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Eliminating Wall Street's Safety Net: How a Systemic Risk Premium Can Solve "Too Big to Fail"

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Eliminating Wall Street’s Safety Net

How A Systemic Risk Premium Can Solve “Too Big to Fail”

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The financial crisis of 2007–2009 sent the United States and the global economy into its worst recession since the great depression.¹ Large, interconnected financial² and non-financial³ institutions were at the center of the financial crisis. The institutions highly leveraged positions during the crisis led the government to take extreme measures, including bailing out some of these “too big to fail,” but failing institutions.⁴ The crisis led the United States Congress to pass the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), the largest reform of the financial system in the United States since the Great Depression.⁶ The Dodd-Frank Act, among other objectives, purports to “promote the financial stability of the United States [and] to end ‘too big to fail.’”⁷

¹ See Nestor M. Davidson, Rshmi Dyal-Chand, Property in Crisis, 78 Fordham L. Rev 1607, 1608 (2010) (focusing on the role of property during the financial crisis); See generally, Jeffrey N. Gordon and Christopher Muller, Confronting Financial Crisis: Dodd-Frank’s Dangers and the Case for a Systemic Emergency Insurance Fund, 28 Yale J. on Reg. 151 (2011) (arguing that serious financial crisis in the financial sector are inevitable and random. Thus, we should preserve the ability for regulators to intervene in case emergency lending is necessary to protect our financial system); Kevin T. Jackson, The Scandal Beneath the Financial Crisis: Getting a View From a Cultural Mental Model, 33 Harv. J.L. & Pub. Pol’y 735 (2010) ; Karl S. Okamoto, After the Bailout: Regulating Systemic Moral Hazard, 57 UCLA L. Rev. 183 (2009).
⁵ See Adam J. Levitin, In Defense of Bailouts, 99 Geo. L.J. 435 (2011) (arguing that the U.S. needs a system that does not prohibit bailouts all together, but allows government to appropriately respond to needs in the financial sector, especially in times of crisis.).
This paper explores the necessary role of “too big to fail” institutions in our financial system, explores the sections of the Dodd Frank Act relevant to determining systemic risk and identifying “too big to fail” institutions, and offers a regulatory and economic framework for regulating “too big to fail” institutions in a manner that reduces moral hazard between the institution and the rest of the financial sector while protecting American ideals of capitalism and the free market. Part II of this paper briefly discusses the causes of the financial crisis and defines “too big to fail,” systemic risk, and contagion. Part III explores Title I and II of the Dodd-Frank Act and the relevant legislation aimed at eliminating the problem of “too big to fail” and reducing the overall risk inherent in the United State’s financial system. Part IV discusses the moral hazard problems in financial regulation and the “too big to fail” paradigm. Part V highlights gaps in the legislation, and explores alternative solutions to the “too big to fail” problem through additional regulation, information sharing, bankruptcy, antitrust and ultimately proposes a systemic risk premium. Part VI concludes.

Part II – The Savings and Loan Crisis

Before discussing the financial crisis of 2007-2009, a look at the Savings and Loan crisis of the 1980’s is instructive. The Savings and Loan crisis exhibited many of the same pre crisis...
warnings and post crisis responses as the financial crisis of 2007-2009. An analysis of the crisis provides a useful backdrop for analyzing and responding to the most recent financial crisis.

A. A Look at The Savings and Loans Crisis of the 1980’s

Throughout the late 1960’s and 1970’s, market interest rates fluctuated wildly, making it difficult for Savings and Loan institutions to pay competitive rates. With each rise in interest rates, depositors withdrew funds and re-deposited them elsewhere, leaving Savings and Loan institutions vulnerable as they were prohibited from conducting any financial activity besides receiving deposits and issuing home loans. When interest rates rose as high as 16% in 1980, many Savings and Loan institutions were damaged beyond repair as they attempted to offer high interest rates on short term deposits in order to compete while suffering losses on long term, fixed mortgage agreements that yielded a lower rate. However, government regulators did not possess the human, financial, or regulatory capital to shut down these thrift institutions. So, government deregulated—allowing thrift institutions to take more risks in the hopes that interest rates would drop and the thrift institutions could finagle their way back into profitability. Government also raised the level of deposit insurance to $100,000, encouraging depositors to continue to deposit at highly damaged, highly risky thrift institutions.

Savings and Loan institutions received a brief reprieve between 1982 and 1985 when interest rates dropped, but by the end of 1986, it became obvious that the Federal Savings and

11 Id.
13 See FDIC, supra note 10.
14 Id.
15 Id. This, of course, resembles the moral hazard problem exhibited between investors in large financial institutions and government bailouts. The higher the level of deposit insurance, the more money investors funneled into these thrift institutions. This is not unlike the government providing implicit insurance guarantees in the form of bailouts. Whereby the bigger an institution becomes, the more money gets funneled in by investors.
Loan Insurance Corporation was insolvent.\textsuperscript{16} Congress was forced to pass the Financial Institutions Reform, Recovery and Enforcement Act in order to wind down failing Savings and Loan institutions.\textsuperscript{17} An overall environment of deregulation in lending, increased insurance guarantees, political corruption, and ex post, instead of ex ante regulation led to the ultimate collapse of the industry and cost taxpayers in excess of 500 million dollars.\textsuperscript{18} Although it is questionable what the financial industry and government actually learned from the Savings and Loan Crisis, it is indisputable what they should have learned.\textsuperscript{19} They should have learned that an environment of deregulation (the repeal of Glass Steagall)\textsuperscript{20}, an environment where institutions developed complicated financial instruments (mortgage backed securities\textsuperscript{21}), and an environment of ex post regulations (the Dodd-Frank Act)\textsuperscript{22} often leads to a dangerous combination of incentives and risk taking. However, Wall Street did not recognize

\textsuperscript{16} FDIC, supra note 10; See also, John B. Shoven, et. al. \textit{Real Interest Rates and the Savings and Loan Crisis: The Moral Hazard Premium}, NBER Working Paper No. 3754, (1991) (arguing that “deposit insurance, moral hazard, and regulatory forbearance provide the incentives and means for insolvent thrifts to issue liabilities that compete with Treasury securities in the markets for funds.”)

\textsuperscript{17} Shoven et. al, supra note 16. In 1989, 318 Savings and Loan institutions with total assets of $135 billion were resolved. In 1990, 213 Savings and Loan institutions with total assets of $130 billion were resolved: For a synopsis of the cost of the crisis, see Timothy Curry and Lynn Shibut, \textit{The Cost of the Savings and Loan Crisis: Truth and Consequences}, FDIC Banking Review (1986), available at www.fdic.gov/bank/analytical/banking/2000dec/brv13n2_2.pdf.

\textsuperscript{18} See FDIC, supra note 10.

\textsuperscript{19} Rep. John D. Dingell, Speech on the Floor of the House in 1999, available at http://www.youtube.com/watch?v=y2RzRv8yQXQ. Rep. Dingell spoke regarding the repeal of Glass Steagall and the implementation of Graham Leech Bliley. In his speech, Rep. Dingell warns that we are passing a bill with little consideration, and without an understanding of what most of it contains. Rep. Dingell reminds the house of what happened when S and L was deregulated, and that it imposed a 500 billion dollar liability on the taxpayers. “Having said that,” Rep. Dingell argues, “what we are creating now is a group of institutions that are too big to fail. Taxpayers are going to be called upon to cure the failures we are creating. The fed will be in and other federal agencies will be in to bail them out.”


\textsuperscript{22} Dodd-Frank Wall Street Reform and Consumer Protection Act, H.R. 4173, 111th Cong. (2010)(enacted).
B. The 2008 Financial Crisis

With the Savings and Loan crisis in mind, I now turn to the causes of the recent financial crisis. The 2007 – 2009 financial crisis began with decade of foreign investment into the United States. As emerging markets in Asia and the Middle East grew as a result of rising consumption and Western dependence on oil, these emerging markets total investments equaled 6% of the United States’ total output in 2006. Such newfound investment led to easy money on Wall Street, and the influx of foreign investment and decreased rates on safe investments, such as T-bills, led to a steep decline in long term interest rates. This easy money led Wall Street firms to become highly leveraged, using hard to value assets like CDO’s and MBS’s as collateral for loans.

Wall Street investors took note of the consistent rise in housing prices that occurred from 1990 through 2005, and investment bankers, commercial banks, lenders and borrowers viewed

24 Id.
27 Bengt Holmstrom, *Discussion of “the Panic of 2007,”* by Gary Gorton, October 14, 2008, available at Kansascityfed.org (noting that as the subprime market began to collapse, the MBS’s and CDO’s became unable to serve as collateral for loans.)
real estate as the one investment that would never decline in value. Wall Street viewed purchasing, splitting up, and packaging billions of dollars worth of subprime loans as a way to diversify risk. A game of high stakes hot potato ensued, as investment banks and financial institutions passed around mortgage backed securities filled with subprime mortgages, hoping that they were not the ones left holding them when the homeowners behind the mortgages that, by and large, were too outlandish for the homeowners to afford, defaulted on the mortgage.

In 2006, the housing bubble began to collapse and home values declined. The housing supply increased as desperate homeowners put their homes on the market, demand decreased and housing prices began to fall, leading to foreclosures. As foreclosed homes went up for sale in great quantities, neighboring homes also lost value because potential homebuyers did not want to purchase a home in a neighborhood filled with other foreclosures. Without home price appreciation, homeowners were finding themselves underwater on their homes, and finding it difficult to work their way out of their adjustable rate mortgage. Now, investment bankers who leveraged millions of dollars to purchase mortgages from a mortgage broker were stuck holding mortgages, or more often homes, that the investment bank could no longer sell to investors. Similarly, when mortgage lenders now tried to sell more mortgages to the investment banker, the banker had to turn the lender away because he could not sell the mortgages he was already

28 Because Wall Street viewed real estate as a safe investment, they saw little risk in developing MBS and trading them with the firms own, highly leveraged capital. In general, Wall Street believed that by placing relative safety ratings on different levels of MBS's, they were diversifying their risk. In fact, they were not. See, Interview by ABC News with Robert Schiller (Apr. 8, 2008), http://abcnews.go.com/video/playerIndex?id=4614590.
31 Id.
32 Id.
holding. The slowing housing market led to a frozen credit market, as many financial institutions were holding billions of dollars worth of now worthless mortgages.  

Then, on September 15, 2008, Lehman Brothers filed for bankruptcy while holding billions of dollars worth of mortgaged back securities. World markets and investors panicked, credit markets froze, and “media and modern communications fed this frenzy and transmitted it across markets.” Allowing Lehman to fail or, “letting the market work, as some people said - basically brought the entire world capital market down” and brought the notion of a firm becoming “too big to fail” under high profile scrutiny from businesspersons, lawmakers, and commentators.

33 Bernanke, supra note 23.
34 Rethinking the Financial Network, Speech by Andrew G. Haldane, Executive Director, Financial Stability, Bank of England, at the Financial Student Association, Amsterdam (2009). Haldane compares the contagion effect of the financial crisis to the SARS outbreak, highlighting the gross overreaction of the masses that led to the ultimate collapse of a system: See also, Jenny Anderson and Eric Dash, For Lehman, More Cuts and Anxiety, The New York Times, August 29, 2008, at C1 (noting that Lehman Brothers incurred losses of 2.8 billion dollars during the second quarter of 2008.).
35 Id.
39 See generally, Gordon and Muller, supra note 1; Perry, supra note 3; Levitin, supra note 5; Lawrence A. Cunningham, Too Big to Fail: Moral Hazard in Auditing and the Need to Restructure the Industry Before it Unravels, 106 Colum. L. Rev. 1698 (2006); Alison M. Hashmall, After the Fall: A New Framework to Regulate “Too Big to Fail” Non-Bank Financial Institutions, 85 N.Y.U L. Rev. 829 (2010); Steven L. Schwarz, Systemic Risk, 97 Geo. L.J. 193 (2008). However, the idea that the American economy developed “too big to fail” firms has been around since at least 1984. See, Maureen O’Hara and Wayne Shaw, Deposit Insurance and Wealth Effects: The Value of Being “Too Big to Fail,” 45 Journal of Finance 1587 (1990).
C. “Too Big to Fail,” Systemic Risk and Contagion

An institution is “too big to fail” if the financial institution poses socially unacceptable systemic risk to the United States financial system in the event the institution fails. The Dodd-Frank Act sets forth a series of factors aimed at determining when a firm poses a systemic risk to the United States economy and is thus “too big to fail.” The Act assigns the Financial Stability Oversight Council the task of considering “the nature, scope, size, scale, concentration, interconnectedness, and mix of the activities of the company” when determining if the institution shall be subject to heightened prudential standards because of the systemic risk it poses to the “financial stability of the United States.” Although the notion of systemic risk appears throughout the Act, its definition remains largely inconsistent outside of the relevant risk factors defined in the Act. A static definition of systemic risk is inadequate, but a highly malleable one leads to inconsistent enforcement. Some define systemic risk in terms of a political, rather than an economic, measure while others use broad language regarding “financial disruptions,” “market failure,” and “significant financial institutions.” The problem with these definitions of

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40 See Schwartz, supra note 39.
43 Id. at §§113(a)(1), 113(a)(2)(a-k).
44 See Webster’s Dictionary, defining “systemic” as “of, relating to, or common to a system; Levitin, supra note 5, at 446-47 (stating that systemic risk is the “risk of socially unbearable macroeconomic consequences of microeconomic failures.” However, “it is not about an absolute measure macroeconomic impact from an individual firms failure, but about whether society is willing to tolerate that level of macroeconomic impact.”); George G. Kaufman, Bank Failures, Systemic Risk, and Bank Regulation, 16 Cato J. 17, 21 (quoting Alan Greenspan, Remarks at a Conference on Risk Measurement and Systemic Risk, Board of Governors of the Federal Reserve System (Nov. 16, 1995) (systemic risk “represents a propensity for some sort of financial system disruption, one observer might use the term ‘market failure’ to describe what another would deem to have been a market outcome that was natural and healthy, even if harsh.”); Hal S. Scott, The Reduction of Systemic Risk in the United States Financial System, 33 Harvard J. of Law and Public Policy 672, 673 (2010) (stating that “the risk that the failure of one significant financial institution can cause or significantly contribute to the failure of other significant financial institutions as a result of their linkage to each other.”).
systemic risk is that they are largely unquantifiable and thus, difficult to incorporate into legislation ex ante. For the purposes of this article, systemic risk will refer to the possibility or certainty, however great or small (that is, a probability greater than 0 but up to and including 100%) that the failure of a financial institution will cause some significant and socially intolerable disruption to the financial system.\textsuperscript{45} It is necessary that the definition leaves room for basing the determination on a multitude of relevant market factors in the current economic environment. Obviously, the response to the Savings and Loan Crisis is the 1980’s would be inadequate to respond to the Financial Crisis of 2007-2009, despite the fact that, by most measures, the failure of institutions in both cases posed a systemic risk to the economy. Because of the fragile,\textsuperscript{46} ever changing nature of the financial system, a definition of systemic risk that combines the assessment of financial and banking representatives, government regulators, and the risk preferences of voting citizens is preferable since it allows flexibility in government response to systemic risk.

A second reason necessitating leeway in the systemic risk determination is the contagion phenomenon. When a “systemically important” institution fails, “fear grips the entire system” as

\textsuperscript{45} \textit{But see} Levitin, \textit{supra} note 5 at 448-49, arguing for a definition of systemic risk that “regulartiz[es] governmental response to systemic risk.” The problem with such a definition, however, and the likely reason that the drafters of the Dodd-Frank Act left the definition of systemic risk so wide open, is that regulatizing pigeon holes government respondents into certain actions in an industry that is highly liquid, highly fragile, and highly malleable. It is important that the government establish legitimacy to their responses to financial crises and firms posing systemic risks, but it is dangerous to force them into a highly regularized regime. Id. at 449. Similarly, the notion that the best definition of systemic risk may be derived from the reaction of a median voter, while making an ex post determination of unacceptable social and systemic risk easier, makes any attempt at ex ante regulation nearly impossible. Voter’s are not as well informed as regulators, and by the time enough information is disseminated for voters to react, the time for regulation has likely already passed.

the contagion effect takes hold. Contagion is propagated by a variety of economic mechanisms during a financial crisis, but at its core, contagion occurs when “small shocks, which initially affect only a few institutions or a particular region of the economy, spread by contagion to the rest of the financial sector and then infect the larger economy.”

Part III – The Dodd Frank Act

The Dodd-Act sets forth the Financial Stability Oversight Council and the Orderly Liquidation Authority to attempt to address the moral hazard, systemic risk, and contagion effects that a failing, but “too big to fail” institution can have on the global economy.

A. The Financial Stability Oversight Council

The Dodd-Frank Act sets out in its initial paragraph that its purpose is to end “too big to fail.” Title 1 of the Act establishes the Financial Stability Oversight Council to “monitor emerging risks to U.S. financial stability, recommend heightened prudential standards for large, interconnected financial companies, and require nonbank financial companies to be supervised by the Federal Reserve if their failure would pose a risk to U.S. financial stability.” Although the Act lays out a number of measurable factors for the council to consider in determining the risk posed by a financial institution, the Act (rightfully so) does not designate thresholds above which an institution poses a systemic risk and will thus be subjected to the heightened prudential standards.

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47 Haldane, supra note 34, at 3: For a microeconomic approach to how and why contagion works, See Franklin Allen and Douglas Gale, Financial Contagion, 110 J. Pol. Econ. 1 (2000); See Levitin, supra note 5 (outlining counterparty contagion, information contagion, and common shock).
48 Allen and Gale, supra note 47, at 2.
51 Dodd-Frank Wall Street Reform and Consumer Protection Act, H.R. 4173, 111th Cong. § 113(a)(2)(A·K)(2010)(enacted). In making a systemic risk determination, the Council considers “(A) the extent of the leverage of the company; (B) the extent and nature of the off-balance-sheet
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Setting a maximum threshold of leverage, off balance sheet financing, or any other factor described in Section 113 of the Act creates perverse incentives for managers to take risks exactly up to the threshold level, or creates incentives for managers to take risk wildly beyond the threshold level to ensure they are included in any future bailouts.\textsuperscript{52} Without a strict threshold for which a institution will be deemed “too big to fail,” and thus subject to heightened regulations, however, institutions are left to guess if the Dodd-Frank Act prevents, and the government will actually refuse, to bail out a large failing institution (Title XI of the Dodd-Frank Act allows only for emergency lending to provide liquidity to the financial system as a whole, not to save a failing institution).\textsuperscript{53}

Institutions must ask, what would happen if my institution is incredibly large and interconnected, and we start to fail? Will the regulators bail me out? What are the costs to the regulator if I fail this time? What if my failure will cause everyone else to fail? The institution

\begin{itemize}
\item[(A)] exposures of the company; (C) the extent and nature of the transactions and relationships of the company with other significant nonbank financial companies and significant bank holding companies; (D) the importance of the company as a source of credit for households, businesses, and State and local governments and as a source of liquidity for the United States financial system; (E) the importance of the company as a source of credit for low-income, minority, or underserved communities, and the impact that the failure of such company would have on the availability of credit in such communities; (F) the extent to which assets are managed rather than owned by the company, and the extent to which ownership of assets under management is diffuse; (G) the nature, scope, size, scale, concentration, interconnectedness, and mix of the activities of the company; (H) the degree to which the company is already regulated by 1 or more primary financial regulatory agencies; (I) the amount and nature of the financial assets of the company; (J) the amount and types of the liabilities of the company, including the degree of reliance on short term funding; and (K) any other risk related factors that the council deems appropriate.” Obviously, this framework for a systemic risk determination gives great deference to the council, and only through actual implication of the provisions will we discover where the systemic risk threshold lies.
\end{itemize}

\textsuperscript{52} A clear division of what is and is not systemically risky, however, creates a race to the bottom, discussed \textit{infra} part IV, D.

\textsuperscript{53} Dodd-Frank Wall Street Reform and Consumer Protection Act, H.R. 4173, 111th Cong. § 1101(a)(B)(i)(2010)(enacted). Title XI of the Dodd-Frank Act seeks to ensure that any emergency lending from the Federal Reserve is to provide liquidity to the financial system, but not to aid a failing institution. Similarly, Title XI requires that the provisions of any emergency lending is sufficient to shield taxpayers from losses, and that any emergency lending program is operated swiftly and efficiently. However, it is unclear how only allowing emergency lending to provide liquidity to the financial system would prevent the Federal Reserve from providing emergency lending to a systemically risky financial institution that would, in essence, pass the emergency loans onto its counterparties.
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knows the regulator will weigh his options, and likely find that the cost of a one-time bailout of a single failing institution, or even other institutions that will fail with this single institution, is far less than the overall cost to society if a single, systemically risky institution fails. Thus, in a one-time game, the institution has every incentive to take great risk to ensure that the government will bail out the institution. The rational choice for the government is to bail the institution out, should they fail. However, the government is involved in a longer term game, and while it may be rational for the government to bail out a failing institution in one period, it may not be rational for the government to send a signal to other institutions, by way of a bailout, that they are able and willing to bail out a failing institution in a future period. If all actors are rational and efficient, then the rules set forth in Title I and Title XI of the act will lead to institutions ensuring that the damage they will do should they be allowed to fail is to great for the government and society to bear.  

Aside from the game theory implications of “too big to fail,” the Financial Stability Oversight Council must also address two serious regulatory problems.

1. The need for consistency in governance based on function, not form

Prior to the financial crisis and the adoption of the Act, the government did indeed have the power to regulate large financial institutions. However, that power was split between the Federal Reserve, the SEC, and Treasury, and all three organizations acted in a “highly

54 See, the discussion of a race to the bottom, infra part IV, D.
55 John B. Taylor, The Dodd-Frank Financial Fiasco, The bill all but guarantees bailouts as far as the eye can see, while failing to address real problems like Fan and Fred and our outdated bankruptcy code, The Wall Street Journal, July 1, 2010, available at http://online.wsj.com/article/SB100014 24052748703426004575338732174405398.html (noting that the New York Federal Reserve Bank “had the power to stop Citigroup’s questionable lending and trading decisions.”)
56 Id. Noting that the SEC “could have insisted on reasonable liquidity rules to prevent investment banks from relying so much on short-term borrowing through repurchase agreements to fund long-term investments.”
discretionary” manner and created an “on again off again bailout policy [that] spooked the markets,” leading to the contagion effect discussed above. Moving forward, it is imperative that we bring the firms the bill seeks to monitor under the umbrella of a single agency with many overseers, or multiple agencies with the same frameworks. During the financial crisis, many institutions were effectively acting in the same way, but being subject to different sets of rules by different governing bodies, thus creating arbitrage opportunities for the institutions subject to the least regulation. The governing body in the financial industry, be it the FSOC or otherwise, must learn to regulate function over form when dealing with financial instruments.

2. **Consistent enforcement of systemic risk determination.**

Section 111 of the Dodd-Frank Act sets forth the voting members of the FSOC who will ultimately make the systemic risk determination based on the factors outlined in Section 113. The voting members include the Secretary of the Treasury, the Chairman of the Board of Governors, the Comptroller of the Currency, the Director of the Bureau, the Chairman of the Commission, the Chairperson of the Corporation, the Chairperson of the CTFC, the Director of the FHFA, the Chairman of the National Credit Union Administration Board, and an independent member appointed by the President. Aside from the single independent member of the FSOC, every other member is a government official or a person privy to the inner workings of government. In order to ensure that the FSOC eliminates political bias in what should be economic decisions, and provides consistent systemic risk rulings over the course of

57 *Id.* Noting that the Treasury, if it worked with the Federal Reserve, “had the power to intervene with troubled financial firms.”

58 *Id.*


61 *Id.*
time, it is necessary that the board consists of more than one independent member, and that the independent members serve on staggered terms.

**B. The Orderly Liquidation Authority and Responsible Parties**

The Dodd-Frank Act contains a number of provisions aimed at forcing the responsible parties to bear the risk of their actions. Title II of the Act creates the Orderly Liquidation Authority to “liquidate failing financial companies that pose a significant risk to the financial stability of the United States in a manner that mitigates such risk and minimizes moral hazard.”

The authority is to exercise its power to assure that, in the event of necessary liquidation, creditors and shareholders bear the loss, that “management responsible for the condition of the financial company will not be retained,” and that all parties contributing to the losses of the company bear losses in proportion to their relative responsibly.

Title II aims to ensure that incentives are aligned, and that those parties taking the risk are adequately penalized if their risk taking leads to widespread institutional failure.

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63 Id. at §204(a)(2).

64 Dodd-Frank Wall Street Reform and Consumer Protection Act, H.R. 4173, 111th Cong. §204(a) (2010) (enacted), stating that “creditors and shareholders should bear the losses of the financial company, management responsible for the condition of the financial company will not be retained; and the corporation and other appropriate agencies will take all steps necessary and appropriate to assure that all parties, including management, directors, and third parties, having responsibility for the condition of the financial company bear losses consistent with their responsibility, including actions for damages, restitution, and recoupment of compensation and other gains not compatible with such responsibility.”

65 See Stone v. Ritter, 911 A.2d 362, 373, S. Ct. DE. (2006), holding that “in the absence of red flags, good faith in the context of oversight must be measured by the directors actions to assure a reasonably information and reporting system exists and not by second-guessing after the occurrence of employee conduct that results in an unintended adverse outcome.”; In Re Caremark International Inc. Derivative Litigation, 698 A.2d 959, 971 Court of Chancery of Delaware, holding that “in order to show that . . . directors breached their duty of care by failing adequately to control Caremark’s employees, plaintiffs would have to show either (1) that the directors knew or (2) should have known that violations of law were occurring and, in either event, (3) that the directors took no steps in a good faith effort to prevent or remedy that situation, and (4) that such failure proximately resulted in the losses complained of.”
Title II also denotes that except as otherwise provided, the bankruptcy code should not apply in place of the Dodd Frank Act for any covered financial institution.\footnote{Dodd-Frank Wall Street Reform and Consumer Protection Act, H.R. 4173, 111th Cong. §202(c)(1-2) (2010) (enacted) (emphasis added).} Thus, the Act implies that the choice between bailouts and bankruptcy/liquidation is an illusory one.\footnote{Levitin, supra note 5, at 439.} Special cases require special treatment, and bankruptcy, as a solution to failing firms that pose a systemic risk, (presumably the ones that come under the umbrella of the Orderly Liquidation Authority) is only a viable solution as long as it does not deliver undesirable loss allocations on a macroeconomic scale.\footnote{Id. at 446.}

Title II fails to take into account that the Orderly Liquidation Authority is, or is not, a viable solution to “too big to fail” only to the extent that it curbs the panic that results from a failing institution in the financial sector.\footnote{See Haldane, supra note 34, at 2-3. The panic that ensued after Lehman Brothers declared bankruptcy was more than a minor proponent of the financial crisis. The signal that such a move sends to the markets is almost more devastating than the decrease in value of the hard assets. The two go hand in hand, and it is debatable at best whether the OLA will give investors and the markets the vote of confidence they desire. Bankruptcy is still bankruptcy, whether the assets are being dispersed by a trustee or the OLA.} But again, where the involvement of the “Orderly Liquidation Authority . . . would result in socially unacceptable loss allocations, it is likely to be abandoned either for improvised resolution or for the statutory framework to be stretched . . . to permit outcomes not intended to be allowed.”\footnote{Levitin, supra note 5, at 489.}

Part IV – “Too Big to Fail”

With the historical and regulatory environment in mind, I now turn to addressing and solving “too big to fail.” “Too big to fail” creates significant moral hazard problems in financial institutions because of the effective insurance scheme the title places on a financial institution. Similarly, the notion of “too big to fail” creates a race to the bottom, whereby institutions attempt
to grow faster than regulators can regulate, in order to force themselves into the category of “too big to fail” to implicate the implicit insurance scheme. The Dodd-Frank Act sets forth the Financial Stability Oversight Council and the Orderly Liquidation Authority to attempt to eliminate this implicit insurance scheme and the signal that such a scheme sends to the market. However, in order to not only eliminate the signal, but actually eliminate some of the market factors that led to the ultimate collapse of the financial system, it is necessary to increase common knowledge amongst financial institutions and require a paper trail that makes it realistic for each financial institution to do their due diligence before the contagion effect takes hold.

A. Moral Hazard and the Too Big to Fail Problem

The Dodd-Frank Act and the concept of “too big to fail” present an interesting paradigm. The failure, or even unwinding of systemically important institution could bring down the entire financial system. Many creditors and stakeholders will be left with pennies on the dollar, even if the Orderly Liquidation Authority unwinds the firm. Thus, a bankruptcy regime, under the guise of the Orderly Liquidation Authority, may not be preferable to a bailout. However, a bailout effectively insures the institution, infringing on the very thing that the Dodd-Frank Act seeks to prevent and perpetuating the “systemic moral hazard” that was at the root of the

71 See Allen and Gale, supra note 47, at 2 (concluding that the financial sector is “unusually susceptible to shocks.”); Schwarz, Protecting Financial Markets - Lessons from the Subprime Mortgage Meltdown, 93 Minn. L. Rev. 373, 400 (hypothesizing that “no firm has sufficient incentive to limit its risk taking in order to reduce the danger of systemic contagion for other firms.”).
72 Robert J. Shiller, Bailouts, Reframed as ‘Orderly Resolutions,’ The New York Times, Nov. 14, 2010, at BU5, available at http://www.nytimes.com/2010/11/14/business/economy/14view.html?_r=1, arguing that the “orderly liquidation authority” is just a clever reframing of a bailout. In psychology, the process of reframing the same thing two different ways is known as cognitive restructuring. Cognitive restructuring seeks to associate positive ideas and feelings with negative events. I posit, however, that with sophisticated parties such as financial institutions and their counterparties, simple reframing of a bailout as an “orderly liquidation” will not help to curb the contagion effect in the event of institutional failure.
financial crisis. Thus, the institution that the government allows to fail may bring down the entire financial system with it, but the firm who is bailed out has greater incentive to take more, and less efficient, risks that would bring down the entire financial system should the government deny a bailout. The implicit insurance scheme eliminates much of the incentive for shareholders to monitor managers at the institution, gives the largest firms a competitive advantage in the form of a lower risk premium, and perpetuates a circular system of risk taking and bailouts.

B. **Section 112 of the Dodd-Frank Act and the Purpose and Authority of the Council**

The challenge for government and financial institutions is to balance the necessity of providing a bailout with the consequences of denying one and to balance the prospect of enormous profits with the necessity for prudent risk taking. But, failure of economic entities is a relative certainty in the financial world.

The Dodd-Frank Act sets forth the Financial Stability Oversight Council to deal with such failure and to “promote market discipline by eliminating expectations on the part of shareholders, creditors, and counterparties of such companies that the government will shield them from losses in the even of failure.” The Act, however, notably leaves room for a government bailout if necessary. It purports to eliminate the expectation of a bailout, but does not make it impossible for the government to issue a bailout. The purpose of the council is not

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73 Okamoto, *supra* note 1, at 188 (arguing that we “can achieve optimal risk-taking decision-making in two ways: (1) by requiring all asset managers in the market to put their own money at risk in their trading decisions; and (2) by requiring all asset managers to use “best practices” in managing risk, or else be subject to legal liability.”).

74 N. Gregory Mankiw, *The Allocation of Credit and Financial Collapse*, 101 Q.J. Econ. 455, 469 (1986) (noting that the history of financial markets “emphasize their propensity for instability and collapse.” Therefore, we must not only recognize this instability in our research and government policy, but provide room for the government to make the necessary steps to become a “lender of last resort.”).


only to ensure the best possible outcome on an institution-by-institution basis, but to protect and respond to threats to the “stability of the United States financial system.” Thus, the Act should ensure the best possible outcome on a macroeconomic scale as well (which sometimes necessitates government assistance in the financial sector.) At a certain risk threshold, the costs of allowing a systemically important institution fail are far greater than the cost of issuing a bailout, even if that cost is analyzed over the course of many periods, not just the current.

Brush fires provide a useful analogy. We can analogize the first distressed firm in a financial market to the small beginnings of a brush fire. If that brush fire begins on a small island in the middle of a lake, with no valuable homes or land around, then the cost of letting the fire burn itself out (or the cost of letting an isolated, non-interconnected institution fail) is less than the cost of sending firefighters by boat to this small island to, in effect, save nothing.

Where, however, the brush fire begins in a forested area neighboring land that contains millions of dollars in assets, the cost of allowing the brush fire to grow is much greater. Trees, wooded areas, and homes are, in effect, other financial firms. When one home goes up in flames, the neighboring home is at a great risk. Thus, when a highly interconnected financial institution fails, its neighbor, its neighbors neighbor, and its neighbors neighbors neighbors are all at risk.

In this scenario, the cost of fighting the fire is far less than the cost borne by the entire

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77 Dodd-Frank Wall Street Reform and Consumer Protection Act, H.R. 4173, 111th Cong. §112(a)(1)(C) (2010) (enacted); Levitin, supra note 5, at 480.

78 Levitin, supra note 5, at 480.

community if the fire is allowed to spread and then burn itself out. In fact, “the cost of not fighting brush fires probably exceeds the cost of fighting them excessively.”

Thus, per the analogy, the cost of not bailing out a systemically important firm probably exceeds the cost of bailing one out, even repeatedly. Letting AIG fail, for example, would be equivalent to starting a brush fire in the middle of Central Park, and letting it burn until the fire hit the Atlantic Ocean. Even if letting that one fire burn would ensure that our society was never harmed by a brush fire again, we would still fight the fire. Whatever the cost of a bailout in this period and future periods, the cost is much smaller than the “output loss from a slowdown in the real economy,” making the task of convincing the market that the government will not engage in a bailout exceedingly difficult, if not impossible (short of actually letting multiple systemically important institutions to fail), to accomplish.

Thus, a lack of belief that the government will let a systemically important institution fail leads to a lack of monitoring inventive for shareholders and stakeholders and a distorted signal sent to the markets and global economy.

C. Information Sharing, Incentives, and Insiders

Generally, however, there is an ongoing duty for shareholders and creditors to monitor the activity of an institution. Where, however, there is an implicit guarantee from government that the institution will receive a bail out, those with the usual incentive to monitor have that incentive reduced. Similarly, the implicit guarantee allows the institution to demand a lower risk

80 Id.
81 Id. at 182.
82 Feldstein, supra note 79, at 182; Speech by Thomas M. Hoenig, President of the Federal Reserve Bank of Kansas City, at Women in Housing and Finance, Financial Reform – Post Crisis? Washington DC, Feb. 23, 2011. Stating that we are “trapped in a repeating game in which participants continue to seek ever higher and more risk returns while ‘banking’ on the State to fund any losses in a crisis.”
83 See, Stone v. Ritter and In Re Caremark International Inc. Derivative Litigation, supra note 65.
A lower risk premium means a competitive advantage in the marketplace. “Too big to fail” institutions do not have to convince creditors of the strength of their institution, have a significant advantage in the market for funding, and “they have significant incentives to take on more risk, hold less capital, and book more assets.” Thus, the “belief that a firm will be bailed out increases the likelihood of behavior that will necessitate a bailout.”

The depth and breadth of asymmetric information, in addition to the unfettered, excessive risk taking of financial institutions, also contributed to the financial crisis. While the asymmetric information gap exists in an institutional to individual consumer relationship, it also exists, and is arguably more dangerous, in institutional to institutional transactions where the dollar amount, risks, and implications are much more severe. Such asymmetry creates moral hazard and adverse selection problems, for both the investee and investor, that are exacerbated by the complexity of the financial system and difficulty in tracing a paper trail back to a product's birth place, particularly in securitization. In securitization, products move from

“originators/issuers of securities [to] underwriters . . . [to] rating agencies . . . [to] intermediaries who sell them, [to] end investors who buy them to hold . . . and other financial intermediaries

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84 Hoenig, supra note 82, stating that depositors and creditors of institutions that are too big to fail are convinced that there is a only a very minimal chance they will suffer a loss. The credit rating agencies take this point into account, and rate these too big to fail institutions as “support” or “standalone,” indicating that they are likely to receive government assistance. Thus, the investment is viewed as being safer, and investors demand a lower rate of return. It is estimated that this advantage amounted to $250 billion dollars for the 28 largest banks in the world.
85 Id.
86 Levitin, supra note 5, at 490; Mankiw, supra note 74, at 469.
87 Michel G. Maila, Contributing factors to the emergence of risk in financial markets and implications for risk governance, International Risk Governance Council, 1 (2010) (Stating that “the use of financial products and services requires a modicum of knowledge and familiarity with their costs, benefits and increasingly some basic understanding of the potential risks associated with them.” While there has been a push for financial literacy, the sophisticated suppliers and less sophisticated buyers of financial services still must negotiate a large information gap.).
88 Id.
89 Id. at 2.
who specialize in trading in and out of them for profit.” By the time financial instruments like CDO’s and MBS’s reach their ultimate destination, the paper trail is often so attenuated that institutions and their counter parties are unable to determine exactly how risky their instruments are. Thus, the adverse selection problem is exacerbated as counterparties know the party holding the instrument might not really know what it is, and moral hazard is exacerbated since each party in the chain of securitization is ultimately passing the asset, albeit in a different form, to someone else relatively quickly. There is little incentive for any one party to do their due diligence in investigating the origin of the securitized asset when the expectation is that the current party will pass the security on within a reasonably short time period. The costs of investigating the security far outweigh the risks for a middle party in a repeat game.

Thus, regulation that requires a stricter paper trail that empowers all parties to the transaction to conduct due diligence at a minimal cost in needed. Requiring every party, from originators to end investors, to document the assets underlying the securitized product would increase costs to consumers only marginally, while providing financial institutions a clearer picture of their assets, and allowing independent credit rating agencies to more accurately rate securitized products.

**D. A Race to the Bottom**

The moral hazard issues associated with bailouts and too big to fail institutions create a race to the bottom, whereby institutions attempt to become too big or too interconnected to fail in order to ensure that they will receive a bailout in the event of failure, and in order to drive down their cost of capital, while the legislature attempts to enact new rules regarding asset balances

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90 Id.
and systemic risk more quickly than the financial institutions can enlarge themselves or create new instruments to circumvent the rules.91

Financial markets are built around time, innovation, and replication. At the heart of our financial markets are products that replicate other assets.92 These products are driven to development, in large part, by government regulation. “New financial instruments or practices are innovated to lessen the financial constraints imposed on firms.”93 Rationally acting firms will act to maximize their utility given the internal and external environmental constraints – most commonly – governmental regulation.94 When the costs of complying with new government regulations become greater than the cost of innovating around the regulations, a firm will innovate.95 Thus, the vast regulations in the Dodd Frank Act will inevitably lead to new, and often valuable financial innovations. However, innovation and financial intermediation does not always provide a positive externality to society, or markets, as a whole.96

The recent financial crisis illustrated this point, as “the innovations of recent years . . . the . . . CDO’s, SIV’s [and] RMBS['s] . . . were sold on false pretenses. They were promoted as ways to spread risk, making

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91 William L. Silber, *Recent Structural Change in the Capital Markets, The Process of Financial Innovation*, 73 The American Economic Review 2, 89, 89 (1983). See also, Speech by Representative John D. Dingell on the Floor of the House of Representatives, 1999, available at http://www.youtube.com/watch?v=yRzRvByQXQ, stating that by repealing Glass Stegal, we are creating numerous too big to fail institutions that will necessitate government intervention and taxpayer bailouts. Representative Dingell mentions the effects of deregulation in the Savings and Loan industry during the 1980’s, and warns that by deregulating the financial industry, congress will be placing the country in a precariously similar position.


93 Silber, *supra* note 91, at 89.

94 Id.

95 Id. at 90. Noting that “the programming framework suggests that the stimulus to innovation can be interpreted as an increase in the cost of adhering to existing constraints.”

96 Presentation by Kevin Stiroh, *Why are Some Banks Systemically Important? What do we do About it?*, Federal Reserve Bank of New York, May 26, 2010, at 19 (noting that systemic risk evolves with financial innovation, and in order for innovation to provide a positive externality, it is necessary that regulations evolve alongside financial innovation.).
investment safer. What they did instead . . . was to spread confusion, luring investors into taking on more risk than they realized.”97

Regulation of financial instruments poses uniquely complex challenge, since the impact of new financial reform is largely uncertain.98 When, however, regulation leads to innovation, regulators need to “catch up,” or, in the context of this section, race towards the bottom with the new innovations in mind.99 Yet, the regulations lag and new financial products are governed in accordance with their product class or institution, not necessarily their function.100 The sheer inability for regulators to act quickly or accurately enough predict the form of similarly functioning financial instruments leads to an arbitrage opportunity through innovation.101

The Dodd Frank Act presents numerous opportunities for institutions to innovate around the regulation. The systemic risk determination and orderly liquidation triggers in Section 113 and 203, respectively, both center on a multitude of qualitative, malleable, and manipulable requirements.102 Jamie Dimon, CEO of JP Morgan, for example, is pursuing a strategy that makes JP Morgan more global and more prevalent in emerging markets.103 In turn, this strategy

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97 Josh Lerner and Peter Tufano, *The Consequences of Financial Innovation: A Counterfactual Research Agenda*, NBER Working Paper Series, Working Paper 16780, 4-6 (2011). The authors also note that aside from the general confusion to non-institutional investors caused by complicated asset backed securities, there is a serious lack of data related to financial innovation, making any attempt at deciphering these products increasing more difficult.

98 Id. at 9-10.

99 Id. at 19. Stating that “innovators look for opportunities that exploit regulatory gaps, regulators impose new regulations, and each new regulation gives rise to new opportunities for more innovation.”

100 Id. at 19. Stating that, for example, ETF’s, futures, index linked annuities and certificates of deposits, and certain notes are regulated largely based on their product class or institution class, and not necessarily their actual function.

101 Id.


103 Peter Boone and Simon Johnson, *Way Too Big to Fail*, The New Republic, Nov. 7, 2010, available at http://www.tnr.com/article/economy/magazine/78563/way-too-big-fail?page=0,1. All a bank needs to do to avoid the OLA, and what Jamie Dimon proposes to do, is to become so large that it is systemically important to the world’s financial system. “If one of these mega-banks go under, the
Jason Rudderman

will make JP Morgan too big, too interconnected, and too global to fail – a simple response to the incentives provided by the Dodd Frank Act and the government bailout. In effect, Jamie Dimon “is constructing a poison pill against takeover by the government.”

Financial regulation provides new incentives to innovate and new incentives to grow. Where those innovations provide a positive externality, all is well. Where regulation leads to incentives that lead to a race to the bottom vis-a-vie government regulation, it puts the entire financial system at risk. At the margin, either regulation will become so burdensome that financial institutions cannot operate, or financial markets will become so complex that every minor blip in the financial sector will lead to widespread panic amongst investors.

Part V – Solving “Too Big to Fail”

A. Possible Solutions

A number of solutions to the “too big to fail” problem, from breaking the firms up to bringing the institutions within the umbrella of antitrust law, have been proposed by regulators government will have no choice but to step in and provide full creditor protection. The [OLA] will effectively be meaningless.”


105 Id.

106 Another Dodd-Frank Triumph, Did we mention its new source of systemic risk?, The Wall Street Journal, Feb. 16, 2011, available at, http://online.wsj.com/article/SB10001424052748704409004576146681486152152.html. Noting that the regulation has internal shortfalls, besides provoking a race to the bottom. Federal Reserve Governor Daniel Tarullo “admitted in testimony to the House Committee on Financial Services that by forcing much of the derivatives market through central counterparties, the government would now be creating new too big to fail institutions and new potential sources of systemic financial risk.”

107 One possible solution posed by Eric Pendergraft is to create a government committee filled with the most innovative and brightest minds in finance. The committee shall be charged with anticipating the development of new securities and innovations in the financial markets, and their study’s and research could be used as a way for regulators to slow down the race to the bottom vis-a-vie financial innovation.

108 Hoenig, supra note 82, at 5.

and commentators. However, bankruptcy law, antitrust law, and pure ex ante regulations all fall short of solving the “too big to fail” problem and aligning the interests of the parties involved. A viable solution does exist, however, in the form of a systemic risk premium. A systemic risk premium will help eliminate instances of extreme risk taking, align incentives between relevant parties, and create common knowledge in the marketplace earlier.

1. Bankruptcy Law

The choice between bankruptcy and a bailout for a “too big to fail” institution is an illusory one, as bankruptcy law is ill equipped to provide the best solution to society on a macroeconomic scale.110 The bankruptcy code, as it currently stands, is inadequate to produce a satisfactory result in reorganizing or liquidating a “too big to fail” institution. Opponents of government bailouts encourage regulation that prohibits the government from assisting a systemically important financial institution, shields taxpayers from the burden of such debt, and places the failing institution in the hands of the bankruptcy code and courts.111 However, the cost to society as whole should we allow “too big to fail” institutions to fail through bankruptcy will be significantly greater than the cost of government bailouts, even repeated ones. Opponents of bailouts argue that the bankruptcy process is well equipped to handle “too big to fail institutions.”112 But, bankruptcy courts and the bankruptcy code are designed to provide a fair resolution to the firm’s debtors and creditors.113 Much like the brush fire on the island,

110 Levitin, supra note 5, at 439.
112 Id.
113 Local Loan Co. v. Hunt, 292 U.S. 234, 244 (1934), opining that the purpose of bankruptcy law is to “give [ ] to the honest but unfortunate debtor . . . a new opportunity in life and a clear field for future effort, unhampered by the pressure and discouragement of preexisting debt.” See also, Thomas H. Jackson, The Logic and Limits of Bankruptcy Law, at 2, Harv. Univ. Press (1986), stating that “bankruptcy law can and should help a firm stay in business when it is worth more to its owners alive than dead. That is a far cry, however, from saying that it is an independent goal of bankruptcy
bankruptcy code works in isolation of other firms and the real economy. Bankruptcy courts are
neither prepared nor adept at addressing macroeconomic factors and symptoms. 

Bankruptcy misses the point, as “too big to fail is not really about protecting [or not protecting] large
financial firms per se but instead is about preventing a sudden loss of financial services that
would have a significant adverse impact on the real economy.”

In short, bankruptcy laws are not “designed to take into account the effects of a firm’s failure on the rest of the economy.” If
the government allowed a “too big to fail” institution to fail through bankruptcy, the failure
would set off a chain of events that would force other large and small institutions into bankruptcy.
The result is not just a frozen credit market, as we saw in 2008, but a complete collapse of the
United States financial system.

The government, then, would face pressure to preserve the
remaining firms in the financial sector with a blanket guarantee of all financial firms. As was
the case during the failure of Lehman Brothers, throwing a United States financial institution into
our bankruptcy system as it currently stands would cause significant damage to the financial
system as a whole and cause widespread panic amongst investors.

law to keep firms in operation.”; World Bank Institute, Resolution of Financial Distress, An
International Perspective on the design of Bankruptcy Laws, at 55, (2001) stating that the purposes
of bankruptcy law are “maximizing asset values, providing quality of treatment for creditors and
other parties with similar legal rights, preventing and undoing fraud, and providing commercially
predictable results and transparent legal procedures.”

David Clarke, FDIC Proposes Liquidation Pecking Order to Solve ‘Too Big to Fail,’ The
to-fail_n_836187.html.

Larry D. Wall, Too Big to Fail: No Simple Solutions, The Federal Reserve Bank of Atlanta, Notes
/vn_no_simple_solutions.cfm.

Id.

2009 at B1. Sorkin notes that the failure of Lehman Brothers and the damage caused by GM’s
troubles look like “summer thundershowers compared with the financial hurricane that a collapse of
A.I.G. would represent.” If investors and customers lost faith in A.I.G. and sought to withdraw all at
once, the entire life insurance industry would fail and generate catastrophic consequences across the
United States economy.

Wall, supra note 115, stating that “market participants can forecast this outcome. Thus, while
they will be concerned that their firm would be unprotected if it were the first to fail, they could take
comfort in the likelihood of blanket guarantees if their firm is not the first to fail.”
2. Antitrust Law

What if, instead of thrusting a firm into bankruptcy on the back end of a failure, regulators used antitrust law to break up the firms before or shortly after they grew too big to fail? After all, if an institution is too big to fail, shouldn’t that institution also be too big to exist under the doctrine of antitrust law? Such a paradox is perplexing, but does not leave antitrust law as the solution to too big to fail institutions. One of the main purposes of antitrust law is “to protect consumers in the relevant market from anticompetitive behavior that exploits them – that unfairly transfers their wealth to firms with market power – not to increase the total wealth of society.”\(^\text{119}\) Granted, the 5 largest banks as of 2009 controlled 35% of the market.\(^\text{120}\) But, the firms that grew “too big to fail”, namely these 5 large banks, did so by acquisition that is already governed by antitrust law and subject to approval by the FTC or DOJ (obviously, that approval was granted).\(^\text{121}\)

For the bulk of his career, Alan Greenspan subscribed to the Chicago School of economics, believing that if these mergers and acquisitions were allowed, the free markets would self correct should the mergers throw it out of equilibrium.\(^\text{122}\) Today, Greenspan admits that he, and many others, “had put too much faith in the self-correcting power of free markets, and . . .

\(^{121}\) Markham, *supra* note 109, at 2-3.
failed to anticipate the self destructive power of wanton mortgage lending.”123 If nothing else, the recent financial crisis has taught us that markets are not as self sustaining as we once thought and that “in the real world . . . markets are not perfect; that imperfect markets do not always correct themselves; and that business people do not always behave rationally.”124 Today, antitrust law has been narrowed to the point where its main purpose is a concern for “consumer welfare and price competition.”125 There is a greater focus on protecting competition, and very little focus on protecting competitors. However, depending on how we define the relevant consumer markets, it is plausible that mergers and acquisitions that create an entity that is “too big to fail” would violate Section 7 of the Clayton Act or Section 1 of the Sherman Act.126

In light of the financial crisis and “too big to fail” institutions, it would be wise to reconsider the influence of the Chicago School and consider adopting an approach influenced by “‘behavioral economics,’ based on the facts about how individuals are behaving rather than on how the Chicago School of economic theory would predict they’ll behave.”127

a. Problems with Antitrust as a Solution to “Too Big to Fail”

The scope of antitrust law has narrowed considerably in light of the Chicago School over the past couple decades. Today, using antitrust law as a means to control “too big to fail” has

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123 Andrews, supra note 122 (noting the remarks of Alan Greenspan, that “those of us who have looked to the self interest of lending institutions to protect shareholders’ equity, myself included, are in a state of shocked disbelief.”).
124 Rosch, supra note 122, at 5.
125 Brooke Group Ltd. v. Brown and Williamson Tobacco Corp, 509 U.S. 209, 251 (1993); See also, NCAA v. Board of Regents of the University of Oklahoma, 104 S.Ct. 2948, 2963. “Individual competitors lose their freedom to compete. Price is higher and output lower than they would otherwise be, and both are unresponsive to consumer preference. This latter point is perhaps the most significant, since Congress designed the Sherman Act as a ‘consumer welfare prescription. A restraint that has the effect of reducing the importance of consumer preference in setting a price and output is not consistent with this fundamental goal of antitrust law.”
126 Rosch, supra note 122, at 3.
127 Id. at 8
numerous shortfalls, most notably that antitrust is unable to control “bigness.” Antitrust laws present no solution or mechanism for preventing a merger on the basis of “bigness” unless the merger simultaneously reduces competition in the specified market. Overall, the Sherman, Clayton and FTC acts are ill equipped to stop a merger or cease action of an institution simply for being large or interconnected, without reducing competition in the market.

The shortfalls in antitrust law led to the enormous expansion of United States banks and insurance institutions over the last decade. Thus, today we are faced with financial institutions that, although “too big to fail”, are now so necessary to the health and success of our financial system that disbanding them is not a viable option. Even if we forced the largest banks and institutions to disband and form subsidiaries or independent organizations via some form of revised antitrust enforcement, they would likely continue to work together, leaving us with higher regulatory costs of monitoring more institutions and a greater incentive for mischief, as 10 small institutions spawn from a single institution will act together to create the same risks under a different guise.

The focus of antitrust law must be, and continue to be, competitive determinations and not size and risk determinations that are better suited for congress. The danger of forcing size

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128 Markham, supra note 109, at 22 (arguing that stricter antitrust rules and enforcement would not lead firms to regulate their own size. “The economic inducements for growth and market power are compelling and vast size can in some cases be obtained without even implicating antitrust rules by conglomerate or out of market acquisition activity. It seems unlikely that a firm would decide, for example, to forego an opportunity to increase its size and market share on the thing ground that doing so would require it to be more cautious about attending trade association meetings.” Similarly, much of the growth in the banking sector that perpetuates “too big to fail” is the result of market extensions that do not invoke the antitrust laws.)
130 Id.
131 Id. at 14.
132 Id. at 47. Noting that “antitrust enforcement should continue to focus on whether markets are the functioning competitively rather than whether a bank or other financial firm is too big or too
and risk determinations into the courts and Antitrust law lies in the forward looking definitional problems of what is too big, and what is too much risk. Extreme size, market power, and risk taking are not necessarily signs of too big or too risky if such attributes lead to innovation and efficiency, and not a lack of competition. In many industries, having a single, large and concentrated institution is beneficial. It allows for free riding by smaller institutions who perhaps do not have the financial or human capital to compete on their own, but can provide valuable innovations and competition to the industry and society as a whole. Thus, to condemn size in the absence of competitive restraints by breaking up the largest institutions, or to try to fit a purely size constraint into the realm of Antitrust law is unrealistic and inefficient, lest we have a separate body of Antitrust law for financial institutions.133

Mergers and acquisitions that create large financial institutions can create efficiencies in production and service.134 However, the courts generally have had a difficult time determining when and how to accept and weigh an efficiency defense to a merger that violates Section 7 of the Clayton Act.135 Antitrust law, as it currently stands, cannot prohibit future mergers that create too big to fail institutions and, absent the creation of new government agencies or a radical change in the courts view of efficiency in antitrust claims, it is unlikely that antitrust serves as a viable solution to “too big to fail.”136

systematically significant to fail. Those concepts present political and regulatory issues that are better handled outside the realm of antitrust enforcement.”

133 However, a separate body of antitrust law for financial institutions would inherently create difficulty in defining which institutions should be categorized as “financial institutions” and which could escape the regulation. Such a regime would perpetuate a race to the bottom.

134 Kirkwood and Lande, supra note 119, at 2.


136 Hearing, supra note 129, at 13. In order to use antitrust law to break up financial institutions that are “too big to fail,” it would be necessary to prove that the institution (a) possesses monopoly
3. Solutions in Ex Ante Regulations

Looking towards self governance, bankruptcy, and antitrust seem to provide little guidance, and create adverse selection and moral hazard problems, for solving “too big to fail.” Antitrust law seems to be the most viable of the three options. But, antitrust as it stands provides an incomplete solution, and alterations to limit size and prevent mergers may stifle competition, limit the desire of new entrants into the market, provide incentives for lower quality, higher margin products, and ultimately harm the consumer and the financial system more than help.

The most viable solution is a regulatory regime that seeks to create common knowledge earlier, provides for a systemic risk premium to discourage risk taking and the exploitation of loopholes, and to consolidate regulatory regimes to align incentives and provide for more comprehensive internal monitoring and paper trails.

The subprime panic, for example, only took hold once the negative view about subprime mortgages became known “and it became known that everyone knew this.” In other words, the financial crisis could not take hold until the markets had common knowledge. Had the

\[^{137}\text{See Kirkwood and Lande, supra note 119 (arguing that such harm contradicts what many argue is the essence of antitrust law—consumer protection.)}\]

\[^{138}\text{Such a regulatory regime will limit the need for bailouts, but not the necessity of bailouts. A fact of our economic system is that there are institutions so big, yet so vital to the financial markets, they cannot be shrunk or removed: Andrew Frye, Buffett Tells FCIC It’s Powerless to Stop ‘Too Big to Fail,’ Bloomberg, Feb. 11, 2001, available at http://www.bloomberg.com/news/2011-02-11/buffett-tells-fcic-it-s-powerless-to-stop-too-big-to-fail-.html. Warren Buffet warns that we “will always have institutions that are too big to fail, and sometimes they will fail.” Buffet also opines that if the United States ran into a similar financial crisis today, the government would act “promptly and decisively” to guarantee commercial paper: William Alden, Shiller: Dodd-Frank Does Not Solve Too Big to Fail, The Huffington Post, Oct. 26, 2010, available at http://www.huffingtonpost.com/2010/10/26/robert-shiller-dodd-frank-too-big-to-fail_n_774302.html. Robert Shiller notes that “[systemic risk] involves the nature of the banking system, which is inherently vulnerable. It’s vulnerable to runs and collapses, just like steam engines are vulnerable.”}\]

common knowledge been revealed earlier in the chain of mortgage originators, investors, dealers, and consumers, the magnitude of the crisis may have been curbed.

a. Common Knowledge

Until a financial institution knows about the risks they are taking, and other financial institutions know the first institution knows the second institution knows, there is a lack of common knowledge. Where each participant, in this case, in the financial market is aware of the riskiness of subprime mortgages and the overvaluation of the assets behind the mortgage, but doesn’t know that other institutions know the same thing, the lack of common knowledge prevents the subprime bubble from bursting. All parties involved understood that securities were tied to housing values, and all parties knew that others knew the securities were tied to housing values, but each party did not know what the other parties views were on “whether house prices would continue to rise, or it they were to stop rising, on when this would occur . . . [or] what the effects would be.”

Prior to the creation of the ABX index, the index tied directly to subprime mortgage values, there was no “liquid, publicly visible, market where subprime risk was directly priced.” Only individual parties to each transaction knew the prices--there was not common knowledge. But once the ABX was created, and started trading downward, it became

140 Id. at 11.
141 Frank Heinemann, Escaping from a Combination of Liquidity Trap and Credit Crunch, CESifo Working Paper No. 2450, Category 6: Monetary Policy and International Finance, at 4, Nov. 2008; See also Robert J. Aumann, Backward Induction and Common Knowledge of Rationality, 8 Games and Economic Behavior 6, 1 (2005) (arguing “that if common knowledge of rationality obtains in a game of perfect information, the backward induction outcome is reached.”)
142 Gorton, supra note 139, at 33 (Discussing the significance of the ABX exchange that made the risk and pricing of the subprime mortgages common knowledge.)
143 Id. at 37.
144 Id.
common knowledge that the value of these subprime securities was decreasing, and that everyone knew the value was decreasing.145

The challenge for government is to create mechanisms that create common knowledge early enough to ease the blow of a financial crisis, but not so early as to stifle the workings of the free market. Too much common knowledge eliminates the ability of the most intelligent and most efficient firms to use their human and financial capital to create value. Too little common knowledge, however, perpetuates risky behavior beyond an efficient threshold.146 But expecting government to have the resources or expertise to foresee a market in which common knowledge is lacking, identify the market, and bring private knowledge to the common markets is unrealistic and improper. Large corporations will fervently lobby against such invasive interference. The government would find it next to impossible to identify the precise time and method for forcing information into the public. Similarly, such legislation would create incentive for information manipulation and further perpetuate a race to the bottom.147

Alternatively, synthetic securities markets could help create common knowledge in the market place. At present, there is little incentive for financial institution A to disseminate information to financial institutions B, C, and D who may or may not be privy to the same information. Disseminating information without knowledge of what an institutions counterparties actually knows is a risky proposition for an institution. On the one hand, dissemination could create common knowledge, and help the entire industry subvert a crisis. On the other, dissemination could lead to lost profits for the disseminating institution if its

145 Id.
146 Marcy Gordon, Ben Bernanke: Solve ‘too big to fail’, The Miami Herald, Sept. 3, 2010, available at www.miamiherald.com/2010/09/03/1805583/bernanke-solve-too-big-to-fail.html#ixzz1fiyn76F0. Chairman Ben Bernanke stated that “we should not imagine . . . that it is possible to prevent all crises. . . . ‘To achieve both sustained growth and stability, we need to provide a framework which promotes the appropriate mix of prudence, risk-taking and innovation in our financial system.”’
147 Supra part IV, D.
counterparties were not actually privy to the information the disseminating institution wished to make common knowledge.

However, in a synthetic securities market where institution A can profit by betting on, for example, Goldman Sachs failing, institution A has at least some greater incentive to make the information public by placing a bet. Presumably, the price of the synthetic security will move positively or negatively depending on the information possessed by the betting institution. Movement in the price of the security will send a signal to the market, and will speed up the process of creating common knowledge without forcing the betting institution to forgo profits.

But, synthetic securities that track the riskiness of financial institutions create moral hazard problems. An institution with a large capital base may simply bid down the price of another synthetic security in an attempt to drive down the stock price or goodwill of a competing institution. In much the same way that the “belief that a firm will be bailed out increases the likelihood of behavior that will necessitate a bailout,” an institution sending a signal to the market that a competitor is taking risks that may cause it to fail increases the likelihood that the competitor will actually fail.

b. A Systemic Risk Premium as a Way to Create Common Knowledge

Instead, what I propose is the creation of a systemic risk premium. Congress should use the model and framework set forth in Title I and Title II of the Dodd Frank Act to assess and determine the systemic risk of financial and non-financial institutions whose failure would pose a systemic risk to the stability of the United States. Currently, the only solution provided by

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148 Hoenig, supra, note 82.
149 See also Gordon and Muller, supra note 1, at 157 (arguing for an emergency insurance fund to be funded by the financial institutions and distributed by the regulators in the case of another financial crisis.)
Dodd Frank to assist a large, failing firm is receivership. But, as discussed infra, emergency lending is a necessary evil in our financial system.

In assessing the systemic risk of an institution, the Council should consider the elements set forth in Section 113 of the Act, including the extent of leverage, the extent of off balance sheet financing and the extent and nature of the institutions transactions. Once the Council determines, based on the factors set forth in Section 113, that the institution poses a systemic risk to the financial stability of the United States and should be subject to heightened prudential standards, I propose that such an institution should pay a systemic risk premium into a bailout trust fund, not unlike the FDIC. The risk premium shall be in direct correlation with the systemic risk posed by the corporation, and should increase exponentially above the threshold.

Functionally, however, it is necessary that the risk premium is not equivalent to a per se restriction on the size or risk level of the institution.

Such a regime would have three key impacts. First, it would limit instances of extreme risk taking where the chances of recouping the initial investment are minimal and would force institutions to consider both long term and short-term outcomes. Secondly, it would align the incentives between investors, government, and large institutions, as institutions subject to the

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151 Gordon and Muller, supra note 1, at 153.
153 See Markus Brunnermeier et. al., The Fundamental Principles of Financial Regulation, Geneva Reports on the World Economy 11, at 63-64. The authors discuss the benefits and costs of imposing minimum capital requirements on banks, but do so with the same underlying rational as the proposed systemic risk premium. Instead of basing requirements on minimum capital ratios, the authors argue, requirements should “be normally restated in terms of higher target levels of capital, with specific, statutory (i.e. not discretionary) and forceful ladder increasing sanctions.” However, when an institution necessitates emergency lending, it is necessary that there are regulations in place to prevent an institution from causing significant damage in order to collect more money from the fund. If the council, using the factors defined in section 113 of the Dodd Frank Act, determines that the institution deliberately tanked at the first signs of distress, I propose the council shall impose penalties for the institutions future contribution to the systemic risk premium fund.
154 It is necessary that the risk premium not make all risk totally undesirable. Some risk is always desirable, and where extreme risk may lead to a breakthrough in technology or innovative new mechanisms, that risk should not be made impossible to achieve.
systemic risk premium will be paying into the fund in proportion to the risk they pose to the macro economy. Thus, some moral hazard is eliminated, as other institutions will not be able to free ride on the funds of the government, or the risk premium of fellow institutions. Third, a systemic risk premium will create common knowledge earlier for markets that pose a systemic risk. For markets that do not pose a systemic risk, the risk premium will not help create common knowledge, but such common knowledge is unnecessary. For markets, such as the subprime mortgage market however, that do create great risk, the systemic risk premium will help create common knowledge by putting the rest of the financial market on notice of the risk inherent in another’s institution. Such notice will provide greater incentive for an institution to conduct due diligence and disseminate information.

Suppose institution A is heavily invested in mortgage-backed securities. Institution A knows these securities are risky, but they do not know that institutions B, C and D also know these securities are risky, and vice versa. Suppose institution B transacts heavily with institution A, and that institutions C and D are in the same market as institutions A and B, but transact most heavily with each other. Prior to the implementation of a systemic risk premium, institution B has incentive to monitor institution A, and will be privy to the risk in securities, but institution C and D have no reason to monitor outside their own transactions, because they are unaware and have no reason to be aware of the risks taken by A and B.

Suppose, however, that the Council knows that institution A poses a systemic risk, and subjects them to a large tax in the form of a systemic risk premium, consequently making the rest of the market aware that institution A poses a systemic risk.

155 Presumably, any institution that would need to dip into the trust in the event of a failure would have been paying into it all along, and the depth of its financial insolvency would be proportional to the amount contributed.
Then, institutions C and D have incentive to investigate and monitor institution A and discover private knowledge in the market. The transformation of such private knowledge into common knowledge will help ensure that institution C and D have the tools to properly manage a risky game. When institutions C and D recognize their own risk, recognize that institution A is carrying the same risks, and each institution knows of the others risk, common knowledge will be created by the market. The common knowledge is thus created without government speculation as to the profit maximizing time to force such common knowledge. Providing the government with a mechanism to gather information about potential systemic risks is a vital step in creating common knowledge. At the very least, the information gathering that leads to a systemic risk determination creates common knowledge within the government, placing the government in a better position to organize and develop markets to create common knowledge.

At its core, a systemic risk premium should preserve the free market and create common knowledge while penalizing for excessive risk taking. If a financial institution can still find returns from risky assets above and beyond the cost of the systemic risk premium, then such action is valuable to our financial system, and should not be prohibited purely based on risk.

The systemic risk premium is meant as a compliment to the Dodd Frank Act, not a replacement of, and would fit nicely within the regulatory regime already set forth. The premium would also shift the burden back to the financial institutions to conduct due diligence when transacting with others in the market, and would alleviate the need for direct government intervention in the process of creating common knowledge.\footnote{See Xin Huang, Hao Zhou, and Haibin Zhu, \textit{Systemic Risk Contributions}, Finance and Economics Discussion Series, Divisions of Research and Statistics and Monetary Affairs, Federal Reserve Board, at 32 (2011). The authors quantify the systemic risk posed by the nations largest banks. They found that, in March, 2009, during the height of the crisis, Citi, Bank of America and JP Morgan Chase were the three largest contributors to systemic risk in the United States.}
VI. Conclusion

This article concludes that bailouts, whether taxpayer or institutionally funded, are an evil, but necessary, part of our financial system. Thus, the challenge lies in developing ex ante regulations that minimize moral hazard problems and avoid involuntary winding down or disbandment of institutions deemed too big to fail. A system that (1) includes a systemic risk premium to relieve the burden on taxpayers in the event a bailout is necessary, (2) creates common knowledge by reasonable market forces, and (3) consolidates regulatory regimes to provide for consistent regulation will help alleviate, although not eliminate, the role of bailouts and too big to fail institutions in our financial system.

There is some option value to bailing out financial institutions now and trying to eliminate the need for bailouts later. Society could suffer the consequences today by letting a systemically important institution fail, with the hopes that it will force voluntary downsizing by other firms. Or, society could bail out the institution today, with the hopes we find a solution before the cost of repeated bailouts surpass the cost of a single failure and potential depression. However, I conclude that the destruction to our financial system in the event that we allowed a “too big to fail” institution to actually fail would be catastrophic. As such, it is necessary that we develop regulations that make it increasingly difficult and inconvenient to

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157 Alden, supra note 8.
158 See Jim Puzzandhera, Cost of federal bailouts plummets, L.A. Times, Feb. 28, 2011, available at http://www.startribune.com/business/117119693.html?page=1&c=y. From an efficiency standpoint, bailouts can be more effective than letting the institution fail. In the most recent bailout, it is estimated that taxpayers will recover 675 of the 700 billion dollars that were infused into the largest banks. Had the government not infused that capital, we could have been looking at the total collapse of financial markets and a second great depression.
159 See Sorkin, supra note 117. The face value of A.I.G.'s life insurance policies was 1.9 trillion dollars. Failure of such a substantial portion of the insurance market in the United States would have certainly cost taxpayers more than the $25 billion in bailout funding that the government has yet to recoup.
become too big to fail without imposing anticapitalistic restraints, that reduce systemic risk without stifling innovation, and that protect consumers and taxpayers while still delivering value.