
Banking & Financial Services: Globalization, Regulation, and Consolidation in a Troubled Industry*

In recent years there has been a far-reaching consolidation of the financial services industry in the United States, Europe, Japan, and elsewhere. From the early 2000s leading up to the financial crisis of 2008–09, a relatively small group of eighteen financial conglomerates came to dominate U.S. and global wholesale markets for syndicated lending, securities underwriting, securitizations, structured financial products, and over-the-counter (OTC) derivatives. Those eighteen institutions, referred to below as the “Big Eighteen,” included the four largest U.S. banks (Bank of America (BoFA), Citigroup, JPMorgan Chase (JPMC), and Wachovia); the five largest U.S. securities firms (Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch, and Morgan Stanley); the largest U.S. insurer (AIG); and eight large foreign banks (Barclays, BNP Paribas, Credit Suisse, Deutsche Bank, HSBC, Royal Bank of Scotland (RBS), Société Générale, and UBS).¹

During the financial crisis, Wells Fargo acquired Wachovia, JPMC acquired Bear Stearns, and BoFA acquired Merrill Lynch. Lehman failed, and AIG was crippled. Thus, of the Big Eighteen, fourteen institutions emerged more or less intact, although most of them received extensive government support. Those fourteen institutions include the six largest U.S. banks (JPMC, BoFA, Citigroup, Wells Fargo, Goldman Sachs, and Morgan Stanley) and eight giant foreign banks (Barclays, BNP Paribas, Credit Suisse, Deutsche Bank, HSBC, RBS, Société Générale, and UBS).²

The same fourteen institutions have retained their dominance within global wholesale financial markets since the financial crisis. These fourteen banks constituted the “G14” group of the “most active global derivatives dealers” in 2010, and the same fourteen banks remain within the current

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¹ Arthur E. Wilmarth, Jr., *The Dark Side of Universal Banking: Financial Conglomerates and the Origins of the Subprime Financial Crisis*, 41 CONN. L. REV. 963, 980–95 (2009) [hereinafter Wilmarth, *Dark Side*]; Arthur E. Wilmarth, Jr., *The Dodd-Frank Act: A Flawed and Inadequate Response to the Too-Big-to-Fail Problem*, 89 OR. L. REV. 951, 966 (2011) [hereinafter Wilmarth, *Dodd-Frank*].

² Wilmarth, *Dark Side*, *supra* note 1, at 1043–46; Wilmarth, *Dodd-Frank*, *supra* note 1, at 978–79; Arthur E. Wilmarth, Jr., *A Two-Tiered System of Regulation Is Needed to Preserve the Viability of Community Banks and Reduce the Risks of Megabanks*, 2015 MICH. ST. L. REV. 249, 256–67 [hereinafter Wilmarth, *Two-Tiered System of Regulation*].

“G16” group of top global derivatives dealers.³ All fourteen banks ranked among Bloomberg’s top twenty global investment banks, based on total fees, in 2012.⁴ All fourteen banks, except for UBS, ranked among the top twenty-one global arrangers of syndicated loans in both 2013 and 2014.⁵

Those fourteen financial giants hold commanding shares of global markets for wholesale financial products and services. For example, the fourteen banks accounted for 82% of the global market for OTC derivatives in 2010, measured by the aggregate notional amount of outstanding derivatives contracts.⁶ Similarly, the six largest U.S. banks and four major European banks collectively accounted for half of the global market for underwriting debt securities and arranging syndicated loans in both 2013 and 2014.⁷

As Dan Awrey has recently explained, the dominant positions of the G16 banks give them “market power” as well as a “privileged market position, and the opportunities this position presents for unscrupulous behavior.”⁸ For example, the G16 banks have the power to influence changes in the London Interbank Offered Rate (LIBOR) and to help determine whether “credit events” have occurred under credit default swaps, even though such decisions “determine the payoffs under contracts to which [the G16 banks] are themselves significant counterparties. This [power], in turn, gives rise to hardwired conflicts of interest between this core group and the other, peripheral, market participants.”⁹ Thus, as industrial organization economist F.M. Scherer has observed, “A handful of giant banking firms have come to tower over the rest of the industry.”¹⁰

This chapter begins by considering antitrust enforcement perspectives for large banking and financial services conglomerates. It then examines mergers, cartels, and collusive conduct among

³ David Mingle, *Concentration of OTC Derivatives Among Major Dealers*, ISDA RESEARCH NOTES 2 n.2 (2010) (listing the “G14” group of the top derivatives dealers), available at http://www.isda.org/researchnotes/pdf/ConcentrationRN_4-10.pdf. In 2011 and 2012, the group of top global derivatives dealers became the “G16” with the addition of Nomura and Cr dit Agricole. Matt Cameron, *G14 dealer group adds two members*, RISK.NET (Dec. 1, 2011), <http://www.risk.net/risk-magazine/news/2127940/g14-dealer-adds>. The original G14 dealers remain members of the G16 group. Dan Awrey, *The Limits of Private Ordering Within Modern Financial Markets*, 34 REV. BANKING & FIN. L. 183, 233 fig.5 (2014).

⁴ *The World’s Best-Paid Investment Banks*, BLOOMBERG MKTS. (Mar. 2, 2013, 8:00 AM), <http://www.bloomberg.com/slideshow/2013-03-02/the-world-s-best-paid-investment-banks.html#slide1>.

⁵ THOMSON REUTERS, GLOBAL SYNDICATED LOANS REVIEW: MANAGING UNDERWRITERS: FULL YEAR 2014, at 1 (2014), available at http://dmi.thomsonreuters.com/Content/Files/4Q2014_Global_Syndicated_Loans_Review.pdf.

⁶ Mingle, *supra* note 3, at 1–2.

⁷ GLOBAL SYNDICATED LOANS REVIEW, *supra* note 5, at 2.

⁸ Awrey, *supra* note 3, at 232.

⁹ *Id.* at 234–35.

¹⁰ F.M. Scherer, *The Banking Industry* 38 (HKS Faculty Research, Working Paper RWP14-042, Sept. 2014), available at <https://research.hks.harvard.edu/publications/citation.aspx?PubId=9477&type=FN&PersonId=219>.

such actors, government advocacy for competition in this arena, and the special case of payment systems.

SUMMARY OF THE CHAPTER'S MAJOR RECOMMENDATIONS

- **The Antitrust Division of the Department of Justice (DOJ) should vigorously and expansively apply available antitrust enforcement tools in reviewing future mergers involving large financial institutions, taking advantage of its statutory authority to review such transactions under the Bank Merger Act and the Bank Holding Company Act (BHC Act). There needs to be further, flexible investigation and analysis with regard to the potential anticompetitive effects of mergers involving large financial institutions.**
- **Antitrust enforcement agencies should pay closer attention to the adverse effects—including the increased potential for collusion—produced by rising levels of concentration in national and international markets for financial products and services, such as investment banking services. Investigations should reflect awareness that important segments of these markets are highly concentrated, now have a track record for collusion, and should therefore be presumed to be particularly susceptible to collusive and manipulative behavior. In keeping pace with changing forms of corporate ownership, attention should also be given to potential collusive activity where the identity and behavior of acquirers or owners of corporate shares may raise novel antitrust concerns.**
- **Senior bank executives who approve or allow antitrust violations should be subject to criminal or civil enforcement. The DOJ should follow prosecution and punishment guidelines that are appropriately aggressive and effectively deter future misconduct. Individual culpability should be punished more aggressively.**
- **The Consumer Financial Protection Bureau's (CFPB's) proposed rule prohibiting providers of certain consumer financial products and services from imposing arbitration agreements that bar consumers from filing or participating in class actions should be adopted and enforced. Applying the same logic, Congress should go further and overturn the U.S. Supreme Court's opinions that have broadly upheld mandatory arbitration clauses.**
- **Congress should require regulators to consult in a timely manner with DOJ on the economic and competitive implications of major structural changes in the banking**

and financial services industry, including issues associated with increased concentration of financial and economic power, following standards that are clearly stated and administrable. DOJ should be given a statutory consultative role in a number of important instances that invoke regulatory oversight under Dodd-Frank, the Bank Merger Act, and the BHC Act. These roles would complement DOJ's existing statutory authority to review bank mergers and bank holding company acquisitions of banks.

- Until Congress adopts the recommended legislative changes proposed herein, DOJ should voluntarily advocate for regulatory outcomes that will enhance the functioning of competitive markets in all of the foregoing instances.
- Competition policy considerations should inform regulatory solutions to the Too Big to Fail (TBTF) problem. Regulatory efforts should focus on creating incentives for company-by-company decisions to divest activities and assets, including progressively higher capital requirements and taxes based on considerations of systemic risk, especially where size is likely to confer competitive advantages based on investor and lender beliefs that the government will prevent a disorderly failure of the company. Such measures should be designed to prevent the largest financial institutions from exploiting safety net subsidies that confer competitive advantages in the form of lower-cost funding and thereby create barriers to entry or growth by smaller and more specialized firms that are important for financing of vibrant new businesses.
- If incentives involving higher capital requirements and taxes based on considerations of systemic risk do not work, Congress should give serious consideration to legislation that would require mandatory breakups of TBTF financial institutions or that would recreate a regime of functional separation similar to the Glass-Steagall Act of 1933. Additionally, Congress should consider “narrow banking” approaches such as the “ring-fencing” concept developed by Sir John Vickers in the United Kingdom, in order to prevent financial conglomerates from using safety net benefits derived from deposit-taking to subsidize speculative activities in the capital markets.
- In situations where proposed mergers, other structural changes, or new financial products would create high levels of concentration or high levels of systemic risk, financial regulatory agencies should seek to apply a precautionary principle that

would reverse ordinary burdens of persuasion and require proponents (rather than regulators) to carry the burden of persuasion.

- The enforcement agencies should continue to monitor the activities of the dominant payment card networks as the industry migrates into digital commerce and mobile payments.
- In addition to ensuring rigorous compliance with the consent decree against Visa and MasterCard, the agencies should scrutinize whether network owners are exploiting their Honor All Cards rules, their proprietary control over new security protocols such as “EMV” chip technology, or their centrality in the standardization of other security techniques to extend their market power into new lines of business.
- The agencies should closely monitor whether leading technology companies are entering into arrangements with the dominant networks that effectively allocate markets and thereby perpetuate the competitive problems in the payments industry.
- Development of bitcoin and blockchain technology merits close scrutiny by antitrust enforcement agencies. Because applications of blockchain technology are so far-reaching, and could have such a revolutionary impact on the economy, the environment, and national security, antitrust authorities should be considered as one of the important stakeholders who should be engaged in far-reaching study and coordinated decision-making on how this technology should be protected from exclusionary or other anticompetitive behavior by large financial firms and other private actors.

I. Adjusting the Lens of Antitrust Enforcement in Banking and Financial Services

The continued power of the G16 banks, as highlighted by Awrey and Scherer, suggests an overwhelming need for broader perspective in setting competition policy goals in the financial services arena. If we maintain no more than the customary antitrust focus on narrow markets such as home mortgages, savings accounts, small business loans, or venture capital investments, we are likely to miss the bigger picture.

A. Merger Review in National and International Markets for Investment Banking Services

Scherer focuses on the bigger picture. He has carefully analyzed issues involving national and international investment banking markets. He observes that, when reviewing mergers, government enforcers have tended to give less attention to the tendency of major mergers to increase concentration levels in markets for investment banking services, even though these are likely to be

economically relevant markets within the criteria of the agency Merger Guidelines. Reasons are that those markets are national and international in scope, and that insufficient information about these markets has been developed.

Scherer points out that detailed statistical data on the structure of specialized investment banking markets are lacking, at least on any publicly available basis, even though such specialized investment banking services exhibit a pattern of collusive and manipulative behavior that implicates antitrust concerns. According to Scherer, because bank regulators and the Antitrust Division of the Department of Justice (DOJ) have focused primarily on antitrust issues in local banking markets, they have not undertaken a careful investigation of national and international investment banking markets and have thereby “allowed an elephant to escape into the countryside.”¹¹

We believe that further investigation and analysis is needed concerning the nature of the investment banking elephant Scherer sees running loose, and other similar financial service elephants. Investigation and analysis may show that only large financial institutions with extensive infrastructures and established reputations can compete effectively in wholesale financial markets such as derivatives dealing, syndicated loans, securities underwriting, and currency exchange. There may be substantial barriers to entry and growth by smaller or more specialized competitors. If there are such barriers, then allowing major competitors to merge (e.g., Wells Fargo and Wachovia, or Bank of America and Merrill Lynch) will only intensify structural and reputational barriers to entry and make it less likely that any new competitors will be able to enter and grow successfully.

B. Collusion on a National and International Scale

The next administration should instruct regulators and enforcers to focus their attention on the market conduct and power of the small group of major financial firms that are dominant in national and international markets. Collusive activity by large financial firms in an array of markets certainly suggests a need for expanded investigative and enforcement vigilance by antitrust enforcers applying usual agency Merger Guidelines analysis, as Scherer suggests.

But it may be that antitrust enforcers’ application of usual antitrust product and geographic market analysis to large financial firms in an array of markets will require extensive resources that as a practical matter are unavailable. In addition, antitrust enforcers may lack the remedial tools to reduce the size and power of large financial firms. Antitrust enforcement may be insufficient to keep up with the ability of the large financial institutions to engage in collusive activity in an array of national and global markets, including wholesale financial markets like derivatives dealing, syndicated loans, securities underwriting, and currency exchange. It may be, of course, that antitrust

¹¹ *Id.* at 37.

enforcement resources will be made more effective in the future through such innovations as sophisticated use of presumptions, shifting burdens of proof, and evolution of market definition analysis.

If it turns out that antitrust enforcement is insufficient to keep up with the ability of the large financial institutions to engage in harmful collusive activity in an array of markets, then possible regulatory interventions in support of competition may need to be considered. This includes requirements of greater transparency in the setting of currency exchange and LIBOR rates, and in other similar instances of permitted coordinated action by large financial institutions. Ultimately, regulatory and antitrust efforts should be complementary and well-coordinated; in other words, regulatory standards should support antitrust principles.

C. The Need for Complementarity Among Antitrust and Regulation

There is great virtue in the case-by-case approach of traditional antitrust enforcement, which targets specific instances of anticompetitive conduct as they arise. An enforcement approach can often provide effective remedies for unique or unexpected fact patterns in a more targeted way, compared with regulatory rulemaking. In contrast, regulatory rulemaking often depends more on developing a relatively broad and potentially burdensome matrix of competitive obligations and prohibitions in anticipation of potential anticompetitive conduct.¹²

The costs associated with additional regulations that complement antitrust law may well be justified when we are confronted with the kind of complex, highly concentrated market power now possessed by giant financial conglomerates, for which a traditional application of antitrust principles may not be sufficient. Don Baker observes that we “cannot rely on U.S. antitrust rules and enforcement” to deal with problems created by the government subsidies and associated competitive advantages exploited by giant “too-big-to-fail” banks. He may state that point too strongly, and may move too quickly to regulatory alternatives, but we agree with him that regulatory alternatives must be explored.¹³

In addition, recent U.S. Supreme Court decisions, including *Trinko* and *Credit Suisse*, may have permitted financial institutions to argue in particular cases that antitrust enforcement should be, and is, subordinated to the authority of financial regulators.¹⁴ The *Trinko* and *Credit Suisse* decisions are

¹² Howard A. Shelanski, *The Case for Rebalancing Antitrust and Regulation*, 109 MICH. L. REV. 683, 719 (2011).

¹³ Donald Baker, *From Philadelphia National Bank to Too Big to Fail: How Modern Financial Markets have Outrun Antitrust Law as a Source of Useful Structural Remedies*, 80 ANTITRUST L.J. 353, 373 (2015).

¹⁴ *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko*, 540 U.S. 398 (2004); *Credit Suisse Sec. (USA) LLC v. Billing*, 551 U.S. 264, 284–85 (2007); Shelanski, *supra* note 12, at 684.

read by commentators like Howard Shelanski as broadening the conditions under which regulation blocks antitrust enforcement, thereby blocking plaintiffs from bringing cases in actively regulated industries, like banking.¹⁵ Nevertheless, there are strong arguments that support the availability of antitrust enforcement in regulated industries, and that regulatory action can be effective as a complement that supports application of antitrust principles.

If regulatory intervention is needed as a complement to antitrust enforcement to facilitate competition among the few powerful and dominant firms that control allocation of funds for investment and other purposes, then ultimately regulatory guidelines may need to be legislated. There is, however, sufficient flexibility in existing antitrust law and regulators' "public interest" jurisdiction to justify efforts by the DOJ, the Federal Reserve Board (Fed), and other U.S. government agencies to begin, in a transparent and coordinated way, to address new enforcement approaches with respect to financial services.

We are aware that the financial services industry is highly regulated, but most observers believe that a systematic failure to apply existing regulatory standards played a large role in allowing the excessive risk-taking that led to the financial crisis of 2008. The financial services industry is also innovative, but most observers believe that innovation has created complexities and hazards that were poorly understood or ignored both within the industry and within the government.

The stakes are high for setting clear competition policy goals and finding ways to achieve those goals. Control by a few powerful financial institutions over the allocation of funds in multiple financial markets has highly significant political implications. One implication is that effective international regulatory and antitrust cooperation with regard to large and powerful financial institutions is crucially important to maintain confidence in financial and government institutions and avoid devastating panics. International cooperation needs to be effective and able to act quickly, since failure of financial systems can occur swiftly and have contagious effects across national boundaries.

Further, control by a few powerful financial institutions over the allocation of funds has negative implications for risk taking and innovation, particularly by smaller or more specialized companies.

Finally, the plight of consumers who are customers of powerful financial institutions must not be forgotten. The Dodd-Frank Act established the Consumer Financial Protection Bureau (CFPB) to protect the rights of consumers, and the CFPB has carried out its mandate vigorously. For example, the CFPB issued proposed rules in May 2016 that would prohibit mandatory arbitration clauses

¹⁵ Shelanski, *supra* note 12, at 684.

barring consumers from filing or participating in class action lawsuits. The proposed rules would apply to mandatory arbitration clauses in contracts for a wide range of consumer financial products, including credit card loans, mortgage loans, and deposit accounts. The CFPB's proposed rules should be adopted and enforced. Applying the same logic, Congress should be urged to overturn the U.S. Supreme Court's opinions that have broadly upheld mandatory arbitration clauses.¹⁶

This chapter assumes that regulatory reforms adopted after the financial crisis will continue to be necessary and will continue to be improved in light of experience. Sooner or later there likely will be additional financial crises, probably different from the past. The protection of competition in such crises will benefit from current planning that coordinates regulatory and antitrust concerns—something that was sorely lacking in 2008.

II. Mergers

The Antitrust Division played a lamentably minimal role in connection with emergency acquisitions of large troubled institutions during the financial crisis. Those acquisitions resulted in a significant increase in the concentration of financial assets on a national level. The DOJ should vigorously and expansively apply available antitrust enforcement tools in reviewing future mergers involving large financial institutions, taking advantage of its statutory authority to review such transactions under the Bank Merger Act and the BHC Act. There needs to be further, flexible investigation and analysis with regard to the potential anticompetitive effects of mergers involving large financial institutions. In addition, antitrust enforcement agencies should pay closer attention to the adverse effects—including the increased potential for collusion—produced by rising levels of concentration in national and international markets for financial products and services.

The DOJ has a longstanding role in reviewing bank mergers as well as acquisitions of banks by bank holding companies. Under the Bank Merger Act, the DOJ generally submits its views on “competitive factors” before a federal banking agency approves a bank merger.¹⁷ Under the BHC Act, the Fed typically consults with DOJ before approving an acquisition of a bank by a bank holding company, and the Fed must notify DOJ after approving an acquisition.¹⁸ DOJ usually can file suit to challenge a bank merger or bank acquisition on competitive grounds within 30 days after the transaction has been approved. However, the Bank Merger Act and the BHC Act include exceptions that allow a bank merger or acquisition to be approved (i) with very short notice to DOJ

¹⁶ See, e.g., *DirecTV, Inc. v. Imburgia*, 135 S.Ct. 1537 (2015); *American Express Co. v. Italian Colors Rest.*, 133 S. Ct. 2304 (2013); *AT&T Mobility LLC v. Concepcion*, 131 S. Ct. 1740 (2011); *Stolt-Nielsen S. A. v. AnimalFeeds Int'l Corp.*, 130 S. Ct. 1758 (2010).

¹⁷ See 12 U.S.C. § 1828(c).

¹⁸ See *id.* § 1849(b).

and limited opportunity for a court challenge by DOJ, in the event of “an emergency requiring expeditious action,” or (ii) without any notice to DOJ or any opportunity for a court challenge by DOJ, if the transaction is necessary “to prevent the probable failure of a bank.”¹⁹

A. History of Extraordinary and Emergency Consolidation

At the peak of the financial crisis in October 2008, the Fed granted expedited approval for Wells Fargo’s emergency acquisition of Wachovia. The Wells Fargo-Wachovia transaction combined the third and fifth largest U.S. banks and produced a megabank with almost \$1.4 trillion in assets and branches in about half the states and the District of Columbia. Wells Fargo and Wachovia competed directly in 49 local banking markets, but Wells Fargo was required to divest only six branches.²⁰ DOJ received prior notice of the transaction, and the Fed reported that DOJ “does not believe that the proposal would likely have a significant adverse effect on competition in any relevant banking market at this time.”²¹

The Wells Fargo-Wachovia combination was one of several extraordinary acquisitions that the Fed approved during the financial crisis. The Fed approved acquisitions by JPMC of Bear Stearns (the fifth largest U.S. securities firm) and Washington Mutual (the largest U.S. savings association, with \$300 billion of assets). The Fed also approved acquisitions by BofA of Countrywide (the second largest U.S. savings association, with \$200 billion of assets) and Merrill Lynch (the third largest U.S. securities firm).²² The foregoing transactions enabled JPMC, BofA, and Wells Fargo to increase their aggregate share of U.S. banking deposits from 21% in 2007 to 33.9% in 2009.²³

In 2010, DOJ stated that it had reviewed the extraordinary mergers of 2008 based on “the same antitrust principles and analytical framework that it applies to every merger review,” and DOJ concluded that the mergers “raised few competitive concerns.”²⁴ Even so, DOJ’s role in reviewing the mergers appears to have been peripheral at best. Albert Foer and Don Resnikoff “found no evidence that the Antitrust Division had a significant role when the Federal Reserve Board, the

¹⁹ *Id.* § 1849(b)(1); *see id.* § 1828(c)(4)(B)(ii), (C)(i).

²⁰ FEDERAL RESERVE BULLETIN, LEGAL DEVELOPMENTS: FOURTH QUARTER 2008 B39–B43 (Mar. 2009) (discussing Wells Fargo & Co.); *see also id.* at B44–B47 (describing the Fed’s analysis of the competitive effects of the acquisition and Wells Fargo’s agreement to divest six branches), *available at* <http://www.federalreserve.gov/pubs/bulletin/2009/pdf/legalq408.pdf>.

²¹ *Id.* at B41, B47.

²² Kevin Kim, *Competition Policy in the Financial Crisis* 7–11 (Am. Antitrust Inst., Working Paper No. 12-07, Dec. 17, 2012), *available at* http://www.antitrustinstitute.org/sites/default/files/aa1%20working%20paper%2012-07_0.pdf; Wilmarth, *Two-Tiered System of Regulation*, *supra* note 2, at 257–59.

²³ Kim, *supra* note 22, at 12.

²⁴ *Id.* at 8 (quoting Dept. of Justice, Roundtable on Competition, Concentration and Stability in the Banking Sector, at 4 (Jan. 30, 2010)).

Treasury, and other U.S. agencies made crisis-time decisions to encourage the acquisition of weakened financial institutions by stronger ones,” and Don Baker concurs.²⁵

Despite DOJ’s assurances about the lack of competitive concerns, the extraordinary mergers of 2008 “substantially increased consolidation in the financial services industry.”²⁶ Those mergers enabled JPMC, BofA, and Wells Fargo to achieve, along with Citigroup, preeminent status as the “Big Four” of the U.S. banking industry. By virtue of a long series of mergers that culminated in the emergency acquisitions of 2008, the Big Four expanded their aggregate share of U.S. banking assets from 6.2% in 1984 to 32% in 2005 to 47.7% in 2013.²⁷ They have now absorbed all but one of the 11 major banks that were identified by the Comptroller of the Currency as TBTF in 1984.²⁸ The Fed and the DOJ cleared all of these transactions. In fact, there have been no denials of large bank combinations since the mid-1980s.²⁹

As a result of the “megamergers” (defined as mergers in which both the acquiring and target banks had assets greater than \$10 billion) and federal bailouts that occurred during the financial crisis, the Big Four and the next two largest banks (Goldman Sachs and Morgan Stanley) held \$9.5 trillion of assets by the end of 2011, equal to 63% of gross domestic product (GDP).³⁰ As Foer and Resnikoff point out, “This is a measure of ‘aggregate concentration’ that should be frightening”³¹ In contrast, the assets of the same six—JPMC, BofA, Wells Fargo, Citigroup, Goldman, and Morgan Stanley—represented only 17% of GDP in 1995.³²

B. *Lenient Bank Merger Policies*

Even prior to the 2008 financial crisis, dating back to the mid-1980s, bank regulators and the DOJ

²⁵ Albert A. Foer & Don Allen Resnikoff, *Competition Policy and ‘Too Big’ Banks in the European Union and the United States*, 59 ANTITRUST BULL. 9, 17 (2014); Baker, *supra* note 13, at 356.

²⁶ Foer & Resnikoff, *supra* note 25, at 18.

²⁷ Wilmarth, *Two-Tiered System of Regulation*, *supra* note 2, at 256, 263. JPMC is the result of seven large mergers since 1990, while BofA is the product of 18 such mergers. Citigroup is the outcome of three such combinations (including the enormous merger between Citicorp and Travelers in 1998), and Wells Fargo is the result of 12 such mergers. Bernard Shull, *Too Big to Fail in Financial Crisis: Motives, Countermeasures, and Prospects* App. B Tbl.4 (Levy Economics Econ. Instit., Working Paper No. 601, June 2010), available at http://www.levyinstitute.org/pubs/wp_601.pdf.

²⁸ James R. Barth & Moutusi Sau, *What Happened to the Too-Big-to-Fail Banks 30 Years Ago?*, 33 BANKING & FIN. SERVS. POL’Y REP. 14, 14–16 (explaining that the Big Four absorbed 10 of the 11 TBTF banks of 1984, while Deutsche Bank acquired Bankers Trust).

²⁹ Shull, *supra* note 27, n.1; Bernard Shull & Gerald A. Hanweck, *Bank Merger Policy: Proposals for Change*, 119 BANKING L.J. 214, 217–20 (2002). The last denial of a bank merger by the Fed occurred in 1996 and involved a proposed merger of two small banks in a rural market. Shull, *supra* note 27, n.1.

³⁰ Wilmarth, *Two-Tiered System of Regulation*, *supra* note 2, at 264 n.32; SIMON JOHNSON & JAMES KWAK, 13 BANKERS: THE WALL STREET TAKEOVER AND THE NEXT FINANCIAL MELTDOWN 202–03, 217 (2010).

³¹ Foer & Resnikoff, *supra* note 25, at 18.

³² JOHNSON & KWAK, *supra* note 30, at 203 fig.7-1.

have followed lenient bank merger policies. Between 1990 and 2005, they cleared 74 megamergers and allowed the ten largest U.S. banks to expand their share of domestic banking assets from 25% to 55%.³³ As Foer and Resnikoff observe, “[t]he analytical approaches of the Antitrust Division are somewhat different from the approaches of the [Fed] and the other regulatory agencies, but the differences have certainly not obstructed the recent U.S. government tendency to facilitate nationwide consolidation in banking.”³⁴

The federal government and the states also enacted a series of laws that greatly expanded opportunities for interstate bank acquisitions and interstate branching during the 1980s and 1990s. However, in keeping with the normal antitrust analyses of the times, bank regulators and DOJ generally continued to evaluate bank mergers using highly localized definitions of geographic banking markets based on localized patterns of consumer demand. In addition, bank regulators and DOJ failed to agree on the product market definitions that should govern the assessment of competitive effects in bank mergers.

For example, DOJ typically defined banking product markets based on discrete business lines, while the Fed adhered to the “cluster of products” approach adopted in *Philadelphia National Bank*.³⁵ The Fed also frequently used “mitigating factors” to justify mergers in highly concentrated local banking markets, with only occasional objections from DOJ. Most importantly, as noted above, bank regulators and DOJ permitted the creation of large multistate banks as well as the formation of giant financial conglomerates that encompass banks, securities firms, insurance companies, and other financial entities.³⁶

International context is important when U.S. mergers have a significant international aspect that requires the attention of antitrust enforcement agencies. For financial institutions, the important merger problems that have international aspects result from the tendency of financial megamergers

³³ Kenneth D. Jones & Robert Oshinsky, *The Effect of Industry Consolidation and Deposit Insurance Reform on the Resiliency of the U.S. Bank Insurance Fund*, 5 J. FIN. STABILITY 57, 58 (2009).

³⁴ Foer & Resnikoff, *supra* note 25, at 19. Permissive merger policy has not been limited to the banking industry. In his recent study of merger retrospectives across a variety of industries, for example, John Kwoka concludes broadly that “studied mergers appeared to be cleared too often,” and “[a]ll in all, both investigations and policy actions appear to err on the side of permissiveness, with the result that too few mergers are challenged, and too few of those that are challenged are subject to either adequate remedies or opposition by the antitrust agencies.” JOHN KWOKA, *MERGERS, MERGER CONTROL, AND REMEDIES: A RETROSPECTIVE ANALYSIS OF U.S. POLICY* 120, 121 (2015). For further discussion of broader merger policy, see Chapter 3 of this Transition Report.

³⁵ *United States v. Phila. Nat’l Bank*, 374 U.S. 321 (1963).

³⁶ For analysis of the lenient bank merger policies followed by bank regulators and DOJ and their impact on the structure of the banking industry, see Foer & Resnikoff, *supra* note 25, at 22; Shull, *supra* note 27, app. A; Shull & Hanweck, *supra* note 29, at 217–20. For a detailed description of those policies, see generally Edward Pekarek & Michela Huth, *Bank Merger Reform Takes an Extended Philadelphia National Bank Holiday*, 13 FORDHAM J. CORP. & FIN. L. 595 (2008).

to produce high concentration in particular financial product markets that are national and international rather than local in scope. The consolidation of investment banking and currency trading markets provide prominent examples of this trend. The relationship between high concentration and collusion in particular financial product areas is explored further in our analysis of collusion.

Finally, some political leaders who are not antitrust specialists have mounted campaigns to oppose big banks, and those campaigns have challenged by implication the mergers that allowed the biggest banks to form. These issues are addressed later in this chapter as part of legislative and regulatory responses to TBTF problems. If such political notions gain traction, they are likely to affect future government merger enforcement policy, either directly through legislation or indirectly through influence on DOJ's policy goals.

III. Cartels and Other Collusive Conduct

Future government actions to investigate, prosecute, and punish collusive and manipulative behavior in financial services markets must be vigorous and effective, building on successes of the recent past. Investigations should reflect awareness that important segments of national and global markets for financial services are highly concentrated, now have a track record for collusion, and should therefore be presumed to be particularly susceptible to collusive and manipulative behavior. Future investigations should include focus on highly concentrated national and global markets for financial products such as investment banking services. Senior bank executives who approve or allow antitrust violations should be subject to criminal or civil enforcement. DOJ should follow prosecution and punishment guidelines that are appropriately aggressive and effectively deter future misconduct. Individual culpability should be punished more aggressively.

In keeping pace with changing forms of corporate ownership, attention should be given to potential collusive activity where the identity and behavior of acquirers or owners of corporate shares may raise novel antitrust concerns.

A. Collusion in and Manipulation of Wholesale Financial Markets

Since 2012, government authorities and private litigants have uncovered a series of anticompetitive violations involving collusion and manipulation of a variety of wholesale financial markets by financial giants. In the context of price-fixing and related illegal agreements, standard antitrust product and geographic markets apply. The relationship between increased market concentration and increased collusion is more than coincidence, as discussed below.

All but one of the fourteen global financial giants named above have featured prominently in

settlements of regulatory actions and/or civil lawsuits related to collusion and manipulation of a wide range of financial benchmarks. Barclays, Citigroup, Deutsche Bank, RBS, Société Générale, and UBS entered into deferred prosecution agreements and paid large fines to settle government charges arising out of their manipulation of various LIBOR interest rates.³⁷ Barclays, BofA, Citigroup, Deutsche Bank, RBS, and UBS entered guilty pleas and paid heavy fines to resolve government allegations that they rigged foreign exchange markets in a scheme described by U.S. Attorney General Loretta Lynch as a “brazen display of collusion.”³⁸ Several of the same banks remain under government investigations for suspected manipulation of trading in U.S. Treasury bonds and precious metals.³⁹ All of the fourteen banks but one—Société Générale—paid large settlements to resolve civil lawsuits alleging that the banks engaged in price-rigging in foreign exchange markets or conspired to limit competition in the credit default swap market.⁴⁰

DOJ and other regulators have received strong criticism for failing to bring criminal or civil charges against senior executives who were responsible for the foregoing market-rigging violations. Although the United Kingdom and the United States have prosecuted criminal cases against several traders who were involved in the LIBOR scandal, as of March 1, 2016, no top bank executives have been charged or brought to trial, even on civil charges.⁴¹ The prosecution and conviction of several

³⁷ Private victims also sued the banks on the LIBOR panel for Section 1 violations. Although a district judge initially dismissed private claims on grounds that LIBOR rigging did not have an “anticompetitive” effect insofar as the LIBOR-setting process itself was collaborative, the Second Circuit recently vacated that judgment, holding instead that where plaintiffs’ alleged “the warping of market factors affecting the prices for LIBOR-based financial instruments,” no further showing was needed to establish antitrust injury. *Gelboim v. Bank of America Corp.*, 2016 WL 2956968, *11 (2d Cir. 2016). For descriptions of the LIBOR scandal, see Awrey, *supra* note 3, at 223–32.

³⁸ David McLaughlin, Tom Schoenberg & Gavin Finch, *Enforcement: Six Banks Pay \$5.8 Billion, Five Guilty of Market Rigging*, 104 BLOOMBERG BNA’S BANKING REP. 999 (2015) (quoting Attorney General Lynch).

³⁹ Gina Chon, *Watchdog in US Treasury Market Probe*, FIN. TIMES (Sept. 9, 2015, 10:57AM), <http://www.ft.com/cms/s/0/fbb913c2-5650-11e5-a28b-50226830d644.html> (reporting that New York’s Department of Financial Services “is probing potential manipulation of the US Treasury markets” and had sent requests for information to “Barclays, Deutsche Bank, Goldman Sachs, Société Générale and other banks”); Gaspard Sebag & Stephen Morris, *Precious-Metals Trading Is Probed by EU After U.S. Inquiry*, BLOOMBERG (Aug. 25, 2015, 5:15AM), <http://www.bloomberg.com/news/articles/2015-08-25/eu-commission-is-probing-precious-metals-operations> (reporting an investigation by European Union antitrust regulators, and stating that “U.S. prosecutors have been examining whether at least 10 banks,” including Barclays, JPMC and Deutsche Bank, “manipulated prices of precious metals such as gold and silver”).

⁴⁰ Nate Raymond, *Currency-Rigging Lawsuit Settlements Rise Past \$2 Billion: Lawyer*, REUTERS (Aug. 13, 2015, 7:37PM), <http://www.reuters.com/article/us-forex-manipulation-settlement-idUSKCN0QI2J720150813> (reporting that nine G14 members—Barclays, BNP Paribas, BofA, Citigroup, Goldman Sachs, HSBC, JPMC, RBS, and UBS—collectively paid more than \$2 billion to settle a class action lawsuit alleging “price-rigging in the foreign exchange market”); Michael J. Moore & Hugh Son, *JPMorgan Said to Pay Most in \$1.86 Billion CDS Settlement*, 105 BLOOMBERG BNA’S BANKING REP. 466 (2015) (reporting that twelve G14 members—Barclays, BNP Paribas, BofA, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JPMC, Morgan Stanley, RBS, and UBS—agreed to pay \$1.86 billion to settle a class action lawsuit claiming that they “conspired to control the information about the multitrillion-dollar credit-default swap market in violation of U.S. antitrust laws”).

LIBOR traders is a positive development in antitrust enforcement.⁴²

In addition, Commissioner Kara Stein of the Securities and Exchange Commission (SEC) criticized the SEC for granting waivers that preserved securities-law privileges for five major banks (Barclays, Citigroup, Deutsche Bank, JPMC, and RBS) after they entered guilty pleas to felony charges for conspiracy to manipulate either currency rates or LIBOR. In Commissioner Stein's view, the SEC's waivers "effectively rendered criminal convictions of financial institutions largely symbolic" and allowed the banks "to continue business as usual, after multiple and serious regulatory and criminal violations."⁴³

The recent enforcement history discussed above deserves some applause but also indicates that DOJ and other government agencies should establish a more ambitious goal for future government enforcement of competition laws in the financial markets: namely, a sustained and vigorous program of investigation, prosecution, and punishment that will effectively deter future collusive and manipulative behavior by financial firms and their senior executives. Such a program is urgently needed because important segments of national and global financial markets have been permitted (and sometimes actively encouraged) to become highly concentrated. Consequently, they are

⁴¹ Suzi Ring, *Enforcement: Hayes LIBOR Verdict Shows 'Everyone Did It' Is Still No Defense*, 105 BLOOMBERG BNA'S BANKING REP. 213 (2015); Nate Raymond, *Ex-Rabobank Traders Face First U.S. Trial Over LIBOR Manipulation*, REUTERS (Oct. 12, 2015, 6:00PM), <http://www.reuters.com/article/us-rabobank-LIBOR-trial-idUSKCN0S609K20151012>; John Heltman, *Why 'Too Big to Jail' Is Still a Matter of Debate*, AM. BANKER (Aug. 24, 2015); *Financial Crime: Unsettling Settlements; More Wrongdoing at Banks, More Swinging Fines, No Prosecutions*, ECONOMIST (May 23, 2015), <http://www.economist.com/news/finance-and-economics/21651885-more-wrongdoing-banks-more-swinging-fines-no-prosecutions-unsettling>; Press release, Better Markets Statement on DOJ's Latest "Slap on the Wrist" Settlement Charade for Wall Street's Too-Big-To-Fail Banks (May 20, 2015), available at <https://www.bettermarkets.com/newsroom/better-markets-statement-DOJ%E2%80%99s-latest-%E2%80%9Cslap-wrist%E2%80%9D-settlement-charade-wall-street%E2%80%99s-too-big>.

⁴² Patricia Hurtado & Tom Schoenberg, *U.S. Wins First LIBOR-Rig Case as Ex-Rabobank Traders Convicted*, BLOOMBERG (Nov. 5, 2015, 11:28 AM), <http://www.bloomberg.com/news/articles/2015-11-05/u-s-wins-its-first-LIBOR-rigging-prosecution-in-n-y-jury-trial>.

⁴³ Phyllis Diamond, *Enforcement: Stein Objects to SEC Waivers for Banks in Currency Cases, Calls Pleas 'Symbolic'*, 104 BLOOMBERG BNA'S BANKING REPORT 1054 (May 22, 2015) (quoting statement by Commissioner Stein). It is not clear whether DOJ was informed of the SEC's intention to grant waivers to the five banks in order to allow each bank to preserve its privileged status as a "well-known seasoned issuer" (WKSI). As Commissioner Stein pointed out, the SEC "has granted at least 23 WKSI waivers to the same five institutions in the past nine years," and she argued that "[t]his type of recidivism and repeated criminal misconduct should lead to revocations of prior waivers, not the granting of a whole new set of waivers." If DOJ acquiesced in the SEC's plan to grant those waivers, such acquiescence raises troubling questions about DOJ's willingness to take all necessary steps to deter serious violations of the antitrust laws by financial giants. In a recent column, Bert Foer and Bob Lande of the AAI and two conservative commentators, Judge Douglas Ginsburg and former FTC Commissioner Joshua Wright, argued that DOJ should negotiate consent orders with companies that would include provisions against re-employing or in any way reimbursing employees who are convicted of felony price-fixing charges. Douglas H. Ginsburg, Joshua Wright, Albert Foer & Robert H. Lande, *DOJ has the Power to Crush Price Fixers*, USA TODAY (May 27, 2015), <http://www.usatoday.com/story/opinion/2015/05/27/currency-manipulation-cartels-doj-antitrust-column/27920795/>.

particularly susceptible to collusion, both explicit and implicit.⁴⁴

The 2010 joint DOJ/FTC Merger Guidelines rightly apply a presumption in favor of enforcement to markets with a history of successful collusion.⁴⁵ The recent history of collusive and manipulative behavior by the largest financial firms should therefore produce a presumptive case for continued antitrust investigation and enforcement in national and international financial markets with high levels of concentration.

With regard to recommendations for future government prosecution and punishment for illegal conduct, the shortfalls of the past suggest the need for more ambitious government action in the future. In particular, as discussed above, DOJ and other regulators have not held any senior banking executives accountable for market-rigging violations. No top bank executives have been indicted or brought to trial on criminal or civil charges. That omission must be corrected, as many commentators have suggested.⁴⁶

As former Fed chairman Ben Bernanke observed in an interview with *USA Today*, “[A] financial firm is of course a legal fiction. . . . You can’t put a financial firm in jail. . . . [O]bviously illegal acts ultimately are done by individuals, not by legal fictions.”⁴⁷ In September 2015, DOJ announced a new policy, declaring it would place a higher priority on holding individual executives accountable for misconduct committed by banks and other corporations. The new policy is a step in the right direction, but it remains to be seen whether DOJ will implement that policy effectively.⁴⁸ To that

⁴⁴ Professor Salop has explained that “concentration levels and market shares at the high and low ends retain some predictive power with respect to coordinated effects when the market is defined appropriately.” Steven C. Salop, *The Evolution and Vitality of Merger Presumptions: A Decision-Theoretic Approach*, 80 ANTITRUST L. J. 269, 298 (2015); see Philadelphia National Bank at 50: Interview with Judge Richard Posner, 80 ANTITRUST L. J. 205, 207 (2015) (“I continue to think that a high degree of concentration [is] important because it facilitates collusion. The fewer large firms there are in a market, the easier it is for them to collude, either explicitly or tacitly.”); Peter C. Carstensen, *The Philadelphia National Bank Presumption: Merger Analysis in an Unpredictable World*, 80 ANTITRUST L.J. 219, 247–251 (2015) (citing studies showing that increased concentration has a strong relationship with higher prices and other harms to competition).

⁴⁵ U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES § 7.2 (2010).

⁴⁶ See, e.g., MATT TAIBBI, *THE DIVIDE: AMERICAN INJUSTICE IN THE AGE OF THE WEALTH GAP* (2014); John Heltman, *How ‘Too Big to Jail’ Will Haunt the 2016 Election*, AM. BANKER (Aug. 19, 2015), <http://www.americanbanker.com/news/law-regulation/how-too-big-to-jail-will-haunt-the-2016-election-1076173-1.html>; Gretchen Morgenson & Louis Story, *In Financial Crisis, No Prosecutions of Top Figures*, N.Y. TIMES, Apr. 14, 2011, at A1.

⁴⁷ Susan Page, *Ben Bernanke: More execs should have gone to jail for causing Great Recession*, USA TODAY (Oct. 5, 2015), <http://www.usatoday.com/story/news/politics/2015/10/04/ben-bernanke-execs-jail-great-recession-federal-reserve/72959402/>.

⁴⁸ Sally Quillian Yates, Deputy Att’y Gen., Dep’t of Justice, Remarks at New York University School of Law Announcing New Policy on Individual Liability in Matters of Corporate Wrongdoing (Sept. 10, 2015), *available at* <http://www.justice.gov/opa/speech/deputy-attorney-general-sally-quillian-yates-delivers-remarks-new-york-university-school>.

end, commentators who have questioned whether DOJ's new policy will actually lead to more frequent prosecutions of senior corporate executives will hopefully be proved wrong.⁴⁹

B. Collusive Activity Where Conduct Raises Novel Antitrust Concerns

Also of concern is potential collusive activity where the identity and behavior of acquirers or owners of corporate shares may raise novel antitrust concerns. For example, one recent collusion case involved a plaintiff class of shareholders of public companies that had been "taken private" in leveraged buyouts (LBOs) by large private equity firms, including KKR, Blackstone, Bain, Goldman Sachs, and others.⁵⁰ The Complaint alleged that, for a period of time in the mid-2000s, these large private equity firms agreed to engage in "club deals" in which the firms bid jointly for LBO transactions even though each firm had the ability and resources to bid separately. The agreement also provided that once a private equity firm's or a club's bid had been tentatively accepted by the target company's board of directors, the other private equity firms would not "jump" that bid, *i.e.* would not make a competing offer during the "go shop" period.⁵¹ An academic study found that the "premium" paid to target companies in "club deals"⁵² was significantly lower than in other LBO deals. Thus, the effect of the alleged conspiracy by private equity firms was to reduce the amount the shareholders of the target company received for their shares in the LBO.

With regard to owners of corporate shares, European regulators have identified troublesome conduct by corporate shareholders which may also be a problem under U.S. law. In 2014, the European Commission imposed fines totaling €301.6 million on eleven producers of underground and submarine high-voltage power cables, including an Italian cable maker in the portfolio of Goldman Sachs Capital Partners. Importantly, the fund manager, Goldman Sachs Capital Partners, was held jointly and severally liable for a portion of the €104.6 million fine imposed on the cable maker.⁵³ In 2010, the Dutch competition authority (ACM) imposed fines totaling €81 million on 15

⁴⁹ Some commenters have expressed concerns that the new policy may be designed as a public relations exercise to mitigate widespread public criticism of DOJ's practice of accepting deferred prosecution agreements or guilty pleas from giant financial institutions while failing to bring any criminal or civil charges against their top executives. Rob Blackwell, Victoria Finkle & Joe Adler, *Is New DOJ Policy to Target Execs a Sham?*, AM. BANKER (Sept. 10, 2015); Ben Protess & Matt Apuzzo, *Justice Dept. Vow to Go After Bankers May Prove a Promise Hard to Keep*, N.Y. TIMES, Sept. 11, 2015, at B1; Russell Mokhiber, *Opinion: Justice Dept. cracking down on white-collar crime? Don't believe the hype*, MARKETWATCH.COM (Sept. 10, 2015), <http://www.marketwatch.com/story/justice-dept-cracking-down-on-white-collar-crime-dont-believe-the-hype-2015-09-10>.

⁵⁰ *Dahl v. Bain Capital Partners, LLC*, 589 F. Supp. 2d 112 (D. Mass 2008).

⁵¹ The fiduciary duties impose on the board of directors an obligation to seek the best possible offer.

⁵² In "going private" or LBO transactions the term "premium" means the difference between the target company's share price before the deal is announced, and the share price the buyer(s) ended up paying to shareholders. *See* Micah S. Officer, Oguzhan Ozbas & Berk A. Sensoy, *Club Deals in Leveraged Buyouts*, 98 J. FIN. ECON. 214 (2010).

⁵³ Thomas Verstraeten, *Private Equity Funds Fined for Antitrust Violations by their Portfolio Companies*, LEXOLOGY (Mar. 5, 2015), <http://www.lexology.com/library/detail.aspx?g=187ad1a1-040a-43fa-8b35-e9cf98001f77>.

flour producers for their participation in a cartel. One of the producers was fined €9 million for its alleged involvement. During the cartel period, the flour producer in question was held by two different investment funds. The ACM eventually ruled that both investment funds were liable for the producer's antitrust violations for the period the company was held in their respective portfolios.

The EU cases are among the first examples of application of the parental liability doctrine to private equity funds for antitrust violations committed by their portfolio companies. They demonstrate a growing trend to fine private equity funds for antitrust violations by their portfolio companies at both the EU and national levels.⁵⁴

With regard to the related topic of horizontal shareholding across corporations, an article by Einer Elhauge, *Horizontal Shareholding*,⁵⁵ offers the following facts with regard to the U.S. banking industry:

In the banking industry, the top four shareholders of JP Morgan-Chase (BlackRock, Vanguard, Fidelity, and State Street) are also the top four shareholders of Bank of America and four of the top six shareholders of Citigroup, collectively holding 19.2% of JP Morgan Chase, 16.9% of Bank of America, and 21.9% of Citigroup.⁵⁶

Professor Elhauge's analysis suggests that, in a concentrated industry like banking, a high degree of overlap in stock ownership across the leading firms raises an enforcement issue for antitrust. He observes:

Economic models show that substantial horizontal shareholdings are likely to anticompetitively raise prices when the owned businesses compete in a concentrated market. Recent empirical work not only confirms this prediction, but also reveals that such horizontal shareholdings are omnipresent in our economy.⁵⁷

One question raised by Elhauge's analysis is whether horizontal shareholders should be held liable for at least some antitrust violations of the companies in which they own shares, in the manner of the EU cases cited above. This new line of inquiry might suggest that the principles which led Congress to outlaw certain interlocking directorates in Section 8 of the Clayton Act (15 U.S.C. § 19), as a way of decentralizing control over the economy, might be ripe for revitalization in a modern form.

⁵⁴ *See id.*

⁵⁵ Einer Elhauge, *Horizontal Shareholding*, 129 HARV. L. REV. 1267 (2016); *see also* Einer Elhauge, *Economic Downsides and Antitrust Liability Risks from Horizontal Shareholding*, HARV. L. SCH. FORUM CORP. GOVERNANCE & FIN. REG. (Jan. 12, 2016), <https://corpgov.law.harvard.edu/2016/01/12/economic-downsides-and-antitrust-liability-risks-from-horizontal-shareholding/>.

⁵⁶ Elhauge, *Horizontal Shareholding*, *supra* note 55, at 1268.

⁵⁷ *Id.* at 1267.

IV. Antitrust Advocacy, the Too Big to Fail Problem, and Systemic Risk

A. The Role of Antitrust Advocacy

A clearer role must be established for DOJ participation in regulatory decisions. DOJ should be granted a stronger presence by specific statute or at least should voluntarily undertake a more substantial advocacy role with regard to all regulatory decisions that could substantially affect competition in the banking industry and financial markets. This should include commenting on the competitive effects of restructuring large financial institutions through resolution planning, involuntary receiverships, or other insolvency proceedings.

Congress should require responsible regulators to consult in a timely manner with DOJ on the economic and competitive implications of major structural changes in the banking and financial services industry, including issues associated with increased concentrations of financial and economic power, following standards that are clearly stated and administrable. For example, DOJ should be given a statutory consultative role when (1) the Financial Stability Oversight Council considers designating a nonbank financial company for enhanced supervision and regulation by the Fed under Section 113 of Dodd-Frank; (2) the Fed and the FDIC consider the imposition of restructuring remedies upon systemically important financial institutions under Section 121 or Section 165(d) of Dodd-Frank; (3) the Secretary of the Treasury, the Fed, and the Federal Deposit Insurance Corporation (FDIC) consider placing a failing financial company in receivership for resolution under Title II of Dodd-Frank; (4) the FDIC considers a plan for restructuring or breaking up a financial company placed in such a receivership; or (5) banking regulators consider emergency bank mergers or acquisitions that are currently exempted from DOJ review under the Bank Merger Act and the BHC Act.

Until Congress adopts the recommended legislative changes, DOJ should voluntarily advocate for regulatory outcomes that will enhance the functioning of competitive markets in all of the foregoing transactions. The additional consultative roles proposed in this recommendation would complement DOJ's existing statutory authority to review bank mergers and bank holding company acquisitions of banks.

Viewed from an antitrust perspective, the authority of bank regulators to decide issues dealing with the structure of the banking industry is reminiscent of antitrust enforcement authority in two areas: mergers and monopolization. In the area of merger enforcement, Congress has given bank regulators the leading role in reviewing bank mergers and acquisitions while granting DOJ a complementary role. The antitrust laws' concerns about monopolization, meanwhile, are arguably reflected in statutes that empower bank regulators to limit or discourage the growth of financial

institutions with excessive size and market power.

The techniques of antitrust monopolization enforcement are quite different from the tools of bank regulation in dealing with size and market power, but their overall goal is similar: to impose restraints on firms whose size or power could pose a significant threat to competitive markets. One difference is that while sectoral regulators are charged with protecting the public interest, which can include considerations of banking size or power, antitrust enforcement must accept the statutory constraint that the abuse of market power, rather than size alone, is the target of prosecution.⁵⁸ This limitation on enforcement, however, should not restrain the DOJ in its competition advocacy function, where companies' ability to predict what will be challenged as illegal by the antitrust authorities is less relevant.

In contrast to bank mergers, Congress has not given DOJ specific statutory authority to comment or otherwise influence bank regulators when those agencies address non-merger issues relevant to bank size and market dominance. Although DOJ is free to provide comments, there is no structure to facilitate such comments and no mechanism to assure that such comments receive serious consideration. In view of the way the financial crisis of 2008 unfolded, that is a problem that should now be addressed.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank)⁵⁹ significantly expands the authority and responsibility of bank regulators to preserve the financial stability of the United States, including the authority to take steps that directly limit or discourage large firm size. For example, under Section 121 of Dodd-Frank, if the Fed determines that a bank holding company with assets of \$50 billion or more “poses a grave threat to the financial stability of the United States,” the Fed can compel the company to take a series of actions to “mitigate” the threat, including the potential step of divesting “assets or off-balance-sheet items.”⁶⁰

Section 113 of Dodd-Frank authorizes the Financial Stability Oversight Council (FSOC) to designate a domestic or foreign nonbank financial company for enhanced supervision by the Fed if FSOC determines that the company “could pose a threat to the financial stability of the United

⁵⁸ The monopolization offense under Section 2 of the Sherman Act requires “(1) the possession of monopoly power in [a] relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.” *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966). For further discussion of monopolization and Section 2, see Chapter 2 of this Transition Report.

⁵⁹ Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010) (codified as amended in scattered sections of U.S.C.).

⁶⁰ *Id.* at § 121 (enacting 12 U.S.C. § 5331(a)).

States.”⁶¹ Section 165(d) of Dodd-Frank requires each designated nonbank financial company and each large bank holding company to file a resolution plan (living will) with the Fed and the FDIC. The plan must provide a blueprint for the company’s “rapid and orderly resolution in the event of material financial distress or failure.”⁶² The Fed and the FDIC can force the company to divest specified assets or operations if the company repeatedly fails to submit a “credible” resolution plan.⁶³

Title II of Dodd-Frank empowers the Secretary of the Treasury, after receiving written recommendations from the Fed and the FDIC, to appoint the FDIC as receiver for a financial company if the Secretary determines that (i) the company is “in default or danger of default,” (ii) the company’s failure and resolution under other applicable law “would have serious adverse effects on financial stability in the United States,” and (iii) “no viable private sector alternative is available” to prevent the company’s default.⁶⁴ The FDIC as receiver has authority to carry out a restructuring or breakup of the failed company.⁶⁵

The decision whether to institute any of the foregoing regulatory actions, and the execution and aftermath of that decision, are likely to have significant effects on the structure of, and competition within, the banking industry and financial markets of the United States. Despite DOJ’s expertise concerning monopolization and related issues of firm size and market power, Dodd-Frank does not give DOJ a statutory consultative role in any of the foregoing regulatory actions. DOJ retains only its preexisting role (described above) to provide comments and file lawsuits with regard to the competitive effects of bank mergers and bank holding company acquisitions in non-emergency situations.

Congress should amend the relevant statutes to specifically authorize DOJ to review the competitive implications of (1) the regulatory actions under Dodd-Frank cited above that relate to limiting or discouraging firm size and power, and (2) emergency bank mergers and acquisitions that are currently exempted from DOJ review under the Bank Merger Act and the BHC Act, where DOJ

⁶¹ *Id.* § 113 (enacting 12 U.S.C. §§ 5323(a), (b)).

⁶² *Id.* § 165 (enacting 12 U.S.C. § 5365(d)).

⁶³ *Id.* (enacting 12 U.S.C. § 5365(d)(5)(B)). In April 2016, either the FDIC or the Fed or both agencies determined that five of the six largest U.S. banks did not have satisfactory resolution plans. However, no divestiture remedy was imposed, and the five banks were given six additional months to submit revised resolution plans. That reprieve has caused some concern about a lack of regulatory rigor. A related issue is whether the Dodd-Frank Act’s plan for subjecting “systemically important financial institutions” (SIFIs) to more stringent government oversight will be effective. Thus far, FSOC has designated only four firms as SIFIs – AIG, Prudential, General Electric’s financing arm, and MetLife. In addition, a U.S. district court judge overturned FSOC’s designation of MetLife in a decision made public in April, creating further concerns about the viability of this crucial component of Dodd-Frank’s reforms. *MetLife Inc. v. Financial Stability Oversight Council*, No. 15-cv-00045 (D.D.C., Mar. 30, 2016, unsealed April 6, 2016).

⁶⁴ *Id.* § 203 (enacting 12 U.S.C. § 5383(b)).

⁶⁵ *Id.* §§ 206, 210, 214 (enacting 12 U.S.C. §§ 5386, 5390, 5394).

review is feasible and will not cause harmful delay.⁶⁶

As discussed above in Part II, DOJ reportedly was not an active participant in the decision-making process during the recent financial crisis. Until Congress adopts the legislative changes proposed above, the Antitrust Division should voluntarily undertake a substantial advocacy role in commenting on the economic and competitive implications of all regulatory decisions that are likely to produce significant structural changes in, or to have other adverse effects on competition within, the banking industry and financial markets. In particular, the Antitrust Division should comment on all regulatory decisions that could lead to further increases in the concentration of both economic and market power within the banking industry and financial markets.

B. Too Big To Fail

Regulatory efforts should focus on creating incentives for company-by-company decisions to divest activities and assets, including progressively higher capital requirements and taxes based on considerations of systemic risk, especially where size is likely to confer competitive advantages based on investor and lender beliefs that the government will prevent a disorderly failure of the company. Such measures should be designed to prevent the largest financial institutions from exploiting safety net subsidies that confer competitive advantages in the form of lower-cost funding and thereby create barriers to entry or growth by smaller and more specialized firms that are important for financing of vibrant new businesses.

If incentives involving higher capital requirements and taxes based on considerations of systemic risk do not work, Congress should give serious consideration to legislation that would require mandatory breakups of TBTF financial institutions or that would recreate a regime of functional separation similar to the Glass-Steagall Act of 1933. Additionally, Congress should consider “narrow banking” approaches such as the “ring-fencing” concept developed by Sir John Vickers in the United Kingdom, in order to prevent financial conglomerates from using safety net benefits derived from deposit-taking to subsidize speculative activities in the capital markets.

As described above in the introduction to this chapter, a group of eighteen large financial conglomerates were the dominant participants in global securities and derivatives markets during the

⁶⁶ The European Union’s practice of giving its competition authority the right to impose conditions on government-aided transactions (e.g., post-merger divestitures and spin-offs) is likely to provide benefits. However, in the context of the U.S. regulatory scheme for financial institutions and with particular regard to the emergency nature of decision-making that can arise in a crisis, the statutory consultative role previously described for DOJ should include the authority to recommend (but not impose) conditions requiring post-merger structural changes, including divestitures and spin-offs, particularly where government financial support is involved.

credit boom of the early and mid-2000s. Those financial giants included most of the top underwriters for nonprime residential mortgage-backed securities, leveraged loans, collateralized debt obligations, and credit default swaps. The Big Eighteen proved to be “the primary private-sector catalysts for the destructive credit boom” that led to the financial crisis of 2007–2009, and they became the “epicenter” of the crisis.⁶⁷ Their central role in the financial crisis is shown by the enormous losses they suffered and the huge public bailouts they received. The Big Eighteen accounted for three-fifths of the \$1.5 trillion of worldwide losses recorded by banks, securities firms, and insurance companies between mid-2007 and the spring of 2010.⁶⁸

Only three of the Big Eighteen institutions—Barclays, Deutsche, and HSBC—survived the financial crisis without receiving capital assistance from government authorities. Lehman failed and AIG and RBS were nationalized, while three other institutions (Bear Stearns, Merrill Lynch, and Wachovia) were acquired in government-supported mergers. Nine other financial giants (BoFA, BNP Paribas, Citigroup, Credit Suisse, Goldman Sachs, JPMC, Morgan Stanley, Société Générale, and UBS) received government capital infusions.⁶⁹ The fourteen largest recipients of emergency liquidity assistance from the Fed were *all* members of the Big Eighteen club, and those institutions received \$16.4 trillion of emergency credit (based on a cumulative total of all individual credit transactions provided by the Fed to those institutions).⁷⁰

The Fed provided further assistance to the largest financial institutions by maintaining a zero-interest-rate policy (ZIRP) for short-term debt and by instituting three rounds of quantitative easing (QE) to lower interest rates on longer-term debt, including home mortgages.⁷¹

The trillions of dollars of assistance provided by government authorities to the largest financial institutions during the crisis is one measure of the TBTF problem. Another gauge is the massive

⁶⁷ Wilmarth, *Dodd-Frank*, *supra* note 1, at 977–78.

⁶⁸ *Id.* at 978.

⁶⁹ *Id.* at 978–79; CORNELIA WOLL, THE POWER OF INACTION: BANK BAILOUTS IN COMPARISON 104–09, 117–37, 171–72 (2014); Pepper D. Culpepper & Raphael Reinke, *Structural Power and Bank Bailouts in the United Kingdom and the United States*, 42 POL. & SOC’Y 427, 440–47 (2014), available at <http://pas.sagepub.com/content/42/4/427.full.pdf+html>.

⁷⁰ Wilmarth, *Two-Tiered System of Regulation*, *supra* note 2, at 262 n.28 (listing the fourteen largest recipients of emergency credit from the Fed, which included all of the Big Eighteen institutions except for HSBC, Lehman, Société Générale, and Wachovia).

⁷¹ Wilmarth, *Two-Tiered System of Regulation*, *supra* note 2, at 265. As a result of the QE programs, the Fed’s balance sheet more than quadrupled in size between 2008 and 2014, rising from \$924 billion to \$4.4 trillion. ZIRP reduced the cost of megabanks’ short-term liabilities almost to zero, and the QE programs boosted the market values of the large volumes of mortgage-related securities that megabanks held on their balance sheets during and after the financial crisis. *See id.* at 264–66; William D. Cohan, *Wall Street Rises Again*, ATLANTIC MONTHLY, Jan./Feb. 2015, (describing QE as “a huge windfall for Wall Street”); Andrew Huszar, *Confessions of a Quantitative Easer*, WALL ST. J., Nov. 12, 2013, at A17 (op-ed by a former manager of the Fed’s QE program for purchasing mortgage-backed securities, describing the program as “an absolute coup for Wall Street”).

harm that the financial crisis inflicted on economies around the world. In the United States alone, the crisis destroyed almost nine million jobs, and more than 17 million Americans were still “underemployed” (either jobless or working in involuntary, part-time jobs) in mid-2015.⁷² The crisis and the weak economic recovery that followed resulted in a net loss of almost two million higher-paying jobs between 2007 and 2015.⁷³

The financial crisis also caused more than nine million U.S. homeowners to lose their homes through foreclosures, short sales, or deeds in lieu of foreclosure.⁷⁴ In mid-2015, eight million households were still “underwater” because they owed more on their mortgages than their homes were worth. Half of those households owed at least 20% more than their homes were worth.⁷⁵

Estimates of lost potential GDP due to the financial crisis range between \$6 trillion and \$14 trillion.⁷⁶ The financial crisis caused a sharp decline in tax revenues and a large increase in spending as the federal government tried to counteract the devastating impact of the Great Recession. As a result, the ratio of federal government debt to GDP has nearly doubled, rising from 60% in 2008 to more than 100% in 2015.⁷⁷

The financial crisis has shown that TBTF megabanks create systemic risks that pose a serious threat to the stability of our financial markets and the health of our general economy. There is strong reason to believe that the Dodd-Frank Act and current reforms in other developed countries are unlikely to end TBTF treatment for large financial conglomerates. Financial giants have used their political clout to block proposals for more comprehensive reforms that would challenge their “universal banking” business model, which relies on the financial benefits of an implicit promise of government bailout to subsidize their deposits and provide cheap funding for high-risk capital

⁷² BETTER MARKETS, *THE COST OF THE CRISIS: \$20 TRILLION AND COUNTING* 12–15 (2015), *available at* <https://www.bettermarkets.com/sites/default/files/Better%20Markets%20-%20Cost%20of%20the%20Crisis.pdf>.

⁷³ *Id.* at 14 (including fig.1).

⁷⁴ John Gittelsohn, *Real Estate: Few Who Lost Homes in U.S. Will Buy Again Soon Amid Tight Credit*, 104 BLOOMBERG BNA'S BANKING REPORT 825 (2015).

⁷⁵ BETTER MARKETS, *supra* note 72, at 22–23.

⁷⁶ *Id.* at 2 (estimating that \$11.5 trillion of potential GDP would be lost between 2008 and 2018); Tyler Atkinson, David Luttrell & Harvey Rosenblum, *How Bad Was It? The Costs and Consequences of the 2007-09 Financial Crisis* 4–9 (Fed. Res. Bank of Dallas Staff Paper No. 20, July 2013) (estimating that \$6 trillion to \$14 trillion of potential GDP would be lost between 2007 and 2020), *available at* <http://www.dallasfed.org/assets/documents/research/staff/staff1301.pdf>.

⁷⁷ BETTER MARKETS, *supra* note 72, at 53–57; *see also* *The Daily History of the Debt Results*, TREASURYDIRECT, <http://www.treasurydirect.gov/NP/debt/search?startMonth=07&startDay=01&startYear=2007&endMonth=07&endDay=01&endYear=2015> (last visited April 18, 2016) (showing that total federal government debt more than doubled between July 2007 and July 2015, rising from \$8.9 trillion to \$18.1 trillion).

market activities.⁷⁸ The prevailing culture on Wall Street encourages excessive risk-taking and tolerates repeated violations of law. Megabanks continue to promote that culture with their bonus-heavy compensation policies.⁷⁹

As described above, emergency acquisitions and bailouts during the financial crisis have helped to entrench an “oligopoly” on Wall Street, and that oligopoly is protected by “[b]arriers to entry [that] are immense.”⁸⁰ The status quo has also produced a “doom loop” in which excessive risk-taking by financial giants is likely to trigger future crises, and governments will almost certainly engineer future bailouts to prevent the collapse of megabanks.⁸¹

We support regulatory efforts to create incentives for individual financial giants to divest activities and assets, including progressively higher capital requirements and taxes that would require megabanks to internalize the risks they pose to the financial system and the general economy. Higher capital requirements and systemic risk taxes should be designed to prevent large financial institutions from exploiting safety net subsidies that confer competitive advantages (in the form of lower-cost funding) and thereby create barriers to entry and growth by small and more specialized financial firms.⁸² Highest priority should be given to this “nudging” approach to decentralization because it leaves to the firms themselves the decision of how best to reduce their size and complexity. Voluntary, market-driven restructuring is likely to produce more efficient outcomes for the economy than government mandates. However, our preference for this approach assumes that the effect of nudging will be sufficient to achieve the necessary reductions in both size and complexity.

If higher capital requirements and systemic risk taxes are insufficient, policymakers and analysts have

⁷⁸ Wilmarth, *Two-Tiered System of Regulation*, *supra* note 2, at 303–37; *Correcting ‘Dodd-Frank’ to Actually End ‘Too Big to Fail’: Hearing on Examining How the Dodd-Frank Act Could Result in More Taxpayer-Funded Bailouts: Hearing Before the H. Comm. on Fin. Servs.*, 113th Cong. (June 26, 2013) (statement of Richard W. Fisher, President & CEO, Federal Reserve Bank of Dallas) [hereinafter Fisher 2013 Speech], available at <http://www.dallasfed.org/assets/documents/news/speeches/fisher/2013/fs130626.pdf>; Thomas M. Hoenig, Vice Chairman, FDIC, Remarks at the Boston Economic Club: Can We End Financial Bailouts? (May 7, 2014), available at <https://www.fdic.gov/news/news/speeches/archives/2014/spmay0714a.pdf>; Cohan, *supra* note 71.

⁷⁹ Wilmarth, *Two-Tiered System of Regulation*, *supra* note 2, at 337–39, 363–64; Cohan, *supra* note 71; Andrew Ross Sorkin, *Many on Wall Street Say It Remains Untamed*, N.Y. TIMES, May 19, 2015, at B; Joris Luyendijk, *How the Banks Ignored the Lessons of the Crash*, GUARDIAN (Sept. 30, 2015), <http://www.theguardian.com/business/2015/sep/30/how-the-banks-ignored-lessons-of-crash> (offering a similar perspective on the continuing culture of excessive risk-taking and poor legal compliance at the largest U.K. banks).

⁸⁰ Cohan, *supra* note 71.

⁸¹ Andrew G. Haldane, *Banking on the State*, BIS REVIEW, at 7 (2009), available at <http://www.bis.org/review/r091111e.pdf>.

⁸² See, e.g., REGULATING WALL STREET: THE DODD-FRANK ACT AND THE NEW ARCHITECTURE OF GLOBAL FINANCE 121–80 (Viral V. Acharya et al. eds., 2011).

proposed a variety of structural reforms to reduce the TBTF problem that could merit support. Simon Johnson and James Kwak advocate maximum size limits that would prohibit any megabank from owning total assets greater than 4% of GDP (about \$700 billion).⁸³ In July 2015, Senators Maria Cantwell, Angus King, John McCain, and Elizabeth Warren introduced the “21st Century Glass-Steagall Act.” Their bill, like the original Glass-Steagall Act of 1933 (which was repealed in 1999), would require companies owning deposit-taking banks to divest any affiliates engaged in securities underwriting and dealing, derivatives dealing, or other capital markets activities.⁸⁴

Neel Kashkari, president of the Federal Reserve Bank of Minneapolis, said in a speech in February, 2016, that “I believe the biggest banks are still too big to fail and continue to pose a significant, ongoing risk to our economy.” He suggested consideration of a “transformational restructuring of our financial system.”⁸⁵

Others have proposed “narrow banking” legislation, which would not prohibit financial conglomerates but (i) would mandate strong firewalls between deposit-taking banks and nonbank subsidiaries within those conglomerates, and (ii) would bar conglomerate-owned banks from providing credit or other financial support to their nonbank affiliates.⁸⁶ The United Kingdom is currently implementing similar “ring-fencing” legislation, which was originally proposed by a commission chaired by Sir John Vickers.⁸⁷ Congress should give serious consideration to each of the foregoing structural reforms if higher capital requirements and systemic risk taxes are not sufficient to reduce the systemic risks and anticompetitive harms posed by giant financial conglomerates.

It is important that small, specialized financial firms be able to enter the market, and that existing small firms be able to grow and prosper. The same competitive advantages for large financial institutions that discourage entry by small, more specialized firms also create barriers to growth that will prevent established smaller competitors not only from growing but perhaps even surviving.

⁸³ JOHNSON & KWAK, *supra* note 30, at 214–17.

⁸⁴ Press Release, Senators Warren, McCain, Cantwell and King Introduce 21st Century Glass-Steagall Act (July 2, 2015), available at http://www.warren.senate.gov/?p=press_release&id=872.

⁸⁵ Neel Kashkari, President, Fed. Reserve Bank of Minneapolis, Remarks at the Brookings Institution: Lessons from the Crisis: Ending Too Big to Fail (Feb. 16, 2016), available at <https://www.minneapolisfed.org/news-and-events/presidents-speeches/lessons-from-the-crisis-ending-too-big-to-fail>.

⁸⁶ Fisher 2013 Speech, *supra* note 78; Wilmarth, *Two-Tiered System of Regulation*, *supra* note 2, at 342–70; see also ROBERT E. LITAN, WHAT SHOULD BANKS DO? 164–89 (1987).

⁸⁷ For discussions of the United Kingdom’s “ring-fencing” legislation and efforts by large U.K. banks to weaken that legislation, see Lauren Fedor, *Banks Push Back Against Government Proposals to Separate High Street and Investment Banking in Ringfencing Reforms*, CITY A.M. (Sept. 28, 2015, 5:25 GMT), <http://www.cityam.com/225273/banks-push-back-against-ringfencing>; Sam Fleming, Sharlene Goff & Martin Arnold, *Banks Horse-trade on Ringfence Fine Print*, FIN. TIMES (Aug. 14, 2014), <http://www.ft.com/intl/cms/s/0/dfd4da64-23b2-11e4-8e29-00144feabdc0.html#axzz3qM0Y98xx>.

Government policies that facilitate entry and growth of small, specialized financial firms are important to the nation's economy. The availability of many and varied sources of funding is important to a market system: different financial institutions view different industries, different borrowers, and different economic times differently. The variety of financing options associated with smaller competitive banks, along with non-bank financing options, is necessary to support an array of new and innovative companies that are important to the economic health of the country. Government antitrust and regulatory policies should facilitate availability of an array of financing alternatives for such innovative companies.⁸⁸

C. Precautionary Principle

There is general agreement that the financial sector must be appropriately regulated to prevent systemic panics and other major disruptions, in order to protect the general economy from severe financial downturns. Accordingly, in situations where proposed mergers, other structural changes, or new financial products would create high levels of concentration or high levels of systemic risk, financial regulatory agencies should seek to apply a precautionary principle that would reverse ordinary burdens of persuasion and require proponents (rather than regulators) to carry the burden of persuasion.

In view of the systemic risks created by TBTF financial conglomerates, scholars have also proposed that financial regulatory agencies should apply a “precautionary principle” when they consider proposals by megabanks to create new types of complex financial products.⁸⁹ Under that principle, “where activities can pose great harm, precautionary regulation should be employed that effectively shifts the burden of proof that the activity should be permitted to the proponent of that activity, rather than the regulator having to make the case for why the regulation is necessary.”⁹⁰ This “precautionary principle,” with its shift in the burden of persuasion to the regulated institution, should also be applied when regulators consider proposals by megabanks for mergers or other structural changes that would create higher levels of concentration in national or global financial markets or produce higher levels of systemic risk due to increased size or closer connections between large financial institutions.

⁸⁸ The U.S. Small Business Administration advises budding entrepreneurs that, along with other financing alternatives, “Loans can be obtained from many different sources, including banks, savings and loans, credit unions, commercial finance companies, and SBA-guaranteed loans.” SBA FINANCE YOUR BUSINESS, <https://www.sba.gov/starting-business/business-financials/borrowing-money-your-business> (last visited April 18, 2016). It is important to the health of the economy that this advice be realistic. For further discussion of competition policy and entrepreneurship, see Chapter 6 of this Transition Report.

⁸⁹ Hilary J. Allen, *The Road to Precautionary Review of Financial Products* (Suffolk Univ. Legal Studies Research Paper No. 15-32, 2015), available at <http://ssrn.com/abstract=2638188>; see also Saule T. Omarova, *License to Deal: Mandatory Approval of Complex Financial Products*, 90 WASH. U. L. REV. 63 (2012).

⁹⁰ Allen, *supra* note 89, at 6–7.

V. Payment Systems: Persistent Network Power in a Technologically Evolving Market

A. Market Dominance in the Payment Card Industry

The enforcement agencies should continue to monitor the activities of the dominant payment card networks as the payments industry migrates into digital commerce and mobile payments.

Decades of enforcement activity and private litigation dating back to the 1990's (if not earlier) have not managed to dislodge the principal competitive issue in the payment card industry—the dominant networks' market power over merchants. For example, DOJ's landmark victory against Visa's and MasterCard's exclusionary rules barring member banks from issuing American Express or Discover cards⁹¹ resulted in the rescission of those rules but did not achieve any meaningful change in Visa's and MasterCard's dominant positions in the credit card and debit card markets.

In 2010, DOJ sued Visa and MasterCard (along with American Express) to invalidate their rules that prohibited “discrimination” or discounting by merchants in favor of less expensive forms of payment.⁹² Visa and MasterCard chose not to contest that litigation. Instead, they entered into a consent decree, which required them to rescind their anti-discrimination and anti-discounting rules.⁹³ However, the consent decree did not address Visa's and MasterCard's prohibitions on surcharging.

While Visa and MasterCard chose to settle the DOJ's lawsuit, American Express elected to litigate it and lost after a seven-week bench trial. The district court ordered American Express to rescind its non-discrimination rules that barred merchants from discriminating against American Express or from discounting cheaper forms of payment.⁹⁴ As with the consent decree, American Express's rules regarding surcharging—which require merchants to surcharge all cards (including debit cards) equally if they surcharge American Express transactions—were not addressed in the DOJ's complaint.

Private litigation has also failed to materially weaken Visa's and MasterCard's market power. The outcome in *In re Visa Check/MasterMoney Antitrust Litigation*,⁹⁵ which resulted in a \$3 billion payment

⁹¹ United States v. Visa U.S.A. Inc., 344 F.3d 229 (2d Cir. 2003).

⁹² Complaint for Equitable Relief, United States v. Am. Express Co., No. 10-cv-4496(NGG)(RER) (E.D.N.Y. filed Oct. 4, 2010; amended Dec. 21, 2010).

⁹³ See Final Judgment as to Defendants MasterCard International Incorporated and Visa Inc., United States v. Am. Express Co., No. 10-cv-4496(NGG)(RER) (E.D.N.Y. filed July 20, 2011).

⁹⁴ See United States v. Am. Express Co., 88 F. Supp. 3d 143 (E.D.N.Y. Feb. 19, 2015); United States v. Am. Express Co., No. 10-cv-4496 (NGG)(RER), 2015 WL 1966362 (E.D.N.Y. Apr. 30, 2015). The case was appealed. For its current status, see *U.S. and Plaintiff States v. American Express Co., et al*, DEP'T OF JUSTICE, <https://www.justice.gov/atr/case/us-and-plaintiff-states-v-american-express-co-et-al#materials> (last visited Apr. 20, 2016).

⁹⁵ Wal-Mart Stores, Inc. v. Visa U.S.A. Inc., 396 F.3d 96 (2d Cir. 2005).

to merchants and the rescission of Visa’s and MasterCard’s practices of tying debit card acceptance to credit card acceptance, has not generated a significant increase in competition by other providers against Visa and MasterCard in the debit card and credit card markets.⁹⁶ Moreover, the interchange settlement that produced an agreement by Visa and MasterCard to pay up to \$7.2 billion to merchants and adopt limited modifications to Visa’s and MasterCard’s no-surcharge rules, did not materially affect Visa and MasterCard during the three years it was in effect.

As the district court acknowledged in approving the Visa and MasterCard interchange settlement, the modifications to Visa’s and MasterCard’s no-surcharging rules were not available to merchants that accept American Express—which account for roughly two thirds of the merchants in the United States, who account for over 90% of total sales—and to merchants that operate in the states that prohibit surcharging.⁹⁷ The settlement has since been overturned by the Second Circuit.⁹⁸ While the AAI took no position on the ultimate merits of the settlement or the issues on appeal, there is no apparent evidence that the settlement discernibly weakened Visa’s and MasterCard’s market dominance while it was in effect, and whether it might have done so over time is at best uncertain.

This background is crucial to a proper understanding of the issues antitrust enforcers will confront as the payments industry migrates from plastic to digital payments. Because Visa’s and MasterCard’s dominance remains intact, the risk remains that Visa and MasterCard will use their market power over payment cards to dominate mobile payments as well. Notwithstanding their deep pockets and obvious desire to penetrate the payments industry, technology giants such as Apple, Google, and Samsung have chosen to build the business model surrounding their mobile wallets by accommodating the underlying infrastructure created by Visa and MasterCard.⁹⁹ Because those

⁹⁶ The fact that Congress, in 2010, felt the need to pass the “Durbin Amendment” reflected the continuing market power of Visa, and to a lesser degree MasterCard, over the debit market. *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376, 2068-74 (2010), codified at 15 U.S.C. § 1693o-2. This is apparent from Senator Durbin’s floor statement in support of the legislation. *See* 156 Cong. Rec. S5,802 (daily ed. July 14, 2010) (statement of Sen. Richard Durbin) (“For years, Visa and MasterCard, and their big bank backers, have unilaterally fixed prices on the fees small businesses pay every time they accept a debit card from a customer. The two giant card networks control 80 percent of the debit card market—that is Visa and MasterCard. And it is no surprise that debit interchange fees have risen, even as the price of processing the transaction has fallen. They can impose these prices and say to the local businessperson: Take it or leave it.”).

⁹⁷ *In re* Payment Card Interchange Fee and Merchant Discount Antitrust Litig., 986 F. Supp. 2d 207, 219, 233–34 (E.D.N.Y. 2013).

⁹⁸ *In re* Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, 2016 WL 3563719 (2d Cir. 2016) (vacating, reversing, and remanding on Rule 23(a)(4) and Due Process grounds).

⁹⁹ They have done so by configuring their wallets to facilitate payments via Near Field Communication technology—the approach long championed by Visa and MasterCard. To date they have indicated an intent to use payments technologies that largely pass through Visa and MasterCard interchange to merchants and, in doing so, have avoided pursuing alternative strategies that could disrupt the interchange-driven paradigm created by the Visa and MasterCard networks.

potentially disruptive actors have had little effect to date on the underlying architecture of retail payments, it is clear that steep barriers to entry still protect the dominant market positions of Visa and MasterCard in the retail payments market.

B. Policing Nascent and Adjacent Payments Markets

In addition to ensuring rigorous compliance with the consent decree against Visa and MasterCard, the agencies should scrutinize whether the networks are exploiting their Honor All Cards rules, their proprietary control over new security protocols such as “EMV,” or their centrality in the standardization of other security techniques to extend their market power into new lines of business.

The agencies also should closely monitor whether leading technology companies, such as Apple, are entering into arrangements with the dominant networks that effectively allocate markets and thereby perpetuate the competitive issues in this industry.

While the mobile payments market remains in its nascent stage, there are several potential antitrust risks that merit continuing scrutiny on the part of federal and state antitrust enforcers. First, Visa and MasterCard could use their Honor All Cards rules to require merchants to accept Visa and MasterCard mobile payment transactions as a condition of accepting transactions from their plastic cards. They could do this either by requiring merchants to install Near Field Communication (NFC) capability, which is a prerequisite for accepting mobile payments transactions favored by Visa and MasterCard, or by requiring merchants to turn on the NFC functionality that will be included in most EMV-capable readers.¹⁰⁰

Since merchants are currently upgrading their point-of-sale (POS) terminals to comply with network mandates to accept EMV chip transactions in order to improve security, that upgrade will provide Visa and MasterCard with additional leverage to force merchants to accept their mobile payments transactions.¹⁰¹ In this regard, Visa and MasterCard appear to interpret their Honor All Cards rules to require merchants to accept all NFC-capable mobile wallets if they accept *any* such wallets. That requirement, standing alone, will eliminate the incentive of NFC-capable mobile wallets—including those created by Apple, Google, and Samsung—to offer alternative technologies that could compete with Visa and MasterCard for merchant acceptance. The likely end result of this “honor all wallets”

¹⁰⁰ EMV is a technical standard for smart payment cards, and for the payment terminals and automated teller machines that can accept them. The EMV protocol for chip-initiated transactions was developed by Europay, MasterCard and Visa, from which it received its name.

¹⁰¹ Starting on October 1, 2015, under network rules merchants bear all risk of fraud if a consumer pays with a chip-based card. That liability shift is designed to move the U.S. market to chip-based payments over the next few years. Since most EMV terminals include NFC functionality, once merchants roll out EMV, Visa and MasterCard will be well positioned to use their Honor All Cards rules to drive acceptance.

policy will be higher fees to merchants.

Second, Visa, MasterCard, and American Express have agreed to a common standard for tokenization that Apple, Google, and Samsung have independently agreed to utilize with their own mobile wallets. Tokenization is a security protocol that assigns a dummy number, or token, to replace the account number at the point-of-sale. While there are obvious security benefits to tokenizing the transaction, Visa's and MasterCard's control over tokenization could give them an enhanced ability to maintain their market dominance—thereby generating additional revenue, maintaining control of transactional data, and raising rivals' costs.

In practical terms, when a consumer uses Apple Pay to make a Visa credit (or debit) transaction, only Visa will be able to see the account holder's identity and potentially monetize that information.¹⁰² If the transaction is a debit transaction, which merchants can theoretically route to competing networks under the Durbin Amendment¹⁰³ in order to reduce their costs and preserve the few choices left in the marketplace, Visa (or MasterCard) will still see the transaction information first when it “de-tokenizes” the transaction and sends it on to its competitors. That built-in advantage in access to transaction information will give Visa and MasterCard a potentially significant competitive advantage in debit transactions, including the ability to see all of the volume that flows to their competitors and to charge their much smaller rivals for the use of their tokenization service. Visa and MasterCard can commercially exploit that data and use those revenues to further cement their dominant positions in the marketplace.

Third, even though mobile payments conceivably could wean the payments industry off of its dependence on interchange, the early returns suggest that mobile payments will further entrench the current paradigm. The collective setting of interchange rules by Visa and MasterCard has historically been justified as being necessary to provide issuers with incentives to issue payment cards.¹⁰⁴ It has also been justified as a necessary restraint on the hold-up problem allegedly created by the Honor All Cards rules.¹⁰⁵ Both justifications are, at best, questionable given the maturity of the payments system, and those justifications are even more tenuous as applied to mobile payments. The continuing justification for the Honor All Cards rules is questionable given that individual issuers are now entering into deals with Apple, Google, and Samsung to provision their accounts on their mobile wallets. Moreover, because of the unique geolocational capabilities of smartphone technology and the ability to facilitate two-way transactions, mobile payments almost certainly will

¹⁰² Visa may permit select large issuers to handle the de-tokenization, but, even then, Visa will see the volume.

¹⁰³ See 15 U.S.C. § 1693o-2(b)(1)(B); 12 C.F.R. § 235.7(b).

¹⁰⁴ See *Nat'l Bancard Corp. v. Visa U.S.A., Inc.*, 779 F.2d 592, 605 (11th Cir. 1986).

¹⁰⁵ See, e.g., *In re Payment Card Interchange Fee*, 986 F. Supp. 2d at 214–15.

be fueled by so-called value-added services, such as offers for discounts or loyalty programs, and the revenues from offering those services could easily supplant interchange. In an environment that will be increasingly dominated by mobile payments, it will be much harder to argue that interchange is necessary to stimulate issuance, and in a competitive environment one would expect the dominant position of the interchange to weaken over time.

But that is not happening. Instead, Apple has demanded and received a common 15 basis points per credit transaction and \$0.005 per debit transaction from the issuers who have entered into deals to provision cards on Apple Pay. These uniform deals were facilitated by Visa (and MasterCard), and the fact that they enable Apple to participate in the interchange fees merchants pay suggests that interchange is not going away any time soon. This recent pricing behavior potentially reflects arrangements between Apple and the networks that are reminiscent of Apple's conduct in e-books that might merit scrutiny by the agencies.

While these trends do not augur well for competition for merchants, it is noteworthy that the Merchant Customer Exchange (MCX), a national, merchant-owned mobile payments consortium, launched in beta form in early 2016. MCX developed a new consumer-facing brand, CurrentC, with the intent to populate its wallet with merchant-friendly payment forms, such as private-label cards and ACH debit access. Last year, MCX announced a deal with Chase under which Chase would launch its mobile payments initiative, Chase Pay, through MCX and transfer its 94 million credit and debit cards into the CurrentC wallet.¹⁰⁶ The fact that the largest Visa member bank and debit and credit issuer in the country would enter into such an agreement highlights the potential for mobile payments to transform the competitive landscape in the payments industry. However, MCX's success has been threatened by all of the developments noted above, including the networks exploiting their Honor All Cards rules to force acceptance of their mobile payments transactions and/or side deals with technology giants like Apple. Recently, MCX laid off 30 employees and ended its beta test while postponing nationwide rollout of CurrentC.¹⁰⁷ The antitrust agencies should remain vigilant and ensure that new, competition-enhancing mobile payments approaches are not squelched by exclusionary tactics by Visa, MasterCard, and American Express.

C. Due Regard for the Potential Impact of Blockchain

Development of bitcoin and blockchain technology merits close scrutiny by antitrust

¹⁰⁶ Press Release, JPMorgan Chase & Co., Chase Announces CHASE PAY—MCX is premier merchant partner (Oct. 26, 2015), available at <https://investor.shareholder.com/jpmorganchase/releasedetail.cfm?ReleaseID=938397>.

¹⁰⁷ Ingrid Lunden, *MCX postpones rollout of Apple Pay rival CurrentC, lays off 30, will focus on bank deals*, TECHCRUNCH (May 16, 2016), available at <http://techcrunch.com/2016/05/16/mcx-postpones-national-rollout-of-apple-pay-rival-currentc-lays-off-30-to-focus-on-bank-deals/>; Jacob Kastrenakes, *CurrentC seems to be pretty much dead*, THE VERGE (May 16, 2016), available at <http://www.theverge.com/2016/5/16/11686922/mcx-delays-currentc-lays-off-30-employees>.

enforcement agencies. The potential applications of blockchain technology are so far-reaching, and could have such a revolutionary impact on the economy, the environment, and national security, that antitrust authorities should be considered as one of the important stakeholders who should be engaged in far-reaching study and coordinated decision-making on how this technology should be protected from exclusionary or other anticompetitive behavior by large financial firms and other significant private actors.

Developments in Bitcoin and blockchain technology¹⁰⁸ warrant close attention from antitrust enforcement agencies. While Bitcoin's future as a digital currency remains unclear, the blockchain technology that underpins Bitcoin has attracted significant attention and investment from networks and banks, among others.¹⁰⁹ Blockchain technology has the potential to transform a wide range of industries in which intermediaries are required to ensure the reliability (trustworthiness) of information transfers. Securities settlement providers, land title registers, managers of health records, and many other firms engaged in verifying or transferring assets and information could be revolutionized with enormous competitive implications. Accordingly, the formation of consortia, joint ventures, and standard setting organizations (e.g., among large financial institutions) to control the development of blockchain technology and access to that technology could raise very serious antitrust concerns.

In terms of payment systems, blockchain has great potential appeal because its distributed ledger appears to provide an effective, relatively inexpensive, and decentralized solution for the double (counterfeit) payment problem, the management of which provides the payments networks a key justification for their continuing centrality in the payments industry. Put differently, blockchain could conceivably render the networks superfluous. Not surprisingly, Visa recently invested in

¹⁰⁸ "At its core, blockchain is a network of computers, all of which must approve a transaction that has taken place before it is recorded, in a 'chain' of computer code. As with bitcoin—the first application of the technology, applied to money—cryptography is used to keep transactions secure and costs are shared among those in the network. The details of the transfer are recorded on a public ledger that anyone on the network can see . . . [A]lmost every big financial services institution has now overcome [the initial suspicion of bitcoin]. And the technology has swung from being a weapon wielded against the banks to being heralded as their ultimate back-office makeover, a bitter blow to the libertarians who conceived the idea of the blockchain to circumvent the global banking system." Jane Wild, Martin Arnold & Philip Stafford, *Technology: Banks seek the key to blockchain*, FIN. TIMES (Nov. 1, 2015), <http://www.ft.com/intl/cms/s/2/eb1f8256-7b4b-11e5-a1fe-567b37f80b64.html#axzz3uR8FVtYS>. "Applications range from storing client identities to handling cross-border payments, clearing and settling bond or equity trades to smart contracts that are self-executing, such as a credit derivative that pays out automatically if a company goes bust or a bond that regularly pays interest to the holder." *Id.*

¹⁰⁹ See, e.g., Peter Lucas, *Worlds Beyond Bitcoin*, DIGITAL TRANSACTIONS (Oct. 1, 2015), <http://www.digitaltransactions.net/news/story/Worlds-Beyond-Bitcoin>; Bradley Hope, *Visa, Nasdaq, Others Invest \$30 Million in Bitcoin-Related Startup*, WALL ST. J. (Sept. 9, 2015, 4:02PM), <http://www.wsj.com/articles/visa-nasdaq-others-invest-30-million-in-bitcoin-related-startup-1441827120>.

blockchain technology, perhaps to gather intelligence and to ward off that threat.¹¹⁰ According to the *Financial Times*, “Almost two dozen of the world’s largest banks, including JPMorgan, UBS, and Barclays, have thrown their weight behind R3CEV, a start-up venture, to set up a private blockchain open only to invited participants who between them maintain and run the network. It forms part of an effort to build an industry-wide platform to standardize use of the technology.”¹¹¹ The R3CEV consortium raises serious potential concerns that the largest financial institutions may be seeking to capture and control blockchain technology in a manner similar to Visa’s and MasterCard’s control over the interchange for credit and debit transactions. Antitrust enforcement agencies should also examine whether major banks, citing pretextual security justifications, may be engaging in group boycott activity to refuse to deal with Bitcoin to maintain their stranglehold on the payments system.

Blockchain is a technology whose ultimate development and applications are currently difficult to understand or predict, but whose implications involve not only payments and other transfers of financial assets but also energy, privacy, employment, cybersecurity, and national security. The development of blockchain technology, and potential efforts to obstruct or control access to that technology, merit far-reaching investigation, engaging the entire range of likely stakeholders, including antitrust agencies and financial regulators, before that technology can be thwarted or captured by powerful interests. The National Commission on Electronic Fund Transfers of the 1970s represents one promising model for how the federal government should respond to the potential implications of blockchain.¹¹²

¹¹⁰ See *Chain Raises \$30 Million from Financial Industry Leaders—Partners with Visa, Nasdaq, Citi, Capital One, Fiserv and Orange*, PR NEWswire (Sept. 10, 2015), <http://www.prnewswire.com/news-releases/chain-raises-30-million-from-financial-industry-leaders-300140260.html>.

¹¹¹ Wild, Arnold & Stafford, *supra* note 108.

¹¹² See NAT’L COMM’N OF ELEC. FUND TRANSFERS, *EFT IN THE UNITED STATES: POLICY RECOMMENDATIONS AND THE PUBLIC INTEREST* (1977).