

# AFTER THE FALL: A NEW FRAMEWORK TO REGULATE “TOO BIG TO FAIL” NON-BANK FINANCIAL INSTITUTIONS

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*The goal of any financial regulatory system should be to enable well-functioning markets. Meeting this goal requires reducing the impact and frequency of financial institution failures that cause systemic risk. Any regulatory structure, however, inevitably involves tradeoffs. A policy that effectively reduces systemic risk and its associated costs might also increase moral hazard. Similarly, a policy that seeks to reduce moral hazard and maintain market discipline—for example, by allowing a large interconnected institution such as Lehman Brothers to fail—might also create uncertainty, which can harm markets by creating panic. In this Note, I argue that our current regulatory structure is suboptimal in its regulation of systemic risk. A different regulatory structure could more effectively reduce the systemic risk caused by failing non-bank financial institutions, while minimizing the attendant problems caused by the regulations themselves—moral hazard and uncertainty. The federal government could strike a superior balance by establishing more stringent ex ante prudential regulations of systemically important non-bank financial institutions aimed at curbing excessive risk-taking and by implementing a regulatory process to resolve the failure of such institutions. The Obama Administration has proposed regulatory reform that endorses such beneficial changes, but certain details in the proposal fall short. I propose specific modifications to the Administration’s proposal to produce a more optimal regulatory framework. By pinpointing and examining the strengths and weaknesses of the Administration’s approach, I formulate a regulatory framework that more effectively contains systemic risk, avoids increasing moral hazard, and reduces excessive uncertainty caused by regulation.*

## INTRODUCTION

In March 2008, the Federal Reserve (Fed) decided to bail out the investment bank Bear Stearns<sup>1</sup> under the authority of the Federal Reserve Act.<sup>2</sup> This action was taken to avoid Bear Stearns’s failure,

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<sup>1</sup> See *infra* notes 34–37 and accompanying text.

<sup>2</sup> Federal Reserve Act § 13(3), 12 U.S.C. § 343 (2006).

which could have created systemic risk<sup>3</sup> and thereby imposed external costs on the larger financial markets. The decision to bail out Bear Stearns established an implicit government guarantee of other large financial institutions and their creditors, creating a moral hazard problem.<sup>4</sup> In September of the same year, the Fed refused to rescue Lehman Brothers, leading to that investment bank's bankruptcy filing and financial turmoil across the globe.<sup>5</sup> Allowing Lehman to fail, though reducing moral hazard, generated uncertainty over regulatory policy that worsened the financial crisis and destabilized markets.<sup>6</sup>

The goal of any financial regulatory system should be to enable well-functioning markets. Meeting this goal requires reducing the impact and frequency of financial institution failures that cause systemic risk. Any regulatory structure, however, inevitably involves tradeoffs. A policy that effectively reduces systemic risk and its associated costs might also increase moral hazard—as was the case with Bear Stearns. Similarly, a policy that seeks to reduce moral hazard and maintain market discipline—for example, by allowing a large interconnected institution such as Lehman to fail—might generate uncertainty, which can harm markets by creating panic.

The current literature has focused on describing regulatory action during the crisis of 2008 and occasionally proposing reforms in specific areas.<sup>7</sup> In this Note, I argue that our current regulatory structure for non-bank financial institutions<sup>8</sup> is suboptimal in its regulation of systemic risk, produces unnecessary moral hazard, and creates regulatory uncertainty that fuels panic. A different regulatory structure could better reduce the systemic risk caused by failing non-bank financial institutions while also minimizing the attendant problems caused by the regulations themselves—moral hazard and uncertainty. The federal government could strike a superior balance between reducing systemic risk and the creation of these attendant problems by

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<sup>3</sup> For a definition of systemic risk, see *infra* note 12 and accompanying text.

<sup>4</sup> For a definition of moral hazard, see *infra* notes 50–51 and accompanying text.

<sup>5</sup> See *infra* notes 39–44 and accompanying text (discussing Lehman's failure and subsequent impact on global financial markets).

<sup>6</sup> See *infra* Part II.B.2 (discussing uncertainty and panic after Fed allowed Lehman to fail).

<sup>7</sup> E.g., Stephen M. Davidoff & David Zaring, *Regulation by Deal: The Government's Response to the Financial Crisis*, 61 ADMIN. L. REV. 463 (2009) (reviewing government action as deal-maker during financial crisis); Brian J.M. Quinn, *The Failure of Private Ordering and the Financial Crisis of 2008*, 5 N.Y.U. J.L. & BUS. 549, 550–53 (2009) (discussing roots of crisis and reformation of securitization markets, clearinghouses, and credit default swaps).

<sup>8</sup> A non-bank financial institution is any institution other than a “bank” or other depository institution that performs financial functions. For a definition of “bank,” see *infra* note 25.

establishing more stringent *ex ante* prudential regulations of systemically important non-bank financial institutions, which would curb excessive risk-taking, and by implementing a regulatory process to resolve the failure of such institutions. The Obama Administration has proposed regulatory reform that endorses such beneficial changes, but certain details in the proposal fall short.<sup>9</sup> I propose specific modifications to the Administration's proposal that will produce a more optimal regulatory framework. By pinpointing and examining the strengths and weaknesses of the Administration's approach, I formulate a regulatory framework that more effectively contains systemic risk, avoids increasing moral hazard, and reduces excessive uncertainty caused by regulation.

Part I of this Note examines the theory underlying financial institution failures. It first explains the problem of "too big to fail" (TBTF) financial institutions.<sup>10</sup> These institutions, which undertake excessive risk in order to make large profits, create systemic risk that they do not internalize, thereby endangering the entire financial system. Part I further discusses how regulation to avert such systemic risk can generate counterproductive results, specifically moral hazard and uncer-

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<sup>9</sup> In this Note, I refer to the Obama Administration's draft legislation and associated Treasury Department White Paper that were introduced over the summer of 2009. DEP'T OF THE TREASURY, BANK HOLDING COMPANY MODERNIZATION ACT OF 2009 [hereinafter MODERNIZATION ACT], available at <http://www.treasury.gov/press/releases/tg227.htm> (follow "Title II" hyperlink at bottom of page) (draft legislation sent to Congress July 22, 2009); DEP'T OF THE TREASURY, FINANCIAL REGULATORY REFORM, A NEW FOUNDATION: REBUILDING FINANCIAL SUPERVISION AND REGULATION 10–18 (2009) [hereinafter A NEW FOUNDATION], available at [http://www.financialstability.gov/docs/regs/FinalReport\\_web.pdf](http://www.financialstability.gov/docs/regs/FinalReport_web.pdf) (white paper issued July 10, 2009); DEP'T OF THE TREASURY, RESOLUTION AUTHORITY FOR LARGE, INTERCONNECTED FINANCIAL COMPANIES ACT OF 2009 [hereinafter RESOLUTION AUTHORITY ACT], available at <http://www.treas.gov/press/releases/tg229.htm> (follow "Title XII" hyperlink at bottom of page) (draft legislation sent to Congress July 22, 2009). Since the Obama Administration legislation was introduced, both House and Senate Democrats have proposed variations on this bill. See Restoring American Financial Stability Act of 2010, S. 3217, 111th Cong. (2010) (proposing reform "[t]o promote the financial stability of the United States by improving accountability and transparency in the financial system, to end 'too big to fail,' to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes"); Wall Street Reform & Consumer Protection Act of 2009, H.R. 4173, 111th Cong. (2009) (proposing regulatory changes "[t]o provide for financial regulatory reform, to protect consumers and investors, to enhance Federal understanding of insurance issues, to regulate the over-the-counter derivatives markets, and for other purposes"). Such legislation may change and evolve as it progresses through the House and Senate.

<sup>10</sup> In this Note, I focus on non-bank financial institutions, but the implications of the analysis could be extended to other institutions as well, such as bank holding companies. I also limit the scope of my proposal to the regulation of TBTF institutions and therefore do not address to what extent financial institutions that are *not* TBTF should be regulated. The proposal should not imply that institutions that are not deemed TBTF should go unregulated.

tainty. Part II examines our current regulatory approach's effectiveness at addressing the difficulties discussed in Part I. It concludes that our current structure is suboptimal because in its attempt to limit systemic risk—which it does poorly—it creates excessive moral hazard and regulatory uncertainty. Part III explains and evaluates the Obama Administration's proposed legislation to reform financial regulation. Part IV then sets forth an alternative regulatory framework that adopts the beneficial aspects of the Administration's proposal while improving upon its major weaknesses, representing what I view as normatively ideal legislation. Specifically, the alternative framework would prevent systemic risk more reliably and reduce the additional harm and contagion caused by uncertainty in regulatory behavior without worsening moral hazard.

## I

### THEORY OF FINANCIAL INSTITUTION FAILURES

In this Part, I broadly examine the relationship between systemic risk and the problems created by policies attempting to reduce such risk. Because TBTF institutions are so large and interconnected, their failure can threaten the financial system as a whole. One way of reducing systemic risk is by bailing out TBTF institutions—i.e., guaranteeing their creditors and counterparties—which reduces the chance of a failure by preventing runs on the institutions. The problem with such a policy, however, is that it creates moral hazard for the guaranteed parties, who will come to expect future bailouts. This policy thus reduces the guaranteed parties' exertion of market discipline, which would otherwise prevent the institution from taking on excessive risk. Conversely, a policy of constructive ambiguity—selectively bailing out creditors and counterparties—reduces the problem of moral hazard, but at the cost of creating uncertainty and panic, which can exacerbate systemic risk. An inquiry into these principles is essential to explain how lawmakers can create an optimal regulatory framework.<sup>11</sup>

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<sup>11</sup> Striking the right balance between systemic risk, moral hazard, and uncertainty is a complicated empirical question not undertaken in this Note. Instead, the proposal I set forth in Part IV reduces systemic risk and uncertainty without increasing moral hazard, thus answering the antecedent question of how to optimize regulatory structure to reduce the levels of moral hazard and uncertainty before reaching the question of proper balance.

### A. Regulation Should Seek To Reduce Systemic Risk

Systemic risk caused by failing financial institutions is a major concern in our increasingly global and interconnected financial markets. Professor Schwarcz defines systemic risk as

the risk that (i) an economic shock such as market or institutional failure triggers (through a panic or otherwise) either . . . the failure of a chain of markets or institutions or . . . a chain of significant losses to financial institutions, (ii) resulting in increases in the cost of capital or decreases in its availability, often evidenced by substantial financial-market price volatility.<sup>12</sup>

By setting off a chain reaction of failures or losses, systemic risk imposes external costs on markets and the economy. A sudden failure can create contagion by causing “a loss of investor confidence,” leading private investors to rush out of investments and thereby causing further liquidations.<sup>13</sup> Systemic risk can also harm the economy primarily by raising the cost of capital<sup>14</sup> and “generat[ing] social costs in the form of widespread poverty and unemployment.”<sup>15</sup>

Because no individual financial institution has an incentive to limit its own risk in order to reduce the external costs imposed on

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<sup>12</sup> Steven L. Schwarcz, *Systemic Risk*, 97 GEO. L.J. 193, 204 (2008); see also ROBERT E. LITAN & JONATHAN RAUCH, *AMERICAN FINANCE FOR THE 21ST CENTURY* 98 (1997) (offering another definition of “systemic risk” as “refer[ring] to the possibility of a sudden, usually unexpected, event that disrupts the financial markets, and thus the efficient channeling of resources, quickly enough and on a large enough scale to cause a significant loss to the real economy”).

<sup>13</sup> *Hedge Fund Operations: Hearing Before the H. Comm. on Banking and Financial Servs.*, 105th Cong. 34 (1998) [hereinafter *McDonough Statement Before the House*] (statement of William J. McDonough, President, Federal Reserve Bank of New York), available at [http://commdocs.house.gov/committees/bank/hba51526.000/hba51526\\_of.htm](http://commdocs.house.gov/committees/bank/hba51526.000/hba51526_of.htm).

<sup>14</sup> See Schwarcz, *supra* note 12, at 198–99 (explaining that systemic risk caused by failed financial institutions directly decreases availability and increases costs of capital); see also *Turmoil in U.S. Credit Markets: Examining the Recent Actions of Federal Financial Regulators: Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs*, 110th Cong. 4 (2008) [hereinafter *Senate Hearing*] (statement of Timothy F. Geithner, President, Federal Reserve Bank of New York), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=50c5b316-ae77-4a68-839c-22bff2c53f2f](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=50c5b316-ae77-4a68-839c-22bff2c53f2f) (explaining that systemic risk “is not theoretical risk” because “[i]t carries the risk of significant damage to economic activity”); *McDonough Statement Before the House*, *supra* note 13, at 1052 (arguing that allowing Long Term Capital Management to default “would have led to further increases in the cost of capital to U.S. businesses”).

<sup>15</sup> Schwarcz, *supra* note 12, at 207. Timothy Geithner similarly emphasizes the possibility of social costs, asserting that “[a]bsent a forceful policy response, the consequences [of systemic risk] would be lower incomes for working families, higher borrowing costs for housing, education, and the expenses of everyday life, lower value of retirement savings, and rising unemployment.” *Senate Hearing*, *supra* note 14, at 4 (statement of Timothy F. Geithner, President, Federal Reserve Bank of New York), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=50c5b316-ae77-4a68-839c-22bff2c53f2f](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=50c5b316-ae77-4a68-839c-22bff2c53f2f).

financial markets and the economy, systemic risk can be thought of as a market failure.<sup>16</sup> Since collective action on the part of market participants to prevent systemic risk is unlikely,<sup>17</sup> regulation should seek to mitigate systemic external costs caused by the failure of TBTF institutions by (1) preventing overly risky behavior by a TBTF institution that could cause it to fail and create contagion, and (2) preventing the panic that can precipitate a failure.

1. *Systemic Risk as Presented in the Traditional Context of Depository Institutions*

Systemic risk is typically associated with commercial bank runs where depositors rush to withdraw funds from their bank, causing that bank's failure<sup>18</sup> along with contagion, resulting in the failure of other similar banks.<sup>19</sup> Regulations have been developed to prevent bank runs and mitigate the systemic risk caused by the failure of depository institutions. For example, deposit insurance has now largely eliminated the problem of depositor runs on commercial banks by preventing panics from occurring in the first place.<sup>20</sup> Similarly, a stan-

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<sup>16</sup> Schwarcz, *supra* note 12, at 206; *see also* Senate Hearing, *supra* note 14, at 4 (statement of Timothy F. Geithner, President, Federal Reserve Bank of New York), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=50c5b316-ae77-4a68-839c-22bff2c53f2f](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=50c5b316-ae77-4a68-839c-22bff2c53f2f) (asserting that systemic risk "is not something that the market can solve on its own"); THE PRESIDENT'S WORKING GROUP ON FIN. MKTS., HEDGE FUNDS, LEVERAGE, AND THE LESSONS OF LONG-TERM CAPITAL MANAGEMENT 31 (1999) [hereinafter PRESIDENT'S WORKING GROUP], available at <http://www.ustreas.gov/press/releases/reports/hedgfund.pdf> ("Every firm has an incentive to restrain its risk taking in order to protect its capital, and firm managers have an incentive to protect their own investments in the firm," but "[n]o firm . . . has an incentive to limit its risk taking in order to reduce the danger of contagion for other firms."). Market failure occurs when "the individual pursuit of one's own interest . . . can actually make society worse off." PAUL KRUGMAN, ROBIN WELLS & KATHRYN GRADY, *ECONOMICS: EUROPEAN EDITION* 3 (2007).

<sup>17</sup> It is unlikely that market participants will collectively solve the market failure because "the externalities of systemic failure include social costs that can extend far beyond market participants." Schwarcz, *supra* note 12, at 206.

<sup>18</sup> *See id.* at 199 ("Because banks keep only a small fraction of their deposits on hand as cash reserves, a bank may have insufficient cash to pay all withdrawal-demands, causing it to default and ultimately fail.").

<sup>19</sup> *Id.* at 199 (explaining that domino effect of failures occurs because "banks are closely intertwined financially"); *see also* James Dow, *What is Systemic Risk? Moral Hazard, Initial Shocks, and Propagation*, 18 *MONETARY & ECON. STUD.*, Dec. 2000, at 1, 21 (noting problem of contagion occurs because "the financial system contains a powerful propagation mechanism that can amplify small initial shocks").

<sup>20</sup> MILTON FRIEDMAN & ANNA JACOBSON SCHWARTZ, *A MONETARY HISTORY OF THE UNITED STATES, 1867-1960*, at 440 (Princeton University Press 1990) (1963) (explaining that deposit insurance "has succeeded in achieving what had been a major objective of banking reform for at least a century, namely the prevention of banking panics"); *see also* CHARLES P. KINDLEBERGER & ROBERT ALIBER, *MANIAS, PANICS, AND CRASHES: A HISTORY OF FINANCIAL CRISES* 220 (John Wiley & Sons, Inc., 5th ed. 2005) (1978) ("Deposit

standardized resolution process—a legal process like bankruptcy used “to efficiently and equitably resolve the claims of creditors and other stakeholders”<sup>21</sup>—governs the insolvency of certain banks so as to further mitigate systemic risk. When certain banks fail, the Federal Deposit Insurance Corporation (FDIC)<sup>22</sup> has the authority to resolve the bank failure through standardized regulatory procedures.<sup>23</sup> These resolution processes are tailored to mitigate systemic external costs by minimizing a bank failure’s impact on the financial system as a whole rather than focusing solely on the rights of creditors.<sup>24</sup> As discussed in the next section, however, the traditional bank run problem has now been supplanted by the modern concern that counterparties will begin a run on a non-bank financial institution.

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insurance has limited both bank runs and contagion in the runs from one troubled bank to other banks in a neighborhood.”); Jonathan R. Macey & Geoffrey P. Miller, *Bank Failures, Risk Monitoring, and the Market for Bank Control*, 88 COLUM. L. REV. 1153, 1158 (1988) (“[T]he comprehensive system of federal deposit insurance greatly reduces the danger of bank runs of all sorts . . .”).

<sup>21</sup> Robert R. Bliss & George G. Kaufman, *U.S. Corporate and Bank Insolvency Regimes: A Comparison and Evaluation*, 2 VA. L. & BUS. REV. 143, 144 (2007).

<sup>22</sup> The FDIC is a federal government agency responsible for supervising federally insured, state-chartered banks that are not members of the Fed. John C. Coffee, Jr. & Hillary A. Sale, *Redesigning the SEC: Does the Treasury Have a Better Idea?*, 95 VA. L. REV. 707, 719 (2009); see also *infra* note 26.

<sup>23</sup> The FDIC currently acts as a receiver for all national banks and federal thrifts. 12 U.S.C. § 1821(c)(2)(A) (2006). In practice, the FDIC also acts as a receiver for state banks that are FDIC-insured and state thrifts. RICHARD SCOTT CARNELL ET AL., *THE LAW OF BANKING AND FINANCIAL INSTITUTIONS* 700 (4th ed. 2009). A receiver acts like a bankruptcy trustee in that it “steps into the shoes of an insolvent party.” FEDERAL DEPOSIT INSURANCE CORPORATION, *RESOLUTIONS HANDBOOK* 67 [hereinafter *FDIC RESOLUTIONS HANDBOOK*], available at <http://www.fdic.gov/bank/historical/reshandbook/> (last updated Apr. 2, 2003). The FDIC, however, has greater power than a bankruptcy trustee to “expedite the liquidation process for banks and thrifts in order to maintain confidence in the nation’s banking system and to maximize the cost-effectiveness of the receivership process to preserve a strong insurance fund.” *Id.* Through the receivership process, the FDIC is authorized to take possession of a failed depository institution’s books, records, and assets, and to liquidate the institution or otherwise dispose of its assets and liabilities. 12 U.S.C. § 1821(c)(13)(B), (d)(2)(A)(ii). The FDIC as receiver is to be distinguished from the FDIC as a conservator: “A receiver resolves a failed bank, whereas a conservator can correct problems at a bank regulators intend to keep open.” CARNELL ET AL., *supra*, at 706.

<sup>24</sup> *Addressing the Need for Comprehensive Regulatory Reform: Hearing Before the H. Comm. on Financial Servs.*, 111th Cong. 47 app. at 59 (2009) (statement of Timothy F. Geithner, Secretary of the Treasury) (“[T]he resolution authority that the FDIC has under current law . . . aim[s] to minimize the impact of the potential failure of the financial institution on the financial system and consumers as a whole, rather than simply addressing the rights of the institution’s creditors as in bankruptcy.”).

## 2. *Systemic Risk Caused by the Failure of Non-Bank Financial Institutions*

In recent years, it has become apparent that systemic risk is no longer a problem limited to banks,<sup>25</sup> which may be regulated by the Fed, FDIC, Office of the Comptroller of the Currency (OCC), or Office of Thrift Supervision (OTS), depending on the institution's charter.<sup>26</sup> The failure of "non-bank" financial institutions, such as hedge funds and investment banks, can also pose serious systemic risk to the financial system. This is partly due to the fact that the previously bank-dominated financial system has slowly given way to a system that relies more heavily on non-bank financial institutions through a process called financial disintermediation<sup>27</sup>—"the removal of banks from the equation as investors increasingly lend directly to borrowers."<sup>28</sup> The shift to greater domination by bigger and more interconnected non-bank financial institutions has made these institu-

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<sup>25</sup> Under the Bank Holding Company Act, a "bank" is generally defined to mean a state- or federally-chartered institution which is either insured by the FDIC or which accepts transaction accounts and engages in the business of making commercial loans. 12 U.S.C. § 1841(c) (2006). The Federal Deposit Insurance Act, in turn, defines a "bank" as any national or state bank. 12 U.S.C. § 1813(a) (2006). Senator Dodd's proposal adopts the Federal Deposit Insurance Act's definition. Restoring American Financial Stability Act of 2010, S. 3217, 111th Cong. § 2(17) (2010).

<sup>26</sup> "State-chartered banks with deposit insurance are supervised at the federal level by the Federal Reserve if they are members of the Federal Reserve System, and by the FDIC, if they are not members of the Federal Reserve System." DEP'T OF THE TREASURY, THE DEPARTMENT OF THE TREASURY BLUEPRINT FOR A MODERNIZED FINANCIAL REGULATORY STRUCTURE 99 (2008) [hereinafter TREASURY BLUEPRINT], available at <http://www.ustreas.gov/press/releases/reports/Blueprint.pdf>. The OCC regulates and supervises national banks. 12 U.S.C. § 481 (2006); Comptroller of the Currency Administrator of National Banks, About the OCC, <http://www.occ.treas.gov/aboutocc.htm> (last visited Apr. 15, 2010). The OTS supervises national thrifts. 12 U.S.C. §§ 1462a–1463 (2006); Office of Thrift Supervision, About the OTS, <http://www.ots.treas.gov/?p=aboutOTS> (last visited Apr. 15, 2010).

<sup>27</sup> See TREASURY BLUEPRINT, *supra* note 26, at 7 (acknowledging "the increased importance of non-depository institutions to overall market stability"); Schwarcz, *supra* note 12, at 200 (explaining that disintermediation has enabled companies "to obtain most of their financing through the capital markets," thus making capital markets "increasingly central to any examination of systemic risk").

<sup>28</sup> Christopher M. Bruner, *States, Markets, and Gatekeepers: Public-Private Regulatory Regimes in an Era of Economic Globalization*, 30 MICH. J. INT'L L. 125, 134 (2008); see also *Senate Hearing*, *supra* note 14, at 7 (statement of Timothy F. Geithner, President, Federal Reserve Bank of New York), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=50c5b316-ae77-4a68-839c-22bff2c53f2f](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=50c5b316-ae77-4a68-839c-22bff2c53f2f) ("[As] business models of banks and non-bank financial institutions—especially large securities firms—have converged, . . . investment banks now perform many of the economic functions traditionally associated with commercial banks . . .").



tions “vulnerable to a sudden loss of liquidity”<sup>29</sup> and thus more likely to produce systemic effects.

The collapse of both Bear Stearns and Lehman demonstrates how a non-bank financial institution, like a depository institution, can be subject to a panicked run that precipitates its failure. In the case of Bear Stearns, rumors quickly spread among market participants during the week of March 10, 2008 that Bear Stearns was in trouble, leading to a mass withdrawal of funds from the investment bank.<sup>30</sup> The withdrawal led to a liquidity crisis and the possibility of bankruptcy for the firm.<sup>31</sup> In a very unusual move, Bear Stearns’s short-term counterparties panicked and refused to supply Bear Stearns with overnight credit in the form of short-term repurchase agreements, or “repos.”<sup>32</sup> The result of the panic was that by March 13, Bear did not have enough liquidity to finance its obligations.<sup>33</sup>

The ad hoc rescue of Bear Stearns to avoid bankruptcy also illustrates the concern that the failure of non-bank financial institutions

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<sup>29</sup> *Senate Hearing, supra* note 14, at 7 (statement of Timothy F. Geithner, President, Federal Reserve Bank of New York), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=50c5b316-ae77-4a68-839c-22bff2c53f2f](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=50c5b316-ae77-4a68-839c-22bff2c53f2f).

<sup>30</sup> *In re Bear Stearns Litig.*, 870 N.Y.S.2d 709, 719–20 (N.Y. Sup. Ct. 2008).

<sup>31</sup> *See id.* at 720 (describing run on Bear Stearns); Davidoff & Zaring, *supra* note 7, at 476 (explaining how rumors precipitated run on Bear Stearns).

<sup>32</sup> WILLIAM D. COHAN, *HOUSE OF CARDS: A TALE OF HUBRIS AND WRETCHED EXCESS ON WALL STREET* 53 (2009) (noting that Wall Street firms refusing to lend Bear Stearns overnight repos, potentially forcing lenders to seize pledged collateral if Bear Stearns could not repay borrowings, “had never happened before”). Repos are “agreements between a seller and a buyer whereby the seller agrees to repurchase securities . . . at an agreed upon price and, usually, at a stated time. When a bank uses a repo as a short-term investment, it borrows money from an investor . . . to finance its inventory using the securities as collateral.” FDIC RESOLUTIONS HANDBOOK, *supra* note 23, at 19 n.1. Investment banks are heavily dependent on the short-term repo market. *See Senate Hearing, supra* note 14, at 7 (statement of Timothy F. Geithner, President, Federal Reserve Bank of New York), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=50c5b316-ae77-4a68-839c-22bff2c53f2f](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=50c5b316-ae77-4a68-839c-22bff2c53f2f) (noting that instead of relying on deposits like commercial banks, investment banks fund “large portions of their balance sheets” through very short-term repo market).

<sup>33</sup> *See Senate Hearing, supra* note 14, at 9 (statement of Timothy F. Geithner, President, Federal Reserve Bank of New York), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=50c5b316-ae77-4a68-839c-22bff2c53f2f](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=50c5b316-ae77-4a68-839c-22bff2c53f2f) (“The rumors of Bear’s failing financial health caused its balance of unencumbered liquidity on March 13 to decline sharply to levels that were not adequate to cover maturing obligations and funds that could be withdrawn freely.”); OFFICE OF AUDITS, OFFICE OF INSPECTOR GENERAL, U.S. SEC. & EXCH. COMM’N, *SEC’S OVERSIGHT OF BEAR STEARNS AND RELATED ENTITIES: THE CONSOLIDATED SUPERVISED ENTITY PROGRAM*, at iv (2008) [hereinafter *INSPECTOR GENERAL REPORT*], available at <http://www.sec-oig.gov/Reports/AuditsInspections/2008/446-a.pdf> (explaining that as rumors continued to spread about Bear’s liquidity problems, Bear found itself “unable to obtain secured financing from counterparties,” which caused such severe liquidity problems that it determined it had to file for bankruptcy).

could create substantial systemic risk.<sup>34</sup> J.P. Morgan's agreement to acquire Bear Stearns was structured so as to mitigate systemic risk by requiring J.P. Morgan to guarantee Bear Stearns's trades and by inserting deal protections to ensure that the merger would close,<sup>35</sup> with the Fed agreeing to provide \$29 billion in financing—pursuant to the Federal Reserve Act § 13(3)<sup>36</sup>—to support the acquisition.<sup>37</sup> Thus, the agreement effectively protected Bear Stearns's creditors and counterparties from losses they would have otherwise incurred in bankruptcy, which helped mitigate systemic risk.<sup>38</sup>

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<sup>34</sup> Robert K. Steel, Under Secretary for Domestic Finance, justified the bailout of Bear Stearns to the Senate Committee on Banking, Housing, and Urban Affairs by explaining that “[t]he failure of a firm that was connected to so many corners of our markets would have caused financial disruptions beyond Wall Street.” *Senate Hearing, supra* note 14, at 2 (testimony of Robert K. Steel, Under Secretary for Domestic Finance), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=95e2f1ae-1dc8-49ad-84c0-f8d9a1d38bd8](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=95e2f1ae-1dc8-49ad-84c0-f8d9a1d38bd8). The risks included “potential disruption to counterparties, other financial institutions, the markets, and the market infrastructure.” *Id.* (testimony of Robert K. Steel, Under Secretary for Domestic Finance), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=95e2f1ae-1dc8-49ad-84c0-f8d9a1d38bd8](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=95e2f1ae-1dc8-49ad-84c0-f8d9a1d38bd8).

<sup>35</sup> See *In re Bear Stearns Litig.*, 870 N.Y.S.2d at 723 (explaining Bear Stearns's merger agreement with J.P. Morgan); Bear Stearns Cos., Current Report (Form 8-K) (Mar. 24, 2008), available at <http://files.shareholder.com/downloads/ONE/885613017x0xS914121-08-260/777001/filing.pdf> (same).

<sup>36</sup> 12 U.S.C. § 343 (2006). Some commentators have questioned whether section 13(3) of the Federal Reserve Act in fact authorized the Fed to make a \$29 billion loan in connection with the acquisition of Bear Stearns. See, e.g., Davidoff & Zaring, *supra* note 7, at 466 (observing that “the government stretched, and in some cases, appeared to overstretch, its legal authority” in making deals throughout crisis).

<sup>37</sup> Thomas C. Baxter, Gen. Counsel and Executive Vice President, Fed. Reserve Bank of N.Y., Presentation at London School of Economics: The Legal Position of the Central Bank: The Case of the Federal Reserve Bank of New York 11 (Jan. 19, 2009), available at [http://fmg.lse.ac.uk/upload\\_file/1160\\_Baxter.pdf](http://fmg.lse.ac.uk/upload_file/1160_Baxter.pdf) (explaining Fed's creation of special purpose vehicle—to which Fed lent \$29 billion and J.P. Morgan lent \$1 billion—in order to acquire Bear's bad assets and thereby “transform[ ] Bear into a merger target digestible to Chase”). Regulators felt similarly compelled to extend an \$85 billion loan to rescue AIG because the extent of the institution's exposures meant that a failure “could have sparked a global banking panic.” James B. Stewart, *Eight Days: The Battle to Save the American Financial System*, NEW YORKER, Sept. 21, 2009, at 58, 71 (quoting Benjamin S. Bernanke, Chairman, Board of Governors of the Federal Reserve System).

<sup>38</sup> Both Benjamin Bernanke and Timothy Geithner agreed that the merger agreement, which protected creditors and counterparties, was justified to avoid systemic risk to financial markets. See *Senate Hearing, supra* note 14, at 2–3 (statement of Benjamin S. Bernanke, Chairman, Board of Governors of the Federal Reserve System), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=0a0ec016-ad61-4736-b6e3-7eb61fbc0c69](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=0a0ec016-ad61-4736-b6e3-7eb61fbc0c69) (“The sudden failure of Bear Stearns likely would have led to a chaotic unwinding of positions in those markets and could have severely shaken confidence.”); *Senate Hearing, supra* note 14, at 5 (statement of Timothy F. Geithner, President, Federal Reserve Bank of New York), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=50c5b316-ae77-4a68-839c-22bff2c53f2f](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=50c5b316-ae77-4a68-839c-22bff2c53f2f) (asserting that Fed's response to near failure of Bear Stearns “has helped reduce the risk of systemic damage to the financial system, and thereby helped mitigate a potential source of downside risk to growth”).

Lehman Brothers provides another example. By the summer of 2008, Lehman's counterparties became anxious about Lehman's solvency and refused to do business with Lehman,<sup>39</sup> leading to a growing loss of confidence among clients and counterparties that culminated in a run and bankruptcy filing on September 15, 2008.<sup>40</sup>

The external costs imposed on broader financial markets by Lehman's collapse demonstrate how the failure of a TBTF non-bank financial institution can create serious and substantial systemic risk. Lehman's failure caused severe contagion, precipitating losses suffered by many other financial institutions. The bankruptcy filing, for instance, caused a run on money market funds that were exposed to Lehman,<sup>41</sup> taking "needed capital" out of the market for corporate borrowing.<sup>42</sup> Investors, especially hedge funds, also began to run the other large investment banks, Morgan Stanley and Goldman Sachs.<sup>43</sup> But perhaps most strikingly, Lehman's failure caused global financial markets to effectively break down, wreaking havoc in both equity and credit markets worldwide.<sup>44</sup>

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<sup>39</sup> *Causes and Effects of the Lehman Brothers Bankruptcy: Hearing Before the H. Comm. on Oversight and Government Reform*, 110th Cong. 7 (2008) [hereinafter *House Hearing on Lehman Brothers*] (prepared testimony of Richard S. Fuld, Jr.), [http://oversight.house.gov/images/stories/Hearings/110th\\_Congress/Fuld\\_Statement.pdf](http://oversight.house.gov/images/stories/Hearings/110th_Congress/Fuld_Statement.pdf); see also *House Hearing on Lehman Brothers*, *supra*, at 4 (prepared testimony of Luigi Zingales, Professor of Finance, University of Chicago), [http://oversight.house.gov/images/stories/Hearings/110th\\_Congress/Zingales\\_Statement.pdf](http://oversight.house.gov/images/stories/Hearings/110th_Congress/Zingales_Statement.pdf) (noting it is "distinct possibility" that Lehman "was brought down by a run").

<sup>40</sup> *House Hearing on Lehman Brothers*, *supra* note 39, at 4 (prepared testimony of Richard S. Fuld, Jr.), [http://oversight.house.gov/images/stories/Hearings/110th\\_Congress/Fuld\\_Statement.pdf](http://oversight.house.gov/images/stories/Hearings/110th_Congress/Fuld_Statement.pdf); see also Louise Story & Ben White, *The Road to Lehman's Failure Was Littered with Lost Chances*, N.Y. TIMES, Oct. 6, 2008, at B1 (describing Lehman's failure as "a downward spiral that mirrored the demise of Bear Stearns").

<sup>41</sup> See *House Hearing on Lehman Brothers*, *supra* note 39, at 14 (prepared testimony of Luigi Zingales, Professor of Finance, University of Chicago), [http://oversight.house.gov/images/stories/Hearings/110th\\_Congress/Zingales\\_Statement.pdf](http://oversight.house.gov/images/stories/Hearings/110th_Congress/Zingales_Statement.pdf) (noting that funds were forced to freeze redemptions). When Lehman filed for bankruptcy late on Sunday, September 14, 2008, the Reserve Primary Fund—a money market fund that had 1.2% of its assets invested in Lehman—faced \$16.5 billion in redemption requests from its investors by 1 p.m. the next day. Stewart, *supra* note 37, at 73–74.

<sup>42</sup> Kenneth Ayotte & David A. Skeel, Jr., *Bankruptcy or Bailouts?* 25 (Univ. of Penn. Inst. for Law & Econ., Research Paper No. 09-11, 2009), available at <http://www.ssrn.com/abstract=1362639>.

<sup>43</sup> Stewart, *supra* note 37, at 73–74. On September 21, 2008, the Fed agreed to convert these investment banks into bank holding companies in order to increase the market's confidence that they would not fail. *Id.* at 79.

<sup>44</sup> See William P. Sterling, *Looking Back at Lehman: An Empirical Analysis of the Financial Shock and the Effectiveness of Countermeasures*, 57 MUSASHI UNIV. J. (forthcoming Nov. 2009) (manuscript at 3, on file with the *New York University Law Review*) (arguing that "immediate market reactions to the Lehman event represented the most severe shock to financial conditions in the history of the database," which is "a daily measure of financial conditions" spanning almost two decades); Posting of Sam Jones to FT

## B. Problems Created by Regulatory Solutions to Systemic Risk

### 1. Moral Hazard and Market Discipline

One way of reducing the creation of systemic risk is through market discipline. Shareholders, managers, or creditors of a financial institution are said to impose market discipline on an institution by monitoring its risks and restraining it from engaging in the overly risky behavior that can create systemic risk.<sup>45</sup> For example, uninsured creditors of banks, including depositors, can exert market discipline by demanding higher rates of return from banks that engage in risky activities or by withdrawing their funds entirely.<sup>46</sup> An “extreme form” of market discipline is carried out by creditors through a bank run, which involves “precipitous declines in the availability of funds.”<sup>47</sup>

Governmental efforts to stem systemic risk through either implicit or explicit government support or safety nets, such as deposit insurance or lender-of-last-resort policies,<sup>48</sup> are sometimes made at the expense of reducing market discipline and thereby creating moral hazard.<sup>49</sup> Moral hazard is “the problem of an insured person’s having less incentive to reduce risk than an uninsured person simply because

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Alphaville, <http://ftalphaville.ft.com/blog/2009/03/12/53515/why-letting-lehman-go-did-crush-the-financial-markets/> (Mar. 12, 2009, 12:48 GMT) (disputing contention that Lehman failure did not cause financial crisis, arguing that “[t]he collapse of Lehman *did* create panic among the world’s financial institutions, and it did significantly increase ‘risk’ in the system”).

<sup>45</sup> Asli Demirgüç-Kunt & Harry Huizinga, *Market Discipline and Deposit Insurance*, 51 J. MONETARY ECON. 375, 376 (2004); see also MATHIAS DEWATRIPONT & JEAN TIROLE, *THE PRUDENTIAL REGULATION OF BANKS* 31 (1994) (explaining that investors “perform a variety of monitoring functions: screening, auditing, covenant writing, intervention”).

<sup>46</sup> See GEORGE J. BENSTON ET AL., *PERSPECTIVES ON SAFE & SOUND BANKING: PAST, PRESENT, AND FUTURE* 174 (1986) (claiming that uninsured creditors will demand higher rates of return from risky banks); BD. OF GOVERNORS OF THE FED. RESERVE SYS., *STAFF STUDY NO. 172, USING SUBORDINATED DEBT AS AN INSTRUMENT OF MARKET DISCIPLINE 2* (1999) [hereinafter *USING SUBORDINATED DEBT*], available at <http://www.federalreserve.gov/pubs/staffstudies/172/ss172.pdf> (“[M]arket discipline is exerted through a . . . debt instrument when a banking organization’s expected cost of *issuing* that instrument increases substantially with an increase in the organization’s risk profile.”); Demirgüç-Kunt & Huizinga, *supra* note 45, at 376 (arguing that creditors exert market discipline by withdrawing their funds or demanding higher rates of return from risky banks).

<sup>47</sup> BENSTON ET AL., *supra* note 46, at 174; see also GARY H. STERN & RON J. FELDMAN, *TOO BIG TO FAIL: THE HAZARDS OF BANK BAILOUTS* 48–49 (2004) (describing how panics discipline banks).

<sup>48</sup> KINDLEBERGER & ALIBER, *supra* note 20, at 14 (“Virtually every large country has established a central bank as a domestic ‘lender of last resort’ to reduce the likelihood that a shortage of liquidity would cascade into solvency crisis.”).

<sup>49</sup> See Dow, *supra* note 19, at 3 (noting that deposit insurance reduces market discipline because “banks have an incentive to take excessively risky positions so that, in the event of insolvency, the losses will be borne by the deposit insurer”).

he is insured.”<sup>50</sup> In the context of bank failures, moral hazard refers to the risk that shareholders, managers, or creditors of large financial institutions will take fewer precautions when they think the government will protect them.<sup>51</sup> The result is a loss of market discipline since the insured group no longer has an incentive to monitor and control excessive risk-taking by the institution.<sup>52</sup>

Deposit insurance helpfully illustrates the moral hazard problem. As mentioned in Part I.A, deposit insurance is a useful safety net designed to prevent the contagion caused by a depositor run on banks. Once depositors are insured, though, they can no longer be relied upon to exert market discipline on the bank and curb overly risky behavior, as they lack the incentives to do so. Without the discipline of insured depositors, “the risk-taking incentives of bank management and investors are distorted and increased risk is likely to be incurred.”<sup>53</sup> An implicit or expected government guarantee would have the same effect.<sup>54</sup>

Shareholders, or managers with an equity stake, are another potential source of market discipline. They are good candidates because even if depositors or other creditors are guaranteed by the government to avoid contagion, shareholders can still be wiped out by the resolution process without undermining this policy objective of preventing contagion.<sup>55</sup> Creation of moral hazard is thus less of a con-

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<sup>50</sup> Macey & Miller, *supra* note 20, at 1199 n.214 (citing RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 150 (3d ed. 1986)).

<sup>51</sup> See Marcelo Dabós, *Too Big To Fail in the Banking Industry: A Survey*, in *TOO BIG TO FAIL: POLICIES AND PRACTICES IN GOVERNMENT BAILOUTS* 141, 141 (Benton E. Gup ed., 2004) (explaining that when government is compelled to bail out large banks because government deems them too big to fail, this “generates moral hazard, since the managers of these large banks can thus take excessive risks”); Charles Enoch et al., *Transparency and Ambiguity in Central Bank Safety Net Operations* 4 (Int’l Monetary Fund, Working Paper No. 97/138, 1997), available at <http://www.imf.org/external/pubs/ft/wp/wp97138.pdf> (same).

<sup>52</sup> See DONALD P. MORGAN & KEVIN J. STIROH, FED. RESERVE BANK OF N.Y., STAFF REPORT NO. 220, *TOO BIG TO FAIL AFTER ALL THESE YEARS 1* (2005), available at [http://www.newyorkfed.org/research/staff\\_reports/sr220.pdf](http://www.newyorkfed.org/research/staff_reports/sr220.pdf) (arguing that costs of “TBTF mentality” engendered by rescue of Continental Illinois Bank reduced market discipline); STERN & FELDMAN, *supra* note 47, at 2 (“To the extent that creditors of TBTF banks expect government protection, they reduce their vigilance in monitoring and responding to these banks’ activities. When creditors exert less of this type of market discipline, the banks may take excessive risks.”).

<sup>53</sup> Douglas D. Evanoff & Larry D. Wall, *Subordinated Debt and Bank Capital Reform* 4 (Fed. Reserve Bank of Chi., Working Paper No. 2000-07, 2000), available at [http://www.chicagofed.org/digital\\_assets/publications/working\\_papers/2000/wp2000\\_07.pdf](http://www.chicagofed.org/digital_assets/publications/working_papers/2000/wp2000_07.pdf).

<sup>54</sup> For example, since the FDIC provides “*de facto* insurance protection for large depositors,” such depositors “do not necessarily view themselves as being at risk” and thus “have no incentive to do the type of screening in their choice of bank that can provide useful market discipline.” BENSTON ET AL., *supra* note 46, at 175.

<sup>55</sup> See, e.g., George G. Kaufman, *Too Big To Fail in U.S. Banking: Quo Vadis?*, in *TOO BIG TO FAIL: POLICIES AND PRACTICES IN GOVERNMENT BAILOUTS*, *supra* note 51, 153,

cern for shareholders because they need not be guaranteed as part of a regulatory effort to avert systemic risk. Despite the potential losses faced by shareholders, however, they are still poorly positioned to exert market discipline: While shareholders can enjoy endless upside, their losses are limited to their initial investment, leading them “to prefer relatively risky firms.”<sup>56</sup>

It is generally thought that subordinated debt—a type of long-term debt<sup>57</sup>—can serve as a relatively good source of market discipline.<sup>58</sup> Unlike shareholders, these creditors do not share in the potential profits gained from engaging in risky activities. They also “cannot withdraw their funds on demand when bad news surfaces.”<sup>59</sup> Unable to profit from the upside or to exit quickly from a bad investment, subordinated long-term creditors are incentivized to prefer safe and conservative banks.<sup>60</sup>

The potential for moral hazard, however, is more of a problem with creditors than with shareholders. As discussed in Part I.A, regulators hoping to avoid systemic effects may find it essential *not* to wipe out creditors, but to actually *guarantee* their and other counterparties’ positions. The problem is that “[i]nsuring bond holders of very large banks turns them into yet another class of risk-indifferent claimants (like insured depositors) with little incentive to monitor and penalize . . . risk taking by banks perceived as TBTF.”<sup>61</sup> Put another

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161 (noting that shareholders were wiped out in Continental Illinois Bank resolution); see also BENSTON ET AL., *supra* note 46, at 176 (“The desire of stockholders to avoid such losses is one force making for conservative operation of banks.”).

<sup>56</sup> BENSTON ET AL., *supra* note 46, at 176; USING SUBORDINATED DEBT, *supra* note 46, at 3 (“Equity holders . . . reap gains from risk and thus have a much stronger preference for risk than [subordinated debtholders].”); see also Arnoud W.A. Boot & Anjolein Schmeits, *Market Discipline in Conglomerate Banks: Is an Internal Allocation of Cost of Capital Necessary as Incentive Device?* 2 (Wharton Fin. Insts. Ctr., Working Paper No. 96-39, 1996), available at <http://fic.wharton.upenn.edu/fic/papers/96/9639.pdf> (“As is well known, limited liability of shareholders may invite risk taking behavior . . .”).

<sup>57</sup> Subordinated debt has a relatively long maturity, preventing the debtholders from making a run on the borrowing institution and heightening these investors’ risk sensitivity. Since the debt is subordinated, the debtholders are “among the first (after equity) to lose value in the event of bank failure.” USING SUBORDINATED DEBT, *supra* note 46, at 3.

<sup>58</sup> See *id.* at 23 (“[T]here is fairly strong evidence that market discipline, both direct and indirect, is exerted on banking organizations that issue [subordinated notes and debentures].”); Evanoff & Wall, *supra* note 53, at 17, 24 (examining role of subordinated debt in exerting market discipline on banks and noting that “the evidence as a whole appears to be consistent with the presumption that subdebt-holders effectively discipline banks in the expected manner”).

<sup>59</sup> BENSTON ET AL., *supra* note 46, at 179.

<sup>60</sup> *Id.* at 179; USING SUBORDINATED DEBT, *supra* note 46, at 2–3.

<sup>61</sup> MORGAN & STIROH, *supra* note 52, at 1. Although the authors were referring to bondholders of depository institutions, the same rationale applies to other types of financial institutions.

way, guaranteeing such creditors is harmful because it creates a moral hazard and thereby reduces market discipline from the group that is potentially the best source of such discipline.

An important distinction should be made, however, between short- and long-term debt. To avoid bank runs and avert systemic risk, it is more useful to guarantee short-term creditors, such as depositors for commercial banks or repo lenders for non-bank financial institutions, because these are the creditors that can immediately make demands on the institution, causing a liquidity crisis and subsequent failure.<sup>62</sup> Long-term creditors could still be available to exert market discipline, as it is less critical for the government to fully guarantee them in an effort to reduce systemic risk.

## 2. *Uncertainty and Constructive Ambiguity*

A policy of “constructive ambiguity” as a potential solution to systemic risk offers a way to mitigate the moral hazard associated with bailouts.<sup>63</sup> Constructive ambiguity refers to a regulatory policy that “is supposed to maintain some uncertainty about the criteria actually used for deciding whether to bail out a failing bank.”<sup>64</sup> It can help to mitigate moral hazard because the creditors and counterparties of such an institution cannot depend upon a bailout in the future.<sup>65</sup>

Yet the uncertainty inherent in a policy of constructive ambiguity can also contribute to panic and thus increase the likelihood of contagion and systemic risk. “Uncertainty” is theoretically different from “risk”: Risk can be measured through probabilities, but uncertainty represents randomness that cannot be measured at all.<sup>66</sup> Because it is unmeasurable, uncertainty can precipitate a crisis by making it

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<sup>62</sup> See USING SUBORDINATED DEBT, *supra* note 46, at 3 (“[Subordinated debtholders] are not able to ‘run,’ possibly mitigating a systemic risk situation.”).

<sup>63</sup> Enoch et al., *supra* note 51, at 4 (“Many central banks, in an effort to reduce moral hazard . . . maintain some constructive ambiguity with regard to how, when and whether they will employ their safety nets.”).

<sup>64</sup> See Dabós, *supra* note 51, at 141 (indicating that central banks try to adhere to this policy to maintain uncertainty about criteria for bailing out failing banks); Jean-Charles Rochet & Jean Tirole, *Interbank Lending and Systemic Risk*, 28 J. MONEY, CREDIT & BANKING 733, 734 (1996) (noting that policymakers “refer to a policy of ‘constructive ambiguity’ when discussing their willingness to intervene” to protect uninsured depositors of failed banks).

<sup>65</sup> See Tara Vishwanath & Daniel Kaufmann, *Toward Transparency: New Approaches and Their Application to Financial Markets*, 16 WORLD BANK RES. OBSERVER 41, 53 (2001) (“Theoretically, ambiguity reduces the moral hazard by undermining the bailout guarantee . . . .”); Enoch et al., *supra* note 51, at 11 (discussing how ambiguity reduces moral hazard).

<sup>66</sup> FRANK H. KNIGHT, RISK, UNCERTAINTY, AND PROFIT, at lxiii (1921).

“harder for lenders to screen out good from bad credit risks.”<sup>67</sup> This difficulty results in declined lending and investment activity that in turn can cause panic.<sup>68</sup> Ambiguous government action has indeed been found to exacerbate or even trigger panic and financial crises.<sup>69</sup>

The discretionary (as opposed to mandatory) quality of regulatory decisions<sup>70</sup>—or more specifically, uncertainty over the *outcome* of a decision—is the beneficial moral hazard–reducing element of constructive ambiguity. Uncertainty as to the *procedures* that will be utilized by regulators to make a decision, however, can be harmful to the financial system<sup>71</sup>—investors will not only be uncertain as to *whether* a certain institution will be bailed out, but they will also be unsure as to *how* such a decision will be made by regulators, adding an unnecessary layer of uncertainty that may lead to panic.

The benefits of constructive ambiguity in reducing moral hazard can still be had, but will be produced more effectively through a more discretionary and transparent process that involves less ambiguity over the regulatory decisionmaking rules and procedures while maintaining outcome uncertainty. Such a process would produce a better balance between uncertainty and moral hazard; clear procedures will reduce panic, while an uncertain outcome will ensure that moral hazard is still curbed. Even if rules governing bailouts are made transparent *ex ante*, this “will not necessarily be inconsistent with substantial operational discretion” that can work to curtail moral hazard.<sup>72</sup>

In sum, any regulatory structure that seeks to reduce systemic risk will inevitably involve problems of creating moral hazard and uncertainty: Regulation can inhibit the effect of market discipline on

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<sup>67</sup> Frederic S. Mishkin, *Anatomy of a Financial Crisis*, 2 J. EVOLUTIONARY ECON. 115, 119 (1992).

<sup>68</sup> *Id.*

<sup>69</sup> See Steven Haggard & Andrew MacIntyre, *The Political Economy of the Asian Financial Crisis: Korea and Thailand Compared*, in THE ASIAN FINANCIAL CRISIS AND THE ARCHITECTURE OF GLOBAL FINANCE 57, 59 (Gregory W. Noble & John Ravenhill eds., 2000) (describing uncertainty over government intervention as trigger for crises); LAWRENCE B. KRAUSE, COUNCIL ON FOREIGN RELATIONS, THE ECONOMICS AND POLITICS OF THE ASIAN FINANCIAL CRISIS OF 1997–1998, at 7 (1998) (“[P]olitics and political uncertainty can be elements in triggering a financial crisis.”).

<sup>70</sup> Andrew Campbell & Rosa Lastra, *Revisiting the Lender of Last Resort*, 24 BANKING & FIN. L. REV. 453, 466 (2009) (“It is this discretionary nature that reduces the moral hazard incentives inherent in any support operation . . .”).

<sup>71</sup> *Id.* (“Ambiguity and uncertainty as to the procedures and loci of power are not constructive. In the event of a crisis, the procedures to follow should be crystal clear *ex ante* for the institution affected, other market participants and the public at large.”); see also KRAUSE, *supra* note 69, at 9 (“Investors and speculators will become uncertain when they cannot anticipate the economic policy that will be implemented.”).

<sup>72</sup> Enoch et al., *supra* note 51, at 14; see *id.* at 13–14 (arguing that transparent policies with clear rules create optimal balance of guidance and operational discretion).



reducing systemic risk or create the type of panic that can precipitate failures and exacerbate contagion. The goal is to establish an optimal regulatory structure that reduces systemic risk without creating unnecessary moral hazard or uncertainty. In the next Part, I discuss whether our current regulatory system has struck the proper balance.

## II

### EVALUATING OUR CURRENT REGULATORY SYSTEM

In this Part, I examine the ability of our current regulatory system—both its *ex ante* prudential regulations and *ex post* emergency responses—to prevent systemic risk without creating excessive moral hazard and uncertainty. I conclude that our system fails *ex ante* to reduce the external costs caused by non-bank financial institutions engaging in overly risky behavior and *ex post* fails to sufficiently reduce systemic risk caused by the failure of non-bank financial institutions. Moreover, the *ex post* system fails to mitigate the moral hazard and uncertainty that the *ex post* policies themselves create.

#### A. *Ex Ante* Regulations

Under the current regulatory scheme, prudential regulation<sup>73</sup> to curb overly risky behavior among non-bank financial institutions is either lacking (for investment banks) or nonexistent (for hedge funds). As a result, the current system fails to sufficiently regulate and prevent systemic risk and the external costs it generates.

Prudential regulation of investment banks through the now-defunct Consolidated Supervised Entities (CSE) program provides a telling example of the inability of our current regulatory system to prevent systemic risk caused by non-bank financial institutions. The Securities and Exchange Commission (SEC)<sup>74</sup> established the CSE program in 2004 to regulate large investment banks<sup>75</sup> such as Bear

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<sup>73</sup> Prudential regulation is designed to protect the banking system from crises, such as through the imposition of capital requirements. Thomas F. Hellmann, Kevin C. Murdock & Joseph E. Stiglitz, *Liberalization, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough?*, 90 AM. ECON. REV. 147, 147 (2000).

<sup>74</sup> The Securities Exchange Act of 1934, Pub. L. No. 73-291, 48 Stat. 881 (codified as amended at 15 U.S.C. § 78a–78ll (2006)), established the SEC as an independent federal administrative agency with “broad authority to enforce the federal securities laws and to promulgate rules for the national securities markets.” TREASURY BLUEPRINT, *supra* note 26, at 57.

<sup>75</sup> See Alternative Net Capital Requirements for Broker-Dealers that Are Part of Consolidated Supervised Entities, 69 Fed. Reg. 34,428 (June 21, 2004) (to be codified at 17 C.F.R. pts. 200, 240) (outlining CSE program). Under the Securities Exchange Act of 1934, the SEC has the authority to regulate only the broker-dealer subsidiaries of investment banks. See 15 U.S.C. § 78c(a)(4)–(5) (2006) (defining “broker” and “dealer”). The SEC established the CSE program pursuant to amendments to the 1934 Act that allow the pro-

Stearns and Lehman Brothers, but the program failed to effectively manage the risks created by the institutions it regulated. This is partly due to the program's voluntary nature—which permitted regulated investment banks to opt out at their discretion<sup>76</sup>—and poor oversight in the implementation of CSE rules by the SEC's Division of Trading and Markets (TM). For example, the SEC's Inspector General criticized the program for failing to detect “red flags” that should have prompted a response to deteriorating financial conditions at Bear Stearns.<sup>77</sup> More importantly, though, the regulations themselves were insufficient—Bear Stearns was fully compliant with the CSE's requirements when it collapsed.<sup>78</sup>

The CSE program established leverage, capital, and liquidity requirements for investment banks designed to replicate the standards<sup>79</sup> used by the Fed for oversight of bank holding companies.<sup>80</sup> Participation permitted investment banks to escape the SEC's tradi-

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gram to fill this regulatory gap. Section 17(i) of the 1934 Act gave the SEC authority to promulgate rules creating a voluntary framework for regulating investment banks. *See* 15 U.S.C. § 78q(i)(1)(A) (2006) (“An investment bank holding company . . . may elect to become supervised by filing with the Commission . . .”).

<sup>76</sup> 17 C.F.R. § 240.17i-3(a) (2009) (“A supervised investment bank holding company may withdraw from supervision by the Commission . . . by filing a notice of withdrawal with the Commission.”); Press Release, Sec. & Exch. Comm'n, Chairman Cox Announces End of Consolidated Supervised Entity Program (Sept. 26, 2008) [hereinafter SEC Press Release], available at <http://www.sec.gov/news/press/2008/2008-230.htm> (“[T]he CSE program was fundamentally flawed from the beginning, because investment banks could opt in or out of supervision voluntarily.”).

<sup>77</sup> INSPECTOR GENERAL REPORT, *supra* note 33, at ix (observing that TM failed to limit risk factors at Bear Stearns of which it became aware, such as “its concentration of mortgage securities, high leverage, shortcomings of risk management in mortgage-backed securities and lack of compliance with the spirit of certain” capital standards).

<sup>78</sup> *See id.*, at 10–11. This criticism might apply equally to the Fed's oversight of the banks it regulates, since the Fed also takes guidance from rules developed in the Basel II framework. For a description of Basel II, see *infra* note 79.

<sup>79</sup> As part of the Bank for International Settlements, the Basel Committee on Banking Supervision develops “international standards on capital adequacy” for banks. Bank for International Settlements, About the Basel Committee, <http://www.bis.org/bcb/> (last visited Apr. 15, 2010). The United States, a member of the Basel Committee, helps to develop these standards, which serve as guidelines for bank supervision. *Id.* It is then up to the various U.S. banking regulatory agencies, such as the Fed, to choose to adopt and enforce the Basel standards. *See, e.g.*, Press Release, Bd. of Governors of the Fed. Reserve Sys., Board Proposes Rule to Implement Certain Approaches for Calculating Risk-Based Capital Requirements Included in Basel II Capital Accord (June 26, 2008), available at <http://www.federalreserve.gov/newsevents/press/bcreg/20080626b.htm> (issuing statement announcing proposed implementation of certain new Basel requirements). In 2004, the committee issued a comprehensive Basel II Framework, which provides capital adequacy guidelines for national supervisory authorities. *See generally* BASEL COMM. ON BANKING SUPERVISION, INTERNATIONAL CONVERGENCE OF CAPITAL MEASUREMENT AND CAPITAL STANDARDS: A REVISED FRAMEWORK (2004), available at <http://www.bis.org/publ/bcb107.pdf>.

tional net capital rule, which places a ceiling on debt-to-equity ratios, typically of fifteen to one.<sup>81</sup> Instead, participating investment banks<sup>82</sup> could elect into a more relaxed “alternative net capital” rule with no similar explicit limitation on leverage.<sup>83</sup> As a result, all five major investment banks significantly increased their debt-to-equity leverage ratios following entrance into the CSE program. The program required investment banks to maintain a capital ratio—measuring the percentage of a bank’s capital to its total risk-weighted assets—of at least 10%.<sup>84</sup> The TM also required each investment bank to maintain a liquidity portfolio of \$10 billion, with the exception of Bear Stearns, which, as the smallest CSE participant, was only required to keep a portfolio of \$5 billion.<sup>85</sup> The goal of the liquidity requirements was “to ensure that, in a stressed environment, a firm could withstand the loss of its unsecured financing for up to one year,” assuming the availability of secured funding.<sup>86</sup>

The failure of the CSE program to effectively prevent systemic risk becomes apparent through an examination of the collapse of Bear Stearns. Under the auspices of the alternative net capital rule, Bear exposed itself to significant risk by leveraging itself thirty-three to one, lowering confidence in the firm and thus adversely affecting

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<sup>80</sup> A bank holding company is defined as “any company which has control over any bank or over any company that is or becomes a bank holding company” pursuant to the Bank Holding Company Act of 1956. 12 U.S.C. § 1841(a)(1) (2006).

<sup>81</sup> 17 C.F.R. § 240.15c3-1(a)(1)(i) (2009); see also John C. Coffee, Jr., *Analyzing the Credit Crisis: Was the SEC Missing in Action?*, N.Y. L.J., Dec. 5, 2008, available at <http://www.law.com/jsp/cc/PubArticleCC.jsp?id=1202426495544> (describing ability of CSE members to opt out of debt-to-equity ratios).

<sup>82</sup> Participating investment banks included the five major ones: Bear Stearns, Goldman Sachs, Morgan Stanley, Merrill Lynch, and Lehman Brothers. *Turmoil in the U.S. Credit Markets: Examining the Regulation of Investment Banks by the U.S. Securities and Exchange Commission: Hearing Before the Subcomm. on Securities, Insurance, and Investment of the S. Comm. on Banking, Housing, and Urban Affairs*, 110th Cong. 4 (2008) (statement of Erik Sirri, Director, Division of Trading and Markets, Securities and Exchange Commission).

<sup>83</sup> Alternative Net Capital Requirements for Broker-Dealers that Are Part of Consolidated Supervised Entities, 69 Fed. Reg. 34,428, 34,431 (June 21, 2004) (to be codified at 17 C.F.R. pts. 200, 240). There is still an implied limitation on leverage through the imposition of capital requirements. See Michael Koehn & Anthony M. Santomero, *Regulation of Bank Capital and Portfolio Risk*, 35 J. FIN. 1235, 1236–37 (1980) (illustrating how capital ratio constrains leverage in model demonstrating capital regulation’s impact on commercial banks’ portfolios).

<sup>84</sup> See INSPECTOR GENERAL REPORT, *supra* note 33, at 10–11 (describing capital requirements for CSEs).

<sup>85</sup> *Id.* at 14. A liquidity portfolio could only include “cash or highly liquid debt and equity securities.” *Id.*

<sup>86</sup> *Id.*

liquidity.<sup>87</sup> Bear Stearns was also highly exposed to mortgage-backed securities (MBSs) and was less diversified than other CSE firms.<sup>88</sup> Though Bear was well-capitalized and liquid by CSE standards,<sup>89</sup> the investment bank's counterparties, clients, and lenders began a run on the bank in March 2008.<sup>90</sup>

### B. *Ex Post Regulations*

Under our current regulatory framework, when a large non-bank financial institution is on the verge of failure, regulators have two options: undertake last minute, ad hoc actions to rescue the institution, or permit the institution to file for bankruptcy. This ad hoc approach to regulation is flawed, however, in its ability to prevent systemic risk while minimizing the attendant moral hazard and uncertainty. Under an ad hoc approach, regulators cannot guarantee the creditors of every failing institution in an effort to avert systemic risk—such a system would completely eliminate market discipline and create a severe moral hazard problem. At the same time, regulators cannot permit every large institution to file for bankruptcy because such a disorderly process would increase the risk of runs on such institutions and would fail to mitigate the systemic external costs created by the failure.<sup>91</sup> Given these choices, the only logical approach—and the one that has been followed by regulators—is to rescue some institutions and not others. Regulators employ a strategy of constructive ambiguity in order to manage the moral hazard problem, thereby maintaining market discipline. Large institutions do not know *ex ante* whether they will be rescued, or even the process by which such a determination will be made.<sup>92</sup> The problem is that this ad hoc approach results in (1) the bankruptcy filing of some TBTF institutions, causing contagion, and (2) uncertainty about regulators' deci-

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<sup>87</sup> See INSPECTOR GENERAL REPORT, *supra* note 33, at 19–20 (describing leverage ratio and its effect on confidence levels).

<sup>88</sup> See *id.* at v, 17 (detailing Bear Stearns's investment portfolio).

<sup>89</sup> See *Senate Hearing*, *supra* note 14, at 1 (statement of Christopher Cox, Chairman, Securities and Exchange Commission), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=63615bbd-0f97-4009-b021-b556cecc7f50](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=63615bbd-0f97-4009-b021-b556cecc7f50) (“For the first time, a major investment bank that was well-capitalized and apparently fully liquid experienced a crisis of confidence that denied it not only unsecured financing, but short-term secured financing . . . .”); INSPECTOR GENERAL REPORT, *supra* note 33, at 7, 15 n.92 (noting that Bear had adequate capital and liquidity by CSE standards).

<sup>90</sup> See *supra* text accompanying notes 30–38 (telling story of Bear collapse).

<sup>91</sup> See Bliss & Kaufman, *supra* note 21, at 148 (noting that banking failures have bigger repercussions for economy than other business failures).

<sup>92</sup> See Schwarcz, *supra* note 12, at 231 (referring to policy of ad hoc approach as “constructive ambiguity”).

sionmaking processes, which can create panic and worsen an ongoing financial crisis.

*1. Systemic Risk Is Not Sufficiently Contained Under the Ad Hoc Approach*

The current ad hoc, ex post regulatory approach is suboptimal. The potential creation of rampant moral hazard hampers regulators' ability to address systemic risk. Both time and legal constraints exacerbate this problem, making it difficult to quickly craft solutions to the failure of a complex, TBTF institution.

Under the current ad hoc approach, regulators have particular difficulty managing moral hazard during a financial crisis because repeatedly rescuing TBTF institutions creates an implicit government guarantee of such firms.<sup>93</sup> To avoid the perception that all TBTF institutions will be guaranteed, regulators must let some file for bankruptcy, resulting in substantial systemic risk. The approach is purely ad hoc: There is no legal system in place to guide regulatory decisions as to which institutions should be saved, creating the possibility that some systemically risky institutions will fail. Furthermore, even when regulators decide that averting systemic risk is more important than avoiding moral hazard, their ability to stem systemic risk successfully without a legal system in place is jeopardized by time constraints that effectively force regulators to craft bailouts over one weekend.<sup>94</sup>

The decision by regulators to refuse funding to guarantee Lehman's debts,<sup>95</sup> despite the systemic risk posed, suggests how regulators acting ad hoc occasionally feel compelled to prioritize moral hazard concerns, but at the expense of huge external costs to the

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<sup>93</sup> See *supra* Part I.B.1 (discussing problem of moral hazard in this context). Regulators also faced a new moral hazard created by the rescue of Bear Stearns: Would-be purchasers of collapsing investment banks expected that the government would take on a large part of the risk in the transaction. This explains such firms' unwillingness to acquire failing institutions without government funding. With the Bear Stearns rescue fresh in their minds, Barclays and Bank of America refused to acquire Lehman without being assured financial assistance from the federal government. See Ben White & Jenny Anderson, *Lehman Lurching Closer to Liquidation, Rescue Talks Founder as Barclays Drops Out; Taxpayer Aid Rejected*, INT'L HERALD TRIB., Sept. 15, 2008, at 1 (noting refusal to act without government aid); see also *Potential Lehman Buyers Balking*, MARKET WATCH, Sept. 14, 2008, <http://www.marketwatch.com/story/uks-barclays-balking-in-lehman-negotiations-2008914163300> ("Barclays PLC and Bank of America, the two leading suitors to buy financially failing Lehman Brothers, reportedly have balked in the absence of U.S government guarantees to limit their potential losses.").

<sup>94</sup> For an example, see the discussion of the Bear Stearns bailout, *supra* text accompanying notes 30–38.

<sup>95</sup> See Stewart, *supra* note 37, at 63 (reporting that on weekend before Lehman bankruptcy, Treasury Secretary Henry Paulson told bankers that "despite the rescues of Bear Stearns and Fannie and Freddie, there would be no government money for Lehman").

financial system.<sup>96</sup> Lehman was arguably more systemically important than Bear Stearns,<sup>97</sup> and yet regulators let it fail, an odd result at least partially explained by moral hazard concerns.<sup>98</sup> But even assuming that regulators wanted to rescue Lehman—though clearly without offering a U.S. government guarantee—they were simply unable to craft a workable solution over a single weekend.<sup>99</sup>

## 2. *Too Much Uncertainty Is Created by the Ad Hoc Approach*

The ad hoc approach also creates unnecessary uncertainty, which can increase panic. Both a lack of transparency as to how and why regulatory decisions are made in response to financial institution failures and the prospect of a disorderly bankruptcy process contribute to investor panic that can precipitate a run or exacerbate contagion.

The ad hoc approach involves a policy of constructive ambiguity as to both procedure and outcome, as discussed in Part I.B.2. Uncertainty over the process of decisionmaking is worsened by the fact that without legal guidance, regulators are susceptible to political influence, causing greater inconsistency in regulatory actions. The ad hoc regulatory responses to failing financial institutions during the crisis of 2008 are illustrative. Regulators had no formula for determining whether to rescue certain institutions and not others,<sup>100</sup> suggesting

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<sup>96</sup> See *Systemic Risk and the Financial Markets: Hearing Before the H. Comm. on Financial Servs.*, 110th Cong. 23 (2008) (statement of Benjamin S. Bernanke, Chairman, Board of Governors of the Federal Reserve System) (confessing that rescue of Bear Stearns raised moral hazard concern); *The Future of Financial Services: Exploring Solutions for the Market Crisis: Hearing Before the H. Comm. on Financial Servs.*, 110th Cong. 30 (2008) (statement of Benjamin S. Bernanke, Chairman, Board of Governors of the Federal Reserve System) (comparing moral hazard and other risks in decision to bail out AIG and not Lehman, and noting that even though “[t]he failure of Lehman posed risks,” investors knew that Lehman could fail and thus “had time to take precautionary measures”); Stewart, *supra* note 37, at 67 (quoting Treasury official to note that Treasury thought it might be good for Lehman to fail to maintain market discipline).

<sup>97</sup> See Peter J. Wallison, *Systemic Risk and the Financial Crisis*, AM. ENTERPRISE INST. FOR PUB. POL’Y RES. FIN. SERVICES OUTLOOK, Oct. 2008, at 4, available at [http://www.aei.org/docLib/20081031\\_23536OctFSOg.pdf](http://www.aei.org/docLib/20081031_23536OctFSOg.pdf) (“Lehman was a larger firm than Bear, with \$600 billion in outstanding debt on which CDSs with a notional amount totaling \$400 billion had been written.”).

<sup>98</sup> See *supra* note 96 and accompanying text (comparing Lehman and Bear Stearns).

<sup>99</sup> See Stewart, *supra* note 37, at 66–67 (describing how regulators were unable to consummate Barclays’s acquisition of Lehman Brothers); see also Benjamin S. Bernanke, Chairman, Bd. of Governors of the Fed. Reserve Sys., Speech at the Greater Austin Chamber of Commerce: Federal Reserve Policies in the Financial Crisis (Dec. 1, 2008), available at <http://www.federalreserve.gov/newsevents/speech/bernanke20081201a.htm> (contradicting earlier statements regarding failure of Lehman and asserting that given “legal constraints,” failure of Lehman was “unavoidable”).

<sup>100</sup> James Freeman, Editorial, *Bear Stearns: The Fed’s Original ‘Systemic Risk’ Sin*, WALL ST. J., Mar. 16, 2009, at A19 (arguing that there was no “formula” or “law” guiding regulators’ measure of systemic risk to guide bailout decision).

that the process of decisionmaking was indeed opaque. Investors were perplexed as to why the Fed would let Lehman fail one day and rescue AIG the next, and how such a decision was made.<sup>101</sup> Political pressure also exacerbated uncertainty by influencing regulators who ultimately decided not to repeat the rescue of Bear Stearns with Lehman.<sup>102</sup>

In Lehman's case, there was also concern that a chaotic unwinding in bankruptcy would create substantial panic and contagion, worsening systemic risk.<sup>103</sup> A bankruptcy process is not an ideal solution for resolving bank failures because it "could tie up depositors' money for years," which "would heighten depositors' incentive to run if they believed their bank [were] in danger of failing," and "[a] run could pressure the bank to sell assets at fire-sale prices and precipitate the bank's failure."<sup>104</sup>

This argument applies with similar force to complex TBTF non-bank financial institutions. Even if Lehman's bankruptcy had been as smooth as could be expected,<sup>105</sup> merely the *prospect* of a disorderly bankruptcy would have caused fear of counterparty defaults among financial institutions, precipitating the run on Lehman and runs on other institutions after Lehman's collapse.<sup>106</sup> Thus, the ad hoc approach and resort to bankruptcy create unnecessary uncertainty and contribute to investor panic, precipitating failures and spreading contagion.

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<sup>101</sup> See Edmund L. Andrews et al., *Fed in an \$85 Billion Rescue of an Insurer Near Failure*, N.Y. TIMES, Sept. 17, 2008, at A1 (noting that decision to rescue AIG demonstrated huge policy shift); John B. Taylor, *The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong* 26 (Nat'l Bureau of Econ. Research, Working Paper No. 14,631, 2009), available at <http://www.nber.org/papers/w14631> (observing that uncertainty over regulatory policy became apparent after Lehman failure).

<sup>102</sup> See Stewart, *supra* note 37, at 60 ("[Paulson] was under intense political pressure from the White House and Capitol Hill to curb the furor over the rescue of Fannie Mae and Freddie Mac the previous weekend, as well as continuing resentment over Bear Stearns."). At committee hearings prior to the collapse of Lehman, members of the House and Senate expressed their opinion that some institutions should be left to fail. See, e.g., *Senate Hearing, supra* note 14 (comment of Sen. Richard Shelby), in *Capital Hill Hearing, FEDERAL NEWS SERVICES, INC.* (Oct. 23, 2008).

<sup>103</sup> In fact, the unwinding of Lehman was disorderly and resulted in the destruction of \$75 billion in value. Jeffrey McCracken, *Lehman's Chaotic Bankruptcy Filing Destroyed Billions in Value*, WALL ST. J., Dec. 29, 2008, at A10.

<sup>104</sup> CARNELL ET AL., *supra* note 23, at 696.

<sup>105</sup> See Ayotte & Skeel, *supra* note 42, at 31 & n.90 (explaining that chaos due to counterparties' canceling derivatives contracts upon Lehman's bankruptcy filing was somewhat "diminished" due to International Swaps and Derivatives Association's 2008 Lehman Protocol for netting out contracts).

<sup>106</sup> See also *supra* notes 39–44 and accompanying text (discussing Lehman's collapse); cf. Philippe Jorion & Gaiyan Zhang, *Credit Contagion from Counterparty Risk*, 64 J. FIN. 2053 (2009) (documenting empirical evidence justifying such fears of default).

## III

## A FRAMEWORK FOR REGULATORY REFORM

It has become clear that the current regulatory structure is sub-optimal because it does not sufficiently reduce systemic risk and uncertainty and creates excessive moral hazard. The critical question is whether an alternative framework could better address problems of systemic risk, moral hazard, and uncertainty.

*A. The Obama Administration Proposal*

The Obama Administration has proposed reforming the financial regulatory structure.<sup>107</sup> The legislation revises both *ex ante* requirements for large non-bank financial institutions and establishes *ex post* solutions to better manage the failure of such institutions.

*1. Developing More Stringent Ex Ante Prudential Requirements*

The proposed legislation would establish rules by which the Fed would designate certain financial institutions as TBTF by labeling them “Tier 1 financial holding compan[ies]” (Tier 1 FHCs).<sup>108</sup> Those so designated would be subject to more stringent *ex ante* prudential regulations. Whether an institution should be deemed a Tier 1 FHC would not depend on the legal status of the institution—such as whether it is legally a bank, a hedge fund, or an investment bank—but rather the extent to which its failure would impose external costs on financial markets and the economy.<sup>109</sup> Under the proposed statute, the Fed could assign Tier 1 FHC status to a financial institution if it determines that “material financial distress at the company could pose a threat to global or United States financial stability or . . . economy

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<sup>107</sup> See A NEW FOUNDATION, *supra* note 9, at 2 (“We must build a new foundation for financial regulation and supervision . . .”). Other groups have advocated a similar proposal. See, e.g., GROUP OF THIRTY, FINANCIAL REFORM: A FRAMEWORK FOR FINANCIAL STABILITY (2009), available at <http://www.group30.org/pubs/recommendations.pdf>.

<sup>108</sup> Tier 1 FHC is defined by the proposed Bank Holding Company Modernization Act as “a United States financial company or a Foreign financial company that is designated by the Board as a Tier 1 financial holding company in accordance with section 6.” MODERNIZATION ACT, *supra* note 9, § 203(t). This designation is predicated on the size and level of systemic risk created. See *id.* § 6.

<sup>109</sup> A NEW FOUNDATION, *supra* note 9, at 20 (“All large, interconnected firms whose failure could threaten the stability of the system should be subject to consolidated supervision by the Federal Reserve, regardless of whether they own an insured depository institution.”). The bill introduced by Senator Dodd on April 15, 2010 would similarly subject non-bank financial institutions to enhanced supervision if the proposed Financial Stability Oversight Council determines that “material financial distress” at the non-bank “would pose a threat to the financial stability of the United States.” Restoring American Financial Stability Act of 2010, S. 3217, 11th Cong. § 113(a)(1), (b)(1) (2010).



during times of economic stress.”<sup>110</sup> The statute gives the Fed broad authority to designate almost any company—including hedge funds or automobile companies—a Tier 1 FHC, so long as it engages in some financial activities.<sup>111</sup> Factors that the Fed is to consider in making this determination include the company’s financial assets, liabilities, reliance on short-term funding, and “other factors that the Board deems appropriate.”<sup>112</sup>

Under the proposal, Tier 1 FHCs would become subject to prudential requirements more stringent than those currently in place, including stricter regulation of the institution’s risk-based capital requirements (its capital ratio), limitations on its leverage, and more stringent liquidity and overall risk-management requirements.<sup>113</sup> The proposed legislation also provides for “categorization and tiering,” whereby those companies deemed to be Tier 1 FHCs are differentiated and subjected to a range of prudential requirements based on the institution’s risk, complexity, financial activities, and other factors to be determined by the Fed.<sup>114</sup> Tier 1 FHCs must submit periodic reports disclosing their credit exposures and a plan for “rapid and orderly resolution” to the Fed.<sup>115</sup> In sum, the proposal establishes stricter *ex ante* regulation of TBTF financial institutions, including non-banks, in order to curb excessive risk-taking by such institutions.

## 2. *Establishing an Ex Post Resolution Process*

The Obama Administration’s proposal retains the current bankruptcy process for managing financial institution failure and adds a new resolution authority modeled on the FDIC’s procedure for resolving the failure of certain depository institutions. The proposal stipulates that if a Tier 1 FHC becomes “critically undercapitalized,” the Fed must either force the institution to file a petition for bankruptcy under the Bankruptcy Code or instead file such a petition on behalf of the institution.<sup>116</sup>

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<sup>110</sup> MODERNIZATION ACT, *supra* note 9, § 6(a)(1)(A).

<sup>111</sup> DAVIS POLK & WARDWELL LLP, THE REGULATORY REFORM MARATHON 3 (2009), available at <http://www.davispolk.com/Publications> (search “Keyword” for “Regulatory Reform Marathon”; then follow hyperlink).

<sup>112</sup> MODERNIZATION ACT, *supra* note 9, § 6(a)(1)(A). Note that the factors differ slightly for foreign companies. *Id.* § 6(a)(1)(B).

<sup>113</sup> *Id.* § 6(c)(1).

<sup>114</sup> *Id.* § 6(c)(3).

<sup>115</sup> *Id.* § 6(d)(1)(B).

<sup>116</sup> *Id.* § 6A(h); see also DAVIS POLK & WARDWELL LLP, *supra* note 111, at 12 (“[T]he proposed legislation does not clearly explain the interplay between these mandatory bankruptcy provisions and the proposed resolution authority.”).

As an alternative to bankruptcy, the Administration has drafted legislation that would establish a resolution regime for governing the failure of Tier 1 FHCs.<sup>117</sup> Once the resolution authority is initiated, the Treasury would appoint either the FDIC or the SEC as conservator or receiver of the institution.<sup>118</sup> The agency appointed would have “broad powers” to resolve the financial firm, including the ability “to transfer the firm’s derivatives contracts to a bridge institution and thereby avoid termination of the contracts by the firm’s counterparties.”<sup>119</sup> The tools available to the agency to resolve the institution would include the ability to make loans to the firm, purchase its assets, guarantee its liabilities, or make equity investments—all of which could be transferred to a third party.<sup>120</sup>

The proposal allows for any TBTF institution, regardless of its legal status, to be subject to this resolution regime.<sup>121</sup> The Fed, Treasury, and FDIC can each initiate the process of determining whether to invoke the resolution regime in any given case.<sup>122</sup> Upon recommendation of the other agencies and consultation with the President, the Treasury ultimately decides whether to invoke the resolution regime. It can invoke the regime if it determines that: (1) the firm “is in default or is in danger of default,” (2) the firm’s failure under otherwise applicable law (i.e., bankruptcy) “would have serious adverse effects on financial stability or economic conditions in the United States,” and (3) that application of the resolution regime “would avoid or mitigate such adverse effects.”<sup>123</sup> In considering the ability to mitigate adverse effects, the Treasury must also consider “the cost to the general fund of the Treasury, and the potential to increase moral hazard on the part of creditors, counterparties, and shareholders.”<sup>124</sup> To become effective, such a determination must receive a vote from two-thirds of the members of the Federal Reserve Board and a two-thirds vote from either the commission of the FDIC

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<sup>117</sup> RESOLUTION AUTHORITY ACT, *supra* note 9. Senator Dodd’s proposal establishes a very similar resolution regime. Restoring American Financial Stability Act of 2010, S. 3217, 111th Cong. §§ 201–11 (2010) (creating orderly liquidation authority).

<sup>118</sup> *Id.* § 1204(b).

<sup>119</sup> A NEW FOUNDATION, *supra* note 9, at 78.

<sup>120</sup> RESOLUTION AUTHORITY ACT, *supra* note 9, § 1204(a).

<sup>121</sup> *Id.* § 1202(2)(b)(ii).

<sup>122</sup> *Id.* § 1203(a)(1). Where the largest subsidiary of the institution is a broker or dealer, the SEC replaces the FDIC. *Id.*

<sup>123</sup> *Id.* § 1203(b).

<sup>124</sup> *Id.* Senator Dodd’s proposal contains similar language. Restoring American Financial Stability Act of 2010, S. 3217, 111th Cong. § 203(b) (2010) (mandating that Treasury Secretary consider effects on financial system, Treasury’s general fund, and interests of creditors, counterparties, and shareholders of company).

or the SEC, depending upon which is applicable.<sup>125</sup> The proposal would also create a Bank Holding Company Fund to pay for resolution processes, capitalized by the Treasury, and would enable the FDIC to recover amounts expended in resolving any Tier 1 FHCs.<sup>126</sup>

### *B. Assessing the Obama Administration Proposal*

The regulatory structure proposed by the Administration would be better than our current system at reducing systemic risk while also minimizing the attendant problems of moral hazard and uncertainty. The structure therefore represents an improvement from our current scheme. Certain details in the proposal, particularly in the resolution process, however, prevent the proposal from reaching the optimal result.

#### *1. Strengths of the Proposal: Reducing Systemic Risk and Containing Moral Hazard*

##### *a. Reducing Systemic Risk*

By bringing all TBTF institutions, or Tier 1 FHCs, under the regulatory ambit of various government agencies, the framework does a better job than our current system of solving the market failure of systemic risk, whereby no single institution has the incentive to internalize the costs of systemic risk. The *ex ante* prudential regulations will seek to curb inefficiently risky behavior<sup>127</sup> that threatens to impose external costs on the financial system and economy by forcing TBTF institutions to internalize these costs. Under the framework, TBTF institutions must bear the costs of complying with more stringent regulations aimed at ensuring the health of these institutions and minimizing risk of a run. For example, the proposed leverage limitations will prevent Tier 1 FHCs from over-leveraging and becoming more susceptible to a liquidity crisis, as Bear Stearns had under the CSE program. As a result, the proposal reduces the likelihood that a TBTF institution will fail and cause systemic risk.

The proposal also improves upon our current system in mitigating systemic risk by maintaining an institutional process for handling failures. The process ensures that “serious adverse effects” created by systemic risk are always considered by regulators. Importantly, the

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<sup>125</sup> *Id.* §§ 1202, 1203(a)(1).

<sup>126</sup> *Id.* § 1209(n).

<sup>127</sup> Even if a financial strategy is profitable in the short run, the magnitude of risk it creates to the financial system may outweigh the benefits.

periodic reporting requirements will help regulators gather the information necessary to measure expected systemic risk accurately.<sup>128</sup>

b. Containing Moral Hazard

The proposal also does a relatively good job of containing the moral hazard produced by the regulations, thus preserving market discipline. By designating certain financial institutions as Tier 1 FHCs and establishing a process by which such institutions could be bailed out by the FDIC or SEC, the proposed framework creates a moral hazard problem to some extent, particularly for creditors of the Tier 1 FHCs. Part I.B.1 explained that moral hazard is more of a concern for creditors than for equity holders because bailouts can be structured so that the shareholders receive very little, if anything, from the resolution. Indeed, under the Obama Administration's proposal, it is still likely that shareholders will be wiped out in a resolution process. If creditors of a financial institution expect to be guaranteed by the government, however, they will have less of an incentive to prevent overly risky behavior.<sup>129</sup>

However, by establishing a systematic process for addressing the failure of Tier 1 FHCs, the framework is superior to our current system in its ability to manage and limit moral hazard. The proposal avoids creating an *implicit* guarantee through repeated ad hoc rescues by restricting regulatory action to a specific process that seriously contemplates allowing a Tier 1 FHC to file for bankruptcy. It also reduces the effects of moral hazard by incorporating an element of constructive ambiguity into the resolution process. Creditors cannot be certain that they will be fully repaid if a Tier 1 FHC fails: They may end up in bankruptcy or a resolution process. The preservation of uncertainty as to whether, or to what extent, creditors will be repaid if a TBTF institution fails helps to mitigate moral hazard.

c. Avoiding Potential Pitfalls

One criticism of this proposal is that it might actually perversely encourage institutions to become TBTF to benefit from the perception that the government will bail them out. Specifically, it is the perception that these institutions' *creditors* will be guaranteed that could benefit the institution because the creditors would view investment in

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<sup>128</sup> This would improve upon our current system, under which the Fed had to be informed by the SEC of Bear Stearns's financial position and possible bankruptcy filing as it was happening. *Senate Hearing*, *supra* note 14, at 1 (statement of Timothy F. Geithner, President, Federal Reserve Bank of New York), [http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\\_id=50c5b316-ae77-4a68-839c-22bff2c53f2f](http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=50c5b316-ae77-4a68-839c-22bff2c53f2f).

<sup>129</sup> See *supra* note 52 and accompanying text.

the institution as less risky than they would otherwise, resulting in inefficiently low borrowing costs.<sup>130</sup> Although the institution benefits from lower borrowing costs, the effect is reduced market discipline.

While this is a valid point, its force is lessened by the fact that the regulations should impose enough compliance costs on Tier 1 FHCs to at least net out the benefits of being perceived as TBTF. Not only would Tier 1 FHCs be forced to subject themselves to stringent monitoring by the Fed, but they would also be required to take on significantly less risk than they could otherwise. Mandatory payments to the Bank Holding Company Fund would also operate as a compliance cost. Thus, these institutions will be forced to fully internalize the cost of becoming TBTF.<sup>131</sup>

Institutions might attempt to grow to a size just short of what is considered TBTF to escape the burdens of regulation. Under the proposal, however, regulators are given authorization to include in the regulatory framework firms that are borderline TBTF. The Fed, in making the determination of which institutions qualify as Tier 1 FHCs, may consider “any other factors that the Board deems appropriate,”<sup>132</sup> thus allowing the Fed to capture borderline institutions. While there still might be a “downward bleed” problem whereby firms continue to decrease in size to fall just short of Tier 1 FHC, such firms could continue to be captured by the regulatory framework because there is no floor in the proposed legislation for designating firms Tier 1 FHC.<sup>133</sup> Furthermore, it would be difficult for an institution to consistently maintain its size, counterparty exposure, or derivative exposure over time in an effort solely to avoid regulation. If the result is that firms shrink sufficiently in size to completely avoid the possibility of regulation, this may not necessarily be a bad result.<sup>134</sup> Although

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<sup>130</sup> See MORGAN & STIROH, *supra* note 52, at 18 (finding that naming banks TBTF in 1984 increased optimism that government would support these banks, leading to conclusion that “[u]ntil bond holders no longer consider the possibility of support for those banks, bond market discipline of TBTF candidates will be less than complete”); Benjamin S. Bernanke, Chairman, Bd. of Governors of the Fed. Reserve Sys., Speech at the Council on Foreign Relations: Financial Reform to Address Systemic Risk (Mar. 10, 2009), <http://www.federalreserve.gov/newsevents/speech/bernanke20090310a.htm> (observing that allowing firms to be considered TBTF “provides an artificial incentive for firms to grow, in order to be perceived as too big to fail”).

<sup>131</sup> It is of course difficult to tailor regulations so that they perfectly offset the benefits of being perceived as TBTF and of engaging in overly risky behavior. It is beyond the scope of this Note to address this more technical question regarding quantification of the expected costs of regulation.

<sup>132</sup> MODERNIZATION ACT, *supra* note 9, § 6(a)(1)(A)(vii).

<sup>133</sup> As firms continued to shrink in size, it would become less likely that they would create risk in the system and thus require special regulation.

<sup>134</sup> For example, some experts are proposing that regulation should create incentives for large institutions to decrease in size because they currently create far too much systemic

there are economies of scale for financial institutions, the recent financial crisis has exposed a serious cost of having a large size—the ability to create systemic risk—that cancels out at least some of the benefit.

One might further criticize the framework by arguing that despite some uncertainty over the resolution process, it will actually be obvious *ex ante* which firms will be bailed out. This effect is lessened by the fact that whether an institution is bailed out will depend to some extent upon the strength or fragility of the market *at that time*—something that cannot be predicted *ex ante*. If one institution is really so much bigger or more interconnected than others that a bailout appears almost inevitable, the “categorization and tiering” provision in the proposal allows the Fed to subject this institution to even stricter *ex ante* requirements, forcing the firm to fully internalize this cost and avoid a failure.

### 3. *Weaknesses of the Proposal: Excessive Systemic Risk and Uncertainty*

Despite its strengths, the proposal could do more to avert the contagion or systemic risk that could result from the failure of a Tier 1 FHC. The proposal also insufficiently reduces uncertainty in policy-making decisions that could trigger panic.

#### a. Systemic Risk Is Not Prioritized

Although the proposed framework instructs the regulatory agencies to consider “serious adverse effects” on the financial system and economy when deciding whether to invoke their resolution authority,<sup>135</sup> the procedures for reaching such a determination are so stringent—requiring near consensus among the designated regulatory agencies<sup>136</sup>—that it seems likely that at least some financial institutions whose failure could cause systemic risk will not be bailed out. While such a stringent procedure might help to preserve market discipline, the proposal seems to go too far in that direction.

The proposed legislation also leaves open the possibility that regulators will elevate moral hazard concerns at the eleventh hour at the expense of systemic risk by requiring the Treasury to consider the

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risk. See, e.g., *Regulating and Resolving Institutions Considered “Too Big To Fail?”: Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs, 111th Cong. 3 (2009)* (statement of Sheila Bair, Chairman, Federal Deposit Insurance Corporation) (arguing that financial organizations have become too large and complex, imposing systemic risk, and that regulation should “creat[e] incentives to reduce the size of systemically important firms”).

<sup>135</sup> RESOLUTION AUTHORITY ACT, *supra* note 9, § 1203(b).

<sup>136</sup> See *supra* note 125 and accompanying text (describing proposal’s consensus requirement between both Federal Reserve Board and either FDIC or SEC).

action's "potential for increasing moral hazard" in deciding whether to invoke the resolution regime.<sup>137</sup> While it is important for a regulatory framework to maintain some level of discretion as to whether or to what extent an institution will be bailed out, the primary concern at this stage should be to mitigate the external costs imposed on society by the failure of a TBTF institution.<sup>138</sup> Furthermore, giving the Treasury—an agency firmly within the Executive branch—ultimate authority, upon consultation with the President, to make the decision to invoke the resolution regime overly politicizes what should be a more technical decision. The proposal therefore still fails to address the problem illustrated by the failure of Lehman, whereby politics can influence a decision to let a systemically important financial institution fail.<sup>139</sup>

b. Excessive Uncertainty

The Administration's proposal also preserves too much uncertainty in the *ex post* process of addressing institution failures, primarily because it retains too many of the destructive elements of constructive ambiguity. First, because the proposal leaves open the possibility of bankruptcy, creditors and counterparties of the institution now must worry about their ability to recover if the institution fails under *both* bankruptcy law and resolution rules. This preserves the more destructive aspect of constructive ambiguity: ambiguity over the decisionmaking *process*. Second, the legislation does not require regulators to disclose the basis upon which they will decide if an institution's failure would create "serious adverse effects."<sup>140</sup> Without transparency in this crucial determination, ambiguity over process remains. As a result, the short-term lenders of TBTF institutions still

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<sup>137</sup> RESOLUTION AUTHORITY ACT, *supra* note 9, § 1203(b); *see also* A NEW FOUNDATION, *supra* note 9, at 77.

<sup>138</sup> *See* Lawrence Summers, *Beware the Moral Hazard Fundamentalists*, FINANCIAL TIMES, Sept. 24, 2007, at 13 (arguing that "avoiding moral hazard" should not be regulators' primary concern during financial crisis); Augusto de la Torre & Alain Ize, *Regulatory Reform: Integrating Paradigms* 33 (World Bank Policy Research Working Papers, Paper No. 4842, 2009), available at <http://go.worldbank.org/412QJH0470> ("[I]mposing market discipline *ex-post*, once the system is deeply out of equilibrium and a crisis is unfolding, is fraught with danger."); Michael Krimminger, *Controlling Moral Hazard in Bank Resolutions: Comparative Policies & Considerations in System Design 1* (July 2006) (unpublished manuscript, on file with the *New York University Law Review*), available at <http://ssrn.com/abstract=1123224> ("Past responses to banking crises demonstrate that concerns over moral hazard have, and oftentimes probably must, take a back seat to the necessity of stemming the immediate crisis.").

<sup>139</sup> *See supra* notes 100–02 and accompanying text (explaining how political factors influenced decision to let Lehman fail).

<sup>140</sup> RESOLUTION AUTHORITY ACT, *supra* note 9, § 1203(b).

have a strong incentive to begin a run on the institution in the midst of a failure. The proposal thus does not sufficiently curtail the risk of a run.

#### IV

##### AN ALTERNATIVE REGULATORY REFORM FRAMEWORK

While the Obama Administration's proposal has clear benefits, I propose a modified alternative regulatory framework that should address some of the proposal's weaknesses. Specifically, I alter the ex post process for resolving the failure of TBTF financial institutions in order to prevent systemic risk and reduce uncertainty more effectively.

##### A. *Formulating the Framework by Modifying the Obama Administration Proposal*

Like the Obama Administration, I support the establishment of stricter ex ante prudential regulations and a resolution process to manage the failure of TBTF institutions. I also advocate applying the new regulatory structure to all TBTF institutions (i.e., Tier 1 FHCs) regardless of legal status and support requiring those institutions to contribute to the fund that would finance a resolution process.

I suggest certain changes to the Obama Administration's proposal, however, to improve the framework. Under my proposal, the Fed would have *unilateral* authority to authorize the FDIC to seize a failing institution. Bankruptcy would also no longer be an option: The FDIC could either "rescue" the institution or organize an orderly liquidation, depending on which is the least-cost alternative. That is, like the FDIC's current resolution authority over certain banks,<sup>141</sup> a least-cost resolution provision would require the FDIC to adopt the resolution approach that will minimize expenditure from the fund.

Similar to the current systemic risk exception for depository institutions,<sup>142</sup> the new law would stipulate an exception from the least-cost alternative when the Fed alone determines that a liquidation will create systemic external costs. The Fed would thus be the sole agency responsible for determining whether liquidation would adversely affect the financial system or economy, justifying a more costly resolution process to bail out an institution. This approach differs from the Obama Administration's proposal, which requires consensus among

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<sup>141</sup> The FDIC is currently required to adopt the resolution approach "least costly to the Deposit Insurance Fund of all possible methods." 12 U.S.C. § 1823(c)(4)(A)(ii) (2006).

<sup>142</sup> The least-cost resolution provision contains an exception for systematically significant institutions. 12 U.S.C. § 1823(c)(4)(G)(i).



several regulators in order to make a systemic risk determination that would trigger the use of resolution authority as opposed to bankruptcy.<sup>143</sup>

The Fed would place a value on the expected cost to the financial system and economy were the institution to fail. If there are external costs, a cost-benefit provision in the new statute would require the FDIC to resolve the institution with financing up to the cost of systemic risk<sup>144</sup>—this will ensure that the expected cost of any resolution is less than the expected cost of systemic effects.<sup>145</sup> The methodology used to calculate expected systemic risk would be standardized and transparent. The FDIC would have the flexibility to use the funding as needed, as in the Obama Administration’s proposal.<sup>146</sup> For example, it could use the funding to purchase bad assets from the failed institution to make the sale more palatable to a buyer, just as the Fed did to enable J.P. Morgan’s purchase of Bear Stearns.<sup>147</sup> However, if the FDIC cannot secure an acquirer for the failed institution that is willing to guarantee its trades and counterparty positions, or to employ another solution to keep the institution viable, then the FDIC will oversee an orderly liquidation.<sup>148</sup> Thus, the cost-benefit provision operates as a cap on the amount of money the government can spend to resurrect a failed institution—a cap equal to the averted damage to the larger economy.

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<sup>143</sup> See *supra* notes 121–26 and accompanying text (describing Obama Administration’s proposal).

<sup>144</sup> Application of a cost-benefit analysis would be mandated by statute, but the Fed would develop the process for such an analysis in more detail through regulation. See *generally* *Am. Textile Mfrs. Inst. v. Donovan*, 452 U.S. 490, 510 (1981) (“When Congress has intended that an agency engage in cost-benefit analysis, it has clearly indicated such intent on the face of the statute.”). Calculating the cost of systemic risk would inevitably be an imprecise process, the details of which I do not explore in this Note.

<sup>145</sup> The expected cost of the bailout will depend upon how federal money is used. For example, if the FDIC decides to purchase bad, illiquid assets from a failed institution, the cost to them will depend on the likelihood of the assets decreasing in value over time. Even if the value of the assets increases, there is still an illiquidity cost to the FDIC that must be weighed.

<sup>146</sup> See *supra* notes 119–20 and accompanying text (discussing tools available to agency acting under resolution authority).

<sup>147</sup> See *supra* notes 35–37 and accompanying text (describing Fed’s financing of J.P. Morgan’s acquisition of Bear Stearns).

<sup>148</sup> The FDIC’s options would be modeled on its current powers to resolve depository institutions. Typically, the FDIC will apply one of two resolution methods to the failing bank: (1) a purchase and assumption transaction whereby the FDIC arranges for a healthy institution to acquire some or all of the assets and liabilities of the failed bank, or (2) a deposit payoff, in which the FDIC liquidates all of the failed institution’s assets and pays the bank’s liabilities. FDIC RESOLUTIONS HANDBOOK, *supra* note 23, at 5, 19; see also CARNELL ET AL., *supra* note 23, at 730–31. The FDIC has a third option of pursuing an “open bank assistance transaction,” although this is rarely used. See FDIC RESOLUTIONS HANDBOOK, *supra* note 23, at 5, 49–50 (detailing procedure and frequency of use).

### B. *Benefits of Modified Framework*

The alternative regulatory framework I propose should improve upon the Obama Administration's proposal in two ways: It would (1) more reliably prevent systemic risk without increasing moral hazard and (2) reduce uncertainty in regulatory behavior, lowering the attendant harm of contagion.

#### 1. *Reducing Systemic Risk Without Creating Moral Hazard*

Assuming that *ex ante* regulations and market discipline will not always successfully curb overly risky behavior and that investors may still panic and cause a run on a Tier 1 FHC, the cost-benefit provision of the resolution process ensures that systemic risk is properly analyzed and prioritized *ex post*. The Fed—as a regulatory agency with substantial experience regulating large, complex financial institutions<sup>149</sup> and as the agency that would be responsible for monitoring and regulating Tier 1 FHCs *ex ante*—would have the most expertise and independence to make a technical determination about whether the systemic risk exception should be invoked. Rather than requiring near consensus among several different regulatory bodies, some of whom are politically influenced, this regulatory framework would ensure that systemic risk is more deliberately and consistently addressed by a single agency with minimized political interference.<sup>150</sup>

Periodic reporting requirements allowing the Fed to gather and analyze systemic risk information about Tier 1 FHCs would also permit the Fed to undertake the cost-benefit analysis relatively quickly. Regulated financial institutions would be required to establish a plan for “rapid and orderly resolution” prior to failure, thereby

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<sup>149</sup> *Federal Reserve Perspectives on Financial Regulatory Reform Proposals: Hearing Before the H. Comm. on Financial Servs.*, 111th Cong. 8 (2009) (statement of Benjamin S. Bernanke, Chairman, Board of Governors of the Federal Reserve System) (conveying that “[t]he Federal Reserve is already the consolidated supervisor of some of the largest, most complex institutions in the world” and has “expertise . . . in supervising large, diversified, interconnected banking organizations”); *Regulatory Restructuring: Balancing the Independence of the Federal Reserve in Monetary Policy with Systemic Risk Regulation: Hearing Before the Subcomm. on Domestic Monetary Policy and Technology of the H. Comm. on Financial Services*, 111th Cong. 30 (2009) (statement of Richard Berner, Chief Economist, Morgan Stanley, Inc.) (supporting Fed as best agency to supervise systemic risk due to its experience and expertise).

<sup>150</sup> The Fed is less likely to be politically influenced than the Treasury, for example, because it is an independent agency within the government. Federal Reserve Board, Frequently Asked Questions, <http://www.federalreserve.gov/generalinfo/faq/faqfrs.htm> (last visited Apr. 15, 2010) (“[The Fed] is considered an *independent* central bank because its decisions do not have to be ratified by the President or anyone else in the executive or legislative branch of government, it does not receive funding appropriated by Congress, and the terms of the members of the Board of Governors span multiple presidential and congressional terms.”).

allowing the Fed to initiate the analysis and resolution process quickly.<sup>151</sup> The need to take action within a short time frame would be less critical than under our current regulatory system because bankruptcy would no longer be an option. Regulators would not need to hasten efforts to formulate a solution over one weekend in order to avoid an imminent bankruptcy filing on Monday, as occurred in Lehman's case. Instead, the FDIC would be authorized to seize the failing institution immediately and begin the resolution process. The FDIC would have the tools to buy time while it determined the best approach to resolution, such as forming a "bridge bank" to continue a failed financial institution's business.<sup>152</sup> Therefore, regulators would generally face less pressure to take action in a short time frame.

Critics skeptical of the Fed's performance during the crisis argue that additional authority should not be handed over to the independent, quasi-governmental agency. Regulators and politicians have argued for limiting the Fed's authority to regulate and bail out financial institutions mostly because they think "[t]he Federal Reserve flat out failed at supervising the largest, most complex firms."<sup>153</sup> Sheila Bair, Chair of the FDIC, has voiced support for giving a Financial Services Oversight Council—which would be composed of several agencies, including the FDIC—even greater authority than under the Obama Administration's proposal so that it could oversee and participate in decisions made by the Fed in emergency situations.<sup>154</sup>

The primary problem during the crisis, however, was not that the Fed failed to regulate banks effectively; rather, a large part of the problem was that the Fed did not have enough authority to oversee non-bank financial institutions, like Bear Stearns and AIG, that could threaten the financial system.<sup>155</sup> More worrisome is that politics might

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<sup>151</sup> See *supra* note 115 and accompanying text (discussing Obama Administration's proposal requiring Tier 1 FHCs to submit resolution plan to Fed).

<sup>152</sup> The FDIC would be given the same tools it currently has to form a "bridge bank" so that it could continue the failed bank's business even if it has not yet found an acquirer. See 12 U.S.C. § 1821(n) (2006).

<sup>153</sup> Michael R. Crittenden & Corey Boles, *White House Backs Fed Oversight Role*, WALL ST. J., Nov. 14, 2009, at A2 (quoting statement by Senator Christopher Dodd's spokeswoman).

<sup>154</sup> See *Systemic Regulation, Prudential Matters, Resolution Authority and Securitization: Hearing Before the H. Comm. on Financial Servs.*, 111th Cong. 13–17 (2008) (statement of Sheila C. Bair, Chairman, Federal Deposit Insurance Corporation), [http://www.house.gov/apps/list/hearing/financialsvcs\\_dem/bair.pdf](http://www.house.gov/apps/list/hearing/financialsvcs_dem/bair.pdf); see also Edmund L. Andrews, *World Bank Head Expects Dollar's Role To Diminish*, N.Y. TIMES, Sept. 29, 2009, at B10 (reporting critique by World Bank Group President, Robert B. Zoellick, of increasing Fed's authority because "Congress had become uneasy about the Fed's exercise of emergency powers to bail out financial institutions and prop up credit markets").

<sup>155</sup> See *supra* Part II.A (explaining that Fed lacked authority to regulate non-bank financial institutions and outlining failure of SEC's CSE program to manage systemic risk).

interfere with decisionmaking during a crisis. As demonstrated by Lehman's failure, the influence of politics can lead to decisions that, while popular, are extremely damaging to the financial system as a whole.<sup>156</sup> By giving decisionmaking authority to the Treasury and requiring approval from several other regulatory agencies, the Obama Administration's proposal creates the risk that politics, rather than technical analysis, will guide systemic risk determinations. The Fed, on the other hand, would have not only the expertise, but also the independence to undertake a more methodical and objective assessment of the potential costs of a failure without political influence.

Further, the framework I propose would not permit regulators to consider potential moral hazard consequences when determining whether to rescue a failing institution. Worrying about moral hazard at this stage would make it more likely for regulators to let a TBTF institution fail, creating systemic risk. Under my proposal, regulators would not be permitted to elevate concern about creating moral hazard over the expense of systemic risk in deciding whether to allow a failed institution to liquidate—instead, the decision would be based solely on the technical cost-benefit determination. Under the Obama Administration's proposal, on the other hand, regulators *must* consider moral hazard, despite the fact that the most immediate and pressing concern *ex post* will be containing a financial crisis by curtailing systemic risk.<sup>157</sup>

My proposal is optimal because moral hazard would still be limited by the regulatory structure, but not prioritized at the point in time when risk of damage to the system caused by a large institution's failure is greatest—the time of failure. Under my proposal, creditors of Tier 1 FHCs will not know *ex ante* how much (if any) funding would be made available to them in a later resolution process—a determination that would depend upon factors not knowable *ex ante*, such as the future fragility of the financial system or the positions of other financial institutions. This setup maintains a policy of constructive ambiguity that still limits moral hazard. Even if the Fed bases its decision on whether and how much to finance a resolution process entirely on a measurement of systemic risk with no consideration of moral hazard, creditors *ex ante* will still be uncertain about the *outcome* of this decision and thus cannot depend on a bailout.

Furthermore, even though it is more likely under my proposal than under the Obama Administration's proposal that Tier 1 FHCs

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<sup>156</sup> See *supra* note 102 and accompanying text (describing political pressure to let some institutions fail).

<sup>157</sup> See *supra* note 138 and accompanying text.

will be “rescued” to some extent, moral hazard is not worsened because only short-term creditors with high priority claims against an institution, not the long-term subordinated creditors, are likely to recover fully.<sup>158</sup> The framework is thus advantageous because it is more likely to guarantee and reduce panic on the part of counterparties who can cause a run on the institution—the short-term creditors—but still preserve market discipline by maintaining uncertainty as to how much can be recovered by long-term creditors.

## 2. *Creating Less Uncertainty*

The framework also reduces the uncertainty created by regulatory decisionmaking without losing the benefit of reducing moral hazard, resulting in a more optimal regulatory structure. As discussed in Part IV.B.1, the regulatory framework I propose retains an element of ex post uncertainty in order to reduce moral hazard. Unlike the Obama Administration’s proposal, however, my proposal eliminates unnecessary uncertainty in regulatory decisionmaking that contributes to panic without doing more to reduce moral hazard. First, by removing the possibility of bankruptcy, the framework I propose eliminates a layer of legal uncertainty that could contribute to panic and a run. As with commercial banks, if creditors or counterparties to a non-bank financial institution begin to worry that their money will be tied up in bankruptcy for years, they will be more likely to start a run on the institution. Instead, my framework prescribes a swifter, orderly resolution process, reducing the uncertainty that creditors would otherwise face in a bankruptcy proceeding under the Obama Administration’s proposal, and therefore decreasing the likelihood of a run.

Second, requiring transparency in the Fed’s methodology for making a systemic risk determination also reduces the ambiguity in decisionmaking procedures that can exacerbate a financial crisis.<sup>159</sup> Under my proposal, the methodology used to make the cost-benefit systemic risk determination would be publicly available information. Thus, there would no longer be ambiguity as to the procedures that regulators would use to determine whether or not to rescue an institution. The only real uncertainty left would be uncertainty over *outcome*—the extent to which counterparties and customers would be guaranteed in a resolution process, which will depend in part upon the discretion of the FDIC in crafting a resolution and in part upon the

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<sup>158</sup> See *supra* note 62 and accompanying text (explaining how long-term creditors exert market discipline and need less protection).

<sup>159</sup> See *supra* notes 71–72 and accompanying text (describing how more transparent regulatory processes create less uncertainty).

amount of funding the FDIC is permitted to spend in light of the systemic costs. The preservation of some uncertainty and discretion as to whether, or to what extent, creditors will be repaid if a TBTF non-bank financial institution fails will help to mitigate moral hazard and maintain market discipline without creating excess uncertainty that could contribute to panic and contagion. A transparent process also signals to investors that if an institution is allowed to proceed into liquidation after a thorough cost-benefit analysis, the Fed did not believe that the systemic costs of letting the institution fail would be so great, thus reducing the likelihood that failure will cause panic in markets. That is, the standardized, transparent process legitimizes the decision to allow an institution to liquidate because, unlike with the decision to let Lehman file for bankruptcy, investors would know why and how the decision was made.

#### CONCLUSION

Due to the shortcomings of our current regulatory structure and the ad hoc approach to rescuing TBTF non-bank financial institutions, the Obama Administration has proposed reforming financial regulation. On April 15, 2010, Senator Dodd and other Senate Democrats put forward a similar financial reform bill.<sup>160</sup> Like the Obama Administration's proposal, Senator Dodd's bill would allow the Fed to subject systemically important non-bank financial institutions to enhanced prudential regulation.<sup>161</sup> It also provides for a very similar resolution process for failing TBTF institutions, even requiring an additional layer of approval from a newly established Bankruptcy Panel before the resolution regime can be invoked.<sup>162</sup>

While the two proposals show much promise, I have set forth an alternate regulatory framework that seeks to optimize the ability to reduce systemic risk while minimizing the counterproductive results of moral hazard and uncertainty. Still, I hope that Congress will seriously consider enacting some variation of the Obama Administration's proposal or Senator Dodd's legislation, which both offer a vast improvement from our current regulatory system.

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<sup>160</sup> See *supra* notes 9, 109, 117, 124 (discussing similarities between Obama Administration's proposal and Senator Dodd's bill).

<sup>161</sup> Restoring American Financial Stability Act of 2010, S. 3217, 111th Cong. §§ 113, 115 (2010).

<sup>162</sup> S. 3217 § 202.