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Regulating the Invisible: The Case of Over-the-Counter Derivatives

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ARTICLES

REGULATING THE INVISIBLE: THE CASE OF OVER-THE-COUNTER DERIVATIVES

*Colleen M. Baker**

In this Article, I focus on the regulation of the over-the-counter (OTC) derivative markets. I argue that current reform proposals and draft legislation fall short of constructing the linked domestic and international frameworks needed to successfully regulate the OTC derivative markets. The purpose of my Article is to propose and defend such a framework. Because of the inseparability of the domestic and international aspects of this issue, I argue that in addition to increased prudential supervision and regulation, the regulation of OTC derivative markets requires interwoven domestic and international systems for regulatory cooperation. This recommendation has two parts. First, Congress should create a framework of regulatory cooperation between the SEC and the CFTC through a regulatory joint venture. Second, I argue for an international framework of regulatory cooperation using a system of public-private partnerships to coordinate regulation of OTC derivatives in the global marketplace.

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INTRODUCTION

Mark Twain once said, “Everyone talks about the weather but nobody does anything about it.”¹ The same can be said for one of the most famous—or infamous—of the financial products that were at the epicenter of the 2008–09 financial crisis: so-called “derivatives.” In 1998, Robert Rubin, then U.S. Treasury Secretary, joined with Alan Greenspan, then Chairman of the Federal Reserve Board and Arthur Levitt, then Securities and Exchange Commission (SEC) Chairman,² to caution against a proposed “Concept Release” issued earlier that day³ by Brooksley Born, then Chairperson of the Commodity Futures Trading Commission (CFTC), urging the regulation of the over-the-counter (OTC) derivative markets.⁴ And even now, in the wake of a global financial disaster that many blame primarily on a host of exotic unregulated “invisible” financial instruments such as OTC credit default swaps (CDS), there is strong opposition to imposing restrictions on these markets. As one Congressman recently cautioned, “if Congress overreaches . . . there could be very significant negative implications on how companies manage risk.”⁵ In addition, “[a]t least 42 nonfinancial companies and trade associations are lobbying Congress on derivatives”⁶ and “[m]ore than 160 of Europe’s largest companies have swung behind efforts to persuade regulators to exempt corporate users of over-the-counter derivatives from tough new regulations.”⁷ Several of the former companies argue that the ultimate stakes include the health of American businesses and the prices consumers pay for all types of products, presumably including even Post-It Notes.⁸ And that does not even count the opposition of firms in the

1 See GREGG CAMFIELD, *THE OXFORD COMPANION TO MARK TWAIN* 216 (2003) (noting the quote’s attribution to Twain, but suggesting that it was originally coined by Twain’s neighbor).

2 See Press Release, U.S. Dep’t of the Treasury, Joint Statement by Treasury Secretary Robert E. Rubin, Federal Reserve Board Chairman Alan Greenspan and Securities and Exchange Commission Chairman Arthur Levitt (May 7, 1998), *available at* <https://www.ustreas.gov/press/releases/rr2426.htm>.

3 See Richard B. Schmitt, *The Born Prophecy*, 95 A.B.A. J., May 2009, at 50.

4 See Concept Release, Commodity Futures Trading Comm’n, Over-the-Counter Derivatives (May 7, 1998), *available at* <http://www.cftc.gov/opa/press98/opamntn.htm>.

5 Kara Scannell, *Big Companies Go to Washington to Fight Regulations on Fancy Derivatives*, WALL ST. J., July 10, 2009, at B1.

6 *Id.*

7 Jeremy Grant, *Businesses Demand OTC Exemptions*, FIN. TIMES, Jan. 6, 2010, at 21.

8 For example, 3M Co. officials, the makers of Post-It Notes, have testified in Congress and have been involved in lobbying efforts surrounding regulation of the OTC derivatives. See *The Effective Regulation of the Over-the-Counter Derivative Markets:*

financial sector itself, most of which strongly oppose increased regulation. As some financial experts explain, OTC derivatives are the “last remaining source of supra-normal profits”⁹ for the “world’s largest banks.”¹⁰

This Article will argue that it is time to prove Mark Twain wrong and actually do something about derivative markets—specifically those traded OTC. A flurry of reform proposals and draft legislation in Congress has arisen in response to the financial crisis. Individually and in common, they advocate many important changes in both prudential supervision¹¹ and regulation such as increases in transparency, disclosure, capital, and margin requirements (altogether, regulatory reforms) for OTC derivatives that are not cleared by a central counterparty (CCP) clearinghouse, in addition to CCP clearing of standardized OTC derivatives. But they generally share at least three major shortcomings. First, they advocate splitting regulation of OTC derivatives between the SEC and CFTC on a product basis. This solution has already been proven to be highly problematic. Second, they advocate mandated CCP clearing for “standardized” OTC derivatives.¹² This division between standardized and nonstandardized derivative products has not only failed in the past, but also arguably incentivized the creation of the OTC derivative products that have

Hearing before the Subcomm. On Capital Markets, Insurance, and Government Sponsored Enterprises of the H. Comm. Of Financial Services, 111th Cong. 75 (2009) (statement of Timothy J. Murphy, Foreign Currency Risk Manager, 3M).

9 *Over-the-Counter Derivatives: Modernizing Oversight to Increase Transparency and Reduce Risks: Hearing Before the Subcomm. on Securities, Insurance, and Investment of the S. Comm. on Banking, Housing and Urban Affairs, 111th Cong. 75 (2009) [hereinafter S. Banking Comm. Hearing]* (statement of Christopher Whalen, Managing Dir., Institutional Risk Analytics). For example, in the second quarter of 2009, U.S. banks generated \$1.9 billion and in the third quarter \$1.2 billion just from their credit derivative activities. OFFICE OF COMPTROLLER OF CURRENCY, U.S. DEP’T OF TREASURY, QUARTERLY REPORT ON BANK TRADING AND DERIVATIVES ACTIVITIES, THIRD QUARTER 2009, at 2 (2010), available at <http://www OCC.treas.gov/ftp/release/2009-161a.pdf>.

10 *S. Banking Comm. Hearing, supra* note 9, at 75 (statement of Christopher Whalen, Managing Dir., Institutional Risk Analytics).

11 In general, “prudential supervision” refers to the supervision by banking regulators of the safety and soundness of typically banking institutions. See generally Frederic S. Mishkin, *Prudential Supervision: Why Is It Important and What Are the Issues?* (NBER Working Paper Series, Working Paper No. 7926, 2000), available at <http://www0.gsb.columbia.edu/faculty/fmishkin/PDFpapers/w7926.pdf> (providing a general introduction to prudential supervision and surrounding issues).

12 But as commentators such as Professor Darrell Duffie note, AIG’s problematic CDS were not “standardized,” so this regulatory reform “solution” would have been inapplicable in AIG’s case. See Darrell Duffie, *How Should We Regulate Derivatives Markets?* (PEW Fin. Reform Project, Briefing Paper No. 5, 2009), available at http://www.pewfr.org/project_reports_detail?id=0017.

caused some of the biggest problems.¹³ Third, they do not seriously address the international aspects of domestic regulations addressing these global markets. As one commentator has noted, “all of these efforts [at regulatory reform] leave unresolved a critical problem—that is, the regulatory arbitrage that will be created by a U.S. regulatory regime that is different from that continuing or established in other jurisdictions.”¹⁴ And as Professor Joseph Norton notes, there are “enormous opportunities for regulatory arbitrage and regulatory jurisdictional ambiguities existing at the international level.”¹⁵

In sum, current reform proposals and draft legislation fall short of constructing the linked domestic and international framework needed to successfully regulate the OTC derivative markets. The purpose of this Article is to propose and defend such a framework.¹⁶ Because of the inseparability of the domestic and international aspects of this issue, I argue that in addition to commonly proposed regulatory reforms, the regulation of OTC derivative markets requires interwoven domestic and international systems for regulatory cooperation. This recommendation has two parts. First, Congress should create a framework of regulatory cooperation between the SEC and the CFTC through a regulatory joint venture. Second, I argue for an international framework of regulatory cooperation using a system of public-private partnerships to coordinate regulation of OTC derivatives in the global market.

The time is right for thoughtful action in this long-deferred regulatory field. Many leaders who counseled caution in the 1990s have changed their tunes. For example, Robert Rubin now predicts that

13 See *The Effective Regulation of the Over-the-Counter Derivatives Market: Hearing Before the Subcomm. on Capital Markets, Insurance, and Government Sponsored Enterprises of the H. Comm. on Financial Services*, 111th Cong. 164 (June 9, 2009) [hereinafter *H. Financial Services Comm. Hearing*] (statement of Christian Johnson, Professor, S.J. Quinney Coll. of Law, Univ. of Utah); Frank Partnoy, Op-Ed., *Danger in Wall Street's Shadows*, N.Y. TIMES, May 15, 2009, at A39.

14 Joel S. Telpner & Jamila A. Piracci, *OTC Derivatives—In the Crosshairs of U.S. Regulatory Change*, SECURITIZATION UPDATE (Mayer Brown LLP, Chicago, Ill.), May 19, 2009, at 1, 4, available at <http://www.mayerbrown.com/publications/article.asp?id=6753>; see also Jeremy Grant et al., *Cracks are Emerging in Transatlantic Approach to Reform*, FIN. TIMES, Jan. 6, 2010, at 21 (describing diverging approaches to OTC reform in Europe and the United States). But see Joseph Stiglitz, Op., *Watchdogs Need Not Bark Together*, FT.COM, Feb. 10, 2010, <http://www.ft.com/cms/s/0/3ebddd1e-15b7-11df-ad7e-00144feab49a.html> (urging regulatory reform even in the absence of immediate global coordination).

15 Joseph J. Norton, *A Perceived Trend in Modern International Financial Regulation: Increasing Reliance on a Public-Private Partnership*, 37 INT'L LAW. 43, 52 (2003).

16 The appropriate basis for mandating CCP clearing is an important issue, but it is beyond the scope of this Article.

“[i]n some form it [OTC derivatives regulation] will happen.”¹⁷ And Alan Greenspan has famously acknowledged that he “‘made a mistake in presuming that the self-interests of organizations, specifically banks and others, were such as that they were best capable of protecting their own shareholders and their equity in the firms.’”¹⁸ While this Article does not claim, as do some proponents of increased regulation of OTC derivative markets, that the stability of the entire global financial system hinges on blanket regulation of these instruments, it does argue that additional regulatory measures will add much-needed transparency and an important degree of protection from systemic risk that is currently lacking in the OTC derivatives area.

Legal scholarship concerning the regulation of the OTC derivative markets has been almost as sparse as the regulation itself.¹⁹ This is unfortunate since much scholarship in financial economics focuses on this area, but as legal scholars and a host of others—including Queen Elizabeth²⁰—note, this financial crisis took most economists by surprise.²¹ Perhaps the economists can be forgiven as legal scholars such as Lynn Stout argue that “the roots of the catastrophe lay not in changes in the markets, but changes in the law. . . . It was the deregu-

17 Matthew Leising & Roger Runningen, *Brooksley Born 'Vindicated' as Swap Rules Take Shape*, BLOOMBERG.COM, Nov. 13, 2008, <http://www.bloomberg.com/apps/news?pid=20601109&sid=aVYf8XDXiSZM&refer=home> (quoting Robert Rubin).

18 Brian Knowlton & Michael M. Grynbaum, *'Shocked' that Free Markets Are Flawed*, N.Y. TIMES, Oct. 23, 2008, <http://www.nytimes.com/2008/10/23/business/worldbusiness/23iht-gspan.4.17206624.html> (quoting Alan Greenspan).

19 Although sparse, a small literature does exist. In addition to materials cited in this Article, examples include: Thomas Lee Hazen, *Disparate Regulatory Schemes for Parallel Activities: Securities Regulation, Derivatives Regulation, Gambling, and Insurance*, 24 ANN. REV. BANKING & FIN. L. 375 (2005); 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 (2001); Frank Partnoy, *The Shifting Contours of Global Derivatives Regulation*, 22 U. PA. J. INT'L ECON. L. 421 (2001); Frank Partnoy, *ISDA, NASD, CFMA, and SDNY: The Four Horsemen of Derivatives Regulation?* (Univ. of San Diego Law Sch., Pub. Law & Legal Theory Working Paper No. 39, 2002), available at <http://ssrn.com/abstract=293085>; and M. Todd Henderson, *Credit Derivatives Are Not "Insurance"* (Univ. Of Chi. Law Sch., John M. Olin Law & Econ. Working Paper No. 476, 2009), available at <http://ssrn.com/abstract=1440945>.

20 See Associated Press, *Sorry Ma'am—We Just Didn't See It Coming*, July 26, 2009, available at <http://www.msnbc.msn.com/id/32156155> (reporting that “a group of eminent economists have apologized to Queen Elizabeth II for failing to predict the financial crisis”).

21 See RICHARD A. POSNER, *A FAILURE OF CAPITALISM* 252–58 (2009); Lynn A. Stout, *How Deregulating Derivatives Led to Disaster, and Why Re-Regulating Them Can Prevent Another*, LOMBARD ST., July 6, 2009, at 4, 4, available at <http://www.finreg21.com/files/finreg21-finreg21/Lombard%207.pdf>.

lation of financial derivatives that brought the banking system to its knees.”²² Professor of finance Darrell Duffie notes that derivative markets “exacerbated” the financial crisis.²³ In recent congressional testimony, Stout argued that derivatives “may provide some economic benefit,” but cautioned that “no empirical evidence” supports claims of the “substantial” social benefit of these instruments.²⁴ In another congressional hearing, however, Professor Christian Johnson cautioned Congress to focus on the “practicalities and complexities” of regulating the OTC derivative markets and to understand “the need to proceed carefully in order to preserve U.S. leadership in the world’s capital markets.”²⁵ As Congress and major financial regulators such as the SEC, CFTC, and Federal Reserve Board begin to revisit the question of regulating the OTC derivative markets, legal scholarship can also contribute to this conversation. This Article seeks to do that.

In Part I, I provide necessary background for my thesis by discussing the myriad of participants, instruments, and transacting practices in the OTC derivative markets. Part II explains the current regulatory framework surrounding OTC derivatives. I also explain a bit of the history behind this minimal and inadequate regulatory structure. I end this Part by addressing whether any justification for government regulation of these markets even exists. Part III treats what I term the

22 Stout, *supra* note 21, at 4.

23 Duffie, *supra* note 12, at 5–6. Professor Duffie argues that derivatives markets “exacerbated” the financial crisis in two ways:

First, insurance companies such as AIG, Ambac, and MBIA used CDS to sell protection on CDOs backed by sub-prime mortgages to such an extent that they were severely impaired when those CDOs experienced large losses from mortgage defaults. This in turn contributed to the weaknesses of the banks that had bought and relied upon the protection of these credit default swaps. Second, the failures of the large investment banks Bear Stearns and Lehman Brothers were exacerbated by a run of their OTC derivatives counterparties. The flight of these derivatives counterparties, as they sought new positions with other dealers, may also have contributed to the fragility of global financial markets. In the same vein, a number of other large dealer banks had to be bailed out for reasons that included the dangers posed by the potential flights of their derivatives portfolios.

Id. For additional background on “runs” on OTC derivative counterparties, see Gary Gorton & Andrew Metrick, *Securitized Banking and the Run on Repo* (Yale Int’l Ctr. for Fin., Working Paper No. 09-14, 2009), available at <http://ssrn.com/abstract=1440752>.

24 Letter from Lynn A. Stout, Professor, UCLA Sch. of Law, to S. Comm. on Agriculture, Forestry, and Nutrition 1 (June 4, 2009) [hereinafter Stout Testimony], available at http://216.40.253.202/~usscanf/index.php?option=com_docman&task=doc_download&gid=93.

25 *H. Financial Services Comm. Hearing, supra* note 13, at 161 (statement of Christian Johnson, Professor, S.J. Quinney Coll. of Law, Univ. of Utah).

“regulatory contenders,” the regulatory paradigms, reform proposals, draft legislation, and financial regulators offering complementary and competing solutions for the reform of these markets.

Finally, in Part IV, I lay out my proposed framework for solving the OTC derivative regulation problem. My approach is incremental, simultaneous, and twofold for at least two reasons. First, regulation of the OTC derivative markets should ideally be part of much needed comprehensive, financial regulatory reform. Understanding effective regulatory reforms in the wake of the current crisis will be a lengthy process as will be the significant challenges of the political process itself. Second, international considerations are the most critical component of the regulation of these markets, but also the most challenging. Meaningfully progressing beyond the largely hollow current calls for international “coordination”²⁶ in the regulation of these markets will also be time consuming. But increased regulation of the OTC derivative markets cannot wait.

The first part of my approach argues that in addition to many commonly proposed regulatory reforms, Congress should create an SEC-CFTC regulatory joint venture to promote a domestic framework of regulatory cooperation. It would have regulatory jurisdiction over all major market participants, all currently unregulated OTC derivative products, and all significant market infrastructure institutions such as CCP clearing facilities and trade repositories. Therefore, Congress should amend the Commodity Futures Modernization Act²⁷ (CFMA) to transfer all oversight of OTC derivative clearing facilities to this SEC-CFTC joint venture. A protracted turf-war between the SEC and CFTC has complicated regulation of these markets since the 1970s. Some scholars even suggest that their disputes have contributed to the lack of effective regulation of these markets.²⁸ Many reform proposals and draft legislation anticipate continuing tensions between the CFTC and SEC and, therefore, generally provide for the creation or intervention of a third entity to address such future dis-

26 For example, the Wall Street Reform and Consumer Protection Act, H.R. 4173, 111th Cong. (as passed by House, Dec. 11, 2009), only makes a very general call for international consultation, coordination and information sharing. *See id.* § 3003.

27 7 U.S.C. §§ 1–27 (2006).

28 *See* Jerry W. Markham, *Super Regulator: A Comparative Analysis of Securities and Derivatives Regulation in the United States, the United Kingdom, and Japan*, 28 *BROOK. J. INT'L L.* 319, 356–66 (2003); Analysts Mull Treasury's Calls for Derivatives Regulation, PBS Online NewsHour, May 14, 2009, http://www.pbs.org/newshour/bb/business/jan-june09/regulation_05-14.html [hereinafter PBS NewsHour] (statement of Lynn Stout, Professor, UCLA Sch. of Law).

putes.²⁹ If and when comprehensive U.S. financial regulatory reform occurs, this joint venture can not only be merged into another agency structure if appropriate, but also can provide valuable practical lessons about combining financial regulatory agencies.

The second part of my framework of cooperation approach builds on theoretical constructs from the economic analysis of international law³⁰ and Professor Joseph Norton's work on public-private partnerships as features of modern international financial regulation.³¹ I utilize insights from Norton's descriptive approach to propose public-private regulatory partnerships that will apply to the governance of the OTC derivative markets. From the law and economics field, I turn to Professors Jeffrey Dunoff and Joel Trachtman,³² who have conceived of the international legal system as a type of "economic market" largely composed of states³³ that trade "components of power."³⁴ Using this model, I suggest that financial regulation can be thought of as a product,³⁵ and that governments face a Coasian "make" or "buy" production decision involving government, global private law, and hybrid solutions.

29 For example, under Wall Street Reform and Consumer Protection Act, a Financial Services Oversight Council would resolve jurisdictional disputes between the SEC and CFTC over OTC derivatives, H.R. 4173, 111th Cong. § 1002, and § 3002 provides for judicial review by the United States Court of Appeals for the District of Columbia Circuit of jurisdictional disputes between these regulators. Similarly, under Senator Dodd's bill, the Restoring American Financial Stability Act of 2010, S. 3217, 111th Cong., which recently passed the Senate Banking Committee, the Financial Stability Oversight Council would resolve jurisdictional disputes between the SEC and CFTC. *Id.* § 119.

30 For examples of the scholarship in this area, see AN ECONOMIC ANALYSIS OF PRIVATE INTERNATIONAL LAW (Jurgen Basedow & Toshiyuki Kono eds., 2006); ECONOMIC DIMENSIONS IN INTERNATIONAL LAW (Jagdeep S. Bhandari & Alan O. Sykes eds., 1997); William J. Aceves, *The Economic Analysis of International Law: Transaction Cost Economics and the Concept of State Practice*, 17 U. PA. J. INT'L ECON. L. 995 (1996); Jeffrey L. Dunoff, *Some Costs and Benefits of Economic Analysis of International Law*, 94 AM. SOC'Y INT'L L. PROC. 185 (2000); Jeffrey L. Dunoff & Joel P. Trachtman, *Economic Analysis of International Law*, 24 YALE J. INT'L L. 1 (1999); Symposium, *Economic Analysis of International Law*, 16 INT'L REV. L. & ECON 1 (1996); Symposium, *Public International Law and Economics*, 2008 U. ILL. L. REV. 1.

31 Norton, *supra* note 15, at 47-53.

32 Dunoff & Trachtman, *supra* note 30, at 12-22.

33 *Id.* at 13.

34 *Id.*

35 See generally ERIN A. O'HARA & LARRY E. RIBSTEIN, *THE LAW MARKET* (2009) (exploring the "law market" created by the ability of people and firms to move beyond domestic law's reach and "shop" for legal regimes just as they do for other goods).

Domestic regulations addressing global OTC derivative markets can be thought of as residing somewhere on an international regulatory production continuum with opposing poles between government law and regulation (a “make own rules” condition) and global private law and governance (the “buy rules from elsewhere” condition). Governments face a “production decision” among domestic legal institutions, institutions of global private law, and hybrid legal institutional arrangements. I argue that recent developments in global private governance such as the Credit Derivative Determination Committees of the International Swaps and Derivatives Association exemplify the highly successful and rapid growth of global private governance of the OTC derivative markets. Therefore, international public-private regulatory partnerships should combine or create “tradeoffs” of the various components of regulatory asset bundles of government regulation and global private regulation. Such combinations offer global governance possibilities in the OTC derivative markets which are inaccessible to either government or consolidated private actors individually. They also harmonize with recent suggestions of “an urgent need for a specialist, cross-border financial court”³⁶ for the OTC derivative markets. I use my conceptualization to highlight three urgent global governance issues in the OTC derivative markets: global CCP clearing, global trade repositories, and specialist cross-border financial courts.

As Rubin recently intimated, few doubt that increased regulation of the OTC derivative markets is imminent and necessary for financial stability. As Secretary of the Treasury Tim Geithner states, “[b]ecause of their enormous scale and the critical role they play in our financial markets, establishing a comprehensive framework of oversight for the OTC derivative markets is crucial to laying the foundation for a safer, more stable financial system.”³⁷ I agree with this general conviction and in this Article explore the two basic questions ultimately involved in the regulation of the OTC derivative markets: by whom and how?

I. SKETCH OF THE OVER-THE-COUNTER DERIVATIVE MARKETS

Derivatives have existed for thousands of years,³⁸ but perhaps in simpler forms. While not as familiar as 3M’s Post-It products, finan-

³⁶ Gillian Tett, *More Prison Sentences May Renew Financial Credibility*, FIN. TIMES, Sept. 4, 2009, at 30 (mentioning a suggestion by Jeffrey Golden, a prominent derivatives attorney).

³⁷ *Hearing to Examine the Regulation of Over-the-Counter Derivatives Before the H. Comms. on Agriculture and Financial Services*, 111th Cong. 12 (2009) [hereinafter *H. Agric. Comm. Hearing*] (statement of Timothy F. Geithner, Secretary, U.S. Dep’t of the Treasury).

³⁸ See ALASTAIR HUDSON, *THE LAW ON FINANCIAL DERIVATIVES* 12 (4th ed. 2006).

cial derivatives such as interest-rate swaps, foreign currency swaps, and CDS are an important and widespread part of the infrastructure of modern business transactions. By some estimates, over ninety-four percent of the five hundred largest companies worldwide use derivatives to manage business and financial risk.³⁹ In fact, “companies are among the biggest users of OTC products.”⁴⁰ These include institutions as diverse as 3M, Cargill, JP Morgan Chase, hedge funds and other types of investment funds, insurance companies, and even government entities. Therefore, the importance of derivatives and their regulation extends far beyond financial and insurance markets. Derivatives are so widely used across so many sectors of the economy that their regulation has implications not only for Wall Street, but also for Main Street America and international financial markets.

Derivatives are bought and sold in two distinct but related markets: exchange-traded markets and the OTC markets. Both markets are also interrelated with their respective cash markets. Exchange-traded derivatives are sometimes generically referred to as “futures.”⁴¹ Similarly, OTC derivatives are often generically termed “swaps.”⁴² A variety of participants trade derivatives on exchanges, but the OTC derivative markets are primarily the province of highly sophisticated and largely institutional parties such as banks and other financial institutions, insurance companies, hedge funds, other types of investment funds, and even government entities. Because institutional markets are global markets⁴³ and no global financial regulator exists, the OTC derivative markets contain important regulatory challenges beyond those experienced by local exchanges. Exchange-traded derivative markets and OTC derivative markets, however, have “developed in parallel” and should be viewed as symbiotic rather than competitive.⁴⁴ Only “standardized” derivatives can trade on exchanges. This cur-

39 Press Release, Int’l Swaps & Derivatives Ass’n, *Over 94% of the World’s Largest Companies Use Derivatives to Help Manage Their Risks, According to ISDA Survey* (Apr. 23, 2009), available at www.isda.org/press/press042309der.pdf.

40 Jeremy Grant, *Derivatives Reform Draws UK Warning*, FIN. TIMES, July 25, 2009, at 14.

41 Int’l Swaps & Derivatives Ass’n, *Product Descriptions and Frequently Asked Questions*, <http://www.isda.org/educat/faqs.html> (scroll to second question) (last visited Apr. 3, 2010).

42 *Id.*

43 See Brian G. Cartwright, *Whither the SEC Now?*, 95 VA. L. REV. 1085, 1090 (2009).

44 MARK YALLOP, *THE FUTURE OF THE OTC MARKETS* § 3.1 (2008), available at <http://www.icap.com/Download.aspx?fileid=2a233c27-8736-406c-bb4a-e3c9ebfb1419>.

rently means only the following types of derivative instruments: “futures, options on futures, and options.”⁴⁵

An important difference between derivatives that trade on an exchange or use CCP clearinghouses⁴⁶ and bilaterally cleared OTC derivatives is counterparty credit risk. For derivatives traded on exchanges or cleared through individual CCPs, the counterparty is the CCP itself. Therefore, market participants are only exposed to the credit risk of the CCP.⁴⁷ Therefore, CCP clearinghouses should theoretically implement highly robust risk management practices. On the other hand, counterparty credit risk is a very important concern for bilaterally cleared OTC derivatives. Exchanges and CCP clearinghouses, however, have important limitations. For example, it is generally only profitable for them to process standardized derivative contracts. Another important difference between exchange-traded derivatives or those cleared through an individual CCP and bilaterally cleared OTC derivatives is that the former category has a clear physical presence in a particular jurisdiction. On the other hand, bilaterally cleared OTC derivatives are “transacted across jurisdictional boundaries and are primarily governed by the contractual relations between the parties.”⁴⁸

Exchange-traded derivatives are well regulated. In fact, some calls for reform have suggested that all OTC derivatives should migrate to exchange trading. Because exchange-traded derivatives are relatively uncontroversial from a public policy perspective, this Article does not focus on this market. The OTC derivative markets, which have grown to have a global face value of approximately \$605 trillion,⁴⁹ however, remain the “Wild West” of derivatives regulation. And as this Article discusses, regulating this global “Wild West” in which local outposts of regional CCP clearing facilities are increasingly being developed is only becoming more challenging.

45 *H. Financial Services Comm. Hearing, supra* note 13, at 166 (statement of Christian Johnson, Professor, S.J. Quinney Coll. of Law, Univ. of Utah).

46 Exchanges generally use CCPs as part of their operational infrastructure.

47 Technically, both face a non-zero insolvency risk. As I discuss later in this Article, an insolvent CCP clearinghouse could be potentially disastrous because of its concentration of credit risk.

48 Int’l Swaps & Derivatives Ass’n, *supra* note 41 (scroll to third question).

49 MONETARY & ECON. DEP’T, BANK FOR INT’L SETTLEMENTS, OTC DERIVATIVES MARKET ACTIVITY IN THE FIRST HALF OF 2009, at 5 (2009) [hereinafter BIS, OTC DERIVATIVES], available at http://www.bis.org/publ/otc_hy0911.pdf.

A. Background

In essence, derivatives are complex financial contracts in which one party pays another party if “something” happens in the future.⁵⁰ Contracting about this “something” sometimes provides an insurance-like, risk-neutralizing function, which is called a “hedge,” and it sometimes simply provides an opportunity for speculation, a “bet.” In the simplest, most traditional case, a farmer can hedge the value of his as-yet-to-be-harvested wheat crop by buying a derivative related to the weather (so Mark Twain was actually wrong all along) or the market price of wheat in the future. Similarly, businesses can hedge fluctuations in foreign exchange rates by using derivatives related to prices in foreign currency markets. The buyer of a CDS seeks to be compensated and the seller of a CDS agrees to pay if the price of a reference asset such as a bond (or the credit quality of an entire firm) decreases. In short, the derivative contract “derives” its value from changes in another underlying referenced asset, asset bundle, financial interest rate, or even an event such as the weather. Examples of such references include interest rates, foreign currency, credit products, equity products, or even an event. Theoretically, “anything that can be quantified and objectively verified can be the subject of a derivative.”⁵¹

The widespread notoriety of the CDS form of financial derivative is largely attributable to the near-collapse of American International Group (AIG), a leading seller of these instruments, which teetered on the brink of financial disaster in September 2008. But CDS are only one type of credit derivative. And credit derivatives are only one type of OTC derivative. The OTC derivative markets include a dizzying array of complex financial instruments. Interest rate swaps constitute the majority of OTC derivatives. Incredibly, less than two years after Long Term Capital Management’s (LTCM) near collapse in 1998, Congress passed the CFMA in 2000.⁵² This legislation implemented a sweeping deregulation of OTC derivative activity and is discussed in Part II of this Article. The timing of the CFMA does not seem to have been an anomaly. Although derivatives have earned star billing in “every major financial calamity”⁵³ for many years now, their regulation appears to so far be inversely correlated with their ill-begotten fame. The OTC derivative markets can be divided into the following catego-

50 See Stout, *supra* note 21, at 5 (“[Derivatives] are simple bets on the future—nothing less, and nothing more.”).

51 Mark A. Guinn & William L. Harvey, *Taking OTC Derivative Contracts as Collateral*, 57 BUS. LAW. 1127, 1129 (2002).

52 See Pub. L. No. 106-554 § 1(a)(5), 114 Stat. 2763, 2763A-366 (2000).

53 See Partnoy, *supra* note 13.

ries and approximate notional amounts: \$437.2 trillion of interest rate products, \$48.8 trillion of foreign exchange products, \$36 trillion of CDS, \$6.6 trillion of equity derivatives, \$3.7 trillion of commodity derivatives, and \$72.3 trillion of other variety.⁵⁴ These categories include “a very broad swath of product types from collateralized obligations packaged as securities (including subprime mortgage obligations) to pure vanilla swaps that are unregulated versions of futures contracts.”⁵⁵ It would be difficult to list all variety of OTC derivatives both because they are often proprietary products and continuous product innovations characterize these markets.

OTC derivative markets are many times the size of exchange-traded markets⁵⁶ and compromise roughly eighty-three percent of the derivative market.⁵⁷ OTC derivatives are often nonstandardized financial instruments. These markets are characterized by “bespoke” or customized financial derivatives. This enables the trading of a plethora of product types and structures “such as forwards, swaps, options, caps, floors, etc.,” which can themselves be “infinitely divided into customized structures and all with a variety of cash flows very distinct from exchange traded derivatives.”⁵⁸ Such flexibility is one important reason these markets have long thrived.⁵⁹ The beginnings of the OTC derivative markets date to the early 1980s in an interest rate swap between IBM and the World Bank.⁶⁰

The building blocks of this exotic “broad swath,” however, consist of merely two basic structures: options and forwards (futures).⁶¹ Forwards “neutralize risk” and options have an insurance-like function.⁶² An option is the right to buy, a right termed a “call,” or sell, a right termed a “put,” a reference asset at a specific price, the “strike price,” in the future. For example, to guard against a drop in the spot price of wheat, our wheat farmer might want the right, but not the obliga-

54 See BIS, OTC Derivatives, *supra* note 49, at 5–6.

55 H. Financial Services Comm. Hearing, *supra* note 13, at 134 (statement of Terrence A. Duffy, Exec. Chairman, CME Group Inc.).

56 JOHN HULL, OPTIONS, FUTURES, AND OTHER DERIVATIVES 2 (7th ed. 2008).

57 BENN STEIL & MANUEL HINDS, MONEY, MARKETS & SOVEREIGNTY 30 (2009).

58 H. Financial Services Comm. Hearing, *supra* note 13, at 166 (statement of Christian Johnson, Professor, S.J. Quinney Coll. of Law, Univ. of Utah).

59 See *id.* at 164 (noting that “OTC derivatives were developed in response to market demand for derivatives that could be customized beyond what was offered in the exchange-traded market”).

60 *Id.* at 177 (statement of Robert Pickel, Chief Exec. Officer, Int’l Swaps & Derivatives Ass’n).

61 But see HUDSON, *supra* note 38, at 15 (“All financial derivatives products are based on variants of the option.”).

62 See HULL, *supra* note 56, at 11.

tion, to “put” or sell his wheat to a cereal manufacturer in six months at a set price. Similarly, if the cereal manufacturer depends upon this wheat in her production processes and wants to insure against a rise in the spot price of wheat, she can enter a forward contract with the farmer to lock in a specified price for the wheat in six months. In this case, the farmer/manufacturer is obligated to sell/buy wheat in six months at the designated price.

OTC derivative markets are currently concentrated in New York and London.⁶³ But this global wholesale market, where small transactions are in the millions of dollars, is inherently a global market and includes participants from all parts of the world. As Professor Hudson explains, “In the context of financial derivatives the use of foreign currency, the use of subsidiaries in other jurisdictions, and the use of multiple branches and transactions across borders are the mainstay of market activity.”⁶⁴ And certain regions such as China,⁶⁵ the Middle East,⁶⁶ and Brazil⁶⁷ are becoming increasingly important in these markets. The participants in the OTC derivative markets are as varied as the instruments themselves. They are typically highly sophisticated commercial parties and all types of financial institutions such as banks, insurance companies, hedge funds, asset managers, multinational corporations and various types of government entities. It is important to note that the banks referred to largely constitute a small, concentrated group. In the United States, an essentially two-tiered banking system has evolved, consisting of a small group of large international banks and another tier of smaller more local/regional banks.⁶⁸ It is the former that tend to deal in derivatives. For example,

63 See Huw Jones, *EU Says Clearing Key to Making Derivatives Safer*, REUTERS, July 3, 2009, www.reuters.com/article/idUSBRU00943520090703.

64 HUDSON, *supra* note 38, at 453.

65 See Denis McMahon, *Foreign Banks Caught in Bind*, WALL ST. J., Sept. 3, 2009, at C2.

66 For example, EuroMoney advertised a seminar in October 2008 entitled “Derivatives in the Middle East Conference.” The promotional materials state that “[d]erivatives and structured products in the Middle East are on the verge of an explosion.” See EuroMoney Seminars, *Derivatives in the Middle East Conference*, <http://www.euromoneyseminars.com/EventDetails/0/703/Derivatives-Middle-East-Conference.html> (last visited Apr. 2, 2010).

67 See Gerald Jeffris, *Brazil to Set Up Registry for Foreign Derivatives*, WALL ST. J., Nov. 12, 2009, at C7.

68 For example, Robert Wilmers explains that:

In fact, 90% of all trading revenues earned by bank holding companies is concentrated in just five firms—Bank of America, Citigroup, Goldman Sachs, JP Morgan Chase and Morgan Stanley. These are the institutions showing the renewed profitability that has attracted so much public com-

the following quote offers a snapshot of OTC derivatives use by large U.S. banks:

The five biggest derivatives dealers in the U.S.—JPMorgan, Goldman Sachs, Bank of America, Morgan Stanley and Citigroup Inc.—held 95 percent of the \$291 trillion in notional derivatives value of the country's 25 largest bank holding companies at the end of the first quarter, according to a report by the Office of the Comptroller of the Currency. More than 90 percent of those derivatives were traded over the counter, the OCC data show.⁶⁹

OTC derivative market participants transact for three general reasons: hedging, speculation, and arbitrage. Hedging is a risk management practice that enables insuring against movements in market prices.⁷⁰ In the above example of a wheat forward, the cereal manufacturer was hedging her risk exposure to changes in the spot price of wheat. The cereal manufacturer will need wheat, regardless of its market price, to make her cereal. If the price of wheat skyrockets, it is unlikely that the manufacturer can raise the price of her cereal an equal amount without impacting consumer buying habits. This type of risk management might sound boring and far removed from the world of high finance, but “[o]ne of the unfortunate facts of life is that hedging is relatively dull, whereas speculation is exciting.”⁷¹ But speculation is also controversial.⁷² In fact, some have argued that

ment. But much of this improvement comes from trading and speculation. The vast majority of American banks don't do either.

....

The five firms have swung from an aggregate loss of \$14.0 billion in 2008 to \$30.1 billion of net income through September 2009. The remainder of the industry, which earned \$4.4 billion in 2008, is now showing \$9.7 billion in red ink through this year's third quarter.

Robert G. Wilmers, *Not All Banks Are Created Alike*, WALL ST. J., Dec. 19, 2009, at A13.

69 Christine Harper et al., *Wall Street Stealth Lobby Defends \$35 Billion Derivatives Haul*, BLOOMBERG.COM, Aug. 31, 2009, http://www.bloomberg.com/apps/news?pid=20601109&sid=agFM_w6e2i00.

70 See Wayne Guay & S.P. Kothari, *How Much Do Firms Hedge with Derivatives?*, 70 J. FIN. ECON. 423 (2003). Guay and Kothari's article “examine[s] the hypothesis that financial derivatives are an economically important component of corporate risk management.” *Id.* at 452. Their study suggests that “the magnitude of the derivatives positions held by most [nonfinancial] firms is economically small in relation to their entity-level risk exposures.” *Id.*

71 HULL, *supra* note 56, at 770. Hull notes that Nick Leeson's official role at Barings Bank, the bank he financially destroyed through derivatives speculation, was to seek arbitrage opportunities. *Id.*

72 In Part II, I explain more of the controversy surrounding derivatives speculation.

there should be an “economic purpose” test for OTC derivatives.⁷³ Speculators make bets about the future. These bets could involve the direction of certain market prices or even the occurrence of a particular event. Consequently, a trader might buy/sell a wheat-related derivative, but have no more real economic interest in wheat than in UFO sightings, except for the potential profit from betting correctly. Finally, arbitrageurs look for assets financial markets should price similarly, but are currently priced differently, and bet on their eventual price convergence.⁷⁴ But theory is often different from practice. LTCM’s strategy reportedly involved relatively riskless arbitrage.⁷⁵

While dazzling many, the dizzying complexity of the OTC derivative markets also has its critics. Some charge that this complexity is “one of the demons that makes our financial markets crisis prone.”⁷⁶ Therefore, I next provide a general overview of the benefits and costs of OTC derivatives use.

B. An Overview of the Benefits and Costs of Using OTC Derivatives

1. Benefits

OTC derivatives serve important, productive, and necessary economic purposes.⁷⁷ Unlike the standardized derivatives traded on exchanges, OTC derivatives allow for customized risk management. This flexibility is important because “‘real world’ economic risk is normally non-standardised.”⁷⁸ The ability to customize OTC derivatives has several important implications. This Part discusses merely a handful of these benefits. First, firms are able to closely hedge their actual business and financial risks and, thereby, receive beneficial account-

⁷³ See Thomas Lee Hazen, *Filling a Regulatory Gap: It Is Time to Regulate Over-the-Counter Derivatives*, 13 N.C. BANKING INST. 123, 133–35 (2009).

⁷⁴ See HULL, *supra* note 56, at 10.

⁷⁵ Michael Lewis, *How the Eggheads Cracked*, N.Y. TIMES MAG., Jan. 24, 1999, at 24 (describing the “killer blows” to LTCM as involving interest-rate waps and long-term options). See generally ROGER LOWENSTEIN, *WHEN GENIUS FAILED* 3–39 (2000) (discussing the rise and fall of LTCM).

⁷⁶ Testimony of Richard Bookstaber Submitted to S. Comm. Agriculture, Nutrition, and Forestry 4 (June 4, 2009) [hereinafter Bookstaber Testimony], available at http://216.40.253.202/%7Eusscanf/index.php?option=com_docman&task=doc_download&gid=92; see also RICHARD BOOKSTABER, *A DEMON OF OUR OWN DESIGN* 143 (2007) (“Complexity is a byproduct of today’s interrelated markets. It is not always benevolent; it is at times catastrophic and is always helped along by the organizational jumble of firms . . . as well as by the host of derivative instruments that have come to dominate the financial landscape.”).

⁷⁷ See, e.g., *Over-the-Counter Derivatives*, 63 Fed. Reg. 26114 (May 12, 1998).

⁷⁸ See YALLOP, *supra* note 44, § 3.9.

ing treatment under current hedge accounting rules.⁷⁹ Second, OTC derivatives can increase liquidity in various underlying markets, the market on which a derivative itself is based. Third, they enable highly tailored diversification of investment portfolios. Fourth, they can improve the accuracy of certain market prices. For example, CDS spreads provide signal the market's outlook on a specific credit risk.⁸⁰ Fifth, OTC derivatives enable a broader diversification of risk than possible with more traditional financial instruments. For example, credit derivatives enable a more tailored transfer of credit risk than traditional credit instruments.⁸¹ Sixth, a related point is that certain derivatives, such as credit derivatives, increase bank credit capacity, which should facilitate additional amounts of lending.⁸² As the financial crisis has demonstrated, however, credit derivatives can also negatively affect the amount of lending in an economy. Seventh, bilaterally cleared OTC derivatives provide firms with more flexibility in their counterparty credit arrangements than exchange trading. For example, bilateral clearing allows firms to use flexibly tailored credit support arrangements to manage counterparty credit risk.⁸³ Firms argue that this flexibility is crucial in efficiently managing their working capital. Cargill, 3M, and others argue that losing such flexibility would have a significant negative impact on their business operations because it would inefficiently reallocate substantial capital amounts necessary for managing their businesses. They argue that losing this flexibility would increase the overall cost of doing business.⁸⁴ Exchange trading or CCP clearing of derivatives requires standardized

79 See HULL, *supra* note 56, at 38.

80 See Michael Casey, *The U.S. Is Riskier Than Euro Zone; So Says CDS Market*, WALL ST. J. ONLINE, Mar. 24, 2010, <http://online.wsj.com/article/SB10001424052748703312504575142112712294450.html> (explaining that rising CDS spreads on U.S. debt signal that financial markets' view of an increased likelihood, even if remote, of a U.S. default).

81 See J.P. MORGAN & CO. & RISKMETRICS GROUP, THE J.P. MORGAN GUIDE TO CREDIT DERIVATIVES § 3 (1999), available at http://www.investinginbonds.com/assets/files/Intro_to_Credit_Derivatives.pdf.

82 See Frank Partnoy & David A. Skeel, Jr., *The Promise and Perils of Credit Derivatives*, 75 U. CIN. L. REV. 1019, 1025 (2007).

83 Testimony of David Dines, President, Cargill, Risk Mgmt., Before the S. Agric. Comm. on Regulatory Reform and Derivatives 2-3 (June 4, 2009), available at http://216.40.253.202/%7Eusscanf/index.php?option=com_docman&task=doc_download&gid=94. Cargill estimates its own costs could exceed \$1 billion.

84 See *H. Financial Services Comm. Hearing*, *supra* note 13, at 173-74 (statement of Timothy Murphy, Foreign Currency Risk Manager, 3M).

collateral and margin arrangements. Eighth, derivatives are thought to “complete” financial markets.⁸⁵

The limitations of exchange trading also highlight another reason that the ability to create and trade customized derivatives in the OTC markets is crucial. Exchange trading requires a certain level of product demand. But the demand for new OTC derivative products must be created over time. And for certain products, demand will always be largely idiosyncratic. The ability to create customized products in OTC derivative markets spurs financial innovation. Finance professor Raghuram Rajan explains:

New financial contracts will not be immediately accepted in the market because the uncertainties surrounding their functioning cannot be resolved by arm’s length participants, who neither have money nor goodwill to spare. . . .

. . . Only when contractual features have been modified to address most contingencies can consideration be given to trading the contract on an exchange.⁸⁶

Some commentators explain that “[f]inancial innovation finds its fullest expression in the market for OTC derivatives.”⁸⁷ Some scholars, however, argue that these markets are not necessarily so innovative⁸⁸ and that some of these innovations cause more harm than good.

In addition to direct economic benefits, OTC derivatives also arguably have indirect economic benefits. They are thought to increase economic growth, contribute “rewarding jobs” to the economy, and augment the reputation, prestige, and influence of the U.S. financial sector.⁸⁹

2. Costs

Professor Lynn Stout argues that the innovative nature of OTC derivative markets is often illusory.⁹⁰ But she argues that lack of innovation is only one possible drawback or cost of OTC derivative markets. Furthermore, Stout asserts that little empirical evidence

85 See Peter H. Huang, *A Normative Analysis of New Financially Engineered Derivatives*, 73 S. CAL. L. REV. 471, 473 (2000).

86 Raghuram G. Rajan, *Has Financial Development Made the World Riskier?*, 2005 PROC. FED. RESERVE BANK KAN. CITY 313, 330.

87 See Darrell Duffie & Henry T.C. Hu, *Competing for a Share of Global Derivatives Markets: Trends and Policy Choices for the United States* 3 (Univ. of Tex. Sch. of Law, Law & Econ. Research Paper No. 145, 2008), available at <http://ssrn.com/abstract=1140869>.

88 See Stout, *supra* note 21, at 5.

89 Duffie & Hu, *supra* note 87, at 7.

90 See Stout, *supra* note 21, at 5.

supports claims that speculation with OTC derivatives has a broad positive impact on liquidity and price discovery.⁹¹ Additionally, she notes that derivatives have a long history,⁹² which consistently provides “four basic lessons”:

First, derivatives contracts have been used for centuries, possibly millennia. Second, healthy economies regulate derivatives markets. Third, derivatives are regulated because while derivatives can be useful for hedging, they are also ideal instruments for speculation. Derivatives speculation in turn is linked with a variety of economic ills—including increased systemic risk when speculators go bust. Fourth, derivatives traditionally are regulated not through heavy-handed bans on trading, but through common-law contract rules that protect and enforce derivatives that are used for hedging purposes, while declaring purely speculative derivative contracts to be legally unenforceable wagers.⁹³

Stout is not alone in her concerns. Professor Frank Partnoy, a former derivative trader, notes that OTC derivatives are frequently used to create excessive amounts of leverage, to bypass legal restrictions, and to avoid disclosure.⁹⁴

An important problem in OTC derivative markets is their lack of transparency. This opacity can create market uncertainty in practice, particularly in times of financial crisis. For example, how can firms using OTC derivatives to hedge particular risks understand the true robustness of their hedges if their counterparty’s exposures are unknown? Without this information, it could be the case that a market participant trades one risk, but unknowingly assumes an excessive amount of counterparty credit risk. This market opacity not only makes it highly problematic for market participants to understand counterparty credit risk, market risk concentrations, and interconnections, but also creates this challenge for regulators. It is extremely challenging for regulators to oversee these markets without sufficient data. These types of challenges arising from the lack of transparency in OTC derivative markets had monumental consequences in the recent financial crisis:

The opaqueness of the market prevented, on the one hand, other market participants from knowing exactly what the exposures of their counterparties were to these three entities [Bear Stearns, Lehman Brothers, AIG], which resulted in mistrust and in the sudden

91 *See id.* at 8.

92 *Id.* at 5.

93 *Id.*

94 Partnoy, *supra* note 13; *see also* Bookstaber Testimony, *supra* note 76, at 2–3 (describing how OTCs “game[d]” the system).

drying up of liquidity. On the other hand, it also prevented regulators from being able to identify early the risks building up in the system, the extent to which risks were being concentrated and consequently the effects that their default would have for financial stability . . . the crisis has highlighted how derivatives in general and CDS in particular created a web of mutual dependence that was difficult to understand, disentangle and contain in the immediate aftermath of a default. Therefore, the crisis has clearly shown that the characteristics of OTC derivative markets—the private nature of contracting with limited public information, the complex web of mutual dependence, the difficulties of understanding the nature and level of risks—increases uncertainty in times of market stress and accordingly poses risks to financial stability.⁹⁵

OTC derivatives can increase market volatility and the level of systemic risk⁹⁶ due to a combination of excessive amounts of leverage and low capital requirements.

Another important longstanding issue in the OTC derivative markets has been market infrastructure development that has been plagued with collective action problems. As I discuss in Part IV, OTC derivative markets have a market structure that is distinct from and potentially more costly to the public than those of multilateral exchanges. Market infrastructure development is costly. Market participants can earn more revenues by allocating resources to new derivative transactions rather than to addressing back office operational capabilities. Inadequate market and operational infrastructures increase systemic risk in OTC derivative markets. Therefore, the Federal Reserve Bank of New York (FRBNY) has at times had to intervene to informally “encourage” market participants to address market infrastructure issues through its powers of “moral suasion.” For example, without the FRBNY’s informal regulatory actions in the credit derivative markets in 2005 and its more recent interventions in the financial crisis, “the unwinding of Bear Stearns’ derivatives portfolio [in March 2008] could have been extremely dangerous.”⁹⁷ Some market infra-

95 Commission of the European Communities, *Working Paper: Ensuring Efficient, Safe, and Sound Derivatives Markets*, § 2.4, COM (2009) 332 final (July 3, 2009), available at http://ec.europa.eu/internal_market/financial-markets/docs/derivatives/report_en.pdf.

96 *Id.* § 1.4.

97 Testimony of Darrell Duffie, Professor, Stanford Univ., Before the Subcomm. on Securities, Insurance, and Investment of the S. Comm. on Banking Housing and Urban Affairs 2 (July 9, 2008), available at http://www.banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=3902fb9c-eb72-4d75-90dc-c8d96b676322; see also Darrell Duffie et al., *Policy Perspectives on OTC Derivatives Market Infrastructure 2* (Rock Ctr. for Corp. Governance, Working Paper No. 70, 2010), available at

structure issues could be ameliorated by greater use of CCP clearing, but as discussed below, this solution is neither a panacea nor unproblematic.

OTC derivatives are interrelated with and can negatively impact their respective cash and exchange markets. Financial expert Richard Bookstaber recently summarized for Congress a number of ways in which OTC derivatives can have such potential negative impact. In his testimony, he explained:

Those who create these products need to hedge in the market, so their creation leads to a direct affect on the market underlying the derivative.

Those who buy these instruments have other market exposures, so that if they are adversely affected by the swaps or derivatives, they might be forced to liquidate other positions, thereby transmitting a dislocation from one market into another.⁹⁸

Widespread use of credit derivatives has also arguably weakened the traditional incentives of banks to monitor their debtors.⁹⁹ Major banks were allegedly “missing in action”¹⁰⁰ in the time preceding Enron’s collapse. One potential explanation is that

[t]he banks that financed Enron had used massive amounts of credit derivatives to limit their exposure in the event Enron defaulted The banks would have preferred that Enron survive . . . [b]ut the prospect of Enron’s decline meant much less to Enron’s banks than if their loans were fully exposed.¹⁰¹

OTC derivatives also can have important negative effects both on the companies that own or sell these instruments and also on companies that are the underlying assets of derivative transactions. For example, OTC derivatives increase both the accounting costs and the complexity of financial statements for buyers and sellers of these instruments. Although the SEC mandates certain derivatives disclosure in financial statements, how helpful this disclosure ultimately is seems unclear.¹⁰² Judge Frank Easterbrook lamented in *Derivative*

<http://ssrn.com/abstract=1534874> (arguing that “[w]ithout the demands made by regulators for improvements in this market, OTC derivatives might have contributed to even greater systemic risk at the time of Lehman’s default”).

98 Bookstaber Testimony, *supra* note 76, at 3.

99 See Partnoy & Skeel, *supra* note 82, at 1032.

100 *Id.* at 1033.

101 *Id.*

102 See Jill E. Fisch, *Top Cop or Regulatory Flop? The SEC at 75*, 95 VA. L. REV. 785, 809–11 (2009) (discussing the SEC’s promulgation of Item 305 to Regulation S-K).

*Securities and Corporate Governance*¹⁰³ that while “[t]here is a large and burgeoning literature on the financial aspects of derivatives[,] . . . almost no one seems to be interested in the relation between derivative instruments and the corporations whose securities are the physical assets on which the derivatives depend.”¹⁰⁴ Unfortunately, the financial crisis has demonstrated the importance of this concern, but legal scholars have made few additional contributions to address this issue. But as Richard Bookstaber explained to Congress:

The market price of some derivatives can have real effects for a company. For example, the credit default swaps are used as the basis for triggering debt covenants, so if the swap spread for a company’s debt rises above a critical level, it can have an adverse effect on the company.¹⁰⁵

Finally, leading up to the financial crisis, the financial sector had increasingly accounted for a larger overall percentage of U.S. corporate revenues.¹⁰⁶ This trend, however, arguably withdraws vital human capital from other critical economic sectors.¹⁰⁷ Additionally, financial crises have become increasingly frequent occurrences. If the financial sector continues to account for an increasingly greater level of corporate revenues in the overall economy, more frequent financial crises are likely to have increasingly greater overall economic impacts.

II. CURRENT REGULATORY SCHEME AND CHALLENGES

In this Part, I briefly describe a bit of the history behind the current regulatory structure of the OTC derivative markets. Following this description, I then provide an overview of the current regulatory scheme. I next briefly discuss several intractable regulatory challenges in these markets and conclude this Part by addressing whether OTC derivatives should even be subject to government regulation.

103 Frank H. Easterbrook, *Derivative Securities and Corporate Governance*, 69 U. CHI. L. REV. 733 (2002).

104 *Id.* at 735.

105 Bookstaber Testimony, *supra* note 76, at 3.

106 See generally Michael Lim Mah-Hui, *From Servant to Master: The Financial Sector and the Financial Crisis*, J. APPLIED RES. ACCT. & FIN., Dec. 2009, at 12 (noting this trend).

107 See Huang, *supra* note 85, at 507–08.

A. *Current Regulatory Scheme*

Despite their astonishing size, the OTC derivative markets are currently “largely excluded or exempted from regulation.”¹⁰⁸ Behind this sparse regulation and the actual market structure lies a history of intense financial lobbying, misdirected regulatory incentives, favorable legislative protections, protracted turf wars among key financial regulators and intractable regulatory challenges such as the innovations of financial engineering and globalization. As one commentator stated, “the emergence and proliferation of financial derivatives . . . have presented profound challenges for U.S. regulatory specialists.”¹⁰⁹

1. A Brief History

As several legal scholars note,¹¹⁰ derivatives have been around for a very long time. But common law prohibitions against “difference contracts” and the traditional requirement of an “insurable interest” in insurance law moderated the growth of these markets.¹¹¹ This moderation, however, came under stress with international legislative changes beginning in the mid 1980s. Professor Stout explains that in 1986, a phenomenal “dismantling” of the traditional moderating forces commenced when the United Kingdom dispensed with their longstanding rule against “difference contracts” and, related to this, made all derivative contracts legally enforceable.¹¹² Not wishing to be left behind, the United States performed a similar “dismantling” with the passage of the CFMA in 2000. Stout explains that:

Although it was not widely appreciated at the time, the CFMA eliminated more than a century of legal restraints on derivatives trading by declaring that over-the-counter (OTC) financial derivatives were not subject to traditional contract law rules and were not subject to the Commodity Exchange Act (CEA) or the oversight of the Commodity Futures Trading Commission (CFTC).¹¹³

108 Letter from Timothy M. Geithner, Secretary, U.S. Dep’t of the Treasury, to Sen. Harry Reid at 1 (May 13, 2009), *available at* <http://www.financialstability.gov/docs/OTCletter.pdf>.

109 EDWARD F. GREENE ET AL., U.S. REGULATION OF THE INTERNATIONAL SECURITIES AND DERIVATIVES MARKETS §14.01 (9th ed. 2008).

110 See HUDSON, *supra* note 38, at 12; Stout, *supra* note 21, at 5.

111 See Stout, *supra* note 21, at 6 (internal quotation marks omitted).

112 *Id.* at 7 (discussing the effect of the United Kingdom’s Financial Services Act of 1986).

113 Stout Testimony, *supra* note 24, at 2.

This quote largely describes the current regulatory status of these \$605 notional trillion markets, but how did we get here?

Many factors likely contribute to the current lack of regulation in the OTC derivative markets. Two particularly important considerations are a longstanding political and ideological push towards deregulation and powerful financial lobbies. The finance industry has been and continues to be one of the most powerful congressional lobbies. In 2007, there were estimated to be five financial industry lobbyists per congressman.¹¹⁴ “Between 1998 and 2008, Wall Street investment banks, commercial banks, hedge funds, real estate companies and insurance conglomerates paid an estimated \$1.7bn in political contributions and spent a further \$3.4bn on lobbyists.”¹¹⁵ And the financial industry spent \$224 million in the first half of 2009 on lobbying efforts.¹¹⁶ But a deregulation ethos and powerful financial lobbies are only two of the likely explanatory factors.

Scholars also point to “regulatory turf war[s]” as being a “key factor” in the development of the OTC derivative markets.¹¹⁷ Professor Stout explains that “there is a long-standing turf battle between . . . the SEC, and . . . the CFTC, over derivatives. And, in fact, that turf battle, in part, is one of the reasons why they were not well-regulated in the first place.”¹¹⁸ Similarly, Professor Jerry Markham describes this competition between the SEC and CFTC,¹¹⁹ which could have diverted the attention of both financial regulators away from the actual regulation of these markets. This infamous regulatory turf-war has a lengthy history, which arguably justifies skepticism about current regulatory reform proposals and draft legislation that advocates “splitting” regulation of these markets between these financial regulators largely based upon whether a swap is classified as a “security.”¹²⁰

This agency tension has existed for most of the CFTC’s history, the younger of the two financial regulators. Although the CFTC was

114 John Plender, *How to Tame the Animal Spirits*, FIN. TIMES, Sept. 29, 2009, at 11.

115 *Id.*

116 Rachel Beck, *All Business: Lobbyists Influence Financial Reform*, THESTREET.COM, Oct. 16, 2009, <http://www.thestreet.com/story/10612733/all-business-lobbyists-influence-financial-reform.html>.

117 *H. Financial Services Comm. Hearing*, *supra* note 13, at 163 (statement of Christian Johnson, Professor, S.J. Quinney Coll. of Law, Univ. of Utah).

118 PBS NewsHour, *supra* note 28 (statement of Lynn Stout, Professor, UCLA Sch. of Law).

119 *See* Markham, *supra* note 28, at 405.

120 For example, see Wall Street Reform and Consumer Protection Act, H.R. 4173, 111th Cong. (as passed by the House, Dec. 11, 2009).

not established until 1974, the Commodity Exchange Act¹²¹ (CEA) dates back to 1936. The SEC, however, was established by the Securities Exchange Act of 1934.¹²² This legislation, in conjunction with the Securities Act of 1933¹²³ (together, the “Securities Acts”), constitute the fundamental securities law statutes in the United States. Both the CEA and the Securities Acts have been amended throughout the years. In the year of its birth, certain amendments to the CEA allocated to the CFTC “exclusive jurisdiction over financial futures and options on certain financial interests (in addition to the agricultural commodities traditionally regulated under the CEA).”¹²⁴ From these amendments arose significant uncertainties about the application of the CEA and the Securities Acts in the OTC derivative markets.¹²⁵ Ultimately, these amendments also precipitated the first shots fired between the CFTC and SEC.

Flaring tensions finally ignited and led to an interagency accord, the “Shad-Johnson Accord” of 1982,¹²⁶ which divided regulatory jurisdiction of the OTC derivative markets. Congress soon codified this truce,¹²⁷ which gave “jurisdiction only over securities and options on securities” to the SEC, and jurisdiction over “[m]ost other derivative products”¹²⁸ to the CFTC. Notwithstanding the Accord, jurisdictional conflicts continued such as in 1987 when the CFTC attempted to assert “jurisdiction over virtually all hybrid instruments.”¹²⁹ But this time, the CFTC had gone too far. Both market participants and other financial regulators now joined forces with the SEC to pushback against the CFTC’s attempted incursion. Such struggles eventually led

121 Pub. L. No. 49-675, 49 Stat. 1491 (1936) (codified as amended at 7 U.S.C. §§ 1-25 (2006)).

122 See Pub. L. No. 73-291, § 4, 48 Stat. 881, 885 (codified at 15 U.S.C. § 78d(a) (2006)).

123 15 U.S.C. §§ 77a-77aa.

124 GREENE ET AL., *supra* note 109, § 14.07[1].

125 See *id.*

126 See *id.* § 14.07[2]. Christopher Culp explains that the Shad-Johnson Accord provided four basic ground rules:

The CFTC would regulate all futures and options on futures, even if the futures are based on securities[.] The SEC would regulate all options on securities[.] Futures on individual securities, such as stocks, were prohibited[.] The SEC would play a formal role in the CFTC’s approval of then-evolving stock index futures contracts[.]

Christopher L. Culp, *Derivatives Regulation: Problems and Prospects*, in *RESTRUCTURING REGULATION AND FINANCIAL INSTITUTIONS* 261, 275 (James R. Barth et al. eds., 2000).

127 15 U.S.C. § 77b(1).

128 Fisch, *supra* note 102, at 808.

129 GREENE ET AL., *supra* note 109, § 14.07[3].

to Congress's passage of the Futures Trading Practices Act of 1992 (FTPA), in which the CFTC gained authority to "grant broad exemptions from regulation under the CEA for derivative instruments, including hybrid instruments and swap transactions."¹³⁰ Not surprisingly, however, regulatory tensions in the OTC derivative markets continued.¹³¹

In 1998, the CFTC issued its "Concept Release on Over-the-Counter Derivatives," which is referred to in the Introduction of this Article.¹³² The Concept Release sought the comprehensive regulation of swaps and OTC derivative dealers.¹³³ Long simmering tensions proceeded to explode as market participants, the SEC, other financial regulators, in addition to Congress, immediately reacted. And this reaction and the market uncertainty it created was so strong that "Congress took the extraordinary step of enacting standstill legislation . . . prohibiting the CFTC on an interim basis from issuing any rule, regulation, interpretation, or policy statement that would restrict or regulate activity in qualifying swaps or hybrid instruments."¹³⁴ The vociferous reaction to the Concept Release, combined with growing legal uncertainty in these markets, and the work of the President's Working Group on Financial Markets, soon spurred the passage of the CFMA.¹³⁵

In addition to the variety of factors evident in the background political and regulatory story, the OTC derivative markets are also characterized by several intractable issues such as financial engineering and globalization. Regarding the importance of this latter consideration, for example, Judge Frank Easterbrook suggests that:

What happened in the regulation of derivatives is that international competition undid U.S. regulation. Trades moved from the Chicago Board of Trade, which had to wait for regulatory approval, to exchanges in London, Frankfurt, and Hong Kong that were not so hobbled. The loss of business led U.S. exchanges to beg for statutory change—and it also meant that there was no U.S. interest group that could gain from holding onto the old rules or adding

130 *Id.*

131 *See id.*

132 *See supra* notes 2–4 and accompanying text.

133 *See* GREENE ET AL., *supra* note 109, §14.07[4]; *see also* Over-the-Counter-Derivatives, 63 Fed. Reg. 26,114 (May 12, 1998) (contemplating the possible imposition of comprehensive regulatory requirements applicable to swap agreements and OTC derivatives dealers).

134 GREENE ET AL., *supra* note 109, § 14.07[4].

135 *See id.* § 14.07[5].

another layer of regulation. That changed the political market, and the Modernization Act of 2000 [the CFMA] was the result.¹³⁶

The effects of all these challenges, combined with political and regulatory issues, help to explain not only the current minimal regulatory framework, but also the longstanding inertia surrounding the regulation of these markets. In fact, even now, after the worst financial crisis since the Great Depression, some commentators have started to opine about “How Overhauling Derivatives Died.”¹³⁷

2. Description of Current Regulatory Scheme

The regulation of the OTC derivative markets that does exist is primarily based upon two considerations: (1) regulation of institutional market participants, and (2) various product categorizations. This regulatory approach has contributed to a plethora of regulatory gaps, particularly since the institutional segregations upon which much of this regulatory structure is based are largely outdated. As Professor Fisch explains,

The historical divides that produced our existing regulatory structure—the divide between banks and securities firms, between securities and commodities, and between broker-dealers and investment advisors—have eroded, leading to a system in which similar functions are under the regulatory oversight of different agencies. In some cases this system produced jurisdictional conflicts; in others, it may lead to regulatory gaps.¹³⁸

As financial institutions evolve and financial products innovation occurs, regulatory gaps are continually created and exploited.¹³⁹ And a widespread consensus exists that such opportunities for regulatory arbitrage can result in a decreased amount of regulatory oversight.¹⁴⁰

Regarding the first regulatory consideration, many important OTC derivative participants, such as banks and insurance companies, are highly regulated institutions. Accordingly, commentators note that “[t]he perception of OTC markets as ‘unregulated’ overlooks that fact that all major market participants are individually regulated

136 Frank H. Easterbrook, *The Race for the Bottom in Corporate Governance*, 95 VA. L. REV. 685, 704 (2009).

137 Randall Smith & Sarah N. Lynch, *How Overhauling Derivatives Died*, WALL ST. J., Dec. 26, 2009, at B1.

138 Fisch, *supra* note 102, at 786–87 (2009).

139 For example, see EDWARD J. KANE, UNMET DUTIES IN MANAGING FINANCIAL SAFETY NETS (2009), available at <http://ssrn.com/abstract=1470123> (describing a continuous cycle of regulation and regulation-induced innovation in financial markets).

140 John C. Coffee, Jr. & Hillary A. Sale, *Redesigning the SEC: Does the Treasury Have a Better Idea?*, 95 VA. L. REV. 707, 715 (2009).

and codes of conduct are set by supervisors in many OTC markets.”¹⁴¹ Likely for this reason, as recently as July 2008, the Office of the Comptroller of the Currency (OCC), one of the primary banking regulators in the United States, stated in congressional testimony that “[t]he OCC has had a longstanding position that we do not believe that OTC derivatives products need to be regulated, in part because the vast majority of significant participants in these markets are regulated.”¹⁴² Some significant market participants, such as hedge funds, however, remain largely unregulated. And, of course, an important difference exists “between ineffective supervision of individual market participants and changes to, or regulation of, market structure itself.”¹⁴³ Finally, it is important to remember that regulation is no panacea. Several catastrophic derivative meltdowns have occurred on regulated exchanges.¹⁴⁴

The second regulatory consideration, product categorization, is primarily based upon whether a derivative instrument can be classified as a security, futures contract, or a commodity option. If an OTC derivative is categorized as a “security,” “futures contract,” or “commodity option,” then in the absence of an applicable exemption or exclusion, it is subject to regulation by either the securities or commodities laws and, therefore, regulated by the SEC or CFTC respectively. This classification is itself largely dependent upon two considerations: (1) the reference asset or interest involved, and (2) how the instrument is structured to relate to this asset or interest.¹⁴⁵ Not surprisingly, OTC derivatives are often carefully structured to qualify for exemptions or exclusions. And a cooperative Congress has provided a plethora of these, particularly with the passage of the

141 YALLOP, *supra* note 44, § 1.1.

142 Testimony of Katherine E. Dick, Deputy Comptroller for Credit & Market Risk, Comptroller of the Currency, Before the Subcomm. on Securities, Insurance, and Investment of the S. Comm. on Banking, Housing, and Urban Affairs 11 (July 9, 2008), available at <http://www.occ.treas.gov/ftp/release/2008-79a.pdf>.

143 YALLOP, *supra* note 44, § 3.15.

144 As Yallop points out, derivatives failures are not relegated to the OTC derivative markets as

significant failures in the exchange traded world include: the collapse of Barings in 1995 as a result of \$1.3bn losses in exchange listed Japanese stock futures and options, Sumitomo’s \$2.5bn losses in copper futures in 1998, Liu Qibing’s losses of up to \$1bn in copper futures in 2005, Mizuho’s loss also in 2005 of \$250m in Japanese equity trading, Amaranth’s \$6.5bn loss in natural gas futures in 2006 and Societe Generale’s \$7.1bn loss on European stock index futures in 2007.

Id. § 3.16.

145 GREENE ET AL., *supra* note 109, § 14.02.

CFMA. As alluded to above, the CFMA's deregulatory scope was astounding. This impact stemmed primarily from two considerations: (1) it "excluded from regulation under the CEA [Commodity Exchange Act], and accordingly from the prohibition on the trading of products outside a CFTC-regulated trading facility, a wide range of OTC derivatives transactions between qualifying counterparties and so-called 'hybrid instruments,'"¹⁴⁶ and (2) it excluded "certain individually-negotiated swap agreements and other derivatives entered into by qualifying counterparties"¹⁴⁷ from the definition of "security" in the Securities Acts, among other legislation.

The upshot of these changes was that if a derivative contract is classified as a "security," then it is subject to the securities laws. But the CFMA amended the Securities Acts, so that the definition of a "security" does not include "certain qualifying 'swap agreements.'"¹⁴⁸ The term "swap agreement," however, includes not only swaps, but can also include certain "options, forwards, and other derivatives."¹⁴⁹ Although not classified as securities, "qualifying swap agreements relating to securities . . . remain subject to the fraud, manipulation and insider trading prohibitions under the Acts."¹⁵⁰ In addition to these exclusions, the CFMA limited the SEC's authority "to promulgate rules imposing reporting or recordkeeping requirements, procedures or standards as prophylactic measures against fraud, manipulation or insider trading"¹⁵¹ in OTC derivative markets. Bizarrely, a few OTC derivatives, namely "security futures," are not only categorized as both "securities" and "futures," but also are actually "subject to both the securities and the commodities laws."¹⁵² Understanding why most OTC derivatives are subject to little, if any, oversight by the SEC and CFTC, while a select few are subject to oversight by both regulators requires reflecting on the above brief history.

If an OTC derivatives is not categorized as a "security," but can be categorized as a "futures contract" or "commodity option," then it will generally be subject to the regulations of the CEA. If classified accordingly, then in the absence of an applicable exclusion or exemption, a derivative contract must be traded on a CFTC-regulated exchange.

146 *Id.* § 14.01.

147 *Id.*

148 *Id.* § 14.05. As Greene notes, however, excluded "qualifying swap agreements relating to securities, while not securities themselves, remain subject to the fraud, manipulation and insider trading prohibitions under the [Securities] Acts." *Id.*

149 *Id.* § 14.05[1].

150 *Id.* § 14.05.

151 *Id.* § 14.02[2].

152 *Id.* § 1.08.

Several types of OTC derivatives generally qualify as “excluded” commodities such as financial commodities, certain commodities without underlying cash markets,¹⁵³ and forward contracts.¹⁵⁴ Commodities that are neither excluded commodities nor agricultural commodities qualify as “exempt” commodities.¹⁵⁵ In sum:

The CFMA enacted several overlapping exclusions and exemptions from CEA regulation applicable to OTC derivatives. . . . [T]he provisions, taken together, exempt from substantive regulation under the CEA any agreement, contract or transaction that (i) involves a nonagricultural commodity, (ii) is entered into solely between ‘eligible contract participants’ . . . and (iii) is not entered into or executed on a ‘trading facility’¹⁵⁶

The CFTC also retains exemption authority both through its authority to make select “administrative exemptions,”¹⁵⁷ and through certain policies predating the CFMA.¹⁵⁸ Although the CFTC retains general authority to police fraud and manipulation in the markets for “exempt” commodities—though not in markets for excluded commodities—its limited oversight authority arguably often prevents effective insight into the actual operations of these markets.¹⁵⁹ In sum, the CFMA largely prevented the regulation of the OTC derivative markets by either the SEC or the CFTC. Equally important, it also finally provided “legal certainty for the existing multitrillion dollar OTC derivatives market.”¹⁶⁰

Additionally, the CFMA created and “expressly authorized, for the first time, the establishment of clearing organizations for OTC derivatives under several possible regulatory frameworks.”¹⁶¹ It also provided for the regulatory oversight of such facilities by the SEC, the CFTC or the Fed.¹⁶² I argue below that regulatory oversight of all

153 *See id.* § 14.02[6].

154 Greene explains that differentiating between forward contracts for deferred delivery and future contracts with future delivery is challenging. *See id.* § 14.08[3].

155 *Id.* § 14.02[6].

156 *Id.* § 14.09[1][a] (footnote omitted).

157 *See id.* § 14.10 for additional detail.

158 *See id.* § 14.05[3]. An example is the CFTC Swap Policy Statement in 1989 “establishing a non-exclusive ‘safe harbor’ for swap transactions meeting certain requirements.” *Id.* § 14.08[3][b]; *see also id.* § 14.08[3][c][i] (discussing the CFTC’s 1989 Statutory Interpretation Concerning Hybrid Instruments).

159 Greene explains that “[i]n certain enforcement actions, the CFTC has taken the position that these exemptions apply only to the transaction itself and not to the conduct of activities related to the transaction.” *See id.* § 14.09[1][a].

160 *Id.* § 14.05[1].

161 *Id.* § 14.07[5].

162 *See id.* § 14.09[6].

OTC derivative clearing organizations should be reallocated to an SEC-CFTC regulatory joint venture. In recent congressional testimony, Professor Johnson noted that, ironically, much of the customization in OTC derivative markets responded to longstanding CFTC regulatory policies, dating back to 1989, which “effectively prevented clearing OTC derivatives.”¹⁶³ Johnson noted that if OTC derivatives were “individually tailored” and involved “no exchange-style offset or clearing,” they would be exempted from regulation under CFTC policies.¹⁶⁴ Reinforcing this trend, the CFTC exempted from CFTC regulation OTC derivatives that were not “‘standardized as to their material [economic] terms’”¹⁶⁵ in 1993. This history highlights not only the importance of regulatory design and its potential effect on market structure, but also the possible perverse effects of ill-conceived regulatory policies. It should also both produce a healthy skepticism about the efficacy of any current reform proposals or draft legislation that aims to mandate CCP clearing of “standardized” OTC derivatives and encourage very careful, thoughtful regulatory reforms.

In sum, the passage of the CFMA has arguably been one of the most important factors facilitating the phenomenally explosive growth in the United States of the OTC derivative markets. Professor Stout suggests that “[t]he CFMA thus eliminated, in one fell swoop, a legal constraint on derivatives speculation that dated back not just decades, but centuries. It was this change in the law—not some flash of genius on Wall Street—that created today’s \$600 trillion financial derivatives market.”¹⁶⁶ And a pivotal aspect of this “one fell swoop” consists of CFMA provisions which implement federal preemption of the application of state gaming or bucket shop laws to OTC derivatives and provide legal certainty for swap agreements.¹⁶⁷

B. *Intractable Regulatory Challenges*

Globalization, technology, financial engineering, increased institutionalization of financial markets, and privatization are all forces which present difficult challenges for the regulation of OTC derivative markets. Globalization and technology, in particular, have “proved to be among the most dynamic and destabilizing forces” in financial mar-

163 *H. Financial Services Comm. Hearing, supra* note 13, at 162 (statement of Christian Johnson, Professor, S.J. Quinney Coll. of Law, Univ. of Utah).

164 *Id.* (referring to Policy Statement Concerning Swap Transactions, 54 Fed. Reg. 30,694 (July 21, 1989)).

165 *Id.* at 163 (quoting 17 C.F.R. § 35.2 (2008)).

166 Stout, *supra* note 21, at 7.

167 See H.R. 5660, 106th Cong. §§ 117, 301–04 (enacted).

kets.¹⁶⁸ Since the 1970s, the combination of technological advances, evolving financial institutional structure, and deregulation have effected a “revolutionary change” in global financial markets.¹⁶⁹ This “revolutionary change” has increased access to credit and opportunities to diversify risk,¹⁷⁰ one of the most important benefits of OTC derivatives use. But these forces also made regulation of international financial markets, especially the OTC derivative markets, exceedingly problematic.

1. Globalized Financial Markets

An intractable issue surrounding not only regulation of the global OTC derivative markets but also international financial markets in general is capital mobility and potential invisibility. For example, Professor Hudson explains that “[w]here a cash-settled derivatives contract is created between a trader sitting in Frankfurt and a trader sitting in London entirely over-the-counter, it could be argued that the transaction has no inter-action with the outside world because it provides only for the payment of cash between those parties.”¹⁷¹ Such transactions can be thought of as largely “invisible” and, consequently, are extremely challenging to regulate. If one government actor’s financial regulations strike market participants as burdensome, they can often choose to transact in a jurisdiction with a more favorable regulatory approach.

The OTC derivative markets have always been global; globalization is a “key theme” of derivatives law.¹⁷² To fully understand this, it helps to remember that “[t]he interest rate swaps market began life as a supra-national market which sought to evade municipal exchange controls which sought to prohibit the movement of currency across borders.”¹⁷³ Derivatives can create synthetic financial exposures to an underlying reference asset without requiring the type of physical presence that has traditionally provided regulators with jurisdiction in financial markets. Accordingly, many financial regulators, such as the SEC, have traditionally had “regulatory monopolies” within their own jurisdictions, which are today increasingly circumscribed by globalization. Globalization decreases regulatory sovereignty: “The full implications of globalized [securities] offerings and trading is the death of

168 Coffee & Sale, *supra* note 140, at 709.

169 Rajan, *supra* note 86, at 313.

170 *Id.* at 346.

171 HUDSON, *supra* note 38, at 465.

172 *Id.* at 451.

173 *Id.*

the regulator's sovereignty."¹⁷⁴ Likely one objective of the regulatory push to use local CCP clearing is assertion of regulatory control over markets that have largely been beyond reach. Professor Hudson suggests that "derivatives are used for asset arbitrage, regulatory arbitrage, tax arbitrage and speculation on markets without the need to participate physically in those markets . . . [t]herefore, the extent to which municipal legal system will and will not apply to derivatives contracts is clearly important."¹⁷⁵ Therefore, globalization necessitates a global regulatory structure and approach. As the U.S. Treasury explains, "[w]ithout consistent supervision and regulation, financial institutions will tend to move their activities to jurisdictions with looser standards, creating a race-to-the-bottom and intensifying systemic risk for the entire global financial system."¹⁷⁶ For this reason, both academics and businesspersons often caution that any new legislation must be particularly sensitive to this global reality.¹⁷⁷ OTC derivative markets

174 James D. COX, *Coping in a Global Marketplace: Survival Strategies for a 75-Year-Old SEC*, 95 VA. L. REV. 941, 978 (2009).

175 HUDSON, *supra* note 38, at 451–52.

176 U.S. DEP'T OF THE TREASURY, FINANCIAL REGULATORY REFORM: A NEW FOUNDATION 8 (2009), available at http://www.financialstability.gov/docs/regs/FinalReport_web.pdf.

177 See, e.g., *H. Financial Services Comm. Hearing*, *supra* note 13, at 84 (statement of Thomas F. Callahan, Exec. Vice President, NYSE Euronext); *id.* at 133–35 (statement of Terrence A. Duffy, Exec. Chairman, CME Group Inc.); *id.* at 157 (statement of Donald P. Fewer, Senior Managing Dir., Standard Credit Group); Duffie & Hu, *supra* note 87, at 23–25. In 2002, Congress passed Sarbanes-Oxley (SOX) in response to Enron and the financial scandals of the early 2000s. See Pub. L. No. 107-204, 116 Stat. 745 (codified in scattered sections of 11, 15, 18, 28, and 29 U.S.C.). SOX is often credited with driving many financial market transactions to non-U.S. jurisdictions. Recently, a bipartisan amendment was introduced in the Senate to address concerns about the competitiveness of U.S. financial markets. See S. amend. 956 to S. Res. 761, 110th Cong. (2007) (enacted). This amendment was inspired by reports such as that of Charles Schumer and Michael Bloomberg entitled *Sustaining New York's and the US' Global Financial Services Leadership*. As the report details: "In looking at several of the critical contested investment banking and sales and trading markets—initial public offering (IPOs), over-the-counter (OTC) derivatives, and debt—it is clear that the declining position of the US goes beyond this natural market evolution to more controllable, intrinsic issues of US competitiveness." MICHAEL R. BLOOMBERG & CHARLES E. SCHUMER, *SUSTAINING NEW YORK'S AND THE US' GLOBAL FINANCIAL SERVICES LEADERSHIP* 11 (2007), available at http://www.abanet.org/buslaw/committees/CL116000/pub/materials/library/NY_Schumer-Bloomberg_REPORT_FINAL.pdf. The "more controllable, intrinsic issues" refers to (poorly designed) financial regulations that have a detrimental impact on U.S. financial markets. Data on worldwide initial public offering (IPO) volumes in 2001 versus 2006 offer an illustration. In 2006, the United States' share of the international IPO market was about one-third that in 2001. *Id.* at 12. European markets, however, increased by more than thirty percent and IPOs in non-Japan Asian markets doubled. See *id.* Financial markets are global. Financial

are currently concentrated in New York and London, but this concentration could shift if regulatory incentives change. As one congressman recently warned, “[t]he risk of mobile capital migrating elsewhere if we overshoot the mark in regulatory reform is a very real one.”¹⁷⁸

Paradoxically, global financial markets could potentially solve the regulatory collective action problem faced by government actors. Andrea M. Corcoran, former Director of the Office of International Affairs at the CFTC, suggests that “markets potentially can harmonize requirements across borders where legislatures have failed (or have yet) to do so, and can provide internationally-ruled trading facilities notwithstanding the national nature of financial services law.”¹⁷⁹ This is because “markets—through their rulemaking powers—have the means to transcend or improve upon national law.”¹⁸⁰ As Corcoran explains, markets make participant identity or location inconsequential and can provide global trading rules.¹⁸¹ OTC derivative markets illustrate the potential of this phenomenon as discussed below.

2. Financial Engineering and Innovation

Financial engineering and innovation makes regulation of OTC derivative markets particularly difficult, especially as some of this activity is specifically designed to skirt current regulatory structures. Through financial engineering, financial instruments lying outside of existing regulatory structures, but with similar or equivalent economic substance to that of regulated instruments can be created. This consideration is likely to make any current reform proposals or draft legislation seeking to mandate CCP clearing of “standardized” derivatives highly problematic. As Professor Johnson recently explained in congressional testimony, the OTC derivatives industry has several decades

regulation is not only an issue of global public policy, but also an issue of national regulation that individual jurisdictions must craft with an international perspective. New regulations of the OTC derivative markets, therefore, must consider the behavioral implications in a global financial market of any new rules.

178 Press Release, Rep. Scott Garrett, Garrett Opening Statement for Financial Services Committee (July 22, 2009), *available at* http://www.house.gov/apps/list/hearing/financialsvcs_dem/rep_scott_garrett.pdf (internal quotation marks omitted).

179 Andrea M. Corcoran, *The Uses of New Capital Markets: Electronic Commerce and the Rules of the Game in an International Marketplace*, 49 AM. U. L. REV. 581, 608 (2000). Note that the first version of this paper appeared in *Applied Derivatives Trading Magazine* in December 1999.

180 *Id.* at 585.

181 *See id.* at 608.

of experience in creating customized OTC derivatives.¹⁸² Financial engineering techniques have undoubtedly assisted in this practice. Routinely, financial innovation that is “regulation-induced” spurs a never-ending, challenging cycle: “Regulation begets avoidance activity, and avoidance eventually begets some form of re-regulation . . . [and] [i]nvariably, the range, size, and speed of regulation-induced innovation outpaces the vision and disciplinary powers that regulatory authorities can bring to bear.”¹⁸³

III. THE CONTENDERS: COMPETING REGULATORY PARADIGMS, PROPOSALS, AND INSTITUTIONS

A. *Contending Regulatory Paradigms*

Despite the contributions of OTC derivatives, particularly CDS, to the recent financial crisis and the enormously expensive taxpayer bailouts of AIG and other financial institutions that traded these instruments, some nevertheless argue that the only “regulation” necessary for OTC derivative markets is market discipline. Of course, the strength of this argument ultimately depends upon politicians, regulators, and the financial industry actually insisting in practice upon the operation of market discipline.¹⁸⁴ Events not only during the finan-

182 H. *Financial Services Comm. Hearing*, *supra* note 13, at 162 (statement of Christian Johnson, Professor, S.J. Quinney Coll. of Law, Univ. of Utah) (referring to Policy Statement Concerning Swap Transactions, 54 Fed. Reg. 30,694 (July 21, 1989)).

183 Edward J. Kane, *The Importance of Monitoring and Mitigating the Safety-Net Consequences of Regulation-Induced Innovation* 7 (Ind. State Univ., Networks Fin. Inst., Policy Brief No. 2009-PB-08), available at <http://ssrn.com/abstract=1507802>.

184 At least three considerations are particularly relevant to the issue of whether market discipline can effectively regulate OTC derivative markets or if critical considerations surrounding these markets implicitly distort the functioning of market discipline and make government regulation necessary. First, the most significant derivative market participants are dealer banks. Bank deposit insurance can both corrupt market discipline and distort firm decision making. See Jean-Charles Rochet, *Capital Requirements and the Behavior of Commercial Banks*, in CREDIT, INTERMEDIATION, AND THE MACROECONOMY 339, 339–40 (Sudipto Bhattacharya et al. eds. 2004). Second, in addition to deposit insurance, the existence of a lender of last resort—such as the Federal Reserve—can also distort market discipline. See William C. Hunter & David Marshall, *Financial Derivatives, Systemic Risk and Central Banking*, in RESTRUCTURING REGULATION AND FINANCIAL INSTITUTIONS, *supra* note 126, at 303, 313–14. Third, current trends in financial regulatory reform suggest that reliance upon market discipline to regulate excessive risk taking by large financial institutions such as the dealer banks is highly unlikely in the near future. The best evidence for this suggestion is the congressional push to create a new resolution authority, which many experts across the political spectrum think is extremely unlikely to end the “too big to fail” problem, for failing financial institutions. See Edward E. Kaufman, Ending “Too Big To Fail,” Address to U.S. Senate (Mar. 26, 2010), available at <http://kaufman.senate>.

cial crisis, but also surrounding other past near financial collapses such as that of LTCM,¹⁸⁵ instead suggest that if a financial institution is deemed “too big to fail” or “too interconnected to fail,”¹⁸⁶ it will likely be protected in practice from the discipline of the market. An extensive discussion of the arguments for market self-regulation versus some type of government regulation of the OTC derivative markets is beyond the scope of this Article. But, because even in the midst of the current widespread support for additional government regulation of OTC derivative markets there are proponents of a market discipline-only approach to regulation, it is helpful to briefly suggest why there is a case for increased government regulation of these mar-

gov/imo/media/doc/3-26-10%20Ending%20Too%20Big%20to%20Fail.pdf (“[T]here is little in the current legislation that would change the behavior or reduce the size of the nation’s six mega-banks. . . . Thus far, on the central aspect of ‘too big to fail,’ financial reform consists of giving regulators the authority to supervise institutions that are too big, and then the ability to resolve those banks when they are about to fail. Upon closer examination, however, the former is virtually the same authority regulators currently possess, while the latter—an orderly resolution of a failing megabank—is an illusion.”); see also Michael R. Crittenden & Sarah N. Lynch, *Dodd Agrees to Change in Finance Overhaul Bill*, WALL ST. J., Mar. 20, 2010, at A7; Peter Eavis, *Congress Is Wasting a Good Crisis*, WALL ST. J., Mar. 3, 2010, at C16; Marcy Gordon, *Bair Says Senate Bill Must Be Tweaked*, ABC News, Mar. 19, 2010, <http://abcnews.go.com/Business/wireStory?id=10150069>.

185 For example, as Kevin Dowd points out, LTCM had a market buyer and, arguably, the Federal Reserve’s intervention was unnecessary:

A group consisting of Warren Buffett’s firm, Berkshire Hathaway, along with Goldman Sachs and American International Group, a giant insurance holding company, offered to buy out the shareholders for \$250 million and put \$3.75 billion into the fund as new capital. That offer would have put the fund on a much firmer financial basis and staved off failure. However, the existing shareholders would have lost everything except for the \$250 million takeover payment, and the fund’s managers would have been fired.”

KEVIN DOWD, CATO INST. BRIEFING PAPER NO. 52, TOO BIG TO FAIL? LONG-TERM CAPITAL MANAGEMENT AND THE FEDERAL RESERVE 4 (1999), available at <http://www.cato.org/pubs/briefs/bp52.pdf>. Dowd also presciently notes that the Federal Reserve’s rescue of LTCM signaled the return of the “too big too fail” doctrine. *Id.* at 10. *But see* Lewis, *supra* note 75 (“William McDonough, president of the New York Fed, came to the same conclusions as Meriwether—different from Buffett’s—that the fund could not legally sell without consulting its investors, which Buffett had given them less than an hour to do.”).

186 Arthur Levitt describes “too big to fail” as a situation “in which large financial institutions are not allowed to fail because of the impact their failure would have on the rest of the market” and “too interconnected to fail” as “when a financial institution’s positions in the unregulated and non-transparent derivatives markets are so complex, so secretive, and so leveraged that to unwind them quickly is either impossible or dangerous.” Arthur Levitt, *Op.*, *Risk and Discipline in the Financial Markets*, WALL ST. J., Feb. 22, 2010, at A19.

kets.¹⁸⁷ This case is supported by: (1) market failures¹⁸⁸ involving both information failures and systemic risk; (2) considerations of fairness based upon the distributional consequences of OTC derivatives trading, public policy preferences conferred on OTC derivatives in bankruptcy, the potential negative impact on corporate governance of OTC derivatives, and public policy decisions to permit trading in a less efficient market structure; and (3) the inadequacy of private economic incentives to effect a sufficient amount of private ordering in OTC derivative markets.

Market failures generally provide one justification for government regulatory intervention in financial markets. OTC derivative markets exhibit at least two types of market failures:¹⁸⁹ (1) information asymmetries and deficiencies, and (2) systemic risk.¹⁹⁰ Systemic risk is the risk that the collapse of one financial institution will trigger a domino-like collapse of other financial institutions, which could have a very broad economic impact. The systemic risk created by OTC derivatives trading activity can create negative externalities because of "the participants' possible failure to internalize all costs associated with their derivatives activities. Market discipline might demand the bankruptcy of a derivatives dealer as the price for imprudent risk-taking, but the *private* costs of a financial institution's failure may not reflect the even greater *social* costs of its demise."¹⁹¹ OTC derivatives are a primary contributor to systemic risk because of the counterparty credit risk they create.¹⁹² Therefore, the counterparty

187 This topic requires a much further discussion, which is beyond the scope of this Article.

188 As some of the most important OTC derivative market participants are dealer banks, potential market failures surrounding the banking industry are also implicitly relevant to this discussion. See generally Xavier Freixas & Anthony M. Santomero, *Regulation of Financial Intermediaries: A Discussion*, in CREDIT, INTERMEDIATION, AND THE MACROECONOMY, *supra* note 184, at 424 (discussing potential market failures in the banking industry).

189 See J. Christopher Kojima, *Product-Based Solutions to Financial Innovation: The Promise and Danger of Applying the Federal Securities Laws to OTC Derivatives*, 33 AM. BUS. L.J. 259, 279 (1995). Kojima calls these "potential" market failures. See *id.* But, after fifteen years of history, they clearly appear to be actual market failures.

190 In fact, a recent FRBNY staff report states that "[d]espite the significant recent improvements in market infrastructure . . . the infrastructure for OTC derivatives still poses systemic risks that should be addressed with further improvements." Duffie et al., *supra* note 97, at 11.

191 Kojima, *supra* note 189, at 281.

192 It is important to note that counterparty credit risk is theoretically unnecessary. That is, if all derivatives were traded on multilateral exchanges, then counterparty credit risk would be eliminated (though there would still theoretically be the risk of a failed exchange). See Andrew Ross Sorkin, *A Wish List for Fixing Wall Street*, N.Y. TIMES,

credit risk associated with OTC derivatives activity can create enormous negative externalities because of excessive buildup of risk in individual financial institutions and the interconnections among counterparties. In the financial crisis, both types of market failures materialized.

First, certain information asymmetries and deficiencies clearly contributed to the financial crisis. For example, information deficiencies, which can refer to a lack of information by counterparties, end-users, or regulators, severely impacted both regulators and counterparties when Lehman Brothers collapsed. This information failure led to a breakdown in market confidence that froze credit markets since neither counterparties nor regulators knew Lehman's true OTC derivative exposures: "[t]he market for Credit Default Swaps (CDS) froze, as Lehman was believed to be counterparty to around \$5 trillion of CDS contracts."¹⁹³ The actual amount of Lehman's net liability was closer to \$6 billion.¹⁹⁴ Similarly, in the near collapse of LTCM, "[t]he risks inherent in LTCM portfolio were perhaps not as fatal as the consequences of the industry's exagger-

May 13, 2008, at C1. Duffie et al. explain the important dimensions of the counterparty credit risk issue:

Counterparty credit risk rises to the level of systemic risk when the failure of a market participant with an extremely large derivatives portfolio could trigger large unexpected losses on its derivatives trades, which could seriously impair the financial condition of one or more of its counterparties. Systemic risk also arises when the fear of such a failure could lead counterparties to attempt to avoid potential losses by reducing their exposures to a large weak market participant, possibly contributing to a "run" that indeed accelerates the failure of that market participant. An additional form of systemic risk that can arise from the actual or anticipated failure of a large OTC derivatives market participant is the potential for an accompanying "fire sale," which can lead to significant price volatility or price distortions (in both derivative markets and underlying asset markets) when counterparties suddenly attempt to replace their positions with the distressed firm, and otherwise attempt to sell risky assets in favor of safer assets, a "flight to quality." Through price impacts, such a fire sale or flight to quality could cause failure-threatening losses to some market participants, even those with no direct counterparty credit risk to the firm in question.

Duffie et al., *supra* note 97, at 4–5.

193 Andrew G. Haldane, Executive Dir. of Fin. Stability, Bank of Eng., Rethinking the Financial Network, Address at the Amsterdam Fin. Student Ass'n 2 (April 2009), available at <http://www.bankofengland.co.uk/publications/speeches/2009/speech386.pdf>.

194 Press Release, Depository Trust & Clearing Corp., DTCC Addresses Misconceptions About the Credit Default Swap Market (October 11, 2008), available at <http://www.dtcc.com/news/press/releases/2008/tiw.php>.

ated opinion of its portfolio.”¹⁹⁵ Not surprisingly, therefore, “[t]ransparency can have a calming influence on trading patterns at the onset of a potential financial crisis.”¹⁹⁶ But without government intervention, the OTC derivative markets are likely to remain unacceptably opaque because of strong economic incentives for the private market participants controlling these markets, namely the derivatives dealers, to maintain the status quo.¹⁹⁷ But without understanding a counterparty’s exposures to other counterparties, it is impossible for a OTC derivatives market participant to responsibly assess the counterparty credit risk it assumes.¹⁹⁸ And because in these circumstances, such necessary risk assessment is generally impossible, a “counterparty risk externality,”¹⁹⁹ which is ultimately an information failure, can arise.

Accordingly, regulators should require the disclosure²⁰⁰ of certain data to facilitate the monitoring of the systemic risks OTC derivatives create. This is particularly important since derivative trading is often accompanied by excessive amounts of leverage, which is easily masked by the opacity of the OTC derivative markets. In the financial crisis, “[t]he complexity and limited transparency of the market rein-

195 Desmond Eppel, Note, *Risky Business: Responding to OTC Derivative Crises*, 40 COLUM. J. TRANSNAT’L L. 677, 686 (2002); see also *id.* at 685 (“The Bank for International Settlements reported that LCTM was ‘perhaps the world’s single most active user of interest rate swaps.’” (quoting U.S. GEN. ACCOUNTING OFFICE, LONG-TERM CAPITAL MANAGEMENT: REGULATORS NEED TO FOCUS GREATER ATTENTION ON SYSTEMIC RISK 7 (1999))).

196 Duffie et. al, *supra* note 97, at 16.

197 See generally Christopher Whalen, *Yield to Commission: Is an OTC Market Model to Blame for Growing Systemic Risk?*, J. STRUCTURED FIN., Summer 2008, at 8, 11 (noting that the opacity of OTC derivative markets helps maintains high profits for derivatives dealers, who are at the center of this market structure and provide “all liquidity”).

198 Of course, this risk can be largely mitigated by the taking of collateral. For this reason, in a *Wall Street Journal* opinion piece, Professors of Finance Viral Acharya and Robert Engle argue that transparency should be mandated for all derivatives trades. See Viral Acharya & Robert Engle, Op., *Derivatives Trades Should All Be Transparent*, WALL ST. J., May 15, 2009, at A13.

199 Viral Acharya & Alberto Bisin, *Centralized Versus Over-the-Counter Markets* 3 (Mar. 16, 2010) (unpublished manuscript), available at <http://ssrn.com/abstract=1573355> (“[O]pacity of exposures in OTC markets leads to an important risk spillover—a counterparty risk externality—that leads to excessive ‘leverage’ in the form of short positions that collect premium upfront but default ex post and result in inefficient levels of risk-sharing and/or deadweight costs of bankruptcy.” (emphasis omitted) (footnote omitted)).

200 Delineating the exact parameters of this disclosure is beyond the scope of this Article. But in general, disclosure must be sufficient for regulators to adequately monitor market integrity and systemic risk and for counterparties to responsibly assess counterparty credit risk.

forced the potential for excessive risk-taking, as regulators did not have a clear view into how OTC derivatives were being traded.”²⁰¹ Therefore, having the “right data” is an essential “starting point”²⁰² for effective regulation of OTC derivative markets. Currently, however,

[r]egulators are ill equipped to monitor risk because they lack the data. . . . We are not even in a position to learn from past disasters, because we cannot review the firm-level details of what occurred. It is as if the National Transportation Safety Board was not given flight recorders or allowed to investigate a crash site²⁰³

Similarly, finance professor Joseph Mason notes, “The key problem facing markets today is information. . . . Information problems . . . are

201 Duffie et al., *supra* note 97, at 1.

202 See BOOKSTABER, *supra* note 76, at xii.

203 *Id.* at xii–xiii. Bookstaber provides the following example:

[I]n a few days in early August 2007, many quantitative long/short equity hedge funds suffered large losses, in some cases losses of more than 30 percent. We do not know what set off this wave of losses or why the losses affected so many of these funds. We suspect too much leverage was a culprit and the triggering event was somehow related to the subprime and credit stresses, but we do not know because we do not have the relevant data.

Id. at xiii. Similarly, Professor Andrew W. Lo argues that

the current financial crisis, and the eventual cost of the bail-out, should be sufficient motivation to create a “Capital Markets Safety Board” (CMSB) patterned after the NTSB, dedicated to investigating, reporting, and archiving the “accidents” of the financial industry. By maintaining teams of experienced professionals—forensic accountants, lawyers, and financial engineers—working together on a regular basis over the course of many investigations, a number of new insights, common threads and key issues would emerge from their analysis.

Andrew W. Lo, *The Financial Industry Needs Its Own Crash Safety Board*, FIN. TIMES, Mar. 2, 2010, <http://www.ft.com/cms/s/0/011cbf2e-2599-11df-9bd3-00144feab49a.html>. Related developments include the SEC’s new division of “Risk, Strategy, and Financial Innovation,” where Richard Bookstaber is a senior officer, and regulatory reform proposals calling for a “National Institute of Finance” (NIF):

a proposed U.S. Government entity that would serve as a resource to gather and provide appropriate data for the financial regulatory community. The NIF would also provide the analytical capabilities to monitor systemic risk, perform independent risk assessments of individual financial entities, and provide advice to the Federal regulatory agencies tasked with ensuring the health of the financial system.

Comm. to Establish the Nat’l Inst. of Fin., FAQs—Role of the NIF, <http://www.ce-nif.org> (last visited Apr. 6, 2010). Additionally, Senator Dodd’s financial reform bill that recently passed the Senate Banking Committee proposes the creation of an “Office of Financial Research,” which would have data collection as one of its mandates. Restoring American Financial Stability Act of 2010, S. 3217, 111th Cong., § 152.

the root of most every financial crisis known to history.”²⁰⁴

Information deficiencies also potentially decrease market integrity in at least three ways. First, information deficiencies make it difficult for regulators to spot insider trading²⁰⁵ or investigate and police market irregularities, cornering, fraud or any other abuses. Second, if some OTC derivatives are used in financial market price discovery processes, then information deficiencies can be particularly harmful to the integrity of this process.²⁰⁶ Additional pricing information would clearly contribute to OTC derivative market efficiency in many ways, including facilitating inefficient, but frequent disputes about collateral amounts due to counterparties.²⁰⁷ Third, as Professor Duffie notes, “competition” is the “most important ingredient for market efficiency.”²⁰⁸ But healthy competition in financial markets “depends on price transparency and on relatively unencumbered access to trading by a broad set of market participants.”²⁰⁹ Currently, the OTC derivatives markets exhibit little price transparency and are dominated by a small number of large, international banks.

Information deficiencies are related to the second market failure, the problem of systemic risk, in which market participants do not completely internalize the risks of their OTC derivatives activity and thereby create negative externalities for society to absorb. Without sufficient data and effective government regulation, neither regulators nor counterparties know whether the collapse of a specific financial institution will have a larger market or social impact. In financial emergencies, therefore, financial institutions are more likely to be

204 Joseph R. Mason, *The (Continuing) Information Problems in Structured Finance*, J. STRUCTURED FIN., Spring 2008, at 7, 7.

205 See, e.g., Shannon D. Harrington & John Glover, *Credit-Default Swaps May Incite Regulators Over Insider Trading*, BLOOMBERG.COM, Oct. 10, 2006, <http://www.bloomberg.com/apps/news?pid=20601087&sid=aAMb0.6cgOLs>; Rachele Younglai, *SEC Probes Derivatives in Insider Trading Cases*, REUTERS, Nov. 25, 2009, <http://www.reuters.com/article/idUSN2535917220091125>; Viral V. Acharya & Timothy Johnson, *Insider Trading in Credit Derivatives* (September 2005) (unpublished manuscript), available at <http://ssrn.com/abstract=767864> (making an attempt to quantify the problem of insider trading in this market).

206 Related to this, the Justice Department is conducting an antitrust investigation of Markit and its CDS pricing. See Liz Rappaport et. al., *U.S. Tightens Its Derivatives Vise*, WALL ST. J., July 15, 2009, at C1.

207 For example, collateral related pricing disputes grew so time consuming and problematic for market participants that ISDA intervened to craft a solution: its “Collateral Dispute Resolution Procedure.” Additional background information on this issue can be found at Int’l Swaps & Derivatives Ass’n, Collateral Committee, http://www.isda.org/c_and_a/collateral.html (last visited Apr. 8, 2010).

208 Duffie, *supra* note 12, at 1.

209 *Id.*

bailed out by public taxpayers—as in the case of AIG, Bear Stearns,²¹⁰ and other financial institutions because regulators fear the unknown consequences of letting such institutions collapse due to their interconnectedness with other financial institutions.

In addition to these market failures, at least four considerations surrounding the OTC derivatives markets present issues of fairness. First, the distributional effects during the financial crisis of OTC derivatives trading, an activity whose overall social welfare effects is controversial,²¹¹ have been patently unjust. Profits from excessively risky financial activity have been privatized, but the downside risk of this activity has been socialized. Unfortunately, it is foreseeable that taxpayers will continue to subsidize this activity in the future in the absence of meaningful financial regulatory reforms. For example, there is an increasingly prevalent assumption that taxpayers would bail out an insolvent CCP clearing facility for OTC derivatives.²¹² As

210 J.P. Morgan bought Bear Stearns, but the Federal Reserve's generous guarantee to J.P. Morgan, constituted a government subsidy.

211 For example, Paul Volcker has said that the most beneficial financial innovation in the past few decades has been the ATM. See Alan Murray, *Paul Volcker: Think More Boldly*, WALL ST. J., Dec. 14, 2009, at R7.

212 For example, in *Centralized Clearing for Over-the-Counter Derivatives*, Gordon Rausser, William Balson, and Reid Stevens state that “[t]he government cannot rely on the private sector alone to clear OTC derivatives, and must take an active role in creating and managing a CCP. Government backing is an essential ingredient, since it is the guarantor of last resort.” Gordon Rausser et al., *Centralized Clearing for Over-the-Counter Derivatives* 12 (Sept. 18, 2009) (unpublished manuscript), available at <http://ssrn.com/abstract=1475351>. Professor Darrell Duffie notes that “[a]mong the issues to be resolved for the effective international supervision of clearing houses is the division of responsibility for bailouts, should a clearing house need government support.” Duffie, *supra* note 12, at 9. And European Central Bank Governor Christian Noyer has said that CCP clearing ought to “take place at conditions that would make the recourse to the central bank possible in case of need.” See Patrick McGroarty & Carolyn Henson, *EU Backs Tighter Regulation of CDS*, WALL ST. J. ONLINE, Mar. 9, 2010 (on file with author) (quoting Noyer). Finally, the Federal Reserve Board recently approved the application of Warehouse Trust Company LLC (Warehouse Trust) to be a member of the Federal Reserve System. Warehouse Trust “proposes to operate a central trade registry for credit default swap contracts and to offer related services, including the processing of life-cycle events for the contracts and facilitation of payments settlements.” Press Release, Fed. Reserve Sys. (Feb. 2, 2010), available at <http://www.federalreserve.gov/newsevents/press/orders/20100202a.htm>. And ICE US Trust LLC, the most significant CCP clearing house for credit derivatives in the United States, also recently became a member of the Federal Reserve System. Fed. Reserve Sys., Order Approving Application for Membership (Mar. 4, 2009), available at <http://www.federalreserve.gov/newsevents/press/orders/orders20090304a1.pdf>. As members of the Federal Reserve System, both institutions have access to the Federal Reserve's discount window and lender of last resort protection. Membership of both institutions in the Federal Reserve System is controversial. See generally Gret-

discussed below, the bailout of an insolvent OTC derivatives CCP clearing house could cost many times that of AIG. To rebut such costly assumptions rife with moral hazard, financial regulatory reforms should clearly and credibly mandate that OTC derivative market infrastructures not have access to any type of government funding or subsidy. But given past history and the trend of both these current assumptions and financial regulatory reforms, future government bailouts of financial institutions or OTC derivatives CCP clearing facilities in a financial crisis is foreseeable. Therefore, there must be ex-ante government regulation of OTC derivative markets sufficient to minimize the cost of ex-post government bailouts. Second, current U.S. bankruptcy law confers on OTC derivatives a privileged status in bankruptcy. As Senator Edward E. Kaufman recently, eloquently stated: "This is special treatment, not market discipline."²¹³ If OTC derivative markets benefit from government intervention granting a special status in bankruptcy, a reasonable tradeoff for this governmental ex post privileged protection is some level of ex-ante government regulation.²¹⁴ Third, as both Judge Frank Easterbrook and Professor

chen Morgenson & Don Van Natta Jr., *Even in Crisis, Banks Dig in for Battle Against Regulations*, N.Y. TIMES, June 1, 2009, at A1.

213 See Kaufman, *supra* note 184 (urging reconsideration of the privileged legal status of "qualified financial contracts"—which includes OTC derivatives—in bankruptcy).

214 The normative desirability of this special bankruptcy carve out for OTC derivatives is an important question, but beyond the scope of this article. Gary Gensler, CFTC Chairman, recently stated,

Though reform efforts to date have yet to address the bankruptcy laws, we should seriously consider modifications to address this new development in capital markets. One possible reform would be to require CDS-protected creditors of bankrupt companies to disclose their positions. Another is to specifically authorize bankruptcy judges to restrict or limit the participation of 'empty creditors' in bankruptcy proceedings.

Gary Gensler, Chairman, Commodity Futures Trading Comm'n, Keynote Address at Markit's Outlook for OTC Derivatives Markets Conference (Mar. 9, 2010), *available at* <http://www.cftc.gov/ucm/groups/public/@newsroom/documents/speechandtestimony/opagensler-32.pdf>. *But see* David Mengle, *The Empty Creditor Hypothesis*, ISDA RES. NOTES, No. 3, 2009, at 1, *available at* <http://www.isda.org/researchnotes/pdf/ISDA-Research-Notes3.pdf> (questioning the empty creditor hypothesis). For further discussion of these issues, see Stephen J. Lubben, *Repeal the Safe Harbors* (Seton Hall Law Sch., Pub. Law Research Paper No. 1497040, 2009), *available at* <http://ssrn.com/abstract=1497040> (arguing for repeal of bankruptcy code's safe harbor provisions); Stephen J. Lubben, *The Bankruptcy Code Without Safe Harbors* (Seton Hall Law Sch., Pub. Law Research Paper No. 1569627, 2010), *available at* <http://ssrn.com/abstract=1569627> (discussing possible revisions to the bankruptcy code once its safe harbors are removed); Mark J. Roe, *Bankruptcy's Financial Crisis Accelerator: The Derivatives Players' Priorities in Chapter 11* (Harv. Law Sch., Pub. Law Working Paper No. 10-

Duffie note, it is reasonable to question whether derivatives could have important corporate governance implications.²¹⁵ Professor Duffie argues:

There is, however, a good case for mandating the public disclosure of derivatives positions (whether obtained on exchanges or over the counter) that offset the economic exposures of major holders of debt or equity in public corporations. For example, the public has an interest in discovering whether a major shareholder, who ostensibly contributes to proper corporate governance, has severely diluted its governance incentives through a derivatives position. Likewise, the major creditors of a distressed corporation are normally presumed to act in a manner that mitigates distress costs. If, however, a creditor has purchased protection against default using credit derivatives, the creditor may even have a net incentive to accelerate the default or may have a substantially diluted interest in raising the recovery value of debt claims. In general, regulators should rationalize disclosure requirements for derivatives positions that raise substantial concerns over moral hazard in corporate governance.²¹⁶

Fourth, many approaches to the regulation of OTC derivatives exist.²¹⁷ While this Article does not advocate requiring all derivatives to trade on multilateral exchanges, it is important to recognize that exchange trading has clear public benefits such as superior access, transparency, price discovery, and liquidity that “the systemically unstable nature of an OTC market structure”²¹⁸ lacks. Therefore, if public policy permits a less efficient OTC derivatives market structure that is potentially much more costly to the public than alternative possibilities in order to advance financial innovation and enable the hedging of idiosyncratic risks, an appropriate tradeoff is government oversight of this less stable market structure.

Finally, OTC derivative markets have been largely unregulated for years. The market failures discussed above have likewise been evident for years. But, as is clear from the financial crisis, an insufficient

17, 2010), available at <http://ssrn.com/abstract=1567075> (discussing failures of current bankruptcy policy to ensure adequate monitoring of debtors and suggesting reforms).

215 See Duffie, *supra* note 12, at 13–14; Easterbrook, *supra* note 103.

216 Duffie, *supra* note 12, at 13–14.

217 These include: (1) private regulation relying exclusively upon market discipline; (2) regulation mandating exchange trading of all derivatives; (3) regulation banning the trading of all/some derivative products; (4) regulation by “deregulation,” that is, by removing legal enforceability for all or some OTC derivative products; or (5) regulation adopting some sort of “middle of the road” approach.

218 Whalen, *supra* note 197, at 12. Whalen’s article provides a general overview of the market structure differences between multilateral exchanges and OTC markets.

level of private ordering has materialized to ameliorate these and other market concerns.²¹⁹ For example, it was only due to regulatory prodding that the CDS markets engaged in extensive portfolio compression of redundant positions in 2008. Prior to that time, “These redundant positions posed significant unnecessary counterparty exposure and offered no material economic benefit.”²²⁰ Additionally, the development of CCP clearing houses for OTC derivatives has long been discussed,²²¹ but private ordering on its own has failed to fully implement this solution.²²² And it is clear that although many OTC derivatives instruments are clearing eligible, regulatory pressure rather than private ordering has been responsible for the recent migration of many OTC derivatives to CCP clearing.²²³ Clearing can be thought of as a collective action problem, a type of problem whose solution generally requires regulatory intervention. CCP clearing is costly and often less profitable for private market participants. For example,

although market participants might not individually choose to incur the cost of clearing more of their derivatives exposures, they collectively benefit from the market-wide use of clearing, and would be more inclined to agree to the increased use of clearing if all market participants are held to common high standards in this respect.²²⁴

219 See generally David Barboza & Jeff Gerth, *On Regulating Derivatives*, N.Y. TIMES, Dec. 15, 1998, at C1 (reporting calls for government derivatives oversight and industry support for self-regulation); Brian J.M. Quinn, *The Failure of Private Ordering and the Financial Crisis of 2008*, 5 N.Y.U. J. L. & Bus. 549 (2009) (discussing the causes of the 2008 financial crisis and proposing policy changes).

220 Duffie et al., *supra* note 97, at 4.

221 See, e.g., Barboza & Gerth, *supra* note 219; Randall S. Kroszner, *Can the Financial Markets Privately Regulate Risk? The Development of Derivatives Clearinghouses and Recent Over-the-Counter Innovations*, J. MONEY CREDIT & BANKING, Vol. 31, No. 3 (August 1999, Part 2).

222 Beginning in 2001, the private market began clearing interest rate swaps—the largest category of OTC derivatives—and there is also limited CCP clearing of a few other derivatives products. It is also the case that many OTC derivatives are highly standardized and could easily be traded on exchanges, which would best promote market efficiency, but would also decrease dealer margins. See Duffie, *supra* note 12, at 14–15.

223 For example, Duffie notes that OTC derivatives dealers “reap substantial profits from OTC trading, and have little incentive to foster the migration of trading from the OTC market to exchanges, even after a derivative product achieves a high level of standardization and breadth of investor activity. Anyone suggesting otherwise should be embarrassed by the examples of standardized and extremely heavily traded derivatives that are available only in the OTC market” *Id.* at 14.

224 Duffie et al., *supra* note 97, at 14.

Additionally, in theory, CCP clearing of “both vanilla and complex derivatives is possible.”²²⁵ However, given the economics of CCP clearing, insufficient economic incentive exists for the private market to clear a socially optimal level of OTC derivatives. Therefore, some economists suggest that a “public-private OTC clearing partnership is inevitable, given the systemic importance of OTC clearing and recent public sector support for failing financial institutions to prevent cascading defaults.”²²⁶

The private market has created many proactive solutions, particularly under the leadership of ISDA. Its solutions are generally rapid and often ingenious. Such solutions, however, have sometimes only proved temporary and only arisen after much informal regulatory prodding.²²⁷ Therefore, it is clear that private ordering solutions have been insufficient in the past²²⁸ and likely will continue to be insufficient in the future. In sum, there is insufficient economic incentive for a publically acceptable level of private ordering in the OTC derivative markets in the absence of government regulation.

B. Contending Regulatory Reforms

As this Article goes to press, it appears likely that Congress will implement OTC derivative markets reforms, but the exact parameters of these reforms remain uncertain.²²⁹ Assuming such reforms are implemented, it seems clear both that jurisdiction of the OTC derivative markets will be split between the SEC and CFTC and, for now, the

225 Rausser et al., *supra* note 212 (manuscript at 4).

226 *Id.* (manuscript at 10).

227 See generally Siona Robin Listokin, Can the Derivatives Market Self-Regulate? Evidence from OTC Derivatives Confirmations (Nov. 4, 2009) (unpublished manuscript), available at <http://ssrn.com/abstract=1499964> (describing the confirmation backlog crisis in the credit derivatives industry and the industry’s ultimate failure to sufficiently address this issue).

228 See Duffie et al., *supra* note 97, at 2 (“Regulatory efforts over the past four years have significantly improved a market that had been *fraught with inefficient systems and processes*—especially in the case of credit derivatives.” (emphasis added)).

229 As of March 29, 2010, the House of Representatives has passed a financial reform bill, Wall Street Reform and Consumer Protection Act of 2009, H.R. 4173, 111th Cong., which includes additional regulations for OTC derivative markets. Senator Dodd’s financial regulatory reform bill, Restoring American Financial Stability Act 2010, S. 3217, 111th Cong., passed the Senate banking committee on March 22, 2010. Senator Dodd’s bill, however, has a “placeholder”—reflecting earlier drafts—for reform of the OTC derivative markets as “Senators Jack Reed (D-RI) and Judd Gregg (R-NH) are working on a substitute amendment to this title that may be offered at full committee.” Senate Comm. on Banking, Housing, & Urban Affairs, Summary: Restoring American Financial Stability, http://banking.senate.gov/public/_files/FinancialReformSummary231510FINAL.pdf (last visited Apr. 14, 2010).

international dimension will be largely addressed by general calls for consultation, coordination, and information sharing. Since the financial crisis began, both domestically and internationally, there have been a plethora of reform proposals and draft legislation²³⁰ (altogether, reform proposals) with many common elements. The foreseeable congressional reforms will likely reflect many of these recommendations. Although I agree with the basic elements of many of these reform proposals, all fall short of constructing the linked domestic and international frameworks of cooperation needed for the regulation of the OTC derivative markets.

An illustrative reform proposal is the Department of the Treasury's *Financial Regulatory Reform: A New Foundation* (Treasury Report),²³¹ which includes a section on the "comprehensive regulation" of the OTC derivative markets. It proposes four public policy objectives as guideposts to OTC derivative markets regulatory reform: "(1) preventing activities in those markets from posing risk to the financial system; (2) promoting the efficiency and transparency of those markets; (3) preventing market manipulation, fraud, and other market abuses; and (4) ensuring that OTC derivatives are not marketed inappropriately to unsophisticated parties."²³² Accordingly, it recommends regulatory reforms in five general areas: (1) universal record keeping and reporting, including creating audit trails; (2) increased prudential supervision and regulation of OTC derivatives dealers and firms with large counterparty exposures; (3) the migration of standardized OTC derivative contracts to regulated CCPs with robust risk management policies; (4) market integrity reforms, including "clear unimpeded authority [for the CFTC and SEC consistent with their mandates] to police and prevent fraud, market manipulation, and other market abuses . . . [and that] [t]he CFTC also should have authority to set position limits on OTC derivatives that perform

230 A few such examples include: *Over-the-Counter Derivatives Market of 2009*, H.R. 3795, 111th Cong. (2009); *Derivatives Trading Accountability and Disclosure Act*, H.R. 3300, 111th Cong. (2009); *The Derivatives Markets Transparency and Accountability Act of 2009*, H.R. 977, 111th Cong. (2009); U.S. DEP'T OF THE TREASURY, *supra* note 176; Collin Peterson & Barney Frank, *Description of Principles for OTC Derivatives Legislation* (July 30, 2009) [hereinafter *Draft Principles*], *available at* http://agriculture.house.gov/inside/Legislation/111/otc_principles_final_7-30.pdf.

231 U.S. DEP'T OF THE TREASURY, *supra* note 176. The Treasury Report also gave the mandate for the *Joint Report of the SEC and CFTC*, see U.S. SEC. & EXCHANGE COMM'N & U.S. COMMODITY FUTURES TRADING COMM'N, *A JOINT REPORT OF THE SEC AND THE CFTC ON HARMONIZATION OF REGULATION* (2009), *available at* <http://www.cftc.gov/stellent/groups/public/@otherif/documents/ifdocs/opacftc-secfinaljointreport101.pdf> (hereinafter *SEC-CFTC, JOINT REPORT*).

232 *Id.* at 46–47.

or affect a significant price discovery function with respect to regulated markets;²³³ and (5) increased protections for less sophisticated counterparties. Although the Treasury Report would continue to permit bilateral trading of customized derivatives, it would increase related capital and margin requirements for firms.²³⁴

Many of the Treasury Report's recommendations are shared by other reform proposals. In sum, many common regulatory reforms center on increased transparency, additional disclosure, increased regulatory powers to insure market integrity and stability, using CCP to clear standardized derivatives, and regulatory measures to discourage excessive amounts of leverage. The application of these reforms should not be based upon the legal organizational form of a major market participant,²³⁵ nor should they only apply to certain types of OTC derivatives. To increase market transparency and disclosure, all OTC derivative trades of major market participants that are not centrally cleared should be reported to trade repositories within a brief, but appropriate span of time.²³⁶ As discussed below, trade repositories should be global market infrastructures.²³⁷ The required reporting information must provide regulators the data necessary to proactively identify excessive leverage and market concentrations and to police fraud, market manipulations, or any other irregularities. It must also enable regulators to create audit trails.²³⁸ Increased trade reporting requirements for OTC derivatives are an important reform necessary to counteract information asymmetries, especially those confronting regulators and responsible counterparty credit risk assessment. China already requires reporting of all derivative trades.²³⁹ Brazil has recently moved to "require registry of all derivatives linked

233 *Id.* at 48.

234 *H. Agric. Comm. Hearing, supra* note 37, at 13–14 (statement of Timothy F. Geithner, Secretary, U.S. Dep't of the Treasury).

235 Congress should give the SEC-CFTC joint venture that I propose the regulatory authority to define "major market participant," but require that this definition be based upon activity levels rather than form of legal organization or applicable financial regulators.

236 Some derivative transactions have a short time frame and regulators would need to consider such differences.

237 Some have suggested locating a central trade repository in the Bank of International Settlements. I argue for a different solution.

238 See Joshua Gallu & David Scheer, *SEC's Schapiro Calls Derivatives Data 'Critical' for Probes*, BLOOMBERG.COM, Aug. 28, 2009, <http://www.bloomberg.com/apps/news?pid=20601087&sid=aKOAX86H8NxY>.

239 See James T. Areddy & Denis McMahon, *China is Ahead of the Curve on Oversight*, WALL ST. J., May 15, 2009, at C1.

to overseas financing operations.”²⁴⁰ And the OTC derivative market has already testified to the general feasibility of a trade reporting requirement. For example, the Depository Trust Clearing Corporation’s (DTCC) Trade Information Warehouse is “the market’s first and only comprehensive trade database and centralized electronic infrastructure for post-trade processing of OTC derivatives contracts,”²⁴¹ and is already in operation. As of August 3, 2009, DTCC reported that because of such efforts “the goal of trying to ensure that risk could be seen from a central vantage point at a central repository has now been achieved for the CDS market.”²⁴²

Regulators, such as the SEC-CFTC joint venture this Article proposes, should have the authority to increase margin/collateral and capital requirements for firms with bilaterally cleared OTC derivatives. Increased margin/collateral and capital requirements should discourage excessive risk taking, which should decrease systemic risk. As a prerequisite to OTC derivative trading, major market participants should also be required to maintain certain minimal operating standards.²⁴³

C. *Contending Regulatory Institutions*

One of the two fundamental questions about reform of the regulation of OTC derivative markets is: who? Which regulatory agencies should have a starring role? As Professor John Coffee explains, “Washington is a world in which it matters critically which agency is empowered, and there are at least three agencies that are contending in a kind of bureaucratic rebounding contest for enhanced power [of the OTC derivative markets]: the Federal Reserve, the SEC, and the Commodity Futures Trading Commission.”²⁴⁴ While acknowledging that arguments exist in favor of all three agencies, Coffee casts his vote for the SEC, arguing that “the SEC has the best capacity for enforcement. They are the most experienced and toughest of the enforce-

240 Jeffris, *supra* note 67.

241 See The Depository Trust & Clearing Corp., Trade Information Warehouse, http://www.dtcc.com/products/derivserv/suite/tradeinfo_warehouse.php (last visited Feb. 18, 2010).

242 See Press Release, The Depository Trust & Clearing Corp., DTCC Values Additional CDS Contracts in Trade Information Warehouse at \$5.7 Trillion (Aug. 3, 2009), available at http://www.dtcc.com/news/press/releases/2009/cds_contract_values.php.

243 The concern here is to require market participants to internalize the totality of their business cost, which includes back office operations.

244 PBS NewsHour, *supra* note 28 (statement of John Coffee, Professor, Columbia Law Sch.).

ment agencies, and we need a good deal of that right now.”²⁴⁵ Professor Lynn Stout distinguishes the case for the SEC versus the CFTC:

The Commodities [sic] Futures Trading Commission . . . has more of a history in regulating this kind of speculative derivatives trading and is more experienced at it. The SEC traditionally has taken more of a hands-off approach, simply requiring disclosure and not getting too involved in how people actually do their business.

. . . .

But the SEC is the much larger agency, has lot more clout. So you’ve got a smaller agency with less clout, but maybe more experience with this particular problem, going up against a much larger agency that swings more weight.²⁴⁶

The Federal Reserve currently plays one of the most important regulatory roles in the OTC derivative markets since it regulates five commercial banks, which are among the critical derivatives dealers: “Five large commercial banks [J.P. Morgan Chase, Bank of America, Goldman Sachs, Citigroup, and Wells Fargo] represent 97% of the total banking industry notional amounts [of OTC derivatives] and 88% of industry net current credit exposure.”²⁴⁷ It also regulates some of the most critical OTC derivative market infrastructures in the United States, such as ICE US Trust, a CCP clearing house for CDS, and Warehouse Trust Company, “a central trade registry for credit default swap contracts . . . [which also offers] related services, including the processing of life-cycle events for the contracts and facilitation of payments settlement.”²⁴⁸

As I argue below, an SEC-CFTC joint venture should have a starring role in regulating the OTC derivative markets. This arrangement would represent a combination of their respective strengths and ameliorate the longstanding transaction costs associated with tensions between these agencies. It should also decrease the moral hazard associated with having a lender of last resort regulate critical OTC derivatives market institutions and infrastructures.

245 *Id.*

246 *Id.* (statement of Lynn Stout, Professor, UCLA Sch. of Law).

247 OFFICE OF COMPTROLLER OF THE CURRENCY, QUARTERLY REPORT ON BANK TRADING AND DERIVATIVES ACTIVITIES, FOURTH QUARTER 2009, at 1 (2010), available at <http://www.occ.treas.gov/ftp/release/2010-33a.pdf>.

248 Press Release, *supra* note 212.

IV. FRAMEWORKS OF COOPERATION: DOMESTIC AND INTERNATIONAL APPROACHES TO INCREASE REGULATION OF THE OTC DERIVATIVE MARKETS

Calls to regulate OTC derivative markets started many years and crises ago. Ideally, OTC derivatives “reregulation”²⁴⁹ should be part of comprehensive financial regulatory reform. And legal scholars caution against hasty regulatory reforms²⁵⁰ premised upon incomplete understandings of the current financial crisis. While many important regulatory reforms have been proposed, such as those discussed in Part III, they fall short of constructing the linked domestic and international frameworks needed to successfully regulate the OTC derivative markets. Therefore, in this Part, I first suggest a domestic framework of cooperation to improve regulation of the OTC derivative markets: a regulatory joint venture between the SEC and CFTC. I then propose a system of international public-private regulatory partnerships as a way to promote the international frameworks of cooperation needed to regulate the global OTC derivative markets. I then link these domestic and international frameworks of cooperation. Finally, I conclude by suggesting that my frameworks of cooperation can be generalized and used to examine other regulatory issues in financial markets such as sovereign wealth fund (SWF) investment.

A. *Domestic Frameworks of Cooperation: A SEC-CFTC Joint Regulatory Venture: The Derivatives Supervision Initiative*

An incremental, domestic step designed to potentially harmonize with any future financial regulatory agency reform is the creation of a fully integrated SEC-CFTC joint venture, which I call the “Derivatives Supervision Initiative” (DSI). Although this is an unprecedented regulatory form, as argued below, recent regulatory reform proposals surrounding the creation of a new consumer protection agency provide an interesting and important parallel. The DSI is the best approach to the domestic component of OTC derivative markets regulation since it is both an immediate, practical step capable of harmonization with likely future comprehensive financial regulatory reforms and it deftly combines the regulatory expertise of the SEC and CFTC, the composite skill set necessary for the successful regulation of the OTC derivative markets. It also leverages the SEC and CFTC’s own recent

249 See POSNER, *supra* note 21, at 291.

250 See *id.* at 288; see also 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, 74–89 (2009) (discussing different proposals for crisis response).

recommendations for the harmonization of their individual regulatory approaches. My proposal actually instantiates several of the core recommendations of the SEC and CFTC in their October 2009 report, *A Joint Report of the SEC and the CFTC on Harmonization of Regulation*²⁵¹ (Joint Report), which was prompted by directives in the Treasury Report. Although the Joint Report specifically omits addressing the regulatory gaps in the OTC derivative markets,²⁵² the substance and approach of its recommendations is nevertheless applicable to these markets. The DSI, however, improves upon, streamlines, and ultimately expands upon these recommendations. In this first subsection, I touch upon possible configurations of future financial regulatory reform to show that the DSI easily harmonizes with various arrangements, then briefly summarize specific task-force recommendations of the Joint Report and explain why these recommendations, in addition to other recent discussions and developments in financial regulatory reform, support creation of the DSI with its comparable advantages, then sketch and argue for the DSI, and finally address several objections against it. In the end, the “reregulation” of the OTC derivative markets can be thought of as a Coasian “make” or “buy” decision. The domestic regulatory production process can be undertaken by: (1) the SEC and/or CFTC; (2) the SEC and/or CFTC in conjunction with outsourcing to a third-party—such as the decisionmakers already proposed to settle anticipated jurisdictional disputes between these financial regulators; (3) the OTC derivative markets can self-regulate—largely the current solution; or (4) the SEC and CFTC can undertake a hybrid institutional solution, the DSI.

1. The DSI and Financial Regulatory Reform

Although a comprehensive discussion of financial regulatory reform is beyond the scope of this Article, I support a gradual transition towards a modified “twin peaks” model of financial regulation in the United States. Worldwide, various models of financial regulation exist, but a few dominate. Professors Coffee and Sale explain that “[f]inancial regulation in the major capital markets today follows one of three basic organizational models: the functional/institutional model, the consolidated financial services regulator model, and the ‘twin peaks’ model.”²⁵³ The U.S. approach reflects a functional/institutional model, which means that regulation is based both upon the specific type of financial institution and the function of a financial

251 SEC-CFTC, JOINT REPORT, *supra* note 231.

252 *See id.* at 2.

253 Coffee & Sale, *supra* note 140, at 717.

product or market.²⁵⁴ Therefore, there is an insurance regulator for insurance companies, banking regulators for banks, etc. As discussed in Part II, however, this approach is increasingly problematic because today's financial institutions engage in a variety of financial markets and activities. The United Kingdom and Japan illustrate a consolidated approach, which means there is one "super regulator," which can take various configurations.²⁵⁵ Finally, Australia and New Zealand largely rely upon a "twin peaks" model, which consists of having two primary financial regulators: a prudential regulator to ensure the safety and soundness of financial institutions and a regulator focused on "business conduct and consumer protection."²⁵⁶ In other words, the twin peaks model largely takes an objective based approach, which should minimize the possibility of regulatory arbitrage through either manipulation of organizational form or financial instrument categorizations. And assuming the central bank is not also the prudential regulator, this approach should promote central bank independence.²⁵⁷ In fact, some argue that the Federal Reserve's main responsibility should be monetary policy.²⁵⁸ Coffee and Sale, however, suggest that "the Federal Reserve or a similar agency"²⁵⁹ should undertake the task of consolidated prudential supervisor and that the business conduct/consumer protection role should be allocated to the SEC.²⁶⁰

Although I largely agree with Coffee and Sales's recommendation, I think strong arguments support having the Federal Reserve

254 See e.g., Culp, *supra* note 126 (discussing both the differences between functional and institutional regulation and the hybrid approach to financial regulation taken by the United States).

255 For a discussion of the differences in Japan and the United Kingdom's approach to consolidated financial regulation, see Jerry W. Markham, *Super-Regulator: A Comparative Analysis of Securities and Derivatives Regulation in the United States, The United Kingdom and Japan*, 28 BROOK. J. INT'L L. 319, 374-410 (2003).

256 Coffee & Sale, *supra* note 140, at 723.

257 Coffee and Sale explain that Michael Taylor, an academic central banker and creator of the twin peaks model, "apparently feared that if the Bank of England remained responsible for the prudential supervision of banks, its independence in setting interest rates may be compromised by its fear that raising interest rates would cause bank failures for which it would be blamed." *Id.* at 724. An independent central bank is of paramount importance.

258 See Rachele Younglai, *U.S. Senate Panel Nears Agreement on Role of Fed*, REUTERS, Jan 6, 2010, <http://www.reuters.com/article/idUSN053650820100106>. The Federal Reserve is currently tasked with several responsibilities, including monetary policy, bank supervision, and consumer protection. For additional information on its various roles, see Fed. Reserve Sys., *Purposes and Functions*, <http://www.federalreserve.gov/pf/pf.htm> (last visited Apr. 12, 2010).

259 Coffee & Sale, *supra* note 140, at 782.

260 See *id.* at 717.

focus on monetary policy.²⁶¹ The Federal Reserve is currently one of the United States' most important banking regulators. But a critical reality of today's financial markets is that credit markets are no longer "bank-centric," but "securities-centric."²⁶² Therefore, bank-style "runs" now threaten other types of financial institutions,²⁶³ which should also be the subject of prudential regulation. The risk of the Federal Reserve acting as the prudential regulator for all financial institutions is of the financial markets assuming that the federal safety net will cover all such institutions.²⁶⁴ Financial markets will be particularly likely to make this assumption about any OTC derivative market infrastructures for which the Federal Reserve has oversight authority. Unfortunately, many are already assuming that central banks around the world will "bailout" OTC derivative markets CCPs in times of crisis.²⁶⁵ This assumption is likely to be even stronger if the Federal Reserve or another central bank is also a CCPs' primary banking supervisor and regulator. Therefore, responsibility for the prudential supervision of financial institutions should transition to a new consolidated entity of current banking regulators.²⁶⁶

Responsibility for business conduct, market regulation and enforcement, and consumer protection should be allocated to a second regulatory entity. The DSI could constitute the core beginnings of this institution by beginning with a focus on the OTC derivative markets. Regulatory reform should occur gradually and cautiously. Such reforms could begin with a consolidation of banking regulation and supervision and later draw upon lessons learned from the creation and operation of the DSI in establishing the second consolidated entity. But even if the United States never adopts a modified twin peaks model, the design of the DSI is deliberately versatile: it can stand alone or be absorbed into a multitude of regulatory institutional configurations at a later date.

261 See, e.g., Younglai, *supra* note 258.

262 Brian G. Cartwright, *Wither the SEC Now?*, 95 VA. L. REV. 1085, 1094 (2009).

263 See, e.g., Gary Gorton & Andrew Metrick, *Securitized Banking and the Run on Repo 2* (Yale Int'l Ctr. for Fin., Working Paper No. 09-14, 2009), available at <http://ssrn.com/abstract=1440752>.

264 See Joel Seligman, *The SEC in a Time of Discontinuity*, 95 VA. L. REV. 667, 677 (2009).

265 See *supra* note 212.

266 Note that Dodd's current bill advocates a minor consolidation of the banking regulators, but earlier reports suggested a more radical transformation of banking industry regulators. See, e.g., Younglai, *supra* note 258.

2. The SEC and CFTC's Joint Report and Current Reform Proposals

Although comprehensive financial reform remains in the future, the Joint Report is a recent effort of the SEC and CFTC focused on harmonizing their regulatory approaches. The many recommendations of the Joint Report include legislation authorizing the creation of three new joint committees: (1) a Joint Advisory Committee, (2) a Joint Agency Enforcement Task Force, and (3) a Joint Information Technology Task Force. The Joint Advisory Committee "would be tasked with considering and developing solutions to emerging and ongoing issues of common interest in the futures and securities markets."²⁶⁷ Specifically, the Joint Advisory Committee would "identify emerging regulatory risks and assess and quantify their implications for investors and other market participants, and provide recommendations for solutions."²⁶⁸ The Joint Agency Enforcement Task force would "harness synergies from shared market surveillance data, improve market oversight, enhance enforcement, and relieve duplicative regulatory burdens."²⁶⁹ Among its primary responsibilities would be integrating the education, training, development, and agency rotation of CFTC and SEC staff in addition to creating "enforcement and examination standards and protocols, and [to] coordinate information sharing."²⁷⁰ Finally, the Joint Information Technology Task force would "pursue linking information on CFTC and SEC regulated persons made available to the public and such other information as the Commissions find jointly useful and appropriate in the public interest."²⁷¹ Nevertheless, and not surprisingly, despite recommending the creation of these three joint entities, the Joint Report also recommends

legislation that would provide a process for expedited judicial review of jurisdictional matters regarding new products. Specifically, the SEC and the CFTC support legislation to establish and clarify: (i) legal certainty with respect to the agencies' authority over products exempted by the other agency; and (ii) a review process to ensure that any jurisdictional dispute is resolved by the Commissions against a firm timeline.²⁷²

267 SEC-CFTC, Joint Report, *supra* note 231, at 14.

268 *Id.* at 10.

269 *Id.* at 14.

270 *Id.*

271 *Id.* at 15.

272 *Id.* at 11.

In sum, the Joint Report not only implicitly recognizes the need of a permanent “joint venture” between the SEC and the CFTC by recommending the creation of at least three joint task forces, but it also implicitly recognizes that their traditional tensions will continue. This is problematic.

The DSI makes creation of these three interagency entities unnecessary and facilitates the resolution of jurisdictional disputes. The appointed tasks of these three joint entities could be, and should be, accomplished by the DSI as the natural complement of its regulation of the OTC derivative markets. Unlike the United States, most countries task one regulator with securities and commodities market regulation.²⁷³ As should now be apparent by the problems of the anomalous U.S. structure, there is good reason for the majority’s approach. It avoids a complicated, inept split of increasingly interrelated product markets, which has proved particularly problematic in the financially engineered OTC derivative markets. Additionally, the SEC and CFTC have important, complementary, but somewhat distinct skill sets which are all necessary to the proper regulation of the OTC derivative markets. The institutional expertise of the SEC rests primarily in disclosure, enforcement, and consumer protection. Its responsibilities also include “market regulation, broker-dealer and investment adviser regulation, new securities offerings, municipal and governmental securities dealers.”²⁷⁴ The CFTC’s expertise lies primarily in market regulation: “There is likely no regulator anywhere that is as fluent and capable in understanding the mechanics of markets, or as focused on their workings, as the CFTC.”²⁷⁵ It is also responsible for the “prudential regulation of financial institutions, and settlement and trading practices.”²⁷⁶ The Joint Report recognizes that agency personnel need cross-training in the traditional skill sets of the SEC and CFTC as both are arguably necessary for the robust regulation of securities and commodities markets. Without doubt, both skill sets are also necessary for the regulation of the OTC derivative markets.

In combining the traditional expertise of the SEC and the CFTC, the DSI will ultimately enable objective based regulation of the OTC derivative markets. This should significantly reduce the transaction costs related to the problems of dividing regulation of the OTC derivative markets between the SEC and CFTC upon a product basis. An

273 See Coffee & Sale, *supra* note 140, 719–20; Seligman, *supra* note 264, at 679–80.

274 Seligman, *supra* note 264, at 675.

275 Steven M.H. Wallman, *Commentary on Redesigning the SEC: Does the Treasury Have a Better Idea?*, 95 VA. L. REV. 825, 833 (2009).

276 Fisch, *supra* note 102, at 795.

unfortunate byproduct of U.S. product-based financial regulation has been the creation of both regulatory gaps and incentives to harness financial engineering to design products to evade regulation categorization. By definition, the core of financial derivatives is financial engineering. Former SEC Commissioner Steven Wallman explains that:

Various good and worthwhile derivatives products, for example, might have fallen into an intricate web of conflicting rules from different regulators with presumptive authority. Because of that, two things happened: some products were designed to remain outside the regulatory system altogether and others were precluded from being regulated by Congress after lobbying showed that, without an exemption, the current regulatory structure likely would have been deadly to their creation and offering. The result is a lack of oversight and regulation that has now led to significant problems. Had the regulatory structure been better and more reasonable, the gap allowing products to be designed to escape regulation would not have existed, and Congress, presumably, would not have been so easily convinced to exempt the others.²⁷⁷

Furthermore, as recounted in Part II, the ongoing historical tensions between the SEC and CFTC consume regulatory resources, increase market uncertainty, and have arguably even contributed to decreased regulation of the OTC derivative markets. Continued efforts to split regulatory authority of the OTC derivative markets between these two financial regulators on a product basis, the path most reforms anticipate, is simply untenable. Thirty years of history testify that this “solution” is problematic. In fact, in addition to the Joint Report’s recommendation for the legislative establishment of a judicial review process to resolve jurisdictional disputes, many other reform proposals similarly explicitly anticipate the continuation of these longstanding jurisdictional tensions and the need to introduce third-party arbiters.²⁷⁸ Third-party intervention will do little to ameliorate these current problems, but it will add unnecessary layers of regulation, increase legal uncertainty, and multiply transaction costs. However, an inversion of this solution, such as the DSI, would constitute a more streamlined, effective approach.

Two recent regulatory reform developments also argue for creation of the DSI. First, the Wall Street Reform and Consumer Protection Act of 2009,²⁷⁹ passed by the House of Representatives in December 2009, mandates that the SEC and CFTC perform a “Study of Desirability and Feasibility of Establishing Single Regulator For All

277 Wallman, *supra* note 275, at 831–32.

278 See *supra* note 212.

279 H.R. 4173, 111th Cong., (as passed by House, Dec. 11, 2009).

Transactions Involving Financial Derivatives.”²⁸⁰ This provision likely responds to the implicitly recognized need for unified regulation of the OTC derivative markets. But a prolonged study is unnecessary and will be costly. History tells us all we need to know. Second, the proposed new consumer protection agency in Senator Dodd’s regulatory reform bill, which recently passed the Senate Banking Committee, provides an important institutional parallel to support the unprecedented regulatory form suggested by the DSI. Many regulatory agencies currently focus on consumer protection, but the Dodd bill proposes to create a new consumer protection agency housed in the Federal Reserve, the “Bureau of Consumer Financial Protection (Bureau).”²⁸¹ The Director of the Bureau is to be appointed by the President, with the advice and consent of the Senate. Among its many features, the Bureau will be independent, responsible for determining its own budget (with an upper cap), have rule-making authority, the power to create general policies for its executive and administrative functions, and can be delegated certain powers by the Board of Governors of the Federal Reserve. The Bureau will also coordinate with the SEC, CFTC, and other regulatory agencies “to promote consistent regulatory treatment of consumer financial and investment products and services.”²⁸² The structure of the proposed Bureau strongly suggests that although unprecedented, the structure and powers of the DSI should be congressionally unproblematic.

3. The DSI: A Sketch

The institutional design of the DSI should maximize the respective regulatory strengths and knowledge bases of both the SEC and the CFTC, but insure equal participation, that is, “to jointly form, fund and operate.”²⁸³ It should have three objectives that depend upon and combine the traditional strengths of the SEC and CFTC: disclosure-based regulation, market integrity and surveillance, and enforcement. As explained in Part II, most OTC derivatives are currently excluded or exempted from the CFTC’s or the SEC’s jurisdiction as a result of the CFMA. Congress should give the DSI comprehensive regulatory jurisdiction of all current and future OTC derivatives based upon underlying assets such as “physical commodities (e.g., agricultural products, metals, or petroleum), financial

280 *Id.* § 3005.

281 *See* Restoring American Financial Stability Act of 2010, S. 3217, 111th Cong.

282 *Id.* § 1015.

283 SEC-CFTC, JOINT REPORT, *supra* note 231, at 14. In addition to congressional authorization, Congress would also need to increase its budget.

instruments (e.g., debt and interest rate instruments or equity securities), indexes (e.g., based on interest rates or securities prices), foreign currencies, or spreads between the value of such assets.”²⁸⁴

A sketch of the DSI’s organizational structure should include governance by a committee of five members (Commissioner Committee). This should include two Commissioners of different political parties from each the SEC and the CFTC in addition to an outside member, with significant regulatory experience in banking, appointed by the President and with the advice and consent of the Senate.²⁸⁵ The Commissioner Committee members would facilitate coordination and sharing of information, particularly that necessary for identifying any market manipulations among interrelated cash, OTC and exchange markets. For example, Sumitomo used both exchanges and OTC markets to manipulate copper markets.²⁸⁶ The DSI should be staffed by comparable numbers of periodically rotated employees from the CFTC and the SEC in addition to new, permanent hires. Such measures will facilitate melding the diverse institutional cultures of the SEC and CFTC.

284 Over-the-Counter Derivatives Markets and the Commodity Exchange Act, 63 Fed. Reg. 26114 (May 12, 1998) (to be codified at 17 C.F.R. pts. 34–35). This quote merely offers a suggested way of defining the derivatives for which the DSI would have jurisdiction. In order to capture future financial innovations in OTC derivative markets, such definition inherently requires an element of flexibility. An interesting parallel can be seen in J. Christopher Kojima’s discussion of the inclusiveness of the “investment contract” language of the securities laws for capturing various OTC derivatives. Kojima, *supra* note 189, at 293–305. He argues that, “[i]n many instances, therefore, the investment contracts analysis provides a mechanism through which OTC derivatives may fall within the scope of the securities laws.” *Id.* at 304.

285 See U.S. CONST. art. II, § 2, cl. 2 (“[The President] shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the supreme Court, and all other Officers of the United States”); *Buckley v. Valeo*, 424 U.S. 1, 126 (1975) (per curiam) (“[A]ny appointee exercising significant authority pursuant to the laws of the United States is an ‘Officer of the United States,’ and must, therefore, be appointed in the manner prescribed by [the Appointments Clause].”). Also, based upon longstanding Supreme Court jurisprudence surrounding the nondelegation clause, it is unlikely that any delegation issues under Article I of the Constitution would exist as long as Congress provided an “intelligible principle” to any discretion it delegated. See *e.g.*, *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 474 (2001) (“In the history of the Court we have found the requisite ‘intelligible principle’ lacking in only two statutes, one of which provided literally no guidance for the exercise of discretion, and the other of which conferred authority to regulate the entire economy on the basis of no more precise a standard than stimulating the economy by assuring ‘fair competition.’”).

286 See Born, *supra* note 19, at 624.

Congress should require all major market participants²⁸⁷ in the OTC derivative markets to register with the DSI. This requirement could be streamlined for participants already registered with either the SEC or CFTC. The DSI's market surveillance activities should focus on the prevention of market fraud, manipulation, and irregularities. As further developed below, the DSI should also have supervision authority and regulatory oversight of all significant OTC derivative market infrastructures such as CCP clearing facilities²⁸⁸ and trade repositories.

Coordinated disclosure, market surveillance, and enforcement activities in OTC derivative markets are best accomplished by a single regulator. This should be the DSI. The presence of multiple primary regulators of the OTC derivative markets creates opportunities for regulatory arbitrage, costly and unnecessary regulatory overlap, patchwork understandings of information, and poor, if any, coordination among regulators. As discussed in Part IV.B, strong arguments exist for global CCP clearinghouses and global trade repositories. As also discussed in Part IV.B, the DSI should coordinate the U.S. international regulatory efforts related to such institutions.

The DSI also provides opportunities for regulatory learning and experimentation. In discussing possible transitions in financial regulation, Coffee and Sale suggest a probable need for a period of trial and experimentation.²⁸⁹ The DSI would facilitate essential knowledge acquisition, trial, and experimentation in at least two ways. First, it would be a learning laboratory providing insights applicable to likely future financial regulatory consolidation. Second, it would integrate distinct regulatory cultures, knowledge, and expertise, an immediate and necessary task as indicated by the Joint Report. Similar to the Joint Report's recommendations, legal scholars have also suggested institutional rotation for financial regulators to increase their expertise and career satisfaction.²⁹⁰ For all of the above reasons, Congress should pass legislation establishing a fully integrated, joint venture, the DSI, to regulate the OTC derivative markets and to provide a vehicle for implementing the substance of the joint task forces recommended in the Joint Report.

287 Congress should give the DSI authority to define "major market participants," but require that this be an activity level definition rather than one related to legal structure.

288 Congress will need to amend the CFMA.

289 See Coffee & Sale, *supra* note 140, at 783.

290 See generally POSNER, *supra* note 21, at 289–90 (describing the inefficiency and fragmentation of regulatory authority).

4. The DSI: Potential Objections

The strongest arguments against comprehensive regulation of the OTC derivative markets by the proposed DSI are political infeasibility, regulatory inefficiency, and additional legal uncertainty. First, it could be argued that the DSI is politically infeasible because of likely opposition by the SEC and CFTC and their respective congressional oversight committees.²⁹¹ Specifically, merging the SEC and CFTC has proven politically untenable in the past and there is no reason to expect that the DSI would fare any better. But it is important to recognize many current regulatory reforms suggest naming a third party to resolve anticipated disputes between the SEC and CFTC. If Congress passes legislation reforming the OTC derivative markets and if such regulatory reforms split jurisdiction of the OTC derivative markets between the SEC and CFTC on a product basis, Congress will likely also designate a third-party umpire mechanism. Both financial regulators might ultimately prefer retaining, albeit by combination, final decisionmaking authority through an egalitarian DSI structure rather than abdicating their ultimate decision making authority to a separate third-party. Second, the Joint Report explicitly recognizes the urgent need for various joint "task forces." Designing and designating one entity as a permanent, joint "task force" with equal participation from each agency would be simpler and more effective. Finally, if both agencies recognize the importance of a joint approach to harmonize the regulation of securities and commodities markets, they should recognize that this approach is even more important in markets based upon financial engineering, the OTC derivative markets.

A second possible objection is that the DSI would create unnecessary additional layers of regulation which would be costly and inefficient. First, the regulatory inefficiencies and costs of prolonged jurisdictional disputes between the SEC and CFTC can be expected to continue and possibly increase. The DSI would minimize, if not eliminate, such costs. It would also make costly studies unnecessary. Second, it is unlikely that any inefficiencies and costs related to the DSI would exceed those of an alternative third party decision maker. In fact, they should be much less because it is highly unlikely that a third-party decision maker would have the costly and complex knowledge expertise of the DSI. It would be very costly and highly redundant for

291 See, e.g., Seligman, *supra* note 264, at 673-74 (arguing that one reason proposed mergers of the SEC-CFTC have been politically unfeasible is because of considerations related to congressional committee oversight). A joint congressional committee task-force could be formed to overcome such resistance.

a third party decision maker to acquire the necessary knowledge of OTC markets and institutions to address jurisdictional and related issues. Furthermore, any costs incurred by the DSI could significantly decrease future costs that could be incurred if necessary comprehensive financial regulatory reform occurs. This is due not only to the partial consolidation that the DSI could effect, but also to the learning about regulatory consolidation gained from its creation and operation. Any arguments that tension among the DSI and the SEC and CFTC would increase costs are equally applicable to any third party decision maker designed to resolve their disputes. Such costs, however, are likely to be less in the case of the DSI because of its close interrelationship with these regulators due to overlapping Commissioners and employees.

Finally, the argument could be made that the creation of the DSI could create additional legal uncertainty concerning whether an OTC derivative was regulated by the SEC, the CFTC or the DSI. First, as already explained, some legal uncertainty already exists and it is likely to remain, if not increase, if the SEC and CFTC have increased jurisdiction over these markets, but continue splitting their jurisdiction based upon product categorization. In fact, the DSI should decrease legal uncertainty because it will have regulatory jurisdiction over essentially all OTC derivatives not traded on CFTC or SEC regulated exchanges. This should actively decrease legal uncertainty surrounding the creation of new OTC derivatives and not act as a disincentive to productive financial innovation.

B. International Frameworks of Cooperation

One consequence of the financial crisis is that “[t]here is definitely a recognition among regulators and central banks that we need a new macro-prudential apparatus to address systemic risk.”²⁹² OTC derivatives are a primary contributor to global systemic risk and commentators argue that localized regulation can sometimes even add to this systemic risk.²⁹³ In the United States, reform proposals generally advocate international coordination. But they generally fail to propose substantial solutions²⁹⁴ or offer conceptual frameworks for think-

292 Joel Clark, *OTC Trade Repository Plan Faces Hurdles*, RISK.NET, May 20, 2009, <http://www.risknews.net/public/showPage.html?page=858359> (quoting Andrew Haldane, Exec. Dir. of Financial Stability, Bank of Eng.).

293 See Jeffrey B. Golden, *The Courts, the Financial Crisis and Systemic Risk*, 4 CAP. MARKETS L.J. S141, S144–48 (2009).

294 Note that Peterson and Frank’s Draft Principles, *supra* note 230, suggest that the U.S. Treasury take certain actions against banks from countries with lesser regulatory standards.

ing about this critical challenge. And although international regulatory groups such as the OTC Derivatives Regulators' Forum²⁹⁵ (DRF) have recently arisen, commentators are already remarking that "cracks are emerging in [the] transatlantic approach to reform."²⁹⁶ Therefore, the second part of my frameworks of cooperation approach proposes international public-private governance partnerships to coordinate regulation of the OTC derivative markets. As I discuss, developments surrounding three OTC market infrastructures—CCP clearing, trade repositories, and global adjudication systems—make the issue of global regulatory solutions urgent. In this section, I first describe several regulatory challenges in the OTC derivative markets motivating my public-private partnership framework solution: the difficulty for local regulators in regulating inherently global financial markets; the problems created by local regulators in trying to solve this issue by "localizing" such global markets, particularly in relation to existing or developing OTC derivative market infrastructures; and the problem of transaction costs in coordinating international government solutions, but the corresponding comparative advantages of private actors, such as ISDA, in implementing such global coordination through private contracting mechanisms, enabling the creation of private global governance solutions. I then suggest that in combining descriptions in the literature of international public-private partnerships with both regulatory concepts from international law and economics and contracting theories arguably facilitating the instantiation in practice of such hybrid partnerships, including their maintenance through equilibrium mechanisms, my model of public-private governance partnerships to regulate the global OTC derivative markets arises.

1. Background Descriptions

a. The Problem of Local Regulation of Global Financial Markets

The regulation of OTC derivative markets is an international collective action problem, but no global financial regulator exists to remedy this challenge. Collective action problems are endemic to domestic regulations addressing global financial markets because cap-

²⁹⁵ See Press Release, Fed. Reserve Bank of N.Y., A Global Framework for Regulatory Cooperation on OTC Derivative CCPs and Trade Repositories (Sept. 24, 2009), available at <http://www.ny.frb.org/newsevents/news/markets/2009/ma090924.html>.

²⁹⁶ See Tom Braithwaite et al., *Cracks are Emerging in Transatlantic Approach to Reform*, FT.COM, Jan. 6, 2010, <http://www.ft.com/cms/s/0/ad574f78-fa62-11de-beed-00144feab49a.html>.

ital is highly mobile and can relocate to preferred regulatory jurisdictions. As Professors Erin O'Hara and Larry Ribstein explain, financial market participants "in effect, can shop for law, just as they do for other goods. This can occur domestically or internationally, where limiting the downsides of the market competition is much more problematic. Nations and states must take this 'law market' into account when they create new laws."²⁹⁷ They define the "law market" as the "ways that governing laws can be chosen by people and firms rather than mandated by states."²⁹⁸ In other words, law can be viewed as a commoditizable product offered by government actors²⁹⁹ and this "law market" competition imposes inherent limits on regulators.³⁰⁰ In sum, no individual jurisdiction can successfully enact unilateral reforms of global OTC derivative markets.

b. The Problem of Local Market Infrastructures

And although individual jurisdictions can implement OTC derivative market infrastructures such as CCP clearing facilities and trade repositories, a local approach is problematic in these areas. OTC derivative market infrastructures such as CCP clearinghouses, trade repositories, and adjudicatory systems need global scope—which requires global regulation—as I discuss below.

In theory, CCP clearing facilities are market infrastructures that reduce risk and provide additional market transparency. When an OTC derivative is cleared through a CCP, the CCP becomes the buyer to the seller and the seller to the buyer through a process of trade novation. Because the CCP becomes a counterparty to each trade, it concentrates credit risk. A banker aptly explained that this is "'like the military putting all its artillery shells in a single dump.'"³⁰¹ Therefore, a CCP clearing market infrastructure, which potentially decreases risk management efficacy, should be avoided. Regulations mandating local CCP clearing of OTC derivatives, however, carry this potential implication for market safety, regulatory access, and local economies. Such regulations also raise jurisdictional issues generally absent from reform proposals. Regulatory mandates of local CCP clearing physically localize transactions once largely global, which then subject these transactions to local regulation. Therefore, man-

297 O'HARA & RIBSTEIN, *supra* note 35, at 3.

298 *Id.* at 65.

299 *See id.* at 66.

300 *See id.* at 7.

301 *The Great Untangling*, *ECONOMIST*, Nov. 8, 2008, at 85, 86 (quoting an unnamed banker).

dating local CCP clearing has both global regulatory and political implications.³⁰² The CDS markets, which have received regulators' initial focus because of their role in the financial crisis, are already providing a ready example of potential international regulatory and political tensions. For example, France's central bank has specifically called for E.U.-based CCP clearing to avoid business losses to either New York or London.³⁰³ E.U. regulators have "encouraged" European CDS dealers to use local CCP clearing facilities or face possible legislative mandates.³⁰⁴ U.S. regulators have also exerted pressure on U.S. CDS dealers to use CCPs.³⁰⁵ Not surprisingly, multiple CCP clearing facilities for CDS now exist in the United States and European Union. But it is not clear this is an encouraging development. Although the CDS CCP clearing infrastructure is developing locally, the relevant risks are global.³⁰⁶ Both academics and industry are concerned that localized or multiple clearing facilities could ultimately decrease the efficacy of CCP risk management.³⁰⁷ Traders insist that "[i]t doesn't matter where the clearinghouse is based, as long as it's in one place If your purpose is to reduce systemic risk, it makes sense to have one clearinghouse."³⁰⁸ And local CCP clearing risks local taxpayer bailouts of global counterparties—as happened in the case of AIG—if a local CCP becomes insolvent. It will also create strong incentives for financial market participants to use CCP clearing infrastructures in "bail-out friendly" countries because of the implicit financial subsidy market participants would receive.

302 See David Gow, *France, Germany and Britain Battle for Primacy in \$28tn Derivatives Trade*, GUARDIAN.CO.UK, Feb. 19, 2009, <http://www.guardian.co.uk/business/2009/feb/19/cds-european-clearing-deal>.

303 Shannon D. Harrington & John Rega, *Banks Agree to EU Demand for Credit-Swaps Clearing*, BLOOMBERG.COM, Feb. 19, 2009, <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=auumhRn9Udmo>.

304 See Alex Chambers et al., *Credit Derivatives: Big Bang to Avert Blow-Up*, EUROMONEY, Mar. 4, 2009, at 21.

305 The Federal Reserve Bank of New York (FRBNY) and other regulators periodically meet with the OTC derivatives industry to discuss industry reform objectives. In turn, the OTC derivative markets industry periodically provides the FRBNY with "commitment letters" describing its progress in such areas. See, e.g., Press Release, Fed. Reserve Bank of N.Y., *New York Fed Welcomes Further Industry Commitments on Over-the-Counter Derivatives* (Mar. 1, 2010), available at <http://www.newyorkfed.org/newsevents/news/markets/2010/ma100301.html>.

306 See Alex Chambers, *Credit Derivatives: OTC CDS Clearing Moves Ahead*, EUROMONEY, Aug. 3, 2009, at 28.

307 See, e.g., Duffie & Hu, *supra* note 87, at 37 (noting potential drawbacks to multiple CCP clearing facilities).

308 Neil Shah, *EU Derivatives Revamp Puts Bankers on Edge*, WALL ST. J., July 3–5, 2009, at C2 (quoting a derivatives trader).

For such reasons, a global CCP clearing infrastructure is necessary. A primary challenge of a global CCP clearing infrastructure, however, will be its regulation. But regulation mandating a local approach is unlikely to avoid this international complexity, especially if CCPs in the United States and European Union have common corporate ownership. For example, the Intercontinental Exchange (ICE) has CCP clearing subsidiaries in the United States and Europe, ICE-Trust, and ICE-Trust Europe, respectively. Common corporate ownership facilitates creation of a global clearing network among private actors. This is likely to occur as “[b]anks and other traders would benefit from having to provide less capital at different clearing houses.”³⁰⁹ Therefore, a de facto global CCP clearing infrastructure will likely arise regardless of whether government actors adopt a unified global approach to regulation. Designing regulation for a global approach is challenging, but regulation of a de facto system, especially in the event of insolvency, is likely to be even more arduous.

Global OTC derivative markets also require global trade repositories. Trade repositories are market infrastructures that store recorded trade position data. Global trade repositories would provide a comprehensive snapshot of markets to regulators and aid them in identifying possible systemic threats. A few global trade repositories already exist such as DTCC’s Trade Information Warehouse for CDS. Unfortunately, however, the international tensions surrounding the development of global CCP clearing likewise exist with trade repositories.³¹⁰ For example, Spain recently announced plans to establish an OTC trade repository “in a surprise move . . . that looks set to fuel concerns on both sides of the Atlantic over the growth of such post-trade services.”³¹¹ Similar to the case of local CCP clearing, local trade repositories are potentially problematic as “multiple repositories could do more harm than good.”³¹² A common perspective is that “[i]f a central trade repository is bound by institutional or national boundaries, it will probably miss the bigger problems.”³¹³ In sum, “[e]veryone agrees derivatives are an international cross-border market, so any trade repository should be globally co-ordinated. The ultimate objective is that supervisors look properly at risk exposures

309 Harrington & Rega, *supra* note 303.

310 There are also technical issues associated with the establishment of global trade repositories, but these are beyond the scope of this Article.

311 Jeremy Grant, *Spain to Launch OTC Trade Repository*, FT.COM, Nov. 4, 2009, <http://www.ft.com/cms/s/0/efda4cda-c8e2-11de-8f9d-00144feabdc0.html>.

312 Clark, *supra*, note 292.

313 *Id.* (quoting Andrew Haldane, Exec. Dir. of Financial Stability, Bank of Eng.).

across borders.”³¹⁴ But global trade repositories also face the challenge of global regulation.³¹⁵

A third OTC derivative market infrastructure requiring a global rather than local approach is cross-border financial courts.³¹⁶ Complex financial litigation, such as that sometimes arising with OTC derivatives, is challenging for traditional judicial systems. Consequently, “senior figures in the financial world are looking for solutions” to this challenge, including advocating a “specialist, cross-border financial court.”³¹⁷ As with global CCP clearing and trade repositories, strong arguments exist for global adjudicatory mechanisms. First, “a ‘tsunami’ of financial markets litigation”³¹⁸ arising from the financial crisis is likely. Second, such cases increasingly rest upon complex financial issues rather than traditional and judicially familiar legal concepts such as contract formation.³¹⁹ Third, as noted above, the widely used standard form contracts for OTC derivatives trading are arguably akin to statutes. Therefore, individual judicial decisions could potentially have systemic significance.³²⁰ In sum:

Concerns are growing that the present, decentralized way of adjudicating financial market disputes is unnecessarily slow, expensive and unpredictable, and failing to produce a settled and authoritative body of relevant law. As a result there is *impetus to think more creatively* about dispute settlement in the global financial markets and ways to ensure a ready supply of competent jurists equipped to handle effectively the cases arising.³²¹

But here too, the challenging issue of global regulatory cooperation arises.

In conclusion, strong arguments exist for the creation of global market infrastructures and because of possible regulatory arbitrage, no individual jurisdiction can successfully enact unilateral reforms of global OTC derivative markets. Furthermore, government actors should welcome global CCP clearing, trade repositories, and adjudica-

314 Joel Clark, *Counterparty Maze, Risk*, June 1, 2009, at 18, 21 (quoting Richard Metcalfe, Int’l Swaps & Derivatives Ass’n).

315 See *id.* at 20–21. Note that the recently established Derivatives Regulators’ Forum (DRF) was “formed to provide regulators with a means to cooperate, exchange views and share information related to OTC derivatives CCPs and trade repositories.” Press Release, *supra* note 295.

316 Golden, *supra* note 293, at S148.

317 Tett, *supra* note 36 (mentioning a suggestion by Jeffrey Golden, a prominent derivatives lawyer).

318 Golden, *supra* note 293, at S142.

319 *Id.* at S143–44.

320 *Id.* at S149.

321 *Id.* at S141 (emphasis added).

tory structures for at least four reasons. First, government actors stand to increase their regulatory jurisdiction in previously inaccessible international realms. As discussed below, individual government actors have limited “regulatory asset bundles,” but when bundle components with comparative advantage are deftly combined with complementary “regulatory asset components” of consolidated global private actors, their reach is extended. Professor Jody Freeman suggests that domestically “public-private contracts could be a means of extending government priorities and policies to private actors, and of exacting concessions and gains that might otherwise be beyond the government’s regulatory reach.”³²² Her insights can be extended to the international arena; public-private partnerships in the OTC derivative markets arguably create such opportunities in global financial markets that are otherwise beyond the reach of any individual government actor. Second, government actors should be concerned about “too big to fail” CCP insolvencies occurring in their local jurisdiction. An important benefit of global infrastructures regulated by international public-private partnerships is that OTC derivative market participants should be much less certain of government bailouts, and therefore, more prudent about their risk taking activities. This uncertainty should incentivize market participants to maintain highly robust risk-management practices. Third, the information deficiencies of local trade repositories limit their potential efficacy to regulators. Fourth, local adjudicatory approaches to complex international financial issues could increase systemic risk and likely will be increasingly replaced by alternative private market solutions.

2. The Problem of Transaction Cost

In the above discussion, I argue that the OTC derivative markets need global regulation. This section discusses why because of transaction costs the best global regulatory solution involves both government and private actors: a system of public-private regulatory partnerships. Transaction costs are “the costs of measuring the multiple dimensions of the goods and legal rights being exchanged in an economic transaction and the costs of enforcing these rights.”³²³ These costs entail “time, energy and money” and can be generally categorized as costs related to “search, information, negotiation, and

322 Jody Freeman, *The Contracting State*, 28 FLA. ST. U. L. REV. 155, 159 (2000).

323 John N. Drobak, *Law & The New Institutional Economics: Introduction*, 26 WASH. U. J.L. & POL'Y 1, 2 (2008).

enforcement.”³²⁴ The transaction costs of negotiating, implementing, and enforcing coordinated regulatory solutions among individual government actors in the complex, continuously innovative, and uncertain OTC derivative markets are stupefying. Given such transaction costs, what type of international institutional arrangement could best regulate the OTC derivative markets? Possible contenders include an international treaty, an international regulatory network, and an international system of public-private regulatory partnerships.

Traditional paths of international governmental cooperation such as treaties are time consuming and will likely be outdated upon implementation due to the pace of financial innovation. The reality is that “[r]egulators may attempt to reevaluate regularly and to revisit their rules to accommodate economic reality and change; but in areas where multi-agency coordination is required—especially across national borders, as with the Basel Accord—the lag between financial innovation and regulatory amendments will not be insignificant.”³²⁵ And international law scholars, such as Professor John Murphy, note a trend away from formal international agreements, such as treaties, towards more informal, flexible arrangements.³²⁶ But neither is a flexible network of international regulators³²⁷ a suitable alternative because of the transaction costs of requisite knowledge and expertise acquisition without an explicit, permanent partnership structure involving private actors.³²⁸ For these reasons, I explore the possibility of public-private partnerships to regulate global OTC derivative markets.

324 Joseph Blocher, *Institutions in the Marketplace of Ideas*, 57 DUKE L.J. 821, 839 (2008).

325 Kojima, *supra* note 189, at 290.

326 See JOHN F. MURPHY, *THE EVOLVING DIMENSIONS OF INTERNATIONAL LAW* 3–4 (2010).

327 See generally Anne-Marie Slaughter, *Global Government Networks, Global Information Agencies, and Disaggregated Democracy*, 24 MICH. J. INT’L L. 1041, 1042 (2003) (proposing to “develop a typology of . . . transgovernmental regulatory networks” and evaluating common criticisms of such networks); Anne-Marie Slaughter, *Governing the Global Economy Through Government Networks*, in *THE ROLE OF LAW IN INTERNATIONAL POLITICS* 177 (Michael Byers ed., 2000) (advocating for regulation of an “increasingly global economy” through a system of international government networks).

328 For example, a report of the Financial Services Authority and HM Treasury state, in regard to certain regulatory questions such as to the meaning of standardization, that “[r]egulators alone are not equipped to make these decisions” and recommends that regulators and industry work together. FIN. SERVS. AUTH. & HM TREASURY, *REFORMING OTC DERIVATIVE MARKETS* § 3.7 (2009), available at http://www.fsa.gov.uk/pubs/other/reform_otc_derivatives.pdf.

A helpful methodology to explore why public-private partnerships could best regulate OTC derivative markets is transaction cost economics (TCE), an approach originated by Ronald Coase and made popular by Oliver Williamson.³²⁹ In general, TCE argues that institutional arrangements/organizations respond to the coordination costs contracting parties confront in economic or political markets. The methodology's "unit of analysis is the contract or transaction,"³³⁰ which conveniently "places firms and regulatory mechanisms on a single scale of analysis."³³¹ Therefore, TCE can be used to analyze both government and private actors. TCE is a helpful methodology for this Article's suggestion of public-private regulatory partnerships because it "poses the problem of economic organization as a problem of contracting."³³² And when TCE is applied to government actors, it can likewise pose the problem of political organization, domestically or internationally, as a contracting problem. Legal scholars have applied Coase's paradigmatic idea of the make (firm) or buy (market) production decision to analyze outsourcing decisions by the government to the private sector domestically.³³³ Administrative law scholarship has suggested that both Congress and administrative agencies confront a "make" or "buy" decision in determining the boundaries of various regulatory institutions.³³⁴ In other words, government agencies can provide goods, services, or regulation (all "make" decisions) or outsource this production decision to the private sector (a "buy" decision).

TCE is particularly suited for analyzing international questions because it "maintains that the governance of contractual relations is primarily effected through the institutions of private ordering rather than through legal centralism."³³⁵ International regulatory coordination ultimately consists of a "private ordering" of public actors. Professor William Aceves argues that "[t]he principles of transaction cost economics apply with equal rigor at the international level."³³⁶ He argues that "[l]ike firms engaged in private contractual relations,

329 See R. H. Coase, *The Nature of the Firm*, 4 *ECONOMICA* 386 (1937).

330 Edward L. Rubin, *The New Legal Process, the Synthesis of Discourse, and the Microanalysis of Institutions*, 109 *HARV. L. REV.* 1393, 1413 (1996).

331 *Id.* at 1415.

332 OLIVER E. WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM* 20 (1985).

333 See, e.g., Sidney A. Shapiro, *Outsourcing Government Regulation*, 53 *DUKE L.J.* 389, 391-95 (2003) (using transaction cost analysis to compare the relative merits of government employees and private actors in regulatory roles).

334 See, e.g., *id.* at 395 (noting that government institutions face the same 'make-or-buy' decision faced by private actors).

335 WILLIAMSON, *supra* note 332, at xii.

336 Aceves, *supra* note 30, at 1016.

states are involved in the negotiation and implementation of contractual arrangements. These arrangements are also subject to transaction costs.³³⁷ These transaction costs, however, present a “significant limitation to the development and operation of international institutions”³³⁸ One consequence of this, therefore, is that international agreements are “incomplete.” In fact, scholars have analyzed the Basel Accord as an “incomplete contract.”³³⁹ Aceves suggests that state practice, a “fundamental principle of international law” can act as an “endogenous governance structures” to overcome these transaction costs.³⁴⁰ He explains that “state practice allows states to interpret or even modify their original agreements through subsequent practice, thereby diminishing the need to draft extensive agreements at the outset. Additionally, states maintain the flexibility necessary to address new circumstances as they arise while remaining grounded within the context of their original agreement.”³⁴¹ As discussed below, my system of public-private partnerships incorporates this flexibility.

As Aceves describes, transaction costs are an impediment to international cooperation among government actors. But transaction costs can have the opposite effect on private market actors and catalyze widespread international cooperation. Particularly in financial markets, transaction costs incentivize and facilitate the formation of global private law and governance mechanisms. For example, the ISDA, the global trade association of the OTC derivative markets, is arguably a highly efficient institutional response to such global transaction costs.³⁴² Aceves suggests that “[i]nternational institutions play an important role in establishing cooperation among states, even in a decentralized world.”³⁴³ I argue that private international institutions (private actors) such as ISDA can facilitate cooperative global regulatory structures otherwise highly problematic for government actors because of transaction costs. ISDA, a global private actor, has arguably implicitly begun this task by its creation of a global private law for

337 *Id.* at 1003.

338 *Id.* at 1002.

339 See Edward J. Kane, *Basel II: A Contracting Perspective* 8–10 (Nat'l Bureau of Econ. Research, Working Paper No. 12,705, 2006), available at <http://ssrn.com/abstract=945345>.

340 Aceves, *supra* note 30, at 1004.

341 *Id.* at 1005.

342 For more information about the history of ISDA, see Sean M. Flanagan, *The Rise of a Trade Association: Group Interactions Within the International Swaps and Derivatives Association*, 6 HARV. NEGOT. L. REV. 211, 227–53 (2001).

343 Aceves, *supra* note 30, at 1064.

OTC derivatives, self-help mechanisms, and increasingly, adjudicatory mechanisms.

a. ISDA: The Global Industry Association of the OTC
Derivative Markets

ISDA describes itself as:

the largest global financial trade association [It] has over 830 member institutions from 56 countries on six continents. These members include most of the world's major institutions that deal in privately negotiated derivatives, as well as many of the businesses, governmental entities, investment managers and other end users that rely on over-the-counter derivatives to manage efficiently the financial market risks inherent in their core economic activities.³⁴⁴

It has developed extensive standardized documentation used by most OTC market participants.³⁴⁵ Through its standardized documentation, ISDA has created the "global rules" of the OTC derivative markets. It has also developed highly effective and rapid "legislative"

344 *H. Financial Services Comm. Hearing, supra* note 13, at 176 (statement of Robert Pickel, Chief Exec. Officer, Int'l Swaps & Derivatives Ass'n).

345 For an excellent introduction to explanation of ISDA's standard form documentation, see ALLEN & OVERY LLP, AN INTRODUCTION TO THE DOCUMENTATION OF OTC DERIVATIVES (2002), available at <http://www.isda.org/educat/pdf/ten-themes.pdf>. As this material discusses, the design of ISDA's standard form documentation incorporates a "modular architecture," which allows counterparties to enter into a standard form "Master Agreement" detailing the general legal and credit arrangements to which they have agreed. *Id.* at 1–2. The language of the Master Agreement anticipates the incorporation of a "Schedule," and additional agreements such as a "Credit Annex," "Confirmations," and possible other transactions. *See id.* at 2–5. ISDA documentation generally includes express choice of law, choice of jurisdiction, and arbitration provisions. Omitting such provisions can mean ending up in a foreign court. *See* Robert Cookson & Sundeep Tucker, *Morgan Stanley Faces Court Battle in China Over Hedging Contract*, FT.COM, Oct. 28, 2009, <http://www.ft.com/cms/s/0/e222bd1a-c3f7-11de-8de6-00144feab49a.html>. Confirmations are contracts that detail the economic terms of an individual trade. After entering into their foundational agreements, the counterparties can easily make future trades with one another by simply entering into a confirmation. The "genius" of ISDA's "modular architecture" is that counterparties only need to negotiate the general legal terms of their relationship (contained in the Master Agreement Schedule, which is part of the Master Agreement itself, but it is a separate form that allows the parties to customize the terms of their relationship as the language of the Master Agreement itself should never be altered) and possibly a Credit Support Annex, (to collateralize one or both parties' obligations under the Master Agreement) and then individually document the economic terms of each trade with a confirmation. Without such an arrangement, every time counterparties wanted to trade, they would have to negotiate every term of their relationship—a process that would be incredibly time consuming and expensive, resulting in fewer transactions and lower liquidity levels.

reform processes through its protocols, self-help mechanisms through its collateral practices, and increasingly, global adjudicative mechanisms through Credit Derivative Determination Committees. As a global private actor, ISDA has replicated in varying degrees the basic jurisdictional powers—prescriptive, adjudicatory, and enforcement³⁴⁶—of government actors. Therefore, ISDA is more than just an industry trade association.³⁴⁷ It performs a very important private law making and governance function in the OTC derivative markets.

b. Global Private Law and Global OTC Derivative Markets³⁴⁸

Law is not always made by public entities. Much law is privately made. Professor David Snyder terms privately made law a “robust component of commercial and consumer life”³⁴⁹ and “unavoidable now—a political fact we would do well to recognize.”³⁵⁰ Snyder explains that “in various commercial contexts, as a practical matter, the lawmaking function has been partially reallocated from the government.”³⁵¹ This reallocation is particularly evident in the global OTC derivative markets. The global OTC derivative markets are arguably “the embodiment of global private law”³⁵² and a market that “has no territory.”³⁵³ Professor Annelise Riles defines “global private law regimes” as systems that “do not rely primarily on the legitimacy or the coercive power of the state for their authority.”³⁵⁴

346 See Dunoff & Trachtman, *supra* note 30, at 22–28.

347 In fact, Adam Glass, former partner at Linklaters LLP and now a senior official in the SEC’s new division of Risk, Strategy, and Financial Innovation has compared certain of ISDA’s features to those of a “public utility” and recommends that regulators “listening in to” certain ISDA meetings and conference calls. Adam Glass, *Helpful Hints for the New Derivatives Regulators*, FINREG21.COM, Aug. 31, 2009, <http://www.finreg21.com/lombard-street/helpful-hints-new-derivatives-regulators>. Somewhat related to this, Emiliios Avgouleas argues that “bringing ISDA’s rule-making function under some kind of global public interest oversight should be seen as a desirable inevitability.” Emiliios Avgouleas, *Financial Innovation Versus Systemic Stability: The Unresolved Dilemma of Derivatives Regulation?*, FINREG21.COM, Aug. 31, 2009, <http://www.finreg21.com/lombard-street/financial-innovation-versus-systemic-stability-the-unresolved-dilemma-derivatives-reg>.

348 Questions about the exact nature of the state, global private law or the symbiotic relationship between these legal regimes are beyond the scope of this Article.

349 David V. Snyder, *Private Lawmaking*, 64 OHIO ST. L.J. 371, 374 (2003).

350 *Id.*

351 *Id.* at 377.

352 STEIL & HINDS, *supra* note 57, at 30.

353 *Id.* at 31.

354 Annelise Riles, *The Anti-Network: Private Global Governance, Legal Knowledge, and the Legitimacy of the State*, 56 AM. J. COMP. L. 605, 606 (2008).

Although OTC derivative markets are currently concentrated in New York and London,³⁵⁵ they are in reality global markets:³⁵⁶

[I]t is not a U.S. market or a U.K. market, or even an “offshore” market. Its legal foundation is a privately produced document of about thirty-two pages [the ISDA Master Agreement] . . . laying out the common rules for each derivatives transaction, and specifying that any dispute resulting from the transaction will be adjudicated by a common law English or New York State court, as per the specified preference of the parties.³⁵⁷

Professors Stephen Choi and Mitu Gulati argue that certain standardized contracts between sophisticated commercial parties, such as ISDA agreements, are “better viewed as akin to statutes”³⁵⁸ rather than ordinary contracts. Consequently, they suggest that courts should “interpret boilerplate terms [in such contracts] similarly with statutes.”³⁵⁹ Since ISDA has “created a kind of global law by contract,”³⁶⁰ it has a “virtual monopoly on the creation of legal rules”³⁶¹ in the OTC derivative markets, which scholars have described as “the most private of markets.”³⁶²

ISDA has not only developed global rules/law for OTC derivative markets, but is also increasingly developing innovative global governance institutions. Trade associations have long developed private law and arbitration mechanisms for their members.³⁶³ Scholars have noted that arbitration is “quite explicitly an analog to state law, an *alternative* to state law with all of state law’s functional elements—a regime of norms, a set of procedures, a set of problems (disputes).”³⁶⁴ Certain recent governance developments by ISDA such as their Credit Determination Committees (DCs), however, arguably represent an important step beyond such traditional practices. DCs are distinct from international commercial arbitration because the decisions of

355 FIN. SERVS. AUTH. & HM TREASURY, *supra* note 328, § 2.1 (“43% of the global OTC market is located in the UK”).

356 Not all scholars agree with this. Using the OTC derivative markets as an example, Riles argues that global private law should be thought of “as a set of institutions, actors, doctrines, ideas, documents, that is, as a specialized set of ‘knowledge practices.’” Riles, *supra* note 354, at 605.

357 STEIL & HINDS, *supra* note 57, at 31.

358 Stephen J. Choi & G. Mitu Gulati, *Contract as Statute*, 104 MICH. L. REV. 1129, 1130 (2006).

359 *Id.* at 1172.

360 Golden, *supra* note 293, at S144.

361 Partnoy & Skeel, *supra* note 82, at 1039.

362 Riles, *supra* note 354, at 608.

363 See O’HARA & RIBSTEIN, *supra* note 35, at 88–89.

364 Riles, *supra* note 354, at 623.

DCs apply to all effected transactions of market participants who have adhered to the relevant protocol. The decisions of DCs are binding upon OTC derivative market participants who have incorporated relevant protocols.³⁶⁵ DCs currently adjudicate issues surrounding credit derivatives, but could extend their focus to other areas and aspects of OTC derivative markets. Therefore, these nascent DCs could conceivably be the nascent beginning of cross-border specialist financial courts.³⁶⁶ ISDA is the central link in a federally structured system of five regional DCs, which are the Americas, non-Japan Asia, Japan, Australia-New Zealand, and EMEA (Europe).³⁶⁷ But, participants in OTC derivative markets and legal scholars should not be the only ones interested in such developments. DC decisions are already having important practical impacts on government regulatory efforts.

c. Global Private Market Governance Mechanisms

In September of 2008, the U.K. Treasury nationalized Bradford & Bingley (B&B), a large mortgage lender. The U.K. government provided B&B with both financial assistance and a guarantee of its senior debt, whose terms were amended in February 2009.³⁶⁸ In an effort to

365 If less than eighty percent of a DC is in agreement concerning a particular decision, then the issue is sent to an external review panel. See Howard T. Spilko & Fabien Carruzzo, *After The Big Bang: The New Credit Default Swap Landscape*, METRO. CORP. COUNS., Apr. 10, 2009, at 10, available at <http://www.metrocorpocounsel.com/pdf/2009/April/10.pdf>. This article explains the external review process:

External reviewers are selected for each question from a pool determined by the relevant Determination Committee. If a vote of the Determination Committee reached less than a 60% majority, two out of the three external reviewers can overturn the result. If a vote of the Determination Committee was greater than 60% but less than 80%, all three external reviewers are required to overturn the decision.

Id.

366 Cf. Golden, *supra* note 293, at S148 (suggesting a need for an international tribunal of market experts).

367 See INT'L SWAPS & DERIVATIVES ASS'N, 2009 ISDA CREDIT DERIVATIVES DETERMINATIONS COMMITTEES AND AUCTION SETTLEMENT CDS PROTOCOL (2009), available at <http://www.isda.org/bigbangprot/docs/Big-Bang-Protocol.pdf>. For additional information, see Int'l Swaps & Derivatives Ass'n, Big Bang Protocol—Frequently Asked Questions, http://www.isda.org/bigbangprot/bbprot_faq.html (last visited Feb. 23, 2010), which explains the make-up of these committees: “8 global dealers, 2 regional dealers, 5 non-dealer ISDA members, 1 non-voting dealers (sic) (for the first year, there will be 2 non-voting dealers), 1 non-voting regional dealer per region, and 1 non-voting non-dealer member.”

368 Radi Khasawneh, *Skipping Interest Payout Equals Default, ISDA Says: U.K. Government Couldn't Change Rule as Part of State Aid*, WALL ST. J. ONLINE, July 10, 2009, <http://online.wsj.com/article/SB124718275176320271.html>.

quickly recoup taxpayer funds, the U.K. Treasury permitted B&B to “defer all payments on subordinated bonds without being in default”³⁶⁹ and that such action would not constitute a “credit event.”³⁷⁰ Despite the U.K. Treasury’s position, Morgan Stanley asked—by some reports pressured³⁷¹—an ISDA DC to rule on whether a credit event had occurred. Two days later, the EMEA DC said “yes.”³⁷² This decision was important for at least two reasons. First, it “sets a precedent in the U.K. that will help determine when people who have insurance on bonds get paid.”³⁷³ Second, it is a powerful example of the development of global private governance mechanisms and their potential impact on government actors.

Other DC decisions have also raised important issues for government actors. For example, Kazakhstan’s largest bank, BTA, was also recently nationalized. After BTA’s nationalization and during restructuring negotiations, Morgan Stanley, in addition to another creditor, demanded repayment of their debt. Since BTA could not repay its debt, Morgan Stanley asked the EMEA DC whether a credit event had occurred.³⁷⁴ The DC quickly said “yes.”³⁷⁵ But, even long before DCs existed, the Japanese government consulted ISDA prior to its nationalization of Long-Term Credit Bank (LTCB) because it was concerned about triggering a “termination event” under ISDA contracts.³⁷⁶

369 *Id.*

370 The occurrence of a “credit event” would trigger seller obligations to pay on credit derivative contracts.

371 See Radi Khasawneh, *ISDA Unanimous in Bradford & Bingley CDS ‘Default’ Vote*, FIN. NEWS, July 9, 2009, <http://www.efinancialnews.com/homepage/content/1054655718>.

372 See Press Release, Int’l Swaps & Derivatives Ass’n, ISDA to Publish Auction Terms for Bradford & Bingley (July 9, 2009), available at <http://www.isda.org/press/press070909.html>; see also Int’l Swaps & Derivatives Ass’n, EMEA Determinations Committee Decision (July 9, 2009), http://www.isda.org/dc/docs/EMEA_Determinations_Committee_DecisionA_09072009.pdf (cataloguing unanimous vote). Interestingly, Bloomberg reports that this question had also been considered in February 2009 by dealers before the advent of DCs and it was decided that this was not a credit event. See John Glover, *ISDA Dealers Decide No Credit Event on Bradford & Bingley CDS*, BLOOMBERG.COM, Feb. 23, 2009, <http://bloomberg.com/apps/news?pid=20601009&sid=avLIYePCCcjo>.

373 Khasawneh, *supra* note 368.

374 See Gillian Tett, *Insight: Kazakh Bank Falls Foul of CDS*, FT.COM, Apr. 30, 2009, <http://www.ft.com/cms/s/0/fa0428ee-35a7-11de-a997-00144feabdc0.html>; Quentin Peel et al., *Kazakhstan Central Bank Grapples with CDS Headache*, FIN. TIMES, July 17, 2009, at 31.

375 See Int’l Swaps & Derivatives Ass’n, Credit Event Determinations Requests, <http://www.isda.org/dc/creditrequests.asp> (last visited Feb. 23, 2010).

376 Anna Gelpern, *Commentary*, 51 ARIZ. L. REV. 57, 60 (2009).

Therefore, as Professor Anna Gelper notes, ISDA's issuance of a statement of support for the Japanese government's approach functioned as "a private 'no-action letter' of sorts."³⁷⁷

The B&B, BTA, and LTCB examples signal important developments in the relationship between government and private actors in international financial markets, especially the OTC derivative markets. This interaction extends beyond the domestic outsourcing from the public to the private sector analyzed in administrative law scholarship as government actors cannot "outsource" in an arena in which they have limited or no authority. Interestingly, consolidation developments in global private governance contrast with trends towards vertical disintegration among government actors. Professor Freeman notes that "[a]round the world, governments appear to be both shrinking and outsourcing many of their traditional functions to private parties"³⁷⁸ If government actors are increasingly finding it necessary to outsource to the private sector at the domestic level, frequently due to knowledge and expertise considerations, this trend strongly suggests partnering with private actors in the regulation of international, private financial markets.

Scholars have argued that "transactions in international relations are analogous to transactions in private markets."³⁷⁹ Professors Dunoff and Trachtman suggest the international system can be thought of as an international marketplace:

Like economic markets, the international system is formed by the interactions of self-regarding units—largely, but not exclusively, states. . . . Actors in each system are willing—to some extent—to relinquish autonomy in order to obtain certain benefits.

The assets traded in this international "market" are not goods or services per se, but assets peculiar to states: components of power. In a legal context, power is jurisdiction, including jurisdiction to prescribe, jurisdiction to adjudicate, and jurisdiction to enforce. In international society, the equivalent of the market is simply the place where states interact to cooperate on particular issues—to trade in power—in order to maximize their baskets of preferences.³⁸⁰

They term "governmental regulatory authority"³⁸¹ the "unique feature" or asset of states. Dunoff and Trachtman decompose regulatory

377 *Id.* at 61.

378 Freeman, *supra* note 322, at 155.

379 Dunoff & Trachtman, *supra* note 30, at 12; *see also* Aceves, *supra* note 30, at 1016–31 (distinguishing exogenous and endogenous governance structures).

380 Dunoff & Trachtman, *supra* note 30, at 13.

381 *Id.*

authority into three separate components: prescription, adjudication, and enforcement. Consistent with this perspective, Professors O'Hara and Ribstein suggest that law can be viewed as a "government-provided" good.³⁸² Government actors currently have formal, coercive enforcement powers, local prescriptive powers, and established, but local, adjudicatory powers. Global private actors currently have global prescriptive powers, limited enforcement power, and increasingly, global adjudicatory mechanisms. Therefore, the jurisdictional components of each legal regime are distinct with unique characteristics, which are necessary, but inaccessible to the other because of transaction costs. Their complementary aspects suggest a system of public-private partnerships.

3. Theoretical Background

Professor Norton describes "public-private partnerships" as features of modern international financial regulation.³⁸³ In proposing my system of public-private partnerships, I borrow from Norton's descriptive account. He notes that "in the context of international economic activities" there is an increasing "reliance by the public sector on private sector involvement."³⁸⁴ Norton argues that "elite banks" constitute "the institutional fabric that connects domestic and international banking and financial markets . . ."³⁸⁵ I argue that consolidated global private actors, such as ISDA, constitute similar connective "institutional fabrics," and should partner with government actors in the regulation of the OTC derivative markets. Norton explains that:

although the theoretical and practical examination of these [partnership] parameters is currently in its infancy, several observations may be noted. First, the partnership is both formal (established through banking laws, regulations, and other supervisory guidance) and informal (established through certain supervisory and market practices and understandings not necessarily reduced to writing). Second, there are various responsibilities of the partnership to be fulfilled by governments and/or banking authorities. Third, there

382 O'HARA & RIBSTEIN, *supra* note 35, at 14.

383 Norton, *supra* note 15, at 47–53. *But see* Cynthia Crawford Lichtenstein, *The Fed's New Model of Supervision for "Large Complex Banking Organizations": Coordinated Risk-Based Supervision of Financial Multinationals for International Financial Stability*, 18 *TRANS-NAT'L L.* 283, 290 (2005) ("Norton seems to misconceive the purpose and the mechanics of the new supervisory approach . . .").

384 Norton, *supra* note 15, at 43.

385 *Id.* at 47.

are various responsibilities to be fulfilled by the elite banking institutions in this configuration.³⁸⁶

Many of Norton's "elite banks" are also some of the most important participants in the OTC derivative markets. Norton appears ultimately somewhat skeptical of the regulatory effectiveness of public-private partnerships, particularly in certain areas such as the OTC derivative markets. He is concerned that the partnership "provides elite banks with incentives consistently to 'push the envelope' of complex risk-taking in their activities" and that "[t]he basic ambiguities, gaps, or failures to perform under the partnership" will contribute to banking crises.³⁸⁷

With the background of the current financial crisis, Norton's concerns are not unwarranted. Although I am sympathetic to such hesitations, I also think that public-private partnerships are the best approach to increase regulation of the global OTC derivative markets, particularly with the collective action problems and transaction cost considerations involved. Ultimately, the regulatory effectiveness of public-private partnerships depends on achieving a certain power balance between government and private actors. Therefore, it is imperative to find mechanisms to create such balance.

One method of finding such regulatory equilibria is through contracting theories designed for highly innovative, uncertain environments, an environmental context also characteristic of the OTC derivative markets. Contract law has provided a "useful metaphor" for legal scholars to analyze a variety of areas, including regulation and interrelationships between the public and private sector.³⁸⁸ Professor Jody Freeman notes that "the conceptual distinction between contract and regulation may not be as clear as we think."³⁸⁹ In fact, regulation can be thought of as a comprehensive contract. In an ideal world, government regulation would consist of many "comprehensive contracts" between the regulators and the regulated to create a comprehensive regulatory regime.³⁹⁰ Analogously, ideal regulation of global financial markets would consist of such global, comprehensive contracts. Whether domestic or international, such "comprehensive contracts" would delineate regulations for all possible future states of the world. In reality, of course, such contracts are impossible to write due to transaction costs, which are particularly salient at the global level.

386 *Id.* at 48.

387 *Id.* at 52.

388 Shapiro, *supra* note 333, at 404.

389 Freeman, *supra* note 322, at 190.

390 See OLIVER HART, FIRMS, CONTRACTS, AND FINANCIAL STRUCTURE 11 (1995).

Nevertheless, analogizing regulation to contract and harnessing insights from contract theories focused upon innovative collaborations, such as would be an international system of public-private partnerships, illuminates possible governance arrangements.

One such theory is "*Contracting for Innovation*."³⁹¹ It provides helpful intuitions for designing governance arrangements to implement a specific regulatory power balance between government and private actors in the public-private partnerships. The authors, Professors Ronald Gilson, Charles Sabel, and Robert Scott, describe certain contracting practices in highly innovative, uncertain environments requiring "transaction-specific investments,"³⁹² in which they observe "increasingly . . . novel forms of collaboration."³⁹³ These collaborations "blur the distinction between contract and organization, or market and firm"³⁹⁴ and likely arise since "[p]roducers today recognize that they cannot themselves maintain cutting-edge technology in every field required for the success of their products. Accordingly, companies are increasingly electing to acquire by contract components that in the past they would have made themselves."³⁹⁵ These collaborative arrangements are held together by "a formal governance mechanism that stimulates the development of stable cooperative equilibria to support informal, relational contracting."³⁹⁶ The formal governance mechanism consists of a "braiding" of explicit (enforceable) and implicit (nonenforceable) obligations,³⁹⁷ which "creates an interactive process that constrains opportunism as the parties' investments in detailed knowledge of each other's character and capabilities raise switching costs—the costs one party to a contract must incur in order to replace the other party to the contract."³⁹⁸

The OTC derivative markets are also highly innovative, uncertain environments. Regulation of these markets can be thought of as a product produced by government or private actors. The regulatory production process—whether of government or private actors—likewise requires transaction-specific investments. This investment is much more significant and vulnerable to hold-up problems in politi-

391 Ronald J. Gilson et al., *Contracting for Innovation: Vertical Disintegration and Interfirm Collaboration*, 109 COLUM. L. REV. 431 (2009).

392 *See id.* at 433.

393 *Id.* at 437.

394 *Id.* at 494.

395 *Id.* at 434.

396 *Id.* at 458.

397 This braiding of explicit and implicit terms arguably parallels Norton's recognition of formal and informal aspects of the public-private partnerships he describes.

398 Gilson et al., *supra* note 391, at 435.

cal markets, where transaction costs are formidable, than in private markets. As Professor Snyder comments,

the kind of lawmaking that is at the most private end of the [law-making] continuum would seem most likely to be adapted and revised as the world changes and practices develop [i]t surely seems easier for an industry association to innovate than to get legislation passed in Congress or the many states.³⁹⁹

This consideration seems particularly true at the international level. For example, ISDA has been an extremely rapid and successful governance innovator, particularly in introducing industry wide “protocols,” or reforms, which quickly respond to market exigencies. Such practices arguably demonstrate that

[t]he obstacles to reform are not nearly as great with private lawmaking No new legislation is required, no reversal of judicial precedent, no instigation of an administrative agency. Market participants simply need to convince—whether through force of argument or more straightforwardly, by paying a price—a counterparty to accept a different regime.⁴⁰⁰

OTC derivative market counterparties frequently “convince” one another to accept “different regimes” through their adoption of ISDA protocols.

But as Gilson, Sabel, and Scott note, another consideration about transaction specific investments in highly innovative, uncertain environments is producers’ inability to continuously update all the technological aspects of their production process.⁴⁰¹ Similarly, when financial markets were primarily local and less innovative, government actors could largely adopt a vertically integrated production process (a “make” decision) for their regulation. In today’s international financial markets, this is no longer possible. In general, government actors simply do not have the requisite expertise or jurisdictional expanse to produce a “cutting-edge” regulatory product. Therefore, in complex, innovative, global markets such as the OTC derivative markets, government actors must acquire by contract “regulatory components,” from private actors which “in the past they would have made themselves.”⁴⁰²

399 Snyder, *supra* note 349, at 424.

400 *Id.* at 438.

401 Gilson et al., *supra* note 391, at 434.

402 *Id.*

4. Model of International Public-Private Governance Partnerships

Building upon the conceptual foundations of Professors Norton; Dunoff and Trachtman; and Gilson, Sabel, and Scott, in conjunction with TCE, I sketch the beginnings of a possible framework of international regulatory cooperation in the OTC derivative markets: public-private governance partnerships, which could also be thought of as “joint ventures.” I develop my partnership framework in three parts. First, I propose a conceptual device, an “international regulatory production continuum,” to illuminate both the implications of regulatory production decisions by individual government or private actors and to illustrate various institutional configurations for possible partnerships in the OTC derivative markets. Second, I apply Norton’s tripartite descriptive approach to detail the parameters of public-private partnerships: a description of the explicit and implicit terms of the partnership, the role of government actors, and the role of private actors. Third, using concepts from Gilson, Sabel, and Scott’s *Contracting for Innovation*, I delineate possible power balances, or equilibria, arrangements within the partnership.

First, in Dunoff and Trachtman’s international marketplace, I argue that government actors can be thought of as akin to production firms. A distinct product of their production process is regulation, with its prescriptive, adjudicatory, and enforcement components. Consolidated private actors such as ISDA also produce a regulatory product with prescriptive, adjudicatory, and enforcement components and likewise inhabit this international, financial marketplace. Although the private actor focused on in this Article is ISDA because of its role in the OTC derivative markets, the role of the consolidated private actor can be generalized for other global financial markets. Although both government and private actors produce a regulatory product, the characteristics of the components of their regulatory asset bundles differ. Each asset bundle has its own comparative advantages, but neither asset bundle alone is sufficient to enact comprehensive global regulation.

Government actors can be viewed as resting on one end of this “global regulatory production continuum” (continuum) and private actors on the other. This “continuum” provides a hypothetical device for analyzing the implications of various regulatory production decisions made by government or private actors in international financial markets. An implicit public-private governance partnership already exists in the OTC derivative markets. It consists primarily of the adjudicatory asset and enforcement asset components of government actors, namely New York and London, combined with the prescriptive

asset components and a minimal amount of enforcement assets supplied by private actors, such as ISDA. Regulatory decisions/developments affecting the components of regulatory asset bundles of either government or private actors shift the implicit location on the continuum of this implicit partnership. For example, DCs can be thought of as an evolutionary shift on the continuum towards global private actors. In other words, global private actors are increasingly opting for “make” decisions surrounding adjudicatory assets. Recent calls for cross-border financial courts largely staffed by private market expertise⁴⁰³ will likely continue this shift.

At the same time, the current pressure of U.S. and E.U. regulators on market participants to use CCP clearinghouses for standardized OTC derivatives within their respective home jurisdictions represents a counter-shift on this continuum. Therefore, government actors are increasingly opting for “make” decisions in mandating CCP clearing of standardized derivatives within their own regional jurisdiction. As these CCP clearing and trade repository pressures are likely to continue in other product markets,⁴⁰⁴ such directional shifting is also likely to continue. Unfortunately as discussed above, both academic and industry participants question whether this shift, presumably away from points on the continuum where necessary macroprudential solutions implicitly reside, should be welcomed. But this shifting along the continuum, whether productive or unproductive, is likely to continue as government actors increasingly seek to locally regulate these global markets and global private actors such as ISDA increasingly develop their own governance capabilities. Therefore, the longstanding implicit partnership between government and private actors in the OTC derivative markets will increasingly come under stress unless a more cooperative, explicit partnership approach is implemented.

Regulatory decisions by government or private actors in global financial markets can be thought of as “make” (produce) or “buy” (market) decisions. For example, in addressing the regulation of OTC derivative markets, government actors can make comprehensive regulatory decisions, a “make” decision, can opt for regulation by pri-

403 See, e.g., Jeffrey Golden, *We Need a World Financial Court with Specialist Judges*, FIN. TIMES, Sept. 9, 2009, at 3Y (advocating for a world financial court to regulate markets).

404 Note that the OTC derivatives industry said it would “implement a centralized reporting infrastructure for all interest rate derivatives” by December 31, 2009. Letter from Senior Management of AllianceBernstein et al. to William C. Dudley, President, Fed. Reserve Bank of N.Y. (June 2, 2009), available at <http://www.newyorkfed.org/newsevents/news/markets/2009/060209letter.pdf>.

vate actors, a “buy” decision, or can opt for a hybrid institutional arrangement such as a partnership. Any regulatory product decision by either government or private actors in OTC derivative markets shifts where on the continuum their implicit partnership resides. Importantly, neither endpoint of the continuum offers a feasible regulatory solution. And market participants can opt to “buy” regulatory product from a competitor, that is, transact in an alternative jurisdiction. As regulation is a “transaction specific investment,” market participants’ ability to engage in regulatory arbitrage produces a “hold up” problem which has a disproportionate impact on government producers. The solution to this hold-up problem is not increased vertical integration, the equivalent of regulatory measures surrounding CCP clearing that individual government actors are now taking in the OTC derivative markets, but innovative contracting/partnering with consolidated, global private actors. The advantage of a partnership structure is that its “regulatory product” can be a carefully crafted mix of optimal regulatory asset components.

Second, I now use Norton’s tripartite approach to sketch the parameters of an explicit system of public-private partnerships. The general, explicit framework of the partnership system should consist of an informal, international accord. Informal accords have become “a central feature of transgovernmental networks . . . [and] an increasingly important mode of cooperation between national regulatory officials,”⁴⁰⁵ a trend representing “an increased preference for informal nonbinding guidelines and flexible procedures in place of binding legal instruments [such as treaties].”⁴⁰⁶ This explicit, static framework would delineate the background “relationship” terms of the partnership and could be thought of as analogous to an ISDA Master Agreement. The explicit framework of the partnership should be overseen, maintained, and very rarely updated by a governance committee, the Global Derivatives Council, composed of government and private actors. As discussed below, this Council would be one link between the domestic and international frameworks of cooperation. Supervisory power over this Council should be by an international Global OTC Derivatives Supervisory Board composed only of interna-

405 MURPHY, *supra* note 326, at 4.

406 *Id.* at 3. Also note that in October 2008, a plethora of government actors created the “Santiago Principles” to provide best practices for sovereign wealth fund (SWF) investment. I discuss SWF investment in more detail below, but the interesting point here is that SWF investment represents widespread public investment in private markets. Therefore, informal governance arrangements are already being explicitly constructed surrounding the interactions of public and private actors in international financial markets through informal arrangements.

tional government actors. Established international regulatory groups such as the International Organization of Securities Commissions (IOSCO), the Financial Stability Board (FSB), or the OTC Derivatives Regulators' Forum⁴⁰⁷ could fill this role.

An implicit subsidiary, market infrastructure-based framework should be interwoven within the explicit, outer framework. The implicit framework of this partnership structure should be designed to facilitate a flexible, public-private "endogenous governance structure"⁴⁰⁸ analogous to Aceves's description of the role of "state practice" in incomplete contracts, to likewise overcome the transaction costs involved in regulating the OTC derivative markets, particularly those related to knowledge acquisition and expertise. This implicit framework would be akin to ISDA Schedules, capable of renegotiation so that governance arrangements evolve with market infrastructure developments. Such developments currently consist of global CCP clearing, global trade repositories, and a global adjudicatory system. These subsidiaries should be governed by standing oversight committees, subject to the oversight of the Council, composed of government actors and private actors dependent upon the comparative advantages of their regulatory asset components. These subsidiaries would likewise reside on the continuum, but their movements would be bounded by the external partnership framework. The aim of this elasticity would be to facilitate incorporation of global governance developments, while constraining unproductive, national regulatory competition. The equilibria, or regulatory bundle of asset components, will balance when a regulatory product is created such that both the government and private actors are better off cooperating than defecting from the partnership. For example, such regulatory partnerships could facilitate the creation of specialist, cross-border financial courts, which should significantly decrease costs to both government and private actors.

The negotiated governance approach of the subsidiaries has several possible predecessors. First, Aceves describes state practice as allowing "states [to] maintain the flexibility necessary to address new circumstances as they arise while remaining grounded within the context of their original agreement."⁴⁰⁹ Consolidated global private actors can negotiate informal agreements with government actors and also engage in a "state practice like" process with government counterparties. Second, Freeman suggests that administration is "a

407 See Press Release, *supra* note 295.

408 Aceves, *supra* note 30, at 1004.

409 *Id.* at 1005.

set of negotiated relationships” between public and private actors⁴¹⁰ and argues that “public and private actors negotiate over policy making, implementation, and enforcement.”⁴¹¹ This phenomenon is likely to be more robust at the international level where individual government actors have decreased jurisdiction. Third, informal governance processes have long been characteristic of the OTC derivative markets in the United States.⁴¹² Fourth, the flexibility inherent in the governance of these subsidiaries is also supported by the approach of the “new governance” literature, which consists of

strategies for regulation that seek to enlist the cooperation of the regulated community so as to overcome the inevitable informational disadvantage that regulators have when dealing with rapidly changing markets. The basic idea is to let regulated entities experiment with compliance practices without a one-size-fits-all command, so long as outcomes satisfy the articulated principles.⁴¹³

From a TCE perspective, at least three reasons exist for a system of public-private regulatory partnerships. First, knowledge can be thought of as a transaction cost that both affects and is generated by firm structure.⁴¹⁴ ISDA’s prescriptive assets embed the global knowledge of OTC derivative market participants. International regulators simply do not have similar access to such knowledge, expertise, or the resources to acquire it. Second, as a global private industry standard setting organization, ISDA’s prescriptive abilities are rapid and capable of much broader global implementation than those of individual government actors. Scholars have noted ISDA’s characteristic rapid

410 Jody Freeman, *The Private Role in Public Governance*, 75 N.Y.U. L. REV. 543, 548 (2000).

411 *Id.*

412 Informal regulation and “moral suasion” characterize the FRBNY’s longstanding involvement in the OTC derivative markets, which has included arranging a bailout for LTCM and joining with other international regulators to “encourage” market participants to address confirmation backlogs issues in the credit derivative markets. See, e.g., Letter from Senior Management of Bank of America et al. to Timothy Geithner, President, Fed. Reserve Bank of N.Y. (Oct. 4, 2005), available at <http://www.newyorkfed.org/newsevents/news/markets/2005/industryletter.pdf> (addressing industry commitments following a September 15, 2005, meeting at the FRBNY concerning the confirmation backlog in the credit derivatives industry).

413 Donald C. Langevoort, *The SEC, Retail Investors, and the Institutionalization of the Securities Markets*, 95 VA. L. REV. 1025, 1032 (2009).

414 See Erica Gorga & Michael Halberstam, *Knowledge Inputs, Legal Institutions and Firm Structure: Towards a Knowledge-Based Theory of the Firm*, 101 Nw. U. L. REV. 1123, 1127 (2007).

responses to market exigencies in a number of areas.⁴¹⁵ For example, ISDA's recent "Big Bang" and "Small Bang" Protocols, both aimed at standardizing CDS contracts to facilitate CCP clearing, were implemented rapidly. Third, because ISDA increasingly represents a broader array of global market participants, its governance solutions should increasingly reflect an acceptable level of overall market representation.

Several objections can be made against the use of public-private partnerships to regulate the OTC derivative markets. First, it could be argued that it would be preferable for an international group of government regulators to govern the OTC derivative markets. A related objection is that global governance of these markets should be located within an international institution such as the Bank for International Settlements or the International Monetary Fund. The problems with these two alternative suggestions are the transaction costs involved not only in coordination of such regulatory efforts, including keeping them current, but also in the cost of knowledge and expertise acquisition.

Next it could be objected that this governance partnership relies heavily on regulation by market actors and that "self-regulation" has often failed in the past. As a preliminary matter, the financial crisis has clearly demonstrated that regulators themselves are sometimes "asleep at the switch."⁴¹⁶ More importantly, in the absence of a global financial regulator, there are few realistic alternatives to relying upon private market governance of global markets as it is the best way to solve international regulatory collective action problems. It is also not clear that a global, governmental financial regulator would be a preferable alternative. Instead, the key to successful regulation of the OTC derivative markets lies in careful alignment of the often diverse incentives of government and consolidated, private market actors.

Many objections will likely center on a concern for public legitimacy and transparency of decisionmaking. Government actors face similar objections whenever they outsource any aspect of their regulatory function to the private sector. But with the financial crisis and its bailouts, "Main Street" is increasingly demanding political accountability for concentrations of private economic power. Therefore, the

415 See, e.g., Choi & Gulati, *supra* note 358, at 1142–44 (relating ISDA's response to an ambiguity in its definitions).

416 See Richard A. Posner, Op-Ed., *Our Crisis of Regulation*, N.Y. TIMES, June 25, 2009, at A23; see also Gretchen Morgenson, *But Who Is Watching the Regulators?*, N.Y. TIMES, Sept. 13, 2009, at BU1 ("Awarding increased power to those who failed in their oversight duties flies in the face of all notions of accountability.").

importance of public legitimacy in financial regulation should not be underestimated. For example, Professor Donald Langevoort explains:

I am convinced that part of the motivation for the substantive and procedural disclosure requirements of U.S. securities regulation increasingly is disconnected from shareholder or investor welfare per se, and instead relates to the desire to impose norms that we associate with public governmental responsibility—accountability, transparency, openness, and deliberation—on nongovernmental institutions that have comparable power and impact on society.⁴¹⁷

He terms this a “publicization of the governance of private sources of economic power”⁴¹⁸ and argues that Sarbanes-Oxley is an example of this public ethos. His perspective harmonizes with Professor Freeman’s insight that the privatization process can extend public norms into previously private realms.⁴¹⁹ But as discussed above, Freeman also notes that around the world, government actors are increasingly downsizing and outsourcing their functions to the private sector. My system of public-private partnerships represents a distinct framework from these domestic predecessors. It is a unique, regulatory institutional form that promotes more public accountability than the traditional outsourcing practices of government actors.⁴²⁰

A final argument against global public-private governance partnerships could be that while this structure avoids an “international race to the bottom,” it also facilitates possibilities for regulatory capture and stifles any positive aspects of international regulatory competition. The concern is that “while federal or uniform laws reduce some problems, they may create others by reducing the diversity of laws and parties’ ability to avoid bad laws.”⁴²¹ Judge Easterbrook argues that “[t]he national government . . . can win a race to the bottom in a way that states cannot.”⁴²² In international markets, a global financial regulator or global regulatory structure could arguably likewise “win a race to the bottom” in a way no individual government actor could. U.S. history, however, suggests that a federal regulator is sometimes needed to prevent a race to the bottom among individual

417 Langevoort, *supra* note 413, at 1066.

418 *Id.* at 1078.

419 See Freeman, *supra* note 410, at 592–664.

420 Somewhat similarly, Gordon Rausser, William Balson, and Reid Stevens argue in *Centralized Clearing for Over-the-Counter Derivatives* for a public-private CCP. The authors argue that “[t]hough private CCPs provide an adequate amount of clearing’s private good, they do not provide the socially optimal level of the public good or impure good.” Rausser et al., *supra* note 212 (manuscript at 1).

421 O’HARA & RIBSTEIN, *supra* note 35, at 16.

422 Easterbrook, *supra* note 136, at 692.

states. Since there is no global regulator, it is not clear what force if necessary could prevent a global race to the bottom. Second, the public-private nature of these partnerships and the necessity of maintaining equilibrium in the regulatory asset bundle, suggests that each party will be better off cooperating and should moderate this tension. Finally, global regulatory partnerships for market infrastructures should strengthen market discipline. While it might be politically and legally feasible to bailout “local” market infrastructures, this is unlikely to be the case globally. This uncertainty should encourage OTC derivative market participants to maintain robust risk management practices.

C. Linked Domestic and International Frameworks of Cooperation

As indicated above, similar to the SEC-CFTC joint venture, my system of international public-private regulatory partnerships can also be thought of as a “joint venture.” These domestic and international “joint-ventures” are linked in at least two ways. First, government actors on the Council of the public-private partnership will consist of government actors in charge of domestic OTC regulation such as the CFTC-SEC joint venture in the case of the United States. Second, these same domestic regulators should be the ones involved in the international, government regulatory group eventually chosen for the role of the Supervisory Board.

D. Extensions of Domestic and International Frameworks of Cooperation

My conception of international frameworks of cooperation through public-private partnerships can offer a generalized approach for thinking about domestic regulations addressing global financial markets. For example, it is also a helpful framework for thinking about the domestic regulation of sovereign wealth fund (SWF) investment. SWFs are government investment vehicles that invest in private enterprises. Prior to the financial crisis, they were highly controversial because of the unique issues which arise from widespread public investment in private markets. Domestic regulatory decisions of investment recipient countries, such as the United States, can similarly be thought of as located on the continuum. Recipients face a spectrum of regulatory production choices residing on this continuum. They can pass highly protectionist legislation and not permit any SWF investment. This represents a “make” decision reflecting a highly vertically integrated regulatory approach. On the other hand, a recipient can chose to forego any SWF investment restrictions. This represents a “buy” decision reflecting a market-based solution. Recipients must

decide where on this continuum to locate their regulatory production process and understand its consequences for capital investment.

As in the OTC derivative markets, recipient countries face a collective action issue: capital is likely to migrate to less restrictive regulatory jurisdictions. Most recipients will likely want to avoid locating their production process at either extreme of the continuum. It would therefore be helpful for recipients to conceptualize various possible governance arrangements on the continuum which reflect their regulatory preferences. The two contracting parties, the recipient and the group of SWFs, should form public-private regulatory partnerships whose parameters are characterized by explicit and implicit governance mechanisms. Although these partnerships consist of public institutions, I term these arrangements "public-private" since they ultimately represent a private ordering of public institutions in the international financial system. The explicit terms or framework of this partnership could consist of the regulations of the recipient country. The implicit terms could consist of sets of best practice guidelines developed both by recipients and SWFs such as the best practice guidelines for recipient countries created by the OECD⁴²³ and the best practice guidelines for SWF investment called "The Santiago Principles."⁴²⁴ Public-private partnerships surrounding SWF regulation are highly feasible because many countries play investor and recipient roles, a reality which could facilitate finding the cooperative equilibria necessary to maintain regulatory balance.

CONCLUSION

Today, major financial markets, such as the OTC derivative markets, are global markets which no jurisdiction can individually successfully regulate. International regulatory cooperation is needed to regulate the OTC derivative markets. But the transaction costs involved in what is essentially an international collective action are significant. Government actors can intervene locally to solve market failures associated with collective action problems. In the international marketplace, however, government actors themselves can cause the collective action problem when it comes to regulation. A possible global solution to this issue is an inversion of the local one: interven-

423 See Org. for Econ. Co-operation & Dev., Guidance on Sovereign Wealth Funds, http://www.oecd.org/document/19/0,3343,en_2649_34887_41807059_1_1_1_1,00.html (last visited Apr. 7, 2010).

424 INT'L WORKING GROUP OF SOVEREIGN WEALTH FUNDS, SOVEREIGN WEALTH FUNDS: GENERALLY ACCEPTED PRINCIPLES AND PRACTICES 1-3 (2008), available at <http://www.iwg-swf.org/pubs/eng/santiagoprinciples.pdf>.

tion by consolidated global private actors. In the international marketplace, transaction costs incentivize standardization and governance consolidation by global private market actors.

One of the purposes of this Article is conceptualize frameworks of domestic and international cooperation in the OTC derivative markets. Even if only a beginning, these ideas make at least three contributions. First, an inversion of commonly proposed "solutions" for resolving the likely continuing jurisdictional tensions between the SEC and CFTC in OTC derivative markets if domestic reforms are based upon product categorizations by suggesting the creation of a regulatory joint venture: the DSI. Second, it assists legislators in thinking about responses of global OTC derivative market participants to domestic regulatory production decisions. Third, it suggests a potential international framework to coordinate increased international regulation of OTC derivative markets which offers individual jurisdictions regulatory inroads otherwise inaccessible in a global marketplace.