

*Misalignment: Corporate Risk-Taking and Public Duty*¹

Steven L. Schwarcz²

Abstract: The law does not effectively control corporate risk-taking that could have systemic financial consequences, even though that type of risk-taking led to the global financial crisis and is continuing to increase. Various regulatory responses are designed to control systemic risk-taking by aligning interests; but they attempt to align only managerial and investor interests, constraining managers from engaging their firms in risk-taking ventures that have a negative expected value. That leaves a critical misalignment: because much of the harm from the failure of systemically important firms would be externalized onto other market participants as well as onto ordinary citizens impacted by an economic collapse, such firms can engage in risk-taking ventures with positive expected value to their investors but negative expected value to the public. This article analyzes why, and examines how, financial regulation should help to align those private and public interests.

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² Stanley A. Star Professor of Law & Business, Duke University School of Law; Founding Director, Duke Global Financial Markets Center; Senior Fellow, the Centre for International Governance Innovation. E-mail: schwarcz@law.duke.edu. For valuable comments, I thank Emiliós Avgouleas, John de Figueiredo, Deborah DeMott, Lisa M. Fairfax, Jesse D. Gossett, Matthias Haentjens, John Hasnas, Ian B. Lee, Robert T. Miller, Gabe Shawn Varges, . . . , and participants in faculty workshops at the University of Zurich Institute of Law (co-sponsored by the University of Zurich Centre for Financial Regulation), the University of Iowa College of Law, . . . , and participants in a (virtual) joint faculty workshop between Duke University School of Law and Shanghai University of International Business and Economics (SUIBE) School of Law. I also thank Brittany LaFleur, Tashi Sun, and Ruiyao Sun for invaluable research assistance. Support is provided in part by a Fuller-Purdue grant.

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INTRODUCTION

Corporate risk-taking is economically necessary³ and even desirable. Successful risk-taking increases profitability, thereby increasing welfare by generating jobs and purchasing power.⁴ But corporate risk-taking can also be harmful. There is widespread agreement that excessive corporate risk-taking was one of the primary causes of the 2008-09 global financial crisis (the “financial crisis”).⁵ There is also widespread agreement that existing regulatory measures to curb that risk-taking are inadequate.⁶

³ Cf. Gabriel Jiménez et al., *How Does Competition Impact Bank Risk-Taking* (Federal Reserve Bank of San Francisco Working Paper Series No. 2007-23, Sept. 2007), available at <http://www.frbsf.org/economic-research/publications/working-papers/2007/wp07-23bk.pdf> (arguing that increasing competition among banks increases the need to engage in risk-taking in order to maintain profitability).

⁴ See, e.g., David Rosenberg, *Supplying the Adverb: The Future of Corporate Risk-Taking and the Business Judgment Rule*, 6 BERKELEY BUS. L.J. 216, 221-22 (2009) (observing that students of American law and economic history agree that much of the nation’s technological progress and economic growth can be partly attributed to bold corporate risk-taking).

⁵ See, e.g., Financial Crisis Inquiry Comm’n, *The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis*

Many of the regulatory responses to the financial crisis, both in the United States and abroad, seek to mitigate excessive corporate risk-taking by systemically important financial firms.⁷ Various of those responses are designed to control that risk-taking by aligning managerial and investor interests to reduce agency costs and make managers less likely to engage their firms in risky business ventures that could jeopardize investors. These responses implicitly assume that the investors themselves would oppose excessively risky business ventures.

That assumption, however, is flawed, and therefore financial regulation based on the assumption's validity is unreliable. The assumption is flawed because what constitutes "excessive" risk-taking depends on the observer. Risk-taking is excessive from a given observer's standpoint if it has a negative expected value to that observer.

in the United States xviii–xix (2011), available at http://fcic-static.law.stanford.edu/cdn_media/fcic-reports/fcic_final_report_full.pdf (identifying excessive risk-taking as a primary cause of the financial crisis); *The Origins of the Financial Crisis: Crash Course*, ECONOMIST, Sep. 7, 2013, at 74, available at <http://www.economist.com/news/schoolsbrief/21584534-effects-financial-crisis-are-still-being-felt-five-years-article> (identifying excessive risk-taking as one of three causes of the financial crisis, the other causes being irresponsible lending and regulators being asleep at the wheels); Jacob Lew, *Let's Leave Wall Street's Risky Practices in the Past*, Op-Ed, WASHINGTON POST, Jan. 9, 2015 (in which U.S. Treasury Secretary Lew repeatedly attributes the financial crisis to "excessive risks taken by financial" firms).⁶ See, e.g., Binyamin Appelbaum, *Skepticism Prevails on Preventing Crisis*, N.Y. TIMES, Oct. 5, 2015, at B1 (observing the "troubling reality highlighted at a conference . . . at the Federal Reserve Bank of Boston" that "policy makers have made little progress in figuring out how they might actually" prevent another financial crisis). Donald Kohn, former Vice Chairman of the U.S. Federal Reserve Board, observed at the conference that the Federal Reserve "doesn't really have the tools" to prevent another crisis. *Id.* Luc Laeven, European Central Bank Director General for Research, summarized the consensus reached at the conference: "Both monetary policy and macroprudential [regulatory] policy are not really very effective." *Id.* He then asked, "Do we have other policies?" This article seeks to provide an answer.

⁷ Cf. Part I, *infra* (discussing regulatory responses to mitigate excessive corporate risk-taking by systemically important firms). This article's references to systemically important firms, systemically important financial firms, and systemically important financial institutions all mean financial firms that are systemically important. Very large and highly interconnected non-financial firms that might be systemically important are beyond the article's scope.

Thus, it is reasonable to assume that investors would oppose risky business ventures that have a negative expected value to them. The problem, however, is that systemically important firms—the primary focus of post-financial crisis regulation, and also the focus of this article—can engage in risk-taking ventures that have a positive expected value to their investors but a negative expected value to the public. That’s because much of the systemic harm from such a firm’s failure would be externalized⁸ onto other market participants as well as onto the public, including ordinary citizens impacted by an economic collapse.⁹

This misalignment occurs because, absent illegalities, torts, and other specific regulatory and contractual requirements,¹⁰ managers of a firm—by which this article means the most senior managers who have ultimate responsibility to manage the firm, such as a corporation’s directors—are legally obligated to view the consequences of their firm’s actions, and thus to view the expected value of corporate risk-taking, only from the standpoint of a firm’s investors.¹¹ That perspective ignores externalities¹² caused by the

⁸ This could be described as a type of “tragedy of the commons,” insofar as market participants suffer from the actions of other market participants. But it also is a more standard externality insofar as non-market participants (i.e., the ordinary citizens impacted by an economic collapse) suffer from the actions of market participants.

⁹ Steven L. Schwarcz, *Systemic Risk*, 97 GEO. L.J. 193, 206 (2008). See also John Crawford, *The Moral Hazard Paradox of Financial Safety Nets*, CORNELL J.L. & PUB. POL’Y (forthcoming 2015) (Aug. 17 2015 draft, on file with author) (observing, at 54, that “Financial firms . . . are under-incentivized to insure at the optimum level, given the fact that the potential systemic costs of their *own* failure would be borne primarily by others.”). The collapse of Lehman Brothers illustrates this. Lehman Brothers had engaged in highly profitable, but also high-risk and high-leverage, business strategies. The financial stresses caused by “defaults in the subprime mortgage and commercial real estate markets” then caused Lehman Brothers to default, roiling financial markets and threatening the entire U.S. economy with collapse. Edward J. Estrada, *The Immediate and Lasting Impacts of the 2008 Economic Collapse—Lehman Brothers, General Motors, and the Secured Credit Markets*, 45 U. RICH. L. REV. 1111, 1115 (2011).

¹⁰ See Part II.A, *infra* (discussing regulating substance).

¹¹ See, e.g., RICHARD A. BREALEY, STEWART C. MYERS, & FRANKLIN ALLEN, *PRINCIPLES OF CORPORATE FINANCE* 9–10 (10th ed. 2011). Cf. BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, *CALIBRATING THE GSIB SURCHARGE 1* (July 20, 2015) (observing that systemically important financial institutions “themselves lack sufficient incentives to take precautions against their own failures”). In some jurisdictions,

risk-taking. In general, that makes sense because myriad externalities result from corporate risk-taking¹³; it would not be feasible to take all those externalities into account. Even the Federal Reserve’s regulations requiring systemically important financial firms to establish risk committees direct those committees to consider risks to the firm, not to the public.¹⁴ But risk-taking that causes the failure of a systemically important firm could trigger a domino-like collapse of other firms or markets, causing systemic externalities that harm the public by damaging the real economy.¹⁵ This article argues that the regulation of corporate risk-taking should, and feasibly could, take systemic externalities into account.

The article proceeds as follows. Part I examines the “macroprudential” regulatory responses to the financial crisis—that is, regulatory responses intended to protect against “systemic” risk to the integrity of the financial system¹⁶—that purport to mitigate excessive corporate risk-taking by systemically important firms.¹⁷ To the extent these responses attempt to mitigate that risk-taking by aligning interests, they seek to align managerial and investor interests (collectively, the “firm’s interests”). That leaves a critical misalignment: even if those interests could be perfectly aligned, that would be insufficient to control excessive risk-taking that causes systemic externalities. Part I also shows that the regulatory responses to the financial crisis that profess to mitigate excessive corporate risk-taking in other ways (i.e., without aligning managerial and investor interests) are also inadequate to prevent systemic externalities.

however, managers may also be allowed or required to take into account other interests, such as those of employees, suppliers, customers, creditors, and communities (*see infra* note 155 and accompanying text, discussing the Pennsylvania constituency statute) and “the entire national economy” (*see infra* note 153, discussing legislation in Iceland).

¹² I am talking, of course, about non-investor externalities.

¹³ *See infra* notes 73-74 and accompanying text.

¹⁴ *See infra* notes 160-161 and accompanying text.

¹⁵ *Systemic Risk*, *supra* note 9, at 204. The “real economy” means the economic reality, such as a recession, that the public actually experiences. *Id.*

¹⁶ *Systemic Risk*, *supra* note 9, at 204 (defining systemic risk).

¹⁷ *Cf.* text accompanying notes 7-8, *supra* (discussing why such risk-taking occurs).

Part II examines and compares possible regulatory redesign options to help align the firm's interests with the public's interests, in order to control excessive risk-taking that causes systemic externalities. Although financial regulation traditionally focuses on regulating substance, such as imposing capital-adequacy standards, this Part argues that these redesign options should additionally focus on reforming a firm's governance.

Part III analyzes how a firm's governance should be reformed to reduce systemic externalities. To that end, it first shows why, consistently with corporate governance law and theory, regulation could impose a public governance duty to help align the firm's interests with the public's interests. Thereafter, it shows how such a duty could be feasibly and efficiently implemented. Finally, the Appendix to the Article proposes model language for regulation imposing the duty.

I. THE REGULATORY MISALIGNMENT

Various types of macroprudential regulatory responses to the financial crisis purport to mitigate excessive corporate risk-taking by systemically important firms.¹⁸ Certain of these responses attempt to mitigate that risk-taking by aligning managerial and investor interests. Thus, requiring a systemically important firm to tie management compensation to the firm's long-term performance is intended to better align managerial and investor interests by penalizing managers who engage such firms in risky ventures that, notwithstanding short-term appeal, ultimately jeopardize investors.¹⁹ Requiring a systemically important firm to maintain so-called contingent capital, in which debt securities convert into equity securities upon specified conditions, is designed to motivate

¹⁸ Recall that macroprudential regulation focuses on the integrity of the financial system, as a system, in contrast to microprudential regulation which focuses on the safety and soundness of individual firms. *See supra* note 16 and accompanying text. These forms of regulation have an indirect overlap: reducing the likelihood that individual firms will fail can help to partially reduce systemic risk by making it less likely that individual systemically important firms will fail. Microprudential regulation does not, however, generally address correlations among failing firms, nor does it address how to protect the financial system as a system.

¹⁹ *See* Part I.A, *infra*.

holders of those convertible debt securities to better monitor and impose covenants against excessive risk-taking, since they more clearly bear the risk of the firm failing.²⁰ As shown below, however, these types of responses are insufficient: even if the managerial and investor interests to engage in risk-taking could be perfectly aligned, that would be insufficient to control risk-taking that causes systemic externalities.

Other types of regulatory responses that are currently used to control excessive corporate risk-taking by systemically important firms do not profess to align interests. Because there is no formal categorization of macroprudential regulatory responses,²¹ there is no formal categorization of this subset of responses. For discussion purposes, this article categorizes these responses along functional lines: regulation attempting to limit the so-called too-big-to-fail (“TBTF”) problem,²² regulation implementing the so-called Volcker Rule,²³ and regulation imposing capital and other types of firm-specific financial requirements.²⁴ Some of these categories overlap.²⁵ However one categorizes these responses, however, the analysis below shows—and policymakers agree²⁶—that they too are inadequate to control risk-taking that causes systemic externalities.

²⁰ See Part I.B, *infra*. These convertible debt securities are sometimes called contingent convertible securities, or “CoCos.” See, e.g., John Glover, *Contingent Convertibles*, BLOOMBERG QUICKTAKE (Mar. 22, 2015, 5:52 PM), <http://www.bloombergtake.com/quicktake/contingent-convertible-bonds>.

²¹ Policymakers and regulators tend to view macroprudential regulation as a loose assortment of “tools” in their toolkit. See, e.g., Robert Hockett, “Implementing Macroprudential Finance-Oversight Policy: Legal Considerations” 12-13 (Jan. 20, 2013 draft prepared for the International Monetary Fund; on file with author) (discussing the “emergent macroprudential ‘toolkit’ as currently constituted”). Even the theoretical scholarship on macroprudential regulation takes a somewhat similar ad hoc approach, yielding “propositions [that] can serve as a tool kit” for regulatory scrutiny. Daniel Awrey, Colleen Baker, & Katharina Pistor, “An Overview of the Legal Theory of Finance” 2 (unpublished manuscript on file with author) (2014).

²² See Part I.C, *infra*.

²³ See Part I.D, *infra*.

²⁴ See Part I.E, *infra*.

²⁵ For example, regulation imposing capital and other types of firm-specific financial requirements can overlap with TBTF regulation because both can make it less likely that a TBTF firm will fail.

²⁶ See *supra* note 6.

A. Compensation

One approach to control excessive corporate risk-taking is to better align managerial compensation with investor interests. To this end, commentators, legislators, and regulators have proposed aligning the long-term compensation of senior and secondary managers of systemically important firms with the interests of those firms' investors.²⁷ The U.S. Securities and Exchange Commission ("SEC"), for example, is authorized to enforce the recovery of bonuses paid to chief executive officers and chief financial officers of public companies that issue financial restatements due to material noncompliance "with any financial reporting requirement under the Securities Laws" resulting from misconduct.²⁸ The SEC also requires all firms whose compensation policies create risks that are "reasonably likely to have a material adverse effect" on the firm to disclose, in the form of a "narrative discourse," how those compensation policies relate to risk management and risk-taking incentives.²⁹

Even greater restrictions were placed on firms receiving bailout moneys in connection with the financial crisis. For example, these firms had ceilings imposed on the compensation payable to the five highest-earning executives, in order to eliminate incentives to take "unnecessary and excessive risks that threaten the value of such" a

²⁷ For a comparison of senior and secondary manager compensation, including an argument that the latter is at least as important as the former, see Steven L. Schwarcz, *Conflicts and Financial Collapse: The Problem of Secondary-Management Agency Costs*, 26 YALE J. REG. 457 (2009).

²⁸ See Section 304 of the Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745, 778 (codified at 15 U.S.C. § 7243 (2012)). The Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"), Pub. L. No. 111-203, §§ 951–956, 971, 972 124 Stat. 1376, 1899–906, 1915 (2010), added Sections 14A, 10C, 14(i), 10D, 14(j), 14(a)(1), and 14B to the Exchange Act of 1934, which extended the federal government's regulatory reach into a company's internal governance and compensation practices even further.

²⁹ See, e.g., Lisa M. Fairfax, *Symposium: Government Ethics and Bailouts: The Past, Present, and Future: Government Governance and the Need to Reconcile Regulation with Board Fiduciary Duties*, 95 MINN. L. REV. 1692, 1704 (2011) (citing Proxy Disclosure Enhancements, 74 Fed. Reg. 68,334 (Dec. 23, 2009)) (to be codified at 17 C.F.R. § 229, 239-40, 249, 274).

firm.³⁰ These firms also were required to have an independent “Board Compensation Committee,” which would meet “to discuss and evaluate employee compensation plans in light of an assessment of any risk posed to [such a firm] from such plans.”³¹ Additionally, they were required to recover any form of “incentive compensation paid to a senior executive officer and any of the next 20 most highly-compensated employees” if the financial statements or other criteria on which the compensation was based later is found to be “materially inaccurate.”³² The Dodd-Frank Act extends certain of these requirements to firms that are required to file periodic reports to the SEC.³³ It also requires firms to implement shareholder advisory voting on executive compensation, known as “say on pay.”³⁴

Nonetheless, a misalignment remains because these compensation requirements focus exclusively on the effect of risk-taking on the firm and its investors. None of these requirements takes into account the potential for risk-taking to create systemic externalities.³⁵ These requirements therefore will be insufficient to control that risk-taking.

³⁰ American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (adding § 111(b)(3)(A) to the Emergency Economic Stabilization Act). *See also id.* (amending § 111 of the Emergency Economic Stabilization Act of 2008 to include § 111(b)(3)(A)) (preventing the executives with top five highest salaries of any TARP company from receiving compensation incentivizing them to take “unnecessary and excessive risks that threaten the value” of the firm.).

³¹ American Recovery and Reinvestment Act § 7001 (adding § 111(b)(4) to the Emergency Economic Stabilization Act).

³² *Id.* (adding § 111(b)(3)(B) to the Emergency Economic Stabilization Act).

³³ *See, e.g.*, Dodd-Frank Act § 954 (requiring senior managers to return any compensation they received in the past three years based on erroneous financial reports submitted to the SEC).

³⁴ Dodd-Frank Act § 951.

³⁵ *Cf.* Jesse D. Gossett, *Financial Institution Executive Compensation: The Problem of Financially Motivated Excessive Risk-Taking, the Regulatory Response, and Common Sense Solutions*, 14 U.C. DAVIS BUS. L.J. 51, 63 (2013) (observing that the compensation provisions of the Dodd-Frank Act and the Sarbanes-Oxley Act “will do nothing to actually reduce the level of systemic risk at financial institutions which means [such provisions] will be largely ineffective at holding off the next financial crisis”); PETER F. DRUCKER, *THE NEW SOCIETY: THE ANATOMY OF INDUSTRIAL ORDER* 340-43 (1950)

B. Contingent Capital

Contingent capital regulation assumes that a firm’s creditors—who would not benefit from the firm’s increased profitability but could be harmed by its failure—should be good monitors against excessive risk-taking if they more clearly bear the risk of the firm failing. To assign more of that risk to creditors, such regulation requires certain debt claims to convert to equity upon specified (deteriorating) financial conditions.³⁶ To reduce the chance those conditions will occur, creditors impose even stricter loan covenants on their debtor-firms.³⁷ That aligns managerial and investor interests by contractually restricting risk-taking.

Contingent capital regulation is unlikely to be sufficient to control risk-taking that causes systemic externalities. Admittedly it might indirectly and partially reduce systemic risk by reducing the likelihood that any given firm will fail.³⁸ As a practical matter, however, the firm and its shareholders will want the firm to be able to engage in risk-taking in order to make profits.³⁹ Firms customarily offer creditors higher interest rates to

(arguing that board alignment with shareholder interests would weaken the desirable capacity of managers to manage in the public interest).

³⁶ Debt securities that are required to convert to equity securities upon certain conditions, such as the debtor-firm’s equity capital falling below a pre-set minimum, are often called contingent convertible securities or, more simply, “CoCos.” *See supra* note 20.

Contingent capital regulation also serves to convert debt claims of a troubled firm into equity interests, thereby reducing the likelihood that the firm will default. *See infra* note 63.

³⁷ *Cf.* Simone M. Sepe, *Corporate Agency Problems and ‘Dequity’ Contracts*, 36 J. CORP. L. 113, 127–28 (2010) (observing that “although the law grants creditors no special rights against managers, creditors can acquire substantial control powers over corporate operations by bargaining for both positive and negative covenants”).

³⁸ *See supra* note 18.

³⁹ As discussed, corporate risk-taking is economically necessary and desirable. *See supra* note 4 and accompanying text. *But cf.* John Armour & Jeffrey N. Gordon, *Systemic Harms and Shareholder Value*, 6 J. OF LEGAL ANALYSIS 35, 54 (2014) (arguing that because systemic risks cannot be avoided by investment diversification, shareholders can be indirectly harmed by excessive risk-taking that triggers a systemic collapse).

compensate for allowing looser covenants,⁴⁰ and experience shows that creditors often “go for the gold,” choosing the higher rates over stronger covenants.⁴¹ If private and public interests were perfectly aligned, the pricing theoretically should offset the risks. But in negotiating loan covenants, creditors have no incentive to control systemic externalities. They therefore will not price in the systemic consequences of risk-taking.⁴²

Also, contingent capital regulation could have unintended consequences. Because it is riskier, debt issued as contingent capital would be more expensive than non-convertible debt.⁴³ Capitalizing a systemically important firm with lots of contingent capital, in order to make the firm less likely to fail, might also motivate the firm’s managers to take even greater corporate risks.⁴⁴

The foregoing discussion has focused on controlling excessive corporate risk-taking by aligning managerial and investor interests, showing that existing regulatory responses are insufficient to prevent systemic externalities. I next examine whether

⁴⁰ See, e.g., Steven L. Schwarcz, *Rethinking A Corporation’s Obligations to Creditors*, 17 CARDOZO L. REV. 647, 651 n.12 (1996).

⁴¹ Larry Light, *Bondholder Beware: Value Subject to Change Without Notice*, BUSINESS WEEK, Mar. 29, 1993, at 34, available at <http://www.bloomberg.com/bw/stories/1993-03-28/bondholder-beware-value-subject-to-change-without-notice> (“Bondholders can—and will—fuss all they like. But the reality is, their options are limited: higher returns or better protection [in the form of stronger covenants]. Most investors will continue to go for the gold.”).

⁴² Nor are creditor-imposed loan covenants likely to protect the financial system, as a system. Cf. Iman Anabtawi & Steven L. Schwarcz, *Regulating Ex Post: How Law Can Address the Inevitability of Financial Failure*, 92 TEX. L. REV. 75, 87 (2013) (examining how macroprudential regulation should help to protect the financial system, as a system).

⁴³ See, e.g., Eric S. Halperin, *Coco Rising: Can the Emergence of Novel Hybrid Securities Protect from Future Liquidity Crises?*, 8 BYU INT’L L. & MGMT. REV. 15, 21–23 (2011) (explaining why issuing CoCos to investors may be more expensive than issuing ordinary debt).

⁴⁴ Cf. George Pennacchi, *A Structural Model of Contingent Bank Capital*, Federal Reserve Bank of Cleveland, Working Paper No. 10-04 (rev. June 2011), at 30, available at <https://business.illinois.edu/gpennacc/ConCap030211.pdf> (observing that a “bank that issues contingent capital faces a moral hazard incentive to increase its assets’ jump risks”).

regulatory responses that profess to control excessive corporate risk-taking in other ways could prevent systemic externalities.

C. Too Big to Fail

Another type of regulatory response to control excessive corporate risk-taking focuses on the TBTF problem: that systemically important firms might engage in excessive risk-taking because they would profit by a success and be bailed out by the government in case of a failure. This is a problem of moral hazard, that persons protected from the negative consequences of their risky actions will be more tempted to take risks.⁴⁵

TBTF regulation seeks to reduce that moral hazard by limiting the government's authority to provide bailouts. In the United States, for example, it restricts the Federal Reserve's authority to act as a lender of last resort to a failing financial institution.⁴⁶

This aspect of TBTF regulation is unlikely to be sufficient to control excessive risk-taking, and it might even increase systemic externalities. It is unlikely to be sufficient to control excessive risk-taking because the misalignment discussed in this article is completely independent of the possibility of a government bailout.⁴⁷ And it might inadvertently increase systemic externalities by preventing the government from bailing out a failing systemically important firm.⁴⁸

⁴⁵ See, e.g., GARY H. STERN & RON J. FELDMAN, *TOO BIG TO FAIL: THE HAZARDS OF BANK BAILOUTS* (2004).

⁴⁶ The Dodd-Frank Act limits the authority of the Federal Reserve to make emergency loans under section 13(3) of the Federal Reserve Act. Dodd-Frank amended that subsection to require the Federal Reserve to consult with and receive approval from the Secretary of the Treasury to ensure that any emergency lending is designed to provide liquidity to the markets and not to aid a financially failing firm. Dodd-Frank Act § 1101(a)(6).

⁴⁷ Cf. *supra* notes 10-15 and accompanying text (showing that misalignment results from externalized harm, not from reliance on a bailout).

⁴⁸ See, e.g., Iman Anabtawi & Steven L. Schwarcz, *Regulating Systemic Risk: Towards an Analytical Framework*, 86 NOTRE DAME L. REV. 1349, 1376 (2011); John C. Coffee, Jr., *Systemic Risk after Dodd Frank: Contingent Capital and the Need for Regulatory*

TBTF regulation also focuses on making systemically important firms less likely to need a government bailout if they suffer devastating losses—whether or not those losses are caused by excessive risk-taking.⁴⁹ The Dodd-Frank Act, for example, requires systemically important firms to file so-called living wills, setting forth how they could liquidate with minimal systemic impact.⁵⁰ Because this focus of TBTF regulation does not purport to control excessive corporate risk-taking, it is not central to this article’s analysis.⁵¹

Strategies Beyond Oversight, 111 COLUM. L. REV. 795, 825 (2011) (observing that the Dodd-Frank Act prevents federal government lender-of-last-resort assistance to nonbank financial firms that are solvent but illiquid, thereby forcing “some firms into an arguably unnecessary liquidation”).

⁴⁹ Yet another focus of TBTF regulation is on reducing the TBTF nature of systemically important firms, such as Senator Elizabeth Warren’s proposal to break up large banks. See Joseph Lawler, *Warren Introduces Glass-Steagall Bill to Break up Big Banks*, WASH. EXAMINER, (July 7, 2015), available at <http://www.washingtonexaminer.com/warren-introduces-glass-steagall-bill-to-break-up-big-banks/article/2567757>.

⁵⁰ See, e.g., Jennifer Meyerowitz et al., *A Dodd-Frank Living Wills Primer: What you Need to Know Now*, 31 AM. BANKR. INST. J. 34, 34 (Aug. 2012) (“As part of the goal to remove the risks to the financial system posed by ‘too big to fail’ institutions, § 165(d) of the Dodd-Frank Act requires systemically important financial institutions to create living wills to facilitate rapid and orderly resolution, in the event of material financial distress or failure”) (internal quotations omitted).

⁵¹ The living-will requirement is unlikely, in any event, to eliminate systemic externalities caused by the failure of a TBTF firm. In my years as a workout and bankruptcy lawyer, I rarely saw a firm’s failure that accurately reflected, much less closely resembled, expectations about the firm when it was profitable. Furthermore, living wills do not prevent the concurrent failure of multiple otherwise-TBTF firms from, collectively, having a systemic impact. Cf. Victoria McGrane, *FDIC Chief Martin Gruenberg: Big Bank Failure Won’t Imperil System*, WALL ST. J., May 12, 2015, at C1 (observing that some in Congress “doubt regulators could handle the failure of multiple major firms at the same time”). The financial crisis demonstrated that a concurrence of failures is likely when the causes of the failures are interconnected, such as an industry-wide overreliance on credit ratings. Steven L. Schwarcz, *Protecting Financial Markets: Lessons from the Subprime Mortgage Meltdown*, 93 MINN. L. REV. 373, 379-83 & 404-05 (2008). Cf. Janet L. Yellen, Vice-Chair of Board of Governors of the Federal Reserve System, Speech at the Annual Meeting of the National Association for Business Economics, Denver, Col., Oct. 11, 2010, available at 2010 WL 3952044 (F.R.B.) (attributing the financial crisis to concurrences of interrelated failures).

D. Volcker Rule

In response to the financial crisis, former Federal Reserve Chairman Paul Volcker proposed that because bank deposits are federally guaranteed, deposit-taking banks should be restricted from making risky investments.⁵² This proposal became known as the “Volcker Rule.”⁵³ The substance of the Volcker Rule was implemented by the Dodd-Frank Act, which prohibits banks from (1) “engag[ing] in proprietary trading”⁵⁴ or (2) “acquir[ing] or retain[ing] any equity, partnership, or other ownership interest in or sponsor[ing] a hedge fund or a private equity fund.”⁵⁵

The Volcker Rule is also insufficient to control risk-taking that causes systemic externalities. Besides the Rule’s limited application (to investments by banks), its regulatory rationale is microprudential: protecting the safety and soundness of individual firms. As with any other type of microprudential regulation, the Volcker Rule indirectly and partially reduces systemic risk by reducing the likelihood that an individual bank

⁵² Paul Volcker, Op-Ed., *How to Reform Our Financial System*, N.Y. TIMES (Jan. 30, 2010), <http://www.nytimes.com/2010/01/31/opinion/31volcker.html?pagewanted=all>.

⁵³ David Cho & Binyamin Appelbaum, *Obama’s ‘Volcker Rule’ Shifts Power Away from Geithner*, WASH. POST (Jan. 22, 2010), <http://www.washingtonpost.com/wp-dyn/content/article/2010/01/21/AR2010012104935.html>.

⁵⁴ 12 U.S.C. § 1851(a)(1)(A) (2012). “Proprietary trading” is defined as engaging as a principal for the trading account of the banking entity or [relevant] nonbank financial company . . . in any transaction to purchase or sell, or otherwise acquire or dispose of, any security, any derivative, any contract of sale of a commodity for future delivery, any option on any such security, derivative, or contract, or any other security or financial instrument that the appropriate Federal banking agencies, the Securities and Exchange Commission, and the Commodity Futures Trading Commission . . . determine [by rule]. *Id.* § 1851(h)(4). Reference to a “trading account” is intended to primarily cover short-term trades, though federal regulators could expand that coverage. *See id.* § 1851(h)(6) (defining a trading account as “any account used for acquiring or taking positions in the securities and instruments [described in the definition of proprietary trading] principally for the purpose of selling in the near term (or otherwise with the intent to resell in order to profit from short-term price movements), and any such other accounts as the appropriate Federal banking agencies, the Securities and Exchange Commission, and the Commodity Futures Trading Commission . . . determine [by rule]”).

⁵⁵ *Id.* § 1851(a)(1)(B). Notwithstanding these restrictions, trading is permitted “in connection with underwriting or market-making, to the extent that either does not exceed near term demands of clients, customers, or counterparties; on behalf of customers; or by an insurance business for the general account of the insurance company.”

covered by the Rule will fail; but it does not address correlations among failing firms, nor does it address how to protect the financial system as a system.⁵⁶

E. Firm-specific Financial Requirements

In theory, firm-specific financial requirements, such as capital and solvency requirements, could help to control excessive corporate risk-taking by systemically important firms. For example, some of the largest systemically important firms are believed to have a funding advantage, “deriv[ing] from the belief of some creditors that the government might act to prevent [such a firm] from defaulting on its debts.”⁵⁷ That funding advantage “creates an incentive for [those firms] to take on even more leverage and make themselves even more systemic (in order to increase the value of the [funding advantage] subsidy).”⁵⁸ Imposing a financial surcharge on those systemically important firms could, if calibrated correctly, “offset [that] subsidy and thereby cancel out these undesirable effects.”⁵⁹

In practice, however, firm-specific financial requirements are not yet used expressly to control excessive corporate risk-taking. No calibrated surcharge, for

⁵⁶ See *supra* note 18. See also Crawford, *supra* note 9, at 26 (observing that “While prudential oversight is extremely important for addressing bank-like risks, it has never been enough on its own to prevent panics.”). The Volcker Rule may also be counterproductive. Moody’s has warned, for example, that it might “diminish the flexibility and profitability of banks’ valuable market-making operations and place them at a competitive disadvantage to firms not constrained by the rule.” Edward Wyatt, *Regulators to Set Forth Volcker Rule*, N.Y. TIMES, Oct. 10, 2011 (quoting Moody’s). See also George W. Madison, Gary J. Cohen, & William A. Shirley, *Reconsidering Three Dodd-Frank Initiatives: The Volcker Rule, Limitations on Federal Reserve Section 13(3) Lending Power, and SIFI Thresholds*, 34 BANKING & FIN. SERVICES POL’Y REP. NO. 6, 1, 6–7 (June 2015) (arguing that the Volcker Rule will not mitigate systemic risk because its effect will be to move trading activity from banks, which are subject to capital and liquidity requirements, to other market participants that are not subject to the same prudential regulation; and that restricting banks from engaging in proprietary trading may actually aggravate liquidity problems). The ultimate value of the Volcker Rule will be an empirical question: whether the benefits of its limitation on proprietary trading will outweigh profits lost by losing the ability to engage in such trading.

⁵⁷ BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, *supra* note 11, at 13.

⁵⁸ *Id.*

⁵⁹ *Id.*

example, is currently imposed to control such risk-taking.⁶⁰ Instead, firm-specific financial requirements are being imposed to try to make systemically important firms more internally robust, so (as is the goal of TBTF regulation⁶¹) they will be less likely to need a government bailout if they suffer losses—whether or not those losses are caused by excessive risk-taking.⁶² Because this focus of firm-specific financial requirements does not purport to control excessive corporate risk-taking, it is not central to this article’s analysis.⁶³

It nonetheless may be worth observing that this focus of firm-specific financial requirements is unlikely to eliminate systemic externalities. While making systemically important firms more internally robust should partially reduce systemic risk by reducing the likelihood that any given such firm will fail, these requirements are effectively microprudential—regulating the safety and soundness of individual firms.⁶⁴ Firm-specific

⁶⁰ *Id.* (observing that imposing such a surcharge “would require more precision in estimating [certain factors] in the context of surcharges for individual firms than is now attainable”).

⁶¹ *See supra* note 49 and accompanying text.

⁶² BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, *supra* note 11, at 2. The Federal Reserve has also characterized this use of firm-specific financial requirements as reducing a systemically important firm’s “systemic footprint.” *Id.* at iii.

⁶³ This article focuses on controlling excessive corporate risk-taking as a means of reducing systemic externalities. As discussed above and *supra* notes 49-51 and accompanying text, other regulatory approaches to try to reduce systemic externalities are not central to this article’s analysis. Other such regulatory approaches include the use of contingent capital regulation to convert debt claims of a troubled firm into equity interests, thereby reducing the likelihood that the firm will default, and the FDIC-inspired strategy for administratively resolving a large complex financial institution. *Cf.* Mike Konczal, *Sheila Bair: Dodd-Frank Really Did End Taxpayer Bailouts*, WASH. POST, May 18, 2013 (WonkBlog interview with Sheila Bair), available at <http://www.washingtonpost.com/blogs/wonkblog/wp/2013/05/18/sheila-bair-dodd-frank-really-did-end-taxpayer-bailouts/> (reporting that “the FDIC has come up with a viable strategy for resolving a large complex financial institution. . . . The FDIC will take control of a holding company and put creditors and shareholders into a receivership where they, not taxpayers, will absorb any losses. This will allow the subsidiaries to remain operational, avoiding systemic disruptions, as the overall entity is unwound over time”).

⁶⁴ *See supra* note 18. *Cf. supra* note 38 and accompanying text (making a similar observation in the context of contingent capital regulation). *Also cf.* Daniel Schwarcz &

financial requirements do not purport to (macroprudentially) protect the integrity of the financial system as a system. Such financial requirements might also be counterproductive, making firms that are subject to them less competitive,⁶⁵ driving “credit intermediation to the less regulated shadow banking sector,”⁶⁶ and inadvertently hurting the real economy.⁶⁷

II. REDESIGNING REGULATION

For the reasons discussed above, the regulatory responses to the financial crisis that purport to mitigate excessive corporate risk-taking by systemically important firms are unlikely to be sufficient to control risk-taking that causes systemic externalities. As a result, that risk-taking is likely to continue. Indeed, those regulatory responses may be

Steven L. Schwarcz, *Regulating Systemic Risk in Insurance*, 81 U. CHI. L. REV. 1569, 1580 (2014) (observing that although “solvency regulation . . . attempts to safeguard the financial strength of individual insurers[,] the core goal of even solvency regulation has long been understood to be protecting consumers by ensuring that insurers have the financial capacity to pay policyholder claims when they become due”).

⁶⁵ Cf. Eduardo Porter, *Recession’s True Cost is Still Being Tallied*, N.Y. TIMES, Jan. 21, 2014, at B1, available at <http://www.nytimes.com/2014/01/22/business/economy/the-cost-of-the-financial-crisis-is-still-being-tallied.html> (observing that regulations that require financial institutions to increase capital cushions to buffer against risks and potential losses have been criticized for cutting into global economic output and reducing jobs); Nabila Ahmed & Sridhar Natarajan, *Jefferies Is Poaching the Big Banks’ Loan Business With Help From the Fed*, BLOOMBERG.COM May 29, 2015 12:14 AM, <http://www.bloomberg.com/news/articles/2015-05-29/jefferies-poaching-big-banks-loan-business-with-help-from-fed> (reporting that unregulated hedge funds “step in to fill a void” when regulated banks are restricted from fulfilling market needs). The potential for firm-specific financial requirements to make firms less competitive is a result of Congress’ “mandate provided by the Dodd-Frank Act, which instructs the [Federal Reserve] Board to mitigate risks to the financial stability of the United States” without consideration of costs and benefits. BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, *supra* note 11, at 13.

⁶⁶ BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, *supra* note 11, at 13.

⁶⁷ See, e.g., Steven L. Schwarcz, *Regulating Financial Change: A Functional Approach*, 100 MINN. L. REV. [cite] (forthcoming Apr. 2016) (observing that countercyclical capital requirements may not be feasible because it is “virtually impossible to know ex ante whether a financial cycle is rational or merely a bubble”; and discussing how the misapplication of such firm-specific financial requirements led to the S&L crisis of the 1980s).

insufficient to control risk-taking that hurts the firm's interests, much less the public's interests. For example, almost half of the thirty-six banks covered in a recent Financial Stability Board survey failed to meet the "fundamental criteria for sound risk governance."⁶⁸ And J.P. Morgan Chase, UBS, and Barclays suffered huge losses from excessive risk-taking or lack of risk-taking oversight.⁶⁹

Whether or not more should be done to control risk-taking that hurts the firm's interests,⁷⁰ more certainly should be done, in principle, to control excessive corporate risk-taking that causes systemic externalities. Subpart A below explains why regulation should be appropriate for that purpose, even though it is inappropriate to control most other externalities that result from corporate risk-taking. Subparts B and C then examine and compare regulating-substance and regulating-governance options to control excessive corporate risk-taking that causes systemic externalities. Although financial regulation traditionally regulates substance (such as imposing capital-adequacy standards),⁷¹ systemic risk regulation should additionally focus on regulating a firm's governance to better align private and public interests.

A. Additional Regulation is Needed

Although in principle more should be done to control excessive corporate risk-taking that causes systemic externalities, one cannot merely assume that additional regulation is justified. Corporate risk-taking routinely causes externalities,⁷² yet

⁶⁸ Jim Brunsten, *Banks Must Boost Risk Oversight After Trading Scandals*, *FSB Says BLOOMBERG.COM* (Feb. 12, 2013, 10:00 AM), <http://www.bloomberg.com/news/articles/2013-02-12/banks-must-boost-risk-oversight-after-trading-scandals-fsb-says>.

⁶⁹ *Id.* In 2012, a J.P. Morgan trader, aptly nicknamed the London Whale for his big positions, caused the bank to report its biggest-ever trading loss of \$6.2 billion. Also in 2012, UBS suffered the largest loss from unauthorized trading in U.K. history, \$2.3 billion, when one of its traders was convicted of fraud and sentenced to prison. *Id.*

⁷⁰ This article does not focus on that question per se; it focuses instead on risk-taking that harms the public's interests.

⁷¹ See Part II.B, *infra*.

⁷² Steven L. Schwarcz, *Collapsing Corporate Structures: Resolving the Tension Between Form and Substance*, 60 *BUS. LAW.* 109, 144 (2004). Most "of a corporate structure's

regulation controls few of those externalities.⁷³ Regulation cannot, realistically, control all corporate externalities.⁷⁴

Nonetheless, for at least three reasons,⁷⁵ regulation should require firms to mitigate their systemic externalities. First, systemic externalities “can cause much more harm than non-systemic externalities.”⁷⁶ Because they impact the real economy, systemic

externalities result from the limited-liability rule of corporation law.” *Id.* For an analysis of whether that rule itself should be limited, *see The Governance Structure of Shadow Banking, infra* note 76.

⁷³ *Cf.* MICHAEL TREBILCOCK, *THE LIMITS OF FREEDOM OF CONTRACT* 58 (1993) (“Even if both parties to a particular exchange benefit from it, the exchange may entail the imposition of costs on non-consenting third parties. . . . The problem of third-party effects from exchange relationships is pervasive and not aberrational. Almost every transaction one can conceive of is likely to impose costs on third parties.”). For arguments that corporate law should be used to control externalities, *see, e.g.*, Lawrence E. Mitchell, *The Legitimate Rights of Public Shareholders*, 66 WASH. & LEE L. REV. 1635, 1665–66 (2009) (arguing that because “creditors were providing the bulk of the risk capital,” “[m]anagerial incentives can be distorted significantly by the existing regime of shareholder participation rights”).

⁷⁴ *Cf.* TREBILCOCK, *supra* note 73, at 58 (explaining that if externalities resulting from everyday transactions justified prohibiting the exchange process or putting constraints upon it, then “freedom of contract would largely be at an end”); Ronald H. Coase, *The Firm, the Market, and the Law*, in *THE FIRM, THE MARKET, AND THE LAW* 1, 26 (1988) (arguing that the existence of externalities does not establish a prima facie case for intervention because government regulation is also not without cost).

⁷⁵ A fourth reason why regulation should require firms to mitigate their systemic externalities is that the financial crisis has established and solidified a norm that financial regulation should address and mitigate systemic risk. *See, e.g.*, Harold S. Bloomenthal & Samuel Wolff, *Recent Developments in International Securities Regulation*, in 1 SECURITIES AND FEDERAL CORPORATE LAW REPORT 33 NO. 11 (Nov. 2011), *available at* Westlaw 33 NO. 11 SECFEDCLN 1 (commenting that the United States has led the international financial regulatory community in implementing the reforms agreed upon by the Group of Twenty, or G-20, in the aftermath of the financial crisis, and describing this regulation as “focused on the familiar crisis and postcrisis themes of systemic and macroeconomic risk, including regulation and resolution of systemically important financial institutions (SIFIs) and global SIFIs (G-SIFIs), bank capital requirements and supervision, derivatives regulation, investment advisers, executive compensation, and rating agencies”).

⁷⁶ Steven L. Schwarcz, *The Governance Structure of Shadow Banking: Rethinking Assumptions About Limited Liability*, 90 NOTRE DAME L. REV. 1, 21 (2014).

externalities can, for example, lead to “widespread poverty and unemployment.”⁷⁷ A prominent governor of the Federal Reserve similarly argues that “prudential regulation [should] need to involve itself with corporate governance” because “risk-taking” by systemically important financial intermediaries “carries substantial potential societal consequences.”⁷⁸ Second, systemic externalities harm the public, as opposed to private stakeholders who could contract to protect themselves.⁷⁹ Third, systemic externalities can, as this article will show, realistically, pragmatically, and efficiently be mitigated.⁸⁰

For these reasons, systemic externalities should be distinguished from other externalities for regulatory purposes. I next examine how regulation could further control corporate risk-taking that causes systemic externalities.⁸¹

B. Regulating Substance

Regulation could control corporate risk-taking that causes systemic externalities by imposing specific regulatory requirements,⁸² making certain actions illegal or tortious,

⁷⁷ *Id.* at 15 n. 99 (quoting *Systemic Risk*, *supra* note 9, at 207, 235).

⁷⁸ Governor Daniel K. Tarullo, Federal Reserve System, *Corporate Governance and Prudential Regulation*, speech at the Association of American Law Schools 2014 Midyear Meeting, June 9, 2014, at 2. *Cf.* Jonathan R. Macey & Maureen O’Hara, *The Corporate Governance of Banks*, 9 FED. RES. BANK OF NEW YORK ECON. POL’Y REV. 91, 97-98 (2003) (arguing that it may be economically efficient to modify the corporate governance of FDIC-insured banks to account for systemic risk).

⁷⁹ *Cf.* Ian B. Lee, *The Role of the Public Interest in Corporate Law*, in RESEARCH HANDBOOK ON THE ECONOMICS OF CORPORATE LAW 106, 115 (Claire A. Hill & Brett H. McDonnell eds., 2012) (arguing that corporation law should be able to impose rules to protect the public, just as law otherwise protects the public—such as a municipal park rule that protects residents of the neighborhood from excessive noise).

⁸⁰ *See* Part III.B, *infra*.

⁸¹ In a prior article, I made a related but narrower inquiry. *See* Steven L. Schwarcz, *Excessive Corporate Risk-Taking and the Decline of Personal Blame*, 65 EMORY L.J. issue no. 2 (forthcoming Dec. 2015) (manuscript at 10 n. 28), available at <http://ssrn.com/abstract=2553511>: “This article does not examine all forms of optimal regulation that could limit excessive risk-taking or its systemic consequences; its scope is limited to regulation that imposes personal liability to deter excessive risk-taking. Thus, the article does not consider, for example, whether to break up systemically important firms.”

or imposing corporate governance duties on the managers of systemically important firms.⁸³ This article refers to imposing specific regulatory requirements and making certain actions illegal or tortious as “regulating substance,” as discussed in this Subpart B. In contrast, this article refers to imposing corporate governance duties as “regulating governance,”⁸⁴ which is discussed in Subpart C below.

Financial regulation traditionally regulates substance because regulating governance is thought to “weaken[] the wealth-producing capacities of the firm.”⁸⁵ The responses to the financial crisis discussed in Part I, for example—including those that are designed to control risk-taking by aligning managerial and investor interests—regulate substance. The capital-adequacy standards imposed on banks for decades under the Basel

⁸² For an example of how regulatory requirements can drive contractual restrictions, *see, e.g., supra* note 37-42 and accompanying text (discussing how contingent capital regulation motivates contractual loan-covenant restrictions).

⁸³ *See, e.g.,* Franklin A. Gevurtz, *The Role of Corporate Law in Preventing a Financial Crisis*, in *CORPORATE GOVERNANCE AFTER THE FINANCIAL CRISIS* 163, 168-75 (P.M. Vasudev & Susan Watson eds., 2012).

⁸⁴ Commentators have made a somewhat parallel distinction between external and internal regulation, the former referring to standards imposed on a firm and the latter referring to any interference with the firm's internal operations, including limiting executive compensation. *See* Lee, *supra* note 79, at 124. This article's distinction between regulating substance and regulating governance—in which the latter refers only to regulating corporate governance *procedures* themselves—attempts to be more precise (*cf.* Lee, *supra*, calling the distinction between external and internal regulation as a “distinction without a difference”). For example, limiting executive compensation in prescribed ways would be regarded as regulating substance in this article but as internal regulation under the external-internal distinction.

⁸⁵ Lee, *supra* note 79, at 124. *See also* Leo E. Strine, Jr. & Nicholas Walter, 100 *CORNELL L. REV.* 335, 380-81 (2015) (also contending that the most responsible, legitimate, and effective way to control externalities is to have the “legitimate instruments of the people's will, reflective of their desire, set the boundaries for corporate conduct”); STEPHEN M. Bainbridge, *CORPORATION LAW AND ECONOMICS* 425 (2002) (pointing out that negative externalities created by corporate conduct should be “constrained through general welfare legislation, tort litigation, and other forms of regulation”). *Cf.* Milton Friedman, *The Social Responsibility of Business Is to Increase Its Profits*, *N.Y. TIMES MAG.*, Sept. 13, 1970, available at <http://umich.edu/~thecore/doc/Friedman.pdf> (arguing that managers lack the political legitimacy and expertise to consider social interests). In principle, I agree with these arguments, especially where the regulation concerns routine externalities or externalities as to which private parties could contract to protect themselves.

Accords regulate substance.⁸⁶ As this article has shown, however, regulating substance has so far proved insufficient to control the excessive corporate risk-taking that causes systemic externalities.⁸⁷

Commentators have proposed other possible ways to regulate substance to help control that corporate risk-taking.⁸⁸ For example, regulation could require systemically important firms to pay into a fund that would be used to help offset systemic risks and costs.⁸⁹ This would not only help to internalize externalities; it also would motivate systemically important firms to monitor each other, in order to avoid having to pay more into the fund, thereby helping control each other's risky behavior.⁹⁰ FDIC deposit insurance provides a precedent for this type of a fund.⁹¹

⁸⁶ See, e.g., Heath P. Tarbert, *Are International Capital Adequacy Rules Adequate? The Basle Accord and Beyond*, 148 U. PA. L. REV. 1771, 178–86 (2000) (stating that the “capital adequacy standards for commercial banks . . . prescribed a substantive set of risk-based capital adequacy standards”).

⁸⁷ See *supra* notes 56–69 and accompanying text.

⁸⁸ Only one country, in a limited banking context, has proposed imposing criminal illegality. The U.K.'s Financial Conduct Authority and the Bank of England's regulatory arm, the Prudential Regulation Authority, have proposed regulations that would impose personal criminal liability on bankers of a failed bank unless they could prove that they acted appropriately. Jill Treanor, *Regulators Want Reckless Bankers to be Criminally Liable Under New Plans*, THE GUARDIAN, Jul. 30, 2014,

<http://www.theguardian.com/business/2014/jul/30/regulators-want-bankers-to-accept-criminal-liability>. In protest, bank directors have been threatening to quit. See, e.g., Sean Farrell, *HSBC Directors to Quit Over Threat to Jail Bosses for Banking Crises*, THE GUARDIAN, Oct. 7, 2014, <http://www.theguardian.com/business/2014/oct/07/hsbc-directors-quit-jail-bank-crises>.

⁸⁹ *Regulating Ex Post*, *supra* note 42, at 102–03; *Regulating Systemic Risk*, *supra* note 48, at 1402. This type of regulation ideally should be global to avoid prejudicing the competitiveness of firms subject to U.S. regulatory requirements.

⁹⁰ *Regulating Ex Post*, *supra* note 42, at 102–03; *Regulating Systemic Risk*, *supra* note 48, at 1402. See also Jeffrey N. Gordon & Christopher Muller, *Confronting Financial Crisis: Dodd-Frank's Dangers and the Case for a Systemic Emergency Insurance Fund*, 28 YALE J. ON REG. 151, 210 (2011) (arguing that a systemic risk fund “amounts to a mutualization of risk that should encourage more cautious firms to press regulators to rein in firms and practices that pose systemic risks”).

⁹¹ *Regulating Ex Post*, *supra* note 42, at 102–03; *Regulating Systemic Risk*, *supra* note 48, at 1402.

Although such a requirement theoretically could help to control excessive corporate risk-taking that causes systemic externalities, it may not be feasible in the near future. Politically, although such a requirement was in the bill that became the Dodd-Frank Act, it was deleted because certain members of Congress felt (incorrectly in the author’s opinion) that the very creation of a systemic risk fund would itself increase moral hazard.⁹² Practically, such a requirement would need further analysis of, and also would need a consensus on, how to calculate the required contributions. Such calculations would be needed both to make the size of the fund sufficiently viable for its purpose and also to allocate the required contributions among the wide range of systemically important firms.⁹³

Commentators have also suggested a so-called “Pigouvian tax” as another possible way to help control, or at least to help internalize the systemic impact of, excessive corporate risk-taking. This is a tax designed to “offset the effects of [a systemically important] bank’s actions on wider society.”⁹⁴ Along these lines, the Financial Stability Board (“FSB”) has proposed imposing a “systemic [capital] surcharge” on the largest banks.⁹⁵

⁹² Gordon & Muller, *supra* note 90, at 208. See also Steven L. Schwarcz, *Identifying and Managing Systemic Risk: An Assessment of Our Progress*, HARV. BUS. L. REV. ONLINE (2011), available at <http://www.hblr.org/2011/07/systemicrisk/>.

⁹³ Cf. Steven L. Schwarcz, *Too Big To Fail?: Recasting the Financial Safety Net*, 94, 99 nn. 40–41, in *THE PANIC OF 2008* (Lawrence E. Mitchell & Arthur E. Wilmarth, Jr., eds., 2010) (discussing these practical considerations, and also suggesting that—so long as each contributing firm has enough capital at risk in the fund—the government could supplement the fund to ensure that its size is sufficiently viable).

⁹⁴ Gianni De Nicolò, Giovannie Favara, & Lev Ratnovski, *Externalities and Macroprudential Policy*, 2 J. FIN. PERSPECTIVES 95, 103 (2014); Andrew G. Haldane, Bank of England, *On Being the Right Size*, 2 J. FIN. PERSPECTIVES 13, 16 (2014).

⁹⁵ See, e.g., Haldane, *supra* note 94, at 16–17 (stating that a capital surcharge of over 7% would “remove 90% of the systemic externality”).

The practicality of a Pigouvian tax is unclear. At least as proposed as a capital surcharge, it could be difficult to impose on a systemically important non-bank.⁹⁶ Imposing such a surcharge on a bank would also be imperfect, economists argue, because a capital surcharge is used to achieve two (sometimes) incompatible goals—“as a buffer against unexpected loss and [to] limit risk taking.”⁹⁷ To the extent it serves as a buffer against unexpected loss, a Pigouvian tax would simply be a type of firm-specific financial requirement, which would not be central to this article’s analysis.⁹⁸

Tort law is also unlikely to control excessive corporate risk-taking that causes systemic externalities. As a form of public control through the common law system of privately enforced rights,⁹⁹ tort law has long been a fundamental tool to impose personal civil liability to remedy harm for unreasonable risk-taking.¹⁰⁰ Its utility is limited, however, to remedying foreseeable harm.¹⁰¹ But systemic harm is rarely foreseeable.

Systemic harm instead affects a wide range of third parties in unpredictable ways. Consider, for example, an individual who is forced to close her family-owned restaurant during a systemically caused recession. Or taking a more concrete example from the financial crisis, consider whether to impose tort liability on a manager of a financial firm who, in the expectation of a bonus, sells highly-leveraged types of risky asset-backed

⁹⁶ Beatrice Weder di Mauro, Ulrich Klüh, Marco Wagner, & Hasan Doluca. *Three Birds with One Stone: The G20 and Systemic Externalities*, VOXEU (2010), available at <http://www.voxeu.org/article/three-birds-one-stone-g20-and-systemic-externalities>.

⁹⁷ *Id.*

⁹⁸ See *supra* note 63 and accompanying text.

⁹⁹ RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* § 13.1, at 383 (6th ed. 2003) (observing that there are “two methods of public control—the common law system of privately enforced rights and the administrative system of direct public control”).

¹⁰⁰ See, e.g., Franklin A. Gevurtz, *The Role of Corporate Law in Preventing a Financial Crisis: Reflections on In re Citigroup Inc. Shareholder Derivative Litigation*, 23 PAC. MCGEORGE GLOBAL BUS. & DEV. L.J. 113, 127 (2010) (observing that the concept of “[i]mposing liability to pay the damages resulting from unreasonable risks . . . is a pillar of tort law”).

¹⁰¹ American Law Institute, *Negligence Liability and the Ordinary Duty of Care*, in A CONCISE RESTATEMENT OF TORTS 62 (2013) (“To establish [] negligence, it is not enough that there be a likelihood of harm; the likelihood must be foreseeable to the actor at the time of conduct.”).

securities to sophisticated investors, contributing to that crisis. Tort law could not—and assuming legally sufficient disclosure, probably should not—be used to impose personal liability on that manager for the resulting systemic harm.¹⁰²

Regulating substance therefore is important, but it may be insufficient to control excessive corporate risk-taking that causes systemic externalities. To continue to limit financial regulation to regulating substance would therefore create what Professor Ian Lee has called a “regulatory dysfunction.”¹⁰³ To avoid that dysfunction, I next examine whether regulating governance could help to control that excessive risk-taking without weakening corporate wealth-producing capacity.¹⁰⁴

C. Regulating Governance

Although regulating substance generally should be superior to government interference with corporate governance to control externalities, regulating substance has so far proved insufficient—and is unlikely to become sufficient in the near future—to control the excessive corporate risk-taking that causes systemic externalities.¹⁰⁵ That insufficiency may well reflect the reality that excessive corporate risk-taking primarily results from managerial judgment calls. For example, the excessive corporate risk-taking

¹⁰² Cf. Armour & Gordon, *supra* note 39, at 46-47 (explaining that tort law usually does not allow recovery for indirect losses, and also observing that it is difficult to impose tort liability on a bankrupt firm).

¹⁰³ E-mail from Ian B. Lee, Associate Professor, University of Toronto Faculty of Law, to the author (Aug. 18, 2015) (observing that “if existing legal obligations are an important part of the problem, then we are in the presence of a regulatory dysfunction and not a market dysfunction. A logical possibility exists that the solution is not to introduce a further intervention (new legal obligations), but rather to remove or alter the existing intervention . . . that is, to weaken the managers’ existing legal duty to shareholders.”).

¹⁰⁴ Cf. *supra* note 85 and accompanying text (stating that argument against regulating governance).

¹⁰⁵ Cf. David T. Llewellyn, *Some Lessons for Bank Regulation from Recent Financial Crises*, 428, 429, in *HANDBOOK OF INTERNATIONAL BANKING* (Andrew W. Mullineux & Victor Murinde, eds., 2003) (“While external regulation has a role in fostering a safe and sound banking system, this role is limited” and “increasingly important, are . . . corporate governance arrangements within banks.”).

that led to the financial crisis “largely resulted from poor decisions, bad judgment, and greed”¹⁰⁶

To control that risk-taking, regulation also needs to address managerial decisionmaking.¹⁰⁷ In making corporate decisions, managers currently have a duty to the firm and its investors. To reduce systemic externalities, they should also have a duty to society (hereinafter, a “public governance duty”) not to engage their firms in excessive risk-taking that leads to those externalities.¹⁰⁸ Regulating governance in this way, as a supplementary duty, would help to align private and public interests.¹⁰⁹

In the financial context, regulating governance also has another advantage over regulating substance. Regulating substance often depends on regulators precisely understanding the financial “architecture”—the particular design and structure of financial firms, markets, and other related institutions—at the time the regulation is

¹⁰⁶ *Excessive Corporate Risk-Taking and the Decline of Personal Blame*, *supra* note 81, at 8 (citing Jean Eaglesham, *Financial Crimes Bedevil Prosecutors*, WALL ST. J., Dec. 6, 2011, at C1).

¹⁰⁷ *Cf.* Governor Daniel K. Tarullo, *supra* note 7877, at 3 (arguing “for prudential regulation to influence the *processes* of risk-taking” to complement “capital requirements and other substantive measures”).

¹⁰⁸ This article contemplates an actual duty on the part of a firm's managers, in contrast to mere managerial discretion, to not engage their firms in excessive risk-taking that leads to systemic externalities. *Cf.* Einer Elhauge, *Sacrificing Corporate Profits in the Public Interest*, 80 N.Y.U. L. REV. 733 (2005) (arguing for managerial discretion to act in the social interest).

¹⁰⁹ There is banking precedent that purports to regulate governance to align private and public interests, but it is more precatory than real. The Basel Committee on Banking Supervision sets corporate governance guidelines for banks in order to “safeguard[] interest in conformity with public interest on a sustainable basis.” Basel Committee on Banking Supervision, Bank for International Settlements, *Guidelines: Corporate Governance Principles for Banks* 3 (July 2015), available at <http://www.bis.org/bcbs/publ/d328.pdf>. These guidelines, however, merely require banks to “protect the interests of depositors, meet shareholder obligations, and consider the interests of other recognized stakeholders.” For an argument in favor of regulating governance to minimize corporate environmental externalities, see Gail Elizabeth Henderson, “A Fiduciary Duty to Minimize the Corporation’s Environmental Impacts,” Sept. 22, 2011 draft, available at <http://ssrn.com/abstract=1932032>.

promulgated.¹¹⁰ Because the financial architecture is constantly changing,¹¹¹ however, that type of grounded regulation has value only as long as it is updated as needed to adapt to those changes.¹¹² But ongoing financial monitoring and regulatory updating can be costly and is subject to political interference at each updating stage.¹¹³ As a result, financial regulation of substance usually lags financial innovation,¹¹⁴ causing unanticipated consequences and allowing innovations to escape regulatory scrutiny.¹¹⁵

Regulating governance, in contrast, can overcome that regulatory time lag. If the firm is proposing to engage in a risky project that represents financial innovation, its managers either have or, to fulfill their governance duties, should try to obtain the most current information about the innovation and its consequences.

III. TOWARDS REGULATORY ALIGNMENT: A PUBLIC GOVERNANCE DUTY

To help control the excessive risk-taking that leads to systemic externalities, this article has shown that regulating governance has an advantage over, and therefore in

¹¹⁰ *Regulating Financial Change*, *supra* note 67.

¹¹¹ *Id.* at [cite].

¹¹² *Cf.* PERRY MEHLING, *THE NEW LOMBARD STREET: HOW THE FED BECAME THE DEALER OF LAST RESORT* 4-5 (2011) (arguing that because economics and finance “largely ignore the sophisticated mechanism that operates to channel cash flows . . . to meet cash commitments,” they have not “been particularly well suited for understanding the [financial crisis] during which the crucial monetary plumbing broke down . . .”).

¹¹³ *Regulating Financial Change*, *supra* note 67, at [cite].

¹¹⁴ *Id.* at [cite]. *See also* Edward Kane, *Policy Implications of Structural Changes in Financial Markets*, 73 *AM. ECON. REV.* 98 (1981) (arguing that regulatory responses lag behind innovations).

¹¹⁵ This occurred in 2008, for example, when the pre-crisis financial regulatory framework, which assumed the dominance of bank-intermediated funding, failed to adequately address a collapsing financial system in which the majority of funding had become non-bank intermediated. *Cf.* Julia Black, *Restructuring Global and EU Financial Regulation: Character, Capacities, and Learning*, in *FINANCIAL REGULATION AND SUPERVISION: A POST-CRISIS ANALYSIS* 3 (Eddy Wymeersch, Klaus J. Hopt, & Guido Ferrarini, eds., 2012) (observing that “the system simply did not operate in the way that regulators, banks, and economists had thought it did. If you do not understand how the system works, it is very hard to build in mechanisms either for managing risk or for ensuring the system’s resilience when those risks crystallize.”).

principle should supplement, regulating substance—so long as it does not weaken corporate wealth-producing capacity. Subject to that proviso, managers should have a public governance duty not to engage their firms in excessive risk-taking that leads to those externalities. Because only systemically important firms, by definition, could engage in risk-taking that leads to systemic externalities, the public governance duty should apply only to managers of those firms.

Subpart A below analyzes such a public governance duty under corporate governance law and theory. Thereafter, Subpart B shows how the duty could be feasibly and efficiently implemented, without weakening corporate wealth-producing capacity. The Appendix to the Article then proposes model language for regulation imposing the duty.

A. Analyzing a Public Governance Duty under Corporate Governance Law and Theory

A public governance duty that aligns a systemically important firm's interests with the public's interests should not be inconsistent with corporate governance law and theory. As explained below, it should be consistent with the stakeholder model of governance, because the public is a stakeholder whom the law should protect against systemic externalities. It should be consistent with the more generally accepted contractarian model of governance because, even though the public is not a contracting party, systemic externalities are exactly the type of externalities that should count in limiting freedom of contract that harms non-contracting parties. And it should not be inconsistent with the shareholder-primacy model because that model recognizes the need to control certain externalities and a public governance duty may be the best way to control the excessive corporate risk-taking that causes systemic externalities.

1. *The Stakeholder Model of Governance.* A public governance duty should most clearly be consistent with the stakeholder model of governance. Under this model, the interests of everyone affected by a firm's actions should be considered, to avoid anyone's

interest being unfairly exploited.¹¹⁶ The public, of course, is affected by a firm's risk-taking. This model, however, does not add any explanatory value because there is fundamental disagreement on the extent to which non-investor stakeholder interests should be taken into account, valued, and balanced with shareholder interests.¹¹⁷

Judicial opinions in the United States and Canada illustrate this disagreement. In *Metropolitan Life Insurance Co. v. RJR Nabisco, Inc.*,¹¹⁸ plaintiff MetLife argued that RJR's leveraged buyout caused the RJR bonds held by MetLife to lose their investment-grade rating,¹¹⁹ thereby violating an implied covenant to bondholders.¹²⁰ As a consequence of the rating downgrade, the resale value of the bonds plummeted.¹²¹ MetLife argued that its damages should include this loss in market value, but the court declined to recognize that loss as legally compensable.¹²² The court implicitly acknowledged the possibility that the bondholders were affected stakeholders. It refused, however, to order compensation for the resulting externalities.¹²³

¹¹⁶ Henry Hansmann & Reinier Kraakman, *The End of History for Corporate Law*, 89 GEO. L.J. 439, 447 (2001) (explaining that stakeholders may include employees, creditors, customers, merchants, or even broader interest groups such as beneficiaries of a well-preserved environment). *But cf.* Lee, *supra* note 79, at 111 (suggesting that stakeholder theory does not necessarily imply that the firm has no bounds, i.e., that there is no distinction between the firm and the public; it need only mean that the firm's interests are not coextensive with those of the shareholders).

¹¹⁷ *Cf.* Douglas Baird, *Bankruptcy's Uncontested Axioms*, 108 YALE L.J. 573, 578 (1998) (observing a similar type of debate in bankruptcy law, in which different parties to the debate start with very different norms).

¹¹⁸ 716 F. Supp. 1504 (S.D.N.Y. 1989).

¹¹⁹ For a description of how bond ratings are structured, see Steven L. Schwarcz, *Private Ordering of Public Markets: The Rating Agency Paradox*, 2002 U. ILL. L. REV. 1, 7 (“[T]he highest rating on long-term debt securities is AAA, with ratings descending to AA, then to A, and then to BBB and below. . . . The higher the rating, the lower the rating agency has assessed the credit risk associated with the securities in question. . . . Ratings below BBB- are deemed non-investment grade, and indicate that full and timely repayment on the securities may be speculative.” (internal quotation marks omitted)).

¹²⁰ *RJR Nabisco*, 716 F. Supp. at 1516.

¹²¹ *Id.* at 1506.

¹²² *Id.* at 1518.

¹²³ *Id.* at 1518. The court's articulated reasoning was somewhat tortured: the market-value loss did not constitute the “fruits of the agreement” under which the bonds were issued because the “substantive ‘fruits’ [of a bond indenture only] include the periodic

The authority most clearly articulating the stakeholder model is the celebrated Canadian case of *BCE Inc. v. 1976 Debentureholders*,¹²⁴ whose facts are virtually identical to those in *Metropolitan Life Insurance Co. v. RJR Nabisco, Inc.* Plaintiff-debentureholders argued that BCE’s board of directors had acted inappropriately in agreeing to a leveraged buyout that would have caused the debentures to lose their investment-grade rating, thereby diminishing their value.¹²⁵ The court observed that the debentureholders were warned that they could not reasonably expect the investment-grade rating to be maintained, nor did they include indenture covenants to try to protect the rating.¹²⁶ Nonetheless, the court’s opinion broadly articulated a stakeholder model of governance:

Where conflicting interests arise, it falls to the directors of the corporation to resolve them in accordance with their fiduciary duty to act in the best interests of the corporation. . . . There are no absolute rules and no principle that one set of interests should prevail over another. In each case, the question is whether, in all the circumstances, the directors acted in the best interests of the corporation, having regard to all relevant considerations, including—but not confined to—the need to treat affected stakeholders in a fair manner, commensurate with the corporation’s duties as a responsible corporate citizen.¹²⁷

One prominent commentator, quoting a prior Canadian decision, observes that such a stakeholder model of governance could even take into account “the interests of, *inter alia*, shareholders, employees, creditors, consumers, governments and the environment.”¹²⁸ Even in Canada, however, there remains fundamental disagreement about how to apply a stakeholder model of governance, including how to determine

and regular payment of interest and the eventual repayment of principal,” which were expected to continue even after RJR’s leveraged buyout. *Id.* at 1518-19.

¹²⁴ [2008] 3 S.C.R. 560 (Can.).

¹²⁵ *Id.* at 563.

¹²⁶ *Id.* at 565.

¹²⁷ *Id.*

¹²⁸ Robert Yalden, *Canadian Mergers and Acquisitions at the Crossroads: The Regulation of Defence Strategies After BCE*, 55 CANADIAN BUS. L.J. 389, 407 (2014).

which stakeholders’ interests should be taken into account and how managers of firms could attempt to value and balance those interests with investor interests.

I next argue, in the context of discussing the contractarian model of governance, that this disagreement reflects a larger uncertainty about the extent to which law should protect third parties from externalities.¹²⁹ That larger uncertainty is a fundamental inquiry of contract law. Insights from contract law can help to reveal, at least in the context of systemic externalities, how that uncertainty can be resolved.

2. *The Contractarian Model of Governance.* This model reflects the most widely accepted theory of corporate governance—that a firm is a “nexus of contracts” among private parties.¹³⁰ The corporate governance rules are priced as part of the contractual negotiation.¹³¹ At first glance, a public governance duty would appear to be inconsistent with this model. After all, members of the public are not contracting parties.

Contract law, however, does not limit its application to contracting parties. Freedom of contracting is not, and should not be, absolute. Government should be able to limit it in at least three scenarios,¹³² one of which is when the contracting causes externalities.¹³³ The critical question is which externalities should count in limiting that freedom.¹³⁴

¹²⁹ Cf. TREBILCOCK, *supra* note 73, at 20 (identifying the “major conceptual” problem of “[d]etermining which [externalities] are to count in constraining the ability of parties to contract with each other”). After all, the stakeholder-model debate ultimately turns on the extent to which law should require a firm’s managers to protect non-investor parties who could be impacted by a corporate action.

¹³⁰ Frank H. Easterbrook & Daniel R. Fischel, *The Corporate Contract*, 89 COLUM. L. REV. 1416, 1426 (1989).

¹³¹ *Id.* at 1430.

¹³² See, e.g., Steven L. Schwarcz, *Rethinking Freedom of Contract: A Bankruptcy Paradigm*, 77 TEX. L. REV. 515 (1999) (arguing that freedom of contract should be subject to statutory policies, paternalism, and material externalities).

¹³³ *Id.* at 520-21.

¹³⁴ TREBILCOCK, *supra* note 73, at 58–59 (raising that question).

Even under contract law, there is no absolute answer to that question.¹³⁵ Some scholars have therefore dismissed externalities as a basis for regulation.¹³⁶ But this article need answer only a much more limited question: Should *systemic* externalities count in limiting freedom of contract? That question has already been answered in a separate context.¹³⁷ Systemic externalities not only harm the public, who cannot contract to protect themselves,¹³⁸ but also cause much more harm than non-systemic externalities, including widespread poverty and unemployment.¹³⁹ These are exactly the type of externalities that should count in limiting freedom of contract.¹⁴⁰

Thus, even though the public is not a contracting party, a contractarian model of corporate governance should permit—and arguably should even require—government to limit corporate governance decisions that cause systemic externalities to the public.

3. *The Shareholder-Primacy Model.* A public governance duty would less clearly be consistent, but at least should not be inconsistent, with the shareholder-primacy model.

¹³⁵ *Id.* at 59–61 (explaining that different value judgments have different implications for answering that question).

¹³⁶ *Cf.* Alan D. Morrison, “Meta Contracting and Autonomy: A Liberal Theory of the Firm” 2 (May 2015 draft, on file with author) (observing that “many people now argue that regulation based solely upon the correction of externalities has been proved to be inadequate”).

¹³⁷ That separate context was examining whether regulation should require firms to mitigate their systemic externalities. *See supra* notes 75-77 and accompanying text.

¹³⁸ *Cf.* Morrison, *supra* note 136, at 22-23 (observing that firms impose costs on the public that are “not knowingly assumed”); Henry N. Butler & Jonathan R. Macey, *Externalities and the Matching Principle: the Case for Reallocating Environmental Regulatory Authority*, 14 *YALE L. & POL’Y REV.* 23, 29 (1996) (leaving open the possibility that government intervention might be justified to prevent externalities that cannot be internalized through Coasian bargaining).

¹³⁹ *See supra* notes 75-77 and accompanying text.

¹⁴⁰ *Rethinking Freedom of Contract*, *supra* note 133, at 520-21, 534-36, 551 et seq. *See also* Butler & Macey, *supra* note 138, at 29 (arguing, in the environmental context, that government regulation may be appropriate to require a polluter to bear the full costs of its activities when the externality is significant and cannot be bargained away, and the benefits of the regulation outweigh the costs); Morrison, *supra* note 136, at 22-23 (arguing that when the public is unable to contract to avoid costs imposed by firms, the “regulatory state should minimize” those costs, representing the public as part of a “meta contract”).

This model is not a corporate governance theory per se, but its widespread dominance in the United States¹⁴¹ and worldwide¹⁴² merits attention.

Proponents of shareholder-primacy argue that managers of for-profit corporations should govern the firm solely for the best interests of its shareholders.¹⁴³ Although this model is sometimes discussed in a broader context of economic efficiency, it is fundamentally based on agency costs.¹⁴⁴ Because firms and their agents cannot enter into complete contracts to prevent the latter from shirking,¹⁴⁵ there must be another way to prevent that.¹⁴⁶ Shareholders as residual claimants have incentives to monitor the firm's agents.¹⁴⁷ The agents, in turn, benefit from that monitoring because they need focus on only one goal: maximizing shareholder value (usually in the form of stock price).¹⁴⁸

To that extent, a public governance duty would appear to be inconsistent with the shareholder-primacy model. But here is why it should not be inconsistent. Even proponents of shareholder-primacy accept that firms can cause externalities, but they believe the proper response is for government to regulate externalities, as needed, without interfering with corporate governance.¹⁴⁹ This article has shown, however, that such

¹⁴¹ See, e.g., *Dodge v. Ford*, 170 N.W. 668, 684 (Mich. 1919) (shareholder primacy's classical articulation).

¹⁴² Cf. Hansmann & Kraakman, *supra* note 116, at 443-48 (discussing the ideological convergence on the shareholder-primacy model around the world).

¹⁴³ Strine & Walter, *supra* note 85, at 346.

¹⁴⁴ Agency costs are an aspect of economic efficiency; efficiency increases when agency costs are minimized (because agency costs are a dead weight loss).

¹⁴⁵ See Armen A. Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization*, 62 AM. ECON. REV. 777 (1972).

¹⁴⁶ Stephen M. Bainbridge, *Director Primacy: The Means and Ends of Corporate Governance*, 97 NW. U. L. REV. 547, 566 (2003).

¹⁴⁷ *Id.* at 567.

¹⁴⁸ Lynn A. Stout, *Bad and Not-so-Bad Arguments for Shareholder Primacy*, 75 S. CAL. L. REV. 1189, 1200 (2002).

¹⁴⁹ Cf. *supra* note 85 and accompanying text (discussing the argument that government interference with corporate governance might weaken the wealth-producing capacities of the firm).

regulation may be insufficient to control the excessive corporate risk-taking that causes systemic externalities.¹⁵⁰ The alternative is to regulate corporate governance.¹⁵¹

The analysis has shown that imposing a public governance duty to align the firm’s interests with the public’s interests in order to control systemic externalities should not be inconsistent with corporate governance law and theory. I next examine how to implement such a duty.

B. Implementing a Public Governance Duty

A public governance duty could be implemented in a manner that is both feasible and efficient, without weakening corporate wealth-producing capacity. Under a public governance duty, the managers of a systemically important firm¹⁵² would not only have a private corporate governance duty to investors but also a duty not to engage in excessive risk-taking that could systemically harm the public.¹⁵³ That public duty raises at least five

¹⁵⁰ See Part II.B, *supra*.

¹⁵¹ See Part II.C, *supra*. One can also make other arguments that a public governance duty should not be inconsistent with the shareholder-primacy model, including that such a duty’s reduction in systemic cost would exceed any increase in agency costs resulting from the duty. Professor Morrison argues that state intervention—which implicitly would include a public governance duty—would undermine the moral value of the corporate form, which allows “choices that individuals, left to themselves, might prefer to make.” Morrison, *supra* note 136, at 4. I would argue to the contrary, that individuals should have no moral right to cause systemic harm to others.

¹⁵² Recall that a public governance duty should apply only to managers of systemically important firms, which in this article are limited to financial firms that are systemically important. See *supra* note 7 and introduction to Part III.A.

¹⁵³ Cf. John Carney, *Big-Bank Board Game Puts Shareholders in Second Place*, WALL ST. J., Apr. 5, 2015 (noting a speech by U.S. Federal Reserve Governor Daniel Tarullo suggesting that “corporate governance would need to change to broaden the scope of boards’ fiduciary duties to reflect macroprudential [i.e., systemic] regulatory objectives”). The nation of Iceland has actually enacted legislation that appears to require, at least in principle, the managers of at least certain systemically important firms to “operate[] [their firms] in the interests of . . . shareholders . . . and the entire national economy.” Ministry of Industries and Innovation, Act. No. 161/2002 on Financial Undertakings. The Dean of the University of Iceland’s law faculty believes this law “puts clear constraints on the directors and managers” of those firms and “underlines the difference between” those firms “and other companies that usually have the only purpose of increasing shareholder

practical questions: (1) How should a public governance duty be legally imposed?; (2) How should managers assess the public costs and private benefits of a risk-taking activity?; (3) How should managers balance those costs and benefits when deciding whether the firm should engage in a given risk-taking activity?; (4) How should a public governance duty be enforced?; (5) Weighing the goals of protecting the public against systemic externalities and encouraging the best people to serve as managers, to what extent should managers performing their public governance duty have the protection of a business judgment rule as a defense to liability? Consider these questions in turn.

1. *Legally Imposing the Duty.* A public governance duty could be legally imposed in different ways. Courts, for example, could create such a duty through judicial decisions. Or legislatures could amend their corporation laws to require such a duty.

Because this article is primarily normative, its emphasis is on whether the duty should be imposed, not how it might be imposed. Nonetheless, the following observations may be relevant to that latter inquiry. As at least one commentator has observed, changes in corporate governance law that could have “profound public policy” implications that “ultimately shape the fabric of the form of capitalism that a society embraces” should be undertaken by “our legislatures,” which are “designed to allow for a full airing of social and political currents.”¹⁵⁴

In the United States, this would mean that a public governance duty should be imposed either by state legislatures (especially the Delaware legislature, because most domestic firms are incorporated under Delaware law) or by the U.S. congress (“Congress”). Because corporation law in the United States is traditionally state, not federal, states ideally should take the lead in imposing such a duty. By analogy, states are already beginning to allow corporate managers to consider non-shareholder

value.” E-mail from Professor Eyvindur G. Gunnarsson, Dean, Faculty of Law, University of Iceland, to the author (Feb. 14, 2015).

¹⁵⁴ Yalden, *supra* note 128, at 410.

constituencies, such as “employees, suppliers, customers and creditors of the corporation, and . . . communities.”¹⁵⁵

It is questionable, however, whether state legislatures are well positioned to impose a public governance duty. They are likely to want to impose such a duty only if they believe it will attract firms to incorporate in their states. But they will not ordinarily want to impose such a duty because systemic risk is a national and international problem, not usually a local state problem.¹⁵⁶ This reflects the “internalization principle,” which recognizes that regulatory responsibilities should generally be assigned to the unit of government that best internalizes the full costs of the underlying regulated activity.¹⁵⁷ Under this principle, Congress may be best situated to impose a public governance duty, and indeed the Sarbanes-Oxley Act and the Dodd-Frank Act set legislative precedents for Congress limiting state corporation law.¹⁵⁸

Congress might already implicitly have granted power to the Federal Reserve to create a public governance duty. Section 165(h) of the Dodd-Frank Act directs the Federal Reserve Board to require each publicly traded nonbank financial company

¹⁵⁵ 15 PA. CONS. STAT. ANN. § 1715(a)(1) (West 2015).

¹⁵⁶ In the corporate governance context, this disconnect is potentially even greater because firms operating anywhere in the United States can select another state's law under which to incorporate, and that law will control the firm's governance. Therefore, a state's corporate governance law need not even take that state's risks into account.

¹⁵⁷ Robert D. Cooter & Neil S. Siegel, *Collective Action Federalism: A General Theory of Article I, Section 8*, 63 STAN. L. REV. 115, 137 (2010). *See also* Clayton P. Gillette, *Who Should Authorize a Commuter Tax?*, 77 U. CHI. L. REV. 223, 233 (2010). The internalization principle's rationale is that government entities will have optimal incentives to take into account the full costs and benefits of their regulatory decisions only if the impacts of those decisions are felt entirely within their jurisdictions. WALLACE E. OATES, *FISCAL FEDERALISM* 46–47 (1972).

¹⁵⁸ Hillary A. Sale, *Public Governance*, 81 GEO. WASH. L. REV. 1012, 1014 (2013) (discussing those Acts as federal legislative precedents in which Congress limited how state corporation law enabled corporate private ordering). For example, Sarbanes-Oxley requires a public company's audit committee members to be independent and makes specific managers individually responsible for the accuracy of financial reports. *Id.* at 1021. Dodd-Frank requires the directors on the compensation committee to be independent and also, through its “say-on-pay” provisions, requires precatory shareholder approval of the substantive terms of executive compensation. *Id.* at 1027-29.

supervised by the Board and each publicly traded bank holding company with total consolidated assets of \$10 billion or more to establish a risk committee, which will be responsible for overseeing the company’s risk-management practices.¹⁵⁹ The Board’s implementing regulations currently only require risk committees to focus on risks to the firm, not to the public.¹⁶⁰ That microprudential focus subjects risk committees to the same misalignment discussed earlier.¹⁶¹ As a result, members of a risk committee who vote to favor the public over investor interests may even be violating their state-law corporate governance duties. However, assuming Congress’s mandate to the Board is

¹⁵⁹ 12 U.S.C. 5365(h) (stating that the risk committee should be responsible for overseeing the firm’s enterprise-wide risk-management practices—i.e., overseeing the broad spectrum of risks facing the firm and the firm’s affiliated group). The risk committee is also required to have independent directors (as the Federal Reserve Board deems appropriate), including at least one risk-management expert having experience in identifying, assessing, and managing risk exposures of large, complex firms. *Id.* For further discussion of risk committees, see Kristin N. Johnson & Steven A. Ramirez, *New Guiding Principles: Macroprudential Solutions to Risk Management Oversight and Systemic Risk Concerns*, 11 U. ST. THOMAS L.J. 386, 416-18 (2014).

¹⁶⁰ The Federal Reserve Board’s regulations do not require risk committees to take systemic risk into account. See 12 C.F.R. § 252.20–22, 30–35 (2015). (At most, the Board’s regulations indirectly suggest that possibility by requiring (emphasis added) that the “level of risk management expertise possessed by the risk committee of a company should rise in accordance with a company’s rising threat of *systemic risk to the economy*.” *Id.* at [cite].) Risk committees formed pursuant to the Board’s regulations likewise do not appear to take systemic risk into account. See, e.g., Matteo Tonello, *Should Your Board Have a Separate Risk Committee?*, Harvard Law School Forum on Corporate Governance and Financial Regulation, available at <http://corpgov.law.harvard.edu/2012/02/12/should-your-board-have-a-separate-risk-committee/> (Feb. 12, 2012) (stating that the risk committee’s function is to “develop a mutual understanding regarding the risks the company faces over time as it executes its business model for creating enterprise value”); MAUREEN P. ERRITY & HENRY J. RISTUCCIA, *RISK COMMITTEE RESOURCE GUIDE FOR BOARDS* 18, 20 (DELOITTE LLP 2012) (stating in its “Sample risk committee charter” that the risk committee’s purpose is to identify and assess “the risks that the organization faces” and to provide “input to management regarding the enterprise’s risk appetite and tolerance”).

¹⁶¹ See *supra* notes 11-15 and accompanying text. Although that microprudential focus reduces the likelihood that individual firms will fail, that at most partially reduces systemic risk. See note 18, *supra*.

broad enough, the Board could issue additional regulations that require risk committees to also consider systemic risks to the public.¹⁶²

2. *Assessing Costs and Benefits.* How should managers of a systemically important firm, or members of such a firm’s risk committee,¹⁶³ assess the public costs and private benefits of a risk-taking activity? Although a range of approaches is possible, this article offers two examples of approaches, one subjective and the other more objective and ministerial. On a case-by-case basis, managers could choose which approach to follow.

When deciding how to vote on matters as to which they believe there could be significant systemic costs to the public, managers following a subjective approach would simply consider those costs and balance them against benefits—the same way they would consider any other relevant costs and benefits when making a corporate governance decision. Their assessment and balancing might, but would not necessarily, be documented or explained.¹⁶⁴ Managers may favor this approach because it would not change their current behavior.

¹⁶² During an October 19, 2015 presentation on “Regulating Systemic Risk in Insurance,” I suggested to the U.S. Federal Reserve Board and Reserve Bank staff that they should consider doing that. If the delegation of authority under § 165(h) of the Dodd-Frank Act is broad enough, the Board’s regulations requiring a public governance duty should override contrary state law by virtue of the Supremacy Clause of the U.S. Constitution.

¹⁶³ See *supra* notes 159-162 and accompanying text (discussing risk committees). Even if the cost-benefit assessment is performed by members of a firm’s risk committee, the firm’s senior managers (e.g., members of its board of directors) “should retain overall responsibility for risk oversight, mirroring [their] overall responsibility for strategy.” Tonello, *supra* note 160.

¹⁶⁴ Cf. JAMES D. COX & THOMAS LEE HAZEN, CORPORATIONS 191 (2d ed. 2003) (observing that “what is required for the board to act reasonably to inform itself varies with the facts”).

This subjective approach would be subject to at least three drawbacks, however.¹⁶⁵ First, because the consequences of a systemic collapse can be devastating to the public, the decisionmaking process to mitigate that harm should be more transparent.¹⁶⁶ Second, managers following a subjective approach may be subject to peer pressure to favor investor profitability over avoiding public harm.¹⁶⁷ Third, although courts generally try to avoid second-guessing management decisions,¹⁶⁸ even managers should want to follow an approach that provides an explicit safe harbor against litigation—at least if the approach is relatively ministerial.

Consider how to craft such a ministerial safe-harbor objective approach, using the generic example of a systemically important firm engaging in a risky project that could be profitable. The expected private benefits can be calculated as the expected value of the project to the firm's investors (usually the shareholders), which I'll call α :

$$\alpha \text{ (expected value of project to investors)} = [(X\% \text{ chance of project being successful}) \times \$Y \text{ value to investors from that success}^{169}] - [(1-X\% \text{ chance of project being unsuccessful}) \times \$W \text{ loss from that failure}]$$

The expected public costs can be calculated as the expected value of the project's systemic costs, which I'll call β :

¹⁶⁵ The more objective approach also could have drawbacks, such as its simplifying assumption that the only way a risky project could cause systemic costs is if the project's being unsuccessful causes the firm to fail. *See infra* note 170.

¹⁶⁶ *Cf. infra* notes 180-184 (arguing that the harmful consequences of a systemic collapse justify the application of a precautionary principle).

¹⁶⁷ As a director of special purpose entities, I routinely experienced this peer pressure. I also saw this type of peer pressure routinely exercised against the senior manager of a banking client's internal risk committee, to greatly favor profitability over caution. To attempt to mitigate this pressure, a firm's risk committee ideally should have at least two independent members.

¹⁶⁸ *See infra* notes 193-197 and accompanying text (discussing the business judgment rule as a defense to liability).

¹⁶⁹ \$Y, the value to investors from the project's success, could be measured by profit or whatever other metric the firm normally uses.

β (expected value of project's systemic costs) =
 (1-X% chance of project being unsuccessful) x F% chance of firm failing as a
 result of the project being unsuccessful x \$Z resulting systemic costs.¹⁷⁰

What values should management use? Most of these values would be pure business judgments about which the firm's managers should have sufficient information, or at least much more information than third parties. For example, those managers should have much more information than third parties about valuing X%, the chance of the project being successful; \$Y, the value to investors from that success; \$W, the loss from the project's failure; and F%, the chance of the firm failing as a result of the project's failure (i.e., effectively as a result of the \$W loss).

The exception, however, is the value for \$Z, the systemic costs if the firm fails. Government financial regulators are likely to know much more about valuing \$Z than the firm's managers. That valuation should therefore be a public policy choice.

As a policy matter, there could be several possible ways of valuing \$Z. One approach would be to assume that the firm actually fails, with a systemically negative impact to the real economy. That would yield an indeterminate but potentially huge number for \$Z.¹⁷¹ But that valuation approach could be misleading for at least two reasons. First, the failure of any given firm, no matter how large, would be unlikely by itself to be the sole cause of a major financial crisis; even Lehman Brothers' failure did

¹⁷⁰ This equation has been simplified in two ways. First, it assumes that the only way a risky project could cause systemic costs is if the project's being unsuccessful causes the firm to fail. Second, the full equation would be [(1-X% chance of project being unsuccessful) x F% chance of firm failing as a result of the project being unsuccessful x \$Z resulting systemic costs] + [(X% chance of project being successful) x A% chance of firm failing as a result of the project being successful x \$B resulting systemic costs]. However A%, the chance of the firm failing as a result of the project being successful, is likely to be zero.

¹⁷¹ Estimates of the cost of the financial crisis are in the trillions. *See, e.g.,* Tyler Atkinson, David Luttrell, & Harvey Rosenblum, *How Bad Was It? The Costs and Consequences of the 2007-09 Financial Crisis*, Fed. Res. Bank of Dallas Staff Paper No. 20 (July 2013) (estimating the likely cost of the financial crisis to the United States as "greater than the value of one year's output," or greater than \$15.5 trillion).

not, by itself, cause the financial crisis.¹⁷² Second, at least in the United States, the “living will” requirement under the Dodd-Frank Act is intended to minimize the systemic consequences of any given systemically important firm’s failure.¹⁷³

A more plausible way to value \$Z would be to estimate the costs of the firm’s failure to its immediate counterparties. The rationale for this approach is that first-order systemic consequences are more likely to result from a systemically important firm’s failure than a full-blown financial collapse.¹⁷⁴ Such a cost estimate was done by analysts at J.P. Morgan for the possible failure of Long-Term Capital Management (“LTCM”), a large hedge fund whose losses in the Russian bond market brought it close to default; they found that LTCM’s failure would have cost its larger bank-creditors \$500–700 million each.¹⁷⁵

Another plausible way to value \$Z would be to base it on the estimated cost of a government bailout to avoid a systemic failure. Such an estimate could be required to be made by the government, for example,¹⁷⁶ as part of the process of designating a firm as a

¹⁷² The shock caused by the Federal Reserve’s failure to bail out Lehman Brothers was merely the final straw that triggered the collapse that led to the financial crisis. *See* THE ECONOMIST, *supra* note 5.

¹⁷³ *See supra* note 50 and accompanying text.

¹⁷⁴ The Dodd-Frank Act attempts to minimize systemic disruptions in the event of a failed systemically important financial institution.

¹⁷⁵ ROGER LOWENSTEIN, WHEN GENIUS FAILED: THE RISE AND FALL OF LONG-TERM CAPITAL MANAGEMENT 190 (2000).

¹⁷⁶ The process by which the government should make and periodically update such an estimate is beyond this article’s scope. One way it might do so, however, is by attempting to match the firm in question to the most “comparable company” that has received bailout money in the past, based on its tracking of data for bailout recipients in connection with the financial crisis. *See, e.g., Bailout Recipients*, PROPUBLICA.ORG, <http://projects.propublica.org/bailout/list/index> (last visited Mar. 26, 2015) (providing a bailout list, which tracks every dollar and every recipient of federal government bailout money). Of course, no estimate would be perfect. *Cf.* ASWATH DAMODARAN, APPLIED CORPORATE FINANCE 653 (3d ed. 2011) (observing that a comparable companies approach is never based on exactly comparable companies).

“systemically important financial institution,” or “SIFI,”¹⁷⁷ and thereafter periodically updated by the government.

3. *Balancing Costs and Benefits.* Next consider how managers should balance public costs and private benefits when deciding whether their firm should engage in a given risk-taking activity. Managers following a subjective approach would simply balance those costs and benefits the same way they would balance any other relevant costs and benefits when making a corporate governance decision.¹⁷⁸ But that subjective approach would again be subject to the drawbacks that the balancing process should be more transparent, that managers engaging in subjective balancing may be subject to peer pressure to assign more weight to investor profitability than to avoiding public harm, and that subjective balancing does not provide a clear safe harbor against litigation.

Managers following the ministerial safe-harbor objective approach to assessing public costs and private benefits could also use that approach to balance those costs and benefits. Using the earlier terminology, they would be balancing α (the expected value of the project to the firm’s investors) against β (the expected value of the project’s systemic costs), recognizing that a firm’s wealth production to society should be assessed net of potential systemic costs. Such a balancing would be needed only when deciding on a risky project whose failure could cause the firm to fail.¹⁷⁹

To ensure that the balancing does not weaken corporate wealth-producing capacity, it should be designed to yield an economically efficient result. From a strict economic efficiency standpoint, the project would be Kaldor-Hicks efficient if α exceeds β .¹⁸⁰ As a public policy matter, however, simple Kaldor-Hicks efficiency may be

¹⁷⁷ Such an estimate should, ideally, take into account both domestic and foreign bailout costs. If the United States is designating a global firm as a SIFI, the bailout cost would include not only the U.S. bailout cost but also the costs of any necessary foreign bailouts.

¹⁷⁸ See *supra* note 164 and accompanying text.

¹⁷⁹ See *supra* note 170 and accompanying text.

¹⁸⁰ Kaldor-Hicks efficiency is the practical standard used by economists. Robin Paul Malloy, *Economic Concepts for Law in a Market Context*, in *LAW IN A MARKET*

insufficient because the magnitude and harmful consequences of a systemic collapse, if it occurs, could be devastating. When balancing the costs and benefits of activities that might pose great harm, policymakers normally apply a precautionary principle.¹⁸¹ The “strong form” of the precautionary principle—under which the “potential for great harm justifies *any* regulatory intervention, and/or that the proponent of an activity must conclusively demonstrate that the activity is safe before it is allowed”¹⁸²—should not, however, apply to corporate decisionmaking because it could stymie much reasonable risk-taking, thereby weakening corporate wealth-producing capacity.

It may be more appropriate to apply a weaker form of the precautionary principle, which would merely require “a margin of safety” to demonstrate that a given risk-taking activity is justified.¹⁸³ Under this weaker form of the precautionary principle, engaging in a project for which α considerably exceeds β should not constitute excessive risk-

CONTEXT 142, 190 (2004). A project is Kaldor-Hicks efficient if its overall benefits exceed its overall costs, regardless of who bears the costs and who gets the benefits. *Id.* Kaldor-Hicks efficiency implicitly assumes that the distribution of benefits and costs is not controlled by the party—in our case, a firm’s managers—also controlling the decision whether to engage in the project. *Id.* at 190-91. But those managers do not completely control the distribution of benefits; the public usually benefits, at least indirectly, from corporate risk-taking that benefits investors.

¹⁸¹ Hillary J. Allen, *A New Philosophy for Financial Stability Regulation*, 45 LOY. U. CHI. L.J. 173, 191 (2013) (observing that precautionary principles generally direct “regulators to err on the side of regulating an activity when the outcome of that activity is uncertain, but potentially irreversible and catastrophic”). Although precautionary principles have been mostly applied in assessing environmental regulation, they also can have application to financial regulation. *Id.* at 191. See also JAMES SALZMAN & BARTON H. THOMPSON, JR., ENVIRONMENTAL LAW AND POLICY 16 (2d ed. 2007); *Systemic Risk*, *supra* note 9, at 234-35 (applying a precautionary principle to cost-benefit balancing involving systemic risk); Saule T. Omarova, *License to Deal: Mandatory Approval of Complex Financial Products*, 90 WASH. U. L. REV. 64, 85 (2012) (“adopting and operationalizing the general concept of precaution in the context of post-crisis financial systemic risk regulation may be a worthwhile, and even necessary, exercise”).

¹⁸² Allen, *supra* note 181, at 195 (emphasis in original).

¹⁸³ See Cass R. Sunstein, *Beyond the Precautionary Principle*, 151 U. PA. L. REV. 1003, 1014 (2003) (discussing this form of the precautionary principle, under which “regulation should include a margin of safety, limiting activities below the level at which adverse effects have not been found or predicted”).

taking.¹⁸⁴ This formulation would not completely prevent risk-taking that causes systemic externalities. It should, however, reduce that risk-taking by including systemic externalities in the corporate governance balancing, thereby also shaping corporate governance norms to begin to take the public into account.¹⁸⁵

In examining how to apply this approach, assume for illustrative purposes¹⁸⁶ that a systemically important firm's bailout cost (\$Z) would be \$500 million and that the firm's managers estimate the other values as follows:

X% (the chance of the project being successful) = 80%.

\$Y (the value to investors from that success) = \$50 million.

\$W (the loss from the project's failure) = \$20 million.

F% (the chance of the firm failing as a result of the project's failure) = 10%.

Applying these values yields the following:

α (expected value of the project to the firm's investors)

= [(80% chance of project being successful) x \$50 million value to investors from that success] – [(20% chance of project being unsuccessful) x \$20 million loss from that failure]

= \$36 million

β (expected value of the project's systemic costs)

¹⁸⁴ The margin of safety, in other words, is that α not merely exceeds but *considerably exceeds* β . To provide more of a safe harbor for managers, the regulatory language of the public governance duty could specify a percentage that is deemed to provide that margin. *See Appendix.*

¹⁸⁵ *Cf. Lee, supra* note 79, at 124 (observing that “provisions embedded within corporate [governance] law might influence the managers' conception of their role, with the result that the norms underlying such provisions are capable of guiding managers even within the gaps left by legal enforcement mechanisms”).

¹⁸⁶ These values are solely illustrative. They rely on no hard empirical data, and a quantitative analysis is no better than its assumptions.

= (20% chance of project being unsuccessful) x 10% chance of firm failing as a result of the project being unsuccessful x \$500 million resulting systemic costs
 = \$10 million

If these values are realistic, α (\$36 million) would considerably outweigh β (\$10 million). Managers of a systemically important firm that undertake this project would not be engaging in excessive risk-taking.

Much will depend on valuing $\$Z$, the systemic costs if the firm fails. In $\$Z$ were \$1.5 billion, rather than \$500 million, the expected value of the project's systemic costs would equal \$30 million. Managers of a systemically important firm that undertake the project might then be engaging in excessive risk-taking because α (\$36 million) would not clearly considerably outweigh β (\$30 million).

Because this balancing includes a margin of safety against systemic risk, it could reduce a firm's wealth production from a given project that is not undertaken. Nonetheless, the net overall wealth production to society, after subtracting systemic costs, should be increased.¹⁸⁷

4. *Enforcing a Public Governance Duty.* Who should enforce a public governance duty? Under existing corporate governance law, shareholder derivative suits

¹⁸⁷ The balancing also should satisfy what at least one leading civil law scholar characterizes as the burden that should be met in order for financial regulation to favor general welfare over corporate governance autonomy. See Matthias Haentjens, "Party Autonomy, Public Policy and European Bank Insolvency Law," Hazelhoff Research Paper Series No. 7, Hazelhoff Centre for Financial Law, Leiden Law School (2015), available at http://ssrn.com/abstract_id=2608903. In connection with examining bank crisis-management measures under the Dutch Intervention Act, Prof. Haentjens observes that private autonomy is a "fundamental principle" of European Union law. *Id.* at 13. Nonetheless, he argues that "public welfare may take priority over party autonomy" if the regulation protecting public welfare (i) unequivocally serves the public welfare, (ii) proportionately and optimally balances public welfare against party autonomy, and (iii) explicitly states that it is applying the balancing. *Id.* at 15-16. This article's public governance duty should meet all of these conditions.

are the primary enforcement mechanism. Shareholders would have no interest, however, in suing managers of their firm for externalizing systemic harm. Therefore, the government, by default, at least should have the right to enforce the public duty.

The government, however, may be unable to effectively monitor a firm’s internal compliance with the public governance duty until the firm fails, when systemic consequences may be irremediable. To facilitate better monitoring, regulation implementing a public governance duty should include whistleblower incentives, motivating managers involved in the risk assessment to inform government officials of their firm’s noncompliance.¹⁸⁸

Another way to facilitate better monitoring, and more specifically enforcement, of the public governance duty would be to incentivize members of the public themselves. *Qui tam* suits under the False Claims Act,¹⁸⁹ the primary litigation tool for combating fraud against the federal government, constitute a strong precedent for this. That Act permits private citizens to sue alleged defrauders in the name of the United States government. If the suit is successful or settled, the citizen-plaintiff is entitled to 30% of the award or settlement, plus costs and attorneys’ fees.¹⁹⁰

Qui tam lawsuits raise a standing question; the citizen-plaintiff “suffers no injury” and thus would appear to “lack the ‘injury in fact’ required to create Article III standing” under the U.S. Constitution.¹⁹¹ Nonetheless, the Supreme Court has found standing through a somewhat circular argument—that the Act’s partial assignment of the government’s claim to the citizen-plaintiff provides a sufficient stake in the outcome to create Article III standing.¹⁹²

¹⁸⁸ [Further develop this discussion. cite]

¹⁸⁹ 31 U.S.C. §§ 3729-3733 (2012).

¹⁹⁰ David Freeman Engstrom, *Private Enforcement Pathways: Lessons from Qui Tam Litigation*, 114 COLUM. L. REV. 1913, 1943-44 (2014).

¹⁹¹ Richard A. Bales, *A Constitutional Defense of Qui Tam*, 2001 WIS. L. REV. 381, 384.

¹⁹² *Id.* (citing *Vt. Agency of Natural Res. v. United States ex rel. Stevens*, 529 U.S. 765, 777-78 (2000)).

That same circular argument could justify citizen standing to sue to impose personal liability on managers who breach their public governance duty, if those citizen-plaintiffs were entitled to a percentage of the award or settlement. Moreover, those citizen-plaintiffs would have an additional standing claim: as members of the public, they would be directly harmed by a systemically important firm's collapse.

Assuming that regulation implementing a public governance duty allows *qui tam* lawsuits, regulators should provide for an ongoing study of those lawsuits to ensure they do not overwhelm the courts or discourage good people from serving as managers.

5. *Business Judgment Rule as a Defense.* The final practical question concerns the business judgment rule as a defense to liability. In the traditional corporate governance context, managerial decisions—including risk-taking decisions—are protected to some extent by this rule, which presumes that managers should not be personally liable for harm caused by negligent decisions made in good faith and without conflicts of interest—and in some articulations of the business judgment rule, also without gross negligence.¹⁹³ Weighing the goals of protecting the public against systemic externalities and encouraging the best people to serve as managers, to what extent should managers performing their public governance duty have the protection of that rule?

One of the business judgment rule's primary justifications¹⁹⁴ is an attempt to balance somewhat similar goals: protecting investors against losses, and encouraging the best managers to serve.¹⁹⁵ Even though the business judgment rule can reduce investor

¹⁹³ Christine Hurt, *The Duty to Manage Risk*, 39 J. CORP. L. 253, 258 (2014).

¹⁹⁴ The business judgment rule's other primary justification is that the exercise of managerial business judgment is inappropriate for court review. Hurt, *supra* note 193, at 259-60. This justification should be as applicable in a public-governance-duty context as in a traditional corporate governance context.

¹⁹⁵ See, e.g., Ryan Scarborough & Richard Olderman, *Why Does the FDIC Sue Bank Officers? Exploring the Boundaries of the Business Judgment Rule in the Wake of the Great recession*, 20 FORDHAM J. CORP. & FIN. L. 367, 377 (2015) (explaining that a

protection, that reduction is seen as a necessary cost. Because managers cannot always precisely predict the consequences of their corporate governance decisions, some decisions that appear correct when made can result in investor harm. Without the business judgment rule's protection, competent managers would be exposed to liability,¹⁹⁶ discouraging the quality of people who will consider serving as managers.¹⁹⁷

In a public-governance-duty context, consider how to balance the parallel goals of protecting the public against systemic externalities and encouraging the best managers to serve. The first goal, protecting the public against systemic externalities, should be more important than protecting investors against losses because systemic harm can be widespread and devastating.¹⁹⁸ The second goal, encouraging the best managers to serve, should also be more important; managers may find it even more difficult to precisely predict the public governance consequences of their decisions because it is harder to predict systemic than ordinary consequences¹⁹⁹ and also harder to predict consequences

typical justification for business judgment rule protection is fear that qualified individuals will refrain from serving as managers due to the significant liability exposure).

¹⁹⁶ Cf. MELVIN A. EISENBERG & JAMES D. COX, BUSINESS ORGANIZATIONS CASES AND MATERIALS 625-26 (unabr. 7th ed. 2014) (explaining that due to hindsight bias, people often erroneously treat decisions that have bad results as bad decisions).

¹⁹⁷ Cf. William T. Allen, Jack B. Jacobs, & Leo E. Strine, Jr., *Realigning the Standard of Review of Director Due Care with Delaware Public Policy: A Critique of Van Gorkom and Its Progeny as a Standard of Review Problem*, 96 NW. U. L. REV. 450, 455 (2002) (explaining the highly disproportionate incentives; liability for an imprudent decision could be in the millions, whereas outside directors rarely receive fees commensurate with that level of risk); Ryan Scarborough & Richard Olderman, *supra* note 195, at 377 (arguing that even management salaries pale compared to the huge potential liability managers face after a crisis). A related justification is that the business judgment rule encourages appropriate levels of risk-taking. *Id.* at 378-79. Without that rule's protections, managers may be unduly risk averse, thereby avoiding risky but socially desirable economic projects. Allen, Jacobs, & Strine, *supra* at 455.

¹⁹⁸ See *supra* note 15 and accompanying text (observing that systemic externalities harm the real economy) & *supra* note 171 (estimating the likely cost of the financial crisis in the trillions). Also, members of the public, unlike investors, cannot mitigate their harm by voting to replace managers or selling securities.

¹⁹⁹ Cf. *Regulating Ex Post*, *supra* note 42, at 93-96 (observing, among other things, that we do not yet know enough about systemic shocks to prevent their transmission).

to the public than to the firm and its investors.²⁰⁰ Managers therefore may need more encouragement to serve.

Because there would be increased importance for each of these competing goals in a public-governance-duty context, the business judgment rule should still be needed in that context to help balance those goals.²⁰¹ The next question is whether the business judgment rule should therefore apply to performance of a public governance duty the same way it applies to performance of traditional corporate governance duties.

At least in a traditional corporate governance context—in which the first competing goal is protecting investors against losses, not protecting the public against systemic harm—scholars have rejected arguments to weaken the business judgment rule for managers who engage their firms in excessive risk-taking. A weaker rule, they argue, would require courts to exercise inappropriate discretion, and it should be up to shareholders to evaluate corporate risk through their investment decisions, not through litigation.²⁰² In a public-governance-duty context, courts likewise should not be required to exercise inappropriate discretion. However, the argument that it should be up to shareholders to evaluate corporate risk through their investment decisions would be inapplicable because systemic externalities primarily affect the public, not shareholders.²⁰³

Applying these scholars' arguments to a public-governance-duty context, it therefore should be acceptable to weaken the business judgment rule for managers who engage their firms in excessive systemic risk-taking if that weakening would not require

²⁰⁰ Cf. Friedman, *supra* note 85 (arguing that managers are experts in running the company, not experts in improving social welfare).

²⁰¹ Recall that the business judgment rule's other primary justification should be as applicable in a public-governance-duty context as in a traditional corporate governance context. *See supra* note 194.

²⁰² Hurt, *supra* note 193, at 259-60; Robert T. Miller, *Oversight Liability for Risk-Taking Management Failures at Financial Firms*, 84 S. CAL. L. REV. 47, 120-21 (2010).

²⁰³ Recall that shareholders generally want their firms to take potentially profitable risks, regardless of the possible systemic impact *See supra* note 8 and accompanying text.

courts to exercise inappropriate discretion or discourage the best people from serving. I next argue, consistent with those constraints, that the public interest should require a modest weakening of the business judgment rule, and that such a weakening would not require courts to exercise inappropriate discretion.

The public interest should require a modest weakening of the business judgment rule because public harm breaches one of the basic assumptions of that rule’s application—that there be no conflict of interest.²⁰⁴ The interest of a manager who holds significant shares or interests in shares, or whose compensation or retention is dependent on share price, is aligned with the firm’s shareholders, not with that of the public. To that extent, the manager would have a conflict of interest.²⁰⁵ Managers who are conflicted in that way should not be given quite the same absolute deference that the business judgment rule gives non-conflicted managers.

So how should the business judgment rule be weakened without requiring courts to exercise inappropriate discretion or discouraging the best people from serving as managers? One solution would be to prevent conflicted managers who are grossly negligent—that is, who fail to use even slight care in assessing systemic harm to the public—from using the rule as a defense.²⁰⁶ Technically, this solution does not even

²⁰⁴ See *supra* note 193 and accompanying text.

²⁰⁵ I recognize that courts applying the business judgment rule usually look for conflicts of interest between managers, on the one hand, and the firm and its shareholders, on the other hand. Logically, however, if—as this article argues—the managers should also have a duty to the public, then the notion of conflicts should be broadened to include conflicts between managers, on the one hand, and the public, on the other hand.

²⁰⁶ A related question is the extent to which conflicted and grossly negligent managers who are subject to liability should be protected under directors and officers (“D&O”) liability insurance, which indemnifies managers against personal liability. Although D&O liability insurance will be needed to incentivize good managers and also to help ensure that sufficient funds are available to properly incentivize private-action lawsuits, it might compromise the deterrent effect of imposing personal liability. Cf. Richard MacMinn et al., *Directors, Directors and Officers Insurance, and Corporate Governance*, 35 J. INS. ISSUES 159, 165 (Fall 2012) (observing that “[t]he major criticism of corporate purchase of D&O insurance is that it creates moral hazard problems for” the managers covered by

change the business judgment rule; it merely applies the gross negligence standard that is articulated as part of that rule, though rarely utilized with any rigor.²⁰⁷ Moreover, because courts routinely review whether other types of actions are grossly negligent, they should not find it “inappropriate” or impractical to review corporate risk-taking actions under a gross negligence standard. As a practical matter, furthermore, managers who follow a reasonable procedure to balance public costs and private benefits—such as the procedure discussed in this article²⁰⁸—should be protected. That would effectively conform the business judgment rule’s public-governance-duty application to a duty of process care, the standard commonly used in the United States.²⁰⁹

The discussion above is normative, attempting to neutrally balance competing goals. Under U.S. law, however, regulators are technically required “to mitigate risks to the financial stability of the United States” without consideration of costs and benefits.²¹⁰ That law could be interpreted to favor the first competing goal (protecting the public

such insurance). A possible balance might be to increase the size of the deductible for actions that result in systemic harm.

²⁰⁷ Although gross negligence is articulated as part of the business judgment rule, directors usually are not subjected to monetary damages for violating their duty of care, even when they are grossly negligent. *See, e.g.*, Carter G. Bishop, *Directorial Abdication and the Taxonomic Role of Good Faith in Delaware Corporate Law*, 2007 MICH. ST. L. REV. 905, 911 (2007); Jesse W. Markham, Jr., *The Failure of Corporate Governance Standards and Antitrust Compliance*, 58 S.D. L. REV. 499, 502 (2013) (observing that although it is included in the duty of care, gross negligence “has almost no place in the life of a board member of a public company because every state of the Union has enacted so-called ‘exculpation’ enabling laws that permit corporations to excuse their boards of any duty of care”).

²⁰⁸ *See* Parts III.B.1 & III.B.2, *supra*.

²⁰⁹ *See, e.g.*, *Brehm v. Eisner*, 746 A.2d 244, 264 (Del. 2000) (stating that due care in the corporate decisionmaking context is process due care only, not substantive due care); *In re Caremark Int’l. Inc.* 698 A.2d 959, 967 (Del. 1996) (explaining that the business judgment rule is process oriented and informed by a deep respect for all good-faith board decisions).

²¹⁰ *See supra* note 65.

against systemic externalities) over the second (encouraging the best managers to serve).²¹¹

CONCLUSIONS

Although corporate risk-taking is economically necessary and even desirable, it can also be harmful. There is widespread agreement that excessive corporate risk-taking was one of the primary causes of the systemic collapse that caused the 2008-09 financial crisis. To avoid another devastating collapse, most financial regulation since the crisis is directed at reducing excessive corporate risk-taking by systemically important firms. Often that regulation focuses on aligning managerial and investor interests, on the assumption that investors generally would oppose excessively risky business ventures.

This article argues that assumption is flawed. What constitutes “excessive” risk-taking depends on the observer; risk-taking is excessive from a given observer’s standpoint if, on balance, it is expected to harm that observer. As a result, the law inadvertently allows systemically important firms to engage in risk-taking ventures that are expected to benefit the firm and its investors but, because much of the systemic harm from the firm’s failure would be externalized onto other market participants as well as onto ordinary citizens impacted by an economic collapse, harm the public.

Pragmatically, regulators cannot control the myriad harmful externalities that result from corporate risk-taking. But excessive risk-taking that causes the failure of a systemically important firm could trigger a domino-like systemic collapse of other firms or markets, leading to widespread unemployment and poverty. Regulation should try to control that risk-taking. Post-financial-crisis regulation attempts to control that risk-taking without interfering with corporate governance because financial regulation of corporate governance is thought to weaken the wealth-producing capacities of the firm.

²¹¹ That law should not fully trump the first competing goal over the second because protecting the public against systemic externalities requires at least reasonably competent managers.

That sort of substantive financial regulation is certainly important. The article shows, however, that it is, and inevitably will be, insufficient to control the excessive corporate risk-taking that causes systemic externalities.

The article then examines whether regulating corporate governance could help to control that risk-taking, without weakening corporate wealth-producing capacity. It concludes that managers of systemically important firms should not only have their traditional corporate governance duty to investors but also a duty—which the article calls a ‘public governance duty’—not to engage in excessive risk-taking that could systemically harm the public. Such a duty would help to align private and public interests. It also would help to correct another critical regulatory failure—that substantive financial regulation usually lags financial innovation. That regulatory lag occurs because substantive financial regulation often depends on regulators precisely understanding the particular design and structure of financial firms, markets, and other related institutions at the time the regulation is promulgated. The problem, though, is that the design and structure are constantly changing. The public governance duty, in contrast, would overcome that time lag. If the firm is proposing to engage in a risky project that represents financial innovation, its managers either have or, to fulfill their governance duties, should try to obtain the most current information about the innovation and its consequences.

The proposed public governance duty is designed to avoid weakening corporate wealth-producing capacity.²¹² The duty merely requires managers of systemically important firms to price in potential systemic costs when deciding on risky projects whose failure could cause the firm to fail. This recognizes that a firm’s wealth production to society should be assessed net of systemic public harm. The article’s analysis of the public governance duty also informs the larger debate over corporate governance models.

²¹² Read literally, however, the Dodd-Frank Act imposes a mandate on U.S. regulators to reduce systemic externalities regardless of the costs of doing so. *See supra* notes 210-211 and accompanying text. This article—and regulators generally—eschews such an austere and unrealistic approach.

The analysis shows that such a duty should not be inconsistent with corporate governance law and theory. It also explains why systemic externalities should count in limiting corporate governance autonomy (and freedom of contract).

Because the public governance duty is intended to have minimal impact on existing corporate governance, the article also examines such practical concerns as how the duty should be legally imposed, how managers should assess and balance the public costs and private benefits of a risk-taking activity, how the duty should be enforced, and to what extent managers performing the duty should have the traditional protection of a business judgment rule as a defense to liability. The last issue is especially significant because qualified managers are unlikely to want to serve without that protection.

The proposed public governance duty should significantly reduce, but it could not completely prevent,²¹³ the excessive risk-taking that causes systemic externalities. Even if imperfect, however, that duty should constitute an important first step towards shaping corporate governance norms to begin to take the public into account.²¹⁴

²¹³ *See, e.g., supra* note 170 and accompanying text (discussing simplifying assumptions).

²¹⁴ There could be even weaker first steps. For example, rather than imposing a public governance “duty,” government could simply legislate a public governance “right” that would permit, but not require, managers to take into account potential systemic harm. State constituency statutes sometimes take that approach. *See supra* note 155 and accompanying text (discussing the Pennsylvania constituency statute). Managers who then vote to favor public over investor interests would not necessarily be violating their state-law corporate governance duties.

Appendix

Model Regulatory Language for a Public Governance Duty²¹⁵

[to come]

²¹⁵ For an analysis of the process by which this or alternative language stating a public governance duty could be implemented into law, *see supra* notes 154-162 and accompanying text.