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LESSONS FROM THE FINANCIAL CRISIS

MAURICE E. STUCKE*

The character Howard Beale's tirade in the 1976 movie *Network* still resonates today.¹ People are angry about the financial crisis, corporate scandals, and executives' spendthrift ways.² In a 2008 survey of "who's to blame for the economy," 90 percent identified mortgage companies as having a major effect on the financial crisis. Many also blamed lending institutions (88 percent), the federal government (86 percent), oil companies (81 percent), and credit card companies (76 percent).³ Public respect for business leaders in one March 2009 survey was "all but non-existent."⁴

Besides anger there is a loss of trust. More than 75 percent of Americans in one survey had lost faith in business between 2008 and 2009.⁵

* Associate Professor, University of Tennessee College of Law; Senior Fellow, American Antitrust Institute. The author wishes to thank Marina Lao for her comments and for organizing the ABA and AALS conferences and the other panelists, Darren Bush, Dan Crane, Keith Hylton, and Howard Shelanski, for their discussion and comments.

¹ NETWORK (Metro-Goldwyn-Mayer 1976). For a clip of his "I'm as mad as hell, and I'm not going to take this anymore" speech, see American Rhetoric: Movie Speech "Network" (1976), <http://www.americanrhetoric.com/MovieSpeeches/moviespeechnetwork2.html>.

² In one survey, feelings of anger over the financial crisis were more prevalent among college graduates (63 percent felt anger) and upper-income households (annual incomes of \$60,000 or more) (62 percent) than non-graduates (50 percent) and those who did not attend college (43 percent). The survey was conducted September 30, 2008, the night after the U.S. House of Representatives rejected a proposed \$700 billion bailout plan in response to the financial crisis. Jeffrey M. Jones, *Majority of Americans Angry About Financial Crisis, Most Expect Their Own Finances to Be Harmed in the Long Term*, GALLUP.COM (Oct. 2, 2008), <http://www.gallup.com/poll/110914/Majority-Americans-Angry-About-Financial-Crisis.aspx>.

³ *Snapshots*, USA TODAY, Jan. 26, 2009, <http://www.issans.com/News.aspx?newsId=03>.

⁴ Richard Milne, *How Business Turned into the Bogyman*, FIN. TIMES, Apr. 14, 2009, at 6.

⁵ 2009 Edelman Trust Barometer Executive Summary 1 (10th ed. 2009) [hereinafter 2009 Edelman Summary], http://www.edelman.com/trust/2009/docs/Trust_Barometer_Executive_Summary_FINAL.pdf. More broadly, 62 percent of the 4500 surveyed "opinion leaders" across twenty countries said they trusted companies less in 2009 than in 2008. *Id.*; see also Andrew Edgecliffe-Johnson, *Davos Confronted by Peak of Distrust*, FIN. TIMES, Jan. 27, 2009, at 14. Trust in businesses increased in the 2010 survey. 2010 Edelman Trust Barometer Executive Summary 1 (11th ed. 2010) [hereinafter 2010 Edelman Summary],

Few Americans in 2009 trusted corporations.⁶ Fewer in 2010 trusted the banking sector.⁷ Trust in markets deteriorated as evidence of Ponzi schemes and other financial deceptions emerged, and the government regulators' failure to deter them.

This past decade had several failures: failure of government institutions,⁸ the intellectual failure of laissez-faire beliefs in self-correcting markets,⁹ and moral failures underlying the financial crisis.¹⁰ Despite some alarmists' concerns, there is little risk that the United States will become a collectivist, centrally planned economy. But the regulatory, intellectual, and moral failures that culminated in the financial crisis

http://www.edelman.com/trust/2010/docs/2010_Trust_Barometer_Executive_Summary.pdf.

⁶ 2009 Edelman Summary, *supra* note 5, at 1 (only 38 percent, which was down twenty percentage points from 2008 and the lowest since the poll began); *see also How Trust Has Eroded*, HARV. BUS. REV., June 2009, at 64–65 (76 percent of readers surveyed have less trust since 2008 in senior management of U.S. companies; only 51 percent of readers had less trust in management of *non*-U.S. companies).

⁷ 2010 Edelman Summary, *supra* note 5, at 4 (only 29 percent of surveyed Americans in 2010 trusted the banking industry to do what is right). This is a decline of seven percentage points from the 2009 survey. *See* 2009 Edelman Summary, *supra* note 5, at 2 (36 percent, down from 69 percent in 2008).

⁸ *See, e.g.*, RICHARD A. POSNER, A FAILURE OF CAPITALISM: THE CRISIS OF '08 AND THE DESCENT INTO DEPRESSION 113, 134–35, 235 (2009) (criticizing the Bush administration's laissez-faire attitudes); PAUL KRUGMAN, THE RETURN OF DEPRESSION ECONOMICS AND THE CRISIS OF 2008 at 162–64 (2009) (same). Other notable failures in the last decade involved national security (e.g., the Bush administration's mishandling of intelligence before 9/11, its arguments about weapons of mass destruction in Iraq) and environmental catastrophes (e.g., the administration's response to Hurricane Katrina). The decade began with regulatory failures—with Enron's and WorldCom's fraud, bankruptcies, and prison sentences for its executives—and ended with the financial crisis.

⁹ *See, e.g.*, JUSTIN FOX, THE MYTH OF THE RATIONAL MARKET: A HISTORY OF RISK, REWARD, AND DELUSION ON WALL STREET (2009); GEORGE A. AKERLOF & ROBERT J. SHILLER, ANIMAL SPIRITS: HOW HUMAN PSYCHOLOGY DRIVES THE ECONOMY, AND WHY IT MATTERS FOR GLOBAL CAPITALISM (2009); John Cassidy, *Letter from Chicago: After the Blowup*, NEW YORKER, Jan. 11, 2010, at 28; Kenneth M. Davidson, *Reality Be Damned: The Legacy of Chicago School Economics*, AM. INTEREST, Nov.–Dec. 2009, <http://www.the-american-interest.com/article-bd.cfm?piece=693>; Paul Krugman, *How Did Economists Get It So Wrong?*, N.Y. TIMES, Sept. 6, 2009, at 37 (noting that more important than the economists' failure to predict was “the profession's blindness to the very possibility of catastrophic failures in the market economy”).

¹⁰ *See, e.g.*, ROBERT SKIDELSKY, KEYNES: THE RETURN OF THE MASTER 24 (2009) (inquiring whether the financial crisis was “part of a wider intellectual and regulatory failure, as well as a moral climate which celebrated moneymaking above all other activities”); Angel Gurría, Sec'y-Gen., OECD, Business Ethics and OECD Principles: What Can Be Done to Avoid Another Crisis?, Remarks Before the European Business Ethics Forum (Jan. 22, 2009) (noting that financial crisis “was created by the system itself; by the system which we created; and by a toxic combination of unethical behavior by companies and a faulty regulation and supervision of their activities”), *available at* http://www.oecd.org/document/3/0,3343,en_2649_201185_42033219_1_1_1_1,00.html; Milne, *supra* note 4, at 6 (noting that over 60 percent of surveyed U.S. residents—as well as residents of five European countries—described business leaders' behavior as unethical).

have prompted antitrust lawyers and economists to reconsider fundamental questions, such as (1) what is competition?; (2) what are the goals of competition law?; and (3) what should be the legal standards to promote such goals?¹¹

In this essay I comment on the Symposium articles by Howard Shelanski,¹² Keith Hylton and Haizhen Lin,¹³ and Darren Bush,¹⁴ which raise important antitrust policy issues in the financial crisis' aftermath.

I. RELEVANCY OF ANTITRUST TODAY

Professor Shelanski's *Enforcing Competition During an Economic Crisis* nicely illustrates the unhappy history of antitrust enforcement in past crises (the panics of 1893 and 1907 and the Great Depression) and addresses the need to be mindful of the longer-term, competitive effects of consolidation. Although many factors are blamed for the recent financial crisis, vigorous antitrust enforcement is hardly among them. Few within the antitrust community likely would disagree with Shelanski's contentions that: (1) antitrust forbearance in past crises was generally unnecessary or counterproductive to economic recovery; (2) antitrust review can be swiftly accomplished during an economic crisis (even for monopolization claims¹⁵); and (3) given the cost of more enduring but less salient harms to competition, innovation, and social welfare from non-enforcement of the competition laws, antitrust cannot be viewed as a luxury to be shed during economic hard times.

¹¹ For example, the Academic Society for Competition Law (ASCOLA) addressed these issues at its 2010 annual conference in Bonn, Germany, http://www.ascola.org/Tagungsprogramme/Bonn%20_Final_Program.pdf. See also REPORT BY THE COMMISSION ON THE MEASUREMENT OF ECONOMIC PERFORMANCE AND SOCIAL PROGRESS (Joseph E. Stiglitz & Amartya Sen, Chairs; Jean-Paul Fitoussi, Coordinator of the Commission 2009) (addressing sustainability and alternative measures of well-being), available at http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf; Rana Foroohar, *May the Best Theory Win: How Economists Are Competing to Make Sense of Our Failed Financial System*, NEWSWEEK, Feb. 1, 2010, at 42 (discussing annual meeting of American Economic Association).

¹² Howard A. Shelanski, *Enforcing Competition During an Economic Crisis*, *supra* this issue, 77 ANTITRUST L.J. 229 (2010).

¹³ Keith N. Hylton & Haizhen Lin, *Optimal Antitrust Enforcement, Dynamic Competition, and Changing Economic Conditions*, *supra* this issue, 77 ANTITRUST L.J. 247 (2010).

¹⁴ Darren Bush, *Too Big to Bail: The Role of Antitrust in Distressed Industries*, *supra* this issue, 77 ANTITRUST L.J. 277 (2010).

¹⁵ Complaint, Intel Corp., FTC Docket No. 9341 (Dec. 16, 2009), available at <http://www.ftc.gov/os/adjpro/d9341/091216intelcmpt.pdf> [hereinafter *Intel Complaint*]. The administrative proceeding was set for September 15, 2010, nine months after the complaint was filed, and the FTC had expected a Commission decision by August 2011, within twenty months of the filing of the complaint. In August 2010, Intel settled with the FTC. See Decision and Order, Intel Corp., FTC Docket No. 9341 (Aug. 4, 2010), available at <http://www.ftc.gov/os/adjpro/d9341/100804inteldo.pdf>.

Shelanski encourages enforcers and courts to look beyond the merger's short-term impact on static price or output competition and to consider a merger's long-run effects on dynamic competition—namely, a firm's incentive and ability to invest in innovation. To capture fully the long-run merger effects, Shelanski argues, the welfare calculation must account for a broader range of dynamic effects, which can be positive or negative. A monopolist's impact on innovation can far outweigh any deadweight losses or static pricing effects.

But there is an important trade-off that Professor Shelanski does not address—namely, the issue of systemic risk posed by mergers generally and those in the financial services industries specifically.

No one questions that the financial services industries play a significant role in the U.S. economy. Their contribution to the U.S. gross domestic product (GDP) has increased over the past sixty years, overtaking manufacturing.¹⁶ The manufacturing industries' contribution to overall GDP as a percentage steadily and annually declined—from 25.6 percent of GDP in 1947 to 17.4 percent in 1987, 15.1 percent in 1998, and 11 percent in 2009. In contrast, the finance, insurance, real estate, rental, and leasing industries' contribution to overall GDP increased—from 10.4 percent of GDP in 1947, to 17.9 percent in 1987, 19.3 percent in 1998, and 21.4 percent in 2009.¹⁷ The U.S. economy, some fear, is “moving, or so it seems, to a world where we're no longer making anything in this country; we're merely trading pieces of paper, swapping stocks and bonds back and forth with one another, and paying our financial croupiers a veritable fortune.”¹⁸

Given the importance of the financial services industries to the U.S. economy, one priority of antitrust policy should be promoting the efficiency and competitiveness of the U.S. financial markets. In the past decade, the Department of Justice (DOJ) annually reviewed hundreds, if

¹⁶ For an account of this shift and its implications, see KEVIN PHILLIPS, *BAD MONEY: RECKLESS FINANCE, FAILED POLITICS, AND THE GLOBAL CRISIS OF AMERICAN CAPITALISM* (2008).

¹⁷ See U.S. Dep't of Commerce, Bureau of Econ. Analysis, *Gross-Domestic-Product (GDP)-by-Industry Data, 1998–2009 NAICS Data and NAICS Data: 1947–97 GDPby-Ind_VA_NAICS*, available at http://www.bea.gov/industry/gdpbyind_data.htm.

¹⁸ John C. Bogle, founder of The Vanguard Group, Commencement Address to the MBA Graduates of the Georgetown University McDonough School of Business (May 18, 2007), <http://www.johnboglemedia.com/books/1-john-bogle-enough.html>; see also Ron Chernow, *The Lost Tycoons*, N.Y. TIMES, Sept. 28, 2008, at 12 (Week in Review) (“Beneath the razzle-dazzle of trading desks and the esoteric finance lay the inescapable fact that these [Wall Street] firms had shed their original reason for being: providing capital to U.S. business.”).

not thousands, of bank mergers.¹⁹ The 1990s, one DOJ official said at the time, witnessed “an explosion both in the number of mergers in banking and, in the past few years [late 1990s], in large deals that have caught the public imagination and concern.”²⁰ The recent economic crisis involved “emergency” mergers in the banking sector.²¹ During the crisis, the U.S. antitrust and banking authorities, Shelanski observes, greatly streamlined and expedited their bank merger reviews, such as in the Wells Fargo/Wachovia and PNC/National City mergers.

But what was the DOJ’s Antitrust Division reviewing in these bank mega-mergers? Antitrust enforcers typically examine a merger’s anticompetitive risks with respect to the exercise of market power (ability to raise price) in narrowly defined markets. So, absent the resurrection of the perceived potential entrant theory, the DOJ would be unlikely to challenge a merger between a dominant bank in the western United States and a dominant bank in the eastern United States.²²

But in focusing on the short-term static effects (such as whether the banks post-merger may raise rates for specific categories of borrowers), antitrust enforcers can fail to see or assess the long-term impact of major factors, such as the merger’s impact on the efficiency, competitiveness, and stability of the overall financial system.

¹⁹ Comments by the Department of Justice Antitrust Division on the Federal Reserve Bank’s Interpretive and Compliance Guide to the Anti-Tying Restrictions of Section 106 of the Bank Holding Company Act Amendments of 1970, Docket No. R-1159 (Nov. 7, 2003) (noting that as part of its responsibilities to promote free competition, the Antitrust Division reviews all applications for bank mergers and reports on the competitive factors to either the Federal Reserve Board, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, or the Office of Thrift Supervision), *available at* <http://www.justice.gov/atr/public/comments/201459.pdf>. Between its fiscal years 2000 and 2009, the DOJ participated annually in 463 (2009) to 1373 (2000) bank merger proceedings, with screenings requiring competitive analysis ranging between 342 and 945 mergers. U.S. Dep’t of Justice, Antitrust Division Workload Statistics FY 2000–2009, *available at* <http://www.justice.gov/atr/public/workstats.pdf>.

²⁰ Robert Kramer, Chief, Litigation II Section, Antitrust Div., U.S. Dep’t of Justice, “Mega-Mergers” in the Banking Industry (Apr. 14, 1999), *available at* <http://www.justice.gov/atr/public/speeches/214845.pdf>. *See also* Robert E. Litan, Deputy Ass’t Att’y Gen., Antitrust Div., U.S. Dep’t of Justice, Antitrust Assessment of Bank Mergers (Apr. 6, 1994) (noting that in the early 1990s the DOJ was reviewing approximately 2000 bank merger or acquisition applications per year), *available at* <http://www.justice.gov/atr/public/speeches/litan.htm>.

²¹ During the crisis, the United States also made direct loans, equity investments, and asset guarantees to numerous financial institutions.

²² *See* Kramer, *supra* note 20, at 7 (noting how the NationsBank and Bank of America mega-merger “was a classic market extension merger since NationsBank’s operations focused generally on the east coast and south and Bank of America was largely on the west coast” so the merger’s competitive issues for the DOJ involved only two states—New Mexico and Texas).

One lesson from the financial crisis is the role of systemic risk. The financial system, when viewed as a complex adaptive system, can become more vulnerable when one bank increases in size and becomes too-big-to-fail. This is not always apparent. During periods of relative calm, having large financial institutions would appear beneficial. Even if a peripheral bank is subject to a random shock, the network's health would remain stable. Indeed, the larger banks would be credited for absorbing the shock. According to a Bank of England executive, "It is only when the hub—a large or connected financial institution—is subject to stress that network dynamics will be properly unearthed. . . . When large financial institutions came under stress during this crisis, these adverse systemwide network dynamics revealed themselves."²³

One mega-merger in the financial services industry during the 1990s was the \$70 billion merger of Travelers Group Inc. and Citicorp. In 1998, Travelers, a diversified financial services firm with total assets of approximately \$420 billion, engaged in various securities, insurance, lending, advisory, and other financial activities in the United States and overseas.²⁴ Citicorp, with total assets of approximately \$331 billion, was the third-largest commercial bank in the United States. The merger created the largest commercial banking organization in the world, with total consolidated assets of approximately \$751 billion.²⁵ During its merger review, a DOJ official said, the Antitrust Division "heard numerous complaints that Citigroup would have an undue aggregation of resources—that the deal would create a firm *too big to be allowed to fail*."²⁶ But the DOJ "essentially viewed this as primarily a regulatory issue to be considered by the [Federal Reserve Board]."²⁷

The Federal Reserve Board, however, dismissed this and several other concerns, which presaged the financial crisis a decade later. Some commenters, summarized the Federal Reserve Board, warned that "Travelers's marketing and sales practices for its subprime mortgage loans, personal loans and insurance products adversely affect consumers" and the merger "would provide incentives for Citigroup to 'steer' [low to

²³ Andrew G. Haldane, Exec. Dir., Financial Stability, Bank of England, Rethinking the Financial Network, Speech Delivered at the Financial Student Ass'n 11 (Apr. 2009), *available at* <http://www.bankofengland.co.uk/publications/speeches/2009/speech386.pdf>.

²⁴ Federal Reserve Board, Travelers Group, Inc. and Citicorp, Order Approving Formation of a Bank Holding Company and Notice to Engage in Nonbanking Activities, 84 FED. RES. BULL. 985 (Sept. 23, 1998) [hereinafter Fed. Reserve Citicorp Order], *available at* <http://www.federalreserve.gov/boarddocs/press/BHC/1998/19980923/19980923.pdf>.

²⁵ *Id.*, *supra* note 24, at 4.

²⁶ Kramer, *supra* note 20 (emphasis added).

²⁷ *Id.*

moderate income] and minority consumers to its subprime lenders.”²⁸ A “significant number of other commenters” said the merger violated the Glass-Steagall Act and “urged the Board not to consider the proposal unless and until Congress amends the law to allow unlimited combinations of insurance, banking and securities businesses.”²⁹ Commenters also warned that the merger “would result in an undue concentration of resources and in an organization that is both ‘too big to fail’ and ‘too big to supervise.’”³⁰

In permitting the merger, the Federal Reserve responded that the markets in which the merging parties competed were “unconcentrated” and, in any market where one party had a significant presence, the other party has a relatively small market share.³¹ The nation’s largest

²⁸ Fed. Reserve Citicorp Order, *supra* note 24, at 6. In 2002 in the largest consumer protection settlement in FTC history, Citigroup Inc. paid \$215 million to resolve the FTC’s charges of systematic and widespread deceptive and abusive lending practices by a company it acquired in 2000 and merged in its consumer finance operations. The FTC sued Citigroup Inc. and CitiFinancial Credit Company as successor corporations to Associates First Capital Corporation and Associates Corporation of North America, which Citigroup acquired in 2000. Press Release, Fed. Trade Comm’n, Citigroup Settles FTC Charges Against the Associates Record-Setting \$215 Million for Subprime Lending Victims (Sept. 19, 2002), available at <http://www.ftc.gov/opa/2002/09/associates.shtm>. Citigroup said that the alleged predatory lending practices happened before its 2000 acquisition and that it had taken corrective steps to prevent such abusive tactics. See *Citigroup Pays \$215 in FTC Settlement*, MORTGAGE BANKING, Oct. 1, 2002, <http://www.allbusiness.com/finance/304071-1.html>. Despite these assurances, Citicorp and CitiFinancial Credit Company were fined \$70 million in 2004 for their subprime lending practices in 2000 and 2001. Board of Governors of the Federal Reserve System, In the Matter of Citigroup, Inc., Order to Cease and Desist and Order of Assessment of a Civil Money Penalty Issued Upon Consent (May 27, 2004), <http://www.federalreserve.gov/boarddocs/press/enforcement/2004/20040527/attachment.pdf>. And in 2005, Citigroup acknowledged that it made hundreds of high-cost home loans to customers with poor credit histories in 2004. Eric Dash, *Citigroup Units Kept Making Loans that Violated Policy*, N.Y. TIMES, May 4, 2005, available at http://www.nytimes.com/2005/05/04/business/04loan.html?ref=citigroup_inc.

²⁹ Fed. Reserve Citicorp Order, *supra* note 24, at 6. Travelers CEO Sanford Weill had hoped his mega-merger would push Congress to remove the barriers under the Glass-Steagall Act. *The NewsHour with Jim Lehrer: Financial Powerhouse* (PBS television broadcast Apr. 7, 1998) (transcript), available at http://www.pbs.org/newshour/bb/business/jan-june98/merger_4-7.html. Congress did so a year later with the Gramm-Leach-Bliley Act of 1999. The 1999 law repealed the Glass-Steagall Act’s restrictions on bank and securities-firm affiliations and amended the Bank Holding Company Act to permit affiliations among financial services companies, including banks, securities firms, and insurance companies. *Glass-Steagall Act (1933)*, N.Y. TIMES, available at http://topics.nytimes.com/topics/reference/timestopics/subjects/g/glass_steagall_act_1933/index.html.

³⁰ Fed. Reserve Citicorp Order, *supra* note 24, at 74.

³¹ The nonbank subsidiaries of Travelers and Citicorp competed in underwriting and dealing activities involving U.S. government, municipal government, asset backed, and corporate debt and equity securities; investment advisory activities, including providing advice on mergers, acquisitions, and corporate finance; securities brokerage activities; asset management activities; brokerage of shares of mutual funds and related advisory activi-

corporate merger, predicted the Federal Reserve, “would have a de minimis effect on competition.”³² The Federal Reserve rejected the argument that the absolute or relative size of Citicorp would adversely affect the market structure.³³ It saw no evidence that “the size or breadth of Citicorp’s activities would allow it to distort or dominate any relevant market.”³⁴ Finally, the Federal Reserve claimed it had “extensive experience supervising Citicorp and, building on that experience,” it “developed a comprehensive, risk-based supervision plan” to effectively monitor Citibank; also other agencies, like the Securities and Exchange Commission, would “assist the Board in understanding Citigroup’s business and the risk profiles of those businesses.”³⁵

Thus, during the 1990s, the DOJ and Federal Reserve Board heard concerns about mega-mergers in the financial industry, including the concern that the Citibank-Travelers merger would create an institution too big to fail. Over the next decade Citigroup senior management (and the Federal Reserve Board) demonstrated a lack of understanding of the collateralized debt obligation (CDO) business and the risk profiles of that business.³⁶ A decade later, Citibank, and other financial institutions considered too-big-to-fail, were (or were perceived to be) failing and received an implicit government guarantee. Citigroup, an early recipient of the government bailout, received a \$45 billion emergency infusion and \$301 billion of government asset insurance, which was the largest taxpayer bailout for any U.S. bank.³⁷ In March 2010, Citigroup’s CEO testified before Congress that no financial institution should be too-big-to-fail, and that “Citi owes a large debt of gratitude to American taxpayers” for bailing out his bank.³⁸

ties; credit card operations; mortgage origination and servicing activities; consumer finance activities; syndicated lending activities; foreign exchange activities; financial data processing activities; trust services; and certain types of insurance underwriting and brokerage activities. *Id.* at 75.

³² *Id.*

³³ *Id.* at 85.

³⁴ *Id.* at 86.

³⁵ *Id.*

³⁶ After Citigroup senior executives testified before the Financial Crisis Inquiry Commission investigators on the cause of Citigroup’s 2008 bailout, the Commission’s Chairman Phil Angelides said, “One thing that is striking is the extent to which senior management either didn’t know or didn’t care to know about risks that ultimately helped bring the institution to its knees.” Bradley Keoun et al., *Citigroup “Liquidity Puts” Draw Scrutiny from Crisis Inquiry*, BLOOMBERG, Apr. 13, 2010, <http://www.bloomberg.com/news/2010-04-13/citigroup-s-14-billion-liquidity-put-loss-is-focus-of-u-s-crisis-panel.html>.

³⁷ See *id.*; Pro Publica Inc., *Where Is the Money?: Eye on the Bailout*, <http://bailout.propublica.org/entities/96-citigroup>.

³⁸ Eric Dash, *Panelists Question Citigroup’s “Government Guarantee,”* N.Y. TIMES, Mar. 4, 2010, available at <http://www.nytimes.com/2010/03/05/business/05tarp.html>.

Few question today that regulators should assess systemwide risks. Among the issues debated are who should assess these risks, what structural or behavioral measures should be used to preserve or improve the network's robustness, and what role should the antitrust agencies have in this review.

To improve the Federal Reserve's ability to identify and correct problems in financial institutions, Ben S. Bernanke, Chairman of the Board of Governors of the U.S. Federal Reserve, said in January 2010 that the Federal Reserve is expanding beyond an institution-by-institution supervisory approach to one that evaluates the financial system's health and stability from a systemwide perspective:

Toward that end, we are supplementing reviews of individual firms with comparative evaluations across firms and with analyses of the interactions among firms and markets. We have further strengthened our commitment to consumer protection. And we have strongly advocated financial regulatory reforms, such as the creation of a systemic risk council, that will reorient the country's overall regulatory structure toward a more systemic approach. The crisis has shown us that indicators such as leverage and liquidity must be evaluated from a systemwide perspective as well as at the level of individual firms.³⁹

Likewise, the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act seeks to "promote the financial stability of the United States by improving accountability and transparency in the financial system, to end 'too big to fail,' to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes."⁴⁰ Toward that end, the Act created a Financial Stability Oversight Council (Council), which, among other things, will (1) monitor the financial services marketplace to identify potential threats to the financial stability of the United States; and (2) advise Congress and make recommendations in such areas that will enhance the integrity, efficiency, competitiveness, and stability of the U.S. financial markets.⁴¹

Conspicuously missing from the Council are any officials from the DOJ's Antitrust Division or the FTC.⁴² It appears that antitrust is being

³⁹ Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, Monetary Policy and the Housing Bubble, Annual Meeting of the American Economic Association 21 (Jan. 3, 2010), *available at* <http://www.federalreserve.gov/newsevents/speech/bernanke20100103a.pdf>.

⁴⁰ Pub. L. 111-203, 124 Stat. 1376 (2010) (Dodd-Frank).

⁴¹ 12 U.S.C. § 5322(a)(2).

⁴² 12 U.S.C. § 5321. The voting members of the Council are (a) the Secretary of the U.S. Department of the Treasury, who also serves as the Council's Chairperson; (b) the

marginalized. Despite the DOJ role in reviewing bank mergers and the DOJ and FTC role in preserving the competitiveness of the U.S. financial markets, the agencies are on the sidelines with respect to this Council's fact-gathering and advising function.

For some, this may not be a concern. The expertise of the antitrust agencies involves the exercise of market power in narrowly defined markets, not the integrity, efficiency, competitiveness, and stability of the U.S. financial markets overall. Antitrust enforcers do not continually regulate market participants' behavior; instead they examine whether particular actions (such as mergers) violate the federal antitrust laws. The DOJ's antitrust review for bank mergers, for example, does not account for systemwide risks.⁴³ Nor do the DOJ and FTC's merger guidelines address a merger's systemwide risks.⁴⁴ Antitrust enforcers presumably have little knowledge about (and few tools to measure) systemwide risks. Even if the agencies had the tools, systemwide analysis could add greater uncertainty to the merger process.

On the other hand, there are risks if antitrust policy ignores systemwide risks. Under a total welfare analysis, the competition authorities would not only assess a merger's short-term impact on consumer and producer surplus, but also assess the tradeoff between the merger's short-term productive efficiency gains and the longer-term risks (and costs) posed by the merger, including its effect on the network's resilience.⁴⁵ The antitrust agencies' understanding of competition (and to what extent a merger may substantially lessen competition) is not limited to price competition. The 2010 Horizontal Merger Guidelines make clear that "[e]nhanced market power can also be manifested in non-price terms and conditions that adversely affect customers, including reduced product quality, reduced product variety, reduced service, or di-

Chairman of the Board of Governors; (c) the Comptroller of the Currency; (d) the Director of the newly created Consumer Financial Protection Bureau; (e) the Chairman of the Securities and Exchange Commission; (f) the Chairperson of the Federal Deposit Insurance Corporation; (g) the Chairperson of the Commodity Futures Trading Commission; (h) the Director of the Federal Housing Finance Agency; (i) the Chairman of the National Credit Union Administration Board; and (j) an independent member appointed by the President, by and with the advice and consent of the Senate, having insurance expertise.

⁴³ U.S. Dep't of Justice, Antitrust Div., Bank Merger Competitive Review—Introduction and Overview (1995), available at <http://www.justice.gov/atr/public/guidelines/6472.htm>.

⁴⁴ See, e.g., U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines (2010), available at <http://www.ftc.gov/os/2010/08/100819hmg.pdf>; U.S. Dep't of Justice & Fed. Trade Comm'n, Commentary on the Horizontal Merger Guidelines (2006), available at <http://www.justice.gov/atr/public/guidelines/215247.htm>.

⁴⁵ Sally J. Goerner et al., *Quantifying Economic Sustainability: Implications for Free-Enterprise Theory, Policy and Practice*, 69 *ECOLOGICAL ECON.* 76, 77 (2009).

minished innovation.”⁴⁶ Thus, in creating a financial institution too-big-to-fail, a merger can adversely affect consumers and other market participants by reducing the requisite degree of diversity for the financial network to remain stable. Moreover, in being deemed too-big-to-fail, financial institutions can engage in risky behavior with the confidence of a government bailout, and thus enjoy a competitive advantage over smaller rivals that are permitted to fail.⁴⁷

The issue, then, is to what extent is antitrust analysis inadequate when it ignores a merger’s systemwide risks. The federal antitrust agencies cannot assume that the Council or their sister agencies will engage in this analysis adequately for the financial industry. The bank regulators were ineffective in addressing the competitive implications of systemwide risk in the past two decades. Nor can the federal antitrust agencies assume that the Council will engage in this systemwide analysis for every industry network. As Professor Darren Bush writes in this Symposium, the Congressional “whack-a-mole” regulation fails to prevent crises in other network industries.⁴⁸ Thus, the competition authorities must be knowledgeable about the systemwide risks from mergers across industries. Otherwise, the competition authorities will have little to say on this important issue and risk being further marginalized. The competition agencies, if ignorant of the systemwide risks that arise under their antitrust policies, also may be less effective advocates of competition policy to their sister agencies, the states, and other countries.

Thus, competition authorities face the current dilemma. On the one hand, merger policy currently does not offer the tools to intelligibly make this risk assessment. On the other hand, to be effective competition advocates, the FTC and DOJ cannot ignore the systemwide risks from a merger.

One way to end this dilemma is to amend the 2010 Dodd-Frank Act to include at least one federal antitrust agency. The FTC and DOJ should also undertake more empirical work (or at least provide data for others to review) that considers the requisite degree of diversity in a network to withstand shocks as well as to foster innovation, employment growth, and entry and the formation of new firms.⁴⁹ After engaging in such re-

⁴⁶ Horizontal Merger Guidelines, *supra* note 44, §1.0.

⁴⁷ JOSEPH E. STIGLITZ, FREEFALL: AMERICA, FREE MARKETS, AND THE SINKING OF THE WORLD ECONOMY 166 (2010).

⁴⁸ Bush, *supra* note 14, at 278.

⁴⁹ The American Antitrust Institute has been active in examining how complexity science can inform antitrust analysis and systems-related issues. See, e.g., NETWORK ACCESS, REGULATION AND ANTITRUST (THE ECONOMICS OF LEGAL RELATIONSHIPS) (Diana L. Moss ed. 2005) (compilation of work from AAI’s Network Access Project); Gregory T. Gund-

view, the antitrust agencies can advise on measures to maintain or restore the network's robustness. Rather than making systemwide risk assessments merger-specific, the competition authorities can play an important role in designing proper structural safeguards, such as limiting the banks' ability to grow through mergers beyond a certain threshold.⁵⁰

Shelanski's article is refreshing in warning of the dangers in marginalizing antitrust and in focusing on the long-run effects from mergers, including the broader range of dynamic effects. In extending his argument, I would argue that competition authorities, when looking beyond mergers' short-term impact on static price or output competition, must better understand mergers' potential long-run effects on the network's health and stability.

II. WHAT PROMOTES INNOVATION?

Professors Hylton and Lin's article, *Optimal Antitrust Enforcement, Dynamic Competition, and Changing Economic Conditions*, also incorporates dynamic efficiency considerations into the economic analysis of antitrust enforcement. Their article addresses one well-known antitrust problem: how to design the antitrust laws to encourage, or at least to avoid discouraging, incentives to invest in the creation and expansion of markets.

Antitrust policy, Hylton and Lin note, gives little attention to this dynamic efficiency problem. Few would dispute their observation. One complaint is that antitrust policymakers over the past thirty years recognize the importance of dynamic competition for a country's long-term

lach & Albert A. Foer, *Complexity, Networks, and the Modernization of Antitrust: The American Antitrust Institute's Roundtable on the Science of Complexity and Antitrust*, 51 ANTITRUST BULL. 1, 2 (2006) ("Incorporating insights and relying on metaphors from population ecology, evolutionary biology, systems theory, chaos and the study of networks, the science of complexity attempts to describe and explain how systems and their occupants, including industries and firms, evolve and compete against one another over time through adaptation, co-evolution and other dynamic processes."); AAI Systems Competition Invitational Symposium (June 17, 2009), <http://www.antitrustinstitute.org/content/systems-competition-invitational-symposium>. Other AAI symposia that discussed "complexity" of the marketplace and its various manifestations, including "systems" and "systems competition," are: (a) Combining Horizontal and Vertical Analysis in Antitrust (2004); (b) Complexity, Networks and the Modernization of Antitrust (2005); (c) The Future of Aftermarkets in Systems Competition (2006); and (d) Buyer Power (2007). The papers presented in these symposia are available at http://www.antitrustinstitute.org/Archives/AT_Bulletin_Papers.ashx.

⁵⁰ Stephen Bartholomeusz, *Britain's Banks on Notice*, BUS. SPECTATOR, June 18, 2010, <http://www.businessspectator.com.au/bs.nsf/Article/Volker-regulation-George-Osborne-Bank-of-England-F-pd20100617-6H5BG?OpenDocument&src=sph>.

economic growth,⁵¹ but antitrust law has ossified around static price competition.⁵² Antitrust enforcement, FTC Commissioner J. Thomas Rosch observed, “has historically focused more on static than dynamic analysis.”⁵³

Hylton and Lin propose a dynamic enforcement model to determine the optimal level of fines to deter abuses by monopolists while not chilling dynamic efficiency. Hylton and Lin raise many points, but I will focus my comments on three important issues their model raises: (1) What is the probability of successful enforcement of Section 2 of the Sherman Act?; (2) What is the harm from monopolistic conduct?; and (3) What is the necessary inducement for innovation?

A. WHAT IS THE PROBABILITY OF SUCCESSFUL ENFORCEMENT OF SECTION 2 OF THE SHERMAN ACT?

The authors’ model is a variation of Gary Becker’s decision regarding whether to park illegally on the street rather than in a parking lot. The Nobel Prize-winning economist thought about optimal deterrence theory in the 1960s after driving to Columbia University for an oral examination of a student in economic theory. Becker was late and had to decide quickly whether to put the car in a parking lot or risk getting a ticket for parking illegally on the street. He calculated the likelihood of getting a ticket, the size of the penalty, and the cost of putting the car in

⁵¹ Thomas O. Barnett, Ass’t Att’y Gen., Antitrust Div., U.S. Dep’t of Justice, Competition Enforcement in an Innovative Economy, Address at the 4th Annual Competition Policy Conference on the Role of Competition and Liberalization in Furthering Competitiveness (June 20, 2008) (discussing how dynamic efficiencies were critical in promoting economic growth between 1909 and 1949; whereas gains from labor and capital intensity accounted for one-eighth of U.S. GNP growth, “technical change” accounted for the remainder) (quoting Robert M. Solow, Growth Theory and After, Prize Lecture for the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1987 (Dec. 8, 1987), available at http://nobelprize.org/nobel_prizes/economics/laureates/1987/so-low-lecture.html).

⁵² Michael E. Porter, *Competition and Antitrust: A Productivity-Based Approach*, in *UNIQUE VALUE: COMPETITION BASED ON INNOVATION: CREATING UNIQUE VALUE FOR ANTITRUST, THE ECONOMY, EDUCATION AND BEYOND* 154, 157 (Charles D. Weller ed., 2004) (“While protecting short-run consumer welfare measured by price-cost margins is . . . important, . . . productivity growth through innovation, where innovation is defined broadly to include not only products, but also processes and methods of management . . . [are] the single most important determinant of long-term consumer welfare and a nation’s standard of living.”).

⁵³ J. Thomas Rosch, Comm’r, Fed. Trade Comm’n, Promoting Innovation: Just How “Dynamic” Should Antitrust Law Be?, Remarks Before the USC Gould School of Law 2010 Intellectual Property Institute (Mar. 23, 2010), available at <http://www.ftc.gov/speeches/rosch/100323uscremarks.pdf>.

a lot, and decided it paid to take the risk and park on the street. (He did not get a ticket.)⁵⁴

To achieve optimal deterrence, the total penalty (which includes civil damages and criminal penalties) levied against a violator should equal the violation's expected net harm to others (plus enforcement costs per case) divided by the probability of detection and successful prosecution.⁵⁵ So, for example, if the net harm is \$900, the enforcement costs are \$100 and the probability of successful prosecution is 50 percent, the optimal penalty would be \$2,000.

Optimal deterrence theory assumes that rational profit-maximizing monopolists make this calculation before engaging in the anticompetitive conduct. So Intel, for example, would have determined before (or continually calculating during) its decade-long campaign of allegedly illegal and deceptive conduct the likely net harm from its conduct and the probability of its conduct being successfully prosecuted. Assuming that market participants behave that way,⁵⁶ under optimal deterrence theory one must then accurately assess the probability of successful prosecution. Calculating the probability is not a concern if the probability is known *ex ante* and remains constant (for example, if the probability of Becker getting and having to pay a parking ticket was 30 percent). But calculating the probability is a concern when the probability can vary, is unknown *ex ante*, is subjective, or is difficult to determine and subject to error.

Hylton and Lin recognize the real-world difficulties in calculating the probability of successful prosecution of cartels, which hide their socially unproductive collusion from the public. But they say that enforcers and the courts would not face these difficulties for monopolization claims because the probability of successful enforcement is high. The authors contend that monopolization "generally is not difficult to detect" and the "most common monopolizing acts (e.g., exclusive dealing, tying,

⁵⁴ Gary S. Becker, *Nobel Lecture: The Economic Way of Looking at Behavior*, 101 J. POL. ECON. 385, 389-90 (1993); see also Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169 (1968) (discussing how society can conserve enforcement resources and reduce the probability of detection by increasing the magnitude of sanctions); William M. Landes, *Optimal Sanctions for Antitrust Violations*, 50 U. CHI. L. REV. 652, 656, 666-68 (1983).

⁵⁵ Landes, *supra* note 54, at 657.

⁵⁶ I discuss several shortcomings of optimal deterrence theory, including its assumption of rational actors, in Maurice E. Stucke, *Morality and Antitrust*, 2006 COLUM. BUS. L. REV. 443, 475-88; Maurice E. Stucke, *Am I a Price-Fixer? A Behavioral Economics Analysis of Cartels*, in *CRIMINALISING CARTELS: A CRITICAL INTERDISCIPLINARY STUDY OF AN INTERNATIONAL REGULATORY MOVEMENT* (Caron Beaton-Wells & Ariel Ezrachi eds., forthcoming 2011), available at <http://ssrn.com/abstract=1535720>.

mergers, cutting price below cost) are carried out in broad daylight and even trumpeted to the public.”⁵⁷ In assuming that the probability of punishment for monopolistic offenses is greater than 33 percent, Hylton and Lin conclude that antitrust law’s treble damages are “probably excessive for the typical monopolization case.”⁵⁸

A high probability of successful prosecution under Section 2 of the Sherman Act implies several things. First, it assumes that the legal standards under Section 2 are well recognized and easily implemented. The Hylton-Lin model assumes that courts are “perfectly accurate.”⁵⁹ But any Section 2 analysis involves market power issues, which the authors recognize involve “a complicated assessment of facts and the exercise of discretion, especially with respect to burdens of proof.”⁶⁰ Next the generalist court must assess whether the monopolist’s conduct violates Section 2, often under a rule-of-reason legal standard, which has been criticized for its poor administrability, the inconsistency of its results, the degree of subjective input from the decisionmakers, its lack of transparency, and its higher risk of false positives and negatives.⁶¹

Second, the empirical evidence does not support the assumption of a high probability of successful enforcement of Section 2. The DOJ, for example, did not litigate any Section 2 cases during the eight years of the recent Bush administration. Private antitrust plaintiffs have had little success in prevailing in Section 2 cases. In cases where courts address the merits, private antitrust plaintiffs nearly always lose.⁶² The statistics can be biased, however. Antitrust plaintiffs with meritorious claims settle, leaving the questionable claims to go to trial and eventually be dismissed. But why would private plaintiffs (and their attorneys working for contingency fees) invest the time and money to litigate frivolous cases? Some antitrust plaintiffs perhaps invest in Section 2 litigation for competitive reasons, but one cannot assume all do. Hylton and Lin recognize that once judicial error and baseless or frivolous actions are incorporated, optimal deterrence theory loses appeal.

Third, Hylton and Lin’s argument is logically inconsistent. If the legal standards under Section 2 were clear and predictably enforced, and the probability of successful enforcement was high, why would any monop-

⁵⁷ Hylton & Lin, *supra* note 13, at 253 (citation omitted).

⁵⁸ *Id.*

⁵⁹ *Id.* at 254.

⁶⁰ *Id.* at 264.

⁶¹ Maurice E. Stucke, *Does the Rule of Reason Violate the Rule of Law?*, 42 U.C. DAVIS L. REV. 1375, 1382 n.24 (2009) [hereinafter *Rule of Reason*] (collecting criticisms).

⁶² *Id.* at 1423–24.

list trumpet its illegal conduct to the public? If monopolists were rational profit-maximizers, as optimal deterrence theory assumes, they would not trumpet their illegal anticompetitive conduct, unless the benefits in doing so outweighed the likely costs, including the government sanctions and treble private antitrust damages. If monopolists trumpet their illegal conduct, as Hylton and Lin suggest, and the harm from the monopolistic conduct exceeds the benefits to the monopolist, then under optimal deterrence theory, the current antitrust penalties are insufficient and should be increased, rather than decreased.

Finally, Hylton and Lin's point is perhaps true for conduct that would be lawful if undertaken by firms without monopoly power or for firms that somehow remain unaware of their monopoly power. But monopoly violations often involve business torts⁶³ and deceptive conduct.⁶⁴ For example, several notable cases—the DOJ's Section 2 case against Microsoft⁶⁵ and FTC's allegations under Section 5 against Rambus⁶⁶ and more recently Intel⁶⁷—involved deception.

In reality, courts and enforcers cannot assume that the probability of successful enforcement, a key variable under optimal deterrence theory, is uniform, high, and constant for all monopolistic abuses. Determining

⁶³ The FTC survey of private Section 2 claims decided between January 2000 and July 2007 identified "Business Torts" and "Walker Process claims" as the third and fourth most popular theories of liability (following "Other" and "Refusals to Deal With Non-Rivals" categories). William F. Adkinson, Jr. et al., *Enforcement of Section 2 of the Sherman Act: Theory and Practice: Appendix: Methodology for the Studies of State and Private Section 2 Enforcement Actions* (FTC Working Paper, 2008), <http://ftc.gov/os/sectiontwohearings/docs/section2overview.pdf>.

⁶⁴ For examples of a monopolist's anticompetitive deception, see Maurice E. Stucke, *How Do (and Should) Competition Authorities Treat a Dominant Firm's Deception?*, 63 SMU L. Rev. 1069 (2010); Maurice E. Stucke, *When a Monopolist Deceives*, 76 ANTITRUST L.J. 823 (2010).

⁶⁵ Microsoft publicly agreed to promote Java's cross-platform technologies and cooperate with Sun and lured independent software developers to use Microsoft's software development tools in designing Java applications. Based on Microsoft's representations, the independent software vendors thought Microsoft's tools were for cross-platform applications and thus could be used on any computer with Java technology, not just computers with Microsoft's operating systems. Unbeknownst to the vendors, Microsoft's tools included certain keywords and compiler directives that only Microsoft's version of Java could execute properly. Thus, the deceived Java developers ended up producing applications that ran only on Microsoft's Windows operating system. *United States v. Microsoft*, 253 F.3d 34, 76–77 (2001).

⁶⁶ *Rambus Inc. v. FTC*, 522 F.3d 456 (D.C. Cir. 2008) (setting aside FTC's order challenging defendant's deception of standard-setting organization).

⁶⁷ See, e.g., *Intel Complaint*, *supra* note 15, at 10 (alleging that "Intel engaged in deceptive acts and practices that misled consumers and the public," such as failing to disclose material information about the effects of its redesigned compiler on the performance of non-Intel CPUs and misrepresenting that industry benchmarks reflected the performance of its CPUs relative to its competitors' products); *id.* at 65–66 (deceptive advertising).

the probability of successful enforcement will often be a complicated, empirically driven endeavor, especially as monopolists seek to avoid detection by hiding their behavior. This complexity raises rule-of-law concerns when companies cannot accurately assess *ex ante* their likely exposure to antitrust damages, and the litigants differ over the likelihood of successful prosecution.

B. WHAT IS THE HARM FROM MONOPOLISTIC CONDUCT?

To assess the optimal penalty, the antitrust judge or enforcer must next accurately calculate the net harm from the monopolist's challenged conduct.

Hylton and Lin propose a dynamic enforcement model, but their conception of harm from monopolistic behavior is static. Under their model's worst-case scenario (i.e., the change in antitrust penalty would have no effect on the firm's *ex ante* investment to innovate), the net harm from the monopolistic conduct in a dynamic industry equals the net harm under the Chicago School's static equilibrium model: namely, the wealth transfer (from the price overcharge) from the consumer to the monopolist (represented by the rectangle T in their graph) and the welfare deadweight loss (represented by triangle D).⁶⁸

But can one confidently and accurately state that the net harm from Intel's or Microsoft's anticompetitive monopolistic conduct over the years was limited to only higher prices paid by consumers and the deadweight welfare loss? To assess harm under a dynamic enforcement model for dynamic industries, one must also measure dynamic, not static, harm, which includes the net loss of productive and dynamic efficiencies from the monopolistic conduct and any other economic, political, and social harms.⁶⁹

As Professor Shelanski points out, mergers in dynamic industries can put at risk the substantial, long-run gains to consumer welfare from in-

⁶⁸ Hylton and Lin cite Landes's 1983 article on the static optimal penalty but their model deviates from his in one important aspect—namely, whether enforcement costs are multiplied by the probability of successful prosecution. This can play an important role as enforcement costs increase in size and as the probability of successful prosecution decreases. For example, suppose plaintiff's enforcement costs are \$5 million and probability of successful prosecution is 20 percent. Under Hylton and Lin's model, the monopolist pays \$5 million (plus the multiplied net harm). Under Landes's model, upon which Hylton and Lin rely, the monopolist pays \$25 million (plus the multiplied net harm). Landes, *supra* note 54, at 657.

⁶⁹ See Maurice E. Stucke, *Should the Government Prosecute Monopolies?*, 2009 U. ILL. L. REV. 497, 504–29 [hereinafter *Monopolies*] (discussing the economic, political, social and ethical concerns of a monopoly).

novation.⁷⁰ Likewise, in complex adaptive systems, monopolistic conduct over the long term can adversely impact innovation, productivity, and society.⁷¹ A monopolist's anticompetitive behavior can reduce potential entrants' incentives to compete and innovate in the affected industry. Thus, a monopolist's impact on innovation can far outweigh any deadweight welfare losses or static pricing effects.⁷²

Ultimately the Hylton-Lin model specifically, and optimal deterrence theory generally, requires one to assess accurately the net harm from the violation. This may be easy for some offenses, such as a parking violation or running over a neighbor's mailbox. But assessing the net harm caused by a monopolist, especially in dynamic industries, can be difficult. The actual harm from monopolist conduct, at times, may be limited to the wealth transfer from supracompetitive prices and the deadweight welfare loss, as Hylton and Lin assume. But monopolies can inflict far greater harm. If one includes only some of the harm from the violation, then under optimal deterrence theory, the resulting fine will be too low, the monopolist will not be deterred, and society will bear the cost.

C. WHAT IS THE NECESSARY INDUCEMENT FOR INNOVATION?

In their model, Hylton and Lin introduce a weighting parameter θ (itself a function of the penalty), which varies with the relative responsiveness of the firm's monopolization and investment incentives to changes in the penalty. Hylton and Lin do not address how enforcers and courts will reliably and accurately calculate this weighting parameter. The key question under the Hylton-Lin model is whether the firm would invest in socially beneficial innovation absent the monopolizing conduct. Consequently, calculating the weighting parameter raises several issues for enforcers and courts.

One issue is whether monopoly profits were necessary to induce innovation. For example, the Supreme Court in *Trinko* surmised—for the

⁷⁰ Shelanski, *supra* note 12.

⁷¹ Sanghoon Ahn, *Competition, Innovation and Productivity Growth: A Review of Theory & Evidence* 5 (OECD Econ. Dep't Working Paper No. 317, 2002) (noting that "[c]ompetition has pervasive and long-lasting effects on economic performance by affecting economic actors' incentive structure by encouraging their innovative activities, and selecting more efficient [activities]"), available at <http://dx.doi.org/10.1787/182144868160>.

⁷² Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 AM. ECON. REV. 18 (1968) (must assess (i) the cost from slower (or the lack of) technological progress once a monopolist lays claims to a national market, and (ii) the other social costs imposed (or incurred) by the monopolist or cartel, such as the political implications of control over wealth, which are a matter for serious concern).

first time in its opinions—that charging monopoly prices is “an important element of the free-market system,” and that monopoly pricing serves as an inducement to “attract[] ‘business acumen’ in the first place” and engage in “risk taking that produces innovation and economic growth.”⁷³ The Court’s assumption that the prospect of monopoly profits is necessary for innovation to occur is empirically suspect.⁷⁴ The difficulty lies in predicting where and when this innovation will emerge and what motivates this innovation. An evolutionary outlook, for example, assumes that companies take risks and innovate to survive.⁷⁵ Even without the prospect of monopoly profits, companies enter markets and innovate.⁷⁶ Although participants in some industries, such as pharmaceuticals, incur significant R&D expenses with the expectation of patent protection for their innovation and any ensuing monopoly rents, the empirical evidence does not support any general conclusion that monopolies (or the prospect of monopoly rents) are necessary for innovation.

In a *Business Week*/Boston Consulting Group survey, for example, 2500 senior executives from fifty-eight countries and all major industries identified their company’s risk-averse culture as the major obstacle to innovation. These executives cited customer satisfaction as the top metric to measure innovation success followed by revenue growth. Fewer than 40 percent cited higher margins, which the Court in *Trinko* surmised was the inducement for innovation.⁷⁷

⁷³ *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004).

⁷⁴ See, e.g., Stucke, *Monopolies*, *supra* note 69, at 504–20 (collecting literature).

⁷⁵ See, e.g., Thomas J. Horton, *The Coming Extinction of Homo Economicus and the Eclipse of the Chicago School of Antitrust: Applying Evolutionary Biology and Ethics to Structural and Behavioral Antitrust Analyses*, LOY. U. CHI. L.J. (forthcoming 2011) (an evolutionary biology perspective on why large economic concentrations, such as monopolies and oligopolies, are vastly overrated in terms of their overall efficiency and positive impacts on our economic system, and how the Chicago School underrates their dangerous impacts), available at http://works.bepress.com/thomas_horton/1.

⁷⁶ For example, in 2008, an average of 0.32 percent of the adult population (320 of 100,000 adults) created a new business each month, representing approximately 530,000 new businesses per month. ROBERT W. FAIRLIE, KAUFFMAN INDEX OF ENTREPRENEURIAL ACTIVITY 1996–2008, at 2 (2009), available at http://www.kauffman.org/uploadedFiles/kiea_042709.pdf. These businesses were further categorized by their potential to produce high, medium, and low-income levels for the entrepreneur. In 2008, more new businesses were created each month in low-income-potential types of businesses (130 new businesses created each month per 100,000 people), than in either medium-income-potential types of businesses (123 new businesses per 100,000) or high-income-potential types of businesses (69 new businesses). *Id.* at 6.

⁷⁷ Jena McGregor, *Innovation Insights: Key Findings of Our Annual Survey of Senior Executives*, *Bus. Wk.*, May 3, 2007, http://images.businessweek.com/ss/07/05/0503_inno_rankings/source/6.htm.

Even if monopoly profits were needed for innovation to reach the market, a second issue is whether a monopolist could protect this innovation by using less anticompetitive or otherwise legal measures, such as advertising, to foster brand loyalty. By being the first mover, a company can maintain its market position through reputation effects, slow information diffusion, and regulatory or other entry barriers.⁷⁸

Even if (i) monopoly profits were needed for innovation to reach the market and (ii) the monopolist could not protect this innovation through less anticompetitive or otherwise legal measures, a third issue is whether the enforcer and court can effectively limit the supracompetitive monopoly profits to the minimum amount necessary for the firm to invest in the innovation. No one contends that the monopolist's reward be unlimited to spur innovation. Hylton and Lin state that the otherwise illegal exclusionary behavior should last only long enough for the innovating firm to earn a sufficient return on its investment.⁷⁹ This raises complications. Antitrust plaintiffs may dispute the proper return on investment (arguing for a smaller amount). Courts and enforcers may not know when the monopolist exceeded its return on investment, which raises the risk that the monopolist continues to engage in anticompetitive behavior after earning its return. Finally, a monopolist because of network effects may no longer need to rely on exclusionary behavior to secure its monopoly profits.

Even if (i) monopoly profits were needed for innovation to reach the market, (ii) the monopolist could not protect this innovation through less anticompetitive or otherwise legal measures, and (iii) the enforcer and court could effectively limit the supracompetitive monopoly profit to the minimum amount necessary to the investment in the innovation, a fourth issue is whether, and to what extent, the innovation benefits society. Innovation is not an end in itself, but the means of promoting overall welfare; it inherently involves trade-offs. With intellectual property, the reward to its owner is a secondary consideration to the general benefits that the public derives from the innovation.⁸⁰ Ironically, as it

⁷⁸ Michele Boldrin & David K. Levine, *The Economics of Ideas and Intellectual Property*, 102 PROC. NAT'L ACAD. SCI. U.S. 1252, 1254 (2005).

⁷⁹ Hylton & Lin, *supra* note 13, at 267, 272.

⁸⁰ H.R. REP. NO. 60-2222, at 7 (1909) (enacting the copyright law, Congress considered "how much the monopoly granted [would] be detrimental to the public . . . [as] the granting of such exclusive rights, under the proper terms and conditions, confers a benefit upon the public that outweighs the evils of the temporary monopoly."); *see also* Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 63 (1998) ("The balance between the interest in motivating innovation and enlightenment by rewarding invention with patent protection on the one hand, and the interest in avoiding monopolies that unnecessarily stifle competition on the other, has been a feature of the federal patent laws since their inception.").

relates to the financial crisis, J.P. Morgan innovated with new forms of credit default swaps precisely because competing investment banks copied prior financial innovations and industry margins were eradicated.⁸¹ The fact that this copying occurred did not prevent J.P. Morgan and the other investment banks from innovating with new financial products that led to a global financial crisis.

Nonetheless the Hylton-Lin model could serve several important purposes. First, it may help explain why generalist courts are reluctant to impose antitrust liability on companies that create a new market through their innovation and whose conduct would be legal if engaged in by firms without market power. Second, although many recognize that competition from new commodities, technologies, sources of supply, and organizational structures can be more important than static price competition, the authors seek to develop a model that promotes (or at least does not deter) the incentive to innovate. Third, this issue will be of importance when private antitrust enforcement takes hold in the European Union and elsewhere.⁸²

III. WHAT ARE THE GOALS OF ANTITRUST LAW?

Professor Bush's article, *Too Big to Bail: The Role of Antitrust in Distressed Industries*, raises the political implications of concentrated economic power. In the tradition of Robert Pitofsky's seminal article⁸³ (which appeared with Richard Posner's famous piece on the Chicago School),⁸⁴ Bush addresses the goals of competition law. He notes how antitrust policy over the past thirty years has ignored issues once considered important, such as the political and economic effects of firm size on the economy as a whole. Bush raises several historical and salient concerns about monopolies, such as (1) their political influence; (2) the effect of their size on the economy; and (3) their effect on distribution of income. Although Bush's first two historical concerns are recognized antitrust concerns, some may ask, "What does income inequality have to do with antitrust?"

⁸¹ GILLIAN TETT, *FOOL'S GOLD: HOW THE BOLD DREAM OF A SMALL TRIBE AT J.P. MORGAN WAS CORRUPTED BY WALL STREET GREED AND UNLEASHED A CATASTROPHE* (2009).

⁸² European Comm'n, *Green Paper on Damages Actions for Breach of the EC Antitrust Rules*, COM (2005) 672 final (Dec. 19, 2005), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2005:0672:FIN:EN:PDF>.

⁸³ Robert Pitofsky, *The Political Content of Antitrust*, 127 U. PA. L. REV. 1051 (1979).

⁸⁴ Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 U. PA. L. REV. 925, 933 (1979).

As many scholars have documented, the pattern of income disparity between the 1920s and mid-2000s has a distinctive “U” shape.⁸⁵ Despite increases in worker productivity, income inequality has grown in the United States, beginning in the late 1970s and increasing after Ronald Reagan took office in 1981.⁸⁶ Although the disparity between the rich and poor has widened globally, the OECD observed, “nowhere has this trend been so stark as in the United States.”⁸⁷ Despite its high employment rate, the United States in 2005 had the third-highest poverty rate and third-highest income gap between the rich and poor among OECD nations (trailing Mexico and Turkey on both measures).⁸⁸ The United States also ranks lower among OECD nations for earnings mobility between generations.⁸⁹ In other words, contrary to the Horatio Alger belief,⁹⁰ the poor in the United States are likely to produce the next generation of poor.

⁸⁵ LAWRENCE MISHÉL ET AL., *THE STATE OF WORKING AMERICA 2008/2009* Fig. 1K (2009) (examining share of total income held by top 1 percent of households), available at <http://www.stateofworkingamerica.org/tabfig/2008/01/19.pdf>. After increasing in the 1920s, income inequality in the 1930s and 1940s declined, and the level was relatively stable between the 1950s and 1970s, a period also known for its robust (and at times possibly too robust) antitrust enforcement. In the 1970s, for example, the United States was a rich country with an educated population, but its income inequality was not significantly greater than in other wealthy countries. Thomas Lemieux, *For Equality, Education Matters*, SCIENCE, Sept. 26, 2008, at 1779. The Gini coefficient, based on equalized household disposable income, after taxes and transfers, ranges between 0 (perfect equality, where each share of the population gets the same share of income) and 1 (perfect inequality, where all income goes to the individual with the highest income). In the United States, the Gini coefficient in the mid-1970s was 0.32, and grew to 0.38 by the mid-2000s. The Gini coefficient in Austria, Belgium, Denmark, Finland, France, Sweden, Netherlands, Luxembourg, Germany, and Norway remained at or below 0.30 during this period. OECD, *Income Distribution—Inequality* (Table), <http://stats.oecd.org/Index.aspx?DataSetCode=INEQUALITY>.

⁸⁶ Thomas Piketty & Emmanuel Saez, *Income Inequality in the United States: 1913–1998*, 118 Q.J. ECON. 1 (2003). Professor Saez has updated their 2003 article’s tables and figures with federal income tax data up to 2008. See <http://elsa.berkeley.edu/~saez/TabFig2008.xls> (July 2010); see also MISHÉL ET AL., *supra* note 85, at Fig. 1K (“Data on income concentration going back to 1913 show that the top 1 percent of wage earners [in 2006] hold 23 percent of total income, the highest inequality level in any year on record, bar one: 1928.” *Id.* at 3, available at http://www.stateofworkingamerica.org/swa08_00_execsum.pdf).

⁸⁷ OECD, *Country Note: United States, in GROWING UNEQUAL?: INCOME DISTRIBUTION AND POVERTY IN OECD COUNTRIES 1* (2008), available at <http://www.oecd.org/dataoecd/47/2/41528678.pdf>. Interestingly, the income divide between 1948 and 2007 trended upward during Republican administrations and downward during Democratic administrations. LARRY M. BARTELS, *UNEQUAL DEMOCRACY: THE POLITICAL ECONOMY OF THE NEW GILDED AGE UNEQUAL DEMOCRACY* (2008).

⁸⁸ OECD, *Are We Growing Unequal?* 2–3 (Oct. 2008), <http://www.oecd.org/dataoecd/48/56/41494435.pdf>.

⁸⁹ *Id.* at 7; see also MISHÉL ET AL., *supra* note 85, at 5.

⁹⁰ See, e.g., Roland Bénabou & Jean Tirole, *Belief in a Just World & Redistributive Politics*, Q.J. ECON. 699, 701–03 (2006) (noting popular perceptions of upward mobility in the United States and Europe).

The increasing income inequality in the United States over the past thirty years raises many issues, including: (a) what causes income inequality, and is lax antitrust enforcement a contributing factor, and (b) how does income inequality affect antitrust policy? The issue of income inequality is itself complex, and its relationship to competition policy adds further complexity. A full examination of these issues is beyond this article's scope. Rather, the purpose here is to sketch these issues for future research.

A. WHAT CAUSES INCOME INEQUALITY, AND IS LAX ANTITRUST ENFORCEMENT A CONTRIBUTING FACTOR?

Economists agree that income inequality is not attributable to one factor. As Professors Frank Levy and Peter Temin state, there is "no single determinant, whether education, minimum wage, capital or labor mobility, that determines the path of income distribution."⁹¹ Economists disagree over the primary causes of income inequality.⁹² To what extent then is the level of antitrust enforcement a contributing factor to the increasing income inequality?

One way in which antitrust policy can affect income inequality is via mitigating wealth transfers to buyers and sellers with significant market power.⁹³ For example, consumers may be paying supracompetitive overdraft fees to large financial institutions, which in turn distribute the

⁹¹ Frank S. Levy & Peter Temin, *Inequality and Institutions in 20th Century America* 44 (MIT Dep't of Econ. Working Paper No. 07-17, 2007), available at <http://ssrn.com/abstract=984330>.

⁹² Some cite as the primary causes technological change and the rising demand for skill (referred to as skill-biased technical change (SBTC)). PAUL KRUGMAN, *THE CONSCIENCE OF A LIBERAL* 132 (2007) (discussing and criticizing SBTC position); U.S. CENSUS BUREAU, *THE CHANGING SHAPE OF THE NATION'S INCOME DISTRIBUTION 1947-1998*, at 10 (June 2000). But other economists note the shortcomings of the SBTC proposition, including the lack of direct supporting evidence; its inability to explain why median college-educated salaries for U.S. males increased in real dollars only 17 percent since 1973; and why levels of income inequality have remained fairly stable in continental European countries and Japan over the past thirty years. KRUGMAN, *supra*, at 132-41; Thomas Piketty & Emmanuel Saez, *The Evolution of Top Incomes: A Historical and International Perspective*, 96 *AM. ECON. REV.* 200, 204 (2006); Piketty & Saez, *supra* note 86, at 31-35. Others attribute changes in labor market institutions (including the decline of unions, minimum wages, and progressive taxes) and social norms (social outrage over high salaries) as significantly affecting income inequality. Levy & Temin, *supra* note 91, at 5.

⁹³ See, e.g., Bush, *supra* note 14, at 287 (discussing SCP tenet that "concentrated market structures lead to a redistribution—or perhaps a 'maldistribution'—of income").

rents unequally (namely to the CEOs⁹⁴ and other senior executives).⁹⁵ Among the goals of antitrust Professors Lawrence Sullivan and Warren Grimes discuss is preventing such wealth transfers.⁹⁶ Congress “intended to stop powerful firms from shifting wealth from consumers to themselves;” thus, “protecting consumer pocket books from market power overcharges is probably at the core of political support for the antitrust laws.”⁹⁷

One would expect markets, as they become more competitive, to disperse economic power and alleviate the resource allocation and income distribution problem.⁹⁸ Professors Levy and Temin, for example, calculated economic rents (the sum of compensation and corporate profits) per full-time-equivalent (FTE) employee between 1950 and 2000 for several categories of industries.⁹⁹ They found that from 1950 through the 1970s, the economic rents per FTE employee in finance, insurance, and real estate industry (aggregated) grew at a similar rate to the other surveyed industries.¹⁰⁰ But between the mid-1980s and 2000, economic rent per FTE for the finance, insurance, and real estate industry grew at a much higher rate to over \$100,000, which was more than any other category and more than double the levels for the services and all private industries categories.¹⁰¹

A second way in which antitrust policy can affect income inequality is in reinforcing other economic institutions and informal social norms that affect income inequality. Runaway executive compensation, for

⁹⁴ Piketty & Saez, *supra* note 86, at 32–33 (Fig. XI) (showing how average CEO compensation between the early 1970s and 1999 increased at a much faster rate than the average wage of a full-time U.S. worker).

⁹⁵ In 2009, consumers paid a record \$38.5 billion in overdraft fees for their debit cards, nearly double the amount reported in 2000. Saskia Scholtes & Francesco Guerrera, *Banks in \$38.5bn Windfall from Fees*, FIN. TIMES, Aug. 10, 2009, at 1. See also FDIC, FDIC STUDY OF BANK OVERDRAFT PROGRAMS 18, 22 (Nov. 2008) (noting how large banks (assets greater than \$1 billion) tended to charge higher overdraft and usage fees than mid-size and small banks (assets less than \$250 million)), available at http://www.fdic.gov/bank/analytical/overdraft/FDIC138_Report_Final_v508.pdf.

⁹⁶ LAWRENCE A. SULLIVAN & WARREN S. GRIMES, THE LAW OF ANTITRUST: AN INTEGRATED HANDBOOK 12–16 (2d ed., 2006); Kenneth G. Elzinga, *The Goals of Antitrust: Other than Competition and Efficiency, What Else Counts?*, 125 U. PA. L. REV. 1191, 1193 (1977) (discussing how efficiency and equity concerns, including the distribution of income are not mutually exclusive).

⁹⁷ SULLIVAN & GRIMES, *supra* note 96, at 13.

⁹⁸ F.M. SCHERER & DAVID ROSS, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 18–19 (3d ed. 1990).

⁹⁹ Levy & Temin, *supra* note 91, at 36–37 (surveying all private industries; services; finance, insurance and real estate; manufacturing; and retail trade and automobile services).

¹⁰⁰ *Id.* at 37.

¹⁰¹ *Id.*

some economists, is not simply a function of supply and demand for the executives' services, but is shaped by institutions and social norms, such as the social attitudes of shareholders, workers, politicians, and the general public.¹⁰² In discussing how the labor market institutions and social norms affect income inequality, Professors Levy and Temin distinguish between two time periods: the first was the "Treaty of Detroit" period, which was after World War II to the late 1970s, where the income inequality levels in the United States were kept in check by labor laws, unions, progressive taxes, high minimum wages, and social norms. Thereafter, during the "Washington Consensus" period, these economic institutions came under attack in the name of efficiency, which contributed to the steep rise in income inequality.¹⁰³

Similarly, Professor Bush discusses how antitrust policy shifted over this time period. Before Reagan and the Chicago School, most historical approaches to antitrust, as Bush describes, considered the social, political, and distributional ramifications of firm size upon the economy and distrusted the concentration of economic wealth. Despite the Sherman Act's inconsistent enforcement over the past century, it had originally embodied at least a competitive ideal of curbing the concentration of economic power and serving as the last obstacle to complete industrial autocracy. President Franklin D. Roosevelt, for example, observed that cartels and monopolies flourished in pre-war Germany because of the absence of antitrust laws and a lack of popular distrust of the concentration of power and monopolies.¹⁰⁴

Antitrust policy's distrust of the concentration of economic power changed with the Reagan administration and rise of the Chicago School.¹⁰⁵ Concentration, even to the brink of monopoly, Bush writes, was characterized as beneficial in terms of efficiency. As Bush observes, "Political influence, the distribution of income, and the effect of firm size on the economy as a whole and on the political process are now well out of vogue."¹⁰⁶

For some (including within academia) there is the belief that the importance of antitrust in the United States diminished during the Reagan administration and never recovered (despite the prosecutions of

¹⁰² KRUGMAN, *supra* note 92, at 145.

¹⁰³ *Id.* at 136–41; Levy & Temin, *supra* note 91.

¹⁰⁴ Wilhelm Cohnstaedt, *Germany's Cartels and State Control: A Revealing Study of the Reich's Post-War Industrial Monopoly Organizations*, N.Y. TIMES, May 19, 1935, at BR9; John H. Crider, *Roosevelt Calls for Cartels Curb: In Letter to Hull He Says Types of "Trusts" Used by Reich Must Be Ended*, N.Y. TIMES, Sept. 9, 1944, at 1.

¹⁰⁵ Stucke, *Rule of Reason*, *supra* note 61, at 1451–52.

¹⁰⁶ Bush, *supra* note 14, at 299.

Microsoft,¹⁰⁷ international cartels,¹⁰⁸ and Intel¹⁰⁹). Unlike in earlier presidential campaigns, antitrust policy is no longer mentioned, much less debated, in recent elections.¹¹⁰ In one 2003–04 survey, many younger Americans (ages 18 to 29), unlike the older Americans surveyed, were unconcerned about economic concentration.¹¹¹ Fifty-four percent of the younger Americans were very or somewhat satisfied with the size and influence of major corporations, which was fifteen percentage points higher than the next-most-optimistic age group (30- to 49-year-olds), and satisfaction with major corporations decreased even more among the older age groups. Among the factors to explain this disparity, Gallup's chief economist identified the federal government not pursuing monopolies the way it once did (therefore, younger people did not have such a negative view of monopolies) and that the antitrust laws were not emphasized in business school the way they once were.¹¹² While many antitrust professionals followed the antitrust trial against Microsoft, few average Americans apparently did.¹¹³

Thus, one issue to be further explored is to what extent, if any, did the shift in competition policy and changes in social attitudes toward monopolies over this time period contribute to the rise in income inequality. They may be contributing factors to the income inequality problem or may be simply a symptom of a larger trend toward reduced government involvement in the marketplace, increased hostility to un-

¹⁰⁷ *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001).

¹⁰⁸ One example is the lysine cartel, *United States v. Andreas*, 216 F.3d 645 (7th Cir. 2000), featured in the film *The Informant!*, based on KURT EICHENWALD, *THE INFORMANT* (2000).

¹⁰⁹ *Intel Complaint*, *supra* note 15.

¹¹⁰ For example, a search on the Commission on Presidential Debates Web site found the term "antitrust" mentioned last in October 6, 1976, in the Second Carter-Ford Presidential Debate (Ford stating, "my administration—and I'm very proud of it—is the first administration that has taken an antitrust action against companies in this country that have allegedly cooperated with the Arab boycott"), <http://www.debates.org/index.php?page=debate-transcripts>; Stucke, *Rule of Reason*, *supra* note 61, at 1390–98 (discussing Wilson-Taft-Roosevelt debate over rule-of-reason standard).

¹¹¹ Linda Lyons, *Youthful Optimism? Young Americans Happy with "Big Business,"* GALLUP.COM (Mar. 2, 2004), <http://www.gallup.com/poll/10816/Youthful-Optimism-Young-Americans-Happy-Big-Business.aspx>.

¹¹² *Id.*

¹¹³ The Pew Research Center for the People & the Press, *Campaign Incidents Have Little Punch* (Dec. 16, 1999) (noting that only about one in ten people (11 percent) said they followed reports of the antitrust trial against Microsoft, which was relatively unchanged from interest in this story in November 1998), <http://people-press.org/report/?pageid=253>.

ions, reduction of taxes for the wealthy, spiraling individual and corporate debt, and greater market speculation.¹¹⁴

B. HOW DOES INCOME INEQUALITY AFFECT ANTITRUST POLICY?

Even if one concludes that the shift in antitrust policy was not a contributing factor to the rise of income inequality, then to what extent does economic concentration affect antitrust enforcement? Antitrust policy was historically concerned about preventing the concentration of economic power. But once economic power is concentrated, what then is the role of antitrust?

Although the Sherman Act was enacted during a period of significant income inequality, one risk with concentrated economic power is that antitrust falls by the wayside. If antitrust policy principally seeks “to stem the ‘rising tide’” of economic concentration¹¹⁵ and preserve “a competitive system [] seen as essential to avoid the concentration of economic power that [is] thought to be a threat to the Nation’s political and social system,”¹¹⁶ then competition policy offers benefits to middle-class and lower-income consumers and small-to-moderate-sized firms. The economically powerful may derive some benefit under this antitrust policy (such as lower input costs), but the costs from vigorous antitrust enforcement may outweigh these benefits. If the fringe firm were an annoyance, the dominant firm may resort to quicker, lower-cost means to resolve their disputes, such as partnering with the fringe firm to increase mechanisms to punish unwanted behavior, or retaliating with anticompetitive measures.

Once power and wealth are concentrated, social policies are often directed to preserve the status quo.¹¹⁷ As Professor Bush observes, “Political power has the capacity to potentially translate into economic power, for example by intensely lobbying for legislation that derails competition in the marketplace.”¹¹⁸ Economic power also has the capacity to

¹¹⁴ PHILLIPS, *supra* note 16, at 71 (identifying ten recurring characteristics of the late 19th century Gilded Age, the Roaring Twenties, and the post-1982 Second Gilded Age). See also Goerner et al., *supra* note 45, at 80 (criticizing the laissez-faire assumption that highly skewed distributions of wealth, power, and size do not affect economic health).

¹¹⁵ *United States v. Pabst Brewing Co.*, 384 U.S. 546, 552 (1966) (quoting *United States v. Von’s Grocery Co.*, 384 U.S. 270, 276 (1966) (quoting *Brown Shoe Co. v. United States*, 370 U.S. 294, 315 (1962))).

¹¹⁶ *United States v. Falstaff Brewing Corp.*, 410 U.S. 526, 541 (1973) (Douglas, J., concurring in part) (quoting STAFF OF ANTITRUST SUBCOMM. OF THE H. COMM. ON THE JUDICIARY, 92D CONG., 1ST SESS., REPORT ON H. RES. 161: INVESTIGATION OF CONGLOMERATE CORPORATIONS 18 (Comm. Print)).

¹¹⁷ Stucke, *Monopolies*, *supra* note 69, at 521–25 (providing examples).

¹¹⁸ Bush, *supra* note 14, at 286.

translate into political power. The wealthy can seek to redefine the goals of antitrust policy to preserve their economic power, use the competition law to deter entry,¹¹⁹ or direct antitrust enforcement against unions (which happened early in the Sherman Act's history¹²⁰) and other atomistic buyers and sellers who collectively bargain against the dominant firm.

The relationship between competition policy and income inequality is worthy of further evaluation. Bush's article is timely in raising these concerns. In 2007, many more Americans saw the United States divided into the "haves" and "have-nots," with more classifying themselves as the have-nots.¹²¹ During the financial crisis, Americans were angry over the wide wealth disparity.¹²² Competitive markets should have the effect of alleviating, not increasing, income inequality. Antitrust's populist principles, if nothing else, can serve as signposts of whether our competition policies are indeed heading in the right direction.

IV. CONCLUSION

As Claude Bernard wrote, "Those who have excessive faith in their ideas are not well fitted to make discoveries."¹²³ Economic theory will continue to shape antitrust policy. The most interesting issue will be the evolution of economic theories relied on by antitrust enforcers, practitioners, and courts after the financial crisis. We have already seen the shift in academic research toward more interdisciplinary economic approaches. The growth stocks in academia today are not the Chicago School's or even post-Chicago School's "rational choice" theories, but in

¹¹⁹ See, e.g., *Citicorp v. Interbank Card Ass'n*, 87 F.R.D. 43, 44 (S.D.N.Y. 1980) (Citicorp sought to block the entry of defendants into the market for U.S. dollar travelers checks, alleging that defendants' plan to introduce checks bearing the trademark and logo "Master Charge" violated the Sherman Act).

¹²⁰ The eighth federal antitrust action brought by the United States was against Eugene V. Debs. CCH, *THE FEDERAL ANTITRUST LAWS: WITH SUMMARY OF CASES INSTITUTED BY THE UNITED STATES 1890-1951* 69 (1952). The United States prosecuted numerous unions and union officials. *Id.* at 459-60 (index of cases against unions); PAUL E. HADLICK, *CRIMINAL PROSECUTIONS UNDER SHERMAN ANTI-TRUST ACT* 140 (1939) (the first persons to serve jail sentences resulting from Sherman Act violations were Eugene V. Debs and others, growing out of the Pullman strike of 1894).

¹²¹ Jodie T. Allen & Michael Dimock, *A Nation of "Haves" and "Have-Not"?* *Far More Americans Now See Their Country as Sharply Divided Along Economic Lines*, PEWRESEARCHCENTER.ORG (Sept. 13, 2007), <http://pewresearch.org/pubs/593/haves-have-nots>.

¹²² John Thornhill, *Poll Shows Wide Dislike of Wealth Gap*, FT.COM, May 18, 2008, http://www.ft.com/cms/s/0/86c4edea-250f-11dd-a14a000077b07658.html?nclick_check=1; David Frum, *The Vanishing Republican Voter*, N.Y. TIMES (Sunday Mag.), Sept. 7, 2008, at 50. This displeasure over the wealth disparity exists in the European Union as well. John Thornhill et al., *Accent on Egalité*, FIN. TIMES, June 9, 2008, at 7.

¹²³ KARL POPPER, *POPPER SELECTIONS* 84 (David Miller ed., 1985).

such fields as behavioral economics and neuroeconomics.¹²⁴ A tension exists between the Chicago School's and post-Chicago School's mathematical models, based on the faulty assumption of rational behavior, and behavioral antitrust, which provides more realistic assumptions of market behavior, which may not be as easily modeled.

Despite the protestations among rational choice proponents, competition policy will likely follow the interdisciplinary intellectual current. The regulatory, intellectual, and moral failures of the past decade have already prompted competition lawyers and economists in the United States and European Union to reconsider the assumptions underlying current competition policies, and whether such policies are indeed achieving their desired goals.¹²⁵ But predicting the form of innovation in antitrust policies that arise after the financial crisis is like predicting innovation generally. We know it is coming, but not necessarily when, where, and by whom.

¹²⁴ FTC Commissioner Rosch, for example, identified as one agency priority "how to incorporate behavioral economics principles into our enforcement decisions." J. Thomas Rosch, Comm'r, Fed. Trade Comm'n, Enforcement Priorities in the New Administration, Remarks at the Global Competition Review's 2009 Competition Law Review (Nov. 17, 2009), available at <http://www.ftc.gov/speeches/rosch/091117enforceprioritiesremarks.pdf>.

¹²⁵ See, e.g., Amanda P. Reeves & Maurice E. Stucke, *Behavioral Antitrust*, 86 INDIANA L.J. (forthcoming 2011) (discussing increasing interest in behavioral economics and its applications to competition law), available at <http://ssrn.com/abstract=1582720>.

