Misalignment: 

Corporate Risk-Taking and Public Duty

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Abstract: This article argues for a “public governance duty” to help manage excessive risk-taking by systemically important firms. Although governments worldwide, including the United States, have issued an array of regulations to attempt to curb that risk-taking by aligning managerial and investor interests, those regulations implicitly assume that investors would oppose excessively risky business ventures. That leaves a critical misalignment: because much of the harm from a systemically important firm’s failure would be externalized onto the public, including ordinary citizens impacted by an economic collapse, such a firm can engage in risk-taking ventures with positive expected value to its investors but negative expected value to the public. The article analyzes why corporate governance law should, and shows how it feasibly could, take the public interest into account.

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INTRODUCTION

Should corporate governance law take into account risk-taking that could systemically harm the public? Corporate risk-taking is certainly economically necessary and often desirable. Successful risk-taking increases profitability, thereby enhancing welfare by generating jobs and purchasing power. But corporate risk-taking can


sometimes cause harm. There is widespread agreement that excessive corporate risk-taking was one of the primary causes of the systemic economic collapse that became the 2008-09 global financial crisis (the “financial crisis”). There is also a consensus that existing regulatory measures to curb that risk-taking and prevent another crisis are inadequate.

Many of the regulatory responses to the financial crisis, both in the United States and abroad, seek to mitigate excessive risk-taking by systemically important financial firms. 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

nation’s technological progress and economic growth can be partly attributed to bold corporate risk-taking).


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.

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.
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—i.e., the expected costs to that observer exceed the expected benefits. 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 externalized onto other market participants as well as onto the public, including ordinary citizens impacted by an economic collapse.  

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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. Cf. Sean J. Griffith, Governing Systemic Risk: Towards a Governance Structure for Derivatives Clearinghouses, 61 EMORY L.J. 1153, 1156 & 1210 (2012) (describing a similar misalignment as a free-rider and moral hazard problem).

This misalignment occurs because corporate governance law requires 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—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 the firm and its investors. That perspective ignores externalities caused by the risk-taking. In general, that makes sense because myriad externalities result from corporate risk-taking; 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. 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 damage the economy and harm the public. This article argues that corporate governance law should, and feasibly could, take into account risk-taking that causes systemic externalities.

The article proceeds as follows. Part I examines the “macroprudential” regulatory responses to the financial crisis—that is, regulatory responses intended to protect against

10 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, 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 162 and accompanying text, discussing the Pennsylvania constituency statute) and “the entire national economy” (see infra note 160, discussing legislation in Iceland). I am talking, of course, about non-investor externalities. Cf. Griffith, supra note 8, at 1210 (in the context of derivatives transactions, observing that “[b]ecause no private party can enjoy the full benefit of eliminating systemic risk, no private party has an incentive to fully internalize the cost of doing so”).

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12 See infra notes 76-77 and accompanying text.

13 See infra notes 170-171 and accompanying text.

14 Systemic Risk, supra note 9, at 204.
“systemic” risk to the integrity of the financial system\textsuperscript{15}—that purport to mitigate excessive corporate risk-taking by systemically important firms.\textsuperscript{16} 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.

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 legal 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 possible model language, in the form of a Public Governance Duty Act, for regulation imposing the duty.

\textbf{I. THE REGULATORY MISALIGNMENT}

\textsuperscript{15} \textit{Id.} (defining systemic risk).
\textsuperscript{16} \textit{Cf.} text accompanying notes 7-8, \textit{supra} (discussing why such risk-taking occurs).
Various types of macroprudential regulatory responses to the financial crisis purport to mitigate excessive corporate risk-taking by systemically important firms.\(^{17}\) 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.\(^{18}\) 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 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.\(^{19}\)

As shown below, however, these types of responses are insufficient: even if 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 managerial and investor interests. Because there is no formal categorization of macroprudential

\(^{17}\) 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 15 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. Riz Mokal also argues that trying to make the financial system stable by making it less likely that individual systemically important firms will fail can actually increase financial instability. Rizwaan Jameel Mokal, \textit{Liquidity, Systemic Risk, and the Bankruptcy Treatment of Financial Contracts}, \textit{Brooklyn J. Corp., Fin., & Comm. L.} (forthcoming 2015; draft on file with author, at 6).

\(^{18}\) See Part I.A, infra.

regulatory responses, 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, regulation implementing the so-called Volcker Rule, and regulation imposing capital and other types of firm-specific financial requirements. Some of these categories overlap. However one categorizes these responses, however, the analysis below shows—and policymakers agree—that they too are inadequate to control risk-taking that causes systemic externalities.

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. 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


21 See Part I.C, infra.

22 See Part I.D, infra.

23 See Part I.E, infra.

24 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.

25 See supra note 6.

26 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).
noncompliance “with any financial reporting requirement under the Securities Laws” resulting from misconduct.27 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.28

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 firm.29 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.”30 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


29 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.).

to be “materially inaccurate.”31 The Dodd-Frank Act extends certain of these requirements to firms that are required to file periodic reports to the SEC.32 It also requires firms to implement shareholder advisory voting on executive compensation, known as “say on pay.”33

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.34 These requirements therefore will be insufficient to control that risk-taking.35

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

31 Id. (adding § 111(b)(3)(B) to the Emergency Economic Stabilization Act).
32 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).
33 Dodd-Frank Act § 951.
34 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) (arguing that board alignment with shareholder interests would weaken the desirable capacity of managers to manage in the public interest).
35 Professors Bebchuk and Spamann have partly recognized that insufficiency, arguing that compensation of a bank’s “top executives” should be tied not only to common stock value but also to preferred share and bond value in order to better protect the government as a guarantor of bank deposits. Lucian A. Bebchuk & Holger Spamann, Regulating Bankers’ Pay, 98 GEO. L.J. 247, 254 (2010). In that context, they examine “corporate governance measures aiming to align management with shareholders” and conclude, as do I, that such measures will not fix the insufficiency and might even make it worse. Id. at 274-75. Unlike my article, however, they do not consider how corporate governance measures might be reformed to help align management with societal interests.
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. To reduce the chance those conditions will occur, creditors impose even stricter loan covenants on their debtor-firms. 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. 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. Firms customarily offer creditors higher interest rates to compensate for allowing looser covenants, and experience shows that creditors often “go for the gold,” choosing the higher rates over stronger covenants. If private and public interests were perfectly aligned, the pricing theoretically should offset the risks.

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 19. 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 64.

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”). See supra note 17.

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).


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

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.\footnote{See, e.g., Eric S. Halperin, \textit{Coco Rising: Can the Emergence of Novel Hybrid Securities Protect from Future Liquidity Crises?}, 8 \textit{BYU Int’l L. \& Mgmt. Rev.} 15, 21–23 (2011) (explaining why issuing CoCos to investors may be more expensive than issuing ordinary debt).} 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.\footnote{\textit{Cf.} George Pennacchi, \textit{A Structural Model of Contingent Bank Capital}, Federal Reserve Bank of Cleveland, Working Paper No. 10-04 (rev. June 2011), at 30, \textit{available at} https://business.illinois.edu/gpennac/ConCap030211.pdf (observing that a “bank that issues contingent capital faces a moral hazard incentive to increase its assets’ jump risks”). Another possible unintended consequence of contingent capital is that “by requiring banks to issue more debt, it might prompt some to reduce their ratio of equity to assets. This added leverage will leave the system more susceptible to distress in bad times.” \textit{A Bad Way to Make Banks Safe}, \textit{Bloomberg Bus. Wk.}, at 14 (Nov. 23, 2015).}

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 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.  

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.

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 results from externalized harm, not from reliance on a bailout. And it might inadvertently increase systemic externalities by preventing the government from bailing out a failing systemically important firm.

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. The Dodd-Frank Act, for example, 

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 See supra notes 9-14 and accompanying text.
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 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.
requires systemically important firms to file so-called living wills, setting forth how they could liquidate with minimal systemic impact.\textsuperscript{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.\textsuperscript{51}

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.\textsuperscript{52} This proposal became known as the “Volcker Rule.”\textsuperscript{53} The substance of the Volcker Rule was implemented by the Dodd-


\textsuperscript{50} See, \textit{e.g.}, Jennifer Meyerowitz et al., \textit{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).

\textsuperscript{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. \textit{Cf.} Victoria McGrane, \textit{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, \textit{Protecting Financial Markets: Lessons from the Subprime Mortgage Meltdown}, 93 MINN. L. REV. 373, 379-83 & 404-05 (2008). \textit{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).


Frank Act, which prohibits banks from (1) “engag[ing] in proprietary trading”\textsuperscript{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.”\textsuperscript{55}

The Volcker Rule is also insufficient to control risk-taking that causes systemic externalities. Besides the Rule’s limited application (to specific 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 covered by the Rule will fail; but it does not address correlations among failing firms, nor does it address the reasons why firms may want to engage in excessive risk-taking or how to protect the financial system as a system.\textsuperscript{56}

\textsuperscript{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]”).

\textsuperscript{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.”

\textsuperscript{56} See supra note 17. 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
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.\textsuperscript{57} 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.”\textsuperscript{58} 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).”\textsuperscript{59} Imposing a financial surcharge on those systemically important firms could, if calibrated correctly, “offset [that] subsidy and thereby cancel out these undesirable effects.”\textsuperscript{60}

In practice, however, governments have not been using firm-specific financial requirements to control excessive corporate risk-taking because that “would require more precision . . . than is now attainable.”\textsuperscript{61} Instead, firm-specific financial requirements are being imposed to try to make systemically important firms more internally robust, so (as

\textit{Dodd-Frank Initiatives: The Volcker Rule, Limitations on Federal Reserve Section 13(3) Lending Power, and SIFI Thresholds}, 34 \textit{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.

\textsuperscript{57} But cf. Edward Kane, \textit{Hair of the Dog that Bit Us: The Insufficiency of New and Improved Capital Requirements}, in \textit{The First Great Financial Crisis of the 21\textsuperscript{st} Century: A Retrospective} 377 (George Kaufman \\& James Barth, eds., 2015) (arguing that forcing SIFIs to show more accounting capital will do little to curb their enhanced appetite for risk-taking that could cause the firm’s failure).

\textsuperscript{58} \textit{Board of Governors of the Federal Reserve System, supra} note 10, at 13.

\textsuperscript{59} \textit{Id.}

\textsuperscript{60} \textit{Id.}

\textsuperscript{61} \textit{Id.}
is the goal of TBTF regulation\textsuperscript{62}) 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.\textsuperscript{63} 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.\textsuperscript{64}

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.\textsuperscript{65} Firm-specific financial requirements do not purport to (macroprudentially) protect the integrity of the financial system as a system. Such financial requirements might also be

\textsuperscript{62}See supra note 49 and accompanying text.
\textsuperscript{63}Board of Governors of the Federal Reserve System, supra note 10, 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.
\textsuperscript{64}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”).
\textsuperscript{65}See supra note 17. Cf. supra note 38 and accompanying text (making a similar observation in the context of contingent capital regulation). Also cf. Daniel Schwarcz & 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").
counterproductive, making firms that are subject to them less competitive,\footnote{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 10, at 13.} driving “credit intermediation to the less regulated shadow banking sector,”\footnote{BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 10, at 13.} misleading regulators about safety,\footnote{Cf. Emilios Avgouleas, Bank Leverage Ratios and Financial Stability: A Micro- and Macropuilential Perspective, Levy Econ. Inst. Working Paper No. 849 (Oct. 2015), at 3 (observing that federal regulators were misled about banking safety prior to the financial crisis because the required bank leverage ratio “totally failed to capture the perilous state of the US banks in [that] period”).} creating “perverse incentives,”\footnote{Id. at 12-13. Prof. Avgouleas argues “[t]here is evidence that leverage restrictions may not reduce risk” because “bank managers may be incentivized into choosing [riskier] assets with more highly correlated returns”—thereby creating “perverse incentives.” Id. He additionally argues that even the new Basel III capital requirements create “uncertainty [that] severely undermines rather than reinforces market discipline” because “the Basel system of risk weights is “excessively complex and highly difficult to understand [and also] susceptible to gaming.” Id. at 16-17. That uncertainty, in turn, “will lead to a near certain loss of confidence in the banking system” in the event of a crisis. Id. at 17.} and inadvertently hurting the economy.\footnote{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).}
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 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.”

And J.P. Morgan Chase, UBS, and Barclays suffered huge losses from excessive risk-taking or lack of risk-taking oversight.

Whether or not more should be done to control risk-taking that hurts the firm’s interests, 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), systemic risk regulation should additionally focus on regulating a firm’s governance to better align private and public interests.

A. Additional Regulation is Needed

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72 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.
73 This article does not focus on that question per se; it focuses instead on risk-taking that harms the public’s interests.
74 See Part II.B, infra.
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, yet regulation controls few of those externalities. Regulation cannot, realistically, control all corporate externalities.

Nonetheless, for at least three reasons, regulation should require firms to mitigate their systemic externalities. First, systemic externalities “can cause much more
harm than non-systemic externalities.” 79 Because they impact the real economy, 80 systemic externalities can, for example, lead to “widespread poverty and unemployment.” 81 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.” 82 Second, systemic externalities harm the public, as opposed to private stakeholders who could contract to protect themselves. 83 Third, systemic externalities can, as this article will show, realistically, pragmatically, and efficiently be mitigated. 84

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. 85

supervision, derivatives regulation, investment advisers, executive compensation, and rating agencies”).


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

81 Id. at 207, 235.


83 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).

84 See Part III.B, infra.

85 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,
B. Regulating Substance

Regulation could control corporate risk-taking that causes systemic externalities by imposing specific regulatory requirements,\(^{86}\) by making certain actions illegal or tortious, or by imposing corporate governance duties on the managers of systemically important firms.\(^{87}\) 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,”\(^{88}\) 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.”\(^{89}\) The article does not consider, for example, whether to break up systemically important firms.\(^{89}\)

\(^{86}\) 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).

\(^{87}\) 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).

\(^{88}\) 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 83, 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.

\(^{89}\) Lee, supra note 83, 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
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
Accords regulate substance.90 As this article has shown, however, regulating substance
has so far proved insufficient to control the excessive corporate risk-taking that causes
systemic externalities.91

Commentators have proposed other possible ways to regulate substance to help
control that corporate risk-taking.92 For example, regulation could require systemically
important firms to pay into a fund that would be used to help offset systemic risks and
costs.93 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

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.

90 See, e.g., Heath P. Tarbert, Are International Capital Adequacy Rules Adequate? The
“capital adequacy standards for commercial banks . . . prescribed a substantive set of
risk-based capital adequacy standards”).

91 See supra notes 56-72 and accompanying text.

92 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
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
directors-quit-jail-bank-crises.

93 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.
into the fund, thereby helping control each other’s risky behavior.\textsuperscript{94} FDIC deposit insurance provides a precedent for this type of a fund.\textsuperscript{95}

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.\textsuperscript{96} 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.\textsuperscript{97}

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

\textsuperscript{94} 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”).

\textsuperscript{95} Regulating Ex Post, supra note 42, at 102–03; Regulating Systemic Risk, supra note 48, at 1402.


\textsuperscript{97} 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).
systemically important] bank’s actions on wider society.”98 Along these lines, the Financial Stability Board (“FSB”) has proposed imposing a “systemic [capital] surcharge” on the largest banks.99

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.100 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.”101 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.102

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,103 tort law has long been a fundamental tool to impose personal

99 See, e.g., Haldane, supra note 98, at 16–17 (stating that a capital surcharge of over 7% would “remove 90% of the systemic externality”).
101 Id.
102 See supra note 64 and accompanying text.
civil liability to remedy harm for unreasonable risk-taking. Its utility is limited, however, to remedying foreseeable harm. 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 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.

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.” To avoid that dysfunction, I next examine

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104 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. MGGEORGE 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”).

105 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.”).

106 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).

107 Cf. id. at 38 (concluding that “it is unsafe to rely on regulation [that regulates substance] alone”).

108 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.”).
whether regulating governance could help to control that excessive risk-taking without weakening corporate wealth-producing capacity.  

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.  

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

To control that risk-taking, regulation also needs to regulate governance. 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

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109 Cf. supra note 89 and accompanying text (stating that argument against regulating governance).

110 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.”).


112 Cf. Governor Daniel K. Tarullo, supra note 82, at 3 (arguing “for prudential regulation to influence the processes of risk-taking” to complement “capital requirements and other substantive measures”); Griffith, supra note 8, at 1227 (recommending that derivatives clearinghouses maintain “a separate governing body with a public charge—the containment of systemic risk”); Peter O. Muelbert, Managing Risk in the Financial System, in THE OXFORD HANDBOOK OF FINANCIAL REGULATION 364, 385 (Niamh Moloney, Eilis Ferran, & Jennifer Payne, eds. 2015) (suggesting that the management of financial institutions be required “to take into account the negative external effects of their decisions on other financial institutions and, thus, the contribution to increasing systemic risk and reducing financial stability”).
“public governance duty”113) not to engage their firms in excessive risk-taking that leads to those externalities.114 So long as it does not weaken wealth-producing capacity, regulating governance in this way would help to align private and public interests.115

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 promulgated.116 Because the financial architecture is constantly changing,117 that type of grounded regulation has value as long as it is updated as needed to adapt to those

113 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).

114 An alternative to imposing a public governance duty on a firm’s managers might be to designate one or more managers (“public advocates”) whose primary duty would be to represent the public, preserving the other managers’ traditional duties with one exception: in any decisionmaking, the other managers would have the right to take into account the public advocate’s viewpoint. Cf. Steven L. Schwarcz, “The Market Convergence of Debt and Equity: Its Relevance for Governance” (draft on file with author) (arguing that because bond financing now dwarfs equity financing and bond prices are tied to firm performance, corporate governance should include bondholders, and that including bondholders in corporate governance could help to reduce systemic risk because bondholders are more risk averse than shareholders).


116 *Regulating Financial Change*, supra note 70.

117 Id. at [cite].
changes. But ongoing financial monitoring and regulatory updating can be costly and is subject to political interference at each updating stage. As a result, financial regulation of substance usually lags financial innovation, causing unanticipated consequences and allowing innovations to escape regulatory scrutiny.

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, must 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 corporate risk-taking that leads to systemic externalities, this article has shown that regulating governance has an advantage over, and therefore in 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

118 Cf. Perry Mehrling, 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...”).
119 Regulating Financial Change, supra note 70, at [cite].
120 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).
121 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.”).
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 legal 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 possible model language, in the form of a Public Governance Duty Act, for regulation imposing the duty.

A. Analyzing a Public Governance Duty under Corporate Governance Legal 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 legal 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.122 The public, of course, is affected by a firm’s risk-

122 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
taking. This model, however, adds little 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.

Judicial opinions in the United States and Canada illustrate this disagreement. In *Metropolitan Life Insurance Co. v. RJR Nabisco, Inc.*, plaintiff MetLife argued that RJR’s leveraged buyout caused the RJR bonds held by MetLife to lose their investment-grade rating, thereby violating an implied covenant to bondholders. As a consequence of the rating downgrade, the resale value of the bonds plummeted. MetLife argued that its damages should include this loss in market value, but the court declined to recognize that loss as legally compensable. The court implicitly acknowledged the possibility that the bondholders were affected stakeholders. It refused, however, to order compensation for the resulting externalities.
The authority most clearly expressing a stakeholder model is the celebrated Canadian case of *BCE Inc. v. 1976 Debentureholders*, 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. 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. 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.

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.” Even in Canada, however, there remains fundamental disagreement about how to apply a stakeholder model of governance, including how to determine

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issued because the “substantive ‘fruits’ [of a bond indenture only] include the periodic 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.

131 [2008] 3 S.C.R. 560 (Can.).
132 *Id.* at 563.
133 *Id.* at 565.
134 *Id.*
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. 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. The corporate governance rules are priced as part of the contractual negotiation. 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, one of which is when the contracting causes externalities. The critical question is which externalities should count in limiting that freedom.

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136 Cf. TREBILCOCK, supra note 76, 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.


138 Id. at 1430.


140 Id. at 520-21.

141 TREBILCOCK, supra note 76, at 58–59 (raising that question).
Even under contract law, there is no absolute answer to that question. Some scholars have therefore dismissed externalities as a basis for regulation. 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. Systemic externalities not only harm the public, who cannot contract to protect themselves, but also cause much more harm than non-systemic externalities, including widespread poverty and unemployment. These are exactly the type of externalities that should count in limiting freedom of contract.

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.

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

143 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”).

144 That separate context was examining whether regulation should require firms to mitigate their systemic externalities. See supra notes 78-81 and accompanying text.

145 Cf. Morrison, supra note 143, 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).

146 See supra notes 78-81 and accompanying text.

147 Rethinking Freedom of Contract, supra note 140, at 520-21, 534-36, 551 et seq. See also Butler & Macey, supra note 145, 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 143, 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 States\textsuperscript{148} and worldwide\textsuperscript{149} 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.\textsuperscript{150} Although this model is sometimes discussed in a broader context of economic efficiency, it is fundamentally based on agency costs.\textsuperscript{151} Because firms and their agents cannot enter into complete contracts to prevent the latter from shirking,\textsuperscript{152} there should be another way to prevent that.\textsuperscript{153} Shareholders as residual claimants have incentives to monitor the firm’s agents.\textsuperscript{154} 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).\textsuperscript{155}

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.\textsuperscript{156} This article has shown, however, that such

\textsuperscript{149} Cf. Hansmann & Kraakman, \textit{supra} note 122, at 443-48 (discussing the ideological convergence on the shareholder-primacy model around the world).
\textsuperscript{150} Strine & Walter, \textit{supra} note 89, at 346.
\textsuperscript{151} Agency costs are an aspect of economic efficiency; efficiency increases when agency costs are minimized (because agency costs are a dead weight loss).
\textsuperscript{154} Id. at 567.
\textsuperscript{156} Cf. \textit{supra} note 89 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. The alternative is to regulate corporate governance.

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 legal theory. I next examine how to implement such a duty, without weakening corporate wealth-producing capacity.

B. Implementing a Public Governance Duty

The discussion below shows that a public governance duty could be feasibly and efficiently implemented. Under a public governance duty, the managers of a systemically important firm 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. That public duty raises at least six practical questions: (1) How should a public

\[157\] See Part II.B, supra.

\[158\] 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 143, at 4. I would argue to the contrary, that individuals should have no moral right to cause systemic harm to others.

\[159\] 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.

\[160\] 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
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?; (6) To what extent should managers be protected under D&O liability insurance? 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.”

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

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

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

It is questionable, however, whether state legislatures are well positioned to impose a public governance duty. They are unlikely to want to impose such a duty because it could discourage firms from incorporating in their states. Furthermore, systemic risk is a national and international problem, not usually a local state problem.

The “internalization principle” recognizes that regulatory responsibilities should generally be assigned to the unit of government that best internalizes the full costs of the underlying regulated activity. For these reasons, 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.

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163 Armour & Gordon, supra note 39, at 75 (observing that “systemically important firms might be expected to incorporate away from jurisdictions adopting a [director] liability rule”).
164 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.
165 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).
166 Cf. Armour & Gordon, supra note 39, at 68 (proposing that implementing director liability for systemic harm could require “a Federal liability regime”). Professors Armour and Gordon also suggest, id. at 75, that “the mere possibility of federal intervention could itself spur Delaware” to impose something akin to a public governance duty, because “the most powerful driver of innovation in Delaware corporate law has [been] the threat of federal preemption”).
167 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
federal law public governance duty would also override inconsistent state corporation law.168

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 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.169 The Board’s implementing regulations currently only require risk committees to focus on risks to the firm, not to the public.170 That microprudential focus subjects risk committees to the

independent and also, through its “say-on-pay” provisions, requires precatory shareholder approval of the substantive terms of executive compensation. Id. at 1027-29. 168 See infra note 172. For example, a federal law public governance duty would override a disclaimer of liability for gross negligence included in a firm’s certificate of incorporation under Delaware General Corporation Law § 102(b)(7).
169 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).
170 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 indirectly suggesting that possibility by requiring 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”). 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
same misalignment discussed earlier.\textsuperscript{171} 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 broad enough, the Board could issue additional regulations that require risk committees to also consider systemic risks to the public.\textsuperscript{172}

2. Assessing Costs and Benefits. How should managers of a systemically important firm, or members of such a firm’s risk committee,\textsuperscript{173} 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

\begin{quote}
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”).\textsuperscript{171} See supra notes 10-14 and accompanying text. Although that microprudential focus reduces the likelihood that individual firms will fail, that at most partially reduces systemic risk. See note 17, supra.\textsuperscript{172} 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 requiring risk committees to also consider systemic risks to the public. 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. Cf. Peter O. Muelbert & Alexander Wilhelm, CRD IV Framework for Banks’ Corporate Governance, in EUROPEAN BANKING UNION 197 (Danny Busch & Guido Ferrarini, eds., 2015) (stating that the new European Capital Requirements Directive (CRD) IV “requires the decisions of . . . the management body . . . to take into account not only the interests of shareholders, but also . . . the public interest”).\textsuperscript{173} See supra notes 169-172 and accompanying text (discussing risk committees). Professors Armour and Gordon also advocate “board-level review of risk-taking that may give rise to systemic harms, effectuated through a risk-committee process.” Armour & Gordon, supra note 39, at 64. 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 170.
\end{quote}
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. Managers may favor this approach because it would not change their current behavior.

This subjective approach would be subject to at least three drawbacks, however. 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. Second, managers following a subjective approach may be subject to peer pressure to favor investor profitability over avoiding public harm. Third, although courts generally try to avoid second-guessing management decisions, 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 a possible 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 $\alpha$:

174 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”).
175 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 180.
176 Cf. infra notes 191-195 (arguing that the harmful consequences of a systemic collapse justify the application of a precautionary principle).
177 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.
178 See infra notes 207-211 and accompanying text (discussing the business judgment rule as a defense to liability).
\[ \alpha \text{ (expected value of project to investors)} = \left[ (X\% \text{ chance of project being successful}) \times Y \text{ value to investors from that success}^{179} \right] - \left[ (1-X\% \text{ chance of project being unsuccessful}) \times W \text{ loss from that failure} \right] \]

The expected public costs can be calculated as the expected value of the project’s systemic costs, which I’ll call \( \beta \):

\[ \beta \text{ (expected value of project’s systemic costs)} = \left( (1-X\% \text{ chance of project being unsuccessful}) \times F\% \text{ chance of firm failing as a result of the project being unsuccessful} \right) \times Z \text{ resulting systemic costs}^{180} \]

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).

\[ ^{179} Y\$, the value to investors from the project’s success, could be measured by profit or whatever other metric the firm normally uses. \]

\[ ^{180} 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 \ firm \ fails \ as \ a \ result \ of \ the \ project’s \ being \ unsuccessful. \ Thus, \ managers \ would \ only \ need \ to \ engage \ in \ the \ assessment \ when \ deciding \ on \ a \ risky \ project \ whose \ failure \ could, \ either \ itself \ or \ in \ combination \ with \ other \ factors \ of \ which \ such \ managers \ are \ or \ should \ be \ aware, \ cause \ the \ firm \ to \ fail. \ This \ approach \ may \ miss \ other \ triggers \ of \ systemic \ risk, \ such \ as \ the \ negative \ effects \ of \ correlated \ portfolios. \ Cf. \ Schwartz & Schwartz, supra note 65, at 1595-97 (discussing the systemic impact of correlated investments by insurance companies). Second, the full equation would be \( \left[ (1-X\% \text{ chance of project being unsuccessful}) \times F\% \text{ chance of firm failing as a result of the project being unsuccessful} \right] \times Z \text{ resulting systemic costs} + \left[ (X\% \text{ chance of project being successful}) \times A\% \text{ chance of firm failing as a result of the project being successful} \right] \times B \text{ resulting systemic costs} \). However A\%, the chance of the firm failing as a result of the project being successful, is likely to be zero. \]
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 $Z$. 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 not, by itself, cause the financial crisis. 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.

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. 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;

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182 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.

183 *See supra* note 50 and accompanying text.

184 The Dodd-Frank Act attempts to minimize systemic disruptions in the event of a failed systemically important financial institution.
they found that LTCM’s failure would have cost its larger bank-creditors $500–700 million each.\footnote{185}

Another plausible approach to valuing $Z would be to base its value 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,\footnote{186} as part of the process of designating a firm as a “systemically important financial institution,” or “SIFI,”\footnote{187} 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.\footnote{188} 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.

\footnote{185} ROGER LOWENSTEIN, WHEN GENIUS FAILED: THE RISE AND FALL OF LONG-TERM CAPITAL MANAGEMENT 190 (2000).
\footnote{186} 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. \textit{See, e.g.}, \textit{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. \textit{Cf.} ASWATH DAMODARAN, APPLIED CORPORATE FINANCE 653 (3d ed. 2011) (observing that a comparable companies approach is never based on exactly comparable companies).
\footnote{187} 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. \textit{See supra} note 174 and accompanying text.
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 $\alpha$ (the expected value of the project to the firm’s investors) against $\beta$ (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, either itself or in combination with other factors of which such managers are or should be aware, cause the firm to fail. Managers should be aware of such projects.

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 $\alpha$ exceeds $\beta$. As a public policy matter, however, simple Kaldor-Hicks efficiency may be 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.

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189 See supra note 180 and accompanying text. Managers making this determination and the other determinations contemplated by a public governance duty would be protected, of course, by the business judgment rule. See infra notes 207-227 and accompanying text.

190 Armour & Gordon, supra note 39, at 69 (observing that “it is surely the board’s responsibility to identify those risks which are of a magnitude and kind as to threaten the firm’s stability”).

191 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 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.

192 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
“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”193—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.194 Under this weaker form of the precautionary principle, engaging in a project for which $\alpha$ considerably exceeds $\beta$ should not constitute excessive risk-taking.195 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.196

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”).

193 Allen, supra note 192, at 195 (emphasis in original).

194 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”).

195 The margin of safety, in other words, is that $\alpha$ not merely exceeds but considerably exceeds $\beta$. 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.

196 Cf. Lee, supra note 83, 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”).
In examining how to apply this approach, assume for illustrative purposes\textsuperscript{197} 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:

\begin{align*}
X\% \text{ (the chance of the project being successful)} &= 80\%. \\
$Y$ \text{ (the value to investors from that success)} &= $50$ million. \\
$W$ \text{ (the loss from the project’s failure)} &= $20$ million. \\
F\% \text{ (the chance of the firm failing as a result of the project’s failure)} &= 10\%. \\
\end{align*}

Applying these values yields the following:

\begin{align*}
\alpha \text{ (expected value of the project to the firm’s investors)} &= [(80\% \text{ chance of project being successful}) \times $50 \text{ million value to investors from that success}] - [(20\% \text{ chance of project being unsuccessful}) \times $20 \text{ million loss from that failure}] \\
&= $36$ million \\
\beta \text{ (expected value of the project’s systemic costs)} &= (20\% \text{ chance of project being unsuccessful}) \times 10\% \text{ chance of firm failing as a result of the project being unsuccessful} \times $500 \text{ million resulting systemic costs} \\
&= $10$ million
\end{align*}

If these values are realistic, $\alpha$ ($36$ million) would considerably outweigh $\beta$ ($10$ 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

\textsuperscript{197} These values are solely illustrative. They rely on no hard empirical data, and a quantitative analysis is no better than its assumptions.
project might then be engaging in excessive risk-taking because $\alpha$ ($36$ million) would not clearly considerably outweigh $\beta$ ($30$ 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.\textsuperscript{198}

4. Enforcing a Public Governance Duty. Who should enforce a public governance duty? Under existing corporate governance law, shareholder derivative suits 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,\textsuperscript{199} including anti-retaliation protection for managers or others involved in the risk

\textsuperscript{198} 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. \textit{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. \textit{Id.} at 15-16. This article’s public governance duty should meet all of these conditions.

\textsuperscript{199} The Sarbanes-Oxley Act ("SOX") and the Dodd-Frank Act already protect whistleblowers in the financial industry to some extent, including providing for anti-retaliation provisions.
assessment who inform government officials of their firm’s noncompliance\textsuperscript{200} and possibly also monetary rewards.\textsuperscript{201} Regulation implementing a public governance duty might even impose an obligation on managers involved in the risk assessment to inform government officials of their firm’s noncompliance.\textsuperscript{202}

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,\textsuperscript{203} the primary litigation tool for combating fraud against the U.S. government, constitute a strong precedent for this. That Act permits private citizens to sue alleged defrauders in the name of the 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.\textsuperscript{204}

\textsuperscript{200} Informing government officials of one’s firm’s noncompliance is called external reporting. In principle, whistleblowers who engage in internal reporting—informing someone within the firm, such as an employment supervisor—should also be protected. Cf. Orly Obel, Linking Prevention, Detection, and Whistleblowing: Principles for Designing Effective Reporting Systems, 54 S. TEX. L. REV. 37, 46 (2012) ("[A]n important principle for designing reporting systems is that, under most circumstances, attempts to resolve compliance issues should first be made internally. Only if internal reporting fails or is deemed impractical should external reporting to an administrative agency or another outside authority be encouraged."). Managers involved in the risk assessment associated with the public governance duty, however, will already be the most senior managers. See supra notes 9-10 and accompanying text.

\textsuperscript{201} The Dodd-Frank Act, for example, offers monetary incentives to whistleblowers and allows them to commence actions in federal court without first seeking administrative relief. See 15 U.S.C. § 78u-6(h)(1)(B); 15 U.S.C. § 78u-6(b). A whistleblower who prevails in court may receive up to twice the amount of wages lost due to retaliation, as well as attorney fees and 10\%-30\% of any cash recovered by the SEC based on the whistleblower report. See 15 U.S.C. § 78u-6(b).

\textsuperscript{202} Managers complying with this obligation should logically receive anti-retaliation protection. However, in some statutes, such as the Whistleblower Protection Act, a manager who reports wrongdoing as part of his “duty” may be excluded from anti-retaliation protections if the reporting is made in the ordinary course of the manager’s duties. See Yuval Feldman & Orly Obel, The Incentives Matrix: The Comparative Effectiveness of Rewards, Liabilities, Duties, and Protections for Reporting Illegality, 88 TEX. L. REV. 1151, 1167 (2010).


\textsuperscript{204} David Freeman Engstrom, Private Enforcement Pathways: Lessons from Qui Tam Litigation, 114 COLUM. L. REV. 1913, 1943-44 (2014).
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. 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.

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. A critical 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. Weighing the goals of protecting the public against systemic externalities and

206 Id. (citing Vt. Agency of Natural Res. v. United States ex rel. Stevens, 529 U.S. 765, 777-78 (2000)).
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 justifications is an attempt to balance somewhat similar goals: protecting investors against losses, and encouraging the best managers to serve. Even though the business judgment rule can reduce investor 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, discouraging the quality of people who will consider serving as managers.

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

208 The business judgment rule’s other primary justification is that the exercise of managerial business judgment is inappropriate for court review. Hurt, supra note 207, at 259-60. This justification should be as applicable in a public-governance-duty context as in a traditional corporate governance context.


210 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).

211 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 209, 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.
important than protecting investors against losses because systemic harm can be widespread and devastating.\textsuperscript{212} 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 consequences\textsuperscript{213} and also harder to predict consequences to the public than to the firm and its investors.\textsuperscript{214} 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 to help balance those goals.\textsuperscript{215} 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.\textsuperscript{216} In a public-governance-duty context, courts likewise should not be required

\textsuperscript{212} See supra note 14 and accompanying text (observing that systemic externalities damage the economy and harm the public) & \textit{supra} note 181 (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.

\textsuperscript{213} \textit{Cf.} Regulating Ex Post, \textit{supra} note 42, at 93–96 (observing, among other things, that we do not yet know enough about systemic shocks to prevent their transmission).

\textsuperscript{214} \textit{Cf.} Friedman, \textit{supra} note 89 (arguing that managers are experts in running the company, not experts in improving social welfare).

\textsuperscript{215} 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 \textit{supra} note 208.

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.217

Applying these scholars’ arguments to a public-governance-duty context, it 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 courts to exercise inappropriate discretion or discourage the best people from serving. Scholars who have examined corporate governance from the standpoint of systemic harm likewise argue that “the case for business judgment protection” is weaker.218 I next argue that the public interest should in principle require a modest weakening of the business judgment rule, if such weakening would not require courts to exercise inappropriate discretion or discourage the best people from serving. I then propose how, consistent with those goals, the business judgment rule should be weakened, and also show why the proposed weakening would be consistent with the business judgment rule’s actual application in at least some U.S. states, including Delaware.

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.219 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.220 Managers who are conflicted in

217 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.
218 Armour & Gordon, supra note 39, at 39. They make this argument on the basis that “diversified shareholders [then] want managers to take less risk.” Id. (emphasis in original). Professors Armour and Gordon also observe that “[d]irector liability is not an innovation in the control of risk-taking by financial institutions.” Id. at 62.
219 See supra note 207 and accompanying text.
220 Cf. Avgouleas, supra note 68, at 19 (arguing that “where managerial rewards are contingent on shareholder returns, this naturally places limits on analyzing shareholders
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. Technically, this solution does not even 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. 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 article—should be protected. That would effectively conform the

and managers as distinct stakeholder groups within banks”). 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.

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”).

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

Section 5(a) of the proposed Public Governance Duty Act provides this safe harbor.
The requirement that managers use at least slight care in assessing systemic harm to the public would also be consistent with the business judgment rule’s actual application in at least some jurisdictions, including Delaware, that do not formally articulate a gross negligence standard as part of the rule. Delaware, for example, disallows business-judgment-rule protection for managers who act in “bad faith,” which is broadly defined as including conduct that “is known to constitute a violation of applicable positive law,” which in turn is interpreted to include a manager failing to take “steps in a good faith effort to prevent or remedy” such a violation. A manager’s failure fail to use even slight care when assessing systemic harm to the public under a legally mandated public governance duty would appear to be bad faith under those interpretations.

6. Protecting Managers under D&O Liability Insurance  The final question is the extent to which managers who become subject to liability for breaching the public governance duty 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

224 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).
225 See In re Walt Disney Co. Derivative Litigation, 907 A.2d 693, 755 (Del. Ch. 2005) (explaining that “[t]he presumption of the business judgment rule creates a presumption that a director acted in good faith” and that “[t]he good faith required of a corporate fiduciary includes . . . duties of care and loyalty”).
compromise the deterrent effect of imposing personal liability.\textsuperscript{228} Furthermore, because the harm resulting from systemic harm is open ended,\textsuperscript{229} insurers may be reluctant to offer D&O insurance covering breaches of the public governance duty. At least one possible solution to these concerns would be to specify a limit on the amount of the claim that could be imposed for breaching the public governance duty and, like a deductible, to require managers to be personally liable for some percentage of that amount.\textsuperscript{230}

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.\textsuperscript{231} That law could be interpreted to favor the first competing goal (protecting the public against systemic externalities) over the second (encouraging the best managers to serve).\textsuperscript{232}

\textbf{CONCLUSIONS}

Although corporate risk-taking is economically necessary and even desirable, it can sometimes be harmful. There is widespread agreement that excessive corporate risk-taking was one of the primary causes of the systemic economic collapse that became the 2008-09 financial crisis. Most financial regulation since the crisis is therefore directed at

\textsuperscript{228} 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 such insurance).

\textsuperscript{229} Armour & Gordon, supra note 39, at 69 (indicating that systemic losses raise open-ended director liability because they “cannot readily be quantified”).

\textsuperscript{230} The Appendix’s proposed Public Governance Duty Act accomplishes this in sections 4(a) and 5(b) thereof. Cf. Armour & Gordon, supra note 39, at 69 (arguing that capping director liability by reference to income “will in most cases strike a balance between the desire to enhance deterrence while avoiding strong disincentives to director service by the most qualified”).

\textsuperscript{231} See supra note 66.

\textsuperscript{232} 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.
reducing excessive risk-taking by systemically important firms. That regulation usually 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. 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

233 See supra note 14 and accompanying text.
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.\textsuperscript{234} 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. The analysis shows that such a duty should not be inconsistent with corporate governance legal 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

\textsuperscript{234} 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 231-232 and accompanying text. This article—and regulators generally—eschews such an austere and unrealistic approach.
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 Appendix below proposes a Public Governance Duty Act, designed to implement the goals set forth in the article. Such a public governance duty should significantly reduce, but it could not completely prevent, 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.

235 In the United States, certain of those goals might be able to be implemented without the need for new legislation. See supra notes 169-172 and accompanying text (explaining that the Federal Reserve Board requires risk committees of systemically important financial firms to consider risks to the firm, not to the public; but § 165(h) of the Dodd-Frank Act might already provide the Federal Reserve Board with a broad enough mandate to require those committees to also consider systemic risks to the public).

236 See, e.g., supra note 180 and accompanying text (discussing simplifying assumptions); supra notes 181-187 and accompanying text (discussing the difficulty of valuing $Z, the systemic costs if the firm fails); and supra note 186 (explaining why “no estimate [of $Z] would be perfect”).

237 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 162 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.

238 This article does not directly engage the broader questions of whether corporate governance law should take into account other public interests, such as climate change and environmental harm or non-systemic economic harm, when traditional forms of regulation are insufficient. In separate articles, I use this article’s conceptual analysis as a stepping stone to address these broader questions. I also address the possibility of designating certain managers specifically to act in the public interest in lieu of modifying the corporate governance duties of regular managers. Cf. note 114, supra (observing that an alternative to imposing a public governance duty on a firm’s managers might be to designate a public-advocate manager whose primary duty would be to represent the public, preserving the other managers’ traditional duties with one exception: in any decisionmaking, the other managers would have the right to take into account the public advocate’s viewpoint).
Appendix

Model Regulatory Language for a Public Governance Duty

PUBLIC GOVERNANCE DUTY ACT

SECTION 1. TITLE
(a) This Act may be cited as the “Public Governance Duty Act.”

SECTION 2. DEFINITIONS
(a) Except as otherwise specifically provided in this Act, the following definitions shall apply:

(1) The term “business judgment rule” means the legal presumption that a firm’s managers should not be personally liable for harm caused by negligent decisions made in good faith and without conflicts of interest.

(2) The term “director” means a member of a systemically important firm’s board of directors or such other senior manager who shares or otherwise has ultimate responsibility to manage the firm.

(3) The term “fail” means that a firm admits in writing its inability to pay its debts; or makes a general assignment for the benefit of creditors; or becomes subject to a bankruptcy, insolvency, winding-up, liquidation, or other similar case or proceeding; or otherwise ceases normal business operations due to financial distress.

(4) The term “public governance duty” has the meaning set forth in section 3(a) of this Act.

(5) The term “systemically important firm” means a firm that has been designated as systemically important by [name of applicable governmental body that is authorized to make that designation].

SECTION 3. PUBLIC GOVERNANCE DUTY

239 For an analysis of the process by which this proposed Public Governance Duty Act or alternative language stating a public governance duty could be implemented into law, see supra notes 161-172 and accompanying text.
(a) THE PUBLIC GOVERNANCE DUTY. In addition to the duties a director may have to shareholders or other stakeholders, each director of a systemically important firm has a duty (“public governance duty”) not to engage the firm in risk-taking that, viewed at the time of such risk-taking and either itself or in combination with other factors of which such director is or should be aware, could reasonably cause the firm to fail unless such director (1) first performs one of the processes set forth in subsection (b) of this section and (2) based thereon, determines that the firm should engage in that risk-taking.

(b) PROCESS. For each risk-taking described in subsection (a) of this section, a director shall perform the process described in either subsection (b)(1) or subsection (b)(2) of this section.

(1) The director shall assess and balance the benefits and costs of such risk-taking, including potential systemic harm to the public, in the manner such director would lawfully assess and balance any other relevant benefits and costs when making a corporate governance decision; or

(2) The director shall assess and balance the benefits and costs of such risk-taking, including potential systemic harm to the public, according to the following methodology: [The Act could insert here, for example, methodology extracted from this article’s text.]

SECTION 4. LIABILITY AND ENFORCEMENT

(a) LIABILITY. A director who violates the public governance duty shall be liable for up to [$250,000] per risk-taking.

(b) PUBLIC ENFORCEMENT. [Name of applicable governmental agency that is authorized to enforce this Act] (the “Agency”) may enforce this Act by [insert

240 Cf. supra notes 180 & 189-190 and accompanying text (discussing the risk-taking for which managers should assess the public governance duty). Directors making this determination would be protected by the business judgment rule.

241 See supra notes 172-174 and accompanying text.

242 See text accompanying notes 173-198, supra.

243 This number is merely suggested. Compare text accompanying notes 203-204, supra (discussing how to incentivize qui tam actions) with § 5(b) of the Public Governance Duty Act (limiting director insurance coverage).
appropriate administrative and/or judicial legal actions that may be taken to impose liability or to restrain a risk-taking for which a director has violated the public governance duty\textsuperscript{244}.\textsuperscript{244}

(c) PRIVATE ENFORCEMENT. A person may bring a civil action to enforce this Act on behalf of and in the name of the Agency.\textsuperscript{245}\textsuperscript{245}

(1) A copy of the complaint and written disclosure of substantially all material evidence and information the person possesses shall be served on the Agency. The complaint shall be filed in camera, shall remain under seal, and shall not be served on the defendant until the Agency elects whether to intervene and proceed with the action.

(2) The Agency shall elect whether to intervene and proceed with the action within 60 days after it receives both the complaint and the material evidence and information referenced in subsection (c)(1) of this section. Before the expiration of that 60-day period, the Agency shall (A) proceed with the action, in which case the action shall be conducted by the Agency, or (B) notify the court that it declines to take over the action, in which case the person initiating the action shall have the right to conduct the action.

(3) If the Agency proceeds with the action, it shall have full responsibility for prosecuting the action, and shall not be bound by any act of the person bringing the action. Such person, however, shall receive at least [15 percent but not more than 30 percent\textsuperscript{246}] of the proceeds of the action or settlement thereof, depending upon the extent to which the Agency determines such person substantially contributed to the prosecution of the action.

(4) If the initiating person conducts the action because the Agency declined to take it over, such person shall have the right to the proceeds of the action or settlement thereof.\textsuperscript{247} However, if the action is dismissed or the defendant otherwise prevails, the court may require such person to pay the defendant’s reasonable attorneys’ fees and

\begin{footnotes}
\item[244] See supra notes 198-199 and accompanying text.
\item[245] See supra notes 203-206 and accompanying text (discussing qui tam actions).
\item[246] \textit{Cf.} text accompanying note 204, supra (discussing citizen-plaintiff recovery in qui tam actions).
\item[247] See id.
\end{footnotes}
expenses if the court finds that the action was clearly frivolous, clearly vexatious, or brought primarily for purposes of harassment.

SECTION 5. DEFENSES AND INSURANCE

(a) DEFENSES. This Act shall not restrict the availability of the business judgment rule as a defense to liability, provided a director claiming that defense either (A) uses at least slight care when performing the public governance duty or (B) in good faith performs the process set forth in section 3(b)(2) of this Act.248

(b) INSURANCE. A director who violates the public governance duty shall be personally liable for at least \([10]\)249 percent of any liability award or settlement against such director. Such personal liability may not be reimbursed, indemnified, or otherwise directly or indirectly paid or hedged by insurance (including directors and officers liability insurance) or any other means.250

SECTION 6. WHISTLEBLOWING RIGHTS AND OBLIGATIONS

(a) Each employee of a systemically important firm shall have the right, and each director of such a firm shall have the obligation, to report to the Agency any violation or potential violation of the public governance duty of which such employee or director has knowledge and to assist the Agency in an investigation of such violation.251

(b) An employee or director who acts in accordance with subsection (a) of this section, (1) shall not, on account of such action, be liable to any person under any law, rule, or regulation or under any contract or other agreement, and (2) may not, on account of such action, be discharged, demoted, suspended, threatened, or harassed, directly or

248 See supra notes 207-227 and accompanying text (discussing the requirement to use at least slight care as part of a business judgment rule defense).
249 This number is merely suggested. Compare text accompanying note 230, supra (discussing how much personal liability is needed to discourage violations of the public governance duty) with § 4(a) of the Public Governance Duty Act.
250 See supra notes 224-230 and accompanying text (discussing D&O insurance).
251 See supra notes 199-202 and accompanying text (discussing whistleblowing).
indirectly, or in any other manner discriminated against, by such employee’s or director’s firm or by any other person.\textsuperscript{252}

(c) If the Agency finds, after notice and a hearing, that a director has willfully violated such director’s obligation under subsection (a) of this section, it may impose a civil penalty against such director of up to [$20,000]\textsuperscript{253}.

\textsuperscript{252} Section 4(b) of the Public Governance Duty Act might also offer monetary incentives to non-director employee whistleblowers, such as allowed under 15 U.S.C. § 78u-6(b) in a different context.

\textsuperscript{253} This number is merely suggested.