CORPORATE GOVERNANCE REFORM IN POST-CRISIS FINANCIAL FIRMS: TWO FUNDAMENTAL TENSIONS

Christopher M. Bruner*

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INTRODUCTION

The manner in which financial firms are governed directly impacts the stability and sustainability of both the financial sector and the "real" economy, as the financial crisis and associated regulatory reform efforts have tragically demonstrated. However, two fundamental tensions continue to complicate efforts to reform corporate governance in post-crisis financial firms. The first relates to reliance on increased equity capital as a buffer against shocks and a means of limiting leverage. The tension here arises from the fact that no corporate

^{*} Stembler Family Distinguished Professor in Business Law, University of Georgia School of Law. For helpful comments and suggestions I am grateful to Lucian Bebchuk, Erik Gerding, Jeremy Kress, Usha Rodrigues, and workshop participants at the Law, Finance & Sustainability Conference (2017) hosted by the University of Sheffield's Institute of Corporate and Commercial Law and co-sponsored by the University of Oslo's Sustainable Market Actors for Responsible Trade (SMART) initiative, the International Corporate Governance and Law Forum (2018) hosted by the University of Leeds' Centre for Business Law and Practice and co-sponsored by the Deakin Law School and the Alexander von Humboldt Foundation, and the National Business Law Scholars Conference (2018) hosted by the University of Georgia School of Law.

^{1.} See generally Christopher M. Bruner, Corporate Governance Reform in a Time of Crisis, 36 J. CORP. L. 309 (2011).

constituency desires risk more than equity does, and that risk preference only tends to be stronger in banks and in situations involving financial distress—which places a premium on evaluating who these capital providers are, and what their risk incentives look like.² The second tension relates to reliance on increased board independence as a buffer between the risk-management function and senior corporate management. The tension here arises from the fact that a growing empirical literature increasingly associates board independence with increased risk-taking and worse performance in the wake of the crisis, in addition to the more general concern that independent directors may lack industry-relevant expertise. This once again places a premium on evaluating who these outside voices in the boardroom are, and what capacities they bring to the table in the financial context.³ This Essay explores these tensions in the context of financial firm governance and assesses the intellectual groundwork that remains to be done as a preliminary to identifying a coherent way forward.⁴

The appropriate role of shareholders in corporate governance and the ideal composition of the board of directors represent two of the most fundamental—and hotly contested—issues in corporate governance generally.⁵ However, several unique features of banking render these issues even more fraught and complex in the financial sector. Banks perform quasi-public functions relating to the creation and distribution of money⁶ and occupy positions of heightened systemic significance to the broader economy⁷—for which reason such institutions are widely said to involve a broader range of core stakeholders than typical corporations do.⁸ At the

- 2. See infra Part I.
- 3. See infra Part II.
- 4. See infra Conclusions.
- 5. For an investigation of corporate governance in common-law countries—emphasizing the cultural, social, and political contingency of these matters—see generally Christopher M. Bruner, Corporate Governance in the Common-Law World: The Political Foundations of Shareholder Power (2013).
- See generally Morgan Ricks, Money as Infrastructure (Vanderbilt Law Paper 17-63. Research https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3070270. See also Robert Hockett, Are Bank Fiduciaries Special?, 68 ALA. L. REV. 1071, 1110-13 (2017); Saule T. Omarova, Bank Governance and Systemic Stability: The "Golden Share" Approach, 68 ALA. L. REV. 1029, 1035-36, Yesha 1041-42 (2017);Yadav, Too-Big-to-Fail Shareholders, MINN. L. REV. (forthcoming) (manuscript 12-14). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2922681.
- 7. See Jeremy C. Kress, Board to Death: How Busy Directors Could Cause the Next Financial Crisis, 59 B.C. L. Rev. 878, 886–88 (2018); René M. Stulz, Risk Management, Governance, Culture, and Risk Taking in Banks, FRBNY ECON. POL'Y REV., Aug. 2016, at 43, 47; Catarina Fernandes et al., Bank Governance and Performance: A Survey of the Literature, J. Banking Reg. (forthcoming) (manuscript at 3, 9), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2949798; Guido Ferrarini, Understanding the Role of Corporate Governance in Financial Institutions: A Research Agenda 4 (European Corporate Governance Institute Law Working Paper No. 347/2017, Mar. 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2925721.
- 8. See generally Christopher M. Bruner, Conceptions of Corporate Purpose in Post-Crisis Financial Firms, 36 SEATTLE U. L. REV. 527 (2013); see also Fernandes et al., supra note 7, (manuscript at 3, 9–10); Omarova, supra note 6, at 1036–37.

same time, banking and finance involve forms and degrees of risk that differ fundamentally from other sectors. Banks' central function of maturity transformation—using short-term deposits to finance long-term lending—creates a mismatch that raises the specter of destabilizing runs, 9 yet at the same time their reliance on leverage naturally leads their shareholders to prefer greater risk-taking. 10 Deposit insurance, coupled with the perception that certain financial institutions may be "too big to fail," may substantially allay the former concern, yet only at the cost of exacerbating the latter. 11 In addition to such dynamics, financial firm governance is rendered even more challenging by the complexity and opacity of financial assets, which are inherently difficult to assess and monitor 12—particularly as financial firms and their service offerings grow more sprawling. 13

Such idiosyncrasies "impose unique demands on a financial institution's board of directors to establish effective risk monitoring systems within the firm" ¹⁴ and have prompted concerted regulatory efforts to contain and manage risk-taking in banking and finance, ¹⁵ yet the challenges remain daunting—not least due to the staggering size and systemic significance of the largest financial firms today. Despite efforts to counteract the "too big to fail" phenomenon, ¹⁶ the predominant bank holding companies remain so large and so complex that the legislative claim to have statutorily foreclosed future bailouts lacks credibility. ¹⁷ As of December

^{9.} See Ferrarini, supra note 7, at 5; Jonathan Macey & Maureen O'Hara, Bank Corporate Governance: A Proposal for the Post-Crisis World, FRBNY ECON. POL'Y REV., Aug. 2016, at 85, 87; Omarova, supra note 6, at 1036; Yadav, supra note 6, (manuscript at 17–18).

^{10.} See Fernandes et al., supra note 7, (manuscript at 13); Ferrarini, supra note 7, at 4–5, 13–14; Stulz, supra note 7, at 44.

^{11.} See Fernandes et al., supra note 7, (manuscript at 6, 15); Ferrarini, supra note 7, at 5–6; Macey & O'Hara, supra note 9, at 87–90.

^{12.} See Fernandes et al., supra note 7, (manuscript at 12); Ferrarini, supra note 7, at 5; Kress, supra note 7, at 886–87; Macey & O'Hara, supra note 9, at 88–90; Yadav, supra note 6, (manuscript at 42–43); Colleen Baker et al., The Impacts of Financial Regulations: Solvency and Liquidity in the Post-Crisis Period 6–7 (Federal Reserve Bank of Philadelphia Working Paper No. 17-10, Apr. 18, 2017), https://papers.ssm.com/sol3/papers.cfm?abstract_id=2958121.

^{13.} See Yadav, supra note 6, (manuscript at 14–15); see also Macey & O'Hara, supra note 9, at 92–98 (describing governance dynamics in bank holding companies); Ferrarini, supra note 7, at 5–6 (describing risk dynamics in insurance companies); Baker et al., supra note 12, at 7 (describing risk dynamics in nonbank financial firms).

^{14.} Kress, *supra* note 7, at 888–89.

^{15.} See Fernandes et al., supra note 7, (manuscript at 13–14); Stulz, supra note 7, at 47.

^{16.} See, e.g., Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 214, 124 Stat. 1376, 1518 (2010).

^{17.} See generally Stephen J. Lubben & Arthur E. Wilmarth, Jr., Too Big and Unable to Fail, 69 Fla. L. Rev. 1205 (2017); see also Rana Forochar, Makers and Takers: The Rise of Finance and the Fall of American Business 35–36 (2016); Sanjai Bhagat, Financial Crisis, Corporate Governance, and Bank Capital 2 (June 15, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2987340; Jeremy Kress et al., Regulating Entities and Activities: Complementary Approaches to Nonbank System Risk, S. Cal. L. Rev. (forthcoming) (manuscript at 12–13), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3238059.

2017, the largest U.S. bank holding company, JPMorgan Chase, held total assets exceeding \$2.5 trillion, while the top five together held over \$9.5 trillion. To bring these figures into perspective, U.S. gross domestic product in 2017 amounted to around \$19.4 trillion, and total U.S. national wealth in 2010 amounted to around \$55.3 trillion. To bring these figures into perspective, U.S. gross domestic product in 2017 amounted to around \$55.3 trillion.

Given their persistent magnitude, their systemic significance, and the potential threats posed to financial and economic stability, ²¹ one might have expected post-crisis regulatory reform efforts to have focused intently on how these entities are governed. After all, the crisis and its aftermath powerfully brought home that "the ultimate bearer of full residual risk of the bank's failure is the federal government, rather than private shareholders shielded by limited liability,"²² and that "bank directors should be held to higher standards than the amateur standard that governs directors generally."²³ Yet for all the energy and resources devoted to post-crisis reforms—and despite a growing post-crisis empirical literature associating shareholder-centric governance structures (including reliance on independent directors) with excessive risk-taking and bad outcomes in the crisis²⁴—

18. The top five U.S. bank holding companies as of December 2017 were JPMorgan Chase, Bank of America, Wells Fargo, Citigroup, and Goldman Sachs. *See Holding Companies with Assets Greater Than \$10 Billion*, NAT'L INFO. CTR., https://www.ffiec.gov/nicpubweb/nicweb/HCSGreaterThan10B.aspx (last visited Sept. 14, 2018) (providing data for the quarter ending Dec. 31, 2017).

For discussion of this literature, see Deniz Anginer, Corporate Governance and Bank Insolvency Risk: International Evidence 4-7, 22 (World Bank Policy Research 7017. Working Paper No. Sept. 2014). http://documents.worldbank.org/curated/en/990311468149673385/pdf/WPS7017.pdf; Lucian A. Bebchuk & Holger Spamann, Regulating Bankers' Pay, 98 GEO. L.J. 247, 267-69 (2010); Bruner, supra note 8, at 552-53; Fernandes et al., supra note 7, (manuscript at 10-11): Ferrarini, supra note 7, at 7-8; Daniel Ferreira et al., Boards of Banks 11 (AXA Working Paper Series No. 6, Discussion Paper No. 664, Jan. http://www.lse.ac.uk/fmg/assets/documents/papers/discussion-papers/DP664.pdf; supra note 7, at 48; see also Hsiao-Jung Chen & Kuan-Ting Lin, How Do Banks Make the Trade-Offs Among Risks? The Role of Corporate Governance (Mar. 2, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract id=2923719 (finding that "[d]uring the regular yield curve spread (YCS) period, management-controlled banks take less credit risk and even less liquidity risk whereas shareholder-controlled banks encounter more liquidity risk as they pursue more interest rate risk," while "[d]uring the inverted YCS period,

^{19.} *Gross Domestic Product 2017*, WORLD BANK, https://databank.worldbank.org/data/download/GDP.pdf (last visited Sept. 21, 2018).

^{20.} THOMAS PIKETTY & GABRIEL ZUCMAN, CAPITAL IS BACK: WEALTH-INCOME RATIOS IN RICH COUNTRIES 1700-2010 DATABOOK, tbls. A1, US.1 (2013) (providing data on ratios of national wealth to national income, and national income in the United States, respectively).

^{21.} See, e.g., Bhagat, supra note 17, at 8 (finding that "bank size is positively correlated with risk-taking," and that "bank size has a consistent and significant negative impact on the bank common stock to total assets ratio," suggesting that "banks engage in excessive risk-taking mainly through increased leverage").

^{22.} Omarova, *supra* note 6, at 1042; *see also* Macey & O'Hara, *supra* note 9, at 93 (observing the tension between the shareholder-wealth-maximization norm and the federal government's preference that banks "refrain from engaging in excessive risk taking").

^{23.} Macey & O'Hara, supra note 9, at 102.

these fundamental governance matters have largely gone unaddressed,²⁵ or moved in the wrong direction.²⁶

As an institutional matter, this generalized failure to bring what we know about financial firms' risk-taking to bear upon reform of their governance reflects the fact that the largest and most powerful financial firms today are legally organized as plain-vanilla corporations. Indeed, each of the five largest U.S. bank holding companies is a Delaware corporation publicly traded on the New York Stock Exchange (NYSE),²⁷ meaning that each is governed by the standard suite of corporate governance rules for a U.S. publicly traded company: Delaware corporate law, federal securities regulation, and NYSE listing rules.²⁸ The trend toward applying standard corporate governance structures to U.S. financial firms began in the 1970s, as regulatory constraints on the size, geographic reach, and service offerings of commercial banks began to erode.²⁹ Meanwhile, investment banks began to abandon the risk-inhibiting partnership form in favor of corporate limited liability.³⁰ These developments ultimately reinforced one another through the rise of modern financial holding companies following the 1999 Graham-Leach-Bliley Act, which removed the Depression-era barrier between commercial and investment

management-controlled banks still opt for less credit risk-taking, but shareholder-controlled banks are greatly exposed to risks and should thus be monitored by concerned authorities"); Glauco De Vita & Yun Luo, When Do Regulations Matter for Bank Risk-Taking? An Analysis of the Interaction Between External Regulation and Board Characteristics, CORP. GOV. (2017), pt. 4.1 (finding that, among 493 commercial banks from 54 countries between 2001 and 2015, "[b]oard independence significantly increases bank risk-taking when interacting with supervisory power").

- 25. See, e.g., Macey & O'Hara, supra note 9, at 86.
- 26. See Bruner, supra note 8, at 553–60. For discussion of post-crisis reforms applicable to nonbank financial firms, and problems associated with the shift from entity-based toward activities-based regulation, see generally Kress et al., supra note 17.
- See JPMorgan Chase & Co., Annual Report (Form 10-K) (Dec. 31, 2017), https://www.sec.gov/Archives/edgar/data/19617/000001961718000057/corp10k2017.htm (NYSE: JPM): Bank of America Corp., Annual Report (Form 10-K) (Dec. 31, 2017). https://www.sec.gov/Archives/edgar/data/70858/000007085818000009/bac-1231201710xk.htm (NYSE: BAC); Wells Fargo & Co., Report (Form 10-K) (Dec. 2017), https://www.sec.gov/Archives/edgar/data/72971/000007297118000272/wfc-12312017x10k.htm (NYSE: WFC); Citigroup Inc., Annual Report (Form 10-K) (Dec. 31, 2017), https://www.sec.gov/Archives/edgar/data/831001/000083100118000040/c-12312017x10k.htm (NYSE: C); Goldman Sachs Group, Inc., Annual Report (Form 10-K) (Dec. 31. 2017). https://www.sec.gov/Archives/edgar/data/886982/000119312518056383/d480167d10k.htm (NYSE: GS).
- 28. See Stephen J. Choi & A.C. Pritchard, Securities Regulation: Cases and Analysis 12, 403 (4th ed. 2015); Renée B. Adams & Hamid Mehran, Bank Board Structure and Performance: Evidence for Large Bank Holding Companies, 21 J. Fin. Intermediation 243, 246–48 (2012); Macey & O'Hara, supra note 9, at 93; About the Division of Corporations, Delaware.gov https://corp.delaware.gov/aboutagency.shtml (last visited Dec. 14, 2017).
 - 29. See Bruner, supra note 8, at 549.
 - 30. See id.

banking.³¹ In light of such regulatory and organizational shifts, it is hardly surprising that financial firms would, over the same period, tend to grow substantially larger and substantially boost risk-taking, in pursuit of returns for their own shareholders.³² Likewise, it is hardly surprising that reform efforts leaving these dynamics untouched would fail to produce meaningful improvements. "If anything," as Natasha Sarin and Lawrence Summers have found, "measures of volatility appear to be higher postcrisis than they were precrisis," as do measures of market expectation regarding future volatility.³³

The ramifications of the critical governance distinction between financial and nonfinancial firms have largely gone unrecognized in debates regarding post-crisis financial reform,³⁴ and this Essay explores two of the resulting tensions, toward the aim of charting a way forward. The first tension relates to the role of equity capital in financial firms.³⁵ We are increasingly relying on heightened equity capital as a buffer against shocks and a means of mitigating risks associated with excessive leverage on financial firm balance sheets. Yet, it is widely understood that equity holders—more so than any other constituency in a financial firm—prefer greater risk-taking, and that equity holders' risk preference only becomes stronger as a firm approaches insolvency. This inherent tension has received insufficient public attention,³⁶ and our knowledge of who, precisely, is providing the increased capital cushion in post-crisis financial firms remains remarkably thin—meaning that we know little of their preferences and incentives and cannot coherently assess whether the benefits of their involvement exceed the costs.

The second tension relates to the role of independent directors in financial firms.³⁷ We are increasingly relying on greater board-level independence as a buffer

^{31.} See *id.*; see also FOROOHAR, supra note 17, at 37 (describing the tendency, beginning in the 1980s, to view finance as "a business unto itself, rather than *just* a catalyst to other industries").

^{32.} See Bruner, supra note 8, at 549–53; Yadav, supra note 6, (manuscript at 14–16).

^{33.} See Natasha Sarin & Lawrence H. Summers, Understanding Bank Risk through Market Measures, BROOKINGS PAPERS ON ECON. ACTIVITY, Fall 2016, at 57, 58–59. Their examination of volatility includes "historical stock price volatility, expected volatility as implied by traded options, beta—the standard measure of comovement with the market—and a measure of contribution to systemic risk." Id. Their examination of market expectation focuses on "expected returns" as reflected in "credit default swap (CDS) spreads as a measure of the riskiness of unsecured bank debt, preferred stock yields, and price-earnings (PE) ratios as a proxy for expected stock market returns." Id. at 59; see also Yalman Onaran, Bank Profits Near Pre-Crisis Peak in U.S. Despite All the Rules, BLOOMBERG QUINT (July 21, 2017, 5:00AM), https://www.bloombergquint.com/business/2017/07/21/bank-profits-near-pre-crisis-peak-in-u-s-despite-all-the-rules#gs.HODIPio.

^{34.} See, e.g., Adams & Mehran, supra note 28, at 244, 246 (observing that post-crisis reforms "do not allow for the possibility that bank governance has unique features" and arguing that "proposals that are largely motivated by research on non-financial firms are unlikely to be effective"); Ferreira et al., supra note 24, at 2 (observing that post-crisis reforms proceed with little information about "the characteristics of boards of banks," and "how existing regulations shape the structure of bank boards").

^{35.} See infra Part I.

^{36.} For a noteworthy exception, see generally Yaday, *supra* note 6.

^{37.} See infra Part II.

between the risk-management function and senior corporate management as a means of fostering more concerted attention to overall risk positions in these increasingly far-flung firms. Yet, there is a growing post-crisis empirical literature that tends to associate greater reliance on independent directors (and other shareholder-centric governance structures) with excessive risk-taking in the run-up to the crisis and bad outcomes in its aftermath.³⁸ Conversely, there is mounting empirical evidence that, regardless of the performance benefits independent directors might offer in nonfinancial contexts, they may do affirmative harm in highly complex settings where outsiders generally lack the requisite technical knowledge to advise and monitor effectively.³⁹ This inherent tension has likewise received insufficient public attention, and little thought has been devoted to how well (or badly) such widely embraced reforms might translate to the unique context of financial firm governance.

Following a brief exploration of each of these fundamental tensions, this Essay concludes with a discussion of pitfalls and trade-offs that are involved with transplantation of popular nonfinancial governance reforms to the financial context. ⁴⁰ I conclude that this tendency reflects a cramped contemporary conception of corporate governance, prompting knee-jerk resort to the familiar, and that until we develop a clearer understanding of the risk incentives and capacities that financial firm shareholders and directors bring to the table, our best option may be to affirmatively condition their incentives through the governance structure itself.

I. CAPITAL REGULATION AND EQUITY HOLDERS' RISK PREFERENCES

A. Shareholders as Equity Buffer

The rationale motivating post-crisis reforms aimed at bolstering financial firm capital is straightforward enough. The idea is that "more capital should make banks better able to absorb losses with their own resources, without becoming insolvent or necessitating a bailout with public funds," and that additional capital will "curb incentives for excessive risk taking." Such reforms reflect the conclusion that pre-crisis capital requirements were insufficiently stringent, both quantitatively and qualitatively, as evidenced by the fact that many banks receiving public bailouts "appeared to be in compliance with minimum capital requirements shortly before and even during the crisis." Although the United States has historically imposed more stringent capital requirements than Europe has, heightened capital requirements have featured prominently in post-crisis reform

^{38.} See supra note 24.

^{39.} See infra Section II.B.

^{40.} See infra Conclusions.

^{41.} Asli Demirguc-Kunt et al., *Bank Capital: Lessons from the Financial Crisis* 2 (World Bank Policy Research Working Paper No. 5473, Nov. 2010), http://documents.worldbank.org/curated/en/568301468325454646/pdf/WPS5473.pdf.

^{42.} *See id.*

^{43.} See Basel 3, an International Capital-Adequacy Standard, Is Unloved but Much Needed, Economist (May 4, 2017), https://www.economist.com/news/special-report/21721497-international-bank-regulation-grinding-towards-completionor-possibly-halt-basel-3 [hereinafter Basel 3, Economist].

packages on both sides of the Atlantic, ⁴⁴ reflected most prominently in the Basel III framework and the Dodd–Frank Act of 2010. ⁴⁵

The Basel Committee on Banking Supervision⁴⁶ has generally embraced a stakeholder-oriented conception of banks as corporate entities,⁴⁷ which broadly dovetails with the stability-oriented focus on the sufficiency of capital in the Basel III framework adopted in the wake of the crisis. The problems being "excessive on- and off-balance sheet leverage" and "a gradual erosion of the level and quality of the capital base," the solution, the Basel Committee reasoned, must involve reforms to "raise both the quality and quantity of the regulatory capital base and enhance the risk coverage of the capital framework." Politically, the central benefit is that failing financial firms can, as the *Economist* described it, "be automatically recapitalised by bailing in investors, without troubling taxpayers."

Prior iterations of Basel's capital-adequacy regime had required common equity amounting to just 2% of risk-weighted assets, and Basel III substantially increased the requirement. Emphasizing its "greater focus on common equity, the highest quality component of a bank's capital," the Basel III framework requires common equity amounting to at least 4.5% of risk-weighted assets. To qualify as common equity, the instrument must (among other things) be "the most subordinated claim in liquidation of the bank," and represent "the issued capital that

^{44.} See Baker et al., supra note 12, at 8; Yaday, supra note 6, (manuscript at 4).

^{45.} As of this writing, the fate of the Dodd–Frank Act and various post-crisis reforms remains unclear. See, e.g., The Financial CHOICE Act: Creating Hope and Opportunity for Investors, Consumers and Entrepreneurs, Fin. Servs. Committee, https://financialservices.house.gov/uploadedfiles/financial choice act executive summary final.pdf (last visited Sept. 14, 2018) (executive summary). For additional background, see Bank Health, Imperiled, Editorial Board, N.Y. TIMES (July https://mobile.nytimes.com/2017/07/03/opinion/federal-reserve-banks-stress-test.html; Robert Hockett, Let's Get Real About 'Financial CHOICE,' FORBES (June 11, 2017, 8:21 https://www.forbes.com/sites/rhockett/2017/06/11/lets-get-real-about-financialchoice/: Alan Rappeport, Bill to Erase Some Dodd-Frank Banking Rules Passes in House. TIMES: DEALBOOK (June https://www.nytimes.com/2017/06/08/business/dealbook/house-financial-regulations-doddfrank.html; Jeremy Venook, The House Takes Another Step Toward Repealing Dodd-Frank, ATLANTIC (June 9, 2017), https://www.theatlantic.com/business/archive/2017/06/financialchoice-act-house/529851/, see also infra notes 56, 114.

^{46.} The Basel Committee is "the primary global standard setter for the prudential regulation of banks and provides a forum for cooperation on banking supervisory matters." *See Basel Committee Charter*, BANK INT'L SETTLEMENTS, https://www.bis.org/bcbs/charter.htm (last visited Sept. 14, 2018).

^{47.} See Ferrarini, supra note 7, at 19–20.

^{48.} BASEL COMM. ON BANKING SUPERVISION, BASEL III: A GLOBAL REGULATORY FRAMEWORK FOR MORE RESILIENT BANKS AND BANKING SYSTEMS 1–2 (rev. June 2011) [hereinafter Basel III].

^{49.} See Basel 3, Economist, supra note 43.

^{50.} See Thomas B. Sanders, The Unintended Consequences of Basel III: Reducing Performance Ratios and Limiting Bank Access to Equity Funding Markets, Q. J. Fin. & ACCT. Winter 2015, at 101; see also Baker et al., supra note 12, at 8; Demirguc-Kunt et al., supra note 41, at 3; Basel 3, Economist, supra note 43; Yadav, supra note 6, (manuscript at 21–25).

takes the first and proportionately greatest share of any losses as they occur."⁵¹ Additionally, in order to "ensure that banks build up capital buffers outside periods of stress which can be drawn down as losses are incurred," the framework requires a "capital conservation buffer" of another 2.5% of common equity, imposing distribution constraints that phase in to the degree that a bank falls below the 7% total. ⁵² Beyond these baselines, then, Basel III provides latitude to national authorities to apply a "countercyclical buffer" if "excess aggregate credit growth is judged to be associated with a build-up of system-wide risk," requiring up to an additional 2.5% common equity (hence up to 9.5% total) that effectively increases the capital conservation buffer for determining distribution constraints. ⁵³ The capital conservation buffer may be increased by another 2.5%, then (hence up to 12% total), for so-called globally systemically important banks (G-SIBs). ⁵⁴ Basel III also introduced a minimum leverage ratio of 3% to "constrain the build-up of leverage in the banking sector" and "reinforce the risk based requirements with a simple, non-risk based 'backstop' measure." ⁵⁵

The United States, for its part, has taken a more stern approach with its largest banks. The Dodd–Frank Act requires heightened prudential regulation of banks and other financial firms with total consolidated assets of \$250 billion or more, including "risk-based capital requirements and leverage limits," ⁵⁶ and the

- 51. Basel III, *supra* note 48, at 12–15.
- 52. See id. at 54–57. The idea is that in times when the capital buffers have "been drawn down, one way banks should look to rebuild them is through reducing discretionary distributions of earnings," such as dividends, share buybacks, and bonus payments. *Id.* at 54.
 - 53. See id. at 57–60.
- 54. See Basel Comm. On Banking Supervision, Global Systemically Important Banks: Updated Assessment Methodology and the Higher Loss Absorbency Requirement 12–15 (July 2013), https://www.bis.org/publ/bcbs255.pdf [hereinafter Basel G-SIBs]. Systemic significance reflects "the impact that a bank's failure can have on the global financial system and wider economy, rather than the risk that a failure could occur," and the indicators include size, interconnectedness, substitutability of their services, global activity, and complexity. *Id.* at 5–6.
 - 55. See BASEL III, supra note 48, at 61–63.
- See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 165(a)–(b), 124 Stat. 1376, 1423–24 (2010); Press Release, Bd. of Governors of the Fed. Reserve Sys., Fed. Reserve Board Approves Final Rule Strengthening Supervision and Regulation of Large U.S. Bank Holding Cos. and Foreign Banking Orgs. (Feb. 18, 2014), https://www.federalreserve.gov/newsevents/pressreleases/bcreg20140218a.htm. In May 2018, the Economic Growth, Regulatory Relief, and Consumer Protection Act was signed into law, raising the threshold from \$50 billion to \$250 billion (while providing that any designated G-SIB would be included "regardless of asset size"). Economic Growth, Regulatory Relief, and Consumer Protection Act, Pub. L. No. 115-174, § 401(a), (f), 132 Stat. 1296, 1356-57, 1359 (2018). The Act takes effect after 18 months, except for bank holding companies with less than \$100 billion in total consolidated assets, for which it takes effect immediately, § 401(d), 132 Stat. at 1358–59. For a critique of this change (written prior to its enactment), see Arthur E. Wilmarth, Jr., Raising SIFI Threshold to \$250B Ignores Lessons of Past Crises, Am. Banker: BankThink Blog (Feb. 7, 2018, 9:30 AM), https://www.americanbanker.com/opinion/raising-sifi-threshold-to-250b-ignores-lessons-ofpast-crises ("While Congress would be justified in raising the \$50 billion line to \$100 billion, the proposed \$250 billion figure is much too high and would undermine the Federal Reserve Board's ability to regulate SIFIs effectively under the Dodd–Frank Act.").

Federal Reserve Board (Fed) has taken advantage of the Basel Committee's invitation to impose higher G-SIB surcharges. ⁵⁷ In 2015, the Fed approved a rule imposing surcharges on G-SIBs ranging up to 4.5% to force these firms, expected to include the largest U.S. bank holding companies, "to bear the costs that their failure would impose on others [T]hey must either hold substantially more capital, reducing the likelihood that they will fail, or else they must shrink their systemic footprint, reducing the harm that their failure would do to our financial system." ⁵⁸

The Dodd–Frank Act also created the "orderly liquidation authority" (OLA), which "extended the FDIC's authority to resolve failed institutions beyond commercial banks to include the entire bank holding company and all firms designated as Systemically Important Financial Institutions." While this process "has never been triggered," rendering its application and viability conjectural, 60 the OLA expressly covers bank holding companies and Fed-supervised, nonbank financial firms. Triggering conditions for this process include when "the financial company is in default or in danger of default," its failure "would have serious adverse effects on financial stability," and there is "no viable private sector alternative." The express aim is to mitigate risks to U.S. "financial stability," to reduce "moral hazard" associated with bailouts, and to ensure that "creditors and shareholders will bear the losses" from financial firm failures. Indeed, consistent with the logic of increased-equity capital, the OLA expressly requires that "shareholders of a covered financial company do not receive payment until after all

^{57.} See BASEL G-SIBS, supra note 54, at 12.

^{58.} Press Release, Bd. of Governors of the Fed. Reserve Sys., Federal Reserve Board Approves Final Rule Requiring the Largest, Most Systemically Important U.S. Bank Holding Companies to Further Strengthen Their Capital Positions (July 20, 2015), https://www.federalreserve.gov/newsevents/pressreleases/bcreg20150720a.htm (quoting then-Fed Chair Janet Yellen). As of July 2015, it was expected that designated G-SIBs would include Bank of America, Bank of New York Mellon, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley, State Street, and Wells Fargo. The surcharges were expected to become "fully effective on January 1, 2019." *Id.*; see also 12 C.F.R. §§ 217.400–217.406 (2018) (establishing criteria for identifying G-SIBs and calculating surcharges); § 252.32 (2018) (requiring bank holding companies with \$50 billion or more in assets to hold capital as required by Fed regulations "relating to capital planning and stress tests"). For additional background see Joseph G. Haubrich & Charlotte DeKoning, *Sizing Up Systemic Risk*, FED. RES. BANK CLEVELAND (Aug. 23, 2017), https://www.clevelandfed.org/en/newsroom-andevents/publications/economic-commentary/2017-economic-commentaries/ec-201713-sizing-up-systemic-risk.aspx.

^{59.} Aaron Klein, *A Primer on Dodd–Frank's Orderly Liquidation Authority*, BROOKINGS: UP-FRONT (June 5, 2017), https://www.brookings.edu/blog/up-front/2017/06/05/a-primer-on-dodd-franks-orderly-liquidation-authority/.

^{60.} *Id.* For a skeptical assessment of the OLA's capacity to prevent future taxpayer-funded bailouts, see generally Lubben & Wilmarth, *supra* note 17.

^{61.} See Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 201(a)(11), 124 Stat. at 1443–44 (2010).

^{62. § 203(}b)(1)–(3), 124 Stat. at 1451.

^{63. § 204(}a), 124 Stat. at 1454–55.

other claims,"⁶⁴ and that "[t]axpayers shall bear no losses from the exercise of any authority under this title."⁶⁵

B. Shareholders and Financial Risk-Taking

There is certainly empirical support for the claim that financial firm capital buffers required improvement. For example, a World Bank policy research paper finds "support for the hypothesis that better capitalized banks experienced a smaller decline in their equity value during the crisis" (particularly among "larger banks")—a finding "consistent with the spirit of capital regulation," supporting "the view that greater emphasis on Tier 1 capital and common equity is likely to be effective." ⁶⁶ In a sense, this policy prescription represents a (limited) turn back toward the historical norm of higher bank capital, ⁶⁷ and banks today are widely considered to be better capitalized than they were before the crisis. ⁶⁸

However, from a corporate governance perspective, reliance on equity capital providers as a means of reducing risk-taking ought to give us pause. As a threshold matter, shareholders are widely understood to be the corporate constituency with the strongest risk-taking incentives in all corporate firms due to the shield of limited liability, which greatly reduces the downside relative to the upside. Finis risk preference is augmented in the banking context, where deposit insurance and implicit "too-big-to-fail" guarantees soften the brake on risk-taking that creditor monitoring might otherwise have imposed. At the same time, it is critical to recognize that the shareholders' preference for risk will only tend to grow as the firm approaches insolvency—by hypothesis, the circumstance with which we are most concerned. The potential for bad outcomes is borne out by a growing empirical literature tending to link shareholder-centric corporate governance structures in financial firms with excessive risk-taking in the run-up to the crisis and poor performance in its aftermath. Accordingly, it is incumbent on those

^{64. § 206(2), 124} Stat. at 1459; see also Yadav, supra note 6, (manuscript at 24–25).

^{65.} See § 214(c), 124 Stat. at 1518; see also Supervision and Regulation Letter SR 15-15: Supervisory Concerns Related to Shareholder Protection Arrangements, Bd. Governors Fed. Res. Sys. (Dec. 3, 2015), https://www.federalreserve.gov/supervisionreg/srletters/sr1515.htm (reflecting the Fed's "concerns related to arrangements . . . to protect the financial investments made by shareholders" that "could have negative implications on a holding company's capital or financial position").

^{66.} See Demirguc-Kunt et al., supra note 41, at 3, 13.

^{67.} See Sanders, supra note 50, at 3–4 (observing that banks in the 19th century "were required to fund assets with 50% capital," but that following the advent of the Federal Reserve System and deposit insurance, "capital dropped steadily to single digits where it is today").

^{68.} See, e.g., Baker et al., supra note 12, at 2, 16, 22–23; Basel 3, ECONOMIST, supra note 43.

^{69.} See Bruner, supra note 1, at 312, 317.

^{70.} See id.; see also Bebchuk & Spamann, supra note 24, at 266–67.

^{71.} See, e.g., Credit Lyonnais Bank Nederland v. Pathe Commc'ns Corp., 1991 Del. Ch. LEXIS 215, at *108 n.55 (Del. Ch. 1991).

^{72.} See supra note 24.

identifying risk-preferring shareholders as the antidote to excessive risk-taking in financial firms to articulate how this counterintuitive mechanism might work.

To be sure, increasing the capital buffer does not intrinsically alter the total voting power or governance authority possessed by shareholders as a matter of corporate law⁷³—but it may alter how that power is used to the extent that additional equity requires the involvement of new, and qualitatively different, forms of equity capital providers. In this light, Yesha Yadav is quite right to ask who, precisely, these equity capital providers are; specifically, "which actors, in fact, constitute the major equity holders of large banks."⁷⁴ Yadav's empirical study arrives at the intuitively plausible conclusion that heightened capital for mega-financial institutions requires the involvement of mega-asset managers. Focusing on "the 26 largest and most systemic U.S. banks," Yadav finds that over a six-year period the rate of blockholding in these entities rose substantially.⁷⁵ In particular, "[w]hereas Vanguard was a blockholder at just one of the surveyed banks in 2010/11, it had assumed 25 positions by 2016/17."⁷⁶ Blackrock, meanwhile, rose from 10 to 25 blockholdings, and State Street rose from 1 to 12.⁷⁷

These are among the most significant asset managers globally, confirming that sufficient equity capital for the big banks will, as a practical matter, have to come from the only private entities on Earth that can make the big banks look modest in size ⁷⁸—a concerning development for a least a couple reasons. Altering the identity of the big banks' capital providers could alter how shareholder powers are exercised in these institutions, and the governance incentives of these mega-asset managers remain imperfectly understood. While these institutions have traditionally remained passive, their extraordinary holdings obviously give them capacity to exert substantial influence over financial firm managers, and they stand to gain from greater risk-taking just as other financial firm shareholders do.⁷⁹ And to the extent

^{73.} See, e.g., Del. Code Ann. tit. 8, § 216 (2018) (measuring requisite votes for shareholder action by reference to threshold amounts of "shares present in person or represented by proxy," not by the number or value of outstanding shares).

^{74.} Yadav, *supra* note 6, (manuscript at 5).

^{75.} *Id.* at 6–7.

^{76.} *Id.* at 6.

As of July 2018, the largest mutual fund companies were BlackRock Funds (\$6.23 trillion AUM), Vanguard (\$5.10 trillion AUM), Charles Schwab (\$3.36 trillion AUM), State Street Global Advisors (\$2.73 trillion AUM), Fidelity Investments (\$2.56 trillion AUM), and JP Morgan (\$2.03 trillion AUM). See Mutual Fund Directory: 2018, MUTUAL FUND DIRECTORY, http://mutualfunddirectory.org/ (last visited Sept. 14, 2018) (ranking mutual fund companies by assets under management); see also Top 400 Asset Managers Global Assets Now €56.3trn. Inv. PENSIONS https://www.ipe.com/reports/special-reports/top-400-asset-managers/top-400-assetmanagers-2016-global-assets-now-563trn/10013542.fullarticle (last visited Sept. 22, 2017); Asset Managers, INV. & **PENSIONS** https://www.ipe.com/Uploads/j/t/t/Top-400-2016.pdf (last visited Sept. 22, 2017) (listing BlackRock, Vanguard Asset Management, State Street Global Advisors, Fidelity Investments, BNY Mellon Investment Management, and J.P. Morgan Asset Management as the six largest asset managers globally as of Dec. 31, 2015).

^{79.} See, e.g., Yadav, supra note 6, (manuscript at 5–7, 29–33, 47–50).

that such risks are ultimately borne by the retail investors providing the savings for these asset managers to invest,⁸⁰ the systemic consequences of financial firm failure have not been mitigated so much as relabeled; retail investors continue to pay the price, only they now do so wearing their "saver" hats rather than their "taxpayer" hats.

A growing literature is exploring the interrelationship between increased concentration of shareholding, on the one hand, and passive investment strategies, on the other. Perhaps the critical development has been the emergence of the "index fund," a form of mutual fund that (as the name implies) simply tracks a specified index, and the "exchange-traded fund" (ETF), which also generally tracks an index but trades on an exchange, much like common stock. In each case, the central attraction has been cost reduction through elimination of active portfolio management, 81 and in the years following the crisis "investors sold holdings of actively managed equity mutual funds worth roughly U.S. \$800 billion, while at the same time buying passively managed funds to the tune of approximately U.S. \$1 trillion." By 2015, "passive index funds," including both index funds and ETFs, "managed total assets invested in equities of more than U.S. \$4 trillion," and "this large and growing industry is dominated by just three asset management firms: BlackRock, Vanguard, and State Street."82 Contributing to the substantial concentration of equity ownership in U.S. public companies over recent decades.⁸³ index funds and ETFs have capitalized on the scalability of passive investment, permitting larger funds to compete effectively through lower fees.⁸⁴ BlackRock,

^{80.} See id. at 9–10.

^{81.} See Inv. Co. Inst., 2017 Investment Company Fact Book 91, 97–98 (57th ed. 2017), https://www.ici.org/pdf/2017_factbook.pdf; Benjamin Braun, From Performativity to Political Economy: Index Investing, ETFs and Asset Manager Capitalism, 21 New Pol. Econ. 257, 263–64 (2016); Patrick Jahnke, Voice Versus Exit: The Causes and Consequence of Increasing Shareholder Concentration 4–5 (Sept. 18, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3027058; Asjylyn Loder & Inyoung Hwang, 'Passive' Investing Can Be a Lot More Active Than You Think, WALL St. J. (Oct. 19, 2016, 9:00 AM), https://www.wsj.com/articles/passive-investing-can-be-a-lot-more-active-than-you-think-1476882001.

^{82.} Jan Fichtner et al., *Hidden Power of the Big Three? Passive Index Funds, Re-Concentration of Corporate Ownership, and New Financial Risk,* 19 Bus. & Pol. 298, 299, 303–04 (2017); *see also* Inv. Co. Inst., *supra* note 81, at 8–10, 18–19, 44–46, 94–97, 180–82, 211–14; Lucian A. Bebchuk, Alma Cohen & Scott Hirst, *The Agency Problems of Institutional Investors,* 31 J. Econ. Perspectives 89, 94 (2017); Braun, *supra* note 81, at 263; Dorothy S. Lund, *The Case Against Passive Shareholder Voting,* 43 J. Corp. L. 493, 496, 509 (2018); John Morley, *Too Big to Be Activist,* S. Cal. L. Rev. (forthcoming) (manuscript at 3–4, 8), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3225555; Giovanni Strampelli, *Are Passive Index Funds Active Owners? Corporate Governance Consequences of Passive Investing* 2, 8 (May 30, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3187159.

^{83.} See Jahnke, supra note 81, at 5 (observing that "in 1970 it was individual investors that controlled around 80% of all outstanding shares in the United States," but that by 2017 "institutional investors own around 73% of the outstanding shares of the top 1000 US companies by market capitalisation").

^{84.} See id. at 9; Strampelli, supra note 82, at 7.

Vanguard, and State Street together account for "a stunning 71 percent of the entire ETF market" and "over 90 percent of all [AUM] in passive equity funds." 85

Yet, the governance impacts remain unclear. 86 While these three asset managers "side with management in more than 90 percent of votes," they do sometimes oppose management on elections, perhaps suggesting that they want to "have the ear of management" in order to exert "private influence"—dynamics that are inherently difficult to quantify and predict.⁸⁷ While it is widely thought that indexing could undercut activism by foreclosing an important predicate for such activity—i.e., threat of exit⁸⁸—and that index funds have little incentive to invest in monitoring corporate governance when they cannot fully capture the benefits of doing so, ⁸⁹ Vanguard's founder, John Bogle, nevertheless emphasizes that "[t]here's passive strategies and there's passive investors. And these are two different things."90 Indeed, to the degree that exit becomes less viable in a world of increasing ownership concentration, one could imagine institutions becoming more active in corporate governance as an alternative means of complying with fiduciary duties owed to their own investors. 91 BlackRock alone "holds 5 percent blocks in more than one-half of all listed companies in the United States," and "when combined, BlackRock, Vanguard, and State Street constitute the single largest shareholder in at least 40 percent of all [U.S.] listed companies" and approximately 88% of S&P 500 companies. 92 Accordingly, it is unsurprising that the voting practices of such institutions may often prove outcome-determinative. 93 Major asset managers themselves, meanwhile, report nontrivial levels of corporate governance

^{85.} Fightner et al., *supra* note 82, at 303–04.

^{86.} See, e.g., id. at 300; Joseph A. McCahery et al., Behind the Scenes: The Corporate Governance Preferences of Institutional Investors, 71 J. Fin. 2905, 2905 (2016).

^{87.} See Fichtner et al., supra note 82, at 317–20, 323; see also Sarah Krouse et al., Meet the New Corporate Power Brokers: Passive Investors, WALL St. J. (Oct. 25, 2016, 10:41 AM), https://www.wsj.com/articles/the-new-corporate-power-brokers-passive-investors-1477320101; McCahery et al., supra note 86, at 2912–13 (finding similar dynamics across institutional investors). On the conflict of interest arising from fund managers' desire to secure lucrative pension-management business from public companies, see Bebchuk, Cohen & Hirst, supra note 82, at 102–03; Lund, supra note 82, at 513; Morley, supra note 82, at 25–26.

^{88.} See, e.g., Fichtner et al., supra note 82, at 307; Jahnke, supra note 81, at 6, 11–14; McCahery et al., supra note 86, at 2918–20; Morley, supra note 82, at 28; Strampelli, supra note 82, at 3, 12.

^{89.} The fact that "beneficial governance intervention will improve the performance of all funds tracking the index" means that "any investment in governance would benefit competitor funds while simultaneously driving up the passive fund's costs" relative to those same competitors. Lund, *supra* note 82, at 511; *see also* Bebchuk, Cohen & Hirst, *supra* note 82, at 98; Strampelli, *supra* note 82, at 2, 11–12. Accordingly, it is unsurprising that such funds have invested little in monitoring corporate governance. *See* Bebchuk, Cohen & Hirst, *supra* note 82, at 100; Lund, *supra* note 82, at 516.

^{90.} Loder & Hwang, *supra* note 81 (quoting Bogle).

^{91.} See Jahnke, supra note 81, at 8. But see generally Morley, supra note 82 (arguing that index funds will likely remain passive because activism would expose them to burdensome regulation and exacerbate conflicts across their funds and clients).

^{92.} Fightner et al., *supra* note 82, at 311–13.

^{93.} See Krouse et al., supra note 87.

involvement⁹⁴—ostensibly with a long-term time horizon in mind⁹⁵—and expressly prefer informal means of "engagement" prior to pursuing more visible and confrontational strategies. ⁹⁶

Yadav argues that mega-asset managers fitting this profile may be ideal providers of the enhanced capital buffer now required for mega-financial firms—because their broad investment exposure to the financial sector renders "investments in information and analysis [money] well-spent." But it is far from obvious that these entities will play a productive role. As Yadav acknowledges, the case remains speculative because these asset managers "have only recently deepened the economic stakes within the banking sector." Moreover, their purported long-term

94. See, e.g., BLACKROCK INVESTMENT STEWARDSHIP REPORT: VOTING & ENGAGEMENT QUARTERLY STATISTICS, JULY 1, 2016 – JUNE 30, 2017 (2017) (reporting 1,274 "engagements" between July 2016 and June 2017, and voting against approximately 10% of management proposals in the Americas); Our Engagement Efforts and Proxy Voting: An Update, Vanguard Group, Inc., https://about.vanguard.com/investment-stewardship/update-on-voting/index.html (last visited July 21, 2017) (reporting 817 "engagements" between July 2015 and June 2016, and voting against approximately 8% of management proposals).

95. See, e.g., BLACKROCK, GLOBAL CORPORATE GOVERNANCE & ENGAGEMENT PRINCIPLES 3 (June 2014); FIDELITY INVS., FIDELITY FUNDS' PROXY VOTING GUIDELINES 1 (Jan. 2017); STATE STREET GLOBAL ADVISORS, 2017 GLOBAL PROXY VOTING AND ENGAGEMENT PRINCIPLES 1, 5 (Mar. 2017); Environmental and Social Concerns, VANGUARD GROUP, INC., https://about.vanguard.com/investment-stewardship/social-concerns-investing/index.html (last visited July 21, 2017); Vanguard's Approach to Investment Stewardship, VANGUARD GROUP, INC., https://about.vanguard.com/investment-stewardship/ (last visited July 21, 2017); Vanguard's Proxy Voting Guidelines, VANGUARD GROUP, INC., https://about.vanguard.com/investment-stewardship/voting-guidelines/index.html (last visited July 21, 2017); Vanguard's Responsible Investment Policy, VANGUARD GROUP, INC., https://about.vanguard.com/investment-stewardship/responsible-investment-policy/index.html (last visited July 21, 2017).

See, e.g., BlackRock, supra note 95, at 2 (characterizing "engagement" as a means of gaining information and sharing "our philosophy and approach to investment," and describing votes against or withheld from management resolutions as "a signal that we are concerned" that management "have not responded adequately to shareholder concerns"); Our Governance and Executive Compensation Principles, VANGUARD GROUP, INC., https://about.vanguard.com/investment-stewardship/corporate-governance/index.html (last visited July 21, 2017) (reporting that "we can often accomplish more through dialogue than through the ballot"); Vanguard's Approach to Investment Stewardship, supra note 95 (characterizing "engagement" as giving "the opportunity to target nuanced feedback and message more precisely than does voting alone"); Vanguard's Responsible Investment Policy, supra note 95 (characterizing their approach as "quiet diplomacy focused on results"); FIDELITY INVS., supra note 95, at 3 (reporting that Fidelity will withhold votes in board elections when management "has not adequately addressed concerns communicated ... in the process of discussing executive compensation"); STATE STREET GLOBAL ADVISORS, supra note 95, at 2–3 (prioritizing "direct dialogue"); see also Jahnke, supra note 81, at 15–17; Lund, supra note 82, at 501–02; Strampelli, supra note 82, at 13–20.

97. See Yadav, supra note 6, (manuscript at 53); see also Fichtner et al., supra note 82, at 308–10.

98. See Yadav, supra note 6, (manuscript at 50); $see\ also\ Strampelli,\ supra$ note 82, at 22–26.

focus remains "questionable" to the extent that the performance of such asset managers themselves "is benchmarked daily." ⁹⁹

However, even if we were to assume that these asset managers were prepared to engage and incentivized to do so with long-term stability in mind, it is critical to recognize that this category of institutions might or might not continue to provide the bulk of financial firms' increased capital buffer moving forward. As Yadav additionally observes, a "mandate" to engage with financial firm governance could prompt these asset managers to "pull back from the banking system," in which case "other capital providers will take their place"—potentially including institutions "susceptible to the perverse incentives that usually afflict bank shareholders." Here we confront the reality that investors vary enormously in their capacities to provide truly "patient capital," and that stated investment goals may or may not provide clear indications of the operative timeframe over which various categories of investors actually seek financial returns. 101

Simply put, there can be no assurance that equity capital providers will play a productive role in reducing financial firm risk-taking, short of imposing real curbs on the generalized preference for risk that prevails among all financial firm shareholders. ¹⁰² Otherwise, reliance on increased equity capital to mitigate the systemic consequences of financial firm failure can be no more effective than our own capacities to predict who will provide that equity capital over time, and what their peculiar incentives and interests might be. The answers to these questions remain unknown and are perhaps unknowable.

II. BOARD INDEPENDENCE AND RISK MANAGEMENT

A. Independent Directors as Risk-Management Buffer

Corporate boards of directors classically perform both advising and monitoring functions, and the principal aim of mandating a certain percentage of "independent" directors is to improve the monitoring function for the benefit of minority shareholders. The idea is that the presence of people who (by definition)

^{99.} See Jahnke, supra note 81, at 19. On the historical trend toward accelerating portfolio turnover among institutional investors, see Lynn Stout, The Shareholder Value Myth: How Putting Shareholders First Harms Investors, Corporations, and the Public 66–67 (2012).

^{100.} See Yadav, supra note 6, (manuscript at 55–56).

^{101.} See Richard Deeg & Iain Hardie, What Is Patient Capital and Who Supplies It?, 14 SOCIO-ECON. REV. 627, 629–32 (2016).

^{102.} Such initiatives might include (re)introduction of multiple-liability rules for shareholders, reinforced by an enhanced duty of care for boards. See generally Bruner, supra note 8; infra Conclusions. See also Macey & O'Hara, supra note 9, at 98–101; Steven L. Schwarcz & Aleaha Jones, Corporate Governance of SIFI Risk-Taking: An International Research Agenda, in Cross-Border Bank Resolution (Bob Wessels & Matthias Haentjens eds., forthcoming 2017–2018) (manuscript at 10–11), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2972340 (arguing that if "the current regulatory framework does not effectively control systematic externalities, changing the corporate governance norm may be a valuable regulatory supplement"). An alternative, quasi-regulatory approach would be to give the U.S. government a "golden share" in certain financial institutions. See generally Omarova, supra note 6.

are not employed by the company will improve governance because these individuals will be more likely to assess the business objectively and voice their views assertively, without deferring to a domineering CEO. 103

The Securities and Exchange Commission (SEC) began recommending that audit committees consist of independent directors as early as 1940. 104 However, the trend toward greater board independence sharply picked up pace with reforms that followed the massive accounting frauds and ensuing bankruptcies at Enron, WorldCom, and other companies in the early 2000s—notably through the Sarbanes— Oxley Act of 2002 and amended stock-exchange rules. 105 The Sarbanes-Oxley Act itself requires all listed company boards to have fully independent audit committees. 106 The listing rules of the New York Stock Exchange (NYSE) and NASDAQ go further, however, by requiring majority-independent boards¹⁰⁷ and fully independent compensation and nomination committees, ¹⁰⁸ applying stringent independence tests essentially requiring "that the board of directors determine that a nominee has no material direct or indirect relationship with the listed company." ¹⁰⁹ By 2008, the percentage of independent directors had reached 82%, reinforced by more demanding independence tests, 110 and these trends have been accompanied by changes in how boards tend to operate. Notably, it has been found that "52% of board activity in S&P 1500 firms takes place at the committee level after the

103. See, e.g., Ran Duchin et al., When Are Outside Directors Effective?, 96 J. Fin. Econ. 195, 195–96 (2010); see also Stephen M. Bainbridge, Corporate Governance After the Financial Crisis 78 (2012); Roberta S. Karmel, Is the Independent Director Model Broken?, 37 Seattle U. L. Rev. 775, 788 (2014); Nicola Faith Sharpe, Process Over Structure: An Organizational Behavior Approach to Improving Corporate Boards, 85 S. Cal. L. Rev. 261, 265, 269–74 (2012).

104. See Kevin D. Chen & Andy Wu, The Structure of Board Committees 5 (Harvard Bus, Sch. Working Paper No. 17-032, 2016), http://www.hbs.edu/faculty/Publication%20Files/17-032_22ea9e7a-4f26-4645-af3d-042f2b4e058c.pdf; see also Karmel, supra note 103, at 775–84 (providing a historical discussion of the SEC's views on board independence).

105. See BAINBRIDGE, supra note 103, at 77–83; Chen & Wu, supra note 104, at 5, 13, 17–18; Duchin et al., supra note 103, at 197–98; Ferreira et al., supra note 24, at 33–35; Kobi Kastiel & Yaron Nili, "Captured Boards": The Rise of "Super Directors" and the Case for a Board Suite, 2017 Wis. L. Rev. 19, 25–27; Usha Rodrigues, A Conflict Primacy Model of the Public Board, 2013 U. Ill. L. Rev. 1051, 1060.

106. See Sarbanes—Oxley Act of 2002, Pub. L. No. 107-204, § 301, 116 Stat. 745, 775–77 (2002); see also New York Stock Exchange Listed Company Manual § 303A.06; NASDAQ Stock Market Equity Rule 5605(c)(2)(A).

107. See New York Stock Exchange Listed Company Manual § 303A.01; NASDAQ Stock Market Equity Rule 5605(b)(1).

108. See New York Stock Exchange Listed Company Manual §§ 303A.04–303A.05; NASDAQ Stock Market Equity Rules 5605(d)(2)(A), 5605(e)(1)(A).

109. See Stephen M. Bainbridge, Corporate Law 83 (2d ed. 2009); see also New York Stock Exchange Listed Company Manual § 303A.02; NASDAQ Stock Market Equity Rule 5605(a)(2).

110. See BAINBRIDGE, supra note 103, at 78–79; see also Theodore N. Mirvis & William Savitt, The Dangers of Independent Directors, 40 Del. J. Corp. L. 481, 481 (2016) (reporting data from the Spencer Stuart Board Index indicating that by 2014 "58% of boards had only one non-independent director, 84% had two or fewer, and 94% had three or fewer").

implementation of Sarbanes–Oxley,"¹¹¹ and that the reforms described above prompted a spike in the number of committees and multiple-committee assignments for independent directors. ¹¹²

In the more recent wave of post-crisis reforms, independent directors are relied upon to perform a related, though more specific, function: to act as a buffer between the more robust risk-management apparatus contemplated by such reform packages, on the one hand, and senior management, on the other. In the United States, this has taken the form of a requirement that certain publicly traded bank holding companies and Fed-supervised, nonbank financial firms have risk committees "responsible for the oversight of the enterprise-wide risk management practices"—and these committees must "include such number of independent directors as the [Federal Reserve] Board of Governors may determine appropriate," with "at least 1 risk management expert having experience in identifying, assessing, and managing risk exposures of large, complex firms."113 The Federal Reserve has required a risk committee with an independent board chair and at least one expert for publicly traded bank holding companies with "total consolidated assets of \$10 billion or more,"114 and if assets are \$50 billion or more then the bank holding company must also "appoint a chief risk officer" who reports "directly to both the risk committee and chief executive officer." ¹¹⁵ Meanwhile, the Federal Reserve has signaled greater focus on the quality of financial firm governance in other ways, including by prohibiting Wells Fargo from further asset growth until the firm can demonstrate that the quality of its board-level governance has improved, 116 though it remains unclear precisely what this requires.

Following the crisis, the Basel Committee similarly sought to "reinforce the collective oversight and risk governance responsibilities of the [bank] board,"

^{111.} See Chen & Wu, supra note 104, at 2 (discussing the limited empirical literature on board committees).

^{112.} See id. at 12–19. Chen & Wu's sample includes "all Russell 3000 firms as well as other peer firms and international firms predominantly from Canada, Bermuda and China, with available committee membership data." *Id.* at 10. Financial firms are excluded, although Chen and Wu note that they "also run our tests including these financial firms, and we get similar results." *Id.* at 10 n.14.

^{113.} See Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 165(h), 124 Stat. 1376, 1429–30 (2010).

^{114.} See 12 C.F.R. § 252.22(a) (2018). In May 2018 the EGRRCP Act raised the threshold for mandatory risk committees from \$10 billion to \$50 billion. Economic Growth, Regulatory Relief, and Consumer Protection Act, Pub. L. No. 115-174, § 401(a)(4), 132 Stat. 1296, 1357 (2018).

^{115.} See 12 C.F.R. \S 252.33(b). For rules applicable to foreign banks, see $\S\S$ 252.132, 252.144, 252.155 (applying more lenient requirements to publicly traded foreign banks with less than \$50 billion in U.S. assets).

^{116.} See Emily Flitter et al., How Wells Fargo and Federal Reserve Struck Deal to Hold Bank's Board Accountable, N.Y. TIMES (Feb. 4, 2018), https://www.nytimes.com/2018/02/04/business/wells-fargo-fed-board-directorspenalties.html.

issuing corporate governance guidelines in 2015. 117 Emphasizing the board's fiduciary obligations to the bank, the need to account for "the legitimate interests of depositors, shareholders and other relevant stakeholders," and the board's responsibility "for overseeing a strong risk governance framework," the Basel Committee's guidelines require an express "risk appetite statement" and establishment of "three lines of defence," including the "business line," a "risk management function," and an "internal audit function." 118 While not specifying a bright-line threshold, the Basel Committee states that bank boards "should be comprised of a sufficient number of independent directors" to permit "effective oversight," including "individuals with a balance of skills, diversity and expertise."119 However, the guidelines are more specific regarding committee composition. While the nomination committee should have "sufficient" independence, the audit committee should "be made up entirely of independent or non-executive board members," and the chair of each committee and the whole board should likewise be independent—or at least a "senior independent board member" should be appointed where the board chair holds an executive position. 120 The board should likewise establish a risk committee responsible for "oversight of the strategies for capital and liquidity management as well as for all relevant risks of the bank," and this committee should be majority independent with an independent chair. 121 The guidelines strongly emphasize the need for "independent risk management, compliance and audit functions,"122 and the Basel Committee clearly contemplates independent directors acting as the buffer between these critical functions and senior management. 123

While both the Dodd–Frank Act and the Basel reforms make passing nods to the importance of risk-management expertise, neither expressly grapples with the potential for heightened independence to come at the expense of such expertise. It is generally understood that, in virtually any corporation, senior management will have "informational advantages over outsiders who devote but a small portion of their time and effort to the firm," ¹²⁴ and this is not lost on directors themselves.

^{117.} See Basel Committee on Banking Supervision, Guidelines: Corporate Governance Principles for Banks 4 (2015), https://www.bis.org/bcbs/publ/d328.pdf. These guidelines build on an earlier effort from 2010. *Id.*

^{118.} *Id.* at 2, 9–11.

^{119.} *Id.* at 13.

^{120.} *Id.* at 14–16.

^{121.} *Id.* at 17.

^{122.} Id. at 20.

^{123.} See id. at 25–26 (stating that the chief risk officer "should have the ability to meet with the board or risk committee without executive directors being present").

Bainbridge, supra note 103, at 87–88; see also Yvan Allaire, Board Members Are Independent But Are They Legitimate and Credible? 7, 14 (Inst. for Governance of Orgs. Policy Paper No. 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3198202 (describing the tradeoff between independence and expertise); Jeff Zeyun Chen et al., When Are Outside Directors More Effective Monitors? Evidence From Real Activities Manipulation, J. ACCT., AUDITING FIN. 1. 2-5(Research Article. 2017). http://journals.sagepub.com/doi/abs/10.1177/0148558X17692691 (same); Karmel, supra note 103, at 811 (observing that independence rules skew director selection toward "former

Indeed, in one survey of directors from large corporations, 81% of respondents reported that it has "become more difficult to recruit qualified directors," while just 73% reported that "their colleagues have detailed knowledge of the company's industry," and just 61% reported that "their colleagues understand the company's key technologies and business practices." As one collaborator on the project put it, "[w]e're constantly surprised . . . when directors who have served on boards for years confess that they don't really understand how their companies make money," but "perhaps we shouldn't be." Financial firms—far exceeding many other forms of business in their organizational and technical complexity—are certainly no exception. It is light, it is alarming but hardly surprising that the "evolution of aggregate levels of bank board experience" has been found to be "the mirror image of that of board independence." 128

For a vivid example of these dynamics, one need look no further than the largest U.S. bank holding company—JPMorgan Chase. 129 As of 2018, every position on the 12-member board was held by an independent director, with one exception—the Chairman and CEO, Jamie Dimon. 130 One of the independent directors—Linda Bammann, who chairs the Directors' Risk Policy Committee—is actually a former Deputy Head of Risk Management at JPMorgan Chase and has long-standing professional ties with Dimon (dating back to their days at Bank One, where Dimon was Chairman and CEO and Bammann was Executive Vice President and Chief Risk Management Officer until Bank One's merger with JPMorgan

government officials, other famous personalities, educators, and CEOs from other companies ... who are not sufficiently expert"); Sharpe, *supra* note 103, at 285–91 (describing psychological and practical limitations of independent directors).

^{125.} David A. Nadler, *Building Better Boards*, HARV. BUS. REV., May 2004, at 102, 107–08.

^{126.} *Id.* at 110; see also Mirvis & Savitt, supra note 110, at 481 ("The typical board of directors now includes a greater number of directors who lack detailed operational knowledge about the firms they serve").

^{127.} See, e.g., Kristin N. Johnson, Macroprudential Regulation: A Sustainable Approach to Regulating Financial Markets, 2013 U. ILL. L. REV. 881, 899–902; Macey & O'Hara, supra note 9, at 90, 102–03; see also FOROOHAR, supra note 17, at 35 (observing that the complexity of universal banking "creates tremendous risk," but that "complexity is also where banks make their money").

^{128.} Ferreira et al., *supra* note 24, at 8, 34–36.

^{129.} See Holding Companies with Assets Greater Than \$10 Billion, supra note 18 (reporting that JPMorgan Chase had total assets of over \$2.5 trillion as of December 2017).

^{130.} See JPMorgan Chase & Co., Proxy Statement (Schedule 14A) 5 (Apr. 5, 2018), https://www.sec.gov/Archives/edgar/data/19617/000001961718000077/jpmc2018definitive proxy.htm.

Chase). 131 Apparently, Bammann counts as an independent director because she left JPMorgan Chase in 2005. 132

Beyond Dimon and Bammann, JPMorgan Chase's remaining directors come to the boardroom with similarly impressive CVs, including individuals with executive experience at major blue-chip companies and others with high-level experience in accounting, real estate, and investment. However, these remaining directors do not include career bankers, which naturally prompts a question—how confident can we be that this nominally high level of independence is actually delivering value net of costs? While these high-level executives and professionals are no doubt highly engaged and sophisticated generally, the fact remains that there is just one career banker in the room—the Chairman and CEO, who ironically looms all that much larger amidst this sea of independence, precisely because there is no one else at the table approximating his depth of industry experience. There appear

131. See id.; Linda B. Bammann, JPMorgan Chase & Co., https://www.jpmorganchase.com/corporate/About-JPMC/ab-board-bio-lindabbammann.htm (last visited June 15, 2018); Jamie Dimon, JPMorgan Chase & Co., https://www.jpmorganchase.com/corporate/About-JPMC/ab-board-bio-jamesdimon.htm (last visited June 15, 2018).

132. See JPMorgan Chase & Co., supra note 130, at 5 n.3; New York Stock Exchange Listed Company Manual § 303A.02(b)(i) (providing that a director is not considered independent if he or she "is, or has been within the last three years, an employee of the listed company").

133. See JPMorgan Chase & Co., supra note 130, at 5. Lee Raymond, the retired Chairman and CEO of Exxon Mobil Corporation, serves as the "Lead Independent Director." *Id.*

134. This is not unusual among large financial firms. See, e.g., Robert Pozen, Too Big to Save? How to fix the U.S. Financial System 283–85 (2010).

Cf. Johnson, supra note 127, at 898 (observing that reliance on executives for information potentially "undermines independent directors' ability to evaluate information 'independently'"); Karmel, supra note 103, at 790 (arguing that "dependence on insiders may give a CEO more power than was the case when a board included insiders"); Kastiel & Nili. supra note 105, at 27-29 (observing that "independent directors may feel uncomfortable challenging managerial decisions that they do not understand"); Mirvis & Savitt, supra note 110, at 486 (observing that "independent directors are more likely to rely for information and insight on the very management they are meant to be governing"); Rodrigues, supra note 105, at 1069 (observing that increased director independence "paradoxically reduces its autonomy by reducing the number of its information channels and making the remaining few sources all the more important"); Sharpe, supra note 103, at 307 ("The CEO is primarily in charge of disseminating information to the board, which results in asymmetrical information skewed towards the CEO's viewpoint."). Concerns about such dynamics have prompted wide-ranging reform proposals, from a "Board Suite" providing information independent of management, Kastiel & Nili, supra note 105, at 50-55, to literal curtailment of the board's role to monitoring of conflict scenarios, Rodrigues, supra note 105, at 1067–81.

While JPMorgan Chase's board does include the firm's own retired Deputy Head of Risk Management, in light of her long-standing ties to the Chairman and CEO one naturally wonders to what degree she provides a truly independent viewpoint. As Leo Strine (then-Vice Chancellor of the Delaware Chancery Court) explained in assessing the relevance of social ties to the independence inquiry in the special litigation committee context, regardless of one's subjective good faith and commitment to professional responsibility, it has to be recognized that

to be no other viewpoints in the room from people with appreciable experience in banking, who we could reasonably expect to fully comprehend the risks emanating from various corners of JPMorgan Chase's far-flung and hyper-complex global operations, let alone to impose themselves as stalwart brakes against excessive risk-taking.

B. Independent Directors, Risk-Taking, and Financial Expertise

There is an irony in the push for board-level independence to be grounded (at least in the Basel Committee's case) in stakeholder-oriented corporate governance theory 136 because, as noted above, heightened board independence has typically been rationalized as a means of advancing shareholder interests and has been associated with bad outcomes following the onset of the crisis. 137 However, empirical studies in the broader corporate governance context more generally call into question the wisdom of mandating high levels of director independence in industries characterized by high levels of complexity. While this literature for a time suggested that director independence had little or no performance impact, 138 more nuanced, recent studies have found that the impacts of independence may depend largely on the cost of information acquisition in a given company. One study, for example, found that "adding outside directors to the board does not help or hurt performance on average, consistent with the previous literature," but that "outsiders significantly improve performance when their information cost is low, and hurt

... corporate directors are generally the sort of people deeply enmeshed in social institutions. Such institutions have norms, expectations that ... influence and channel the behavior of those who participate in their operation. Some things are "just not done," or only at a cost In being appropriately sensitive to this factor, our law also cannot assume – absent some proof of the point – that corporate directors are, as a general matter, persons of unusual social bravery, who operate heedless to the inhibitions that social norms generate for ordinary folk.

In re Oracle Corp. Derivative Litig., 824 A.2d 917, 938 (Del. Ch. 2003).

136. See BASEL COMMITTEE ON BANKING SUPERVISION, *supra* note 117, at 3 ("The primary objective of corporate governance should be safeguarding stakeholders' interest in conformity with public interest on a sustainable basis. Among stakeholders, particularly with respect to retail banks, shareholders' interest would be secondary to depositors' interest."); Ferrarini, *supra* note 7, at 19–20.

137. See, e.g., Bruner, supra note 8, at 552–53 (discussing the literature); Duchin et al., supra note 103, at 195 (discussing "the idea that outside directors are important custodians of shareholder interests"); Fernandes et al., supra note 7, (manuscript at 10–11) (discussing the literature). For cross-country comparisons of one-tier and two-tier board structures, see F. Arnaboldi & B. Casu, Corporate Governance in European Banking 8–9 (Jan. 18, 2011) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1763134; Marina Brogi, Two-Tier Boards for the Governance of Banks 14 (June 2009) (unpublished manuscript), https://www.researchgate.net/publication/228254090; Ferreira et al., supra note 24, at 7, 32 ("Bank board independence is significantly higher in countries with mandatory one-tiered board structures.").

138. See, e.g., Adams & Mehran, supra note 28, at 248, 258; Brogi, supra note 137, at 6–7; Duchin et al., supra note 103, at 195–96; Fernandes et al., supra note 7, (manuscript at 18–21).

performance when their information cost is high."¹³⁹ The authors suggest, intuitively enough, that the "finding of consistent negative effects tends to reinforce the message that outsiders are less effective when it is difficult for them to understand the firm's business," and conclude that "the one-size-fits-all approach of the new board regulations may not be ideal."¹⁴⁰

Similarly, a study of nonfinancial S&P 500 companies¹⁴¹ found evidence indicating that the presence of independent directors with relevant expertise on the audit committee can reduce the "ex ante probability of earnings manipulation," but "only in the subsample of firms with higher information asymmetry;" that is, in situations where "board monitoring would be difficult without industry expertise." The authors further found that the involvement of independent directors is substantially beneficial "only in the subsamples of firms with higher information asymmetry, firms from more homogenous industries, firms whose CEOs have more ex ante equity incentives to manipulate earnings, and firms at a higher risk of violating [Generally Accepted Accounting Principles (GAAP)]." Likewise, they found substantial beneficial effects when the independent directors' expertise "is acquired more recently, from public firms, at the executive level, and through an accounting-related position." These findings, the authors conclude, underscore "the importance of differentiating among firms, industries, and the nature of the industry experience."

While the foregoing evidence relates to nonfinancial firms, there is reason to believe that financial firms may themselves have been negatively impacted by the foregoing dynamics; that is, by high degrees of board independence without requisite expertise in a high information-cost environment. As Jonathan Macey and Maureen O'Hara observe, "risk management of a complex financial institution is not something easily grasped by a typical corporate director; it instead requires specialized expertise"—a reality prompting them to argue that "risk management committees should be composed only of individuals who can demonstrate expertise

^{139.} Duchin et al., *supra* note 103, at 196, 204. For a discussion of Duchin et al.'s methodology, see Frederick Tung, *The Puzzle of Independent Directors: New Learning*, 91 B.U. L. Rev. 1175, 1186–89 (2011) (critiquing their use of analyst error as a measure of information cost, as independent directors "have much greater access to information than analysts").

^{140.} Duchin et al., *supra* note 103, at 209, 212; *see also* BAINBRIDGE, *supra* note 103, at 101–02; Allaire, *supra* note 124, at 15, 26–29.

^{141.} Cong Wang et al., *Industry Expertise of Independent Directors and Board Monitoring*, 50 J. FIN. QUANTITATIVE ANALYSIS 929, 936–37 (2015).

^{142.} *Id.* at 942–45. The authors code an independent director "as having industry expertise . . . if he or she has previously held a director or executive position at another firm in the same 2-digit [Standard Industrial Classification (SIC)] industry as the firm on whose board he or she sits." *Id.* at 936.

^{143.} *Id.* at 946.

^{144.} Id. at 950.

^{145.} *Id.* at 950; *see also* Chen et al., *supra* note 124, at 3, 11 (finding, in a study of nonfinancial and nonutility firms, that "more independent boards are more effective monitors of real earnings management when it is less costly for them to become informed about managerial behavior").

in evaluating and monitoring the risk control systems of a bank."¹⁴⁶ The need for such a step-up in board-level expertise is indeed acute, as Robert Pozen observes in his diagnosis of the financial system's meltdown: "I have personal experience in examining closely the board members of two large banks. I was surprised to find how few independent directors had been executives at financial institutions. This appears to be typical in the large U.S. banks."¹⁴⁷

Given these apparent shortcomings, the first and most obvious possibility would be to simply stop doing this-stop defaulting to more and more board independence as the go-to solution for every governance-related problem under the sun and perhaps even carve back at some of the existing requirements. ¹⁴⁸ However, there seems to be little realistic prospect of this happening. As the empirical work described above suggests, there do appear to be certain low-information-cost contexts where it is relatively easier for independent directors to learn about the business, and where the objectivity benefits of independent directors do seem to improve performance. 149 Accordingly, we might consider carving back at such requirements solely in high-information-cost industries, where expertise is at a real premium, yet even here the political challenges are likely insurmountable. Regardless of context, there are powerful political forces that consistently push in this direction in the wake of crises. Requiring more independent directors offers policymakers an easy fix, and a comprehensible reform narrative that makes it appear to the public as if they have actually solved a problem—and it is critical to recognize that managers themselves may be amenable to this if they consider it a less intrusive alternative to substantive regulation. ¹⁵⁰ So even if backing away from

^{146.} Macey & O'Hara, supra note 9, at 103; see also BAINBRIDGE, supra note 103, at 103–04; POZEN, supra note 134, at 283–85; Fernandes et al., supra note 7, (manuscript at 18–20, 24–26); Johnson, supra note 127, at 899–902; Stulz, supra note 7, at 49–51. While the Dodd–Frank Act requires just one "risk management expert," the Fed's final rule release indicates that "the Board would expect all risk committee members generally to have an understanding of risk management principles and practices relevant to the company," and that "the risk committee of a company that poses more systemic risk should have more risk committee members with commensurately greater understandings of risk management principles and practices." Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations, 79 Fed. Reg. 17240, 17249 (Mar. 27, 2014) (final rule adopted by the Board of Governors of the Federal Reserve System to implement Dodd–Frank Act § 165).

^{147.} POZEN, *supra* note 134, at 283; *see also* Allaire, *supra* note 124, at 21–22 (observing that Lehman Brothers' board largely consisted of "ex-CEOs of large corporations" whose experience "had little relevance for the business of Lehman," and concluding that "a board made up of independent members with impressive biographies is not ipso facto credible").

^{148.} *Cf.* Mirvis & Savitt, *supra* note 110, at 484 (characterizing the call for greater director independence following the Enron and WorldCom meltdowns as "reflex unburdened by logic"); Tung, *supra* note 139, at 1176 ("In our hopes and dreams . . . the independent director offers something of a magic bullet for corporate governance.").

^{149.} See supra notes 138–146 and accompanying text.

^{150.} Cf. John W. Cioffi, Public Law and Private Power: Corporate Governance Reform in the Age of Finance Capitalism 214 (2010) (observing that "the financial sector fiercely resisted broader financial system reforms" in the wake of the crisis, and that "[m]uted opposition to the progress of corporate governance reforms thus may have

these requirements would make sense—at least in high-information-cost industries—such a move remains unlikely.

So what else can be done? An alternative might be to add some nuance to independence requirements themselves. If we cannot realistically achieve the requisite level of expertise by relaxing board-independence requirements, then perhaps we might do so by changing the composition of the independent component of the board. As a threshold matter, note that even if we hold constant the majority-independence listing requirement, ¹⁵¹ a balance of objectivity and expertise should be attainable without having to require that all independent directors be industry experts. For example, a board with a bare majority of independent directors, a bare majority of whom have industry experience, should sum up (together with the insiders) to a solid majority with relevant expertise. ¹⁵²

There is a strong case to be made that board-level independence rules across the universe of public companies—financial and nonfinancial alike—ought to require more generally that (at least some of the) independent directors have experience in (at least broadly) related industries. As a structural matter, such a requirement should prove straightforward and realistic, given availability of classification systems already widely used in a variety of public and private contexts. For example, in 1997 the North American Industry Classification System (NAICS)—a U.S., Canadian, and Mexican collaborative effort—was adopted to replace Standard Industrial Classification (SIC) codes, which had been the U.S. standard since the 1930s. NAICS "is constructed within a single conceptual framework;" the core principle being that "[e]conomic units that have similar production processes are classified in the same industry, and the lines drawn between industries demarcate, to the extent practicable, differences in production processes." Services received particular attention in development of the NAICS,

reflected a political and legal bet by financial sector managers that enhanced shareholder powers within corporate governance would likely prove less constraining and threatening than other items on the postcrisis reform agenda").

- 151. See supra note 107 and accompanying text.
- 152. For example, assume a board of 12 directors. If a majority of 7 were independent, and a majority of 4 of those independent directors had industry expertise, then (together with the 5 insiders) a solid majority of 9 directors would possess relevant expertise.
- 153. For one such approach to measuring industry proximity, applied in an empirical study of independent directors' expertise, see Wang et al., *supra* note 141, at 936; *see also* Allaire, *supra* note 124, at 9, 30 (advocating that directors be recruited from "industries with characteristics that closely [track] those of in the industry in which the target company operates").
- 154. See Exec. Office of the President, North American Industry Classification System 3, 13 (2017), https://www.census.gov/eos/www/naics/2017NAICS/2017 NAICS Manual.pdf.
- 155. *Id.* at 3. Other jurisdictions and international organizations have developed similar classification systems for similar applications. *See, e.g., Glossary: Statistical Classification of Economic Activities in the European Community (NACE)*, EUROSTAT, http://ec.europa.eu/eurostat/statistics-
- explained/index.php/Glossary:Statistical_classification_of_economic_activities_in_the_European_Community_(NACE) (last visited Dec. 20, 2017); *UK Standard Industrial Classification of Economic Activities*, OFF. FOR NAT'L STAT.,

which divides economic activity into 20 sectors including 1,057 industries (as of 2017). The system employs "a six-digit coding system to identify particular industries and their placement," and the "Finance and Insurance" sector consists of five subsectors including numerous distinct industry groups and industries. While concerns regarding categorization of complex multi-service firms are inevitable, the system's hierarchical nature lends itself to measuring industry proximity flexibly, with greater specificity or generality as the case may be. Additional flexibility would arise from the inherent scalability of such a requirement—e.g., applying to some or all independent directors on a given board. Both of these forms of flexibility render such an approach compatible with reform proposals emphasizing institutional support for independent directors coming to the firm from different professional backgrounds.

In any event, the need for relevant experience would seem to be particularly acute in the context of financial firms, yet the potential loss of expertise that often accompanies independence requirements has received little attention, suggesting that we can expect problems of this sort to persist. ¹⁶² Much like our reliance on equity capital providers to serve as a buffer against shocks and a means of limiting

https://www.ons.gov.uk/methodology/classificationsandstandards/ukstandardindustrialclassi ficationofeconomicactivities (last visited Dec. 20, 2017); *International Standard Industrial Classification of All Economic Activities (ISIC)*, U.N. INDUS. DEV. ORG., https://stat.unido.org/content/learning-center/international-standard-industrial-classification-of-all-economic-activities-%2528isic%2529 (last visited Dec. 20, 2017).

- 156. See Exec. Office of the President, supra note 154, at 3, 14.
- 157. *Id.* at 18, 429–47.
- 158. See, e.g., Jennifer Boettcher, Challenges and Opportunities Presented by NAICS, 5 J. Bus. & Fin. Librarianship 3, 6–7 (1999). For the Finance and Insurance sector, the approach to "varied activities taking place within existing financial institutions" is to "split these institutions into components performing specialized services," which are treated as "the equivalents for finance and insurance of the establishments defined for other industries." Exec. Office of the President, supra note 154, at 429.
- 159. "The first two digits of the [NAICS] code designate the sector, the third digit designates the subsector, the fourth digit designates the industry group, the fifth digit designates the NAICS industry, and the sixth digit designates the national industry." Exec. Office of the President, *supra* note 154, at 18.
- Recall that the Dodd–Frank Act already requires certain publicly traded bank holding companies and Fed-supervised, nonbank financial firms to have a risk committee that includes "at least 1 risk management expert having experience in identifying, assessing, and managing risk exposures of large, complex firms." *See supra* note 113 and accompanying text. The problem is that this requirement is both minimal and imprecise.
- 161. *Cf.* Allaire, *supra* note 124, at 8 (advocating "a customized development program" for a new director who "lacks the requisite experience/knowledge"); Kastiel & Nili, *supra* note 105, at 50–55 (advocating a "Board Suite" to give independent directors "independent access to company-specific data, institutional knowledge, as well as better resources to analyze the information that is collected by them"). Combining approaches in this manner might help maintain a larger pool of potential directors, alleviating concerns arising from director "busyness." *Cf. generally* Kress, *supra* note 7 (arguing that excessively busy financial firm directors cannot effectively monitor risk exposure, and that those occupying certain critical positions accordingly should have only limited additional commitments).
 - 162. See supra notes 124–128 and accompanying text.

leverage, the wisdom of reliance on independent directors to serve as a risk-management buffer turns principally on who the people performing this role actually are. Until we develop a clearer sense of who director-independence rules tend to place in financial firm boardrooms and take steps to ensure sufficient expertise, we should remain skeptical that greater independence in this context will inherently make us better off.

CONCLUSIONS

Resorting to risk-preferring shareholders as a means of mitigating risktaking across the financial system, and resorting to inexpert, independent directors as a means of improving risk management in financial firms, reflect an overly cramped contemporary conception of corporate governance. Historically, corporate governance has been considerably more fluid and flexible than it is today, permitting managers greater latitude across the universe of public companies to mitigate the extreme pathologies associated with the single-minded pursuit of profit maximization, 163 while at the same time carving out exceptional areas—notably, financial firms—where greater social and economic risks prompted substantial deviations from traditional governance paradigms.¹⁶⁴ However, over time strongform emphasis on shareholder interests has increasingly dominated corporate governance and related discourses among policymakers, practitioners, financial market participants, and academics alike, ¹⁶⁵ and financial firms themselves have come to be viewed through the lens of that increasingly shareholder-centric publiccompany paradigm. 166 These developments have prompted a series of post-crisis reforms to financial firms' capital structure and corporate governance that may do more harm than good from a risk perspective. 167

There is (or should be) room to debate the merits of various ways forward. It is increasingly understood that shareholder wealth maximization and risk management stand in fundamental tension and that regulatory supervision and corporate governance can function as complementary mechanisms for managing that tension. How such balances ought to be struck remains hotly contested, but it is important to acknowledge that the emphasis placed on corporate governance implies imperfect confidence in the potential adequacy of external supervision to contain risk-taking. This places a real premium on developing a clear-eyed

^{163.} See generally Christopher M. Bruner, *The Enduring Ambivalence of Corporate Law*, 59 ALA. L. REV. 1385 (2008). For a comparative study of these dynamics in common-law countries, see Bruner, *supra* note 5.

^{164.} See generally Bruner, supra note 8.

^{165.} For a historical discussion, see generally David Millon, *Radical Shareholder Primacy*, 10 U. St. Thomas L. J. 1013 (2013).

^{166.} See supra notes 27–33 and accompanying text.

^{167.} See supra Parts I–II.

^{168.} See, e.g., Ferrarini, supra note 7, at 1, 14.

^{169.} See, e.g., id. at 16–22 (arguing that prioritizing other stakeholders ought to be confined to external regulation, freeing managers to focus on shareholders).

^{170.} *Cf.* Bebchuk & Spamann, *supra* note 24, at 253, 280–82 (observing that "prudential regulation is necessarily imperfect" and arguing that "[r]egulating bankers' pay could nicely supplement and reinforce the traditional, direct regulation of banks' activities"); Omarova, *supra* note 6, at 1044–45 ("As market 'outsiders,' financial regulators perennially

understanding of risk incentives and interests among various internal corporate constituencies.

While efforts to reorient financial firm boards (including their independent directors) toward greater stability-orientation obviously face substantial obstacles within a broader corporate governance system strongly favoring risk-preferring shareholders, ¹⁷¹ this recognition only highlights the pressing need to assess, and address, those mechanisms of financial firm governance that incentivize excess risk-taking in the first place. The fact is that we have long understood the ultimate wellspring of financial firm risk-taking and how to alter those incentives—most notably through liability rules that directly alter the risk calculus for shareholders and boards alike. ¹⁷² Further ensuring that independent directors actually understand the peculiarities and complexities of the firms that they are charged to govern—including their risk exposures and risk-management strategies—will likewise prove essential. ¹⁷³

As a threshold matter, such steps cannot be taken without fully acknowledging the degree to which strong-form shareholder-centrism contributed to the financial crisis by incentivizing highly undesirable forms and degrees of risk-taking. Short of such a fundamental reckoning, smart money should expect prevailing governance models to generate further crises.

lag behind private market participants in their ability to access and process vital market information, and their ability to act is inherently limited by various jurisdictional constraints.").

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^{171.} See Ferrarini, supra note 7, at 16–22; Omarova, supra note 6, at 1036–40, 1050.

^{172.} See Bruner, supra note 8; Macey & O'Hara, supra note 9, at 98–101.

^{173.} See Macey & O'Hara, supra note 9, at 102–03; see also supra Part II; cf. Hockett, supra note 6, at 1074, 1095 (arguing that "private law fiduciary duty offers little, if any, solution to recursive collective action problems" of the sort arising in the financial system, yet acknowledging that "systemic financial dysfunction" may be amenable to such a response if we "alter the decision calculi of the beneficiaries of fiduciary duty . . . such as then changes the calculi of fiduciaries themselves").