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***Insuring Against a Derivative Disaster:
The Case for Decentralized Risk Management***

Jeffrey Manns^{*}

Abstract: This Article makes the case for a decentralized risk management strategy for identifying and defusing future bubble markets. It suggests how the government can enlist private “gatekeeper guarantors” to provide integrated insurance and monitoring roles to complement the government’s management of systemic risks. It proposes the enactment of a federal mandate that systemically significant financial entities (or participants in systemically significant financial sectors) secure private guarantees to cover a percentage of their potential liabilities (above a loss threshold). Gatekeeper guarantors would act as “circuit breakers” of systemic risk by serving as self-interested monitors of risk taking and tying clients’ coverage to ongoing constraints on risk taking. Gatekeeper guarantors would serve as “bailout buffers” by providing financial backing in the event of defaults and thereby mitigating the government’s potential liability exposure. This expansive role would come with government oversight to ensure that gatekeeper guarantors satisfy reserve requirements, so that they can credibly serve as sea walls in the face of future financial tsunamis. This Article will illustrate the potential for decentralized risk management by showing how a mandate for private reinsurance (or its functional equivalent) may reduce systemic risks in the over-the-counter derivatives market. Reinsurers would bear a percentage of derivative participants’ liability, which would incentivize reinsurers to charge premiums reflecting their risk assessments and to monitor and condition clients’ liability exposure. The repeat-player status of reinsurers would position them to force derivatives’ participants to change their risk exposure as market conditions unfold. Reinsurers would have leverage to push insured parties to demand disclosures from counter-parties, thereby heightening transparency and reducing risks for their clients and the market as a whole. Government monitoring could build on existing state oversight of reinsurers, but provide teeth with expanded reserve requirements to ensure reinsurers are equipped to handle this role.

^{*} Associate Professor, George Washington University Law School. I would like to thank participants in faculty workshops at Cornell, Vanderbilt, George Washington, and the National University of Singapore for their constructive comments.

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Introduction

The recent bailouts and financial reforms underscored the danger that the federal government will overstretch its resources and abilities in centralizing risk management and internalizing the costs of private sector failures. In the long run the federal government lacks the means to act as the sole overseer and backstop of the financial world on its own. Instead, this Article makes the case for embracing a strategy of decentralized risk management to identify and take the air out of future bubble markets. This proposal shows how the federal government can enlist private “gatekeeper guarantors” to provide integrated insurance and monitoring roles to police systemic risks, while subjecting these private actors to reserve requirements to ensure their financial wherewithal. It proposes the enactment of a public mandate that systemically significant financial entities (or participants in systemically significant financial sectors) secure private guarantees to cover a set percentage of their potential liabilities.¹

Gatekeeper guarantors would act as “circuit breakers” of systemic risk by serving as self-interested private monitors of risk taking. They would be in a position to identify excessive risk taking by making ongoing disclosures a condition of guarantees. They would have the ability and incentive to demand that insured parties temper risk taking or lose the coverage. Gatekeeper guarantors would also serve as “bailout buffers” by providing financial backing to systemically significant institutions in the event of defaults and thereby mitigate the government’s potential liability exposure. This expansive role for gatekeeper guarantors should come with government oversight to ensure that gatekeeper guarantors face and meet reserve requirements, so that they can serve as credible sea walls in the face of future financial tsunamis. This Article will illustrate the potential for decentralized risk management by showing how a mandate for private reinsurance may reduce systemic risks in the \$450 trillion dollar over-the-counter derivatives market.²

The idea of gatekeeper guarantors represents a synthesis of two distinct concepts: gatekeepers and guarantors. Gatekeepers, such as rating agencies and accounting firms, have long enjoyed appeal as potentially cost-effective means for outsourcing public

¹ The Dodd-Frank Act designated commercial banking groups with assets of \$50 billion or more as “systemically important financial institutions” (SIFIs), and empowered the Financial Stability Oversight Council—in consultation with the Federal Reserve—to determine which additional non-bank financial institutions should be treated as SIFIs. See Arthur E. Wilmarth, Jr., *The Dodd-Frank Act: A Flawed and Inadequate Response to the Too-Big-to-Fail Problem*, 89 ORE. L. REV. 951, 993–96 (2011). SIFIs are subject to special prudential standards and are potentially subject to Orderly Liquidation Authority (OLA) wind-ups. In contrast, this Article embraces a broader conception of “systemically significant” firms that may be subject to a gatekeeper guarantor mandate.

² See Henry T.C. Hu, *The SEC Speaks in 2010 – Testimony Concerning the Over-the-counter Derivatives Market Act of 2009 Before the House Committee on Financial Services*, 1784 PLI/Corp 421, 423 (Oct. 7, 2009) (discussing how “[t]he derivatives market has grown enormously since the late 1990s to approximately \$450 trillion of outstanding notional amount in June 2009”).

enforcement roles to private parties.³ The distinctive feature of gatekeepers is that their private roles equip them with the means and ability to further public goals by detecting excessive risk taking or wrongdoing by clients and to intervene to stop or disclose the activity.⁴ While gatekeepers enjoy great potential, in practice traditional gatekeepers often lack the motivation to oversee and constrain excessive risk taking. For example, rating agencies, lawyers, and accountants face perverse incentives to downplay or paper over risks their clients face because they have no interest in biting the hand that feeds.⁵ Reputational and liability sanctions may fail to incentivize gatekeepers. The same skills and leverage that enable gatekeepers to detect excessive risks may enable them to cover up both clients' and their own tracks.⁶ Gatekeepers' shortcomings in policing individual clients magnify systemic risks in the aggregate by creating an appearance of oversight that belies the reality of monitors with little at stake.

³ A broad literature has explored the potential for enlisting private gatekeepers to perform public enforcement functions. See, e.g., John C. Coffee, Jr., *Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms*, 84 B.U. L. REV. 301, 308–09 (2004) (describing a gatekeeper as a “reputational intermediary” who “receives only a limited payoff from any involvement in misconduct” compared to the primary wrongdoer); Assaf Hamdani, *Gatekeeper Liability*, 77 S. CAL. L. REV. 53, 63 (2003) (defining gatekeepers as parties who “offer a service or sell a product that is necessary for clients wishing to enter a particular market or engage in certain activities”); Howell E. Jackson, *Reflections on Kaye, Scholer: Enlisting Lawyers to Improve the Regulation of Financial Institutions*, 66 S. CAL. L. REV. 1019, 1050–54 (1993) (describing gatekeepers as actors who provide indispensable, or at least extremely useful, services to the targeted wrongdoers, have similar monitoring capacities, and who cannot easily be replaced by wrongdoers); Reinier H. Kraakman, *Gatekeepers: The Anatomy of a Third-Party Strategy*, 2 J. L. ECON. & ORG. 53, 53 (1986) (defining gatekeepers as “private parties who are able to disrupt misconduct by withholding their cooperation from wrongdoers”). This article understands gatekeepers as private actors whose role as suppliers or consumers of lawful goods or services provides them with the cost-effective ability to detect and potentially prevent wrongdoing.

⁴ See Ronald J. Gilson, *The Devolution of the Legal Profession: A Demand Side Perspective*, 49 MD. L. REV. 869, 883 (1990) (arguing that a defining feature of gatekeepers is that the targeted “misconduct cannot occur without the gatekeeper’s participation”); Kraakman, *supra* note 3, at 54, 61–63 (arguing that “a specialized good, service, or form of certification that is essential for the wrongdoing to succeed—is the ‘gate’ that the gatekeeper keeps”).

⁵ The defining characteristic of gatekeepers is their dual capacity: the services they offer may serve lawful ends or they may enable wrongdoers to pursue their illegal activity. Other gatekeepers may create the demand that attracts prospective wrongdoers, such as employers whose attempts to depress wage levels may attract underage workers or undocumented aliens. See Jeffrey Manns, *Private Monitoring of Gatekeepers*, 2006 U. ILL. L. REV. 887, 941–44. Similarly, American companies may foster illicit activity by outsourcing production facilities to firms in developing countries, which (“unbeknownst” to the American companies) abuse human rights to cut costs or bribe officials to aid their American clients. See H. Lowell Brown, *Parent-Subsidiary Liability Under the Foreign Corrupt Practices Act*, 50 BAYLOR L. REV. 1, 29–35 (1998) (laying out the scope of parent-subsidiary liability under the Foreign Corrupt Practices Act).

⁶ The more complex the activity, the more prospective offenders may enjoy an advantage over enforcers in obfuscating their activities, a fact which creates the need for gatekeepers. See Donald C. Langevoort, *Technological Evolution and the Devolution of Corporate Financial Reporting*, 46 WM. & MARY L. REV. 1, 3–16 (2004); see also Steven L. Schwarcz, *Rethinking the Disclosure Paradigm in a World of Complexity*, 2004 U. ILL. L. REV. 1, 2–6, 18–20 (discussing how “the increasingly widespread problem of complexity” makes it difficult for public enforcers to regulate and oversee “virtually all securitization and derivatives deals and other forms of structured-financing transactions”).

Integrating the concept of gatekeepers with guarantor roles would remedy the incentive problem that plagues gatekeepers by focusing gatekeepers' self-interest on effective risk management and oversight of their clients. A guarantor assumes a percentage or all of the liability for its client's obligations in the event of a default.⁷ As a result, guarantors have the incentive to demand as much information, conditions, and compensation from clients as they believe necessary to justify the liability exposure.⁸ Guarantors must learn the hard way about what level of scrutiny to impose as a condition of issuing guarantees, since they must internalize the costs of failure. The fact that guarantor liability is self-executing allows regulators to sidestep the difficult challenges of establishing what level of diligence or scrutiny is sufficient to satisfy a gatekeeping duty and what type of sanctions wayward gatekeepers should face. Instead, the primary government role would be to set a baseline of reserve requirements to provide assurance that guarantors can plausibly live up to their obligations if large-scale defaults occur.

This Article's proposal would deputize guarantors as gatekeepers of systemic risk. This approach would impose a mandate for systemically significant financial entities (or participants in systemically significant sectors) to secure guarantees for a set percentage of their liabilities. It would enlist guarantors' potential as repeat players by requiring guarantees not only to cover a financial entity's particular transaction, but also its broader liabilities or a category of the financial entity's liability exposure. The rationale for this approach would be to ensure that guarantors have incentives to monitor and shape the conditions imposed on their clients on a rolling basis in a swifter way than regulators.

This approach would impose higher financial and informational costs on corporations than conventional gatekeepers may impose. But it would entail minimal governmental costs and oversight. Gatekeeper guarantors would independently negotiate guarantees, oversee clients, and resolve liabilities. Government oversight could focus on ensuring that gatekeeper guarantors meet reserve requirements, so that they can plausibly live up their obligations in the face of low probability, high impact events. Another virtue of this approach is that it would not require creating entirely new gatekeeper guarantors. Instead, it could build on the existing multi-trillion dollar reinsurance industry whose experience in gauging insurers' catastrophic risks could be extended to financial contexts,⁹ as well as draw in new entrants with deep pockets and relevant experience to take on this role such as sovereign wealth funds and private equity firms.

This Article shows the potential for decentralized risk management by suggesting how a mandate for private reinsurance may reduce systemic risks in the \$450 trillion

⁷ See, e.g., Avery Wiener Katz, *An Economic Analysis of the Guaranty Contract*, 66 U. CHI. L. REV. 47, 49-52 (1999) (discussing the economic logic of guarantee arrangements); Neil B. Cohen, *Striking the Balance: The Evolving Nature of Suretyship Defenses*, 34 WM. & MARY L. REV. 1025, 1027-1028 (1993) (explaining the purpose for guarantees and incentives for the parties involved).

⁸ See Katz, *supra* note 7, at 59 (discussing how guarantees address potential moral hazard by enlisting the guarantor's efforts in reducing or managing risks of debtor misconduct).

⁹ See Thomas Holzheu & Roman Lechner, *The Global Reinsurance Market*, in INTERNATIONAL INSURANCE MARKETS (J. David Cummins & Bertrand Vernard eds. 2003) 877, 881-883 (laying out the scale of the global reinsurance industry).

dollar over-the-counter derivatives market.¹⁰ This case study is chosen in part because the Dodd-Frank Act's clearinghouse model for derivatives oversight incorporates some aspects of a gatekeeper guarantor approach.¹¹ In theory the Dodd-Frank Act's mandate that over-the-counter derivatives be traded on exchanges and that the trades be cleared and settled by central clearinghouses¹² means that these intermediaries will both monitor and pool participants' risk.¹³ In particular, the appeal of clearinghouses is that they are committed to complete derivative transactions if a participant defaults by imposing capital calls on the clearinghouse's members.¹⁴

¹⁰ See Henry T.C. Hu, *The SEC Speaks in 2010 – Testimony Concerning the Over-the-counter Derivatives Market Act of 2009 Before the House Committee on Financial Services*, 1784 PLI/Corp 421, 423 (Oct. 7, 2009).

¹¹ The size and significance of the derivatives markets raise systemic risk concerns, and this danger has sparked an array of ideas about how to temper systemic risks without undercutting the viability of derivatives' markets. See, e.g., Colleen Baker, *Regulating the Invisible: The Case of Over-The-Counter Derivatives*, 85 NOTRE DAME L. REV. 1287, 1291-1295 (2010) (calling for stronger regulatory cooperation between the SEC and the CFTC to regulate derivatives as well as an international framework for regulating derivatives); Frank D'Souza, Nan S. Ellis, & Lisa M. Fairchild, *Illuminating the Need for Regulation in Dark Markets: Proposed Regulation of the OTC Derivatives Market*, 12 U. PA. J. BUS. L. 473, 477-479 (2010) (highlighting the inadequacies of derivatives reform and calling for the merger of the SEC and CFTC to oversee derivatives regulation); Kristin N. Johnson, *Things Fall Apart: Regulating the Credit Default Swap Commons*, 82 U. COLO. L. REV. 167, 176-77 (2011) (making the case for a "community governance" model with a federally registered self-regulatory organization overseeing the derivatives industry); Jeremy C. Kress, *Credit Default Swaps, Clearinghouses, and Systemic Risk: Why Centralized Counterparties Must Have Access to Central Bank Liquidity*, 48 HARV. J. ON LEGIS. 49, 50-52 (2011) (arguing that the Federal Reserve should be authorized to extend credit to OTC derivatives' clearinghouses to meet their emergency needs); Lynn Stout, *Regulate OTC Derivatives by Deregulating Them*, 32(3) REGULATION 30, 32-35 (2009) (arguing that derivatives regulation should revert to the common-law approach in which true hedging and insurance contracts are legally enforceable, while purely speculative "wagering contracts are unenforceable, unless they are processed through private exchanges which use capital and margin requirements to mitigate risks and over-leveraging"). This Article offers an innovative approach towards derivatives reform in calling for the decentralization of risk management by requiring participants to have a reinsurance backstop for a percentage of their liability exposure to create self-interested oversight and constraints on leverage.

¹² Clearinghouses "clear" trades by calculating the net payment obligations between participants. Clearinghouses "settle" trades by overseeing the exchange of funds that concludes the transaction. See Iman Anabtawi & Steven L. Schwarcz, *Regulating Systemic Risk: Towards an Analytic Framework*, 86 NOTRE DAME L. REV. 1349, 1384 (2011).

¹³ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 723(a), 124 Stat. 1376, 1675-76, 1681 (2010) (to be codified at 7 U.S.C. § 2); see also David E. Skeel, Jr. & Thomas H. Jackson, *Transaction Consistency and the New Finance in Bankruptcy*, 112 COLUM. L. REV. 152, 192-94 (2012) (providing an overview of the interface between derivatives exchange trading and settlement and backing of trades by clearinghouses).

¹⁴ See, e.g., Christine Cuccia, *Informational Asymmetry and OTC Transactions: Understanding the Need to Regulate Derivatives*, 22 DEL. J. CORP. L. 197, 216-219 (1997) (calling for banks to disclose the risks and nature of derivatives to end users); Michael Greenberger, *Overwhelming a Financial Regulatory Black Hole With Legislative Sunlight: Dodd-Frank's Attack on Systemic Economic Destabilization Caused by an Unregulated Multi-Trillion Dollar Derivatives Market*, 6 J. BUS. & TECH. L. 127, 166-67 (2011) (arguing that the Dodd-Frank Act's derivatives reforms have the potential to mitigate substantially systemic risks posed by OTC derivatives if regulators use all of the tools granted to them under the legislation); William Spencer Topham, *Re-Regulating Financial Weapons of Mass Destruction," Observations on Repealing the Commodity Futures Modernization Act and Future Derivative Regulation*, 47 WILLAMETTE L. REV. 133, 134-35 (2010) (making the case for centralized clearing and exchange trading to attempt to create complete transparency for derivatives markets); Yesha Yadav, *The Problematic Case of*

But in practice, centralizing risk in clearinghouses may magnify systemic risk and bolster market leverage -- the opposite of what reformers intended.¹⁵ The problem is that clearinghouses may suffer from similar conflicts of interest as conventional gatekeepers. The compensation of clearinghouses depends on trading volume and scale and the willingness of participants to use their services. As major players concentrate transactions in a small number of clearinghouses, both clearinghouses and participants may face little incentive to temper excessive leverage amid exuberant markets. Instead, all would have incentives to double down on risk exposure, since sufficiently large collective liability exposure in a crisis almost guarantees the failure of the clearinghouse and a government bailout.¹⁶

In contrast, a gatekeeper guarantor approach would mandate third-party (re)insurance coverage for derivatives' transactions and create self-interested oversight. Reinsurers would bear a percentage of derivative participants' liability. This liability exposure would incentivize reinsurers to charge premiums reflecting their risk assessments and to monitor and condition clients' liability exposure. The repeat-player status of reinsurers would position them to force derivatives' participants to change their risk exposure as market conditions unfold. Reinsurers would have leverage to push insured parties to demand disclosures from counter-parties, thereby heightening transparency and reducing risks for all concerned. Lastly, reinsurance pricing would serve as a speculation tax as bona fide hedgers would presumably be able to secure much lower reinsurance rates than speculators because of the lower risks involved. Combining this expanded reinsurance role with heightened state or federal oversight and reserve requirements would help to ensure that reinsurers are positioned to serve as sea walls to mitigate the impact of future financial crises.

The net impact of decentralized oversight of derivatives' participants would be a significant reduction in systemic risk as reinsurers would have incentives to reign in leverage before markets reach bubble levels. While mandatory reinsurance would not be a panacea, it would offer policymakers a more credible backstop for the derivatives industry that would mitigate the likelihood and scale of a future crisis.

Part I will make the case for enlisting gatekeeper guarantors as monitors of corporate risk taking and systemic risks. Parts II and III will explore the potential for gatekeeper guarantors to resolve systemic risk concerns in the over-the-counter derivatives market and address potential objections.

Clearinghouses in Complex Markets, at 6-9 (forthcoming GEO. L.J. 2012) available on ssrn.com (discussing the central role of clearinghouses in financial markets, but highlighting the legal and informational limits of clearinghouses to mitigate the vast economic risks they face).

¹⁵ See Craig Pirrong, *Derivatives Clearing Mandates: Cure or Curse?*, 22(3) JOURNAL OF APPLIED CORPORATE FINANCE 48, 50-52 (2010) (discussing how mandatory clearing of derivatives on exchanges/clearinghouses may potentially increase systemic risks).

¹⁶ See *infra* Section II.B.

I. The Case for Gatekeeper Guarantors

The financial crisis exposed the limits of both public enforcers and traditional private gatekeepers. The system-wide failures underscored the need to reconsider both public and private roles and the potential for new alternatives. Private gatekeepers failed at every level in dealing with the long build up to the subprime mortgage crisis. Lawyers and accountants failed to recognize or report excessive risk taking and fraud by mortgage brokers who were granting millions of adjustable rate mortgages often with fraudulent documentation and without diligence review. Commercial and investment banks issued trillions of dollars of subprime residential mortgage backed securities (RMBS) and collateralized debt obligations (CDOs) that camouflaged the actual risks.¹⁷ Rating agencies compromised their duties by failing to ring warning bells about a bubble market and dubious debt packaging practices.¹⁸ Purchasers of these instruments cannot escape blame either in relying excessively on gatekeepers to assess risks.¹⁹ The problem was that so long as everyone was making money, gatekeepers “diligently” turned a blind eye to their clients’ wayward ways and simply covered up or obscured the extent of risk.²⁰

Public regulators fared no better as banking and securities agencies also ignored warning signs of a market bubble and were reluctant to take away the punch bowl in the midst of a property-led economic boom. A growth-oriented monetary policy of low interest rates, incentives for banks to heighten lending to high-risk borrowers, a hands-off approach by banking and securities regulators, and over-reliance on gatekeepers’ accuracy and integrity were a fatal combination. No one in Washington, DC or Wall Street was left with clean hands. Countless eyes witnessed the looming crisis, yet neither

¹⁷ RMBS and mortgage-based CDOs are debt obligations based on large pools of mortgage loans whose cash flows are based on principal and interest payments from the underlying mortgages. Approximately \$1.7 trillion of subprime RMBS were issued from 2001 to 2006. See Adam B. Ashcraft & Til Schuermann, *Understanding the Securitization of Subprime Mortgage Credit*, 2, Aug. 19, 2008, available at <http://ssrn.com/abstract=1071189>. The dollar values of subprime CDOs are harder to pinpoint because of less transparency, but JP Morgan has estimated that over \$600 billion in subprime CDOs were issued over this period. See Jenny Anderson & Heather Timmons, *Why a US Subprime Mortgage Crisis is Felt Around the World*, N.Y. TIMES, Aug. 31, 2007, at A1.

¹⁸ See, e.g., Allen Ferrell, Jennifer E. Bethel, & Gang Hu, *Legal and Economic Issues in Subprime Litigation*, 37-53 (March, 2008), available at <http://ssrn.com/abstract=1096582> (discussing the legal issues surrounding the extensive subprime litigation, such as Rule 10b-5 actions against banks, ERISA litigation, and litigation against rating agencies). Cf. John C. Coffee, Jr., *Understanding Enron: “It’s About the Gatekeepers, Stupid,”* 57 BUS. LAW. 1403, 1408-09 (2002) (arguing “the collective failure of the gatekeepers” lay at the heart of the accounting scandals); Hillary A. Sale, *Gatekeepers, Disclosure, and Issuer Choice*, 81 WASH. U. L.Q. 403, 403-07 (2003) (arguing that securities gatekeepers fail the public by not adequately screening for corporate wrongdoing).

¹⁹ See, e.g., Vikas Bajaj, *If Everyone’s Fingerprinting, Who’s to Blame?*, N.Y. TIMES, Jan. 22, 2008 (discussing the myriad of suits and countersuits filed among the parties involved in the subprime mortgage crisis); Michael Crouhy, Robert A. Jarrow, & Stuart M. Turnbull, *The Subprime Credit Crisis of 07*, at 8-19 (July 9, 2008), available at <http://ssrn.com/abstract=1112467> (discussing the array of market participants who have potential culpability for the subprime mortgage crisis).

²⁰ See, e.g., Jeffrey Manns, *Rating Risk After the Subprime Mortgage Crisis*, 87 N.C. L. REV. 1011, 1020-1025 (2009) (discussing the shortcomings of each major gatekeeper during the financial crisis).

public regulators nor private gatekeepers made meaningful efforts to address the subprime mortgage debacle until it was too late.²¹

Both public and private actors share blame for the crisis, yet the responses of bailouts and financial reforms focused largely on one side of the coin: expanding powers for public regulators to oversee the financial sector. While crises create understandable impulses for the state to consolidate power, the federal government must also come to grips with the limits of the state's ability to monitor the financial world on its own. Public regulators face intrinsic regulatory limits in overseeing financial firms based on information barriers, limited resources, and the political influence of Wall Street.²² Regulators are always playing catch up in overseeing financial innovation while being out-manned and out-gunned by their private sector counterparts. As a result, regulators are likely to follow in their own well-worn footsteps of futility if they rely solely on public tools. It will be difficult for them to detect the signs of trouble until it is too late, and the next crisis in collateralized debt obligations, derivatives, or the latest fad in financial innovation is at their doorstep.²³

The obstacles to direct public enforcement of securities law make the potential of gatekeepers as complements and substitutes for public enforcement particularly important. For example, the enormity of the SEC's mandate and the dearth of specialized skills and insider knowledge among SEC officials may make direct oversight of all but a small percentage of potential corporate actors practically infeasible. These limits may curb the efficacy of SEC scrutiny even when problems capture the attention of regulators.²⁴ In contrast, the specialized services supplied by rating agencies, lawyers, and accountants provide them with systematic opportunities to detect, prevent, and/or alert the public about risky corporate conduct or fraud.²⁵ Whether policymakers like it or

²¹ See DAVID A. SKEEL, JR., *THE NEW FINANCIAL DEAL* 15-33 (2010) (providing an overview of the regulatory missteps that led to the financial crisis).

²² See, e.g., Binyamin Appelbaum, *On Finance Bill, Lobbying Shifts to Regulations*, N.Y. TIMES, June 26, 2010, at A01 (discussing how banks have responded to the aftermath of the financial crisis by hiring legions of lobbyists and financial regulation lawyers to stymie oversight and reform).

²³ See Donald C. Langevoort, *Technological Evolution and the Devolution of Corporate Financial Reporting*, 46 WM. & MARY L. REV. 1, 3-16 (2004); see also Steven L. Schwarcz, *Rethinking the Disclosure Paradigm in a World of Complexity*, 2004 U. ILL. L. REV. 1, 2-6, 18-20.

²⁴ For example, the Securities & Exchange Commission has a staff of approximately 3,600 who are responsible for overseeing over 10,000 publicly traded companies; over 10,000 investment advisers who manage over \$37 trillion in assets; nearly 1,000 fund complexes; 6,000 broker-dealers with 172,000 branches; and the \$44 trillion worth of trading conducted each year on U.S. stock and options exchanges. See *A Review of Investor Protection and Market Oversight with the Five Commissioners of the Securities and Exchange Commission: Hearing Before the House Committee of Financial Services*, 110th Cong. (June 26, 2007) (statement of Christopher Cox, Chairman, Securities and Exchange Commission), at 10. The Commodities Futures Trading Commission faces an equally herculean task of having 700 employees oversee the \$37 trillion U.S. futures market and the \$300 trillion U.S. swaps market. See Gary Gensler, Chairman CFTC, *Letter to Senate and House Appropriations Committees*, Feb. 13, 2012, available at <http://www.cftc.gov/ucm/groups/public/@aboutcftc/documents/file/genslerstatement021312.pdf>.

²⁵ See, e.g., Coffee, *supra* note 3, at 308-09 (describing a gatekeeper as a "reputational intermediary" who "receives only a limited payoff from any involvement in misconduct" compared to the primary wrongdoer); Hamdani, *supra* note 3, at 63 (defining gatekeepers as parties who "offer a service or sell a product that is necessary for clients wishing to enter a particular market or engage in certain activities");

not, the limited reach and resources of the state dictate the need to enlist private parties to complement the government's monitoring role.

A. The Rationale for Gatekeeper Guarantors

However necessary private gatekeepers may be to fulfill public enforcement goals, the financial crisis highlighted a longstanding problem facing gatekeepers: how to incentivize gatekeepers to do their job. While private gatekeepers may have the ability to fill public enforcement gaps, they often lack the incentive to do so as they are beholden to their clients and face little risk of public accountability for lax monitoring.

Gatekeepers have long enjoyed appeal as potentially cost-effective means for outsourcing public enforcement roles to private parties. Rating agencies oversee debtors' default risk, accountants assess financial risks, and lawyers police for fraud.²⁶ The distinctive feature of gatekeepers is that their service role equips them with the means and ability to detect excessive risk taking or fraud by their clients and to intervene to stop or disclose this activity. Gatekeepers enjoy significant informational advantages over public regulators, and if properly incentivized can monitor risk taking and wrongdoing in ways that regulators could not hope to achieve on their own.

In theory reputational concerns alone should incentivize gatekeepers to oversee their clients.²⁷ Rating agencies, lawyers, and accountants in large part derive their income and status from their reputations as perceptions of their integrity and effectiveness are what give their opinions value.²⁸ The problem is that reputation is "sticky" in that market actors often give much greater weight to past reputation than to more recent shortcomings in gatekeeping.²⁹ A dramatic loss of confidence in a gatekeeper can lead to a backlash or in rare cases even collapse, which was illustrated in the fall of Arthur Anderson after alleged collusion in Enron's accounting fraud.³⁰ But

Jackson, *supra* note 3, at 1050–54 (describing gatekeepers as actors who provide indispensable, or at least extremely useful, services to the targeted wrongdoers, have similar monitoring capacities, and who cannot easily be replaced by wrongdoers).

²⁶ The appeal of outsourcing enforcement functions to private gatekeepers is that this approach promises to enhance enforcement while reducing direct state expenditures. *See* Kraakman, *supra* note 3, at 54, 55-57 (discussing government's broad enlistment of gatekeepers in a variety of contexts).

²⁷ *See, e.g.,* Steven L. Schwarcz, *Rethinking the Disclosure Paradigm in a World of Complexity*, 2004 U. ILL. L. REV. 1, 26 (arguing that rating agencies' "reputational motivation is sufficient" and that "[a]dditional regulation of rating agencies thus would impose unnecessary costs and thereby diminish efficiency").

²⁸ Gatekeepers have long professed that concerns for their reputations provide robust incentives for their integrity and accuracy in their screening roles and eclipse any short-term gains from turning a blind eye to client misconduct. *See, e.g.,* Victor P. Goldberg, *Accountable Accountants: Is Third-Party Liability Necessary?*, 17 J. LEGAL STUD. 295, 296–98 (1988) (arguing that the reputational costs that accountants may face from failing to detect wrongdoing provide them with adequate incentives to monitor their clients).

²⁹ *See, e.g.,* Jeffrey Manns, *Rating Risk After the Subprime Mortgage Crisis*, 87 N.C. L. REV. 1011, 1050-1052 (2009) (discussing the reputational staying power of rating agencies in spite of their more recent poor track record).

³⁰ *See* Jeffrey N. Gordon, *What Enron Means for the Management and Control of the Modern Business Corporation: Some Initial Reflections*, 69 U. CHI. L. REV. 1233, 1237-39 (2002) (discussing the

strong reputational reactions are the exception, rather than the rule.³¹ Memories in financial markets often appear to wane as the euphoria of market bubbles builds.³² Even to the extent that reputational concerns matter, gatekeepers such as auditors and lawyers are the masters of caveats. They are quite adept at performing their duties while distancing themselves from client outcomes.³³ Monetary incentives fuel gatekeepers' incentives to paper over clients' misdeeds as they may understandably not wish to bite the hands that feed.³⁴

If reputation is not enough to incentivize gatekeepers, policymakers are stuck with the challenge of using the threat of sanctions to deter wayward gatekeepers from shirking their responsibilities.³⁵ This approach may also prove fruitless.³⁶ The problem is that the same skills and leverage that enable gatekeepers to detect excessive risks or wrongdoing may enable them to cover up both their clients' and their own tracks. Policymakers often have to grapple with the challenge of how to set sanctions to incentivize gatekeepers' compliance if the probability of detecting wayward gatekeepers is quite low.³⁷ Set the sanction too high and gatekeepers may exit the industry leaving

interdependence of Arthur Andersen's auditors with Enron and the internal agency problems that compromised Arthur Andersen's integrity).

³¹ For example, the reputations of rating agencies were tarnished by their role in the sub-prime mortgage crisis, yet within a year of the Dodd-Frank Act rating agencies' reputations had recovered to the point where downgrades and threats of downgrades of the United States had a significant impact on financial markets. See Jeffrey Manns, *The Revenge of the Rating Agencies*, N.Y. TIMES, Aug. 10, 2011.

³² Reputational constraints have waned amidst bubble markets, and broader shifts in the risk-seeking behavior of participants in financial markets have dampened the force of reputational constraints. See John C. Coffee, Jr., *Understanding Enron: "It's About the Gatekeepers, Stupid,"* 57 BUS. LAW 1403, 1408-09 (2002).

³³ A related concern is the interconnectedness of individual gatekeepers and their clients. For example, while fees from a given company may constitute a small percentage of the revenues of a law firm or accounting firm, a single client may frequently account for the majority of the revenue stream for individual lawyers and auditors. See Coffee, *supra* note 3, at 322-23 (discussing how auditing firms as a whole may have a broad set of clients, but arguing that individual auditors who serve a large client such as Enron effectively have their economic interests interconnected with a single client).

³⁴ For example, the combination of "origination" and "proliferation" credits that partners receive are designed to intertwine their economic interests with their firms, yet also form a web that binds law and accounting partners more closely to their clients. See William D. Henderson, *What Do We Know About Lawyers' Lives: An Empirical Study of Single-Tier Versus Two-Tier Partnerships in the Am Law 200*, 84 N.C. L. REV. 1691, 1700-03 (2006) (noting the significance of origination and proliferation credit structures within law firms); Ronald J. Gilson & Robert H. Mnookin, *Sharing Among the Human Capitalists: An Economic Inquiry into the Corporate Law Firm and How Partners Split Profits*, 37 STAN. L. REV. 313, 335-39 (1985) (laying out a theory explaining profit sharing incentives within law firms).

³⁵ The logic of focusing enforcement on gatekeepers rather than their wayward clients is that gatekeepers receive a disproportionately small percentage of the fruits of issuer misconduct. See Coffee, *supra* note 3, at 308-09.

³⁶ See Hamdani, *supra* note 3, at 63-64.

³⁷ The more complicated the activity that private gatekeepers are called to oversee, the more necessary the gatekeeping role may appear, yet the more difficult it may be for the government to oversee gatekeeper compliance. See, e.g., Steven L. Schwarcz, *Rethinking the Disclosure Paradigm in a World of Complexity*, 2004 U. ILL. L. REV. 1, 2-6, 18-20 (discussing how even sophisticated private investors may have difficulty in understanding detailed disclosures in a reasonable time period because of the complicated nature of corporate transactions).

even larger public enforcement gaps. Set the sanction too low, and regulators may invite brazen disregard of gatekeeping duties. The result is that the public enforcement potential for gatekeepers is often wasted because gatekeepers have little at stake in the outcomes, and regulators have little means to incentive the gatekeepers. Worse still, gatekeepers' shortcomings in policing their individual corporate clients magnify systemic risks in the aggregate by creating an appearance of oversight that belies the reality of monitors with little at stake.³⁸

Integrating the concept of gatekeepers with guarantors would remedy the incentive and oversight problem that plagues gatekeepers. It would focus the self-interest of gatekeepers on effective risk management and oversight of their clients by linking monitoring and insurance roles. The defining feature of guarantors is that they assume a percentage or all of the liability for their client's obligations in the event of a default (generally in exchange for a stream of payments).³⁹ The context may be as mundane as a parent's guaranteeing her child's lease to secure an off-campus apartment or as complex as a reinsurance treaty guaranteeing billions of dollars of an insurer's potential liabilities. Corporations may put their credit on the line to guarantee fulfillment of a contract; a bank may issue a letter of credit to backstop a transaction; or a credit default swap may cover a party's losses in the event of a debt default.

While guarantees provide greater certainties for credit markets, they generally come at a higher financial and informational price than conventional gatekeepers may impose. For example, a legal opinion or auditor's letter is often an exercise in caveats and liability avoidance with express conditions that the conclusions are based on the information provided by the client.⁴⁰ In other words, the role of lawyers and auditors allows them to implicitly embrace a "see no evil, hear no evil" approach in applying legal or accounting standards, while minimizing their obligation to scrutinize their clients.

In contrast, the virtue of guarantors is that they possess the powerful incentive of self-interest to demand as much information, conditions, and compensation from clients as they believe necessary to justify the financial commitment. This approach avoids having regulators face the daunting challenge of establishing what level of diligence or scrutiny is sufficient to satisfy a gatekeeping duty and what type of sanctions to impose if gatekeepers are caught shirking their duties. Instead, guarantors must learn the hard way about what level of scrutiny to impose (and the level of costs to incur) as a condition of issuing guarantees, since they must internalize the costs of failure. As importantly, the

³⁸ The concern is not merely gatekeeper noncompliance or formalistic compliance, but worse still that this outcome may foster contempt and embolden subversion of the law. See Bernard S. Black, *The Legal and Institutional Preconditions for Strong Securities Markets*, 48 U.C.L.A. L. REV. 781, 787 (2001) (highlighting the inefficiencies of reputational markets).

³⁹ See, e.g., Avery Wiener Katz, *An Economic Analysis of the Guaranty Contract*, 66 U. CHI. L. REV. 47, 49-52 (1999) (discussing the economic logic of guarantee arrangements); Neil B. Cohen, *Striking the Balance: The Evolving Nature of Suretyship Defenses*, 34 WM. & MARY L. REV. 1025, 1027-1028 (1993) (explaining the purpose for guarantees and incentives for the parties involved).

⁴⁰ See, e.g., Samuel A. DiPiazza Jr., David McConnell, William Parrett, Mike Rake, Frans Samyn, and James Turley, *Caveat Auditor?*, Wall St. J., Nov. 9, 2006 (an op-ed piece from the heads of leading accounting firms' acknowledging the shortcomings of the auditing process).

liability exposure that guarantors face constitutes self-enforcing sanctions. No regulator or prosecutor has to determine the scope of liability for guarantors who fail to constrain the risk taking of their clients.⁴¹ Instead, the regulator's role can be limited to confirming gatekeeper guarantors meet reserve requirements to ensure that the possibility of bailouts or bankruptcy does not distort the incentive of gatekeeper guarantors to price risk accurately.

Guarantors would serve a potentially useful purpose by simply imposing conditions on their clients for guaranteeing particular transactions as banks routinely do in granting letters of credit. But this Article would seek to have guarantors also serve a public purpose by enlisting guarantors as repeat players. Guarantors would guarantee not simply a particular transaction, but rather a percentage of a client's broader overall liabilities or a percentage of a category of liability exposure, such as derivatives or collateralized debt obligations. The approach would seek to ensure that guarantors have incentives to monitor and shape the conditions imposed on their clients on a rolling basis in a more swift and precise way than bureaucrats could hope to accomplish.

B. The Gatekeeper Guarantor Framework

This Article's mandate for "gatekeeper guarantors" is designed to overcome the shortcomings of conventional gatekeepers, while leveraging the monitoring potential of the private sectors. Gatekeeper guarantors would fuse traditional gatekeeping (i.e. the public enlistment of private monitors) with the guarantor role in providing an insurance role as a liability backstop to monitored parties.⁴² The gatekeeper guarantor mandate would create a decentralized private complement to the federal government's oversight of systemic risks. It would also serve as a private backstop to mitigate the scale and risk of future bailouts. The federal government could deputize gatekeeper guarantors to screen for and mitigate market risk while providing assurance to markets of the ability of private actors to fulfill this role by creating and overseeing reserve requirements for gatekeeper guarantors.

The centerpiece of the gatekeeper guarantor approach would be the enactment of a public mandate that systemically significant financial entities (or participants in systemically significant financial sectors) secure private guarantees to cover a set percentage of their potential liabilities.⁴³ Gatekeeper guarantors would act as both

⁴¹ See, e.g., Robert E. Scott, *The Death of Contract Law*, 54 U. TORONTO L.J. 369, 387 (2004) (discussing how the virtue of "self-enforcing sanctions" is that they "are imposed implicitly and ex post").

⁴² Compare John C. Coffee, Jr., *Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms*, 84 B.U. L. REV. 301, 308-09 (2004) (framing a gatekeeper as a "reputational intermediary" who "receives only a limited payoff from any involvement in misconduct" compared to the primary wrongdoer) with Avery Wiener Katz, *An Economic Analysis of the Guaranty Contract*, 66 U. CHI. L. REV. 47, 49-52 (1999) (discussing the economic logic of guarantee arrangements).

⁴³ See, e.g., Robert W. Adler, *Unfunded Mandates and Fiscal Federalism: A Critique*, 50 VAND. L. REV. 1137, 1140-48 (1997) (criticizing the fiscal, legal, and policy arguments against federal mandates); David A. Dana, *The Case for Unfunded Environmental Mandates*, 69 S. CAL. L. REV. 1, 39-45 (1995) (critiquing objections to mandates as vehicles of regulatory change).

“circuit breakers” and “bailout buffers” for the financial system. They would function as circuit breakers of systemic risk by acting as self-interested monitors of risk taking. Gatekeeper guarantors would price their assessments of clients’ risk exposure into the fees for guarantees and enjoy contractual leverage to oversee and limit clients’ risks. Just as a circuit breaker cuts off the current when there is a power surge, gatekeeper guarantors would be in a position to reduce or cut off their clients’ access to financial markets as their risk exposure increases. Gatekeeper guarantors would be able to red flag excessive risk taking by their clients by demanding ongoing disclosures as a condition of a guarantee. They would have the incentives and ability to demand that insured parties temper risk taking in real time or lose their guarantee coverage.

Gatekeeper guarantors would also act as “bailout buffers” by providing financial backing to systemically important firms in the event of defaults and thereby mitigating the government’s potential liability exposure in future bailouts. This backing would make it harder for Wall Street to externalize the costs of firms’ reckless behavior on the public. It would also provide political insulation for policymakers to hold off on bailouts until private backstops are fully used.

While the financial cushion of a private backstop would reduce burdens on public coffers, the key is the incentive effect that the liability exposure of gatekeeper guarantors will have in fostering proactive monitoring of and intervention with clients. The net effect would be to create a class of self-interested monitors with incentives to identify incipient bubble markets and to take (at least some of) the air out of bubbles by pressuring clients to reduce their risk exposure and/or strengthening their liquidity in real time.

Gatekeeper guarantors’ oversight and management of individual clients’ risk taking would have an aggregate impact in reducing systemic risks. No other actors would be in as strong a position to secure and synthesize insider market data to assess their individual clients’ risk exposure and to get a bigger picture of the landscape of financial risk. Government regulators lack the ability to perform this type of risk management function directly, and no traditional gatekeeper would ever have the incentive to assume this type of role because they have much less at stake in each client.⁴⁴ As financial innovations take place and become widespread, gatekeeper guarantors would be on the front lines of financial markets and would be able to demand new types of information from their clients (before government actors are even aware of potential problems).⁴⁵ As a result, gatekeeper guarantors would be potentially able to recognize and address emerging problems to reduce the scale and scope of their clients’ exposure. This risk management role would dampen the potential for market frenzies.

⁴⁴ See Lawrence A. Cunningham, *Beyond Liability: Rewarding Effective Gatekeepers*, 92 MINN. L. REV. 323, 342-349 (2007) (discussing the limited scope of reputational and financial risk exposure that gatekeepers face which undercuts their incentives for performing active monitoring of clients).

⁴⁵ See Michael S. Barr, *The Financial Crisis and the Path of Reform*, 29 YALE J. ON REG. 91, 95 (arguing that financial innovation may outpace the ability of both regulators and markets as a whole to understand and respond).

An additional virtue is the potential for “secondary accountability” by gatekeeper guarantors to extend their leverage over insured parties to heighten disclosure from counter-parties. Gatekeeper guarantors would not only be able to demand that insured parties disclose information, but also they would be able to push insured parties to demand similar disclosures from counter-parties. In this way private contracting and business relationships could potentially accomplish what law may not be able to do: i.e. achieve extra-territorial reach to heighten disclosure and temper risk-taking.⁴⁶

This approach would be especially important in derivatives markets in which counter-parties may be based all over the globe and are therefore subject to a variety of legal regimes. Participants in the American market would have no choice but to work with gatekeeper guarantors, and in turn their best way to reduce costs would be to show that they are providing timely and accurate information flows about their own risks and the risks of their counter-parties. While this approach would not cover transactions with participants who are both outside of US markets, it would result in a significant contrast with the world in heightening greater transparency and lowering risk for those dealing with participants in US markets.

This approach would complement the government’s role in directing regulating the targeted financial activity. But government oversight of gatekeeper guarantors themselves would be a necessary complement to foster faith that private actors would have the financial wherewithal to fulfill this expansive private role. While the gatekeeper guarantor proposal is designed to empower private actors to assess and price risk, markets would want assurance that gatekeeper guarantors possess the financial means to fulfill this private backstop role. Imposing federal or state reserve requirements on gatekeeper guarantors would provide credence that private actors are able to fulfill this role. Reserve requirements would also assist the federal government in providing a clearer picture of the degree to which gatekeeper guarantors would provide a bailout buffer. A big enough wave of financial shock can swamp any ship, but the existence of gatekeeper guarantors would allow government actors to project more plausibly the scope of government support that may be needed.

C. The Significance of Institutional Accountability

One of the primary objectives of mandating gatekeeper guarantors is to create ongoing institutional accountability for systemically significant firms. A system that merely required hedging of individual transactions could be resolved through use of piecemeal derivatives designed to secure coverage (or more cynically to check the box of the regulatory requirement) without having any counter-party aware of the full scope of liability exposure. The concern is that derivative counterparties would have no ongoing relationship with the systemically significant firm (aside from the transaction itself). Derivatives counterparties would therefore have limited means to monitor and shape the other party’s overall risk exposure. Counterparties may be able to provide a better

⁴⁶ See Kenneth A. Bamberger & Andrew T. Guzman, *Keeping Imports Safe: A Proposal for Discriminatory Regulation of International Trade*, 96 CAL. L. REV. 1405, 1408-09 (2008) (discussing the legal and practical limits on government’s extraterritorial reach).

system of accountability than the government or existing gatekeepers provide, but they would still lack the ability or incentive to get a full understanding of the big picture of the targeted firm's risks. The primary constraint on excessive risk taking would be the willingness of market participants to enter into derivatives transactions with the targeted firm if there is growing uncertainty about the firm and/or the broader economy.

The piecemeal approach to covering risk exposure would raise a problem of excessive risk dispersion, similar to what occurred in the mortgage-backed securities market.⁴⁷ Numerous parties would carry risk, but all would have such a small amount of risk in any particular transaction that none would have the incentive to monitor the targeted parties effectively. For example, in the collateralized mortgage obligation context, financial instruments were sliced into so many tranches that owners of these instruments had little incentive to monitor the issuers. End purchasers owned a broad range of collateralized-mortgage obligations from different issuers in the hope that diversification would reduce risks. However, the irony was that owning small amounts of a broad range of collateralized mortgage obligations dramatically magnified risk. The growing risk exposure of individual issuers and issuers in the aggregate was not properly monitored until it was too late.⁴⁸

In contrast, the gatekeeper guarantor approach would be designed to create sustained accountability by creating repeat player relationships with targeted firms rather than a myriad of one-off transactions. Having a single gatekeeper guarantor backstopping each targeted firm would mean that the self-interest of gatekeeper guarantors would be clear cut. The gatekeeper guarantor would have to internalize a percentage of all of the liabilities of its client, and would face restrictions barring it from selling off the risk exposure to third parties (e.g. a prohibition on issuing catastrophe bonds or a functional equivalent to disperse its risk exposure).⁴⁹ This approach would give gatekeeper guarantors strong financial incentives to demand disclosures and conditions in exchange for commitments. This approach would address the problem of risk dispersion. Additionally, gatekeeper guarantors would be in a position to control their own risk exposure. They could actively oversee their clients, and assume a broad enough pool of clients to ensure that they can internalize the cost of their (and their clients') errors of judgment.

⁴⁷ See Stephen L. Schwarcz, *Understanding the Subprime Mortgage Crisis*, 18 J. BANKR. L. & PRAC. 5. 10-11 (2009) (discussing how a high degree of risk dispersion can create a collective-action problem as no party may have sufficient risk exposure to incentivize them to engage in due diligence or risk monitoring).

⁴⁸ See John Kiff & Paul Mills, *Money for Nothing and Checks for Free: Recent Developments in U.S. Subprime Mortgage Markets*, International Monetary Fund, Working Paper 07/188 (2007), at 11, available at <http://www.imf.org/external/pubs/ft/wp/2007/wp07188.pdf> (arguing that the "originate-to-distribute model" of mortgage-backed securities was fatally flawed as it was "driven by fee generation" and "facilitated by risk dispersion and compartmentalization").

⁴⁹ See HOWARD C. KUNREUTHER & ERWANN O. MICHEL-KERJAN, *AT WAR WITH THE WEATHER: MANAGING LARGE-SCALE RISK IN A NEW ERA OF CATASTROPHES* 174-190 (2009) (providing an overview of catastrophe bonds and other risk transfer instruments); see also Bertil Lundqvist, *Catastrophe Bonds as a Method of Securitizing Insurance Risk*, Practicing Law Institute, PLI Order No. A0-0033, at 804-805 (Dec. 1999) (discussing how reinsurers have used catastrophe bonds to externalize risks).

D. Learning From the Mistakes of Bond Insurers

The financial crisis exposed the shortcomings of a form of incomplete gatekeeper guarantor – monoline insurers (“monolines”).⁵⁰ Learning from the inadequacies of monolines in bond insurance is important for understanding how to make a gatekeeper guarantor mandate work. Monolines provide investor guarantees on municipal, state, and corporate bonds.⁵¹ Beginning in the 1970s monolines offered insurance for municipal bonds whose primary credit risk (until recently) was liquidity as their ability to tax tempered their risk exposure.⁵² But as monolines’ appetite for risk and revenues grew they also began offering insurance for structured financial products.⁵³

The fatal flaw of the monolines was that they were thinly capitalized and too aggressive in taking on risk, and as a result were singularly unprepared for the wave of defaults that hit during the financial crisis.⁵⁴ The irony of the monolines is that their downfall came because they functioned in practice as neither gatekeepers nor guarantors. Monoline insurers were not true gatekeepers in that their guarantees served as credit enhancement, a way to laurel and boost perceptions of credit, rather than to serve as a necessary gate for issuing debt like the role of ratings. Monolines also did not function as true guarantors as lax pricing and systematic under-estimation of risks meant they provided the worst of all worlds – a fig leaf of coverage that had little substance. Additionally, no regulatory safeguards existed to ensure that monolines had sufficient reserves to cover financial tsunamis or even market panics. The sole assurance was that bond insurers hadn’t failed in the past,⁵⁵ which proved to be little comfort in the crisis.⁵⁶

⁵⁰ See, e.g., John Patrick Hunt, *Rating Dependent Regulation of Insurance*, 17 CONN. INS. L.J. 101, 165-168 (2010) (discussing how bond insurers’ failure to gauge risks in the run up to the financial crisis raised systemic risks and cast doubts about the viability of the bond insurance industry).

⁵¹ For example, one of the largest monolines, Security Capital Insurance, had a portfolio that was approximately 40% municipal and state debt and 60% corporate and asset-backed debt. See Security Capital Assurance, *Year-End 2007 Operating Supplement* 17-18 (2008).

⁵² See Vikram Nanda & Rajdeep Singh, *Bond Insurance: What is Special About Munis?*, LIX(5) J. OF FIN. 1, 7 (discussing the comparatively lower risk of municipal bond defaults than corporate bond defaults); James P. McNichols, *Monoline Insurance & Financial Guaranty Reserving*, *Casualty Actuarial Soc’y*, 233-35 (2003), available at <http://www.casact.org/pubs/forum/03fforum/03ff231.pdf>.

⁵³ See Robert P. Bartlett, *Inefficiencies in the Information Thicket: A Case Study of Derivatives Disclosures During the Financial Crisis*, J. CORP. L. 1, 4 (2010); Christine Richard, *Ambac, MBIA Lust for CDO Returns Undercut AAA Success*, BLOOMBERG NEWS, Jan. 22, 2008, available at <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aw1Oh4B0Wvv8> (noting that from 2003 to 2008 Ambac’s profit margin averaged 48% and MBIA’s profit margin 39%, which was driven by the rapid expansion of their insurance of CDOs).

⁵⁴ See, e.g., Steven L. Schwarcz, *A Minimalist Approach to State Bankruptcy*, 59 UCLA L. REV. 323, 325 (2011).

⁵⁵ See, e.g., Mahesh K. Kotecha, *The Role of Financial Guarantees in Asset-Backed Securities*, in ISSUER PERSPECTIVES ON SECURITIZATION 95-97 (Frank J. Fabozzi ed., 1998) (discussing the appeal of bond insurers since they had never experienced ratings downgrades).

⁵⁶ See Reuters, *On Appeal, MBIA Wins a Challenge to Its Split*, Jan. 11, 2011, available at http://www.nytimes.com/2011/01/12/business/12mbia.html?_r=0 (discussing the bankruptcy of Ambac the restructuring of MBIA to forestall bankruptcy in the wake of the financial crisis).

In the absence of a mandate for bond guarantees, monolines faced both an adverse selection and risk correlation problem. Weaker or more volatile bond issuers sought the legitimacy of bond insurance, which meant that monolines were left to choose between assets that not only were more vulnerable to shocks but were more likely to deteriorate at the same time.⁵⁷ For example, the leading monolines, MBIA and Ambac, provided insurance for only a small percentage of the amount of CDOs that were issued during the roaring 00s. But this liability exposure was more than enough to sink both companies because their coverage focused on correlated, high risk assets, and they lacked the necessary reserves to cover their obligations.⁵⁸

In contrast, the virtue of a mandate approach for systemically significant sectors is that it would create access to a broader pool of assets and reduce the risks that gatekeeper guarantors are saddled with weak, highly correlated assets. A mandate would give gatekeeper guarantors leverage to impose more stringent criteria for offering coverage or to deny or limit market access to risky actors or assets. In the absence of a mandate gatekeeper guarantors may have incentives to race to the bottom by competing on price and laxity in scrutinizing assets. In contrast, a mandate for coverage would position gatekeeper guarantors to focus on their screening roles and designing safeguards to protect themselves. A mandate would also allow a deeper pool of strong assets implicitly to cross-subsidize weaker assets by potentially providing greater levels of gatekeeper guarantor reserves. A broader pool would not necessarily address the concern of risk correlation, which is a challenge facing any effort to mitigate systemic risks given the interconnections of the financial world.⁵⁹ But this approach would position gatekeeper guarantors to design portfolios of coverage that attempt to mitigate risk correlation concerns.

The imposition of reserve requirements on gatekeeper guarantors would also serve to give gatekeeper guarantors greater leverage. The absence of effective reserve requirements for bond insurance exposed monolines to the temptation to print money by offering guarantees without having any plausible means to pay.⁶⁰ In contrast, regulatory reserve requirements would balance giving gatekeeper guarantors flexibility to assess and price risks, while providing assurance that a cushion of reserves exist. Gatekeeper guarantors could point to reserve requirements to justify higher fees or more stringent conditions, while conveniently blaming the government rather than directly shouldering the blame with clients. Critics may be concerned that reserve requirements could serve as a thin justification for higher fees (and profits), but if reserve requirements create incentives to retain profits than it would advance the objective of building bailout buffers.

⁵⁷ See Michael C. Abramowicz & Ian Ayres, *Commitment Bonds*, 100 GEO. L.J. 605, 622 (2012) (discussing the problems of asymmetric information and adverse selection).

⁵⁸ See Ambac Financial Group Inc., Annual Report (Form 10-K) 59 (2008) (stating that the monoline had exposure for approximately \$29 billion of CDOs at the onset of the crisis in 2007); MBIA Inc., Annual Report (Form 10-K) 66 (2008) (establishing that the company faced liability exposure for approximately \$30 billion of CDOs in 2007).

⁵⁹ See Richard Squire, *Shareholder Opportunism in a World of Risky Debt*, 123 HARV. L. REV. 1151, 1152-55 (2010) (discussing the challenges posed by risk correlation).

⁶⁰ See Robert P. Bartlett, *Inefficiencies in the Information Thicket: A Case Study of Derivatives Disclosures During the Financial Crisis*, J. CORP. L. 1, 4-5 (2010).

Skeptics may point to the shortcomings of monolines as evidence that self-interest may be subordinated to risk seeking behavior amidst market bubbles. But arguably the experience of living through the financial crisis may temper excessive risk seeking by future gatekeeper guarantors. Just as a generation of bankers learned risk aversion the hard way by living in the shadow of bank failures during the Great Depression,⁶¹ actors assuming a guarantee role would learn from the failures of their monoline predecessors. Risk aversion may decline with time as the financial crisis retreats in memory. But it is reasonable to expect that the severity of the financial crisis will foster more conservative risk modeling and a paradigm shift towards “trust but verify” that will give greater plausibility to an expansive gatekeeper guarantor role.

An important additional dimension of this proposal is the requirement that gatekeeper guarantors hold on to the liability they assume, a constraint monolines and other guarantors historically have not faced.⁶² Passing on liability to third parties would allow gatekeeper guarantors to pass the buck of accountability and fuel moral hazard in terms of pricing and screening for risk. In contrast, internalizing potential liability would force gatekeeper guarantors proactively to factor risks into coverage premiums.

The goal of the gatekeeper guarantor approach is to create an additional sea wall to preempt or dampen the force of future financial tsunamis. Just because sea walls, such as monoline insurance, may have been poorly designed and overseen in the past doesn't mean that we should abandon sea walls to hold back future storm surges. The danger of a decentralized approach is that parts of the sea wall may not prove to be as strong as others because of differing approaches to assuming risk. But both the experience and design of a gatekeeper guarantee role, such as reserve requirements, can dampen this risk. In a big enough wave any system of sea walls may be breached and require a government backstop. Nonetheless, by adding a system of circuit breakers and bailout buffers policymakers would have a tool to limit leverage and speculation and reduces systemic threats.

E. Leveraging the Potential of Reinsurers

One key to making this proposal work is finding a pool of actors with a sufficient capital base and the willingness to take on the risks of offering financial guarantees. One plausible candidate is the reinsurance industry which has the experience to assess and the capacity to assume large-scale risks. The virtue of enlisting reinsurers as gatekeeper guarantors would not be that there would not be a need to create gatekeeper guarantors out of whole cloth. Instead, this approach would seek to leverage existing expertise and

⁶¹ See Arthur E. Wilmarth, Jr., *The Transformation of the U.S. Financial Services Industry 1975-2000: Competition, Consolidation, and Increased Risks*, 2002 U. ILL. L. REV. 215, 227 (discussing the risk aversion of the generation of bankers that lived through the Great Depression).

⁶² See, e.g., Robert J. Rhee, *Terrorism Risk in a Post-9/11 Economy: The Convergence of Capital Markets, Insurance, and Government Action*, 37 ARIZ. ST. L.J. 435, 500-502 (2005) (providing an overview of catastrophe bonds which represent a form of risk externalization to third parties).

redirect it to assessing financial risk.⁶³ The same expertise that allows reinsurers to condition insurers' risk taking and gauge liability for natural and man-made catastrophes could be employed to oversee risks in financial contexts.⁶⁴

The long track record of reinsurers would provide benchmarks for new entrants to use in developing their own models for assuming gatekeeper guarantor roles and pricing catastrophic risks. For example, sovereign wealth funds and private equity firms would also have relevant experience in assessing financial risks and the deep pockets to meet reserve requirements.⁶⁵ These financial actors would have incentives to enter the market on their own or partner up with reinsurers to offer the financial wherewithal and experience to take on this new private regulatory role. While this Article will refer to reinsurers from this point on, this term refers to a range of actors who may potentially step into a reinsurance role and be subjected a regulatory framework modified to reflect the challenges of financial reinsurance.

Reinsurers already cover trillions of insurance risk and simultaneously temper and expand the potential for insurance markets.⁶⁶ Reinsurers allow insurance companies to engage in risk pooling by not having to internalize all of the risk of their insurance policies on their own books.⁶⁷ The logic is that each individual insurer can cover a broader basket of risks because it does not have to internalize the full extent of catastrophic losses.⁶⁸ Reinsurance also potentially has diversification benefits in that reinsurers may cover broader cross-segments of markets than any insurer.⁶⁹ Therefore, the reinsurer may have a more stable financial foundation when a catastrophic event disproportionately hits a particular sector. Reinsurers may also enjoy comparative advantages in assessing the probability and impact of catastrophic risks. Since the purpose of reinsurers is to serve as a backstop in extremis, their focus is almost exclusively on assessing the costs of low probability, high impact events. They would have the incentives to temper the more optimistic assumptions of insurers to ensure that

⁶³ See, e.g., Aviva Abramovsky, *Reinsurance: The Silent Regulator*, 15 CONN. INS. L.J. 345, 375-77 (2009) (discussing the private regulatory role that reinsurers play in shaping insurers' risk taking in underwriting and claims handling).

⁶⁴ See Lawrence A. Cunningham, *Securitizing Audit Failure Risk: An Alternative to Caps on Damages*, 49 WM. & MARY L. REV. 711, 771 (2007) (discussing the statistically based risk modeling that reinsurers use to gauge and price catastrophic risk exposure).

⁶⁵ For example, sovereign wealth funds' access to substantial long-term funding makes them able to endure short-term fluctuations and promote "economic growth and job production . . . and economic stability." MARTIN A. WEISS, CONG. RESEARCH SERV., SOVEREIGN WEALTH FUNDS: BACKGROUND AND POLICY ISSUES FOR CONGRESS 334, 335 (2009), available at <http://fpc.state.gov/documents/organization/110750.pdf>.

⁶⁶ See Thomas Holzheu & Roman Lechner, *The Global Reinsurance Market*, in INTERNATIONAL INSURANCE MARKETS (J. David Cummins & Bertrand Vernard eds. 2003) 877, 881-883 (laying out the scale of the global reinsurance industry).

⁶⁷ See ROBERT H. JERRY, II, UNDERSTANDING INSURANCE LAW § 140(a), at 1015 (4th ed. 2007) (framing reinsurance as "essentially insurance for insurance companies").

⁶⁸ See ROBERT H. JERRY, II, UNDERSTANDING INSURANCE LAW § 141, at 1056 (4th ed. 2007) (noting that reinsurance helps to guarantee that insured parties are not wiped out by a single catastrophic event).

⁶⁹ See Robert J. Rhee, *Terrorism Risk in a Post-911 Economy: The Convergence of Capital Markets, Insurance, and Government Action*, 37 ARIZ. ST. L.J. 435, 519 (2005) (discussing the benefits from reinsurers' diversification of risks).

they wouldn't be left holding the bag in terms of the ultimate liability exposure. Lastly, the use of reinsurers would provide a signal to the marketplace that not only does the insurer have (at least a partial) backstop, but also that the reinsurer is willing to put its reputation on the line to vouch for the insurer.

Under a reinsurance treaty, reinsurers assume liability for a percentage of an insurers' business.⁷⁰ The focus of the reinsurer is on assessing the underwriting standards, track record, and overall liability exposure the insurer is taking on.⁷¹ Reinsurers employ a variety of approaches for allocating risk between the insurers and reinsurers. Under a quota share or pro rata approach, reinsurers take on a specific percentage of liability exposure for all losses that a reinsurer faces in exchange for sharing a parallel percentage of the insurers' net premiums.⁷² The vice and virtue of this approach is that the reinsurer functions as a syndicate participant with the insurer. The reinsurer is looking over the shoulder of the insurer in terms of monitoring underwriting standards, risk management, and overall liability exposure. While the reinsurer is outsourcing the risk screening, it shares in the risk exposure in proportion to the percentage of premiums it receives.

Under an excess of loss approach, the reinsurer covers losses above an agreed upon level or covers a percentage of losses above a given threshold. The logic behind this approach is that the insurer has to internalize the first level of exposure of loss, so that it has to bear the primary consequences of its own risk taking. The reinsurer steps in as a backstop for all or part of the liability after the agreed upon threshold.⁷³ In other words the reinsurer focuses on the catastrophic losses, while leaving ordinary loss concerns to the insurer. Both the pro rata and excess of loss approaches would be potentially applicable to this Article's proposal. While the excess of loss approach would focus reinsurers more clearly on catastrophic risks, both approaches would add a private backstop and monitoring role to temper insurers' risk taking.⁷⁴

⁷⁰ See ROBERT H. JERRY, II, UNDERSTANDING INSURANCE LAW § 140(b), at 1054 (4th ed. 2007) (explaining that “[m]ost reinsurance is treaty reinsurance,” which can be framed as “automatic reinsurance” in which the reinsurer commits to cover a percentage of the insurers' liability exposure or a percentage above a set threshold – excess basis – for a stated period).

⁷¹ Alternatively, reinsurers may also embrace facultative reinsurance (case-by-case assumption of insurance risks) or automatic facultative reinsurance agreements (in which reinsurers assume specified types of risks for a given line of business). See Donald A. McIsaac & David F. Babbel, *The World Bank Primer on Reinsurance*, Policy Research Working Paper 1512, at 4 (1994). The focus of this article is on the reinsurance treaty approach that makes reinsurers serve as institutional backstops.

⁷² See BARRY OSTRAGER & THOMAS NEWMAN, HANDBOOK ON INSURANCE COVERAGE DISPUTES § 1502(a), at 993 (12th ed. 2003) (observing that under a pro-rata reinsurance contract the reinsurer shares a percentage of the insurance premium in exchange for taking on a corresponding portion of the liability risk).

⁷³ See BARRY OSTRAGER & THOMAS NEWMAN, HANDBOOK ON INSURANCE COVERAGE DISPUTES § 1502(b), at 994 (12th ed. 2003).

⁷⁴ See GRAYDON S. STARING, THE LAW OF REINSURANCE § 1(1), at 4 (Supp. 2008) (arguing that the virtue of both pro rata and excess of loss approaches is that the reinsured party “retains a sufficient amount of the risk to give the reinsurer confidence that the policy will be well administered”).

F. Designing Reserve Requirements to Ensure Financial Wherewithal

Combining reserve requirements and government monitoring with an expanded role for reinsurers would be necessary to avoid the danger that reinsurers become straw men providing a fig leaf of oversight, yet in reality legitimizing reckless risk taking.⁷⁵ One virtue of enlisting reinsurers as gatekeeper guarantors is that state regulation already applies based on the state of incorporation.⁷⁶ State regulators subject reinsurers to similar oversight as insurers, which means coopting reinsurers as gatekeeper guarantors offers a backdoor way to incorporate some of the elements of both the private and public regulation of insurance.⁷⁷

Reinsurers, however, face a lighter touch of oversight than insurance companies, particularly in regard to reserve requirements which would need to be significantly expanded to ensure reinsurers' financial whereithal. The nature of financial reinsurance may also require federal, rather than state oversight due to the clear inter-state and international nature of the risks.

While insurance pricing is a heavily regulated area that attempts to protect consumers, state regulation does not extend to the pricing of reinsurance as it is assumed that insurers and reinsurers are both sophisticated parties.⁷⁸ Giving reinsurers flexibility to price risk is consistent with the underlying objective of empowering gatekeeper guarantors to perform this role. Insurers are subject to reserve requirements to guarantee their solvency, but state regulators' deference to reinsurers in pricing unfortunately extends to reserve requirements.⁷⁹

One lesson from bond insurers' shortcomings during the financial crisis is that reserve requirements are needed to ensure that faith in reinsurers' financial integrity is justified.⁸⁰ This goal could be achieved by extending more stringent insurance reserve requirements to the reinsurance context or by designing risk-based capital requirements

⁷⁵ In the absence of reserve requirements reinsurers may gamble that they will never have to cover defaults and therefore, if regulators cast a blind eye, they could undercut legitimate reinsurers and undermine the credibility of the reinsurance market. Similarly, it would be important to address the captive reinsurer problem. For example, large banks often have reinsurance affiliates, and policymakers would want to keep them out of any reinsurance role for bank affiliates to avoid the danger of rubber stamping risk.

⁷⁶ See Reinsurance Reform Act of 2009, Sept. 9, 2009 (eliminating extraterritorial application of state laws and promoting more efficient solvency regulation of reinsurers by providing for a single state to oversee reinsurers).

⁷⁷ See HAL S. SCOTT, CAPITAL ADEQUACY BEYOND BASEL: BANKING SECURITIES AND INSURANCE 110 (providing an overview of state oversight of reinsurers).

⁷⁸ See GOVERNMENT ACCOUNTABILITY OFFICE, INSURANCE REGULATION: STATE REINSURANCE OVERSIGHT INCREASED, BUT PROBLEMS REMAIN 24-26 (May 4, 1990) (explaining that while state insurance policies are highly regulated, reinsurance contracts are rates are generally not subject to direct regulation).

⁷⁹ See HAL S. SCOTT, CAPITAL ADEQUACY BEYOND BASEL: BANKING SECURITIES AND INSURANCE 110-112.

⁸⁰ See, e.g., Christine Richard, *Ambac, MBIA Lust for CDO Returns Undercut AAA Success*, BLOOMBERG NEWS, Jan. 22, 2008 (discussing how Ambac's and MBIA's zeal for short-term profits led to under-estimation of the risks of insured bonds).

that reflect the information asymmetries and uncertainties reinsurers face vis-à-vis the insured parties. Risk-based capital rules could be adapted from the insurance and the financial institution context to both benchmark the percentage of reserves needed for types of asset classes (or lines of business) that are insured and to design asset-to-capital ratios that delineate the degree to which different types of capital qualify as reserves.⁸¹ For a system of risk-based capital requirements to work, reserve requirements would need to be coupled with periodic reporting requirements of qualitative and quantitative data to facilitate government oversight, as well as a framework for preventive and corrective action when capital thresholds are breached.

A federal insurance regulator would be best suited to administer risk-based capital requirements. For example, one downside of vesting responsibility for setting and overseeing reserve requirements with state regulators is that reinsurers would have incentives to engage in forum shopping to choose the most minimal reserve requirements. A related concern is that state insurance regulators may not have the competence or ability to oversee a redefined reinsurance role that intersects with the securities world. Conventional home, life, or even automobile insurance fit within state auspices as it is reasonable to expect that state insurance commissioners can understand and address these risks. In contrast, financial issues are both inter-state and international in nature and may push the competency expectations for state insurance regulators beyond plausibility.

For this reason it would be desirable to federalize reinsurance oversight or at minimum to set a floor of federal reserve requirements for state-based regulation.⁸² The Dodd-Frank Act created a Federal Insurance Office (FIO), which represents a modest first step towards a federal role in insurance regulation.⁸³ The FIO is an office within the Treasury Department which has advisory, coordinating, and monitoring roles concerning insurance issues, but has no authority to do anything more than make recommendations about insurance-related systemic risk concerns.⁸⁴ However, expanding federal oversight of insurance remains part of the financial reform agenda as the FIO is currently conducting a study to make recommendations to Congress about whether and to what

⁸¹ See, e.g., National Association of Insurance Commissioners, *The United States Insurance Financial Solvency Framework* 18-19 (2010) (providing an overview of best practices in calculating risk-based capital for an insurers based on the degree of risks of insured assets or lines of business); Scott E. Harrington, *Capital Adequacy in Insurance and Reinsurance*, in HAL SCOTT ED., *CAPITAL ADEQUACY BEYOND BASEL* (2005) (discussing capital-to-asset ratios for non-life U.S. insurance companies).

⁸² It may seem counter-intuitive that an article calling for the decentralization of financial oversight by enlisting reinsurers as gatekeeper guarantors would call for the centralization of government oversight of reinsurers. The logic is that establishing a floor of oversight and accountability of reinsurers will help to ensure that reinsurers are not straw men and instead will internalize the incentive effects created by their assumptions of potential derivatives liability.

⁸³ See Federal Insurance Office Mission Statement, available at <http://www.treasury.gov/about/organizational-structure/offices/Pages/Federal-Insurance.aspx>.

⁸⁴ The one substantive aspect of the Federal Insurance Office is its role in the Orderly Liquidation Authority's wind-up of insurance companies and holding companies whose largest business component is insurance. The FIO and Federal Reserve Board must agree on a systemic risk determination to trigger the Orderly Liquidation Authority's wind-up process. See 12 U.S.C. § 5383(a)(1)(A)-(C).

extent there is a need for a federal insurance role.⁸⁵ It is unclear whether an office of the Treasury Department is the appropriate place to silo a federal insurance and reinsurance regulator, or whether it should be a freestanding agency or part of a financial regulator, such as the SEC. But having a federal regulator set minimum state standards for reinsurance regulation and reserve requirements or assume direct authority would provide additional safeguards against the emergence of reinsurer straw men.

There would be a learning curve for a federal insurance regulator overseeing both insurance and the expanded reinsurance role discussed in this Article. But the systemic risk concerns are comparable to other financial risk areas already overseen by the federal agencies. At minimum having national oversight or a common state standard would alleviate concerns about underfunded reinsurers by setting uniform reserve requirements for reinsurers based on the dollar amount of derivative risk they are guaranteeing.⁸⁶

This proposal's reinsurance mandate for derivatives seeks to unlock the potential of reinsurers to leverage their self-interest and ability to oversee the derivatives' industry. But this approach also recognizes that relying purely on private ordering would raise its own dangers. That is part of the appeal of coopting the reinsurance industry as gatekeeper guarantors as it would facilitate building on existing government safeguards (and a potentially expanded federal role) to ensure that reinsurers face credible oversight and reserve requirements.

G. The Degree of Gatekeeper Guarantor Liability Exposure

The virtue of a gatekeeper guarantor mandate is that it would add a private layer of oversight of systemic risks, yet result in minimal direct costs on the federal government. Guarantors would independently negotiate the terms of the guarantees, conduct their own oversight of clients, and enforce any claims they may have for breach of guarantee conditions.

One challenging question is what level of coverage should be mandated, whether under a quota or an excess of loss approach. Regulators may want as high a level of coverage as possible since the larger the private backstop is, the lower the burden of defaults may be on the government. But the tradeoff is that the higher the mandate of liability exposure, the more it will test, if not overwhelm, the capacity of the reinsurance industry (or other gatekeeper guarantor entrants), as well as reduce the number of actors willing to participate in the market. The irony may be that the higher the level of the percentage of liability covered by reinsurers, the greater the chance that reinsurers will be unable to live up to their obligations during a crisis, as occurred to many bond insurers

⁸⁵ The Dodd-Frank Act mandates that the Federal Insurance Office conduct a study for Congress assessing the merits of state insurance regulation and make recommendations about whether federal insurance regulation is needed to complement the state role. This report was initially due on January 21, 2012, but like many parts of the Dodd-Frank Act has been delayed. *See* Dodd-Frank Wall Street Reform and Consumer Protection Act § 502(a), § 313(c), (p), 124 Stat. at 1580, 1585-87.

⁸⁶ *See* Steve Tuckey, *Working Toward the Creation of a Federal Reinsurance Charter*, RISK & INSURANCE, Aug. 1, 2009 (laying out the merits of the creation of a federal charter for reinsurers to offer an alternative to state-based regulation).

during the recent crisis.⁸⁷ That outcome would thwart the purpose of the gatekeeper guarantor mandate. If that were the case, both the reinsured parties and the reinsurers would be tempted to anticipate government intervention and may take or allow more reckless risk taking.

As a result, regulators should err on the low end in terms of liability exposure that gatekeeper guarantors should assume. The goal should be to create a high enough percentage of liability to induce active monitoring by gatekeeper guarantors without making coverage provision unappealing or unsustainable. For this reason, an excess of loss approach may have the most appeal with a modest level of liability exposure. A plausible benchmark would be gatekeeper guarantor liability coverage of 5 to 10% of all losses above a set strike point of losses.⁸⁸ This figure is a hybrid of public and private conceptions of how much risk exposure is sufficient to incentive effective oversight. The Dodd-Frank Act's "skin-in-the-game" rules require originators of mortgage-backed securities to retain 5% of the liability exposure.⁸⁹ In contrast, longstanding market practices among banks require originators of loan participation interests to retain at least 10% of the liabilities.⁹⁰

The 5 to 10% liability exposure is even more plausible in the reinsurance context since reinsurers, unlike originators, would be unable to design deals in a way that cherry picks liability exposure.⁹¹ This threshold of liability exposure would give gatekeeper guarantors incentives to condition coverage on regular updates from insured parties about their degree of expected losses and actual losses and remedial measures to ensure liquidity. In turn, gatekeeper guarantors would then have a window for pressing their clients to alter their risk exposure before they would have to start internalizing part of their clients' losses. This approach would leverage the potential of gatekeeper guarantors as circuit breakers who would have the power and the opportunity to pressure their clients to modify their risk profile if they appear over-extended.

⁸⁷ See John Patrick Hunt, *Rating Dependent Regulation of Insurance*, 17 CONN. INS. L.J. 101, 165-168 (2010) (discussing the shortcomings of bond insurers to gauge risks in the run up to the financial crisis).

⁸⁸ It is important to note that this percentage of liability exposure for derivatives would be significantly less than reinsurers typically assume under a pro rata or excess of loss approach for conventional insurance. This approach would make the reinsurance industry's assumption of derivatives' liabilities more plausible as the monitoring role could be achieved without the industry's serving as a comprehensive backstop. See ROBERT H. JERRY, II, UNDERSTANDING INSURANCE LAW § 140(b), at 1054-55 (4th ed. 2007) (observing that insurers may shift upwards of 40% of liability to reinsurers under an excess of loss approach).

⁸⁹ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 941(b), 124 Stat. 1376, 1891 (2010) (requiring originators and securitizers must have skin in the game by retaining at least 5% of the value of residential mortgage-backed securities they issue).

⁹⁰ See Steven L. Schwarcz, *Protecting Financial Markets: Lessons from the Subprime Mortgage Meltdown*, 93 MINN. L. REV. 373, 389 (2008) (discussing how banks in buying loan participating interests require the originator to retain "typically at least ten percent" of the liability exposure).

⁹¹ See, e.g., Charles K. Whitehead, *The Evolution of Debt: Covenants, The Credit Market, and Corporate Governance*, 34 J. CORP. L. 641, 647 (2009) (discussing the moral hazard of mortgage-backed securities originators' cherry-picking the mortgages that they foisted on investors while keeping the best mortgages for their own balance sheets).

II. The Appeal of a Reinsurance Mandate for Derivatives

Over-the-counter (“OTC”) derivatives epitomize both the potential and pitfalls of financial innovation and the challenges of public and private efforts to oversee risk taking on Wall Street.⁹² For this reason derivatives serve as a valuable case study for considering the potential for gatekeeper guarantors to complement the government’s management of systemic risk. OTC derivatives account for an almost \$450 trillion dollar notional market that covers almost every conceivable type of risk.⁹³ These instruments empower participants to hedge against foreseeable risks or to engage in speculation with unprecedented leverage, all while circumventing the constraints of securities, insurance, and gambling law.⁹⁴

Throughout the exponential growth of derivatives over the past twenty years Congress scaled back regulation of derivatives and largely deferred to industry self-regulation.⁹⁵ However the role of derivatives in the collapse of AIG and Lehman

⁹² The defining feature of derivatives is that their value is derived from the value of the underlying asset, such as a specific equity, commodity, index, interest rate, or exchange rate. In theory parties can design derivatives based on changes in almost any conceivable instrument that raises insurable risks. See Henry T.C. Hu, *Misunderstood Derivatives: The Causes of Informational Failure and the Promise of Regulatory Incrementalism*, 102 YALE L.J. 1457, 1465 (1993).

⁹³ See Henry T.C. Hu, *The SEC Speaks in 2010 – Testimony Concerning the Over-the-counter Derivatives Market Act of 2009 Before the House Committee on Financial Services*, 1784 PLI/Corp 421, 423 (Oct. 7, 2009).

⁹⁴ See Thomas Lee Hazen, *Disparate Regulatory Schemes for Parallel Activities: Securities Regulation, Derivatives Regulation, Gambling, and Insurance*, 24 ANN. REV. BANKING & FIN. L. 375, 401-412, 416-425 (1995) (explaining how derivatives has fallen through the cracks of securities, gambling, and insurance regulation and explaining the parallels between derivatives and insurance); Frank Partnoy & David A. Skeel Jr., *The Promise and Perils of Credit Derivatives*, 75 U. CIN. L. REV. 1019, 1020-21 (2007) (discussing the significant benefits and costs from the central role that credit derivatives play in financial markets).

⁹⁵ See, e.g., Willa E. Gibson, *Investors Look Before You Leap: The Suitability Doctrine is Not Suitable for OTC Derivatives Dealers*, 29 LOY. U. CHI. L.J. 527, 531-32 (1998) (arguing that OTC derivatives transactions should be viewed as arms-length transactions which do not require more invasive regulation); Kimberly D. Krawiec, *More Than Just “New Financial Bingo”: A Risk-Based Approach to Understanding Derivatives*, 23 J. CORP. L. 1, 4-5 (1997) (arguing that since derivatives markets are a zero-sum game, regulation is appropriate only with respect to risks that threaten the financial system as a whole); Jonathan R. Macey, *Derivative Instruments: Lessons for the Regulatory State*, 21 J. CORP. L. 69, 82-93 (1995) (arguing that the economic function of largely unregulated derivatives is no different than other traditional financial instruments and that derivatives should not be regulated); Saul S. Cohen, *The Challenge of Derivatives*, 63 FORDHAM L. REV. 1993, 1995-96 (1995) (arguing that additional federal regulation of derivative securities would be expensive and counterproductive); Commodity Futures Modernization Act, Pub. L. No. 106-554, 114 Stat. 2763 (2000) (codified as amended in scattered sections of 7 U.S.C) (excluding a broad range of derivatives transactions from the SEC’s and CFTC’s jurisdiction, leaving them subject only to industry self-regulation). But see Brooksley Born, *International Regulatory Responses to Derivatives Crises: The Role of the U.S. Commodity Futures Trading Commission*, 21 NW. J. INT’L L. & BUS. 607, 607-08 (2001) (discussing the CFTC’s cooperation with foreign regulators to resolve derivatives crises and arguing for greater international cooperation and harmonization in the future to oversee the derivatives industry); Lynn Stout, *Why The Law Hates Speculators: Regulation and Private Ordering in the Market for OTC Derivatives*, 48 DUKE L.J. 701, 702 (1999) (calling for derivatives to be regulated as common law speculative contracts, which are permitted yet legally unenforceable in court and to require private ordering alone to ensure performance of these agreements); Lynn Stout, *Betting The Bank: How*

Brothers and the broader crisis underscored the systemic risks posed by derivatives and belatedly spurred Congress to action in the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010.⁹⁶ The daunting challenge Congress faced in derivatives reform was how to establish accountability, curb leveraged speculation that poses systemic risks, and provide a solvency backstop for an industry whose notional value dwarfs the world's economy. Congress recognized the desirability of private oversight by requiring OTC derivatives to be traded on exchanges and that clearing and settlement of trades take place on and be backed by central clearinghouses.⁹⁷

The recognition of the need for private oversight of risk exposure was a key step of progress. The problem is that Congress's strategy of making central clearinghouses for OTC derivatives contracts the focal point for regulation and risk management may perversely magnify the systemic risks that reforms are intended to address. Mandating that all OTC derivatives' contracts are publicly disclosed and traded on exchanges is useful in heightening standardization and transparency, but adds little additional value.⁹⁸ The focal point of derivatives reforms is the clearing requirement, which entails netting of participants' liabilities and the clearinghouse's commitment to ensure transactions will be completed.⁹⁹ This role positions clearinghouses to impose capital and margin requirements on participants ex ante. In theory the mandate empowers clearinghouses to impose capital calls on all clearinghouse participants ex post to cover defaults.¹⁰⁰ While the Securities & Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC) share joint authority in overseeing the clearinghouses,¹⁰¹ the efficacy of reform turns on whether clearinghouses have the means and incentives to oversee their membership and manage systemic risks.

Derivatives Trading Under Conditions of Uncertainty Can Increase Risks and Erode Returns in Financial Markets, 21 J. CORP. L. 53, 67-68 (1995) (arguing that even in the absence of a system-wide crisis, the uncertainties and risks created by speculative derivatives trading reduces net social welfare by reducing the welfare of derivatives traders themselves).

⁹⁶ See Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), Pub. L. No. 111-203, 124 Stat. 1376 (2010) (to be codified in scattered sections of 12 U.S.C.).

⁹⁷ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 723(a), 124 Stat. 1376, 1675-76, 1681 (2010) (to be codified at 7 U.S.C. § 2); see also Michael Greenberger, *Overwhelming a Financial Regulatory Black Hole With Legislative Sunlight: Dodd-Frank's Attack on Systemic Economic Destabilization Caused by an Unregulated Multi-Trillion Dollar Derivatives Market*, 6 J. BUS. & TECH. L. 127, 155-66 (2011).

⁹⁸ See David E. Skeel, Jr. & Thomas H. Jackson, *Transaction Consistency and the New Finance in Bankruptcy*, 112 COLUM. L. REV. 152, 193 (2012) (discussing the virtues of greater standardization and transparency from exchange trading of OTC derivatives).

⁹⁹ Clearinghouses "clear" trades by calculating the net payment obligations between participants. Clearinghouses "settle" trades by overseeing the exchange of funds that concludes the transaction. See Iman Anabtawi & Steven L. Schwarcz, *Regulating Systemic Risk: Towards an Analytic Framework*, 86 NOTRE DAME L. REV. 1349, 1384 (2011).

¹⁰⁰ See David E. Skeel, Jr., *Inside-Out Corporate Governance*, 37 J. CORP. L. 147, 198 (2011).

¹⁰¹ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 716 (to be codified at 12 U.S.C. § 8305).

The challenge is that clearinghouses are potentially subject to substantial influence from industry participants.¹⁰² The concern is that clearinghouses may function largely as the sum of their parts of market participants, rather than to serve as genuinely independent gatekeepers. The dilemma is that the compensation of clearinghouses depends on both the volume and scale of transactions, and the willingness of market makers to use their services. For this reason, both clearinghouses and individual participants may have little incentive to take preemptive steps to temper excessive leverage while bubbles grow. Instead, clearinghouse participants may have incentives to double down on risk exposure. Both the clearinghouses and individual participants may trust that large enough collective liability exposure in the event of a crisis will almost guarantee government bailouts to avoid a disastrous domino effect.¹⁰³

The limits of clearinghouses suggest the need to consider other alternatives for private monitoring and accountability. The enlistment of gatekeeper guarantors could fill this oversight gap. Derivatives were originally designed to sidestep onerous state insurance regulation.¹⁰⁴ A gatekeeper guarantor approach would recognize derivatives' roots by treating derivatives as a proxy for insurance hedging and mandating third-party reinsurance coverage for derivatives' transactions. Creating a reinsurance mandate would build on the long-standing practice of insurers' contracting with reinsurers to serve as a liability backstop. In exchange for an up-front payment, reinsurers would assume a percentage of a given insurer's liability exposure in the event of defaults.¹⁰⁵

This approach to managing systemic risk would empower third-party reinsurers to perform self-interested gatekeeping roles in overseeing derivatives' participants and conditioning their leverage in preemptive ways. Because reinsurers would stand to lose if derivatives' participants proved to be insolvent, reinsurers would have strong incentives to monitor the extent of their clients' liability exposure and ability to live up to their obligations on a daily basis. Reinsurers would have leverage to demand any and all

¹⁰² The role of even ostensibly independent clearinghouses as pawns of clearinghouse participants is underscored by the fact that derivatives' participants, rather than clearinghouses, have taken the lead in shaping the contours of debate on regulatory reforms. See, e.g., March 1, 2010 letter from the 26 Leading Derivatives Participants to Federal Reserve Bank of New York (detailing the voluntary steps they will take to enhance transparency of the industry and the role of clearinghouses in risk management for OTC derivatives), available at http://www.newyorkfed.org/newsevents/news/markets/2010/100301_letter.pdf.

¹⁰³ This problem is magnified by the fact that derivatives' counterparties have strong incentives under bankruptcy law to push the other party into default in order to ensure priority for their claims. See, e.g., Frank Partnoy & David A. Skeel Jr., *The Promise and Perils of Credit Derivatives*, 75 U. CIN. L. REV. 1019, 1034-1035 (2007) (explaining that derivatives may create perverse incentives for investors to force debtors into default and thus wasting corporate assets and magnifying overall systemic risks); Mark J. Roe, *The Derivatives Market's Payment Priorities as Financial Crisis Accelerator*, <http://ssrn.com> (Stanford Law Review forthcoming) (discussing how private monitoring of risk by counterparties failed because derivatives' super-priorities in the bankruptcy code undercut the incentives for scrutiny of counterparties' scrutiny, a problem which the Dodd-Frank Act failed to correct).

¹⁰⁴ Lynn Stout, *Why The Law Hates Speculators: Regulation and Private Ordering in the Market for OTC Derivatives*, 48 DUKE L.J. 701, 703-05 (1999).

¹⁰⁵ See BARRY OSTRAGER & THOMAS NEWMAN, HANDBOOK ON INSURANCE COVERAGE DISPUTES § 1502(a), at 993 (12th ed. 2003) (observing that under a pro-rata reinsurance contract the reinsurer shares a percentage of the insurance premium in exchange for taking on a corresponding portion of the liability risk).

information necessary to justify the commitment to serve as a backstop for a derivatives' participant and to condition additional derivatives' exposure on further disclosures and the reinsurer's consent. As importantly, the repeat-player status of reinsurers would position them to force derivatives' participants to price in changes in risk exposure into their agreements as events unfold. Reinsurers would also be able to require derivatives participants to take additional preemptive steps if signs of shifts in risk arise (e.g. anticipatory increases in reserves in anticipation of market changes).

A. The Logic Behind Clearinghouses

Mandating that OTC derivatives transactions be traded on exchanges and cleared and settled by clearinghouses serves a constructive purpose in heightening transparency and disclosure and reducing settlement risks.¹⁰⁶ Making the amount of OTC derivatives contracts more transparent through exchange trading helps to inform markets about the scope of each participant's risks and makes it easier to gauge system-wide risk exposure.¹⁰⁷ As importantly, clearinghouses are designed to mitigate transaction risks. The basic process is straightforward. OTC derivative counterparties enter into trades through electronic trading systems or exchanges, such as the Eurex US trading platform. Once the trading platform executes the trade, the clearinghouse not only registers the trade and nets the liabilities, but also effectively steps into the shoes of the parties on both sides of the trade to guarantee that the trade will be completed.

In order to safeguard against default by participants, the clearinghouse imposes collateral and margin requirements on each party. Clearinghouses enforce margin requirements on a rolling basis, determine mark-to-market value of all open positions on a daily basis, and net each participants' liability obligations.¹⁰⁸ In the event of defaults, the clearinghouse typically either has a fund to cover losses (collected from clearinghouse participants) or more importantly has the power to impose capital calls on all clearinghouse participants ex post to cover actual losses.¹⁰⁹

The result of these related functions is that clearinghouses serve a positive role in mitigating settlement risks. Netting of participants' offsetting transactions, requiring margin deposits, assessing mark-to-market value of trades and collateral, and disclosing

¹⁰⁶ See, e.g., DEP'T OF THE TREASURY, FINANCIAL REGULATORY REFORM: A NEW FOUNDATION 46-47 (June 17, 2009); Reforming U.S. Financial Market Regulation: Hearing Before the Senate Committee on Agriculture, 111th Cong. (Nov. 18, 2008) (statement of Gary Gensler, Chairman, Commodity Futures Trading Commission).

¹⁰⁷ See David E. Skeel, Jr. & Thomas H. Jackson, *Transaction Consistency and the New Finance in Bankruptcy*, 112 COLUM. L. REV. 152, 193 (2012). Greater transparency will help to mitigate the uncertainties about derivative exposure that fueled the financial crisis. See See Viral V. Acharya & Matthew Richardson, Mortgage Origination and Securitization in the Financial Crisis, in *Restoring Financial Stability: How to Repair a Failed System* 61, 74 (Viral V. Acharya & Matthew Richardson eds., 2009); Frank Partnoy, *Historical Perspectives on the Financial Crisis: Ivar Kreuger, the Credit-Rating Agencies, and Two Theories About the Function, and Dysfunction, of Markets*, 26 YALE J. ON REG. 431, 436 (2009) (discussing how banks' CDO exposure was virtually no-existent until collateral requirements began in September 2008).

¹⁰⁸ See David E. Skeel, Jr., *Inside-Out Corporate Governance*, 37 J. CORP. L. 147, 198 (2011).

¹⁰⁹ See Adam J. Levitin, *In Defense of Bailouts*, 99 GEO. L.J. 435, 455-456 (2011).

the nature and scale of participants' exposure all serve to shed light on the derivatives' industry to both participants and markets as a whole. The problem is that clearinghouses' incentives in practice are likely far different than advertised, which undermine their risk reducing role.

B. The Clearinghouse Critique

Two significant concerns may compromise the ability of clearinghouses to perform a gatekeeping role. First, clearinghouses may lack the requisite independence from their members or participants to identify and defuse risks to the financial system in a preemptive way. Second and far worse, the use of central clearinghouses may ironically magnify the potential for systemic risks to overwhelm the financial system by incentivizing firms to pass on counterparty default risks to clearinghouses and ultimately to the federal government.¹¹⁰

The question of clearinghouse independence turns in part on their structure. Traditionally, clearinghouses were literally the sum of their parts as an umbrella organization for member financial firms to engage in transactions. Mutualization meant that every member firm had a stake in the clearinghouse, but it also meant that members and the clearinghouse as a whole potentially had incentives to turn a blind eye to a members' financial difficulties until it was too late since all were part of a cozy club.¹¹¹ The "business" of a mutually owned clearinghouse or exchange was implicitly the business of its members. Even self-interested measures to protect the exchange may fall prey to the furtherance of members' short-term interests.

The moral hazard may ironically be even more stark in the context of ostensibly independent clearinghouses, which form the overwhelming majority of clearinghouses today. In the case of clearinghouse owned by their members, it appears hard to avoid the implication that member firms ought to be accountable for fellow members' defaults. In contrast, independently owned clearinghouses offer the appearance of true autonomy. However, they are dependent on the leading players for most of their revenue streams. Therefore, they may be vulnerable to industry influence and the at times reckless approach to leverage and risk their members embrace.

The example of the Clearing Corporation underscores how the appearance of independence may belie the reality and impact of Wall Street firms concentrating their risks in a handful of clearinghouses. While its predecessor company was founded in 1925 as an independent commodities clearinghouse, the Clearing Corporation's modern incarnation as an OTC derivatives' clearinghouse for the major banks stems from

¹¹⁰ See, e.g., Iman Anabtawi & Steven L. Schwarcz, *Regulating Systemic Risk: Towards an Analytic Framework*, 86 NOTRE DAME L. REV. 1349, 1384 (2011) (expressing concern that central clearing may perversely centralize risk in clearinghouses); Craig Pirrong, *Derivatives Clearing Mandates: Cure or Curse?*, 22(3) JOURNAL OF APPLIED CORPORATE FINANCE 48, 50-52 (2010) (discussing how mandatory clearing of derivatives on exchanges/clearinghouses may potentially increase systemic risks).

¹¹¹ See Stavros Gadinis & Howell E. Jackson, *Markets as Regulators A Survey*, 80 S. CAL. L. REV. 1239, 1245-48 (2007) (discussing the incentives facing participants in mutualized exchanges and clearinghouses).

December 20, 2007.¹¹² Twelve major global dealers in OTC derivatives, Eurex, Europe's largest derivatives' exchange, three inter-dealer brokers, and the leading OTC service provider joined forces to create a member-owned clearinghouse for OTC derivatives. The list of major global dealers included almost every major financial institution (at the time): Bank of America, Bear Stearns, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, J.P. Morgan, Lehman Brothers, Merrill Lynch, MF Global, Morgan Stanley, and UBS.¹¹³

The emergence of the Clearing Corporation as a clearinghouse for OTC derivatives anticipated Congress's current legislative mandate for OTC derivatives' contracts to pass through clearinghouses.¹¹⁴ But unfortunately it also exposed the danger that central clearinghouses could exacerbate systemic risks. By placing most of the major financial institutions' derivatives contracts under one roof, the industry ensured that the clearinghouse would serve to magnify interconnections among the parties and the systemic risks posed by defaults by one or more of their parties. If one or more of its members' failed, then the clearinghouse's role as a centralized backstop all but guaranteed the industry leverage to demand a government bailout.¹¹⁵ Ironically, the timing of the formation of the Clearing Corporation as a clearinghouse for OTC derivatives could not have been better for the industry's members as it provided an institutional framework for coordinating industry efforts to outsource liability to the American taxpayers.

The financial crisis provided an immediate test case for the ability of the clearinghouse to manage systemic risks. It is possible that but for the existence of clearinghouses such as The Clearing Corporation uncertainties surrounding the scope of derivatives' liability could have been greater, which could have triggered an even larger crisis. Advocates of a central clearinghouse approach can also argue that the problem was that not enough entities were participating in clearinghouses at the time of the crisis, which sparked greater uncertainties. But the most damning indictment of clearinghouses throughout the recent crisis was that there was no affirmative evidence that clearinghouses were able to mitigate systemic risks and prevent a domino effect in the event of their members' collapses. Three of the twelve members of The Clearing Corporation literally collapsed during the crisis (Bear Stearns, Merrill Lynch, and Lehman Brothers). Two others: Bank of America and Citigroup effectively became wards of the state that have only recently been weaned off of government-provided life support.

¹¹² See Press Release, The Clearing Corporation Announces Restructuring and Investment by Global Financial Institutions Focused on OTC Derivatives Clearing, available at <http://www.clearingcorp.com/press/pressreleases/20071220restructure.html>.

¹¹³ See Clearing Corporation Member Firm List, available at <http://www.clearingcorp.com/clearingmembers/firmlist.html>.

¹¹⁴ See Jacob Bunge & Doug Cameron, *Crisis on Wall Street: ICE to Buy Clearing Corp. As Big Banks Support Plan*, WALL ST. J., Oct. 31, 2008, at C2.

¹¹⁵ See Kenneth Ayotte & David A. Skeel, Jr., *Bankruptcy or Bailouts?*, 35 J. CORP. L. 469, 472-73 (2010) (discussing how rules are likely to be suspended in favor of bailouts in significant financial crises).

The interconnection of these giant derivatives' participants under one roof arguably made it harder for preemptive actions to be taken by clearinghouses as no clearinghouse member stood to gain from exposing others' weaknesses. More insidiously, even though entities like Goldman Sachs demonstrated through their trading activity that they questioned the solvency of other members, they had little to gain from sharing this information with other clearinghouse members to address systemic risks. Instead, Goldman Sachs simply used this information to mitigate their own exposure by selling holdings and taking offsetting positions. The bottom line was that none of the members who collectively ran the clearinghouses had any incentive for the clearinghouses to perform their gatekeeping function for preemptively policing against systemic risks. Instead, interconnections of guarantee liability merely served to make it more likely that the government would have no choice but to bail the industry out. The irony is that clearinghouses such as the Clearing Corporation proclaim that no derivatives counterparty has lost money due to a default by member firms.¹¹⁶ However, "success" during the most recent crisis had little to do with clearinghouses as this outcome occurred only because the government either provided liquidity or brokered shotgun marriages with other firms to avoid defaults.

The evolution of clearinghouses in the wake of the financial crisis has provided little additional assurance that clearinghouses are capable of filling the systemic risk management roles that Congress (and industry advocates) envision.¹¹⁷ In an effort to preempt regulation, industry participants have sought to strengthen the appearance of independence of clearinghouses and to make broader commitments to disclosing and clearing trades through clearinghouses.¹¹⁸ For example, on October 20, 2008, the Clearing Corporation was formally sold to Intercontinental Exchange, Inc., an international operator of future exchanges and over-the-counter markets. The Clearing Corporation became ICE US Trust ("ICE Trust") and the derivatives clearinghouse operations became ICE Clear US.¹¹⁹ But both the purchase and the clearinghouse's development into a global clearing solution for OTC derivatives were based on the support of nine of the major investment banks who are the leading dealers in OTC markets.¹²⁰ This list included all of the major survivors of the financial crisis, including Bank of America, Citibank, Credit Suisse, Deutsche Bank, Goldman Sachs, J.P. Morgan,

¹¹⁶ See Clearing Corporation, Who We Are, (proclaiming that "no customer has lost money as a result of a default by a clearing participant to The Clearing Corporation"), available at <http://www.clearingcorp.com/about/who-are-we.html> (last visited Oct. 15, 2011).

¹¹⁷ See Doug Cameron & Kara Scannell, *Regulators Back System to Clear Credit Swaps*, WALL ST. J., Dec. 24, 2008, at C1 (discussing regulators' belief that central clearing would reduce systemic risk).

¹¹⁸ See Sarah N. Lynch & Jacob Bunge, *ICE's Swaps Plan Is Advancing*, WALL ST. J., Jan. 14, 2009, at C14 (discussing the success of Wall Street firm efforts to centralize swaps clearing under ICE).

¹¹⁹ See Press Release, Intercontinental Exchange, The Clearing Corporation and Nine Major Dealers Announce New Developments in Global CDS Clearing Solution: ICE to Acquire the Clearing Corporation as Clearing Initiative Advances, Oct. 20, 2008, available at <http://www.clearingcorp.com/press/pressreleases/20081030-ice-to-acquire-tcc.html>.

¹²⁰ See Jacob Bunge & Doug Cameron, *Crisis on Wall Street: ICE to Buy Clearing Corp. As Big Banks Support Plan*, WALL ST. J., Oct. 31, 2008, at C2.

Merrill Lynch (though now a subsidiary of Bank of America), Morgan Stanley, and UBS.¹²¹

This deal nominally secured the greater independence of the ICE Trust clearinghouse, but in practice it arguably strengthened the hand of the leading investment banks in shaping the role of a centralized OTC derivatives' clearinghouse. The banks could point to the formal purchase of the Clearing Corporation to argue that their derivatives' transactions are subject to effective independent oversight. But at the same time, the existence of this clearinghouse expressly rests on the support of the leading investment banks. The clearinghouse operator entered into memorandums of understanding with each of these banks to develop a joint global clearing solution and to effect this acquisition. In other words, the clearinghouse continues to be subject to the strong influence of its leading investment bank members.¹²² Congress's embrace of a central clearinghouse approach to reform merely reinforces the leading investment banks' power.¹²³ However much investment banks may contest greater regulatory oversight of derivatives, the clearinghouse approach leaves them in charge of their industry's destiny.

The fact that the leading investment banks pooled their energies to advocate independently for a more robust role for central clearinghouses highlights the fact that the banks, rather than the clearinghouses, exercise effective power. Clearinghouses can still be expected to perform useful market purposes in mitigating settlement risks in non-crisis situations. However, clearinghouses enjoy little leverage to push derivatives participants to temper risk taking and to defuse growing systemic risks.

C. The Potential for Reinsurers as Gatekeeper-Guarantors for Derivatives

Reinsurers acting as gatekeeper guarantors would have both far greater incentives and ability than either industry-led clearinghouses or the SEC and CFTC to oversee derivatives' markets. The moral hazard of clearinghouse risk pooling is that each individual member's interest in monitoring counterparties' solvency is dampened by the fact that default risk is shared among the clearinghouse members.¹²⁴ Herding behavior in financial markets accentuates this moral hazard and raises a broader collective action problem.¹²⁵ Individual members are likely to engage in excessive leverage at similar points in the economic cycle. They have little interest in exhorting the clearinghouse to take preemptive steps to limit risk exposure (in part because it may highlight their own overstretch to the broader market).

¹²¹ See Intercontinental Exchange Clear U.S. Member List, available at https://www.theice.com/clear_us_members.jhtml.

¹²² See Jerry W. Markham, *Merging the SEC and CFTC: A Clash of Cultures*, 78 U. CINN. L. REV. 537, 590-91 (2009) (discussing swap dealers' support of the central clearinghouse approach).

¹²³ See Stephen Labaton, *Obama Plans Fast Action To Tighten Financial Rules*, N.Y. TIMES, Jan. 25, 2009, at A1 (discussing the administration's advocacy of central clearinghouses for OTC derivatives).

¹²⁴ See Stephen L. Schwarcz, *Understanding the Subprime Mortgage Crisis*, 18 J. BANKR. L. & PRAC. 5, 10-11 (2009) (discussing how risk dispersion can create collective-action problems in dampening incentives for due diligence or risk monitoring).

¹²⁵ See Charles K. Whitehead, *Destructive Coordination*, 96 CORNELL L. REV. 323, 327-28 (2011) (describing the frequency and impact of herding on financial markets)

Worse still, savvy clearinghouse members would also likely act only for their own accounts, such as Goldman Sachs did in reducing its exposure to mortgage-backed securities on the eve of the crisis.¹²⁶ Each clearinghouse member would likely have more to gain from their own speculation or taking advantage of others' recklessness, than they would gain from alerting the clearinghouse of other members' excess. The irony is that the potential cost of facing clearinghouse calls to members to cover a defaulting party would not offset incentives to profit from exploiting irrational exuberance and/or trusting that any significant crash would be covered by future government bailouts.¹²⁷

Unlike government overseers and clearinghouses, reinsurers would have "skin in the game" by having their own dollars at stake, which gives them far greater incentives to hold derivatives' participants accountable.¹²⁸ Reinsurers would be barred from hedging or passing on their liability exposure to third parties to ensure that their focus would be on accurately assessing clients' derivatives risks.¹²⁹ Reinsurers would be able to apply their longstanding experience in assessing and pricing insurance risks to examine the analogous issues facing the derivatives' industry.¹³⁰ Additionally, reinsurers would be able to respond much more quickly to changes in the marketplace than their government counterparts, as reinsurers could impose changes through their contractual arrangements. In contrast, their government counterparts must affect changes through painstakingly long rulemaking processes or by engaging in enforcement actions.

Reinsurers would only need to assume a modest amount of liability exposure for them to assume an effective gatekeeper-guarantor role. As discussed earlier, a benchmark of 5 to 10% of liability above a set loss threshold would be sufficient to incentive gatekeeper guarantors to actively monitor derivatives participants and impose conditions on their liability exposure.¹³¹ Not only would reinsurers have incentives to

¹²⁶ See Gretchen Morgenson & Louise Story, *Banks Bundled Bad Debt, Bet Against It and Won*, N.Y. TIMES, Dec. 23, 2009, available at <http://www.nytimes.com/2009/12/24/business/24trading.html>.

¹²⁷ See Jeffrey Manns, *Building Better Bailouts: The Case for a Long-Term Investment Approach*, 63 FLA. L. REV. 1349, 1355 (2011) (discussing the conventional wisdom that if the financial crisis is large enough bailouts are inevitable).

¹²⁸ See Board of Governors of the Federal Reserve System, *Report to the Congress on Risk Retention*, Oct. 2010, at 6, available at <http://federalreserve.gov/boarddocs/rptcongress/securitization/riskretention.pdf> (discussing the role of risk retention in aligning interests in the securitization context).

¹²⁹ This approach would mirror prohibitions on originators/securitizers of mortgage-backed securities from hedging their five-percent risk retention under the Dodd-Frank Act's skin-in-the-game rules. See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 941(b), 124 Stat. 1376, 1892 (2010) (adding § 15G(c)(1)(A) to the 1934 Securities Exchange Act).

¹³⁰ See Lawrence A. Cunningham, *Securitizing Audit Failure Risk: An Alternative to Caps on Damages*, 49 WM. & MARY L. REV. 711, 771 (2007) (discussing the statistically based risk modeling that reinsurers use to gauge and price catastrophic risk exposure).

¹³¹ The 5 to 10% liability exposure is based on the Dodd-Frank Act's 5% skin-in-the-game risk retention for residential mortgage-backed securities originators and securitizers and private bank practices of requiring originators of loan participation interests to retain 10% of the liability exposure. See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 941(b), 124 Stat. 1376, 1891 (2010) (requiring originators and securitizers must have skin in the game by retaining at least 5% of the value of residential mortgage-backed securities they issue); Steven L. Schwarcz, *Protecting Financial Markets: Lessons from the Subprime Mortgage Meltdown*, 93 MINN. L. REV. 373, 389 (2008) (discussing

function as the “canaries in the mines” in identifying earlier signs of over-leveraging, but also they would have the leverage to demand that their clients curtail risk exposure to mitigate the scale and impact of potential bubbles. In this way they would serve as classic gatekeepers in identifying and remedying risks well before government actors even are aware of them and at dramatically lower cost. Their partial guarantor role would create self-interested incentives to temper clients’ risk taking, which would achieve a far greater impact in stabilizing and disciplining markets than blanket government guarantees during crises which are rife with moral hazard.¹³²

D. Improving on Margin Requirements

Reinsurers would be in the position to address participants’ liquidity in a more proactive way than clearinghouse collateral and margin requirements. The logic of margin requirements is elegant in its simplicity. As losses mount, a party is required to provide additional capital as a surety of its ability to live up to its obligations.¹³³ In theory if changes in risk exposure are gradual, this approach works well. Both individual derivatives participants and the marketplace as a whole would be able to see whether and to what extent parties are able to live up to their obligations and adjust accordingly.¹³⁴

The shortcoming of margin requirements is their reactive nature, which makes this risk management tool ill equipped to either deal with looming storm clouds or dramatic changes in financial markets. Higher margin only kicks in when the market trigger takes place, regardless of how clearly storm clouds may be gathering and raising warning signs.¹³⁵ The lack of independence of clearinghouses from the major players makes this problem doubly difficult. For margin requirements to assure derivatives participants’ solvency in a crisis they would have to be set at high levels or to be adjusted to higher levels as systemic risks increase. But exchanges/clearinghouses would have incentives to set margin levels low to court business, and they may not enjoy the leverage to push back at their clients when higher margin requirements were needed to curb growing systemic risks.¹³⁶

how banks in buying loan participating interests require the originator to retain “typically at least ten percent” of the liability exposure).

¹³² See Zachary J. Gubler, *Regulating in the Shadows: Systemic Moral Hazard and the Problem of the Twenty-First Century Bank Run*, 63 ALA. L. REV. 221, 252-53 (2012) (discussing the moral hazards in the banking sector created by ex post government guarantees).

¹³³ See Iman Anabtawi & Steven L. Schwarz, *Regulating Systemic Risk: Towards an Analytical Framework*, 86 NOTRE DAME L. REV. 1349, 1394-1395 (2011).

¹³⁴ See Robert B. Thompson, *Market Makers and Vampire Squid: Regulating Securities Markets After the Financial Meltdown*, 89 WASH. U. L. REV. 323, 355-56 (2011) (discussing the impact of margin requirements on derivatives markets).

¹³⁵ See Richard Bookstaber, *Understanding and Monitoring the Liquidity Crisis Cycle*, 56(5) FINANCIAL ANALYSTS JOURNAL 17, 19-20 (2000) (discussing how margin calls may come too late in the process and trigger downward liquidity spirals).

¹³⁶ See *infra* Section II.B.

Clearinghouse margin requirements also appear inadequate for addressing market panics.¹³⁷ The financial crisis underscored the reality of how quickly and dramatically risk exposure can change for derivatives. Overreactions define market shifts as participants either don't want to be left behind on an upswing or don't want to be the last passengers on a sinking ship. As a result, the actual changes in risk exposure can take place so swiftly that they may undercut the ability of derivatives' participants to live up to their responsibilities. The rapid collapse of AIG due to reckless derivatives' positions highlights this point.¹³⁸

In contrast, reinsurance treaties can equip reinsurers with the ability to impose anticipatory steps well before any actual changes in risk exposure. Reinsurers would not only be far more sensitive to shifts in market risk than clearinghouses because much more of their own money is on the line, but also they may have a better appreciation of what degree of capital is required to ensure that their clients can live up to their obligations. An additional virtue of reinsurers is their decentralization. While clearinghouses may be vulnerable to pressure from dominant participants, individual reinsurers would be in a much stronger position to act unilaterally. Reinsurers would have the leverage to demand that clients secure greater liquidity or reduce liability exposure or face the sanction of a public withdrawal of a reinsurance guarantee. In troubled markets following through on that threat could be tantamount to a death warrant, which would mean in practice reinsurers could exercise a broad tempering influence on risk taking through private words and informal pressure.

One concern is the degree to which reinsurers will be able to process disclosures by derivatives participants in reacting to changes in risk exposure.¹³⁹ The danger is that reinsurers may not fully process how the technical terms of derivatives can change the risk exposure, the degree of fluidity of derivatives, or collateral business risks that could impact the capacity of participants to uphold their obligations. While the informational challenges are significant, these issues would create incentives for reinsurers to push for

¹³⁷ The Dodd-Frank Act itself implicitly concedes this point as it lays out a standard for clearinghouses that “[t]he margin required from each member and participant of a derivatives clearing organization shall be sufficient to cover potential exposures in *normal market conditions*”). See Dodd-Frank Wall Street Reform and Consumer Protection Act § 725(c)(2)(D), Pub. L. No. 111-203, 124 Stat. 1376, 1688-89 (2010) (emphasis added). The implication of this part of the statute is that margin requirements may and likely will be inadequate in a significant crisis.

¹³⁸ See David E. Skeel, Jr. & Thomas H. Jackson, *Transaction Consistency and the New Finance in Bankruptcy*, 112 COLUM. L. REV. 152, 165-66 (2012) (discussing how “AIG’s fortunes went into a freefall after it was forced to begin posting collateral” for its large derivatives portfolio).

¹³⁹ Robert P. Bartlett, *Inefficiencies in the Information Thicket: A Case Study of Derivatives Disclosures During the Financial Crisis*, J. CORP. L. 1, 8-9 (2010) (arguing that greater disclosure alone would not allow firms to address the uncertainties of assessing risk exposure); Counterparty Risk Management Policy Group III, *Containing Systemic Risk: The Road to Reform* 53-55 (2008), available at <http://www.crmgroup.org/docs/CRMPG-III.pdf> (expressing skepticism that market actors could process structured financial products even with full disclosure).

greater standardization of derivatives contracts and disclosures and to err on the side of risk aversion in gauging risks and limiting liability exposure.¹⁴⁰

E. Impact of Reinsurance Mandate in Reducing the Degree of Speculation

Part of the appeal of mandatory reinsurance is that reinsurers will impose a market-based speculation tax that would raise the cost and limit the degree to which derivatives are used for speculation. While the use of derivatives as a hedging device reduces risk exposure of individual firms and the market as a whole, the use of derivatives as a tool of speculation may dramatically magnify risk. The problem is that derivatives serve as “synthetic insurance” instruments without the need to have an insurable interest.¹⁴¹ That fact means that parties can use derivatives as a form of large-scale gambling with high levels of leverage and with few safeguards.¹⁴²

The simplest way to address the role of speculation would be to treat derivatives as proxies for insurance, which would implicitly recognize that derivatives arose to sidestep onerous state insurance regulation. Applying an insurance approach would require derivatives’ participants to establish that they have insurable interests at stake in each transaction (i.e. the typical requirement for insurability) which would squelch speculation.¹⁴³ The danger of this draconian strategy is that it would have a chilling effect on participation and could potentially dry up liquidity for derivatives markets.

In contrast, the reinsurance approach offers a way to preserve a role for speculators in derivatives markets, while creating a built-in check on the reckless use of leverage. The key step that a reinsurance mandate would entail is requiring hedge funds and other lightly regulated pools of capital to subject themselves to the scrutiny of a reinsurer in order to participate in derivatives markets. This oversight would make it more difficult for speculators to engage in “naked” derivatives bets that could lead them exposed to financial ruin if their assumptions proved to be faulty.

Reinsurers’ pricing power is the other tool that could dampen speculation. To the extent that hedge funds or other speculators would choose not to disclose as much information about their financial positions, one would expect that reinsurers would charge substantially more to serve as backstop. This result would serve as a private “tax” on speculators that would reduce their ability to leverage bets through derivatives

¹⁴⁰ See, e.g., Donald C. Langevoort, *Toward More Effective Risk Disclosure for Technology-Enhanced Investing*, 75 Wash. U. L.Q. 753, 755-58 (1997) (discussing the relevance of the form of disclosure for market processing of its impact).

¹⁴¹ See GRAYDON S. STARING, *LAW OF REINSURANCE* § 6:1 (1993) (discussing the contours of the insurable interest requirement for insurance).

¹⁴² See Thomas Lee Hazen, *Disparate Regulatory Schemes for Regulatory Activities: Securities Regulation, Derivatives Regulation, Gambling, and Insurance*, 24 ANN. REV. BANK. & FIN. L 375, 416-419 (2005) (discussing the degree to which derivatives has aspects of both insurance and gambling instruments).

¹⁴³ See Lynn A. Stout, *How Deregulating Derivatives Led to Disaster, and Why Re-Regulating Them Can Prevent Another*, LOMBARD ST., July 6, 2009, at 4, 6, available at <http://www.finreg21.com/files/finreg21-finreg21/Lombard%207.pdf>.

markets. Even if a corporation hedging insurable risks and a hedge fund speculator made the same level of disclosures, reinsurers may impose higher fees on the hedge fund because of the greater risks incorporated into a hedge fund's business model compared to that of a more conventional corporation. This approach avoids the difficulties posed by having a government regulator distinguish between corporate hedging and speculation,¹⁴⁴ while still having the result of "taxing" speculators at a higher rate and mitigating the systemic risks posed by excessive leverage.

III. Addressing Potential Objections

A. Exit and Liquidity Concerns

Derivatives reform represents a classic case of concern that regulation will stifle innovation or lead to transatlantic (or transpacific) migration of derivatives to other financial markets.¹⁴⁵ This challenge may be more significant in the derivatives context than other contexts of financial reform, such as banking regulation, because derivative transactions can easily be conducted offshore and the United States is not even the premier derivatives' market.¹⁴⁶ Even if U.S.-based corporations or firms with a substantial U.S. presence faced a reinsurance mandate for derivatives that they could not avoid, they would argue that this burden would simply empower their foreign-based competitors by giving them a cost advantage. These risks also easily play into the hands of industry lobbyists to pressure congressmen and regulators to water down any legislation that survives the congressional process.

Any national regulation that trades off higher costs for greater monitoring is going to raise risks of firms or industries exiting the country. Three questions merit consideration. First, one issue is whether the benefit of more effective monitoring is worth the cost, which in part is an issue of market perception.¹⁴⁷ To the extent market participants perceive that the overall benefits in reducing systemic risks outweigh the costs, this approach may actually draw more derivatives transactions to the U.S. Even to the extent that market participants favored lower costs to greater market monitoring, during economic turbulent times mandatory reinsurance coverage would offer assurance that U.S. derivatives' markets were safer than competing foreign markets. This fact

¹⁴⁴ This approach contrasts with the Dodd-Frank Act which exempts non-financial entities from central clearing if they are using swaps to mitigate or reduce commercial risks. See Carl B. Wilkerson, *Derivatives Market Reform: The Impact of Rules Implementing Title VII of the Dodd-Frank Act on Life Insurance Companies*, Practising Law Institute, 945 PLI/Comm 639, at 705 (2012).

¹⁴⁵ See, e.g., Sullivan & Cromwell LLP Comment Letter to the Prudential Regulators and the Commodity Futures Trading Commission, Re: Proposed Rules Relating to Margin Requirements for Swap Dealers and Major Swap Participants, Practising Law Institute, PLI Order No. 28930, at 205, Oct. 17, 2011 (discussing the concern that derivatives reform will cause derivatives trading to relocate outside of the United States).

¹⁴⁶ See DEUTSCHE BÖRSE GROUP, WHITE PAPER: THE GLOBAL DERIVATIVES MARKET: AN INTRODUCTION 3-5 (2008) (laying out the scale of European versus American derivatives' markets).

¹⁴⁷ See, e.g., Michael P. Vandenberg, Amanda R. Carico, & Lisa Schultz Bressman, *Regulation in the Behavioral Era*, 95 MINN. L. REV. 715, 749 (2011) (discussing the importance of framing in establishing perceptions of the costs and benefits of regulations).

means that when liquidity is needed the most, U.S. markets may enjoy a comparative advantage in attracting derivatives' capital.

Second, every time financial or corporate law reforms are raised, companies routinely cry wolf. They claim that the reforms are so onerous that to avoid them they will exit U.S. markets, yet very few firms follow through on that threat. For example, the Sarbanes-Oxley Act's corporate reforms were decried as creating incentives for U.S. firms to leave U.S. markets. But almost a decade later, the hue and cry about Sarbanes-Oxley has come and passed, and only a small number of firms exited the U.S. market.¹⁴⁸ Similarly, corporate opponents to the Dodd-Frank Act proclaimed that financial reforms would drive businesses from the U.S. To date this concern appears to have little substantiation (despite its rhetorical appeal for opponents of business regulation).¹⁴⁹

Third, even to the extent that some transactions would not take place in the United States or would not take place at all, the impact on market liquidity is unclear. The question is whether a gatekeeper guarantor approach would prove to be too successful in imposing a de facto tax on speculation and thereby reduce liquidity. One of the most significant concerns during the financial crisis and its aftermath has been maintaining liquidity in financial markets.¹⁵⁰ Liquidity concerns are particularly important for derivatives markets because of the leverage that derivatives allow firms to take on.¹⁵¹ By having to post only a small amount of capital to cover margin requirements, firms can potentially reap significant gains (or losses) from small price fluctuations in the underlying security or other instrument that forms the basis of the derivative. High levels of leverage require equally high levels of liquidity to allow firms to unwind derivatives bets that have gone awry swiftly to avoid greater damage.

This proposal's cost for bona fide hedgers would likely be modest. Entities using derivatives as a low cost equivalent of insurance would be able to substantiate the fact that their use of derivatives reduces overall risk. Therefore, risk reinsurers would presumably impose low premiums to reflect the low risks. In contrast, the parties most likely to have incentives to exit the U.S. market or not to engage in derivatives transactions would be speculators. Speculators may argue that derivatives reduce their overall risk if their derivative use is part of their hedging strategies. However, to the extent that derivatives transactions constitute speculation in themselves, reinsurers would

¹⁴⁸ See, e.g., Ehud Kamar et al., *Going Private Decisions and the Sarbanes-Oxley Act of 2002: A Cross-Country Analysis*, 25 J. L. ECON. & ORG. 107, 110-115 (2009) (discussing the impact of the Sarbanes-Oxley Act in causing US firms to exit American capital markets).

¹⁴⁹ See, e.g., Ronald Gilson et al., *Regulatory Dualism as a Development Strategy*, 63 STAN. L. REV. 475, 481 (2011) (explaining the incentives for firms to exit when they face alternative regulatory regimes).

¹⁵⁰ See, e.g., Steven L. Schwarcz, *Too Big to Fail?: Recasting the Financial Safety Net*, in THE PANIC OF 2008: CAUSES, CONSEQUENCES, AND IMPLICATIONS FOR REFORM 94, 107-110 (Lawrence E. Mitchell & Arthur E. Wilmarth, Jr. eds., 2010) (discussing the significance of emergency liquidity during economic crises; Robert M. Solow, *On the Lender of Last Resort*, in FINANCIAL CRISES: THEORY, HISTORY, AND POLICY (Charles P. Kindleberger et al. eds., 1982) (laying out the government's indispensable role in providing emergency liquidity).

¹⁵¹ See, e.g., Stanley Fischer, *On the Need for an International Lender of Last Resort*, 13 J. ECON. PERSPECTIVES 85, 85-89 (1999) (recognizing the need for emergency liquidity for financial markets to prevent collapses due to high levels of leverage).

likely impose higher prices for their coverage. As a result, speculators may be priced out of derivatives' markets, relocate operations abroad, or may simply reduce their degree of leverage.

The question is whether a gatekeeper guarantor approach would reduce leverage to a greater degree than it would reduce liquidity in derivatives markets. Reinsurers would reduce the degree of leverage in speculative derivative bets by pricing reinsurance for speculative bets at a higher price than bona fide hedging. Reinsurers would also reduce leverage by seeking to limit both speculators and hedgers from over-extending themselves, especially during turbulent economic times. For this reason concerns about the impact on liquidity would likely be overblown. Since reinsurers have direct incentives to constrain the liability exposure of their clients, they would have reason to reduce the risk of over-stretch and mitigate liquidity needs before a crisis erupts.

It would be foolish to assume that reinsurers themselves may not be prone to exuberance during bullish economic times.¹⁵² However, reinsurers would have the incentive to implement a standing system of checks on their clients to ensure that they have caps on the degree of leveraged derivatives bets, as well as the ability to increase constraints as economic conditions deteriorate. Additionally, reserve requirements on reinsurers would impose a practical constraint on leverage that reinsurers would seek to extend on to their clients. As a result, derivatives participants would be less able to leverage themselves into a situation in which future liquidity crises will arise. Of course liquidity crises may still arise, but they would likely be attributable to broader systemic factors well beyond the scope of derivatives markets.¹⁵³

B. Political Challenges

One perpetual challenge of policy proposals is their political feasibility. That prospect may be particularly daunting in the derivatives context because of how recently the problem was "addressed" in the Dodd-Frank Act.¹⁵⁴ The dilemma is that every legislative enactment, however flawed, stands as the definitive word on the subject until its shortcomings are demonstrated by a future crisis or shortcomings so blatant that even Washington cannot ignore them.¹⁵⁵

As discussed earlier, the Dodd-Frank Act sets the current derivatives landscape and may make a future crisis a matter of time by centralizing derivatives' risk in a small number of central clearinghouses.¹⁵⁶ This approach gives leverage to the industry leaders

¹⁵² See ROBERT J. SHILLER, *IRRATIONAL EXUBERANCE* 12-18 (2000) (discussing the over-optimism that often captivates markets during economic upswings).

¹⁵³ See Steven L. Schwarcz, *Systemic Risk*, 97 *GEO. L.J.* 193, 195-197 (2008) (discussing the spillover effects from systemic risk crises that may create liquidity crises for otherwise solvent companies).

¹⁵⁴ See Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), Pub. L. No. 111-203, 124 Stat. 1376 (2010) (to be codified in scattered sections of 12 U.S.C.).

¹⁵⁵ See Lawrence A. Cunningham & David Zaring, *The Three or Four Approaches to Financial Regulation: A Cautionary Analysis Against Exuberance in Crisis Response*, 78 *GEO. WASH. L. REV.* 39, 40-41 (2009) (discussing how U.S. financial reforms are driven by responses to crises).

¹⁵⁶ See *infra* Section II.B.

over clearinghouses because of the understandable concern of keeping their business. The effect may be to create the illusion of effective third-party monitoring, while obscuring the reality that industry leaders enjoy influence over their purported gatekeeper. The concentration of OTC derivatives in a small number of exchanges/clearinghouses all but ensures that a default by a major player will lead to a bailout.

While the failure of the existing regulatory framework may be a matter of time, significant stumbling blocks towards meaningful reform of derivatives regulation and oversight exist. Major players in the derivatives industry worked hard to shape the contours of the Dodd-Frank Act to preserve their power.¹⁵⁷ They could be expected to fight the gatekeeper-guarantor mandate more fiercely since they would be paying for the “privilege” of greater monitoring and accountability.

While industry opposition may prove unavoidable, the underlying political appeal of this proposal is straightforward. Simply by enacting a mandate, the federal government could create a decentralized private system of circuit breakers for financial overstretch and a private bailout system for the derivatives markets. In a time of financial austerity, this approach would allow lawmakers to create a new layer of self-interested oversight to a key sector of the financial system without engaging in significant direct expenditures. This private approach would bypass the fate of much of the Dodd-Frank Act of being bogged down in a rule-making process in the face of behind-the-scenes industry pressure.¹⁵⁸ Additionally, this approach would not suffer from the revolving door effect of regulatory enforcers holding back from oversight and enforcement (or engaging in lower levels of both) for fear of alienating prospective future employers.¹⁵⁹ While challenges exist, the benefits to addressing systemic risks in a cost-effective way give the proposal political plausibility.

C. Implementation Challenges

The virtue of this proposal is that its success does not primarily turn on the independence or discretion of administrative officials (aside from creating and enforcing reserve requirements on reinsurers). Neither does the approach depend on government mandates that rely on as-of-yet-undiscovered technological enhancements or the

¹⁵⁷ See, e.g., Binyamin Appelbaum, *On Finance Bill, Lobbying Shifts to Regulations*, N.Y. TIMES, June 26, 2010, at A01 (discussing the financial industry's effective lobbying to undercut the force of the Dodd-Frank Act and its regulatory implementation).

¹⁵⁸ The \$251 million that banks spent on lobbying to thwart financial reform went far towards thwarting the regulatory implementation process for the Dodd-Frank Act. See Joshua M. Brown, *How Wall Street Uses Your Money to Lobby Against You*, CHRISTIAN SCI. MONITOR (Aug 3, 2010), available at <http://www.csmonitor.com/Business/The-Reformed-Broker/2010/0803/How-Wall-Street-uses-your-money-to-lobby-against-you>.

¹⁵⁹ For example, many of the crucial political appointees who were asleep at the wheel during the recent crisis were from Wall Street or soon headed in that direction once their term in government service ended. See Zachary A. Goldfarb, *Regulators Are Finding Opportunities at Firms Looking for Government Experience*, WASH. POST, Dec. 30, 2010, at A11 (discussing the revolving door of White House, Justice Department, SEC, and banking regulators heading to Wall Street and law firms).

development of new industries.¹⁶⁰ This approach is based on the fact that a large-scale reinsurance industry does exist and that other financial actors such as sovereign wealth funds and private equity funds may enter the market in response to the mandate-created demand. Applying the reinsurance industry's expertise would be straightforward since the natural and man-made catastrophic insurance risks reinsurance firms routinely assess are related to the derivative risks reinsurers would need to evaluate.¹⁶¹ Other financial actors with expertise in modeling risks would also have incentives to partner with reinsurers or develop their own models of risk.

The challenge lies in the fact that derivatives do not necessarily involve an insurable interest. For this reason reinsurers may have a more difficult time gauging the risks involved and tailoring the safeguards needed to protect their own interests, as well as their clients'. However, the experience of reinsurers in assessing natural and man-made catastrophe risks would equip them to take on a new challenge of assessing financial risks.¹⁶² Modeling firms provide insurers and reinsurers with computer-based models of potential catastrophic loss exposure that enable them to price these risks.¹⁶³ Historically, modeling focused on natural catastrophes, such as modeling the likelihood and impact from hurricanes and earthquakes. The 9-11 attacks spurred innovation in risk modeling as modeling firms leveraged their expertise in natural catastrophe modeling to develop terrorism risk insurance models.¹⁶⁴ A mandate for reinsurance would leverage this expertise and spur similar innovation to assess financial risks.

Modeling natural catastrophes has long been key to the success of the reinsurance industry in being able to weather past storms like Hurricane Andrew in 1992.¹⁶⁵ Natural catastrophes, such as earthquakes and hurricanes, combine uncertainty of scale, timing, and impact with the proximate predictability of historical patterns. The challenge for natural catastrophes is weighing the partial predictability of natural phenomena with the

¹⁶⁰ See Jonathan H. Adler, *Eyes on a Climate Prize: Rewarding Energy Innovation to Achieve Climate Stabilization*, 35 HARV. ENVTL. L. REV. 1, 38 (2011) (highlighting the difficulties of attempting to use regulatory mandates to force technological innovation).

¹⁶¹ Although adapting reinsurers' risk assessment skills to the derivatives context is plausible, it begs the question of why this innovation has not occurred earlier. The likely answer is that markets have not provided sufficient incentives to overcome the transaction costs of negotiating disclosure obligations and liability coverage. The logic of a mandate for reinsurance is that it would provide both derivatives participants and reinsurers with incentives to innovate in terms of contracting and overcoming the transaction costs. The mandate would create incentives for reinsurers to undergo the costs of adapting their insurance risk assessment skills to the "synthetic insurance" context of derivatives. It would give derivatives participants incentives to design ways to provide ongoing disclosures in a form and timely way that reinsurers would need to assess risks.

¹⁶² See Lawrence A. Cunningham, *Securitizing Audit Failure Risk: An Alternative to Caps on Damages*, 49 WM. & MARY L. REV. 711, 771 (2007) (discussing the statistically based risk modeling that reinsurers use to gauge and price catastrophic risk exposure).

¹⁶³ See Alexia Marks, *Under Attack: Terrorism Risk Insurance Regulation*, 89 N.C. L. REV. 387, 403 (2011).

¹⁶⁴ See Claire Wilkinson, *Catastrophe Modeling: A Vital Tool in the Risk Management Box*, Ins. Info. Inst., available at <http://www.iii.org/media/research/catmodeling/> (discussing the development of terrorism risk models by AIR Worldwide Corporation, Risk Management Solutions, and Equecat Inc).

¹⁶⁵ See GOVERNMENT ACCOUNTABILITY OFFICE, NATURAL CATASTROPHE INSURANCE: ANALYSIS OF A PROPOSED COMBINED FEDERAL FLOOD AND WIND INSURANCE PROGRAM 13 & n.17 (2008).

increasing risk caused by growing human activity in potentially exposed areas.¹⁶⁶ Historical hurricane, flooding, and earthquake data, combined with policy coverage and financial data, equips modelers, insurers, and reinsurers to gauge the likelihood and impact of natural catastrophes. This risk exposure to low probability, high impact events has echoes in the potential for financial reinsurance. Financial innovation, coupled with greater leverage and risk taking, increases the probability and scale of catastrophic damage during financial crises. Nonetheless, while financial risks are not readily predictable (or else reinsurers would profit from that by directly investing in stock options!), financial whipsaws are an inevitable feature of the economic cycle. The challenge is how reinsurers can both gauge the potential fallout as well as incentivize risk-mitigation through reinsurance premiums.

Experience in modeling man-made catastrophic risks also offer valuable lessons because pricing terrorism risks raises similar challenges to pricing financial risks. Man-made catastrophes pose significant challenges for computer modeling because of the inherent uncertainties and complexities of assessing the probability and impact of human action. The nature of terrorist threats requires significant assumptions about the likelihood of modes of attack, the extent of defense, and the probable magnitudes of loss.¹⁶⁷ Much of these conclusions will be based on detailed assessments of geography, coupled with assumptions about the nature, likelihood, and scale of attacks that may be hard to prove or disprove since they can only be partly grounded on known facts or past experience.¹⁶⁸ In contrast, the cyclical nature of markets (and over-reactions) is well established. While financial innovation entails new challenges, it may be comparatively easier to project the worst case scenario impact of financial events (although equally difficult to assess their probability).¹⁶⁹ But in both the natural and man-made catastrophe context, reinsurers are experienced in creating and working with models that incorporate large-scale policy and financial data that would be parallel to the challenges of assessing financial risks.¹⁷⁰

¹⁶⁶ See Robert J. Rhee, *Terrorism Risk in a Post-9/11 Economy: The Convergence of Capital Markets, Insurance, and Government Action*, 37 ARIZ. ST. L.J. 435, 467-68 (2005).

¹⁶⁷ See Alexia Marks, *Under Attack: Terrorism Risk Insurance Regulation*, 89 N.C. L. REV. 387, 404-06 (2011).

¹⁶⁸ See CHRISTIAN BRAUNER & GEDRGES GALEY, SWISS RE, TERRORISM RISKS IN PROPERTY INSURANCE AND THEIR INSURABILITY AFTER 11 SEPTEMBER 2001 15-20 (2003).

¹⁶⁹ See, e.g., Federal Reserve Board of Governors, *Press Release on Bank Stress Tests*, available at <http://www.federalreserve.gov/newsevents/press/bcreg/20120313a.htm> (discussing the use of modeling to assess the impact of a 13% unemployment rate, a 50% drop in the stock market, and a 21% decline in housing prices on the balance sheets of the nineteen largest bank holding companies).

¹⁷⁰ See Claire Wilkinson, *Catastrophe Modeling: A Vital Tool in the Risk Management Box*, Ins. Info. Inst., available at <http://www.iii.org/media/research/catmodeling/>.

Just as in terrorism insurance markets,¹⁷¹ the difficulties in gauging financial risk probabilities may lead reinsurers to make more conservative assumptions about the scope of collateral / margin than the actual risks justify. That fact in turn may limit the scale of derivatives markets, which would have both positive and negative effects. The impact would be positive in that the risk of default and overstretch would be far less. But policymakers may be concerned that reinsurers' conservative assumptions would constrain the growth and liquidity of derivatives' markets. That result would not be bad from a systemic risk perspective as the less stretched derivatives markets are, the more likely they are to weather the impact of financial shocks. But conservative assumptions by reinsurers may provoke greater resistance by industry participants both during the initial implementation and market booms.

One clear effect is that conservative reinsurer assumptions would impose the least burden on bona fide hedgers. Hedgers would have the means and incentive to produce evidence that they are using derivatives to manage business risks. In contrast, conservative assessments of risks will lead to higher reinsurance premiums which may drive some speculators out of the market or reduce the extent of leveraged bets. While reduced liquidity is a cost that must be weighed, conservative reinsurer assumptions would be consistent with the objectives of reducing systemic risk and making speculation more expensive.

D. The Danger of Reinsurer Over-stretch

The more significant danger is that over time reinsurers' assumptions may become less conservative as they gain experience in gauging derivatives' markets risk. To the extent this shift reflects a honing of reinsurers' expertise, then lower, more accurate pricing of guarantees would reduce transaction costs for derivatives' markets without compromising risk management. The concern is that reinsurers would become equally exuberant as their clients during bull markets as the financial crisis becomes a distant memory.¹⁷² As a result, they may become less diligent in scrutinizing client and markets risks and compromise their gatekeeping role. They may also charge rates so low that they will fail to have inadequate funds to fulfill their guarantor role should defaults occur.

¹⁷¹ The Terrorism Risk Insurance Act ("TRIA") and its two subsequent extensions create a public backstop designed to make terrorism insurance both readily available and artificially low in price. See Terrorism Risk Insurance Act of 2002, Pub. L. No. 107-297, §105(a), 116 Stat. 2322, 2334 (codified at 15 U.S.C. §6701); Terrorism Risk Insurance Extension Act of 2005, Pub. L. No. 109-144, 119 Stat. 2660 (codified at 15 U.S.C. §6701); Terrorism Risk Insurance Program Reauthorization Act of 2007, Pub. L. No. 110-160, 121 Stat. 1839 (codified at 15 U.S.C. §6701). TRIA requires commercial property and casualty insurers to offer terrorism insurance in exchange for a government terrorism reinsurance backstop. See Michelle E. Boardman, *Known Unknowns: The Illusion of Terrorism Insurance*, 93 GEO. L.J. 783, 787-789 (2005). Rather than charging insurers or their clients for the government reinsurance, the federal government created a cost sharing program for terrorist events causing \$100 million or more in damages to the insurance industry. The net result has been artificially low pricing of terrorism insurance, a topic discussed in more depth in Section III.G note 165.

¹⁷² See Sarah Pei Woo, *Regulatory Bankruptcy: How Bank Regulation Causes Fire Sales*, 99 GEO. L.J. 1615, 1662 n.178 (2011) (discussing the important role of expectations in financial and housing markets).

This concern arises in any public or private regulatory context as herding effects of optimism may cause monitors to become lax.¹⁷³ Every time the economy heats up there are reports of a “new economy” or “new economic models” that should change assumptions about risk.¹⁷⁴ This concern is particularly significant in financial markets because long, steady increases in value may disappear during rapid surges in fear and volatility. The hangover effect from the boom may leave all actors unprepared for the severity of the bust.

The tempering force for this proposal is that reinsurers are accustomed to dealing with low probability, high impact events. Natural disasters in many ways mirror man-made disasters, and reinsurers know from experience that future disasters will come and therefore plan risk-mitigation accordingly. Critics may assail reinsurers for having excessive profits during boom periods, but their role in overseeing catastrophic risks in non-financial contexts will make them much more likely to stick to conservative assumptions amidst periods of irrational exuberance.¹⁷⁵ In contrast, public regulators would likely face strong political pressures to relax oversight and trust markets during boom periods.¹⁷⁶ Similarly, clearinghouses would have less reason to resist their clients’ optimism and to hold firm on high margin requirements, because they would potentially be in a position to externalize catastrophic defaults onto the government. While there is some legitimacy to the concern of relaxed standards over time, reinsurers’ self-interest and experience will likely temper that temptation, and reserve requirements will place limits on their ability to water down their risk assessment standards.

E. Making Interconnections Serve a Productive Purpose

Another concern with the gatekeeper guarantor proposal is that heightening interdependence may backfire and perversely magnify moral hazard. Critics may worry that this approach could have the same effect as banks increasing their size and interdependence to ensure that they are too big to fail.¹⁷⁷ In other words greater interconnections with a small pool of reinsurers will spread risk across the system so that

¹⁷³ See Charles K. Whitehead, *Destructive Coordination*, 96 CORNELL L. REV. 323, 327-330 (2011) (discussing how the convergent expectations of financial market participants can result in potentially dangerous herding effects).

¹⁷⁴ See, e.g., Steven Weber, *The End of the Business Cycle?*, 76(4) FOREIGN AFFAIRS 65, 66-68 (July-Aug. 1997) (declaring the end of the traditional volatility of business cycles due to globalization and changes in technology, ideology, finance, and employment).

¹⁷⁵ See Sallie B. Kraus, *Are Severe Storms a Harbinger of Climate Change? The Insurance Industry Begins to Respond*, Practising Law Institute, PLI Order No. 14317, at 172 (Sept. 17, 2008) (discussing how reinsurers have grappled with the uncertainties of modeling climate change and other natural disasters, yet continued to offer coverage).

¹⁷⁶ See John C. Coffee, Jr., *Legal Aftershocks of the Global Financial Crisis*, 6 N.Y.U. J. L. & BUS. 205, 221 (2010) (arguing that the “intensity of regulatory oversight waxes and wanes . . . [and] follows a sine curve, going up after crises and sooner or later waning as the forces of deregulation come back”).

¹⁷⁷ See, e.g., Markus Brunnermeier et al., *The Fundamental Principles of Financial Regulation*, 11 GENEVA REPORT ON THE WORLD ECONOMY 1, 26 (2009) (calling for asset limits on banks to avoid the creation of “national champions” that are “so large, so massively interconnected, and so iconic . . . that no government would ever allow them to fail”).

the domino effect will be even more swift. Therefore, government intervention would be all the more needed to keep the financial sector afloat.

There is some legitimacy to this concern as the downside of interconnections is that chain reactions can reach a large scale much more quickly.¹⁷⁸ But the logic behind the gatekeeper guarantor proposal is that interconnections can serve a productive purpose if the liability from failure is clear and concrete. The conventional fear of domino effects is that defaults can have collateral effects because parties will have neither the interest nor incentive to monitor the default risk of counter-parties. In contrast, gatekeeper guarantors would have the incentive to analyze the spectrum of an insured party's activities and default risk. Rather than caring only about a given transaction, gatekeeper guarantors would focus on the aggregate of transaction risk. Gatekeeper guarantors would have the incentive to use their leverage to force clients to scale back their risk taking in a preemptive way. For this reason although fears of a domino effect from the interconnectedness of major banks led to large-scale bailouts during the financial crisis, interconnectedness with reinsurers would arguably have the opposite effect in creating incentives to reduce systemic risks.

F. Leveraging Market Pricing to Create an Integrated Private-Public Backstop

A skeptic may argue that public bailouts would still be inevitable even if mandatory reinsurance were in place. This Article has suggested how mandatory reinsurance of derivatives would reduce individual participants' and systemic risks, which would make bailouts less likely. But part of the appeal of the reinsurance mandate is that it would create a market-based pricing mechanism for derivatives risk that public regulators could use in designing an ex ante bailout funding system.¹⁷⁹ Market pricing of

¹⁷⁸ See Jeffrey Manns, *Building Better Bailouts: The Case for a Long-Term Investment Approach*, 63 FLA. L. REV. 1349, 1367 (2011) (discussing how interconnectedness between financial and non-financial companies raises the specter of a domino effect of one default catapulting other firms into insolvency).

¹⁷⁹ This Article's proposal for an integrated private-public backstop is in marked contrast to the blanket subsidies the federal government provides under the Terrorism Risk Insurance Act of 2002 ("TRIA") and its two subsequent extensions. See Terrorism Risk Insurance Act of 2002, Pub. L. No. 107-297, §105(a), 116 Stat. 2322, 2334 (codified at 15 U.S.C. §6701); Terrorism Risk Insurance Extension Act of 2005, Pub. L. No. 109-144, 119 Stat. 2660 (codified at 15 U.S.C. §6701); Terrorism Risk Insurance Program Reauthorization Act of 2007, Pub. L. No. 110-160, 121 Stat. 1839 (codified at 15 U.S.C. §6701). TRIA requires commercial property and casualty insurers to offer terrorism insurance in exchange for a government terrorism reinsurance backstop. See Michelle E. Boardman, *Known Unknowns: The Illusion of Terrorism Insurance*, 93 GEO. L.J. 783, 787-789 (2005). Rather than charging insurers or their clients for the government reinsurance, the federal government created a cost sharing program for terrorist events causing \$100 million or more in damages to the insurance industry. Insurers are responsible for a deductible (which is a percentage of their insurance premiums ranging from 7% in 2002 to 20% from 2006 to the present), as well as a copayment of initially 10% of the costs from the terrorist event (which increased to 15% of the costs from 2006 to the present) up to a \$100 billion ceiling. See Alexia Marks, *Under Attack: Terrorism Risk Insurance Regulation*, 89 N.C. L. REV. 387, 410-413 (2011). In theory, the federal government is supposed to recoup a percentage of its expenditures through an ex-post charge on insured parties. See Terrorism Risk Insurance Act of 2002, § 103(c)(1)-(2). But in practice this appears to be hollow deterrence at best that has little effect in shaping ex ante incentives for insured parties and insurers, because the political pressure not to impose a post-attack insurance surcharge would likely be overwhelming. See Jeffrey Manns, Note, *Insuring Against Terror*, 112 YALE L.J. 2509, 2534-35 (2003).

risk serves as an end in itself in providing a check on risk overstretch, such as by making speculative derivatives bets more expensive. But reinsurance pricing could also be leveraged to help established a baseline of risk-based fees for a public bailout funding system for derivatives participants.

The creation of an ex ante bailout insurance fund was rejected in the Dodd-Frank Act legislative process,¹⁸⁰ in part because of the difficulties in pricing bailout coverage.¹⁸¹ The goal of an ex ante bailout fund would be both to accumulate reserves for future bailouts and as importantly to deter excessive risk taking by imposing a risk-based cost for the government's financial backstop role. The dilemma of all forms of public insurance has been how to price public coverage because of the absence of market competition.¹⁸² Government insurance programs often have artificially low pricing which creates minimal incentives effects for insured parties to reduce risk exposure. A good illustration of this point is Federal Deposit Insurance Corporation (FDIC) coverage of demand deposits. The FDIC imposes "risk-based" assessment rates on banks to insure demand deposits against the risk of the bank's insolvency.¹⁸³ These assessments are based on a composite scorecard of banks' examination ratings and forward looking financial measures that distinguish between large and small banks. The basic problem is that the incentives risk-based assessments give for banks to curb risk taking will only be as strong as the accuracy of banking regulators' examination standards. The track record of bank regulators was quite poor in the run up to the financial crisis as regulators' examination ratings of banks were deferential to the banking industry.¹⁸⁴ There is no reason to believe that regulator deference to industry will be any different in the long run which will lead to predictably low pricing of risk exposure.

The net impact was that the government offered an 85 to 90% subsidy to cover damages from future terrorist attacks without charging insurance companies any premiums. This approach creates moral hazard as there is little incentive for insurers to price terrorism risks accurately beyond their own liability exposure. This fact means that insured parties may not face financial incentives to take all cost-justified steps to reduce terrorism risk exposure or mitigate damages, and at best terrorism insurance pricing will reflect the fractional liability exposure that insurers face. *See id.* at 2536-2543. In contrast, piggybacking the pricing of government bailout coverage off of derivative reinsurance coverage offers a market-based way to force derivatives' participants to internalize more of the potential risks raised by their investment strategies.

¹⁸⁰ The House of Representative initially passed a proposal for a \$150 billion "Systemic Dissolution Fund" pre-funded through risk-based assessments on large financial firms. *See* H.R. 4173, 111th Cong. § 1609 (2009). Senator Dodd's "chairman's mark" of the legislation proposed a pre-funded Orderly Liquidation Fund of \$50 billion. *See* S. 3217, 111th Cong. § 210(n) (2010) (Chairman's mark). Neither version survived in the final version of the Dodd-Frank Act.

¹⁸¹ *See* Jeffrey N. Gordon & Christopher Muller, *Confronting Financial Crisis: Dodd-Frank's Dangers and the Case for a Systemic Emergency Insurance Fund*, 28 YALE J. ON REG. 151, 193 (2011).

¹⁸² *See* Howell E. Jackson, *The Expanding Obligations of Financial Holding Companies*, 107 HARV. L. REV. 507, 600-602 (2010) (comparing the incentives for public and private pricing of insurance for financial entities).

¹⁸³ *See* Jonathan R. Macey & James P. Holdcroft, Jr., *Failure is an Option: An Ersatz-Antitrust Approach to Financial Regulation*, 120 YALE L.J. 1368, 1371 (2011).

¹⁸⁴ *See* Richard M. Hynes & Steven D. Walt, *Why Banks Are Not Allowed in Bankruptcy*, 67 WASH. & LEE L. REV. 985, 1023 (2010) (finding that the FDIC's loss rate is very high as 56% of bank failures resulted in FDIC losses exceeding twenty-percent of total deposits).

In contrast, one virtue of this Article's proposal is that regulators could piggyback off of market-based pricing for derivatives' reinsurance in setting public bailout insurance fees. Regulators could use the market price that parties pay for reinsurance as a baseline for setting optional or mandatory government bailout coverage for derivatives participants. Government bailout insurance rates could be directly linked to the reinsurance premiums for individual derivatives participants. For example, government bailout fees could be integrated as a multiple of reinsurance premiums to provide clear cost-based incentives that could evolve in real time as new risks emerge. Alternatively, a bailout regulator could use a rolling basket of reinsurance premiums to create bailout insurance fees that dynamically respond to broader changes in market risk perception. Either of these approaches would leverage the incentives reinsurance pricing gives to temper risk taking. These approaches would reduce the likelihood of public subsidies for private risk taking through artificially low pricing of public bailout coverage.

Creating a pre-funded bailout fund would raise a variety of challenges, not the least of which is the question of whether the benefits would be worth the additional burdens on the derivatives industry. If public coverage were optional, it is unclear the government would have the political wherewithal only to bail out participants during a major financial crisis. Moral hazard from free riding would be a significant problem as firms that opt out may still push politicians for a public bailout if the crisis were large enough.¹⁸⁵ The concern for compulsory bailout insurance would be both the cost and the potential for redundancy if this Article's proposal for mandatory reinsurance serves its purpose in tempering risk taking. Developing the potential of the idea of public bailout coverage piggybacking off of private risk pricing is well beyond the scope of this work. But at minimum this proposal suggests that a reinsurance mandate would advance a broader purpose in signaling market-based perceptions of risk to government regulators.

IV. Conclusion

At first glance it may seem counterintuitive to make the case for decentralized risk management in the wake of the financial crisis. But while centralized intervention was key to propping up the financial sector during the depths of the crisis, the federal government lacks the ability and resources to identify and nip future crises in the bud. The Dodd-Frank Act's reform of mandating that OTC derivatives are traded on exchanges and cleared and settled by clearinghouses appears to create additional private monitoring. However, in practice the limits to clearinghouse independence mean this attempt at reform will magnify systemic risks and perversely make future bailouts of the derivatives industry more likely.

¹⁸⁵ For example, many home owners fail to pay for optional federal government flood insurance, yet count on politicians to include them in bailouts when large floods strike. The same problem could confound optional government bailout coverage. See Michelle Boardman, *Known Unknowns: The Illusion of Terrorism Insurance*, 93 GEO. L.J. 783, 784-85 (2005) (discussing how victims of cataclysmic losses are likely to be compensated by the state or federal government whether or not they have insurance); Anne Gron & Alan O. Sykes, *TERRORISM AND INSURANCE MARKETS: A ROLE FOR THE GOVERNMENT AS INSURER?*, 36 IND. L. REV. 447, 449-50 (2003) (discussing the moral hazard posed by government compensation for insured and uninsured parties).

In contrast, this Article has shown how decentralized monitoring by gatekeeper guarantors could detect and deflate future financial bubbles. Intertwining self-interest, risk monitoring, and guarantor roles offers an innovative way to make financial sector interconnections serve a positive purpose. The enactment of a gatekeeper guarantor mandate would create a private backstop in systemically important sectors, such as derivatives, and would curb leverage by institutionalizing private circuit breakers in the financial system. This approach will not solve all of the problems facing the financial sector, but it would go far towards creating sustainable accountability and tempering leverage and risk taking.