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FINANCIAL MARKET BOTTLENECKS AND THE "OPENNESS" MANDATE

FELIX B. CHANG †

Financial market infrastructures ("FMIs"), which facilitate the execution of financial transactions, exhibit such strong economies of scale that they are natural monopolies. In each market, production is controlled by a few dominant players. Federal courts have traditionally checked the abuses of natural monopolies under the Sherman Act. Yet recent Supreme Court decisions have reined in the role of antitrust in regulated industries, where administrative bodies set and enforce standards. To this effect, financial regulations require certain FMIs to grant open, nondiscriminatory access to users.

This Article argues that weak "openness" regulations must be buttressed by their antitrust counterpart—specifically, the essential facilities doctrine, which enables an excluded user to sue for wrongful denial of access to an FMI.

This Article situates FMIs at the intersection of four seismic trends. First, the role of FMIs as a mitigant of systemic risk renders their growth inevitable. Second, open access has become fashionable in the regulation of other natural monopolies (e.g., net neutrality rules), but this approach requires precise standards. Third, essential facilities can supplement weak open access regulations, but the doctrine was nearly dismantled by the Supreme Court a decade ago. Finally, the balance between antitrust and regulation is due to be reset, and the next move will likely come from FMIs.

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Keywords: Antitrust, bottleneck, clearinghouses, derivatives, essential facilities, natural monopoly, regulation, *Trinko*

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I. Introduction

Financial intermediaries—entities such as banks which serve as conduits between investors and investment—benefit from economies of scale. The larger an intermediary is, the cheaper its services will be, which in turn attracts more customers. A subset of financial intermediaries known as financial market infrastructures ("FMIs") exhibits such strong economies of scale that they are natural monopolies—monopolies which arise because one producer can serve the market more efficiently than multiple producers.

¹ RICHARD SCOTT CARNEY ET AL., THE LAW OF FINANCIAL INSTITUTIONS 39-40 (2013).

² ALFRED E. KAHN, THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS 123-24 (1971); Shubha Ghosh, *Decoding and Recoding Natural Monopoly, Deregulation, and Intellectual Property*, 2008 U. ILL. L. REV. 1125, 1138–39 (2008).

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FMIs facilitate the execution of financial transactions.³ Like other natural monopolies, FMIs dominate the markets that they serve. For example, two credit card networks finance the lion's share of consumer transactions,⁴ while SWIFT is the primary payment messaging system among banks.⁵

Prior to the financial crisis, little attention was paid to FMIs. They had been eclipsed by more glamorous intermediaries such as banks and hedge funds. Now, financial reform laws have catapulted one type of FMI—derivatives clearinghouses—from obscurity to prominence.⁶ A clearinghouse guarantees the trading activity of its members.⁷ If a member cannot honor its obligations to the other party in a trade, the clearinghouse will step in.⁸ And if all trading activity in the derivatives markets is backstopped by large, well-funded clearinghouses, then the default of one member is less likely to transmit contagion throughout the financial system.⁹

Lawmakers in the world's biggest financial markets have built risk management systems around derivatives clearinghouses. For instance, the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank") directs approximately \$700 trillion in derivatives trades toward a handful of clearinghouses for processing. Armed with this mandate and strong economies of scale, clearinghouses have the propensity to distort competition. 11

³ See Bank for Int'l Settlements & OICU-IOSCO, Principles for Financial Market Infrastructures (2012), available at http://perma.cc/Z2DB-JPWP; Federal Reserve, Oversight of Key Financial Market Infrastructures (2009), http://www.federalreserve.gov/paymentsystems/over_about.htm.

⁴ In 2013, Visa controlled 49.3% of the market share, Mastercard 30.8%, Discover 10.7%, and American Express 9.2%. CardHub, *Market Share by Credit Card Network*, http://www.cardhub.com/edu/market-share-by-credit-card-network/ (last visited Feb. 8, 2015). *See also* Adam J. Levitin, *Priceless? The Economic Costs of Credit Card Merchant Restraints*, 55 UCLA L. Rev. 1321, 1327 (2008).

SWIFT, *Company Information*, http://www.swift.com/about_swift/company_information/company_information (last visited Feb. 7, 2015).

⁶ Derivatives are financial instruments whose values fluctuate on the basis of other variables, such as interest rates, stock prices, and even the weather. *See* Norman Menachem Feder, *Deconstructing Over-the-Counter Derivatives*, 2002 COLUM. BUS. L. REV. 677, 681–83 (2002). For the risks of derivatives, see Arthur E. Wilmarth, Jr., *The Transformation of the U.S. Financial Services Industry*, 1975-2000: Competition, Consolidation, and Increased Risks, 2002 U. ILL. L. REV. 215, 337-73 (2002).

⁷ Yesha Yadav, *The Problematic Case of Clearinghouses in Complex Markets*, 101 Geo. L.J. 387, 408-13 (2013).

⁸ *Id*.

⁹ *Id.* at 410.

 $^{^{10}}$ 7 U.S.C. § 2(h) (2012); 15 U.S.C. § 78c-3(a)(1) (2012); 15 U.S.C. § 8302(d)(1) (2012). This number corresponds to the notional (or contract) value of the

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For all the attention paid to clearinghouses, little has been made of their natural monopoly characteristics. Antitrust considerations occupy only a small corner of Dodd-Frank, ¹² and with few exceptions, ¹³ scholars have not taken up the effects on competition of large clearinghouses. This is not surprising; in the aftermath of a crisis, industry and regulators are far too consumed with the preservation of markets. But it would be a mistake to ignore the antitrust implications of clearinghouses, because these entities sit at the intersection of four seismic legal trends.

First, the primacy placed upon clearinghouses as a mitigant of systemic risk renders their growth and consolidation inevitable. A clearinghouse must be big if it is to buffer markets from the shock of large-scale defaults. ¹⁴ Yet if mismanaged, a large clearinghouse becomes a bottleneck that stifles competition. Specifically, Dodd-Frank requires derivatives trades to run through clearinghouses (the bottleneck facility). ¹⁵ If a clearinghouse denies membership to certain applicants, then those applicants will be unable to operate and compete as traders of derivatives instruments. ¹⁶

Second, the typical regulatory response to bottlenecks is a requirement of open, nondiscriminatory access. Dodd-Frank features such a requirement.¹⁷ In other areas where bottlenecks prevail, open access rules are also the go-to solution. For instance, in telecommunications, where internet service providers deliver web content to consumers, scholars have pushed for "net neutrality" rules that would restrict the ability of these providers to fast-track the content of favored websites.¹⁸ In discrimination law, Joseph Fishkin

over-the-counter ("OTC") derivatives markets. *See* Bank for Int'l Settlements, *Derivatives Statistics*, tbl. 19 (Sept. 14, 2014), http://perma.cc/877H-SL8C?tvpe=pdf.

¹¹ See infra Section II.B.

¹² See infra Section III.B.

¹³ See Michael Greenberger, Diversifying Clearinghouse Ownership in Order to Safeguard Free and Open Access to the Derivatives Clearing Market, 18 FORDHAM J. CORP. & FIN. L. 245 (2013).

¹⁴ Felix B. Chang, *The Systemic Risk Paradox: Banks and Clearinghouses under Regulation*, 2014 COLUM. BUS. L. REV. 101, 130-33 (2014).

¹⁵ See, e.g., 7 U.S.C. § 1a(15); 15 U.S.C. § 78c-3.

¹⁶ See infra Section II.B. This maneuver would be a classic form of vertical exclusion. Vertical exclusion has inspired generations of controversy, though the latest trend seems to be a validation of scholars who view this type of exclusion as harmful. *See infra* text accompanying notes 66-74. One such scholar, Jean Tirole, won the Nobel Prize in Economics in 2014 for his work on market power.

¹⁷ See infra Section III.B.1.

 $^{^{18}}$ See, e.g., Tim Wu, Network Neutrality, Broadband Discrimination, J. Telecomm. & High Tech. L. 141 (2003).

has posited that intra-societal equality might be achieved if bottlenecks which control access to opportunity are opened up. 19

Third, regulatory open access requirements have traditionally been bolstered by an antitrust doctrine derived from common law: essential facilities. This doctrine requires the owner of a bottleneck facility to grant access to all users—even rivals of the owner—if the bottleneck is an infrastructure that cannot be feasibly duplicated. If regulations are weak or nebulous, essential facilities provides alternative recourse for the aggrieved competitor. Yet this doctrine was all but dismantled by the Supreme Court in *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko*. Nonetheless, current antitrust litigation over FMIs may well resuscitate essential facilities from the brink. 22

Finally, the balance between antitrust and regulation is due to be recalibrated. Since *Trinko*, academics have offered a flurry of proposals to overhaul the role of antitrust in regulated industries. That balance often comes into play in essential facilities cases, where a common law doctrine mirrors regulatory mechanisms for opening up a bottleneck. Because of deregulation, administrative agencies refrain from intrusive standard-setting, thereby forcing courts to cobble together answers from common law when aggrieved competitors sue. Consequently, the contours of "open access" may be played out in private actions under the antitrust analog of essential facilities.

In channeling these four trends, this Article clarifies the antitrust peripheries of financial reform. Financial regulation has spurred naturally monopolistic clearinghouses; yet regulation cannot sufficiently deter the attendant effects on competition. Today's regulators favor a hands-off approach that merely sets the baseline for open, nondiscriminatory access in the form of what this Article

¹⁹ JOSEPH FISHKIN, BOTTLENECKS: A NEW THEORY OF EQUAL OPPORTUNITY (2014).

²⁰ See Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 611 (1985); Otter Tail Power Co. v. United States, 410 U.S. 366, 382 (1973). See also Stephen M. Maurer & Suzanne Scotchmer, The Essential Facilities Doctrine: The Lost Message of Terminal Railroad, UC Berkeley Public Law Research Paper No. 2407071 (2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2407071.

²¹ 540 U.S. 398 (2004).

²² See infra Section III.C.

²³ See Maurer & Scotchmer, supra note 20; Adam Candeub, Trinko and Re-Grounding the Refusal to Deal Doctrine, 66 U. PITT. L. REV. 821 (2005); Brett Frischmann & Spencer Weber Waller, Revitalizing Essential Facilities, 75 ANTITRUST L.J. 1 (2008); Howard A. Shelanski, The Case for Rebalancing Antitrust and Regulation, 109 MICH. L. REV. 683 (2011).

²⁴ Trinko was such a case. See infra Section III.C.

²⁵ See infra Section III.B.2.

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calls "openness" mandates.²⁶ Openness mandates abound in industries dominated by natural monopolies, but this approach requires the promulgation and enforcement of rules which precisely define "access." Dodd-Frank falls short on both counts: its open access rules are nebulous, and violations are difficult to patrol.

Consequently, this Article argues that the regulatory mechanism for ensuring open access to derivatives clearinghouses must be bolstered by a reinvigorated essential facilities doctrine. Yet Supreme Court precedent stands in the way—most prominently, *Trinko*. Thus, the recommendation to pair regulatory and antitrust openness mandates must be tacked onto the groundswell to refine, if not altogether undo, *Trinko*.

This Article contributes to the growing body of literature on clearinghouses and FMIs²⁷ and also wades into the debate over the role of antitrust in regulated industries.²⁸ First, this Article shows how the balance between substantive regulation and competition policy will be reshaped if courts hear essential facilities claims against clearinghouses. This rebalancing is inevitable; for financial regulators have abdicated their standard-setting duties in favor of vague prescriptions about open, nondiscriminatory access. Second, this Article illuminates the broad category of such prescriptions—in the form of openness mandates—which encompass areas as disparate as financial, telecommunications, and employment regulations.

The remainder of this Article unfolds as follows:

Section II analyzes the natural monopoly traits of FMIs, focusing on derivatives clearinghouses. Clearinghouses tend to be controlled by the dominant players in the downstream trading market—that is, large financial institutions who are the primary dealers of derivatives instruments.²⁹ These institutions can strengthen

²⁶ See infra Section II.A.

²⁷ See, e.g., Chang, supra note 14; Yadav, supra note 7; Mark J. Roe, Clearinghouse Overconfidence, 101 Cal. L. Rev. 1641, 1672 (2013); Kristin N. Johnson, Clearinghouse Governance: Moving Beyond Cosmetic Reform, 77 Brook. L. Rev. 681 (2012); Sean J. Griffith, Governing Systemic Risk: Towards a Governance Structure for Derivatives Clearinghouses, 61 Emory L.J. 1153 (2012); Jeremy C. Kress, Credit Default Swaps, Clearinghouses, and Systemic Risk: Why Centralized Counterparties Must Have Access to Central Bank Liquidity, 48 Harv. J. On Legis. 49 (2011).

²⁸ Compare Trinko, 540 U.S. at 412 (suggesting that antitrust should yield where a regulatory structure exists to "deter and remedy anticompetitive harm"), with Shelanski, supra note 23, at 685 (criticizing the Trinko court for "discount[ing] the potential for antitrust to complement regulation and to fill gaps where regulation is unsuccessful").

 $^{^{29}}$ In downstream (retail) markets, firms sell products to end users; in upstream (wholesale) markets, firms sell to other firms. See OECD, Defining the Relevant Market in Telecommunications Ch. 2, p 14 (2014). For this

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their hand in the dealer market by denying their rivals access to clearinghouses. Thus, clearinghouses present a novel setting for harms such as leveraging and foreclosure that are commonly associated with bottlenecks and vertical integration.

Section III canvasses the solutions to the anticompetitive effects of natural monopoly, including regulatory and antitrust mechanisms for ensuring open, nondiscriminatory access. Both sets of solutions grew out of the centuries-old duties imposed upon common carriers—businesses which interfaced with the general public and were charged with providing an equal level of service to all. Paradigmatic natural monopolies such as telecommunications and transportation have experienced intensive regulation at some point in their long histories, as well as antitrust actions brought by the Department of Justice or private litigants. For derivatives clearinghouses, however, financial regulators have adopted extraordinarily weak safeguards against leveraging and foreclosure: openness mandates which convey wide discretion to the regulated entities themselves.

Part IV proposes that regulatory openness mandates be buttressed by the essential facilities doctrine. Yet this proposal, narrow as it is, must overcome *Trinko*, which counsels for antitrust to yield in the face of regulation. Thus, this Section explores arguments for and against the proposal, as well as the broader movement to overhaul *Trinko*.

II. NATURAL MONOPOLY TRAITS OF FMIS

This Section provides background on financial market infrastructures ("FMIs") and natural monopolies. It begins by introducing several types of FMIs, focusing on derivatives clearinghouses, which occupy a central place in financial reform. Then this Section explains why clearinghouses should be classified as natural monopolies—first because regulation now requires most derivatives trades to run through clearinghouses, thereby ensuring their *essentialness* to the financial markets, and second because their economies-of-scale foster anticompetitive harms such as leveraging and foreclosure.

A. Financial Market Infrastructures

The global economy depends on the smooth execution of financial transactions. When a pension fund sells some of its holdings in oil companies to buy stock in solar energy companies, or

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when a consumer purchases groceries by swiping a credit card, a vast system of interconnected financial networks perform the hidden, back-office functions to complete the transactions. These networks are comprised of FMIs, a broad class of intermediaries which reconcile, confirm, record, transmit, clear, and settle transactions. ³⁰

FMIs include credit cards, which enable consumers to pay merchants without the use of cash;³¹ interbank messaging systems, which allow banks to transmit account and payment details;³² and clearinghouses, which clear and settle trades in securities and derivatives instruments.³³ Less well known FMIs are securities settlement systems, which register, settle, and memorialize securities transactions; trade repositories, which collect and maintain data for derivatives transactions; and electronic trading platforms, which provide venues for trading financial instruments.³⁴

There are slight differences in nomenclature when regulators speak of FMIs. "Financial market *infrastructures*" is usually the term preferred by non-U.S. regulators and international standard-setting bodies, while Dodd-Frank uses "financial market *utilities*," which encompasses a narrower set of entities—clearinghouses, settlement systems, and payment systems.³⁵

Regardless of nomenclature, FMIs are colossal. In 2012, the National Securities Clearing Corporation cleared \$186 trillion in

³⁰ See supra note 3.

³¹ Levitin, *supra* note 4, at 1329-30.

³² See SWIFT, supra note 5.

³³ Clearing and settlement can be more precisely broken down into three functions: (i) matching of orders, (ii) clearing of trades, and (iii) settlement (ensuring payment by the purchaser and delivery by the seller). For excellent summaries, see Dermot Turing, Clearing and Settlement in Europe §§ 1.2-1.14 (2012); John McPartland, *Clearing and Settlement Demystified*, CHICAGO FED. Let., no. 210 (2005).

³⁴ See Bank for Int'l Settlements & OICU-IOSCO, Recommendations for Securities Settlement Systems (2001),

at www.bis.org/publ/cpss42.pdf; Federal Financial Institutions Examination Council, Securities Settlement Systems, http://ithandbook.ffiec.gov/itbooklets/wholesale-payment-systems/securities-settlement-systems.aspx (last visited Feb. 8, 2015); Karlo Kauko, Interlinking Securities Settlement Systems: A Strategic Commitment? (ECB Working Paper No. 427; Bank of Finland Discussion Paper No. 26/2003), 2005. available http://papers.ssrn.com/sol3/papers.cfm?abstract_id=501742; European Commission, Central Securities **Depositories** (2014),http://ec.europa.eu/internal_market/financial-

markets/central_securities_depositories/index_en.htm.

³⁵ Compare Bank for Int'l Settlements & OICU-IOSCO, supra note 3, and Bank of England, Bank of England's Supervision of Financial Market Infrastructures (Mar. 2014), with 12 U.S.C. § 5462(6). See also Financial Stability Board, OTC Derivatives Market Reforms: Fourth Progress Report on Implementation n.1 (Oct. 31, 2012).

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securities transactions. In the derivatives world, the notional (or contractual) value of the over-the-counter derivatives market is even bigger—roughly \$700 trillion, divided among various financial instruments.³⁶ Clearinghouses of the InterContinental Exchange ("ICE") control a large chunk of the processing of those trades. In 2010, ICE Clear Europe cleared over \$3 trillion in European credit default swaps, and its affiliate ICE Trust U.S. cleared \$6 billion in similar instruments. Another example, drawn from payment messaging and data transmission services, is SWIFT. SWIFT is a member-owned cooperative that serves over 10,800 financial institutions in 216 countries on any given day.³⁷ Finally, for consumers, Visa is perhaps the most familiar credit card network in the world, with 2.2 billion cards issued by 14,300 financial institutions and accepted by 36 million merchants.³⁸ Other than credit cards, these FMIs are the largest financial institutions that most of the world has never heard of.

As the name suggests, financial market *infrastructures* (or *utilities*) are a massive system of interlocking components that work behind the scenes. They are often referred to as the "plumbing" of global finance.³⁹ To function smoothly, they must be large and interconnected. Imagine the ensuing frustration, for instance, if transactions in oil and solar company stocks were serviced by different FMIs that could not reconcile transactions quickly. Our pension fund may have to wait several days for the sale of its oil holdings to settle before the funds came through to buy solar. In the early years of the credit card industry, consumers faced somewhat similar problems. Holders of American Express and Discover cards had a comparatively difficult time paying with them because fewer merchants were part of those credit card networks. American Express and Discover had not attained the scale of subscription that enabled them to enjoy *network effects*.⁴⁰

³⁶ Bank for Int'l Settlements, *Derivatives Statistics*, tbl. 19 (Sept. 14, 2014), http://perma.cc/877H-SL8C?type=pdf. Derivatives can be divided into exchange-traded and over-the-counter: the first category is traded on open markets such as futures and options exchanges; the second category is customized between the two parties to a trade. *See* Feder, *supra* note 6, at 731-36.

³⁷ SWIFT, *supra* note 5 (follow link to SWIFT data for Dec. 2014).

³⁸ Visa, *Visa Transaction*, http://usa.visa.com/about-visa/our-business/visa-transaction.jsp (last visited Feb. 9, 2015).

³⁹ See Ben S. Bernanke, Clearinghouses, Financial Stability, and Financial Reform, remarks at Financial Markets Conference, Stone Mountain, Ga., Apr. 4, 2011, available at

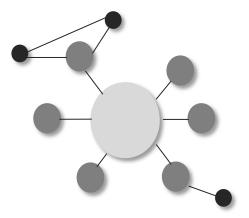
http://www.federalreserve.gov/newsevents/speech/bernanke20110404a.ht m

⁴⁰ See Herbert Hovenkemp, The Antitrust Enterprise: Principles and Exclusion (2006); Levitin, *supra* note 4, at 1363-65. Network effects means that an

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To illustrate an FMI's network effects, we can take the example of clearinghouses. A clearinghouse is a central counterparty—or an entity that sits in the middle of financial activity among numerous other parties—which effectively guarantees the trades of its members (see Figure 1). A fundamental tenet of Dodd-Frank is to interpose central clearing onto the over-the-counter derivatives markets and then closely regulating the providers of clearing services. The statute does this in two parts. Title VII under Dodd-Frank requires all derivatives trades to run through clearinghouses called *derivatives clearing organizations* ("DCOs"). Title VIII governs *financial market utilities* such as DCOs and central securities depositories, with heightened scrutiny over the systemically important utilities.

Figure 1: Centralized Clearing through a Clearinghouse*



* The light grey circle in the center is the clearinghouse. Dark grey circles represent the clearinghouse members whose trades are backed by the clearinghouse; black circles represent entities which are not clearinghouse members but which trade with clearinghouse members.

In a centrally cleared trade, the buyer and seller transfer their positions to a clearinghouse, so that the clearinghouse becomes a buyer to every seller and a seller to every buyer. ⁴³ In this way, the clearinghouse shoulders the risk that one party might default on its obligations.

enterprise's value increases if there are more users of the enterprise—a telephone network, for example, becomes more valuable the more telephone users there are. Levitin, *supra* note 4, at 1363.

⁴¹ See, e.g., 7 U.S.C. § 1a(15); 15 U.S.C. § 78c-3.

⁴² See, e.g., 12 U.S.C. § 5464.

⁴³ This process is called "novation." For a primer, see Darrell Duffie & Haoxiang Zhu, *Does a Central Clearing Counterparty Reduce Counterparty Risk?*, 1 REV. ASSET PRICING STUD. 74, 77 (2011).

Not every party in a trade has the right to clear through a clearinghouse; only members of a clearinghouse have access, and members are typically large financial institutions.⁴⁴ This membership-driven design allows clearinghouses to withstand a certain degree of market volatility. Members back their positions by posting collateral with the clearinghouse, and they also pay into a default fund overseen by the clearinghouse.⁴⁵ Thus, if one member loses a substantial amount on a trade, the member can cover the loss with posted collateral. If collateral is insufficient, or if multiple members suffer staggering losses, the clearinghouse can tap the default fund. Hence, the clearinghouse functions as a guarantor for its members that also mutualizes, or dissipates, losses before they spread to the rest of the financial markets.⁴⁶

As with any guarantor, a clearinghouse tends to function better if it is large. Large clearinghouses can amass a fortress of collateral from broad membership to backstop trades. Further, large clearinghouses can also net (or offset) more positions against each other, which in turn lowers funding costs for trades and entrenches the advantage of established clearinghouses.⁴⁷

Yet a quandary plagues FMIs: the larger and more interconnected an infrastructure, the more systemically significant it becomes. If an FMI is jammed up, nations and industries will be affected. And in times of crisis, the network itself can transmit contagion. ⁴⁸

One way to conceptualize a clearinghouse is as a fortress built upon a foundation of rock-solid members and their collateral and guaranty fund. Another way, however, is as a conduit that concentrates transmits risk in times of crisis. As the financial crisis illustrated, a crisis can spark losses that are both severe and correlated. They are severe in their degree and correlated in that multiple firms are affected. The subprime mortgage meltdown, for instance, touched wide swathes of the economy beyond the issuers of

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⁴⁴ See, e.g., ICE Clear Credit Participant List, INTERCONTINENTALEXCHANGE, https://www.theice.com/publicdocs/clear_credit/ICE_Clear_Credit_Participa nt_List.pdf (last visited Feb. 13, 2014) (listing affiliates of Bank of America, Barclays, BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JPMorgan, Merrill Lynch, Morgan Stanley, Nomura, Société Générale, Royal Bank of Novia Scotia, Royal Bank of Scotland, and UBS as members).

⁴⁵ Roe, *supra* note 27, at 1660.

⁴⁶ For a nuanced analysis of mutualization, see *id*. at 1660, 1675-80.

⁴⁷ For a similarly nuanced analysis of netting, see *id.* at 1660-62. For examples of how a clearinghouse's harnesses netting to mitigate risk and reduce collateral requirements, see Kress, *supra* note 27, at 66-69.

⁴⁸ Chang, *supra* note 14, at 133-34.

⁴⁹ *Id.*

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those mortgages—from the banks which packaged and trafficked in mortgage derivatives to the pension funds and municipalities that bought them. If a clearinghouse has numerous members whose volatile investments crash simultaneously, and if circuit breakers such as the default fund are insufficient, then the systemically significant clearinghouse could fail. Otherwise healthy members could simultaneously be taken down because the clearinghouse would turn to them for support. ⁵⁰

The failure of a clearinghouse is not pure speculation. On occasion, clearinghouses have failed in the past—or come very close to failing. Most notably, Options Clearing Corporation, the world's largest options clearinghouse, run by the Chicago Board Options Exchange, nearly had to ask for access to the Federal Reserve's Discount Window during the financial crisis in 2008.⁵¹ In 1987, after the stock market crash known as Black Monday, the Federal Reserve *did* have to step in to shore up capital and confidence in OCC when its funds became insufficient to weather its members' losses.⁵² That year, the clearinghouse for the Hong Kong Futures Exchange, ICCH Hong Kong, also went under.⁵³ Nonetheless, clearinghouses have generally worked well in the past and have been able to harness their default management procedures to minimize disruptions to the economy.⁵⁴

One major caveat to their continued success, however, is the sheer scale of trading activity being pushed to central counterparties. During the financial crisis, the leaders of the G-20 recognized that the most significant source of systemic risk laid in the over-the-counter (formerly uncleared) derivatives markets. The consensus resulted in a concerted push to mandate central clearing in these markets, whose size boggles the mind. The past six years have witnessed the propulsion of nearly \$700 trillion in trades toward clearinghouses. This figure dwarfs the size of almost any other

⁵⁰ Roe, *supra* note 27, at 1675-80.

⁵¹ Nina Mehta, *Options Clearinghouse Lobbies for Access to Fed Funding During Emergencies*, BLOOMBERG NEWS, June 23, 2010, http://perma.cc/9R8T-DMRF; Kress, *supra* note 27, at 50.

⁵² Ben S. Bernanke, *Clearing and Settlement During the Crash*, 3 Rev. Fin. Stud. 133, 146-50 (1990); U.S. SECURITIES & EXCHANGE COMMISSION, THE OCTOBER 1987 MARKET BREAK (1988).

⁵³ Robert Steigerwald, *Central Counterparty Clearing and Systemic Risk Regulation* (2014), manuscript on file with author; SECURITIES REVIEW COMMITTEE, THE OPERATION AND REGULATION OF THE HONG KONG SECURITIES INDUSTRY (1988).

⁵⁴ For a noteworthy example, see *infra* note 79.

⁵⁵ Group of Twenty (G-20), *Leader's Statement: The Pittsburgh Summit* (Sept. 24-25, 2009).

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financial market on earth by an order of magnitude.⁵⁶ Although DCOs are being built upon a model of central counterparties that has existed for over a century, it is the breadth of their responsibility that raises concern. Industry and regulators may not have had enough time to think through all the contingencies—nor, arguably, the wherewithal to arrest the velocity of contagion should even a fraction of this market crash again.

B. FMIs as Natural Monopolies

A natural monopoly arises when a market is more efficiently serviced by one producer than multiple ones. This condition is known as *subadditivity*, where costs are lower when one firm produces all goods than any combination of additional firms divvying up the output.⁵⁷ The monopoly supplier cannot be disciplined by competition, either because (i) average costs decrease with increasing production, so the incumbent supplier will always be cheaper, or (ii) entry into the market requires enormous investment, so insurgents are deterred by (or the government must product the incumbent's) sunk costs.⁵⁸ Common examples of natural monopoly occur in transportation, utilities, and telecommunications, industries characterized at some point by intensive regulation which permitted single-firm dominance in exchange for rate-setting.⁵⁹

FMIs, too, have been observed to be natural monopolies.⁶⁰ Due to the network effects of established FMIs, insurgents find it very difficult to wrench away market share. The early challenges of American Express and Discover in competing with the established payment systems of Visa and Mastercard, for example, became the basis for extensive litigation. In 1991, Visa U.S.A. added a section to

⁵⁶ See Steve Denning, Big Banks and Derivatives: Why Another Financial Crisis Is Inevitable, Forbes (Jan. 8, 2013), http://perma.cc/6Z32-NHC4 (comparing the OTC derivatives market to the size of the global economy); Back to the futures?, Economist, Feb. 4, 2013 (comparing the OTC derivatives market to the size of the world's securities markets); Office of the Comptroller of the Currency (OCC), OCC's Quarterly Report on Bank Trading and Derivatives Activities, Third Quarter 2014 table 1 (2014) (listing the notional values of OTC versus exchange-traded derivatives).

⁵⁷ Ramsi A. Woodcock, *Inconsistency in Antitrust*, 68 U. MIAMI L. REV. 105, n.87 (2013).

⁵⁸ LAWRENCE A. SULLIVAN & WARREN S. GRIMES, THE LAW OF ANTITRUST: AN INTEGRATED HANDBOOK 742 (West Academic Publ'g, 2d ed. 2006); Ghosh, *supra* note 2, at 1138–39; SANFORD V. BERG & JOHN TSCHIRHART, NATURAL MONOPOLY REGULATION: PRINCIPLES AND PRACTICE 21–24 (1988); DANIEL F. SPULBER, REGULATION AND MARKETS 3–5, 42–43 (1989).

⁵⁹ See infra Section III.A.

⁶⁰ See Thanh Tu Nguyen, EC Antitrust Law in Payment Card Systems, Master's Thesis, Lund University (2003) (analyzing the network effects of credit cards).

its bylaws which automatically terminated any merchant from the Visa network if the merchant were to issue American Express, Discover, or any other card which competes with Visa. 61 Visa considered expanding this exclusivity rule to its foreign affiliates, and litigation soon followed.⁶² In Europe, American Express and the bank Dean Witter contended that the exclusivity rule would restrain competition among credit card systems, since rivals of Visa would be foreclosed from entering markets which Visa had already penetrated.⁶³ In the U.S., the Department of Justice successfully sued Visa and Mastercard (which also enacted an exclusivity rule) for violating Section 1 of the Sherman Act. 64 Ironically, nearly 20 years DOJ would also sue American Express for a later, "nondiscrimination provision" in its governing documents which compels members to favor American Express at the expense of its rivals.65

Slightly less well-known, though perhaps more salient, are the competitive advantages of large, established clearinghouses. Large clearinghouses can draw upon a broad membership to offset counterparty liabilities and thereby lower the amount of required collateral. As observed in the prior Subsection, large clearinghouses enjoy a competitive advantage because of their availability to tap a broader membership pool and, therefore, more positions to net against one another. Superior netting ability translates into lower clearing and settlement prices. Not surprisingly, clearing markets tend to be dominated by the early entrants and are very difficult to penetrate for newcomers. ⁶⁶

Large, naturally monopolistic clearinghouses threaten competition in two ways: *foreclosure* and *leveraging*. These two dangers are often interrelated in a bottleneck facility. For clearinghouses in particular, smaller users might be blocked from access if incumbent clearinghouse members (which tend to be large financial institutions) set membership requirements too high.⁶⁷ And

⁶¹ *Id.* at 40.

⁶² Id.

⁶³ Id.

⁶⁴ See U.S. v Visa USA Inc., 163 F. Supp. 2d 322 (S.D.N.Y. 2001).

⁶⁵ See Plaintiff's Pre-Trial Memorandum, U.S. v. American Express Co., No. 10-CV-04496 (E.D.N.Y. 2014).

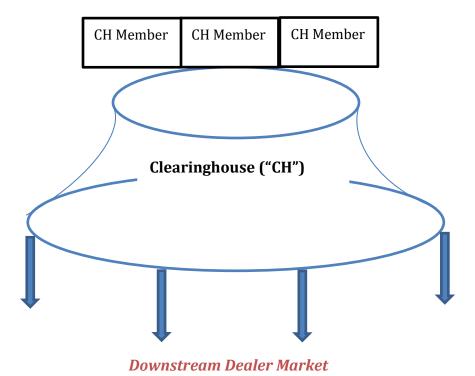
⁶⁶ The Chicago Mercantile Exchange has long dominated agricultural futures, the Options Clearing Corporation securities futures, and LCH credit default swaps in Europe. For an analysis of similar trends in exchanges, see U.S. Dep't of Justice, *Review of the Regulatory Structure Associated with Financial Institutions*, Comments before the Dep't of the Treasury 10 (Jan. 31, 2008).

 $^{^{67}}$ See C. Scott Hemphill & Tim Wu, Parallel Exclusion, 122 YALE L.J. 1182, 1201 (2013) ("In the simplest story, the excluders act on their own, without enlisting assistance from other parties, to raise the costs of market entry. The

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given Dodd-Frank's central clearing mandate, if the excluded users are also sellers of derivatives instruments, then their very survival is impugned, as their products will be unable to be cleared. (For a rendering of the clearinghouse as a bottleneck facility, see Figure 2.)

Figure 2: The Clearinghouse as Bottleneck



As often happens, a natural monopoly may become a bottleneck facility by which the facility's owners can strengthen their hand in the downstream market by constricting access of the owners' competitors to the bottleneck itself.⁶⁸ The ability to parlay the market dominance of a bottleneck facility into dominance over an adjacent market is known a *leveraging*.⁶⁹ Classically a Section 2 claim under the Sherman Act, leveraging is one form of abuse of dominance by a

excluders might manipulate a standard-setting process to exclude the rival, engineer product incompatibility, or game the regulatory system.").

⁶⁸ See Ruben Lee, Running the World's Markets: The Governance of Financial Infrastructure 21 (2011).

⁶⁹ This harm is particularly acute where industries are vertically integrated. *See* Patrick Rey & Jean Tirole, *A Primer on Foreclosure* 1, in HANDBOOK OF INDUSTRIAL ORGANIZATION III (Mark Armstrong & Rob Porter eds., 2006).

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monopolist, by which two distinct monopolies charging two sets of monopoly rents are created.⁷⁰

For decades, leveraging was criticized in another theory, whose most prominent adherent was the Chicago School of economics. As the Chicago School argued, a monopolist in one market has no need to leverage its way to dominance over a second market; for the monopolist could maximize profits simply by charging supracompetitive prices in the first market. This was known as the *single monopoly profit theory*. Extended to clearinghouses, the single monopoly profit theory might posit that a dominant dealer of credit default swaps need not simultaneously corner the upstream clearing market by way of a proxy clearinghouse; for the dealer could make more money by charging higher prices for credit default swaps in the downstream retail market for those products.

But leveraging has been regaining traction.⁷⁴ Economists Patrick Rey and Jean Tirole have shown that the refusal of a bottleneck facility's owners to deal with rivals could be a tactic of raising those rivals' costs.⁷⁵ This problem is especially pronounced if the owners are dominant players in a downstream market (e.g., *dealers*, or sellers, of derivatives) which band together to deny access to an essential upstream facility (e.g., clearinghouses).⁷⁶ Such a scenario might unfold in the financial markets as follows: the largest

⁷⁰ See Law Offices of Curtis V. Trinko, L.L.P. v. Bell Atlantic Corp., 305 F.3d 89, 108 (2d Cir. 2002) (listing the elements of a leveraging claim as (i) possession of monopoly power in one market, (ii) using that power to gain a competitive advantage in another distinct market, and (iii) thereby causing injury) (citing *Virging Atl. Airways v. British Airways*, 257 F.3d 256, 272 (2d Cir. 2001).

⁷¹ See, e.g., Ward S. Bowman, Jr., Tying Arrangements and the Leverage Problem, 67 YALE L.J. 19 (1957); Richard S. Markovits, Tie-ins, Reciprocity, and the Leverage Theory, 76 YALE L.J. 1397 (1967); Richard S. Markovits, Tie-ins, Leverage, and the American Antitrust Laws, 80 YALE L.J. 195 (1970); Richard A. Posner, The Chicago School of Antitrust Analysis, 127 U. PA. L. REV. 925 (1979).

⁷² HERBERT HOEVENKAMP, FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE § 7.9 (4th ed. 2010).

⁷³ There are additional questions that supporters and detractors of the single monopoly profit theory would wrestle over. For instance, how much market power does the dealer possess? Also, how many other dealers are on similar footing? These are critical inquiries because the derivatives dealer market is often cornered by a consortium of big banks which compete with one another. *See infra* note 85 and accompanying text. Of course, such competition *among* large dealers does not obviate parallel exclusion by those dealers as a bloc *against* smaller dealers. *See* Hemphill & Wu, *supra* note 67.

⁷⁴ See Einer Elhauge, Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory, 123 HARV. L. REV. 397 (2009).

⁷⁵ See Rey & Tirole, supra note 69. For a concise summary of Rey and Tirole's arguments, see Candeub, supra note 23, at 852-53.
⁷⁶ Id.

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four credit default swap ("CDS") dealers—which, incidentally, tend to also be the most powerful members of CDS clearinghouses—might somehow restrict the access of smaller dealers to a CDS clearinghouse, thereby frustrating the efforts of excluded dealers to sell CDS. Because Dodd-Frank requires most derivatives trades to pass through a clearinghouse, the clearing function has become essential, or indispensable, to the trading function. Smaller dealers without access to clearinghouses have to clear through the large banks which are clearinghouse members or face the risk that customers of smaller dealers will simply migrate to the large dealers. The choice is one between paying for access to a clearinghouse and abandoning the dealer market altogether.

Rey and Tirole's findings directly refute the argument that a monopolist in one market need not leverage its way to dominance in another market to extract monopoly rents. Control of a bottleneck facility in an upstream market may help the monopolist in a downstream market maintain its dominance.

Whatever its theoretical underpinnings, leverage and foreclosure have been pervasive fears for competitors of the large derivatives dealers. In 2010, shortly after Dodd-Frank's passage, the Commodity Futures Trading Commission ("CFTC") convened a roundtable with prominent leaders from industry and academia to discuss the implementation of the act's central clearing mandate. An enduring thread throughout the conversation was the likelihood of large banks excluding their smaller competitors from clearinghouses by ratcheting up the requirements for membership—all in the guise of risk mitigation. Such a tactic would preserve the dominance of large banks in the dealer market by preventing smaller dealers from accessing clearinghouses.

The LCH is a closed system. It requires that one have not only \$5 billion of net capital but \$1 trillion of [sic] swaps already cleared [I]f we're going to be really clever about keeping people out of the system, the system is not going to work effectively. We're going to have the same OTC style, bilateral, closed, untransparent, opaque, risky system. And what we need to do is allow more entrants to diversify risk, address too big to fail and too interconnected to fail.") (comments of Jason Kastner, Vice Chairman, Swaps & Derivatives Assoc.).

Kastner begins by referring to LCH, a dominant European clearinghouse whose significance is discussed *infra* in notes 79-83 and accompanying text.

⁷⁷ See Commodity Futures Trading Comm'n & Securities & Exchange Comm'n, Public Roundtable on Governance and Conflicts of Interest in the Clearing and Listing of Swaps, Washington, D.C., Aug. 20, 2010 [hereinafter CFTC Roundtable].

⁷⁸ See id. at 25-26:

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The oft-cited example of aggressive membership criteria is LCH.Clearnet, a U.K.-based clearing consortium specializing in interest rate swaps. Prior to 2012, LCH.Clearnet's SwapClear platform used to require that its members maintain an outstanding portfolio of \$1 trillion in interest rate swaps, a requirement widely seen as keeping out all but the largest institutional sellers of these instruments. SwapClear removed this condition the year after the CFTC promulgated a series of rules designed to open up access to derivatives clearinghouses. Yet even today, three years after the elimination of that membership criterion, SwapClear members remain the goliaths of global finance. Sa

The profile of SwapClear reveals that the movers of the interest rate swaps market are also the members of a dominant clearinghouse for interest rate swaps. This pattern is replicated in other derivatives markets. For example, ICE Clear Credit, a major clearinghouse for credit default swaps, also touts a membership list that includes the largest financial institutions. He concentration of the dealer market within the hands of a few large players is best illustrated with numbers. In the U.S., the Office of the Comptroller of the Currency ("OCC") publishes a quarterly ranking of the banks with the largest derivatives trading activity. In combing through those quarterly reports, one finds that the same four or five institutions perennially tower above everyone else. In its most recent report, the OCC noted that "[d]erivatives activity in the U.S. banking system continues to be dominated by a small group of large financial

⁷⁹ LCH.Clearnet became especially prominent during the financial crisis, when it cushioned the markets from the default by a Lehman Brothers affiliate of \$9 trillion in interest rate swaps. *See* Natasha de Terán, *How the World's Largest Default Was Unraveled*, Fin. News (Oct. 13, 2008), http://perma.cc/JB66-52TV; Press Release, LCH.Clearnet, \$9 Trillion Lehman OTC Interest Rate Swap Default Successfully Resolved (Oct. 8, 2008), http://perma.cc/KFF6-L9WH.

⁸⁰ See LCH.Clearnet, Submission of Amendments to the Clearinghouse Rules 3, Submission to the Commodity Futures Trading Comm'n (Apr. 16, 2012), available

http://www.cftc.gov/stellent/groups/public/@rulesandproducts/documents/ifdocs/rul041612lch001.pdf.

⁸¹ See supra note 78; TURING, supra note 33, at \S 5.6(3).

⁸² Derivatives Clearing Organization General Provisions and Core Principles, 76 Fed. Reg. 69334 (Nov. 8, 2011) [hereinafter DCO Core Principles].

See SwapClear, Our Clearing Members, http://www.swapclear.com/service/our-members.html (listing, as SwapClear's U.S.-domiciled members, affiliates of Barclays, BNP Paribas, Citibank, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, J.P. Morgan, Morgan, Nomura, UBS, and Wells Fargo) (last visited Feb. 10, 2015).

⁸⁴ See supra note 44.

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institutions. Four large commercial banks represent 92.6 % of the total banking industry notional amounts."85

Against this backdrop, it becomes clear that the fight over access to clearinghouses is the proxy for a confrontation with much more at stake: control of the adjacent derivatives dealer market. As one panelist on the CFTC Roundtable noted:

96 percent of the swap market is executed by the largest 10 banks. I think they call that an oligopoly. And the notion is if you introduce more competition into that 40 to 60 billion dollars which are at risk or being earned by execution [trading or selling], that's where the pushing and shoving begins. It's not about clearing per se; it's about competition for execution in interest rate swaps and CDS. 86

In other words, the derivatives dealer market is where the real action lies. Profits in the dealer market dwarf profits in the clearing market, ⁸⁷ which are fairly efficient already. ⁸⁸ If anything, the dealer markets are more opaque—an opacity that stems from the high degree of concentration and results in supracompetitive prices. ⁸⁹

III. TRADITIONAL SOLUTIONS FOR NATURAL MONOPOLY

This Section canvasses the solutions to natural monopoly problems of leverage and foreclosure. It begins broadly, with the history of natural monopoly regulation in the United States. This history has culminated in a blurry set of obligations which this Article calls the "openness mandate."

The openness mandate has its roots in the nondiscrimination duties of common carriers devised centuries ago under English

⁸⁵ OCC, *supra* note 56, at 1.

⁸⁶ CFTC Roundtable, *supra* note 77, at 47 (comments of Jason Kastner).

⁸⁷ See id. at 33 ("[A]nnually, there's estimated to be about 3- to \$500 million made clearing, and there are between 40- and \$60 billion being made trading. So this discussion of clearing and access to clearing is really just a proxy about access to trading, because that's where the revenues are.") (comments of Randy Kroszner, Professor of Economics, University of Chicago Booth School of Business).

⁸⁸ See J.P.Morgan, Competition or Consolidation: The Outlook for Interoperability among European CCPs, in THOUGHT (2012).

⁸⁹ See Wallace Tuberville, *Derivatives Clearinghouses in the Era of Financial Reform* (Oct. 24, 2010), http://www.rooseveltinstitute.org/derivatives-clearinghouses-era-financial-reform (chronicling how the big banks shunned efforts by the Chicago Mercantile Exchange to introduce transparency into the pricing of credit default swaps).

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common law and codified in U.S. and English statutes governing railroads in the 1800s. 90 By an accident of deregulation, the openness mandate has become the reigning approach toward overseeing industries characterized by a high degree of vertical integration.

This Section then explores the interplay of openness mandates in regulation and antitrust governing certain market infrastructures (specifically, derivatives clearinghouses), which are natural monopolies that can become competition-stifling bottlenecks. Because regulators have come to favor a gentler approach toward natural monopolies, financial market bottlenecks only have to contend with the openness mandate. In isolation, neither the regulatory openness mandate nor its antitrust analog is sufficient to deter the abuses of market dominance.

A. Utility Regulation and the Openness Mandate

The traditional response to natural monopoly used to be public utility regulation, where a producer's monopoly is protected from competition in exchange for a broad duty to serve the public. Consequently, the monopoly submits to intimate regulation, particularly of the rates it charges consumers. Deviation from preset rates must clear both regulators and the public, in the venue of public hearings. P2

Paradigmatic natural monopolies fall into two camps. In one camp is the classic public utility—a power company, for instance, which generates and delivers electricity. The other camp consists of common carriers such as railroads which are obligated to serve the public on an open, nondiscriminatory basis. Both utility and common-carrier regulations share the same roots in the Interstate Commerce Act of 1887. This act formulated the strict rate-setting rule known as the *filed rate doctrine*, pursuant to which regulated

⁹⁰ James B. Speta, A Common Carrier Approach to

Internet Interconnection, 54 FED. COMMUNICATIONS L.J. 225, 251-52 (2003).

⁹¹ See Spulber, supra note 58, at 271-79.

⁹² Id. at 271

⁹³ The primary regulator of power companies in the U.S., the Federal Energy Regulatory Commission, is empowered by the Federal Power Act of 1935 to ensure that wholesale prices are "just and reasonable." *See* Richard Gilbert & David Newberry, *Market Power in US and EU Electricity Generation* 169-70, in Antitrust and Regulation in the EU and US (François Lévêque & Howard Shelanski eds., 2009).

⁹⁴ See Susan P. Crawford, *Transporting Communications*, 89 B.U. L. REV. 871, 878-80 (2009).

entities were to file their rates with the Interstate Commerce Commission.⁹⁵

Yet a public utility or common carrier framework cannot be practicably adapted to clearinghouse regulation, for reasons which are both technical and doctrinal. Technically, an intensive approach such as the filed rate doctrine would require the CFTC or SEC to scrutinize clearinghouse fee structures to ensure that they are adjusted if costs fluctuate. Clearinghouses would be obliged to serve far more counterparties than they currently do, with less discretion to exclude on the basis of risk. While this would minimize the possibility of price discrimination among participants, oversight this close would demand a level of expertise that regulators do not possess. 6 Clearinghouse cost and fee structures are extremely difficult to assess. Numerous clearinghouses, particularly in the futures markets, are vertically integrated with exchanges. 97 These proprietary clearinghouses can bury clearing and settlement surcharges in trading fees assessed by the exchange, or vice versa.⁹⁸ Not surprisingly, advocates of utility treatment for FMIs do not find that theirs is a mainstream position. 99

The more compelling explanation for why utility treatment would be untenable is the paradigm shift that natural monopoly

⁹⁵ Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323, 1330-34 (1998).

⁹⁶ See CFTC Roundtable, supra note 77, at 100 ("I think a regulator has to be very careful in second guessing experience to risk managers.") (comments of Bill Naven, Options Clearing Corporation); 102 ("I would certainly encourage the CFTC and the SEC to reach out to those risk managers to get their direct views on how these risks and these conflicts are best managed.") (comments of Bill Hill, Morgan Stanley). See also DCO Core Principles, supra note 82, at 69477-78 (comments of Commissioner Scott O'Malia).

⁹⁷ Neal L. Wolkoff & Jason B. Werner, *The History of Regulation of Clearing in the Securities and Futures Markets, and Its Impact on Competition,* 30 REV. BANKING & FIN. L. 313, 374 (2010). Exchanges create a marketplace for the purchase and sale of financial instruments, while clearinghouses ensure the fulfillment of obligations by the buyer and seller. Chang, *supra* note 14, at 114-15.

⁹⁸ These are common tactics of vertically integrated enterprises. For some perspective, see SPULBER, *supra* note 58, at 277-79.

⁹⁹ But see Paul Tucker, Are Clearinghouses the New Central Banks?, Keynote Speech at the Federal Reserve Bank of Chicago Over-the-Counter Derivatives Symposium, Apr. 2014, Chicago, available 11, http://www.chicagofed.org/digital_assets/others/events/2014/annual_over_ the_counter_derivatives_symposium/tucker_clearinghouses_new_central_ban ks tucker 2014.pdf. The former Deputy Governor of the Bank of England, Tucker is a powerful, if lone, voice to the contrary. See also Stephen J. Lubben, Nationalize the Clearinghouses! (Seton Hall Public Law Research Paper No. 2458506), 2014. available http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2458506.

regulation has undergone in the past 40 years. Commonly but inaccurately called *deregulation*, this trend has supplanted rate regulation in favor of a framework where regulators simply set ground rules designed to maximize competition within an industry. It is the product of decades of assault upon heavy-handed regulation, resulting in a lighter regulatory touch that heralds competition above all else, including the public interest. It

The best example of this shift is the Telecommunications Act of 1996. Prior to the Telecommunications Act, the handful of companies controlling the provision of local and long-distance telephone services were insulated from competition in return for a broad commitment to serve all callers. 102 These companies were the "Baby Bells," the survivors of a 1984 divestiture of AT&T by the Justice Department.¹⁰³ In 1996, however, the Telecommunications Act revolutionized the regulatory philosophy. Under this act, the Baby Bells had to make way for competition from insurgents known as "competitive local exchange carriers." The mechanism for doing so was an interconnectivity mandate that enabled the insurgent carriers to access the incumbents' local telephone exchange networks. It was an approach that had not been entertained in the prior rounds of antitrust action against AT&T. 105 The magnitude of this reorientation is difficult to overstate. Telecommunications regulators had moved from a rubric of constant and intrusive supervision to one revolving around a broad but less intensive duty of interconnection—a duty premised upon the obligation to grant access to, or deal with, rivals.

This duty has taken on different names in different settings, including "open access," "duty to deal," and "nondiscrimination." For cohesion, this Article refers to this general set of obligations as the *openness mandate*.

Antecedents of the openness mandate stretch back to the duty of reasonable care imposed by medieval law upon tradesmen who held themselves out to the general public; over time, its prescriptions broadened into the common carrier duty to serve, even as its coverage narrowed to trades whose practitioners effectively wielded a monopoly—particularly trades associated with transportation, such as innkeepers. ¹⁰⁷ In the U.S., common carrier duties made their early

¹⁰⁰ Kearney & Merrill, *supra* note 95, at 1324-26.

¹⁰¹ *Id*.

¹⁰² *Id.* at 1351-52.

¹⁰³ *Id.* at n.127; Hemphill & Wu, *supra* note 67, at 1199.

 $^{^{104}}$ Glen O. Robinson, On Refusing to Deal with Rivals, 87 Cornell L. Rev. 1177, 1217-23 (2002).

¹⁰⁵ *Id.* at 1217.

¹⁰⁶ See, e.g., Kearney & Merrill, supra note 95, at 1352.

¹⁰⁷ Speta, *supra* note 90, at 255-56.

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appearance in iconoclastic cases pertaining to public utilities and railroads in the 1800s. 108 Through the ebbs and flows of rate regulation and deregulation, some of the core characteristics of common carrier duties have endured—namely, the duty to openly serve, on a nondiscriminatory basis, a broad class of consumers. ¹⁰⁹

Today, even the fiercest detractors of telecom monopolies seem to have accepted the immovability of this philosophy—that competition is the ultimate aspiration, best safeguarded by foisting a duty to deal upon the monopolist. For instance, one especially contentious debate concerns the "net neutrality" obligations of internet service providers, which deliver web content to consumers and other users. On one side are the internet service providers themselves, many of whom are Baby Bells, advocating for a right to speed up the delivery of content for certain websites; on the other side is a diverse alliance that includes academics and consumer advocates, arguing that fast-tracking certain content would be discriminatory. 110 Yet as this debate rages on, critics of the dominant internet service providers have merely argued against preferential treatment, without suggesting a paradigm-shifting alternative for regulation.

To be sure, the openness mandate conveys numerous benefits: it eschews labor-intensive rate-setting as well as wrangling over the proper measure of consumer welfare; instead, it imposes a clear baseline of open, nondiscriminatory access for competitors. Nonetheless, the openness mandate also entails some drawbacks. One drawback is the ambiguous relationship between regulatory and common law openness mandates. Most prominently, there is a vestige of common carrier duties which lingers in antitrust. It takes the form of the essential facilities doctrine. But before exploring the antitrust antecedent, this Article will first examine the openness mandate in financial reform regulation.

B. Nondiscriminatory Access in Financial Reform Regulation

Like their counterparts in telecom, financial regulators have adopted openness mandates as the preferred method of patrolling access to bottlenecks in the financial markets. Dodd-Frank itself imposes open, nondiscriminatory access obligations for derivatives clearinghouses. Yet compared to the other facets of clearinghouse

¹⁰⁸ E.g., Munn v. Illinois, 94 U.S. 113, 125 (1876); Interstate Commerce Act of 1887, 24 Stat. 379 (1887). See also Speta, supra note 90, at 251-52.

¹⁰⁹ See Kearney & Merrill, supra note 95, at 1349-53.

¹¹⁰ Tim Wu, Net Neutrality: Competition, Innovation, and Nondiscriminatory Access, Testimony before the House Comm. on the Judiciary, Telecom & Antitrust Task (2006),available http://papers.ssrn.com/sol3/papers.cfm?abstract_id=903118.

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regulation, the provisions of Dodd-Frank addressing competition are weak and ambiguous.

1. The Eligibility Rule

The statutory architecture of Dodd-Frank mandates central clearing under Title VII and close scrutiny over clearinghouses and other financial market utilities under Title VIII. 111 Oversight of clearinghouses can be exacting and rigorous—the Federal Reserve, Securities and Exchange Commission ("SEC"), and Commodity Futures Trading Commission ("CFTC") have the authority to prescribe strict rules on capital adequacy, risk management, default procedures, and collateral requirements. 112 Additionally, Title VIII also permits access to central bank funds during a liquidity crunch. 113 From these perspectives, there is no question that clearinghouses are heavily regulated firms much like large market players in industries with a legacy of rate setting. 114

Concerning competition policy, however, Dodd-Frank is hazier. Section 725(c) of the act mandates, among other goals, (i) that derivatives clearing organizations ("DCOs") establish "appropriate admission and continuing eligibility standards" and (ii) that DCO participation and membership requirements "be objective[,] be publicly disclosed[,] and *permit fair and open access*." This is Core Principle C, one of several aspirational principles for clearinghouses found within the Commodity Exchange Act. Other core principles speak to risk management, default rules, 117 recordkeeping, 118 antitrust considerations, 119 governance, and conflicts of interest.

In essence, Core Principle C aims to prevent a clearinghouse from setting admission standards so high as to exclude the

¹¹¹ See supra notes 41 and 42 and accompanying text. Jurisdiction over clearinghouses is split between the SEC and CFTC. The two agencies have adopted similar regulatory approaches, but this Article will focus on clearinghouses under the CFTC's jurisdiction.

¹¹² 12 U.S.C. § 5464(c).

¹¹³ See 12 U.S.C. § 5465(b) (2012). See also Colleen Baker, The Federal Reserve as Last Resort, 46 U. MICH. J.L. REFORM 69 (2012).

¹¹⁴ This notion of "regulated firms" carries additional significance under antitrust, where, for many years, the pervasiveness of regulation meant that antitrust would defer. *See infra* Section III.C.

¹¹⁵ 7 U.S.C. § 7A-1(c)(2)(C) (emphasis added).

¹¹⁶ Core Principle D, codified at 7 U.S.C. § 7A-1(c)(2)(D).

¹¹⁷ Core Principle G, codified at 7 U.S.C. § 7A-1(c)(2)(G).

¹¹⁸ Core Principle K, codified at 7 U.S.C. § 7A-1(c)(2)(K).

¹¹⁹ Core Principle N, codified at 7 U.S.C. § 7A-1(c)(2)(N).

¹²⁰ Core Principle O, codified at 7 U.S.C. § 7A-1(c)(2)(0).

¹²¹ Core Principle P, codified at 7 U.S.C. § 7A-1(c)(2)(P).

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competitors of its powerful members, the dominant derivatives dealers. Yet its language merely says, unhelpfully, that clearinghouse admission standards are to be "appropriate" and clearinghouse access is to be "fair and open." 122

Implementing Core Principle C is a rule on participant and product eligibility which defines fair and open access as follows:

- (i) A [DCO] shall not adopt restrictive clearing member standards if less restrictive requirements that achieve the same objective and that would not materially increase risk . . . could be adopted;
- (ii) A [DCO] shall allow all market participants who satisfy participation requirements to become clearing members;
- (iii) A [DCO] shall not exclude or limit clearing membership of certain types of market participants unless the [DCO] can demonstrate that the restriction is necessary to address credit risk or deficiencies . . .
- (iv) A [DCO] shall not require that clearing members be swap dealers.
- (v) A [DCO] shall not require that clearing members maintain a swap portfolio of any particular size, or that clearing members meet a swap transaction volume threshold. 123

This Eligibility Rule operates on two fronts: by forcing clearinghouses to articulate objective and least-restrictive standards for membership and by preventing clearinghouses from pegging membership to size or volume thresholds. It neutralizes the propensity of large dealers to couch denials of access to clearinghouses as risk management decisions.

¹²² *Id.* at § 7A-1(c)(2)(C).

^{123 17} C.F.R. 39.12(a)(1) [hereinafter the Eligibility Rule]. A similar rule has been promulgated by the SEC for clearing agencies under its jurisdiction. See 17 C.F.R. 240.17Ad-22; Clearing Agency Standards for Operation and Governance, 76 Fed. Reg. 14472 (Mar. 16, 2011). However, this Article focuses on open access rules for DCOs under the CFTC's jurisdiction. Further, this Article does not cover the rest of the rule on participant and product eligibility, which is voluminous. For instance, 17 C.F.R. 39.12(a)(2) pertains to what DCOs can require of their members in the way of financial resources. Most notably, DCOs cannot set a minimum capital requirement of more than \$50 million. 17 C.F.R. 39.12(a)(2)(iii). Technically, that prohibition has no bearing on fair and open access. See DCO Core Principles, supra note 82, at 69476 n.307.

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Apart from Core Principle C and the Eligibility Rule, Dodd-Frank also stipulates (i) that clearinghouses shall not unreasonably restrain trade or "impose any material anticompetitive burden" and (ii) that the act itself shall not "be construed to modify, impair, or supersede the operation of any of the antitrust laws." The former is Core Principle N. The latter is an antitrust savings clause, preserving antitrust enforcement in the face of substantive regulation. Together, these four provisions comprise the constellation of Dodd-Frank's pronouncements on competition policy.

2. Problems with the Eligibility Rule

Dodd-Frank's pronouncements on competition policy—and the Eligibility Rule in particular—suffer from several major problems. First and foremost, the provisions are vague. Second, they convey wide discretion to clearinghouses, the regulated entities themselves, to justify denials of access. Finally, given the highly technical nature of membership determination, infractions could be difficult to detect. Ultimately, regulators and competitors may have to turn to the voluminous but inconsistent body of antitrust case law to give shape to the parameters of Dodd-Frank's openness mandate.

While lawmakers can easily mandate open access to a bottleneck, the precise meaning of concepts such as "fairness," "open," and even "nondiscriminatory" is elusive. ¹²⁷ This chasm, between a sweeping mandate and systematic implementation, haunts other areas of law. Parallels can be found in areas that work with equality principles, such as antidiscrimination laws; usually, however, the mandate of nondiscrimination is clarified by extensive regulation or case law. ¹²⁸ But what happens if, as with Dodd-Frank, there is just one implementing rule that itself suffers from ambiguity (the Eligibility Rule), and the natural tendency to look to case law has been discouraged in recent antitrust decisions? The remainder of

¹²⁴ 7 U.S.C. § 7A-1(c)(2)(N).

^{125 12} U.S.C. § 5303.

the \$50 million maximum capital requirement for DCO membership, *see* 17 C.F.R. 39.12(a)(2)(iii), and a proposal to set equity ownership limits in DCOs, *see* Requirements for Derivatives Clearing Organizations, Designated Contract Markets, and Swap Execution Facilities Regarding the Mitigation of Conflicts of Interest, 75 Fed. Reg. 63732 (Oct. 18, 2010). But the former does not dovetail with fair and open access, *see supra*, note 123, and the latter, framed as a conflicts of interest issue, has languished in the rulemaking phase. Neither are subjects of this Article's focus.

¹²⁷ See infra text accompanying notes 129-37.

¹²⁸ See Sandra F. Sperino, Discrimination Statutes, the Common Law, and Proximate Cause, 2003 U. ILL. L. REV. 1 (2013).

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Subsection takes up the weaknesses of the Eligibility Rule, leaving the relationship between Dodd-Frank and antitrust for the next Subsection.

a. Vagueness

Vagueness inheres in Dodd-Frank's openness mandate. It stems from the fact that the mandate's implementation is fraught with an extremely technical judgment call—how to strike the right balance between open access and risk management. Indeed, in announcing finalization of the Eligibility Rule, the CFTC indicated that the rule was crafted to accomplish two goals: In the provide for fair and open access, while (2) limiting risk to the DCO and its clearing members.

The Eligibility Rule calls out these strictures in subparts i and iii, which note that fair and open access must account for the added risk to the clearinghouse, as well as credit risk and deficiencies of the prospective member. This balance makes sense as an operational matter; for a clearinghouse serves to diffuse risk across a large and diverse array of members. Yet a clearinghouse must also be discerning about whom it admits to membership: entities which are excessively leveraged relative to their credit profiles would do more to introduce than mitigate risk. Whether a prospective member's risk profile counsels for exclusion instead of admission can vary from clearinghouse to clearinghouse and member to member—and even from time to time, as a clearinghouse might be less willing to admit a member when the clearinghouse foresees an imminent liquidity crunch.

This balance between access and risk is prone to obfuscation and, therefore, evasion of the principles embodied in the rule. In fact, how to reconcile the two concerns—and, more broadly, Dodd-Frank and competition policy—has confounded the industry since the

¹²⁹ DCO Core Principles, *supra* note 82, at 69352.

¹³⁰ Id. at 69415.

¹³¹ 17 C.F.R. 39.12(a)(1)(i), (iii).

¹³² See DCO Core Principles, *supra* note 82, at 69415 ("[I]ncreased access to clearing membership should reduce concentration at any one clearing member and diversify risk."). But for counterpoints from clearinghouse detractors, see, e.g., Roe, *supra* note 27.

¹³³ See Jesse Eisinger, Dodd-Frank's Derivatives Reforms: Clear as Mud, PROPUBLICA, Nov. 16, 2011, http://www.propublica.org/thetrade/item/dodd-franks-derivatives-reforms-clear-as-mud (citing MF Global as a cautionary tale of admitting small, undercapitalized clearing members).

¹³⁴ See also see DCO Core Principles, supra note 82, at 69475-76 (illustrating how the final rule also fails to account for differences in complexity between products—e.g., agricultural versus credit default swaps) (dissent of Commissioner Scott O'Malia).

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statute's inception. During the 2010 CFTC Roundtable on clearinghouses, intense debate centered on the ambiguity of the statute in addressing the anticompetitive effects of major market players. On one hand, smaller dealers worried that the dominant dealers might stifle competition by setting clearinghouse membership standards excessively high. Apart from competition concerns, this would subvert the mitigation of systemic risk in the derivatives markets that animates Dodd-Frank, mitigation which is achieved by dispersing risk across broader pools of members. On the other hand, legitimate concerns abound if a clearinghouse's standard-setting prerogative is eroded to the point where members are admitted without due consideration to risk.

When the CFTC promulgated the Eligibility Rule a year later, the guidance was not particularly helpful. In some prongs, the rule merely recites the fact that clearinghouses can balance open access against risk. The final release for the Eligibility Rule proclaimed, triumphantly, that the balance had been appropriately struck. However, Commissioner O'Malia issued a forceful dissent, citing to a recent dispute between a clearinghouse and some derivatives dealers over open access. Specifically, ICE Clear Credit had changed its minimum capital requirement to \$100 million but simultaneously added a requirement that members hold a certain

Certainly open access is an important part of the Dodd-Frank Act, but it is certainly not the primary driver of the Act. I think one of the biggest conflicts that has to be addressed here is the conflict between open access and proper risk management of the clearinghouse. . . [C]learinghouses are going to be the ultimate repositories for all of the systemic risk that was previously dispersed throughout the market. . . [T]he members of the clearinghouse are ultimately the parties that are underwriting this risk and responsible for it.") (comments of Jonathan Short, ICE Trust U.S., LLC)

¹³⁵ See supra note 78 and accompanying text.

¹³⁶ See CFTC Roundtable, supra note 77, at 14-15 ("[E]conomic interests should be set aside to mitigate systemic risk and protect the American public against further financial calamity. In order to do that, it is more efficient to bring transparency and open access and to allow more participants into the market to diversify risk.") (comments of Jason Kastner).

¹³⁷ See id. at 15-16:

¹³⁸ See supra text accompanying note 131.

¹³⁹ See DCO Core Principles, *supra* note 82, at 69352 ("Although there is potential tension between the goals of 'fair and open access' and 'sufficient financial resources and operational capacity to meet obligations arising from participation in the derivatives clearing organization,' the Commission believes the rules that it is adopting herein strike an appropriate balance."). ¹⁴⁰ *Id.* at 69475 (comments of Commissioner O'Malia).

amount of net capital.¹⁴¹ These changes were challenged by at least two dealers for violating fair and open access.¹⁴² According to Commissioner O'Malia, the final rule provided "very little guidance on the criteria that the Commission will apply in adjudicating a dispute such as this."¹⁴³

The ambiguity of the Eligibility Rule invites other concepts and institutions to fill the void. One possibility is to push open access toward bright-line rules, so that the mandate can revolve around clearer orbits. For example, Dodd-Frank bars derivatives clearinghouses from requiring more than \$50 million in capital as a condition of membership. As a technical matter, this prohibition has nothing to do with open access; however, it has attracted a great deal of attention from supporters and detractors of the Eligibility Rule. Another possibility is that open access determinations will be pushed toward federal courts, which might hear antitrust claims brought by excluded clearinghouse applicants. 147

b. Discretion of clearinghouses

At its best, the *open-endedness* of Dodd-Rank's openness mandate renders the mandate too nebulous. At its worst, however, that *open-endedness* consigns too much power to the regulated entities themselves, the clearinghouses.

It is the prerogative of a clearinghouse to set standards that ensure access while mitigating risk. In that prerogative, there is discretion. And with discretion, a clearinghouse can eviscerate open access by excluding competitors of existing members under the rubric of risk.

Invoking risk dispenses with every element of the Eligibility Rule in one fell swoop. Because prongs i and iii of the rule expressly condition access on risk mitigation, this is a permissible basis for exclusion. Prong ii, which requires admitting members who meet participation requirements, is not violated if risk management was the justification for high bars to admission. Prongs iv and v, which prohibit tying membership to being a swap dealer or attaining size or volume thresholds, also do not come into play if a clearinghouse excludes on the basis of risk.

¹⁴¹ That threshold was 5% of each member's segregated consumer funds. *Id.*

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ See 17 C.F.R. 39.12(a)(2)(iii).

¹⁴⁵ See DCO Core Principles, supra note 82, at 69476 n.307.

¹⁴⁶ See, e.g., id. at 69474-76 (comments of Commissioner O'Malia); Greenberger, *supra* note 13, at 254-61.

¹⁴⁷ See infra Section III.C.

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How have the clearinghouses handled this discretion? Today, three years have elapsed since the finalization of the Eligibility Rule. Its progress in ensuring open access and diversifying the dealer market can be assessed in two ways—by examining the membership requirements of the dominant clearinghouses and the degree of concentration in the dealer market.

As to the first benchmark, the capitalization requirement of ICE Clear Credit challenged three years ago remains intact. An affiliated clearinghouse, ICE Clear Europe, also imposes a tiered capitalization structure that requires higher thresholds for certain members or financial instruments. The persistence of these conditions in the face of the Eligibility Rule suggests that the clearinghouses have fended off challenges from regulators and excluded applicants. The persistence of these conditions in the face of the Eligibility Rule suggests that the clearinghouses have fended off challenges from regulators and excluded applicants.

Meanwhile, empirical evidence shows that the ancillary goal of diversifying the dealer markets has clearly not come to pass. According to the OCC's quarterly reports of bank derivatives positions, the same four institutions capture over 90% of the banking industry's total notional amount quarter after quarter, year after year. In fourth quarter 2011, the year the Eligibility Rule was finalized, those top four banks were JPMorgan Chase, Citibank, Bank of America, and Goldman Sachs. Goldman Sachs, which held the fourth spot, had derivatives exposures nearly 10 times greater than

¹⁴⁸ Large members that qualify as futures commission merchants ("FCMs") or broker-dealers are to have at least \$100 million in adjusted net capital and more than 5% of segregated costumer funds as excess net capital. *See* ICE Clear Credit, *Clearing Rules* § 201(b)(ii). Non-FCM or –broker-dealer members are to bring \$5 billion in tangible net equity to the table. *Id.*

¹⁴⁹ See ICE Clear Europe, Membership Procedures § 3.1 (May 19, 2010) (minimum capital requirement of \$10 million for all clearing members); Clearing Rules 201(i) (Dec. 1, 2014) (establishing additional requirements for members clearing credit default swaps); CDS Procedures § 2.2(a) (May 19, 2010) (requiring a minimum of \$5 billion in Tier 1 Capital).

¹⁵⁰ Naturally, conclusions must be drawn with care. The persistence of high financial requirements for membership might mean that the CFTC upheld them against challenges for violating open access. Even so, this raises the specter of regulatory capture; for risk management is sufficiently complicated that regulators might not possess the expertise to scrutinize the clearinghouses' judgment. *See* Tuberville, *supra* note 89. Another spot check is to look at whether the membership rosters of dominant clearinghouses have changed. For SwapClear's membership, see supra note 83.

¹⁵¹ See Office of the Comptroller of the Currency, OCC's Quarterly Report on Bank Trading and Derivatives Activities, Fourth Quarter 2011 tbl.1 (2011).

the bank holding the fifth spot, HSBC.¹⁵² This trend would continue unabated in every quarter that has followed.¹⁵³

The strategy of relying on clearinghouses to diversify the downstream dealer market is an odd one. If ever there were a symbol of the powerful derivatives dealers, it would be clearinghouses, whose membership rosters read like a who's-who of the largest financial institutions in the world. Regulators obviously believe there is a correlation between concentration and systemic risk, and they may well have concluded that the Eligibility Rule's roundabout way of inducing diversification is the best tool available. The strangest aspect of this strategy, however, which dooms the endeavor altogether, is the regulators' abdication of their standard-setting duties to the regulated entities themselves.

c. Enforcement

The complexity of risk management means that violations of the Eligibility Rule are difficult for regulators to detect. Dodd-Frank anticipates that compliance with the Core Principles will rest with the chief compliance officer of each clearinghouse. ¹⁵⁷ Nonetheless, because regulators do not possess the expertise to assess eligibility determinations, the reliance on clearinghouses leaves the fox to guard the proverbial henhouse. If clearinghouse compliance departments are not vigorous with their charge, then the CFTC's ability to impose civil monetary penalties and even deregistration is rendered meaningless. ¹⁵⁸

To be sure, there are regulatory openness mandates and antidiscrimination prescriptions in other areas of law. These mandates seem to pose fewer problems so long as (i) the discretion

¹⁵² See id.

¹⁵³ See Office of the Comptroller of the Currency, *Quarterly Report on Bank Derivatives Activities*, http://www.occ.gov/topics/capital-markets/financial-markets/trading/derivatives/derivatives-quarterly-report.html (follow the link for each the quarterly report). Intermittently, there are slight variations—e.g., in the order of the top four banks and the degree of separation between the banks at the fourth and fifth spots.

¹⁵⁴ See, e.g., supra notes 44 and 83.

¹⁵⁵ See infra text accompanying note 277.

¹⁵⁶ See Roe, supra note 27, at 1690 ("[B]uilding largely centralized clearinghouses in the hope that (but not the certainty that) the industry will de-concentrate seems a peculiar policy in its indirectness, although perhaps regulators have concluded that they cannot otherwise induce market restructuring and de-concentration.").

¹⁵⁷ See 17 C.F.R. § 39.10.

The authority of the CFTC to impose penalties against derivatives clearinghouses can be found in the Commodity Exchange Act. *See, e.g.,* 7 U.S.C. § 8(b) (deregistration); 17 C.F.R. § 143.8 (civil monetary penalties).

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of the regulated entities is limited, (ii) the benchmarks of openness are objective and discernible, or (iii) a concomitant private right of action helps ferret out the infractions. By contrast, Dodd-Frank suffers from a deficit of all three.

In telecommunications, for example, the openness mandate takes the form of a requirement upon all carriers to interconnect with other carriers. Where negotiation between incumbents and insurgents is necessary for interconnection, the negotiation will be supervised by regulatory bodies and federal courts. And where large carriers merge with one another, the FTC constitutes an additional overlay of supervision to ensure open access. Comparison with discrimination law, too, is illuminating. Title VII of the Civil Rights Act, which prohibits workplace discrimination against protected classes of individuals, is enforced by an administrative agency (the Equal Employment Opportunity Commission), but employees also enjoy a private right of action. Thus, Title VII has two pathways for enforcement: a regulator and private plaintiffs, which often work in tandem.

Comparison to counterparts elsewhere exposes two key weaknesses in the enforcement of Dodd-Frank's openness mandate.

First, mandates elsewhere are often blended with a private right of action. This is a powerful enforcement tool because often the entity best poised to detect a violation is that which has been excluded or discriminated against. ¹⁶⁴ By contrast, there is no private right of action for Core Principle C. ¹⁶⁵

¹⁵⁹ See 47 U.S.C. § 201(a); Speta, *supra* note 90, at 247-48 (discussing the Telecommunications acts of 1934 and 1996).

¹⁶⁰ 47 U.S.C. § 251; Speta, *supra* note 90, at 248.

¹⁶¹ Speta, *supra* note 90, at 235.

¹⁶² For the proportion of government- versus privately prosecuted discrimination lawsuits, see J. Maria Glover, *The Structural Role of Private Enforcement Mechanisms in Public Law*, 53 WM. & MARY L. REV. 1137, 1148-50 (2012).

¹⁶³ *Id.*

¹⁶⁴ See Daniel A. Crane, Optimizing Private Antitrust Enforcement, 63 VAND. L. REV. 675 (2010) (arguing that private enforcement puts the enforcers closer to the relevant problems and permits individualized negotiation between incumbents and insurgents). Note, though, that the literature on pairing private and public enforcement, which is especially well developed in antitrust, is deeply split. For a contrary position, see a.Stacey L. Dogan & Mark A. Lemley, Antitrust Law and Regulatory Gaming, 87 Tex. L. Rev. 685 (2009). Detractors are most worried about cumulative overdeterrence, or duplication of efforts between the plaintiffs' bar and regulators. This concern will be taken up infra in Section IV.B.4.

 $^{^{165}}$ On the enforcement authority of the CFTC, see supra note 158 and accompanying text.

Second, the private right of action is sometimes found in parallel doctrines under antitrust that are on the wane, as in telecommunications regulation. Nevertheless, the regulators would have shared many decades of cohabitation with antitrust. A history of private enforcement history can help regulators become more deliberative in their own policies. The coexistence of a robust plaintiffs bar alongside the Federal Trade Commission and Department of Justice, for example, has shaped the government's antitrust enforcement policy for decades has even if the agencies and the plaintiffs' bar do not see eye-to-eye.

By contrast, Dodd-Frank has engrafted an openness mandate onto financial reform laws, whose regulators do not have much familiarity with, or institutional memory of, how to deal with "openness." The only rule that regulators have come up with so far, the Eligibility Rule, is not only sparse but also nebulous.

C. Essential Facilities in Antitrust

The statutory openness mandate of Dodd-Frank is redolent of the antitrust doctrine of essential facilities, which also has its roots in the law of common carriers. Because of weaknesses in the regulatory mandate, regulators and excluded applicants may turn to antitrust for elucidation. Yet in the event of conflict between the regulatory openness mandate and its pre-existing antitrust counterpart, current Supreme Court precedent teaches that only regulation can prevail.

Essential facilities draws from 100 years of tortuous antitrust case law, ¹⁷⁰ with the latest pronouncement casting doubt on its continued vitality. ¹⁷¹ Still, there is little disagreement over its

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¹⁶⁶ The most prominent example is essential facilities, which will be discussed *infra* in Section III.C.

¹⁶⁷ For instance, the Telecommunications Act, originally passed in 1934, and the Sherman Act, which dates to 1890, enjoyed many years of cohabitation, including decades before deregulation caught on.

¹⁶⁸ See Glover, supra note 162, at 1159 ("even SEC commissioners acknowledge that private enforcement plays a crucial role in regulating securities fraud"), 1160 ("private parties, at least as a functional matter, are often necessary for meaningful enforcement of regulatory directives to occur").

¹⁶⁹ See id. at 1196-97 ("The DOJ relies heavily on antitrust wrongdoers to come forward under its Amnesty Program for the remediation of conspiracy-related harm, but the DOJ also relies on private enforcement to detect instances of wrongdoing when parties are not so forthcoming.").

¹⁷⁰ Compare United States v. Terminal R.R Ass'n of St. Louis, 224 U.S. 383, 411-13 (1912), Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 611 (1985), and Otter Tail Power Co. v. United States, 410 U.S. 366, 382 (1973), with Trinko, 540 U.S. See also infra text accompanying notes 178-88.

¹⁷¹ See Trinko, 540 U.S. See also infra text accompanying notes 204-10.

elements. An essential facilities claim is established if (i) a monopolist controls a facility which (ii) a competitor is unable practically or reasonably to duplicate and (iii) use of the facility is denied to the claimant, even though (iv) it is feasible for the monopolist to provide access. ¹⁷² In the past, essential facilities has been invoked to open up access to a railroad terminal, ¹⁷³ ski slopes, ¹⁷⁴ electricity delivery, ¹⁷⁵ news wire membership, ¹⁷⁶ and local telephone exchanges. ¹⁷⁷

Two relatively recent Supreme Court decisions upholding lower court verdicts relying on the essential facilities doctrine were Otter Tail in 1973 and Aspen Skiing in 1985. In the first case, Otter Tail was a public utility that generated and sold electricity while simultaneously wielding a monopoly over the transmission of electricity. 178 Otter Tail fought off attempts by municipalities to circumvent its lock on the retail market—for example, municipalities would buy electricity from other suppliers and ask Otter Tail to "wheel," or transmit, the electricity over Otter Tail's own power lines. The Department of Justice successfully sued Otter Tail for monopolization of the retail power market by using its dominant foothold in electricity transmission. 180 In the second case, Aspen Skiing owned three of the four major downhill skiing facilities in Aspen, Colorado. 181 For over a decade, Aspen Skiing or its corporate predecessors had collaborated in a joint venture with its rival Aspen Highlands, which owned the fourth major skiing facility. 182 Yet in 1977, Aspen Skiing terminated the joint venture, and Aspen Highlands sued successfully for monopolizing the market for downhill skiing services. 183

Curiously, the Supreme Court dodged the applicability of essential facilities in both *Otter Tail* and *Aspen Skiing*. This was despite the fact that the verdicts in both cases rested upon the doctrine. In *Otter Tail*, the Court's analysis unfolded along

¹⁷² MCI Commc'ns Corp. v. AT&T Co., 708 F.2d 1081, 1132-33 (7th Cir. 1983).

¹⁷³ Terminal Railroad, 224 U.S.

¹⁷⁴ Aspen Skiing, 472 U.S.

¹⁷⁵ Otter Tail, 410 U.S.

¹⁷⁶ Assoc. Press v. United States, 326 U.S. 1, 4-5 (1945).

¹⁷⁷ Trinko, 540 U.S.

¹⁷⁸ 410 U.S. at 368-71.

¹⁷⁹ *Id.* at 370-71.

¹⁸⁰ For a concise summary, see Abbott B. Lipsky, Jr. & J. Gregory Sidak, *Essential Facilities*, 51 STAN. L. REV. 1187, 1205-07 (1999).

¹⁸¹ 472 U.S. at 587-95.

¹⁸² Id.

¹⁸³ *Id.* For a concise summary, see Lipsky & Sidak, *supra* note 180, at 1207-11.

¹⁸⁴ See United States v. Otter Tail Power Co., 331 F. Supp. 54, 61 (D. Minn. 1971) ("Pertinent to an examination of the law is a reference to . . . the 'bottleneck theory' of antitrust law. This theory reflects in essence that it is an

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straightforward monopolization terms, and in Aspen Skiing, the Court invoked alternative reasons for upholding the verdict, including the lack of a valid business justification for exclusion. 185 The reluctance of the Court to confront the doctrine, even in an era that ushered in the "high-water mark" of essential facilities, 186 is illustrative. Essential facilities is part of a broader duty to deal with rivals, whose violation is typically prosecuted as monopolization under Section 2 of the Sherman Act. Yet the duty to deal stands on somewhat incoherent footing, since the refusal to collaborate is generally the prerogative of any business, even a monopolist's. Further, even if sharing is mandated under Section 2 of the Sherman Act, collaboration that rises to the level of conspiracy run can afoul of Section 1.187 Not surprisingly, then, essential facilities has many prominent detractors, and even its supporters are measured in its application. 188

For our purposes, however, the applicability of essential facilities to FMIs is hardly farfetched, as two recent actions against bottlenecks in the financial markets demonstrate. In 1996, La Poste, the French post office, filed a complaint against SWIFT for refusing membership. 189 This came at a time when essential facilities was rapidly gaining ground across the European Union. 190 Shortly after

illegal restraint of trade for a party to foreclose others from the use of a scarce facility."); Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 738 F.2d 1509 (10th Cir. 1984).

¹⁸⁵ The Court noted that Aspen Skiing "was willing to sacrifice short-run benefits and consumer goodwill in exchange for a perceived long-run impact on its smaller rival." 472 U.S. at 610-11.

¹⁸⁶ See Lipsky & Sidak. supra note 180. at 1206.

¹⁸⁷ See Maurer & Schotmer, supra note 20, at 3.

¹⁸⁸ See Philip E. Areeda, Essential Facilities: An Epithet In Need of Limiting Principles, 58 ANTITRUST L.J. 841 (1990) (seminal article decrying essential facilities), HOVENKAMP, supra note 33, at 246-48 (criticizing the doctrine even in the face of deregulation); Frischmann & Waller, supra note 23 (advocating revitalization of essential facilities only for certain infrastructures); Maurer & Scotchmer, supra note 20 (arguing for forced sharing only where synergies are enhanced).

¹⁸⁹ Case No IV/36.120 - La Poste/SWIFT + GUF, Notice 97/C335/03 (Nov. 1997), OI C335.

¹⁹⁰ See, e.g., Oscar Bronner GmbH & Co KG v. Mediaprint Zeitungs- und Zeitschriftenverlag MgbH & Co KG and others, Case C-7/1997, [1998] ECR I-07791. Oscar Bronner, La Poste, and other cases from the European Union are interesting counterpoints because the EU perspective begins with the supremacy of competition policy, which is enshrined in the European Community's Treaty. As such, Europe's financial reform regulations can only inform the essential facilities doctrine, rather than supplant it. See Pierre Larouche, Contrasting Legal Solutions and the Comparability of EU and US Experiences 18, in Antitrust and Regulation in the EU and US: Legal and ECONOMIC PERSPECTIVES (François Lévêque & Howard Shelanski eds., 2009)

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La Poste's filing, the European Commission joined in, arguing that as the dominant international network transmitting payment messages, SWIFT was an essential facility—one which had abused its dominant position by imposing unjustified admission criteria. Within a year, the case was settled when SWIFT promised to grant "full access . . . to any institution in the European Union which provides cross-border payment services to the public and fulfills the criteria laid down by the European Monetary Institute." Such access was to be complete and nondiscriminatory. 193

More recently in the U.S., in July 2013, MF Global, the now-defunct investment bank previously headed by Jon Corzine, sued several large swap dealers, the International Swaps and Derivatives Association (a derivatives industry trade group), and Markit Group (a financial information services company) for conspiring to corner the market in credit default swaps by, among other things, restricting access to ICE Clear Credit, the dominant clearinghouse in the U.S. for these instruments. ¹⁹⁴ The complaint framed ICE Clear Credit as a bottleneck facility to which MF Global was unjustly denied access. That litigation is pending in the Northern District of Illinois.

The challenge for claimants in the U.S., however, is that essential facilities has been consistently scaled back by the Supreme Court after *Aspen Skiing*. This movement culminated in the Court's 2004 decision in *Trinko*. In *Trinko*, the defendant was an incumbent local telephone service provider in New York City—one of the Baby Bells that, after a series of mergers, became Verizon. By an odd twist of history, the insurgent provider attempting to penetrate the New York City local telephone market was AT&T, the carrier of choice for claimant Curtis Trinko. Yet Verizon had denied AT&T access to Verizon's local telephone networks. Hence, Trinko filed suit under Section 2 of the Sherman Act, claiming that Verizon failed to supply rivals with the necessary network connections to service customers of the rivals. The district court dismissed the claim for

¹⁹¹ See id.; TURING, supra note 33, at § 7.9.

¹⁹² Publication of an Undertaking Art. 1.1, Notice 97/C335/03 (Nov. 1997), OJ C335, available at http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:C1997/335/03&from=EN [hereinafter SWIFT Undertaking]. The European Monetary Institute was the predecessor to the European Central Bank. TURING, *supra* note 33, at § 7.9.

¹⁹³ SWIFT Undertaking, *supra* note 192, at Arts. 1.2, 1.3.

¹⁹⁴ Complaint, MF Global Capital LLC v. Bank of America Corp., No. 1:13-cv-5417 (N.D. Ill. 2013) [hereinafter *MF Global* Complaint].

¹⁹⁵ 540 U.S. at 402-05.

¹⁹⁶ Id. at 404-05.

¹⁹⁷ Id. at 403-05.

¹⁹⁸ *Id.* at 405. For an excellent summary, see Shelanski, *supra* note 23, at 693-706.

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failing to state an antitrust claim distinct from Verizon's alleged violation of the Telecommunications Act of 1996, which Trinko had no standing to enforce. The Second Circuit reversed; construing the pleadings liberally, the court proffered a number of independent antitrust theories under which the complaint *could* have stated a claim, including essential facilities and leveraging. When the Supreme Court took up the issue, the Court found that, given the pervasive federal regulatory framework, Trinko's complaint failed to state a claim under the antitrust laws. Then the Court went further, denigrating the essential facilities doctrine in a portion of its dicta that would become one of the most frequently quoted passages from the case:

This conclusion would be unchanged even if we considered to be established law the "essential facilities" doctrine crafted by some lower courts . . . We have never recognized such a doctrine, and we find no need either to recognize it or to repudiate it here. ²⁰²

The *Trinko* majority's dismissal of essential facilities is not ironclad. In the hundred years since the Supreme Court first crafted a sharing remedy in *U.S. v. Terminal Railroad Association of St. Louis*, several decisions have imposed a duty upon a bottleneck to deal with rivals.²⁰³

More controversially, *Trinko* summarily countermands the prior, well-established standard for resolving a conflict between regulation and antitrust where both frameworks exist. That was the "plain repugnancy" standard, developed in cases contemplating the place of antitrust in the face of securities regulation. The earlier cases on plain repugnancy strived for cohabitation of regulation and antitrust, precluding the latter only where regulation was clearly preemptive. Later cases saw "plain repugnancy" evolve into simple "repugnancy," whereby actual conflict is not needed for antitrust to

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¹⁹⁹ Law Offices of Curtis V. Trinko, LLP v. Bell Atlantic Corp., 123 F. Supp .2d 738, 742 (S.D.N.Y. 2000).

²⁰⁰ 305 F.3d 89, 108 (2d Cir. 2002).

²⁰¹ 540 U.S. at 416.

²⁰² *Id.* at 410-11. Yet it is the passage's conclusion that does far more damage: "The 1996 Act's extensive provision for access makes it unnecessary to impose a judicial doctrine of forced access. To the extent respondent's "essential facilities" argument is distinct from its general argument, we reject it." *Id.* at 410-11.

²⁰³ These include both Supreme Court decisions such as *Otter Tail* and *Aspen Skiing*, as well as lower court decisions such as *MCI*.

²⁰⁴ See, e.g., Silver v. N.Y. Stock Exch., 373 U.S. 341, 357 (1963).

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defer—just the potential for conflict with regulation suffices for preemption. 205 In those cases, however, the regulations did not contain express antitrust savings clauses, so the Court was grappling with implied antitrust immunity. 206 In Trinko, by contrast, the Telecommunications Act provided that "nothing in this Act . . . shall be construed to modify, impair, or supersede the applicability of any of the antitrust laws," a common antitrust savings clause. 207 Astonishingly, Trinko superimposed the repugnancy effect onto regulations where the intent of the drafters was to withhold antitrust immunity by conferring a savings clause. ²⁰⁸ Henceforth, the calculus would not be whether potential conflict exists (often measured by the pervasiveness of the regulation) but whether antitrust adds anything at all (as measured by the costs of adding antitrust enforcement) if regulation has already spoken.²⁰⁹ Thus, after *Trinko*, it has been observed that "a little regulation can be a dangerous thing for competition enforcement in regulated industries."210

How can the two major trends identified in this Section be reconciled? On one hand, the great transformation of regulated industry has dismantled the age-old, if heavy-handed, mechanisms for checking the abuses of natural monopolies, replacing the filed rate doctrine with openness mandates. On the other hand, the dialing back of antitrust alternatives such as essential facilities and the concomitant expansion of antitrust immunity means that antitrust will not fill the recesses from deregulation. What, then, is the place of antitrust in regulated industries today, particularly if regulation is neither expansive nor clear?

If the *MF Global* litigation portends anything, it is that financial market bottlenecks will set the stage for courts to answer the above questions.

In *MF Global*, denial of access to a clearinghouse was alleged as the lynchpin for suppression of competition in the adjacent dealer market. The complaint tracked the elements of an essential facilities claim, but the plaintiffs' attorneys refrained from

²⁰⁵ See Gordon v. New York Stock Exchange, Inc., 422 U.S. 659 (1975).

²⁰⁶ The most recent progeny of Silver and Gordon is *Credit Suisse Sec. (USA) L.L.C. v. Billing*, 551 U.S. 264 (2007), where the majority saw the issue presented as one of repugnancy, *id.* at 267-68, even though under the facts the antitrust suit could not have conflicted with the securities laws, *see* Shelanski, *supra* note 23, at 709.

²⁰⁷ 540 U.S. at 406.

²⁰⁸ See id.

²⁰⁹ See id. at 413-15.

²¹⁰ Shelanski, *supra* note 23, at 702.

²¹¹ See Hovenkamp, Antitrust and the Regulatory Enterprise, 2004 COLUM. BUS. L. REV. 335, 341 (2004) ("the natural result of deregulation is an increased role for the antitrust laws").

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classifying their claim as such. As their argument went, ICE Clear Credit was a facility essential to the sale of credit default swaps by virtue of the central clearing mandate; the facility was controlled by the largest sellers of credit default swaps. Due to strong economies of scale, the facility could not be duplicated. Its membership requirements had been set unreasonably high, even though risk could have been mitigated by less stringent standards. For example, ICE Clear Credit required members to have at least \$5 billion in adjusted net capital. According to the complaint, falt \$5 billion capital threshold keeps out independent dealers and end users, whose ability to clear CDS [credit default swaps] would enhance competition in the making of CDS markets and would thereby lower CDS spreads."

Those "spreads" tracked the profitability of incumbent dealers; to keep the spreads wide, the defendants purportedly foreclosed competitors from the dealer market with an insurmountably high net capital requirement which kept them from joining the clearinghouse. In substance, the MF Global suit vindicated the academics and Justice Department attorneys who had warned that clearinghouses would enable incumbent dealers to foreclose competition from insurgents. ²¹⁷

The MF Global suit is also provocative in its timing, coming a year after the finalization of the Eligibility Rule. The plaintiffs' attorneys chose to pursue the private antitrust action *notwithstanding* the presence of regulation on open access. This was the same choice made by the plaintiff in *Trinko*—that is, to spell out an essential facilities action even though the Telecommunications Act provided a duty to deal in the form of interconnection to the monopolist's telephone network. Yet *Trinko* suggests that an essential facilities claim will be rendered duplicative—and therefore dismissed—every time there is an openness mandate in regulation. It

²¹² This would satisfy the first prong of essential facilities—control by a monopolist or, arguably, a cartel.

²¹³ This would satisfy the second prong of essential facilities—inability to duplicate. As MF Global further alleged, the defendants had also conspired to prevent the emergence of alternatives to ICE Clear Credit. *See MF Global* Complaint, *supra* note 194, at para. 89-112.

²¹⁴ This would satisfy the third and fourth prongs of essential facilities—denial of access to a competitor despite the feasibility of providing access.

²¹⁵ MF Global Complaint, supra note 194, at para. 66.

²¹⁶ *Id.* at para. 68.

²¹⁷ See, e.g., Greenberger, supra note 13; Christine A. Varney, Assist. Att'y Gen., U.S. Dep't of Justice Antitrust Div., Comments before the U.S. Commodity Futures Trading Comm'n, Washington, D.C., (Dec. 28, 2010); U.S. Dep't of Justice, supra note 66.

²¹⁸ Not surprisingly, MF Global included treble damages in its prayer for relief. *MF Global* Complaint, *supra* note 194, at para. 13.

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is perhaps for this reason that MF Global never refers to essential facilities by name, opting instead to channel its spirit.

MF Global therefore shows that there is a confluence of trends propelling clearinghouses toward the forefront in the battles over essential facilities and the relevance of antitrust. The next decisive step in these battles may come from litigation against these bottlenecks in the financial markets, where courts are forced to define the precise contours of open access.

IV. A Proposal for Reconciling Openness Mandates

With Dodd-Frank's Core Principle C and Eligibility Rule, lawmakers and financial regulators have imposed an openness mandate to solve age-old problems (leverage, foreclosure) in a novel setting (derivatives clearinghouses). This is an area where regulators have had little experience administering openness mandates. In the past, federal judges might have assisted with enforcement under the Sherman Act. Yet *Trinko* scales back the ability of courts to intervene where regulation has already spoken.

This Section argues that essential facilities claims should be preserved as recourse against clearinghouses and their members for wrongful denial of access, notwithstanding the existence of Core Principle C and the Eligibility Rule. This proposal is a narrow one—it merely argues for reconciliation of Dodd-Frank and essential facilities. However, given dicta in *Trinko* which undercuts both essential facilities as doctrine and the symbiosis of regulation and antitrust, this proposal must be hitched to broader arguments which refine, or even overhaul, *Trinko*.

This Section begins with a formulation of the narrow proposal and discusses the justifications for, as well as opposition to, the proposal. This Section then explores the necessary steps to bring the proposal to fruition.

A. The Proposal

An openness mandate allows excluded applicants to a financial market bottleneck to challenge the denial of access. This is an easy proposition if competition laws are the only framework for deterring the abuses of bottlenecks. But if there are also regulations on point, then the proposition must be refined, and additional justifications must be proffered for supplementing those regulations.

As applied to clearinghouses, then, this proposal can be restated as follows: Permit the coexistence of the essential facilities doctrine and the Eligibility Rule, so that excluded applicants to clearinghouses can bring private antitrust actions.

How might this proposal be applied?

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If an applicant (say, a small derivatives dealer) applies to a clearinghouse for membership and is denied, the applicant might initiate a regulatory proceeding with the Commodity Futures Trading Commission ("CFTC") against the clearinghouse. If successful, such a proceeding may result in either a fine to the clearinghouse or deregistration of the clearinghouse. Neither possibility is very useful to the excluded applicant, who merely wants access to satisfy Dodd-Frank's clearing mandate and who likely cannot afford the sunk costs of building a clearinghouse of its own.

Simultaneously, however, the applicant could also pursue a private right of action against the clearinghouse and its members for denial of access to an essential facility. If successful, the remedy might be forced sharing, which enables the applicant to continue with its core function of selling derivatives; or the remedy might be damages, which either compensates for the additional costs of having to find a surrogate to satisfy the clearing mandate²²⁰ or forces the clearinghouse to the negotiation table to talk seriously about granting access.²²¹

B. Arguing the Proposal

1. Complementing (versus duplicating) regulation

For clearinghouses, an antitrust openness mandate is well-suited to complement the regulatory one. Regulators face an uphill battle in patrolling and effectively remedying the duty of open, nondiscriminatory access. The only tool in their arsenal is the Eligibility Rule, a nebulous formulation which leaves much discretion to the regulated entities themselves. The remedy, too, is inappropriate, providing only for fines and deregistration.

The complementary nature of the Eligibility Rule and essential facilities can be shown through a comparison of their elements. The rule and the doctrine neither duplicate each other entirely nor avoid overlap altogether; instead, combining the two leads to more holistic enforcement of the openness mandate.

To begin with, there are elements of each mandate that can be found in the other. Most importantly, the freedom of a clearinghouse to balance risk under the Eligibility Rule is mirrored in essential facility's inquiry into "feasibility" of access in prong iv. ²²² In an essential facilities action, a clearinghouse must demonstrate why admission of an applicant was infeasible; no doubt the applicant's

²¹⁹ See 7 U.S.C. § 8(b); 17 C.F.R. § 143.8.

²²⁰ This can be done by entering into another trade with a clearinghouse member. However, the additional transaction incurs additional fees.

²²¹ See Crane, supra note 164, at 707-09.

²²² See supra notes 226-27 and accompanying text.

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risk profile would figure prominently in the clearinghouse's argument.

Yet the two mandates also bear unique traits. The Eligibility Rule, understandably, features some detailed requirements which adhere to a degree of specificity that is common for regulations but not found in generalist antitrust doctrines. For instance, clearinghouses cannot peg admission criteria to an applicant being a derivatives dealer or hitting a certain notional threshold.²²³ For its part, prong ii of essential facilities looks to the ease of duplication of a clearinghouse, ²²⁴ an inquiry absent in the regulatory counterpart. Historically, this inquiry has been more the province of antitrust enforcers than financial regulators; it introduces valid questions of whether the applicant could or should just form its own clearinghouse. 225 Essential facilities would also subsume the balancing of access and risk into a broader analysis of "feasibility." This approach might suggest ways of getting from denial of access to granting of access. An applicant whose initial risk profile militates toward denial might be rehabilitated so that it could eventually be granted access. For instance, the clearinghouse might give the applicant pointers on shoring up its risk mitigation procedures. This flexibility would be provided for—even required in the element of "feasibility."²²⁷

There are also institutional benefits that flow from letting the two openness mandates work together. Essential facilities brings along a century of precedent that has built up institutional familiarity with the harms of denial of access, as well as experimentation with different types of remedies. The record on deterrence has been

²²³ 17 C.F.R. 39.12(a)(1)(v).

²²⁴ MCI Commc'ns Corp., 708 F.2d at1132-33.

²²⁵ Also associated with this is the complex question of whether open access deters the DCO's incentives to innovate. In general antitrust circles, the effects of a robust duty to deal upon innovation are hotly contested. *See* Frischmann & Waller, *supra* note 23, at 32; Lipsky & Sidak, *supra* note 180, at 1239-40. *See also The Uncertain Future of the Internet: Hearing before the H. Comm. on Energy & Commerce* (Feb. 15, 2015) (memo from Majority Committee Staff), http://docs.house.gov/meetings/IF/IF16/20150225/103018/HHRG-114-IF16-20150225-SD002-U1.pdf.

²²⁶ "Feasibility" is the fourth element of essential facilities. *See MCI Commc'ns Corp.*, 708 F.2d at1132-33.

²²⁷ Note, however, that even the *MCI* court was unable to apply the feasibility element and, instead, threw up its hands and deferred to regulators. *See* Maurer & Schotmer, *supra* note 20, at 15. This Article's proposal runs the risk of the same happening. To prevent this, courts must apply their own analysis on feasibility rather than repeating how the Eligibility Rule balances access against risk.

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mixed,²²⁸ but it is a record that can help steer regulators toward more flexible detection of anticompetitive effects as well as solutions for such effects. For the massive, yet newly mandated derivatives clearing industrial complex, essential facilities may also spur rigorous examination of problems that financial regulators have heretofore been unable to address—most prominently, concentration in the derivatives dealer markets.²²⁹

Coexistence with antitrust improves not only the tools but also the institutions of oversight. Among the notable advantages of antitrust over regulation is a diminished likelihood of capture. The too-big-to-fail nature of systemically significant clearinghouses necessitates a close relationship with financial regulators, which in turn makes them prone to regulatory capture. Without proper institutional checks, the regulations designed to restrain clearinghouses might morph into restraints against their competitors. 232

Of course, imposing an antitrust openness mandate introduces complications of its own. Prong i in an essential facilities action, control of a facility by a monopolist, presents an inquiry that the Eligibility Rule avoids. Satisfying this prong would necessitate finding that a small group of dealer-members not only controls a clearinghouse but adequately constitutes a "monopolist."²³³ Yet group action is typically governed under Section 1 of the Sherman Act, while single-firm conduct falls under Section 2's prohibition against monopolization.²³⁴ This oddity replicates the conflation of

²²⁸ See, e.g., Lipsky & Sidak, supra note 180, at 1195–96 (discussing the difficulty of crafting the appropriate remedy in *Terminal Railroad*).

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²²⁹ For instance, judicial scrutiny into the reasonableness of denial of access and forcing the excluded applicant to build its own facility might push the industry toward consensus on the grounds for exclusion. This has happened where licensing is heavily utilized: the industry settles upon a norm, and antitrust checks those norms for anticompetitive effects. *See* Frischmann & Waller, *supra* note 23, at 38-39.

²³⁰ For an exploration of regulatory capture in the promulgation of telecom interconnection mandates, see Candeub, *supra* note 23, at 860 (detailing how the Baby Bells sought regulation by the Federal Communications Commission under the belief that the regulator was more lax than antitrust prosecutors).

²³¹ See Lubben, supra note 99 (arguing that it is unimaginable for large clearinghouses to fail without being bailed out).

²³² See Crane, supra note 164, at 707 (quoting Alfred Kahn on regulation's contradictory impulses toward monopoly).

²³³ But see Herbert Hovenkamp, Federal Antitrust Policy: The Law of Competition and Its Practice 336 (2011) at 336 ("once a properly defined 'essential facility' is at issue, it really should not matter whether the facility is controlled by a single firm or a group of firms acting in concert").

²³⁴ 15 U.S.C. §§ 1-2. For a thorough discussion, see Jonathan B. Baker, *Exclusion as a Core Competition Concern*, 78 ANTITRUST L.J. 527, 532-35 (2013).

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sections 1 and 2 of the Sherman Act that has muddled the essential facilities doctrine and inspired its detractors. More complicated still is the prospect that to fully tease out concerted action by dealer-members, we have to turn to debates around parallel exclusion, as well as collusion versus exclusion, which is more controversy than we have room to take on here.

Let us not lose sight of the bigger picture, however. For all the ancillary debates that essential facilities entails, those debates are fresh ways of looking at the problem of FMIs as a node of vertical integration, particularly the integration of the derivatives dealer market with the derivatives clearing market. Coexistence with antitrust would lend these perspectives, as well as a wealth of experience in crafting remedies.

2. Undercutting risk management

A powerful counterargument, however, is that paring a regulatory openness mandate with essential facilities undercuts the ability of a clearinghouse to manage risk. Because a denied applicant could pursue a private right of action, the clearinghouse must now contemplate antitrust when making eligibility determinations.

This concern is backed by valid considerations. After all, regulators settled upon a rule that they felt appropriately balances the diametric interests—balance which might be upset if an antitrust claim is in the mix.²³⁸ If small traders force their way into a clearinghouse by way of open access, then the other members and the clearinghouse itself might be imperiled.

To some extent, however, the mechanics of a properly functioning clearinghouse mitigates those perils. For example, collateral requirements should prevent trades from becoming highly leveraged. Even if trades by smaller members *were not* adequate collateralized, the default fund should stave off exposure to other members.²³⁹

Here is another way to conceptualize what is at stake: The fallout of admitting smaller members might be that some of them default and other members are called upon to augment the default fund. On the other hand, the fallout of preserving the status quo,

²³⁵ See infra note 187-88 and accompanying text.

²³⁶ See Hemphill & Wu, supra note 67.

²³⁷ See Baker, supra note 234.

²³⁸ *See* DCO Core Principles, *supra* note 82, at 69352. Ultimately, it is not the province of regulators to determine how regulation squares with antitrust; this is a decision for lawmakers and the courts.

²³⁹ For a much heralded example of the default fund at work, see de Terán, *supra* note 79; LCH.Clearnet, *supra* note 79.

²⁴⁰ See Lubben, supra note 99, at 10-11.

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where dominant derivatives dealers have a lock on clearinghouses, is that risk will not be properly dispersed. Thus, if a large dealer defaults, the damage cannot be dissipated. Concentration in the dealer market was the norm prior to the financial crisis, and it remains the norm today; Dodd-Frank has simply interposed the additional layer of clearinghouses, which, ironically, works to cement the status quo.

One way to interpret the centralization of clearinghouse membership among a small group of dominant dealers is that the clearinghouses have successfully weeded out risky applicants. The other way to read this is Tirole's: that the clearinghouse membership profile replicates and reinforces concentration in the downstream dealer market.²⁴³ The latter interpretation is backed by not just theory, but also evidence from other vertically integrated industries.²⁴⁴

Of course, the derivatives clearing industry may be different enough that financial regulators should have the exclusive say on how competition policy fits. Certainly there are traits unique to this industry, whose prerogative to manage financial risk has implications not only for competition, but also for the stability of the global economy. Many balancing acts are at work in Dodd-Frank's openness mandate. Admittedly, it may be too early to discern the proper balance between access and risk—we may need more time to see how the clearing market (and, by implication, the adjacent trading market) evolves. This Article merely suggests that it would

The problem with the clearinghouse is not when your smallest clearing member fails. The problem with the clearinghouse is when your highly interconnected, large [clearinghouses fail] So, the notion somehow that you should restrict arbitrarily membership to a clearinghouse such that you have more connected, larger, systemically important institutions who are highly correlated is patently wrong. (comments of Jason Kastner)

In theory, clearinghouse mechanics should take care of this risk, as the CFTC requires clearinghouses to be sufficiently capitalized to withstand the default of its largest one or two members. *See* 17 C.F.R. § 39.29. In practice, however, many are skeptical that if the largest members fall, the clearinghouse will still be able to stand. *See*, *e.g.*, Lubben, *supra* note 99.

²⁴¹ See CFTC Roundtable, supra note 77, at 47-48:

²⁴² See supra text accompanying notes 151-53.

²⁴³ See supra notes 44, 83.

²⁴⁴ See, e.g., Wolkoff & Werner, supra note 97 (futures exchanges); Crawford, supra note 94 (telecommunications).

²⁴⁵ See Commodity Futures Trading Comm'n, Statement of the Commission 12 (Mar. 6, 2013), available at

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be foolhardy to bide the time by leaving the dominant derivatives dealers to their anticompetitive devices.

3. Perverse incentives for derivatives users

Another powerful counterargument is that perverse incentives would be created for consumers of derivatives—end-users, hedgers, and even speculators—if these clearinghouses submit to regulatory and antitrust openness mandates. Open-access clearing ostensibly results in competition in the dealer market. Competition in the dealer market, in turn, lowers prices for derivatives instruments.²⁴⁶

In other paradigms, lower price coheres with consumer welfare, the driving justification for breaking up monopolies.²⁴⁷ Consumer welfare is gauged by increased consumption, particularly of a resource made either artificially scarce or artificially expensive by a monopoly.²⁴⁸

For derivatives, however, the calculus is different. The resource being consumed is a financial instrument with complex, often hidden risks²⁴⁹ that has been maligned as "financial weapons of mass destruction."²⁵⁰ Lower prices for derivatives means greater consumption—usually by two types of "consumers."²⁵¹ One type is consumers who might not need derivatives or understand their risks. Yet they might be induced to purchase if the prices are not

http://www.cftc.gov/PressRoom/PressReleases/pr6525-13 (follow link to "Statement of the Commission") (approving Rule 1001 in CME's Rulebook but noting that the rule's anticompetitive effects may not manifest until some time has passed). The controversy over CME Rule 1001 is one of the most interesting developments in recent months. The rule permits CME's clearinghouse to report data on cleared swaps to its vertically integrated swap data repository. The controversy has revealed how the CFTC handles complaints against a large clearinghouse alleging violations of Core Principle N (antitrust considerations).

²⁴⁶ See Erik Gerding, Derivatives: Learning to love anti-competitive behavior?, THE CONGLOMERATE (Aug. 2, 2013), http://www.theconglomerate.org/2013/08/derivatives-learning-to-love-anti-competitive-behavior.html.

²⁴⁷ BERG & TSCHIRHART, *supra* note 58, at 24-30, 288-89. *See also* John B. Kirkwood and Robert H. Lande, *The Fundamental Goal of Antitrust: Protecting Consumers, Not Increasing Efficiency*, 84 NOTRE DAME L. REV. 191, (2008).

²⁴⁸ See Sullivan Grimes, supra note 58.

²⁴⁹ See Wilmarth, supra note 6, at 337-73.

²⁵⁰ Warren E. Buffett, Letter the Shareholders of Berkshire Hathaway Inc. 13 (Feb. 21, 2003), *available at* http://www.berkshirehathaway.com/letters/2002pdf.pdf.

 $^{^{251}}$ See Frank Partnoy, F.I.A.S.C.O.: Blood in the Water on Wall Street (2010) (characterizing buyers of derivatives as either "cheaters" or "widows and orphans").

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prohibitive.²⁵² Another type is consumers who trade derivatives for purely speculative purposes.²⁵³ They might be induced to double down on their positions if the instruments are cheap enough.

Some of these risks can be averted by other provisions in Dodd-Frank. Purchase of derivatives by certain consumers—for example, government entities and pension plans—triggers certain duties among dealers, including the requirement to place the purchasers' interests above the dealers' interests. These duties should mitigate risks to some consumers.

Further, the clearing function itself works to reduce risk by standardizing derivatives instruments.²⁵⁵ Clearing demands that instruments be fungible enough so that if one party to a trade defaults, an unrelated party can buy into that position.²⁵⁶ Fungibility reduces information asymmetries, increases transparency in pricing, and thereby dampens risk.²⁵⁷

A related argument is that natural monopoly regulation is an improper theoretical framework for clearinghouses because these facilities do not interface with the public interest. The foundational works on natural monopolies justified their regulation on the bases of sunk costs *and* public goods.²⁵⁸ That is, natural monopolies must provide useful services such as electricity that cannot be widely

²⁵² The inducement might come via tying—for example, a lender only extends a loan if the borrower also purchases an interest rate swap. *See* Felix B. Chang, *Death to Credit as Leverage: Using the Bank Anti-Tying Provision to Curb Financial Risk*, 9 N.Y.U. J. L. & Bus. 851 (2013).

 $^{^{253}}$ See Timothy E. Lynch, Gambling by Another Name; The Challenge of Purely Speculative Derivatives, 17 Stan. J.L. Bus. & Fin. 67 (2011).

²⁵⁴ See 17 C.F.R. 23.400 et seq.; Business Conduct Standards for Swap Dealers and Major Swap Participants with Counterparties, 77 Fed. Reg. 9734 (Feb. 17, 2012).

²⁵⁵ Craig Pirrong, *The Economics of Clearing in Derivatives Markets: Netting, Asymmetric Information, and the Sharing of Default Risks through a Central Counterparty* 10 (2009), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1340660.

²⁵⁶ *Id. See also* DCO Core Principles, *supra* note 82, at 69361 ("The Commission believes that standardizing products . . . will increase liquidity, lower prices, and increase participation. In addition, standardized products should make it easier for members to accept a forced allocation in the event of bankruptcy.").

²⁵⁷ See generally Zachary J. Gubler, *The Financial Innovation Process: Theory and Application*, 36 Del. J. Corp. L. 55 (2011). The counterargument to this is that innovation, and therefore risk, will migrate elsewhere. For example, clearinghouses might choose to keep certain instruments unclearable so as to maximize the dealer's cut; or financial institutions might devise new instruments not encapsulated by mandatory clearing. Risk does not diminish but is pushed elsewhere. But standardized instruments are not free of risk. The speculation in silver futures in the 1980s shows that fungible, exchange-traded instruments too can wreak havoc.

²⁵⁸ See Spulber, supra note 58, at 4.

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dispensed without government protection from competition.²⁵⁹ Whether centrally cleared derivatives are a public good is far from settled. Derivatives might be widely consumed at staggering volumes, but they are often lambasted as little more than gambling. If the clearing grid makes it easier to transact in instruments so closely associated with financial crises,²⁶⁰ its value may be dubious.

4. Expansiveness of regulation

The proposal to pair essential facilities with the Eligibility Rule can be justified within the existing framework of regulatory pre-emption of antitrust. While Dodd-Frank as a whole is expansive, its pronouncements on competition are sparse, consisting only of Core Principles C and N, the antitrust savings clause, and the Eligibility Rule.²⁶¹ The lean regulatory framework on competition suggests that antitrust is not to be displaced.

Prior to *Trinko*, Supreme Court precedent on antitrust immunity looked either to the expansiveness of the regulatory scheme or to the potential for conflict between regulation and antitrust. Neither approach was overruled by *Trinko*. Rather, *Trinko* pivots toward comparing the costs and benefits of antitrust if regulation already exists. Thus, there are three ways of considering regulatory pre-emption of antitrust: (i) pervasiveness of regulation, (ii) potential for conflict, and (iii) additional benefits conveyed by antitrust.

Regarding the first possibility, as noted above, Dodd-Frank's provisions on competition are hardly pervasive. The Eligibility Rule is a far cry from the "extensive provision for access" under the Telecommunications Act of 1996 that the Supreme Court invoked to justify its refusal to sanction judicially imposed access. Three years after *Trinko*, the Supreme Court decided *Credit Suisse v. Billing*, which provided four factors to determine whether regulation

²⁶⁰ Frank Partnoy, Infectious Greed: How Deceit and Risk Corrupted the Financial Markets (2009) (Orange County, California and Procter & Gamble interest rate swaps debacles); Kyle Whitmire & Mary Williams Walsh, *High Finance Backfires on Alabama County*, N.Y. Times, Mar. 12, 2008, http://www.nytimes.com/2008/03/12/business/12bama.html?_r=1&fta=y (Jefferson County, Alabama interest rate swaps debacle).

²⁵⁹ See id.

²⁶¹ *Trinko* itself points to the "existence of a regulatory structure *designed to deter and remedy anticompetitive harm,*" 540 U.S. at 412 (emphasis added), rather than the expansiveness of the entire regulation.

²⁶² E.g., Silver, 373 U.S.; U.S. v. National Assn. of Securities Dealers ("NASD"), Inc., 422 U.S. 694 (1975).

²⁶³ See Trinko, 540 U.S. at 412 (citing Silver and NASD with approval).

²⁶⁴ See id. at 411-12 (citing Silver to support this approach).

²⁶⁵ *Id.* at 411.

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should trump antitrust: (i) the existence of regulatory authority to supervise the conduct in question, (ii) evidence that regulators exercise that authority, (iii) the risk of conflicting results from applying antitrust, and (iv) whether the conduct falls within the activities governed by regulation. Credit Suisse saw itself as following prior implied antitrust immunity cases premised upon the pervasiveness of the securities laws. Hence, these four factors can help parse whether the Eligibility Rule too is sufficiently pervasive. Here the Eligibility Rule falls short. Despite the existence of regulation on point (factors i and iv), the persistence of questionable clearinghouse membership requirements and concentration in the dealer markets is evidence suggesting that regulators have not exercised their authority (factor ii).

Regarding the second possibility for construing pre-emption (the potential for conflict), it must be conceded that the complementary relationship between the Eligibility Rule and essential facilities could, in some circumstances, lead to disparate findings. For instance, the CFTC might not challenge a clearinghouse's exclusion of an applicant, but the applicant could turn to federal court, file an action against the clearinghouse under antitrust laws, and prevail. This would be the nightmare scenario that motivates the critics of a parallel private right of action under antitrust law. Such critics fear that antitrust would engender false positives²⁷⁰ and cumulative overdeterrence,²⁷¹ as well as invade the purview of regulators.²⁷²

Nonetheless, we can accept a result of inconsistency if it stems from the inability of the CFTC to enforce the Eligibility Rule.²⁷³ In that case, antitrust would stave off the false *negatives* of underenforcement.²⁷⁴ There can also be no *over*deterrence if regulators do not deter in the first place.

We can also accept inconsistency if it furthers the CFTC's mandate under the Eligibility Rule. Indeed, in the final release announcing the promulgation of the rule, the CFTC noted that "[t]he

²⁶⁶ See 551 U.S. at 275-76. For critics of *Trinko, Credit Suisse* is no les problematic in its approach toward antitrust immunity. See Shelanski, supra note 23, at 706-10.

²⁶⁷ 551 U.S. at 275-76 (citing *Gordon* and *NASD*).

²⁶⁸ See supra Section III.B.2.

²⁶⁹ Factor iii from *Credit Suisse*, the potential for conflict between regulation and antitrust, is discussed in the next paragraph.

²⁷⁰ See Trinko, 540 U.S. at 412-14.

²⁷¹ See Dogan & Lemley, supra note 164, at 705 n.88 and accompanying text.

²⁷² For a nuanced analysis, see Glover, *supra* note 162, at 1180 (discussing when regulators possess informational advantages).

²⁷³ See id. at 1203-04.

²⁷⁴ Shelanski, *supra* note 23, at 711-13.

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Commission has crafted the provisions of § 39.12 . . . to establish a regulatory framework that it believes can ensure that a DCO's participation requirements do not unreasonably restrict any entity from becoming a clearing member while, at the same time, limiting risk to the DCO and its clearing members."²⁷⁵ And yet, in the very next sentence, the release clarified that "The Commission expects that more widespread participation will reduce the concentration of clearing member portfolios, thereby diversifying risk, increasing market liquidity, and increasing competition among clearing members."²⁷⁶ That is, competition in the dealer market, too, is a goal of the rule. Unfortunately, the rule that the agency arrived at is a weak mechanism for ensuring competition, one that would work well in tandem with antitrust. The elements of essential facilities could undertake broader contemplation of vertical exclusion, the ability to replicate a clearinghouse, and competition in the adjacent dealer market.

At its most benign, then, a contradictory result might be traced to the weakness of the Eligibility Rule or the difficulty of catching an infraction—glitches which can be backstopped by a private right of action. Of course, at its most destructive, a false positive under antitrust might force a clearinghouse to expose itself to excessive risk. Recent scholarship has advanced a number of findings that temper the reality of false positives, ²⁷⁷ thereby making this tradeoff more palatable.

Regarding the third possibility for construing pre-emption (additional benefits from antitrust), there is much that a resuscitated essential facilities doctrine can offer alongside the Eligibility Rule. Among other things, antitrust would lend novel perspectives on looking at the harms of leverage and foreclosure, which the CFTC is not accustomed to dealing with.

5. Antitrust savings clause

Core Principle N and the antitrust savings clause reflect clear Congressional intent to sustain the applicability of antitrust law. In fact, Dodd-Frank's rather slim competition-related provisions should settle the convoluted wrangling over whether regulation is sufficiently expansive to displace antitrust. The majority of cases on antitrust immunity actually involve *implied* immunity, where the statute on point does not have an antitrust savings clause or a savings clause that refers explicitly to the antitrust laws. ²⁷⁸ Here, Dodd-Frank

²⁷⁷ E.g., Shelanski, *supra* note 23, at 711-13.

²⁷⁵ DCO Core Principles, *supra* note 82, at 69352.

²⁷⁶ Id.

²⁷⁸ See Silver, 373 U.S.; Gordon, 422 U.S.; and Credit Suisse, 551 U.S.

contains such a savings clause, and while the clause does not necessarily operate to bar any finding of plain repugnancy,²⁷⁹ the existence of such a clause should nudge courts toward trying harder to reconcile antitrust with regulation.

The backdrop of how Dodd-Frank's antitrust savings clause came to pass is salient. Prior to Dodd-Frank, the restriction on imposing a material anticompetitive burden had been limited to designated contract markets ("DCMs"). 280 DCMs are platforms such as exchanges and boards of trade which quote the trading prices of futures or options contracts.²⁸¹ DCMs have existed for over a century; prominent ones include the Chicago Mercantile Exchange ("CME") and the Chicago Board of Trade. 282 In the academic discipline of industrial organization, some DCMs have become synonymous with inefficiency and abuse of dominance. 283 This is because many run their own clearinghouses. For instance, CME dominates the market for selling certain treasury futures.²⁸⁴ CME's proprietary clearinghouse, known as CME Clearing, only clears and settles products sold by CME the futures dealer. 285 If an upstart wanted to sell the same types of agricultural futures, it would have to go to another clearinghouse or form its own. ²⁸⁶

Prior to Dodd-Frank, the antitrust considerations of Core Principle N governed only DCMs. Then in 2010, Section 725 of Dodd-Frank extended this principle to clearinghouses. The extension reflects a commitment from Dodd-Frank's drafters to protect competition. Against the backdrop of vertical foreclosure in the futures industry and now clearinghouses for over-the-counter derivatives, the antitrust savings clause appears all the more compelling.

²⁷⁹ Shelanski, *supra* note 23, at 693 (analyzing the Second Circuit decision in *Trinko*, which advocated such a position).

²⁸⁰ See Core Principles and Other Requirements for Designated Contract Markets, 77 Fed. Reg. 36612, 36657 (June 19, 2012).

²⁸¹ See Commodity Futures Trading Comm'n, Designated Contract Markets (DCMs),

http://www.cftc.gov/IndustryOversight/TradingOrganizations/DCMs/index. htm (last accessed Feb. 26, 2015).

²⁸² See CFTC, Trading Organizations - Designated Contract Markets (DCMs), http://sirt.cftc.gov/SIRT/SIRT.aspx?Topic=TradingOrganizations&implicit=tr ue&type=DCM&CustomColumnDisplay=TTTTTTT (last accessed Feb. 26, 2015).

²⁸³ See, e.g., Wolkoff & Werner, supra note 97, at 313.

²⁸⁴ U.S. Dep't of Justice, *supra* note 66, at 10-16.

²⁸⁵ *Id.*

²⁸⁶ *Id.*

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6. Established nature of the antitrust openness mandate

Control of a bottleneck facility in an upstream market helps the monopolist in a downstream market maintain its dominance. This is a classic case of leveraging that fits within the caveat that *Trinko* left open for causes of action under "existing antitrust standards."²⁸⁷

As a matter of doctrine, leveraging is a form of exclusion, whose rules have long been controversial in competition policy. The detractors of exclusion have been many and prominent. The various tropes of exclusion, from tying to leverage to margin squeeze, have alternately fallen into and out of favor, with the latest volley coming from Rey and Tirole—and, in 2014, vindication of their view by Tirole's Nobel Prize.

As a matter of history, the lineage of exclusion is long and storied. For all the fluctuations in academic trends, exclusion fits squarely within existing antitrust standards. The seminal case on essential facilities, *Terminal Railroad*, recently celebrated its 100th birthday, and it was not that long ago that the high-water-mark of this doctrine was reached in *Otter Tail* and *Aspen Skiing*.

Yet characterizing essential facilities as an "established" cause of action runs up against *Trinko*. The majority in *Trinko* minced no words in its skepticism toward monopolization and duty-to-deal claims. The majority characterized the duty-to-deal precedent as "at or near the outer boundary of [Sherman Act] § 2 liability";²⁹¹ then it proceeded to dismantle *Aspen* by reading it as imposing several high bars for plaintiffs.²⁹² In the few paragraphs between the decision's two frequently quoted passages on essential

²⁸⁷ See 540 U.S. at 407 ("just as the 1996 Act preserves claims that satisfy existing antitrust standards, it does not create new claims that go beyond existing antitrust standards.").

²⁸⁸ Baker, *supra* note 234, at 534-35.

²⁸⁹ See supra note 71 and accompanying text.

²⁹⁰ One might take issue with *Trinko*'s insistence on existing antitrust standards; for it freezes antitrust law in 2004, preventing new doctrines from ever evolving. But for our purposes, the more modest approach of trying to fit leveraging claims against clearinghouses within *Trinko*'s precepts suffices. ²⁹¹ 540 U.S. at 409.

²⁹² *Trinko* appears to require (i) a pre-existing course of dealing prior to exclusion and (ii) sacrificing of short-term profits for long-term dreams of monopoly. *See* Eleanor M. Fox, *Is There Life in Aspen after Trinko? The Silent Revolution of Section 2 under the Sherman Act*, 73 ANTITRUST L.J. 153, 167 (2005).

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facilities,²⁹³ the Court all but obliterated the doctrine, articulating a test that *Aspen*'s own facts could not have passed.²⁹⁴

In the end, all justifications for the essential facilities doctrine must come to a head by confronting *Trinko*.

C. Broader Arguments to Refine Trinko

This Article calls for utilizing antitrust to shore up the regulatory openness mandate. Yet this cannot be done without rethinking *Trinko*. *Trinko* blocks the coexistence of Dodd-Frank and essential facilities at every turn. Under the majority opinion, antitrust can hardly complement regulation if regulation has already spoken, and essential facilities has been whittled to a shred of its former self under *Aspen*. In so starkly cabining the prior antitrust frameworks, *Trinko* itself must be cabined if the proposal herein is to come to pass.

A number of critics have advanced arguments for dealing with *Trinko*.²⁹⁵ There are, therefore, several possibilities to choose from. This Subsection summarizes a few of them, tailoring the application to clearinghouses.

One set of possibilities is to more clearly demarcate the realms of regulation and antitrust, as well as the permissible overlaps. This might be achieved by defaulting to courts to read *Trinko* narrowly. To this end, courts could require that regulation truly be expansive, as well as precise, in its contemplation of competition in order to displace antitrust. This alternative has been explored here and also by Howard Shelanski. ²⁹⁶ Its drawback is that implementation rests the lower courts, which could read "expansive" divergently, eventually requiring the Supreme Court to step in again. ²⁹⁷ But that is not a bad result, as it would force the Supreme Court to reconsider rather problematic precedent. ²⁹⁸

Another set of possibilities is to revitalize essential facilities directly. Brett Frischmann and Spencer Waller, for instance, have

²⁹³ Specifically, that "Aspen Skiing is at or near the outer boundary of § 2 liability," 540 U.S. at 409, and that the Court has "never recognized such a doctrine," id. at 410.

²⁹⁴ *See* Fox, *supra* note 292, at 162-67.

²⁹⁵ See infra text accompanying notes 296-302.

²⁹⁶ See Shelanski, supra note 23, at 730.

²⁹⁷ *Id.* Alternatively, as Shelanski has also suggested, Congress could step in to establish clearer standards for antitrust immunity. *Id.* at 730-31.

²⁹⁸ The post-*Trinko* cases suggest that the current state of affairs is a morass. *See* Robert A. Skitol, *Three Years after* Verizon v. Trinko: *Broad Dissatisfaction with the Whole Thrust of Refusal to Deal Law*, 6-APR ANTITRUST SOURCE 1 (2007); Sandeep Vaheesan, *Reviving an Epithet: A New Way Forward for the Essential Facilities Doctrine*, 2010 UTAH L. REV. 911 (2010).

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defended the use of essential facilities to open up access to certain infrastructures if the infrastructures create social value when utilized productively in the downstream market.²⁹⁹ This is a variation of an older argument that access to public goods should be granted in a nondiscriminatory manner.³⁰⁰ Spencer and Waller's infrastructure theory is not particularly controversial for hard infrastructures, which, traditionally, essential facilities have tended to be (e.g., roads, bridges, connections to the local telephone network). Clearinghouses are less physically tangible, though the upside is that they are not as prone to capacity problems. As applied to derivatives products, infrastructure theory also leads to interesting conversations about the social value of derivatives, which is not universally accepted.

More recently, essential facilities has been reimagined as a tool for creating synergies among the entities sharing access, so that consumer value is enhanced and costs reduced. The peculiarities of the derivatives markets obviate some of the problems that come with the synergy theory—for example, sharing should not be encouraged if it would lead to congestion of the facility, a concern that is likely irrelevant for clearinghouses. But those peculiarities also raise additional considerations, such as the incentives upon consumers of derivatives if those products are less costly and more widely available. 302

A constant thread that runs through most of these options is the need to bolster essential facilities—to defend it from the onslaught of *Trinko* and bring it back from the brink of extinction. Some advocates have proffered an approach by Judge Posner as a measured way of resuscitating essential facilities. In *Olympia Equipment Leasing Co. v. Western Union Telegraph Co.*, ³⁰³ decided nearly two decades before *Trinko*, Posner focused on whether refusal to cooperate hurts competition because access to necessary facilities is denied. ³⁰⁴ For derivatives clearinghouses, the answer is a yes: the central clearing mandate renders clearinghouses necessary, and

²⁹⁹ See Frischmann and Waller, *supra* note 23, at 14. Infrastructure theory is comprised of three conditions: (i) the infrastructure-resource may be consumed non-rivalrously, (ii) social demand for the resource is driven primarily by downstream productive activity that requires the input of the resource, and (iii) the resource is an input into a wide range of goods and services. *Id.* at 12. This theory surfaced in earlier form in Waller's challenge of Areeda's conception of essential facilities. *See* Spencer Weber Waller, *Areeda, Epithets, and Essential Facilities*, 2008 Wis. L. Rev. 359 (2008).

³⁰⁰ See Speta, supra note 90; Crawford, supra note 94.

³⁰¹ *See* Maurer & Schotmer, *supra* note 20, at 4. For the elements of their theory, see id. at 26.

³⁰² See supra Section IV.B.3.

³⁰³ 797 F.2d 370 (7th Cir. 1986).

³⁰⁴ *See id.* at 377; Skitol, *supra* note 298, at 9-10. This is in contrast with the hurdles imposed upon *Aspen. See supra* note 291.

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denial of access hurts competition in the largest financial markets in the world. Even a modest revival of essential facilities by way of Posner's approach would go a long way toward leveling the playing field in those markets.

V. CONCLUSION

The stakes are high for safeguarding open access to derivatives clearinghouses, a type of financial market infrastructure that sits at the intersection of several major trends. If financial regulators fail to catch improper denials of access, the consequence isn't simply that traders do not gain access to clearinghouses or the dealer market is not as diverse—the consequence is also that the derivatives markets continue to be concentrated in a small number of systemically significant financial institutions. Today, several financial markets exhibit a high degree of concentration, with the vast majority of market share typically being taken up by the same entities. The top derivatives dealers, for example, also happen to be the largest commercial banks and the most powerful clearinghouse members. For all the reforms in Dodd-Frank, the act does little to dissipate the concentration in the dealer market.

The only tool that regulators have is the Eligibility Rule, a relatively new rule whose effectiveness depends on the discretion of the regulated clearinghouses. If, by way of essential facilities actions, competitors in the much more lucrative dealer market are permitted to also check the exclusionary impulses of the dominant dealers and their naturally monopolistic clearinghouses, then essential facilities and the Eligibility Rule would have gone further than any combination of financial regulation and antitrust before it. By *Trinko*'s own cost-benefit analysis, the coexistence of antitrust and regulation would be justified.