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A UNIFORM FIDUCIARY STANDARD FOR INVESTMENT ADVISERS AND BROKER-DEALERS*

In July 2010, the Boston University *Review of Banking and Financial Law* issued a call for scholarly essays analyzing the desirability of adopting a uniform fiduciary standard for the delivery of investment advice by investment advisers and broker-dealers. Both advisers and broker-dealers provide investment advice to clients and often "direct them toward the same products."[1] Nevertheless, the federal securities laws have imposed different duties on advisers and broker-dealers. The Supreme Court has found that advisers owe a "fiduciary duty" to clients under the Investment Advisers Act of 1940.[2] In contrast, broker-dealers have traditionally been held to a lower "suitability" standard.[3] As one SEC Commissioner has explained, the fiduciary standard requires advisers to "make investment decisions that are in the best interest of the client" while

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* This introduction for the Fiduciary Papers was written by Thomas V. Powers, Student, Boston University School of Law (J.D. 2011) and Articles Editor for the *Review of Banking & Financial Law*.

[1] Elisse B. Walter, Comm'r, Sec. Exch. Comm'n, Regulating Broker-Dealers and Investment Advisers: Demarcation or Harmonization?, Address at the Mutual Fund Directors Forum Ninth Annual Policy Conference (May 5, 2009), http://www.sec.gov/news/speech/2009/spch050509ebw.htm ("[B]roker-dealers and investment advisers are regulated under different statutes and at times by different regulatory bodies. Yet, they often provide practically indistinguishable services to retail investors and direct them to the same products.").

[2] *See* SEC v. Capital Gains Research Bureau, 375 U.S. 180, 191 (1963) ("The Investment Advisers Act of 1940 . . . reflects a congressional recognition 'of the delicate fiduciary nature of an investment advisory relationship,' as well as a congressional intent to eliminate, or at least to expose, all conflicts of interest which might incline an investment adviser—consciously or unconsciously—to render advice which was not disinterested.") (quoting 2 LOUIS LOSS ET AL., SECURITIES REGULATION 1412 (2d ed. 1961)).

[3] Luis A. Aguilar, Comm'r, Sec. Exch. Comm'n, The Globalization of Investment Advisers—How Will Regulators Respond?, Address at the International Institute for the Regulation and Inspection of Investment Advisers (June 23, 2009), http://www.sec.gov/news/speech/2009/spch062309laa.htm ("In the U.S., broker-dealers traditionally have been required to meet certain 'suitability' requirements when dealing with their customers . . . [which] is generally considered to be a lower standard of responsibility than the fiduciary standard.").

the suitability standard allows brokers to "sell securities to a client as long as they are 'suitable' for that client, even if they may not be in the best interests of the client."[4]

In July 2010, Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act").[5] Among other things, the Dodd-Frank Act requires that the SEC conduct a study evaluating (1) the "effectiveness of existing legal or regulatory standards of care" for advisers and broker-dealers and (2) whether any "legal or regulatory gaps" exist in the standards of care that advisers and broker-dealers owe to investors.[6] The Dodd-Frank Act also gives the SEC authority to promulgate rules requiring that both advisers and broker-dealers "act in the best interest of the customer without regard to the [advisers' or broker-dealers'] financial or other interest[s] . . . ."[7] In effect, the Dodd-Frank Act authorizes the SEC to create a uniform fiduciary standard applicable to both advisers and broker-dealers.

The SEC issued a release in late July requesting public comment as part of its study of existing standards of care for advisers and broker-dealers.[8] The SEC has since received over 3,000 comment letters from industry professionals, academics and other interested parties.[9] These comment letters help illustrate the intense debate over the implementation of a uniform fiduciary standard for advisers and broker-dealers. Proponents of a uniform fiduciary standard argue that investors "do not understand the differences between brokers, investment advisers and financial planners" and do

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[4] Luis A. Aguilar, Comm'r, Sec. Exch. Comm'n, SEC's Oversight of the Adviser Industry Bolsters Investor Protection, Address at the Investment Advisers Association Annual Conference (May 7, 2009), http://sec.gov/news/speech/2009/spch050709laa.htm.

[5] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. 111-203, 124 Stat. 1376 (2010).

[6] *Id.* at § 913(b)-(b)(2).

[7] *Id.* at § 913(f), (g)(2).

[8] Study Regarding Obligations of Brokers, Dealers, and Investment Advisers, Exchange Act Release No. 34,62577 (July 27, 2010), *available at* http://www.sec.gov/rules/other/2010/34-62577.pdf.

[9] Suzanne Barlyn, *SEC 'Moving Rapidly' To Complete Fiduciary Study—Schapiro*, WALL ST. J. ONLINE, Sept. 30, 2010, http://online.wsj.com/article/BT-CO-20100930-712110.html ("[SEC Chairman Mary] Schapiro . . . said the agency's staff is in the process of reviewing more than 3,000 comment letters it has received in response to the agency's request for public input . . . .").

not have any "knowledg[e] about the different standards of care that apply to their recommendations."[10] In effect, they argue that a uniform fiduciary standard would "protect investors" by better ensuring that advisers' and broker-dealers' investment advice is in an investor's "best interest."[11] Opponents argue that adoption of a uniform fiduciary standard for all advisers and broker-dealers will "likely . . . have a negative impact" on investors in terms of their (1) choice of advisers and broker-dealers, (2) access to "products distributed primarily through broker-dealers," and (3) access to the most cost-effective investment options.[12]

The Boston University *Review of Banking and Financial Law* received a number of exceptional scholarly essays, including a series of articles compiled by the Committee for the Fiduciary Standard and other organizations which were submitted to the SEC in September 2010. The *Review of Banking and Financial Law* is publishing the following six articles, which we believe provide some particularly thoughtful insights into the debate over a uniform fiduciary standard for advisers and broker-dealers. The *Review of Banking and Financial Law* would like to thank all contributors who responded to our call for papers.

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[10] Letter from the Am. Assoc. Retired Pers. Et al. to Mary Sharpiro, Chairman, Sec. Exch. Comm'n (Sept.14, 2010), http://www.sec.gov/comments/4-606/4606-2748.pdf.

[11] Luis A. Aguilar, Comm'r, Sec. Exch. Comm'n, Statement in Support of Extending a Fiduciary Duty to Broker-Dealers who Provide Investment Advice (May 11, 2010), http://www.sec.gov/news/speech/2010/spch051110laa.htm.

[12] Letter from the Sec. Indus. Fin. Mkt. Ass'n, Standard of Care Harmonization Impact Assessment for SEC, to Mary Shapiro, Chairman, Sec. Exch. Comm'n (Oct. 27, 2010) at 3-4, http://sec.gov/comments/4-606/4606-2824.pdf.

THE REGULATION OF BROKERS, DEALERS, ADVISERS AND FINANCIAL PLANNERS

TAMAR FRANKEL[•]

I. *Introduction*

Congress has given the Securities and Exchange Commission ("Commission") some serious homework in the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act").[1] First, the Commission is required to study the standards of care for brokers, dealers and advisers and consider the elimination of the broker exclusion from the Advisers Act of 1940 ("Advisers Act").[2] In addition, the Commission must evaluate the impact of imposing on brokers the duties of the Advisers Act.[3] That imposition would include the duty of loyalty, acting for the best interests of the clients and avoiding conflicts of interest.[4] I will deal summarily with the differences between the duties currently imposed on advisers and brokers and their origins. I note that in today's financial world there are individual brokers, broker-dealers, advisers and financial

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[•] Professor of Law and Michaels Faculty Research Scholar, Boston University.

[1] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

[2] *Id*. at §§ 913(b)(1)-(2) ("The Commission shall conduct a study to evaluate . . . the effectiveness of existing legal or regulatory standards of care for brokers, dealers, [and] investment advisers . . . [and] whether there are legal or regulatory gaps, shortcomings, or overlaps in legal or regulatory standards in the protection of retail customers relating to the standards of care for brokers, dealers, investment advisers.").

[3] *Id*. at §§ 913(c)(9)-(9)(A) (stating that the Commission "shall consider" the "potential impact of imposing upon brokers, dealers, and persons associated with brokers or dealers . . . the standard of care applied under the Investment Advisers Act of 1940).

[4] *Id*. at §913(g)(1) (stating that the Commission may promulgate rules to establish a fiduciary standard for broker-dealers, including requirements to "act in the best interest of the customer without regard to the financial or other interest of the broker, dealer, or investment adviser providing the advice[, that] . . . any material conflicts of interest shall be disclosed[, and that the] . . . standard of conduct shall be no less stringent than the standard applicable to investment advisers under section 206(1) and (2) of this Act when providing personalized investment advice about securities . . . .).

planners, as well as large groups and networks of brokers, dealers, advisers, financial planners, underwriters, creators of securitized assets, managers of "dark exchanges," and traders for their own account. I name the conglomerates and any parts of the conglomerate services "brokers, etc."

Second, Congress authorized the Commission to establish a fiduciary duty for brokers in providing retail clients with personalized investment advice.[5] I understand this fiduciary duty to be similar to the fiduciary duty imposed on investment advisers under the Advisers Act and the common law, and will present the definition of investment advice and the general fiduciary duties of advisers under the Act.

Congress authorized the Commission to promulgate "additional rules, where appropriate, regarding sales practices, conflicts of interest and compensation schemes" with respect to brokers, "when providing personalized investment advice about securities to a retail customers (and such other customers as the Commission may by rule provide)."[6] The standard of conduct the Dodd-Frank Act requires for such brokers with respect to such customers "shall be the same as the standard of conduct applicable to an investment adviser under section 211 of the Advisers Act of 1940."[7] I believe and will argue that it is crucial to impose such rules not only on brokers, etc., who advise "retail customers," but also on brokers, etc. who advise institutional investors, even though these investors are what we call "sophisticated."

Third, the Commission should establish rules that impose on brokers a duty to disclose to investors the terms of their relationships with investors, including conflicts of interest.[8] The clients' consent after appropriate disclosure may relieve brokers, etc. from the prohibition on conflict of interest.[9] I will discuss the impact of this

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[5] *Id.* at § 913(f)-(g) (providing the Commission with rulemaking authority to "establish a fiduciary standard for brokers and dealers").

[6] *Id*. at § 913(g)(1).

[7] *Id*.

[8] *Id*. ("The Commission may promulgate rules to provide that the standard of conduct for all brokers, dealers, and investment advisers . . . [and] . . . [i]n accordance with such rules, any material conflicts of interest shall be disclosed and may be consented to by the customer.").

[9] *Id.* ("[A]ny material conflicts of interest shall be disclosed and may be consented to by customers.").

disclosure when the client consents to the fiduciary's conflict of interest.

Fourth, Congress provided guidelines for the Commission's enforcement.[10] This provision raises a number of questions. Does enforcement include FINRA's enforcement on the one hand and state regulation of investment advisers (large and small) on the other hand? Will FINRA's rules and the Commission's rules preempt state laws? Currently, there are two entities that regulate brokers: FINRA and the Commission as its supervisor. There are two entities that regulate advisers: The Commission and the states (over advisers that advise small amounts). Would brokers and advisers be subject to the advisers' regime or would small advisers be subject to the brokers' regime? I consider these questions to be serious and will deal with them in the last part of this article.

II. Who Are Fiduciaries?[11]

A fiduciary may be defined as a person (or institution) that provides a service that requires expertise and is socially important. Moreover, the service[s] cannot be performed without the clients' entrustment of property or power or both. A broker cannot perform his services without entrustment of the clients' money and/or securities. Entrusted property and power are given to the fiduciary for the sole purpose of performing his duties. In addition, a fiduciary's services cannot be guided by itemized directives. Therefore, the fiduciary must have discretion. Brokers' clients bear a number of risks: One risk is misappropriation of entrusted property and power. The other, although lesser, risk is that fiduciaries will not perform their job well, as promised—this is the duty of care. Tight controls and even monitoring of fiduciaries can undermine the utility of the service. The cost of preventing abuse of entrustment may exceed the benefits from the relationships.

Therefore, the purpose of the law is to induce entrustors to enter into relationships with fiduciaries by reducing their risks. It should be noted that the remedies for breach of fiduciary duties

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[10] *Id*. at § 913(h) (defining the Commission's enforcement "with respect to violations of the standard of conduct applicable to a broker or dealer providing personalized investment advice about securities to a retail customer . . . .").

[11] See Tamar Frankel, Fiduciary Law Ch. 1 (Oxford University Press) (2010).

include punitive damages, accounting for the fiduciary's profits (even if the investors were not damaged), injunction, constructive trust and specific performance. This is in contrast to a breach of contract, which involves mainly damages.

There Is No Doubt That Brokers Are Fiduciaries. Brokers are fiduciaries with respect to the money and power that is entrusted to them for trades. Brokers who manage "sweep accounts" are fiduciaries with respect to the management of the accounts as well.[12] When brokers present themselves and act as advisers, they are fiduciaries with respect to their advice. If they present themselves as experts, they are liable with respect to their expertise. A broker who tells the client that "auction of thirty year notes" are like cash must know precisely what these notes mean.

What if brokers, etc. have conflicts of interest with their clients? In such a case the law allows brokers, as for any fiduciary, to fully disclose the conflicting interests and enable the clients to consent to the conflicts or deny consent. Congress required the Commission to promulgate rules that impose on brokers a duty to disclose to investors the "terms of the investors' relationships" with the brokers and advisers "(including conflicts of interest)."[13] If the investors understand the conflicts of interest and are not dependent on the adviser[s], the investors may rely on the advisers or bid them goodbye. Otherwise, advisers' advice may not involve conflicting interests. Much depends on how these conflicting interests are disclosed. An effective disclosure must be in writing, short, clear and

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[12] Nelson v. Serwold, 687 F.2d 278, 282 (9th Cir. 1982) ("Agency is the fiduciary relation which results from the joint manifestation of consent by one person that another shall act on his behalf and subject to his control, and of consent by that other so to act.") (citing Grace Line, Inc. v. Todd Shipyards Corp., 500 F.2d 361 (9th Cir. 1974); *see id.* at 282 ("The agent acts for or on behalf of the principal and subject to his control, and his acts are those of the principal.") (citing NLRB v. United Brotherhood of Carpenters, 531 F.2d 424 (9th Cir. 1976)); RESTATEMENT (SECOND) OF AGENCY § 1(1) (1958) ("Agency is the fiduciary relation which results from the manifestation of consent by one person to another that the other shall act on his behalf and subject to his control, and consent by the other so to act."); RESTATEMENT (THIRD) OF AGENCY § 1.01 (2006) ("[T]he agent shall act on the principal's behalf . . . .").

[13] Dodd-Frank Act § 913(g)(1) ("The Commission may promulgate rules [establishing a broker-dealer fiduciary standard, and] . . . [i]n accordance with such rules, any material conflicts of interest shall be disclosed and may be consented to by the customer.").

highlight the danger of the conflict to the client. The brokers must bear the burden of the client's understanding of the conflict.

The duty to disclose may be viewed as the reversal of the contract principle of *caveat emptor*. The law governing the distribution of securities presents a hybrid. The issuer or the brokers provide information about the proposed security and the client must decide whether to buy. However, attempts to educate investors in evaluating the offered securities have failed. Investors do not examine and often cannot understand the nature of the security that is being offered. Perhaps educating brokers, etc. and their registered representatives to give client advice for the clients' sole interests may be more successful.

In the context of fiduciary law, if fiduciary duties are default rules, then disclosure of the nature of the conflicts merely entitles the clients to consent to the conflicts and thereby change the prohibitions applicable to fiduciaries. In this context, congressional requirements would allow disclosing brokers, etc. to maintain their conflict of interest provided they disclose it.

However, disclosure of conflicts of interest must be delivered in a certain way: (1) The disclosure must be in writing, and (2) The disclosure in writing must be read to the client orally and other statements may not conflict with the written words. To this end the brokers, etc. ought to read to the client the statement. This can be done electronically as well. The purpose of the exercise is to ensure that the client gets the message. But it may well be that even such a process will not be effective if, for example, the broker, etc. jokes about the procedure and winks to the client to signal that this is a silly exercise imposed by the government. If, after a trial period, such communication proves futile, then other forms of effective communications must be tried. There are serious flaws concerning the disclosure solution. One enormous flaw is that clients who entrust their money and securities to advisers are hardly ever likely to mistrust their brokers' advice. The other flaw arising from disclosure is that such disclosure relieves brokers of self-limitations on conflicts of interest, especially when clients agree.

III. What is "investment advice" under the Advisers Act? And what are the fiduciary duties of advisers under the Act?

Under the Advisers Act, "investment advice" includes advice as to the advisability or the desirability "of investing in, purchasing or selling securities."[14] "[I]t is sufficient that advice is generally concerned with investments in securities" and not "on particular securities." Moreover, "an insurance agent who refers potential clients to an adviser for a fixed fee per client may be an adviser if the agent introduces the two [, as] [a]n introduction to an adviser implies advice that securities investment is desirable . . . ."[15]

A stock-charting service including data on high, low and closing prices, and volumes might constitute advice as to the value and advisability of investing in securities and analyses, or reports concerning securities. The inclusion of trend lines and corresponding recommendations of transactions in securities as part of the service constitutes investment advisory services. The service of periodically consolidating data of a subscriber's own portfolio may be investment advice."

Currently, registered representatives of a broker dealer "need not register as advisers for distributing materials describing a subscription bookkeeping system that monitors all assets of a particular subscriber, assisting potential subscribers in preparing financial input data, and receiving compensation from the operator of the services . . . ."[16] In fact, it is "the exercise of discretion by the adviser that gives rise to opportunity for abuse and consequently to fiduciary duties . . . ."[17]

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[14] 15 U.S.C. § 80a-2(20) (2006).

[15] TAMAR FRANKEL & ANN TAYLOR SCHWING, THE REGULATION OF MONEY MANAGERS §§ 3.01-12 (2d ed. 2001) (footnotes omitted).

[16] *Id*.

[17] *Id*. The definition of an adviser covers advice on any securities, except exempt securities specified in section 202(a)(11)(E). In the opinion of the staff, an adviser rendering advice concerning investments in certificates of time deposits, which are exempt from registration under the 1933 Act registration requirements, would probably have to register under the Advisers Act. This aspect of the definition may raise the question whether the instruments are securities. For example, the status of swaps, loan participations, and other derivatives is unclear. It may be that the time has come to clarify their status and since they are bought for investments they should not be treated differently from any other security.

How will these definitions relate to brokers, etc.? If they speak, orally or in writing, or through other communication means, and if they suggest, note, or render clients to notice specific securities, they are advisers. Thus, brokers, etc. that list thousands of mutual fund shares for clients "free" and receives benefits from those managed funds that were placed at the top would have been within the definition of an adviser.[18] An agreement such as the one in which Charles Schwab requires clients to sign should be held ineffective if the document allows Schwab to change the terms of the agreement and the customer consents in advance to these changes, especially if the customer is required to follow and be aware of the changes. It is an incredible document that presumably no one in his right mind would sign, and yet it seems that customers sign it. I doubt whether educating the customers not to sign any of such "disclosure" documents would be effective. Customers either trust or mistrust. And if they mistrust, they will no longer be customers.

IV. Should Fiduciary Duties be Imposed on Brokers' Advice to Those Other Than "Retail Customers"? Such as Institutional Investors, Including Those Who May Be Sophisticated?

Congress granted the Commission discretion to impose fiduciary duties on brokers that serve other than retail clients.[19] I believe that it is crucial to impose fiduciary duties on all brokers, etc. regardless of whether their clients are what we call sophisticated, and even if they manage millions of dollars of investors' money, or the citizens' money, and even if they are themselves fiduciaries.

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[18] Charles Schwab Corp. Managed Accounts, http://www.aboutschwab.com/about/facts/managed-accounts.html *(last visited Nov. 7, 2010) (stating, for example, that "[m]ore than 14,500 funds are available in . . . [Charles Scwab's] Mutual Fund Marketplace, including more than 11,000 with no loads or transaction fees.").*

[19] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 913(f), 124 Stat. 1376, 1827 (2010) ("The Commission may commence a rulemaking, as necessary or appropriate in the public interest and for the protection of retail customers (and such other customers as the Commission may by rule provide), to address the legal or regulatory standards of care for brokers, dealers, investment advisers, persons associated with brokers or dealers, and persons associated with investment advisers . . . .").

Here are my reasons:

First, institutions hold and manage the savings of millions of Americans, both investors and citizens. Any harm done to a single institutional investor affects far more individuals than the harm to a "retail investor," his family and business. Brokers, etc. that mislead one investor or a thousand individual investors cannot threaten the system as much as brokers, etc. that mislead one institutional investor representing thousands of citizens in a municipality or tens of thousands of savers whose money is in their pension funds.

Second, institutional investors are not much better off than individuals with respect to understanding some complex investments. And who knows what other investments are in the pipeline as we speak? In fact, while retail investors deal mostly with registered representatives, institutional investors deal with the truly large prestigious brokers, etc. that cover under their umbrella brokers, dealers, underwriters, creators of securitized assets, managers of "dark exchanges," and various other services. So long as sophisticated investors do not know what else is being prepared in the factory of financial assets they may not be able to judge the value and right price of the financial assets that are being offered to them. And sometimes they might know but perhaps not understand.

The example of the Deutsche Bank debacle is instructive. This large bank engages in hedge fund activities. Yet, it bought from Goldman Sachs, as broker, a financial asset created by Goldman Sachs—the securitization expert and originator—which asset contained "junk" for which Goldman Sachs the expert was paid, and against which Goldman Sachs the trader placed a bet that it would fail. Goldman Sachs manages "dark exchanges," yet according to its "business model" it may, and indeed must, trade on the information that it gathers from all these activities. Nonetheless, it claims not to be a fiduciary of its clients. They are, after all, sophisticated.

Sophistication does not mean hiring private detectives to find out whether the seller is doing what Goldman Sachs did to Deutsche Bank. And market price is not always an indication of the level of risk. The seller may know far more about the level of risk that the sold securities pose. More importantly, I am not sure that Deutsche Bank will do business with Goldman Sachs in the future. If it does, its managers may attempt to "pay Goldman back" in another transaction either directly or indirectly. Or it may avoid not only Goldman Sachs but any broker in the United States for sometime to

come. Other actors may adopt the same attitude. But the most dangerous case for investors and the financial system is when institutional investors flock to such an investment bank and are not aware and perhaps cannot be aware of its "business model" and the investors' possible losses. Presumably, so long as the losses are not outrageous, they will be swept under the rug, as has happened quite often. A system of this sort is bound to crash.

Third, humans are creatures of habit. Brokers are no exception. Brokers should learn to have a knee-jerk reaction when faced with conflicts of interest and seek to avoid it. If brokers are given the choice depending on the type of client they serve, they will not fully reform their bad habit that some of them now possess.

Fourth, the nature of trading has changed since the 1930s. Market prices no longer represent the aggregate judgment of thousands of individuals.[20] Technology has enabled some brokers, etc. to trade faster than any human can. Some of these machine-and-automatic trading systems have created very different market prices. "Quote stuffing" was not known in the 1930s or even later.[21] This technique can cause market prices to fall steeply in a second. Investors, who trade directly or through their managers during that second, may sustain serious losses. This is not the market price that we understood it to be in the 1940s. Therefore, the time has come to focus not only on what the investors understand but also, and perhaps mainly, on what brokers, etc. do, their motivations and techniques, and in what kind of culture they live and work.

Institutional investors—those who represent thousands of investors—are in dire need of protection concerning their investments. Municipalities—those who represent both employees and citizens—are in dire need of protection concerning their investments. If institutional investors (which are non-retail investors)

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[20] Cass R. Sunstein, *Group Judgments: Deliberation, Statistical Means, and Information Markets*, 80 N.Y.U. L. REV. 962, 1023 (2005) ([T]he great advantage of the price signal is that it aggregates both the information and the tastes of numerous people, producing judgments that incorporate more material than could possibly be assembled by any central planner, even one who insists on deliberation with and among experts . . . their aggregate judgments are likely to be right . . . .").

[21] Tom Lauricella & Jenny Strasburg, *SEC Probes Cancelled Trades: Regulators Looking Into Role "Quote Stuffing" May Have Played in Flash Crash*, WALL ST. J., Sept. 2, 2010, at A1 (defining "quote stuffing" as "trading in which unusually large numbers of orders to buy or sell stocks are placed in a fraction of a second, only to be canceled almost immediately.").

cannot fend for themselves and protect themselves against the conflicting interests of brokers, or if their cost of protection against abuse of entrustment is higher than the efficiencies for the brokers, etc., then the law should interfere and even induce the dismantling of the efficient "business model."

In sum, brokers, etc. and their various actors are fiduciaries regardless of their clients' nature. Brokers are subject to the duty of loyalty—to avoid conflicts of interest—unless clients receive full disclosure and give full and knowledgeable consent. Members of brokers, etc. are fiduciaries depending on their functions and their conflicting interests. Their clients—individuals or institutions—ought to know the details of these conflicts. In many cases, however, disclosure is not sufficient and clients' consent in ineffective. Therefore, there should be a list of conflicts which are not subject to clients' waivers. They should be prohibited without exceptions. Alternatively, the Commission or its staff, rather than the client, could render consent upon request.

V. The Main Issue: Enforcement. Who Will Write the Rules? Who Will Enforce the Rules and How?

Three crucial issues are involved regarding enforcement: (1) Would the Commission write the rules or would FINRA continue to write the rules subject to the Commission's supervision?; (2) will the Commission's rules and FINRA rules preempt fiduciary laws under state laws?; and (3) how should the current enforcement systems of brokers and advisers be unified?

A. Who Would Write the Rules and How Should the Rules Be Structured?

Under the current system, FINRA writes the rules and the Commission approves them. Congressional directives seem to suggest that the Commission should write the rules. This is a most important difference. The Commission could use this opportunity to impose fiduciary duties on brokers, etc.—who are also dealers, advisers, the creators of securitized financial assets, underwriters, organizers of auction notes and dark exchanges and investment bankers. The regulation of such actors is not difficult in principle: They should be required to disclose their conflicts to sophisticated clients and avoid such conflicts or seek the Commission's consent for retail clients. Then these brokers, etc. can continue their business

as usual. But if they do not disclose all conflicts, and if they do not make sure that the clients (retail and otherwise) understand these conflicts and not only the proposed investments, they should be liable under the securities acts for fraud. In addition, they should be liable, as all fiduciaries are, to pay punitive damages, account for their ill-gotten profits and be subject to injunctions.

The Commission's rules can take two forms. The rules can be very general, in which case the judging authorities would be required to apply these general rules to the specific cases. The decision making power will then be split between the Commission and the judges or arbitrators that interpret the rules. In the case of groundbreaking new rules, parties may be concerned with this shift in the decision making power. To avoid this result, perhaps the rules' interpretations can be expressed as staff no-action letters or interpretative letters approved by the Commission. However, the process of "filling in the more detailed substance of a rule" is fraught with difficulties Actors should know the details of the law and press for guidelines.

Alternatively, the Commission can follow a legislation structure, which has applied for many years under the Investment Company Act of 1940 ("Investment Company Act"). The rules can establish highly restrictive mode of behavior, similar to that of the Investment Company Act, which is tremendously detailed. In that case, the Commission should have authority to exempt with various conditions both the actors and their required activities. The exemption process can emulate that of the Investment Company Act. This system is valuable both to allow brokers, etc. to expand their activities, subject to the Commission's exemptions or staff no-action letters and to limit at the same time activities which are not to be permitted in light of congressional mandate and the lessons of the past years' disasters.

Finally, brokers, etc. should not be allowed to trade on non-public information that they gleaned from any of their clients, regardless of the capacity in which they served. This rule exists on the books today and the Commission is pursuing enforcements. Nevertheless, I thought this should be mentioned.

Remedies. Rules without remedies are dead letter law. The Advisers Act contains many remedies, and the Commission can resort to them. One particularly effective remedy, because to some extent it is self-executing, is the principle of "skin in the game." Brokers, etc. are not guarantors. Nevertheless, they gain upon the completion of the transaction, while investors can sustain enormous

losses later on. Therefore, brokers, etc. should collect their benefits after a "cooling period." One example of this approach was adopted in section 27 of the Investment Company Act. It was quite successful and effective. That section required brokers who sold mutual fund shares in installments to wait for their commissions until the investors covered not only the brokers' commissions but also continued payment for some time. Brokers were then interested in selling these mutual funds only to people who[m], they believed, could afford to pay the installments. That, in fact, reduced the brokers' ardor to sell to persons who could not afford the price of the shares. A similar rule should not be imposed on brokers, etc. Let brokers, etc. invest a small percentage—say 2%—in whatever they sell to customers. That would be evidence that they "put their money where their mouth is." They should be permitted to cash these amounts after a period of time, say, a year.

B. Preemption

The Securities Exchange Act of 1934 preserves state law on the subject matter and does not preempt state fiduciary law claims.[22] However, a number of state courts have declared that their state laws have been preempted by the federal securities acts, including FINRA rules, because they were established under the Securities Exchange Act of 1934. Once State courts have determined that state laws were preempted, they do not seek to enforce federal laws. For example, the Supreme Court of New York held that the SEC was the "appropriate regulatory agency" for the national securities exchange and its members. The legislative history suggested that Congress intended to preempt state interference with a self-regulating organization's regulatory functions through implementing regulations of the SEC. The Exchange Act established a scheme of regulation of the securities marketplace that combined self-regulation by the securities exchanges with oversight and direct regulation by the SEC. Accordingly, to allow appellee's claims against the national securities exchange arising out of its disciplinary functions would clearly

[22] Papic v. Burke, 965 A.2d 633, 642 (Conn. App. Ct. 2009) (stating that "no language in the Securities Act" of 1933 or the Securities and Exchange Commission's "Regulation D" preempted Connecticut State law, *§ 36b-4(a)). See* 15 U.S.C. §78bb(a) (2006) (providing that generally "the rights and remedies provided by [the Act] shall be in addition to any and all other rights and remedies that may exist at law or in equity.").

"stan[d] as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress," which was "essentially to encourage stringent self-regulation of the securities industry."[23] It is interesting that the court did not note the specific section in the Securities Exchange Act, which expressly preserved state law, but rather implied congressional intent from the legislative history.

Similarly, the Supreme Court of Minnesota held that Minnesota state law regarding agency and statutory consumer protection provisions were impliedly preempted by the Commission's rules when applied to broker.[24] The NASD (now FINRA) code was held to have preempted California state law.[25] In these cases the plaintiffs could not resort to state laws as well as to state courts.

If the Commission enacted a rule imposing fiduciary duties on brokers, would the rule preempt state law and state courts protection of clients unless otherwise expressly provided by the rules? Would the Commission-approved FINRA rules preempt not only state laws but also their state enforcement? The greatest care should be taken to assure that the imposition of fiduciary duties on brokers, etc. directly or by eliminating the exemptions of the brokers from the provisions of the Advisers Act or by creating a new enforcement method for brokers, etc. does not weaken or eliminate States' enforcement of fiduciary law.

C. Unification of the Enforcement System

The main issue concerning brokers, etc. is not whether they are fiduciaries; they are and always were. The crucial issue is how their duties will be enforced. The Commission has an opportunity to break through the wall of weak enforcement to a true and effective enforcement of brokers, etc.'s fiduciary duties.

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[23] Bantum v. Am. Stock Exch., LLC, 7 A.D.3d 551, 553-53 (N.Y. App. Div. 2004).

[24] Dahl v. Charles Schwab & Co., Inc., 545 N.W.2d 918, 920-21 (Minn. 1996) (concluding that "the SEC rules impliedly preempt the application of Minnesota's common law of agency and statutory consumer protection provisions.").

[25] Jevine v. Super. Ct. of Los Angeles, 111 P.3d 954, 965 (Cal. 2005) ("SEC approval will have preemptive effect if the SEC intended that the rule prevail over conflicting state law and if the SEC's decision was not arbitrary or in excess of its statutory authority.").

I assume that unification of an enforcement system means that the duties of all brokers, etc. will be enforced in the same way, subject to the same type of "judge and jury." Currently, there are two entities that regulate broker dealers: FINRA and Commission as its supervisor. There are two entities that regulate advisers: The Commission and the States (over advisers that advise small amounts). Would brokers and advisers be subject to the advisers' regime or would advisers over $25 million, currently regulated by the states, be subjected to the brokers' regime? I consider these issues to be the most serious issues as compared to any of the topics discussed.

VI. Who should be the enforcer?

Arbitration. One possible enforcement unification mechanism will lock all claims against brokers, etc. into a unified enforcement by arbitration. Public policy favors arbitration as a desirable form of dispute resolution. But in order to render it the only form of dispute resolution, one should be careful to make it an effective one. Otherwise the law would be meaningless.

One possibility is to establish an independent organization that would manage arbitrations of investors and brokers, etc., including class actions and other procedures determined by the Commission and let state laws fiduciary duties continue to be applied. Federal courts are likely to continue playing the current role and, since the Commission's rules will not be open to private rights of action, the federal courts will have a small part in the enforcement. Time will tell whether this enforcement mechanism is effective.

But regardless of who manages the arbitration, that regime must be truly effective. There are three conditions that would strengthen the arbitration process and render it trustworthy. First, allow class actions. Right now there are no class actions in arbitration under the FINRA system. That is likely to allow brokers, etc. to recruit expensive legal talent that some plaintiffs who assert small claims (the ones that Congress seems to be concerned about most) cannot. Therefore, any arbitration system, no matter who manages it, must include the plaintiff's right to a class action, excluding frivolous claims.

Second, publicize the arbitrators' decision and their rationale. For arbitrations to obtain a semblance of law, the decisions and rationales of the arbitrators must be publicized in an accessible form. Note that Commission's staff no-action letters have acquired a measure of precedent. Implied is the assumption that an arbitrary

deviation from a previous reasoning would not be approved by a higher authority, whether a court or congress.

Last, prohibit retroactive avoidance of existing decisions as precedents except in very special cases accompanied by good explanations. One reason for the added authority of no-action letters is the Commission's announced policy that it will not overrule the staff's no-action letters retrospectively. A similar rule that provides a semblance of a precedent should apply.

Arbitrations governing issues concerning brokers, etc.'s fiduciary duties towards their clients should comply with these three conditions.

VII. Change the attitude.

We should recognize that the year 2010 was fundamentally different from the 1930s and 1940s. The time has come to cease educating investors and instead educate brokers, registered representatives and large investment banks. They must be educated about fiduciary law and conflicts of interest and their own accountability to the country and the financial system.

A new segment in the broker-dealers examinations should be designed to teach future brokers, etc. not only what the law is and what the consequences of breaking the law could be. Brokers, etc. must be repeatedly taught that the money they hold does not belong to them and that their advice must be for the sole benefit of their clients. Brokers, etc. may disclose their conflicts to their clients by telling the clients the truth, the whole truth and nothing but the truth and ask whether the clients would follow their advice after this disclosure. In addition, and just as important, those who serve in truly diversified brokers, etc. should take a special exam that would teach them what fiduciary law is and what their role as fiduciaries in their organizations as well as the remedies for violations of these duties could be.[26]

[26] Jim Ware, *The Challenge of Ethical Leadership*, CFA MAGAZINE, July-Aug.2009, at 10 (acknowledging that "investment leaders are far too modest about their ability to make a difference in the ethical arena" and that "[l]eaders must realize their importance in providing a solution to the ethical dilemma").

VIII. Conclusion

Legal research would easily classify brokers, etc. as fiduciaries, even when they invest their own money in ventures such as dealerships. Like every type of expert fiduciary, these intermediaries have far more information and knowledge than most of their clients. Financial assets are sufficiently complex to require commitment to expertise. Therefore, regardless of the particular aspect of their service and "business model" which includes numerous activities, brokers, etc. are fiduciaries, no different from lawyers and physicians and far closer to trustees who hold other people's money and affect other people's financial fortunes.

Few beneficiaries can control their trustees. Few investors can truly understand their brokers, etc. and explore how the investors' money is used. Moreover, brokers, etc. have become the creators of financial assets as well, thus leaving investors nothing to check by real assets (such as a business or manufacturing issuer). No investor, not even the most sophisticated one can truly evaluate any of these financial assets, and especially the documents that shift not merely promises to pay on a specific date but documents to pay if the other obligor have failed to pay.

Therefore the contract model with which we tinkered for sixty years should be eliminated. The burden can no longer be imposed on investors but must be differently balanced. Brokers, etc. have been affecting the financial system and the lives of too many millions for too long. The time has come to impose on them a duty to their customers and to the country. To be sure, others have contributed to the plight of us all. And each of us must bear the burden of correction. Brokers, dealers, underwriters, advisers and financial managers as well as institutional traders must bear their burden. Fiduciary law, in existence today, is the appropriate and tested tool. If agents, money managers, advisers, lawyers, doctors, teachers and corporate managements have lived well under this legal regime, there is no reason for financial intermediaries to live outside it, especially if they pretend to be part of the fiduciaries' group.

Brokers, etc. should understand that they hold other people's money, and can affect our financial and economic systems. They must exercise self-restraint as fiduciaries, rather than as contract

parties.[27] What requires the most fundamental change is the culture of the financial intermediaries. What can bring it about is of course their leadership.[28] But leadership can be helped in this mission by the law which would require them to match their purported behavior as trusted institutions with their real behavior as truly trusted institutions. The Securities and Exchange Commission's rules, its clear aim and its enforcement can introduce and induce this culture and strengthen it.

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[27] *Id.* at 12 (stating that "[p]eople tend to view ethical conflicts as aberrations—distractions from 'real'work", but asserting that ethical conduct is part of the "job").

[28] See JOHN C. BOGLE, ENOUGH. TRUE MEASURES OF MONEY, BUSINESS, AND LIFE 159 (John Wiley & Sons, Inc. 2009) (observing that most of the larger corporations are "overmanaged but underled" and it is accurate "not only with respect to our nation's businesses, but to our financial institutions as well.").

STRENGTHEN DISCLOSURES BY LIMITING THEIR ROLE IN THE DELIVERY OF INVESTMENT AND FINANCIAL ADVICE

KNUT ROSTAD*

I. Introduction

The word *fiduciary* comes from Latin and means *trust.* The heart of fiduciary duties for investment advisers entails acting with undivided loyalty, in good faith, with due care, absent conflicts of interest and with prudence. Fulfilling these duties necessarily presumes complete transparency. Herein the role of disclosures becomes central.

The importance of disclosures is routinely placed in the context of "educating" investors so that they may make "informed" decisions, much as citizens are advised to become informed about the different candidates at election time. There is no question that our political and economic free market system depends on informed consumers and citizens.

Yet, choosing a candidate or buying a car is, in important respects, more different than similar to managing a retirement portfolio. Despite the longstanding emphasis on disclosures, evidence abounds that many retail investors are not well-informed investors, and behavioral biases have been shown to negate the effectiveness of disclosures. Investors' clearly demonstrated limitations in fulfilling their responsibilities as consumers of investment products and advice must drive how disclosures are used.

Consequently, an overarching issue today is identifying the parameters within which disclosures are effective means of investor protection. It is recognizing circumstances when disclosures are clearly not effective. It is, first and foremost, recognizing investors' limitations. In situations when a conflict is present and the client clearly appears to not understand the conflict and its ramifications, by definition, there can be no informed and independent consent. In such situations, disclosures are ineffective and should have no role. As such, the key challenge for policymakers is to both improve disclosures when they can be effective, and, at the same time, limit their role when they are ineffective.

Recognizing investors' limitations is consistent with a point made by Securities and Exchange Commission ("SEC") Commissioner Elisse Walter in her discussion of a harmonized fiduciary standard. In May 2009, the Commissioner explained her rationale, in

part, for supporting a harmonized fiduciary standard by making this observation:

> When your Aunt Millie walks into her local financial professional to ask for advice, she does not need to know whether the person on the other side of the table is a registered representative of a broker-dealer or an investment adviser. She should not be placed at risk by the fact that application of those labels may lead to differing levels—or at least different kinds—of protection. Instead, she should know, or be able to assume—consciously or subconsciously—that regardless of the title held by the person sitting across the desk from her, she will receive an appropriate and comparable level of protection.[1]

This point underscores the broader need to acknowledge investors' limitations, and to apply the fiduciary standard consistent with these limitations.

II. Background: The Role of Disclosures in 2010 and the View from FINRA

Disclosures are widely seen as the foundation of securities regulation. As SEC Commissioner Troy Paredes noted in his article, "Blinded by the Light", "a demanding system of mandatory disclosure, which has become more demanding in the aftermath of the Sarbanes-Oxley Act of 2002, makes up the core of the federal securities laws."[2]

Disclosures today, in the aftermath of the financial crisis, seem to be relied on more than ever in ensuring market transparency.

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[1] Elisse B. Walter, Comm'r, Sec. Exch. Comm'n, Regulating Broker-Dealers and Investment Advisers: Demarcation or Harmonization?, Address at the Mutual Fund Directors Forum Ninth Annual Policy Conference (May 5, 2009), http://www.sec.gov/news/speech/2009/spch050509ebw.htm.

[2] Troy A. Paredes, *Blinded by the Light: Information Overload and its Consequences for Securities Regulation*, 81 WASH. U. L. Q. 417, 417-18 (2003). This article was published in 2003, before Professor Paredes became an SEC Commissioner.

Former SEC Chairman Arthur Levitt told Congress, quite simply, "we need to dedicate ourselves to a decade of transparency."[3] Chairman Schapiro has focused on the importance of robust disclosures in restoring investor trust, stating that "investors must know that the information upon which they base their investment decisions is the truth, the whole truth and nothing but the truth."[4]

CEO of the Financial Industry Regulatory Authority ("FINRA"), Richard Ketchum, has also underscored the importance of disclosures for brokers moving from operating under the suitability to the fiduciary standard: "There also should be no question that this will involve real change. There is an important cultural change from shifting the question from is a product 'suitable' or 'ok' to is it 'in the best interest of the customer.'"[5] Ketchum noted that, while account opening disclosures have improved in recent years, this process has not been easy; rather, "[t]he process has been painful, involving lengthy debates and often enforcement actions as conflict by conflict has been identified and resulted in improper selling practices." Ketchum further noted that the industry should make sure "your customers understand any conflicts that may impact the recommendation as well as the worst case risks of the product . . . [as the] risk that an investment may not be 'in the best interests of the customer' can only be increased if he or she doesn't fully understand each of these facts."[6]

The acknowledged challenges in improving "account opening" disclosures, premised on a "buyer beware" principle, are important, but they understate the nature of the challenge in transforming from a sales to a fiduciary environment.[7] The rationale for disclosures in a sales environment is based on the customer being ultimately responsibility for the transaction. The rationale of

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[3] Arthur Levitt, Jr., Chairman, Sec. Exch. Comm'n, Testimony before the Senate Banking Committee (October 15, 2008), http://banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=7480cab6-cfb7-473a-a741-457ac59e3747.

[4] Mary L. Schapiro, Chairman, Sec. Exch. Comm'n, Speech by SEC Chairman: Building a Stable and Efficient Financial System (May 8, 2009), http://www.sec.gov/news/speech/2009/spch050809mls.htm.

[5] Richard Ketchum, Chairman and CEO, FINRA, Securities Industry and Financial Markets Association (SIFMA) Annual Meeting (Oct. 27, 2009), http://www.finra.org/Newsroom/Speeches/Ketchum/P120289.

[6] *Id.*

[7] The parallels between FINRA disclosure rules and commercial sales rules are evident. See Appendix A, *infra*.

disclosures in a fiduciary relationship must be based on the advisor holding ultimate responsibility for his or her recommendation.

III. Investor Knowledge and Understanding of Investing, Mutual Funds and Financial Advisors

Commissioner Paredes concluded his article, "Blinded by the Light" by stating that, "securities regulation needs to focus to a greater extent on the user of information . . . . [R]egulators and policy makers need to focus on how users process information and make decisions."[8]

The SEC's 2008 Rand Report, "Investor and Industry Perspectives on Investment Advisers and Broker Dealers," is widely cited for revealing that investors are unaware of the basic different legal requirements of brokers and registered investment advisers, that many investors presume their interests are put first and that some investors do not even believe that they pay for financial advice.[9] Moreover, the report found that "many survey respondents and focus group participants do not understand key distinctions between investment advisers and broker-dealers—their duties, the titles they use, the firms for which they work, or the services they offer."[10] Rand also reports that investors are generally satisfied with the services they receive, and "[t]his satisfaction was often reported to arise from the personal attention the investor receives." Regarding investment expenses, "[s]urvey responses also indicate[d] confusion about fees."[11]

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[8] Paredes, *supra* note 2, at 485.

[9] Angela A. Hung ET AL., *Investor and Industry Perspectives on Investment Advisers and Broker-Dealers*, 2008 LRN-RAND INST. FOR CIV. JUST. 212 ("Responses to the questions on methods of payment suggest that many respondents are confused about the methods of payment or the type of firm with which their individual professional is associated. For example, 84 respondents indicated that they receive advisory services (either alone or in conjunction with brokerage services) from an investment advisory firm that is not also a brokerage firm. Of these respondents, 19 percent reported that they pay for these advisory services based on a percentage fee, and 22 percent indicated that they pay commission for advisory services.").

[10] *Id.* at 112.

[11] *Id.* at 113. These widely reported and discussed findings regarding investors' lack of understanding of differences between brokers and investment advisers and confusion about adviser fees are serious indictments of either investors or the regulatory regimes—or both. However, they may also

In the context of the confusion about financial advisors reported by Rand, academic research suggesting that many investors are unaware of the fundamentals of mutual funds may not be surprising. Mutual fund investors and investors using financial advisors overlap significantly. Investment Company Institute research reveals that financial advisors are the most common source of information for mutual fund investors, used by 73% of surveyed investors.[12]
Researchers Palmiter and Taha surveyed the academic research and concluded, simply, that, "investors are ignorant of basic fund characteristics."[13] This lack of knowledge about the funds they own often includes their asset classes, objectives and basic fund costs and operating expenses. In fact, according to these researchers, "overall, studies of the actual knowledge and behavior of investors show that fund fees and expenses matter little to many investors."[14] Interestingly, Palmiter and Taha point out that academic literature frequently contrasts with financial industry perspectives, whereas the fund industry "portrays fund investors as making informed decisions" and the SEC portrays fund investors as "needing only to be reminded to pay appropriate attention to important fund characteristics . . . ."[15]

More recently, the Envestnet Fiduciary Standards Study[16] has served to reinforce concerns about investors' understanding of advisors and brokers. The report characterizes investors as being

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understate the extent that investors are disengaged from their financial services broker or advisor. Investor disengagement may be more fully appreciated from another Rand finding: 25% of the survey respondents who reported using a financial service provider also report that they paid "$0" for advisory or brokerage services. *Id.* at 96-97. That one in four investors claim to believe their advisory or brokerage services are given to them free of charge suggests there may be a larger issue here than investor confusion.

[12] Sandra West & Victoria Leonard-Chambers, *Understanding Investor Preferences for Mutual Fund Information*, 2006 INV. CO. INST. 6 (noting that "[s]hareholders rely heavily on professional financial advisers when making mutual fund investment decisions.").

[13] Alan R. Palmiter & Ahmed E. Taha, *Mutual Fund Investors: Divergent Profiles*, 2008 COLUM. BUS. L. REV. 934, 975 (2008).

[14] *Id.* at 980.

[15] *Id.* at 974-75.

[16] THE FIDUCIARY OPPORTUNITY: SUCCEEDING IN A CHANGING ADVISORY LANDSCAPE 1 (2010), *available at* http://www.envestnetadvisor.com/marketingsupport/pdfs/ENV_fiduciary_whitepaper.pdf.

confused about brokers' and advisors' roles and obligations.[17] Of particular note regarding investors' knowledge of investment expenses and broker or advisor compensation, only 15% of investors state they can "very well" "assess how your advisor gets paid."[18] It would be a mistake to shrug off this new research as inconsequential simply because it is consistent with other research pointing out general investor confusion. This research offers new insight into the implications of this confusion and a more fundamental view of investor disengagement. It should be viewed in a broader context, and raises questions in relation to how these very same investors might respond to this same question regarding their accountant, lawyer or medical doctor. In this study, only 15% of investors appear to reply very confidently that they understand how (and by implication "what") their broker or advisor is paid. How would these investors reply about their other professional advisors? Would 85% also reply they do not know "very well" how their lawyer, for example, is paid, or what he or she is paid? This finding, by itself, should be a red flag for the profession and regulators alike.

This assessment that investors have a limited understanding of investing and the importance of expenses is not a new insight. In the 1995 "Report of the Committee on Compensation Practices" (a.k.a. The Tully Report, for its Chairman, Daniel B. Tully),[19] this same issue was raised. Most notably, the report illuminates the significance of investors' lack of knowledge of investment products and confusion derived from misunderstanding what's written in prospectuses. The report states that registered representatives and their clients are:

> [S]eparated by a wide gap of knowledge—knowledge of the technical and financial aspects of investing. The pace of product innovation in the securities industry has only widened this gap. It is a rare client who truly understands the risks and market behaviors of his or her investments, and the

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[17] *Id.* at 1 (finding that" less than one third of investors understand how/when [a fiduciary standard] applies.").

[18] *Id.* at 5 tbl. (finding that 39% of investors stated that they could understand how their investment advisors were made "well" while 53% of investors responded "not too well," "not well at all," or "don't know").

[19] REPORT OF THE COMMITTEE ON COMPENSATION PRACTICE 1 (1995), http://www.sec.gov/news/studies/bkrcomp.txt.

> language of prospectuses intended to communicate those understandings is impenetrable to many.
>
> This knowledge gap represents a potential source of client abuse, since uninformed investors have no basis for evaluating the merits of the advice they are given. It also makes communication between a registered representative and investor difficult and puts too much responsibility for decision-making on the shoulders of RRs—a responsibility that belongs with the investor.[20]

In short, two overriding, and arguably conflicting, themes stand out. The first theme is the importance of improving disclosures. Analyses of the financial crisis point to a significant need for greater transparency within the financial system, a goal that can be accomplished, arguably, by improving disclosures. The second theme, on the other hand, raises serious questions as to whether disclosures are effective. Academic research, the Rand Report and the Tully Report underscore investors' limited understanding of investing and advisors, and Commissioner Paredes has underscored the need for regulators to focus on how investors process such disclosures.

IV. Loyalty and the General Fiduciary Duty to Disclose

Loyalty is the cornerstone of the fiduciary duty. In affirming that fiduciary DNA is in the Adviser's Act of 1940, the Supreme Court has focused on the legislative history, as captured in the Congressional record.[21] According to the Supreme Court, the Congressional record reveals the sense of urgency of policymakers in the 1930s, seeking to restore the "highest ethical standards . . . in every facet of the securities industry."[22] The fiduciary vision of Congress for the investment advisory profession was clear and present in the view of the Court, noting the Act "'reflects a congressional recognition of the delicate fiduciary nature of an investment advisory relationship,' as well as a congressional intent to eliminate, or at least to expose, all conflicts of interest which might

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[20] *Id.* at 15.

[21] SEC v. Capital Gains Research Bureau Inc., 375 U. S. 180, 186-87 (1963).

[22] *Id.*

incline an investment adviser—consciously or unconsciously—to render advice which was not disinterested."[23]

The Court further stated that "guiding principles" of fiduciary law included the following: (1) compensation should only include "'direct charges to clients for services rendered;'" and (2) an adviser should not "'directly or indirectly engage in any activity which may jeopardize his ability to render unbiased investment advice.'"[24] The president of the predecessor organization of the Investment Adviser Association opined that advisers should only engage in "the study of investment problems from the investor's standpoint, not engaging in any other activity, such as security selling or brokerage, which might directly or indirectly bias their investment judgment . . . ."[25]

Today, three broad prohibitions are entailed in the duty of loyalty. The fiduciary must not place his interests in conflict with his client's, gain profit at the expense of his client, or pit the interests of one client against another client.[26] Disclosure obligations derive from the duty of loyalty. The starting point is disclosing any and all *material* facts, (a fact that may reasonably be expected to alter the client's actions) in a timely manner. This responsibility includes not misleading clients and proactively volunteering information consistent with general good faith duties.

The record underscores that Congress stressed restoring the "highest ethical standards" to Wall Street, and the Supreme Court later affirmed Congressional intent to confer fiduciary status to investment advisers in the Advisers Act of 1940. The duty of loyalty

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[23] *Id.* at 191-92 (quoting 2 LOUIS LOSS ET AL., SECURITIES REGULATION 1423 (2d ed. 1961)).

[24] *Id.* at 188-89 (quoting Report of the Securities and Exchange Commission, Pursuant to Section 30 of the Public Utility Holding Company Act of 1935, on Investment Counsel, Investment Management, Investment Supervisory, and Investment Advisory Services, H. R. Doc. No. 477, at 29, 65).

[25] Ron A. Rhoades, *The Fiduciary Duty of Loyalty* (unpublished) (on file with author).

[26] *Id.; See also* Birnhaum v. Birnhaum, 503 N.Y.S.2d 451, 456 (N.Y. 1986) (noting that "[o]ne of the most stringent precepts in the law is that a fiduciary shall not engage in self-dealing and when he is so charged, his actions will be scrutinized most carefully. When a fiduciary engages in self-dealing, there is inevitably a conflict of interest: as fiduciary he is bound to secure the greatest advance for the beneficiaries; yet to do so might work to his personal disadvantage").

is central to fiduciary practices. Disclosures, starting with material facts, are part of being loyal.

V. Disclosing and Managing Conflicts

Disclosures take on greater importance when conflicts are present. Conflicts, where an adviser's interest competes with interests of a client, are always considered to be material. "In the context of conflicts of interests which may exist between the fiduciary and the client, the purpose of full and affirmative disclosure of material facts . . . is always to obtain the client's informed consent to proceeding with a recommendation or transaction."[27] It is presumed a client will only give "informed consent" if the adviser manages the conflict in the client's best interest in executing the recommendation or transaction. Otherwise, the transaction would be considered a gratuitous gift from the client to the adviser. The courts have held such a transaction as presumptively void. As such, the responsibility on the adviser is substantial.

This responsibility requires greater care than what might be considered "standard" disclosure and customer acknowledgement procedures common in many sales transactions. The initialing of the sales agreement on a cell phone plan, or signing numerous pages in an auto sales transaction are such familiar sales examples. Further, the brokerage industry, in the views expressed by FINRA's CEO, Richard Ketchum, has traveled a long road in improving disclosures. Still, the journey is not complete. Ketchum further notes that this task, imposing a fiduciary standard on broker-dealers, will likely be even more challenging.[28] He says, "harmonizing" the brokerage

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[27] RON A. RHODES, RIA'S AND FINANCIAL PLANNERS 52-53 (Unpublished manuscript) (on file with author).

[28] Ketchum, *supra* note 5:

> As we look for ways to achieve harmonization, we should start with a commitment that the standard is "business model neutral" and focus on the basic shift that each recommendation must be in the "best interest of the customer." While I believe all present business models can thrive in a properly designed customer-facing fiduciary standard, there also should be no question that this will involve real change. There is an important cultural change from shifting the question from is a product "suitable" or "ok" to is it "in the best interests of the customer." While it will be up to the SEC to design the

standard into the fiduciary standard will not be easy for the brokerage industry.[29] It will "involve real change", as there is "an important cultural change" in shifting from asking the question, "is a product suitable" to "is it in 'the best interest of the consumer.'"[30]

In addition to affirmatively disclosing all material facts, client understanding of the transaction and its ramifications must be "ensured," and intelligent and informed client consent obtained. Further, the transaction must also be deemed to remain "substantively fair" for the client. Professor Tamar Frankel elaborates on the critical importance of the client's capacity to provide consent that is "informed" and "independent":

> Fiduciary rules cannot be avoided if the entrustors (clients) are incapable of independent and informed consent. The entrustors' consent is subject to a number of conditions. The fiduciaries must disclose the details of the proposed transactions to the client-entrustors. The information should enable the entrustors to protect themselves in the bargain and deal with their fiduciaries…. Clients' consents may be more doubtful and would require more evidence of entrustors' independence when the fiduciaries are experts, and the non-expert entrustors are unlikely to form informed and rational decisions.[31]

The identification of material conflicts significantly raises the burden on advisors. The burden requires more than clearly communicating material facts. When conflicts are identified advisors are required to reasonably ensure that investors understand the implications of the conflict, including how the conflict may harm them. Also, investors must understand how the advisor can mitigate this harm by managing the conflict. Further, once the conflict is

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> precise parameters of the standard, it's worth taking a moment to discuss what you as senior management should be focusing on now.

[29] Ketchum, *supra* note 5.
[30] Ketchum, *supra* note 5.
[31] Tamar Frankel, *Fiduciary Duties of Broker-Advisers-Financial Planners and Money Managers* 6-7 (Boston Univ. Sch. of Law Working Paper No. 09-36, 2010), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1446750.

managed, investors must also provide informed and independent consent in writing. Finally, even with fully informed consent, the advisor must still be able to demonstrate that the transaction was fairly and reasonably in the client's best interest. Clearly, fulfilling this responsibility is at the heart of putting the investor's interest ahead of the advisor's interest.[32]

VI. Conclusion

Chairman Schapiro noted in June 2009, as she made her case for extending the fiduciary duty, that the laws governing the regulatory framework were written in 1934 and 1940. [33] She then said: "It is time the regulatory regime for financial service providers reflects 21st century realities."[34]

One such 21st century reality is the increasing complexity of the financial markets and the significant evidence that many retail investors possess a very limited understanding of investing, the role of their broker or advisor and the importance of investment expenses to investment performance. This seeming burgeoning disparity of

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[32] The record suggests there is a basis to question how well many retail investors understand their own investments, the role of their advisor and the implications of higher (versus lower) expenses. The level of investor mis-understandings revealed in the Rand Report and the Palmiter and Taha article, for example, are affirmed, as a matter of fact, by the industry in the Tully Report. The implications of this record, and what it means for investor protection and additional considerations required to advise clients with a limited understanding of investing are significant. A parallel situation is the increasing attention of regulators on the particular challenges of serving senior investors. In 2008, SEC, NASAA and FINRA staff collaborated on a report summarizing how securities professionals are serving this large and growing demographic group. *See* SEC. EXCH. COMM'N ET AL., PROTECTING SENIOR INVESTORS: COMPLIANCE, SUPERVISORY AND OTHER PRACTICES USED BY FINANCIAL SERVICES FIRMS IN SERVING SENIOR INVESTORS 7 (2008). The thinking and concerns that form the basis of this report—the implications for firms serving investors with "diminished mental capacity" —might well be applied to a wider group of investors. The report makes an important observation in noting, "Securities professionals cannot take advantage of investors in a manner that would violate an advisor's fiduciary duty". *Id.* at 7.

[33] Mary L. Schapiro, Chairman, U.S. Sec. Exch. Comm'n, Address before the New York Financial Writers' Association Annual Awards Dinner (June 18, 2009).

[34] *Id.*

knowledge between the broker or advisor and client raises fundamental questions as to the role of disclosures consistent with responsibilities inherent in a fiduciary relationship.

While there should be appropriate efforts to improve disclosures, as discussed above, there should be no confusion about whether improving disclosures to seek greater investor understanding is tantamount to fulfilling the advisor or broker's fiduciary duty. It is not. Not only are improved disclosures insufficient to meeting fiduciary requirements, more importantly, they may also be fundamentally independent of whether fiduciary requirements have been met. Fiduciary duty is premised on the advisor being responsible (as opposed to the client being responsible) for his or her advice or product recommendations he or she deems to be in the client's best interests. Disclosures are independent of this determination.

Against this backdrop of the widely acknowledged limitations of investors, a backdrop that parallels the point made by Commissioner Walter, in part of her reasoning (noted above) for supporting a harmonized standard, there should be efforts to more clearly redefine disclosures' role in a fiduciary relationship. At minimum, disclosures should be only used in circumstances where independent research indicates disclosures effectively communicate the required information and enhance investor protection. Making this assessment is vital to ensure that communications between advisors or brokers and clients are effective. To not make this assessment in light of this 21st century reality may well be to overlook one of the single most powerful factors determining the effectiveness—or ineffectiveness—of broker and investment adviser regulation.

Appendix

Disclosures: The Commercial Standard for Determining Communications That Are "Fair" and Not "Deceptive."

The commercial standard for determining whether business communications, advertising or disclosures are fair to consumers is well established in the regulatory framework and rules promulgated by the Federal Trade Commission ("FTC"). FTC policy on deceptive practices or communications was articulated in a letter from the FTC Chairman in1983.[35]

Three key factors are considered central to all determinations of deceptive or misleading communications. The communication or practice must be: 1) "likely to mislead the consumer"; 2) "from the perspective of a consumer acting reasonably in the circumstances;" and 3) "material."[36] For example, some of the practices that have been found "misleading or deceptive in specific cases include false oral or written representations, [and] misleading price claims. . . ."[37]

More recently, the FTC supplemented some of its interpretive guidance in the Telemarketing Sales Rule in 2003. [38] In part, this Rule states that prohibited practices include: "Misrepresenting, directly or by implication, in the sale of goods or services any of the following material information: (i) The total cost to purchase, receive, or use . . . any goods or services that are the subject of a sales offer; . . . [(ii)] "[a]ny material aspect of the performance, efficacy, nature, or central characteristics of goods or services that are the subject of a sales offer; . . . [and (iii)] [a]ny material aspect of an investment opportunity including, but not limited to, risk, liquidity, earnings potential, or profitability . . . .[39]

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[35] Letter from FTC to John D. Dingell, Chairman, Comm. on Energy and Commerce, U.S. House of Reps. (Oct 14, 1983), http://www.ftc.gov/bcp/policystmt/ad-decept.htm (noting that "the Commission will find deception if there is representation, omission or practice that is likely to mislead the consumer acting reasonably in the circumstances, to the consumer's detriment").
[36] *Id.* at 1-2.
[37] *Id.* at 1.
[38] Part 310—Telemarketing Sales Rule, 68 Fed. Reg. 4669 (Jan. 29, 2003) (to be codified at 16 C.F.R. part 310).
[39] *Id.* at 4670-71.

FINRA Guidelines to Ensure that Communications with the Public Are Not Misleading

FINRA guidance regarding general communications is in Rule 2210, "Guidelines to Ensure that Communications With the Public are not Misleading."[40] In this guideline, FINRA members are advised, for example, that they "must ensure that statements are not misleading within the context in which they are made," and "member communications must be clear."[41]

The emphasis of these guidelines is aimed at oral product and sales presentations, as noted in a widely circulated article on broker and adviser standards: "Sales materials and oral presentations must present a fair and balanced picture to investors regarding both the risks and the benefits of investing in a recommended product." [42] Specific disclosures must be made based on specific regulations. Some disclosures, such as product benefits and risks, are not required to be made in writing and may be made orally. As an example, disclosures are required to be made in the following documents: research reports, sales literature, advertising and correspondence. Form BDs are not required to be provided to customers.

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[40] FINRA Manual, NASD Rule IM-2210-1, available at http://finra.complinet.com/en/display/display_main.html?rbid=2403&element_id=3618.

[41] *Id.*

[42] Thomas P. Lemke & Steven W. Stone, *The Madoff "Opportunity" Harmonizing the Overarching Standard of Care for Financial Professionals Who Give Investment Advice,* 13 WALL STREET L., 1, 6 (2009).

FIDUCIARY: A HISTORICALLY SIGNIFICANT STANDARD

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I. Introduction

In July 2010, the U.S. Securities and Exchange Commission ("SEC") began the process of conducting a study on the effectiveness of the standards of care for broker-dealers and investment advisers.[1] The results of the study are expected to lay the groundwork for potential rulemaking by the SEC related to a fiduciary standard of care for all investment advice providers, as authorized under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act").[2] As a part of this process, investment professionals and firms have engaged in a broad debate regarding appropriate standards of care for broker-dealers and investment advisers.[3] Many professionals and firms engaged in this debate,

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[1] Study Regarding Obligations of Brokers, Dealers, and Investment Advisers, Exchange Act Release No. 62,577, 75 Fed. Reg. 44,996 (July 30, 2010).

[2] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010) ("Each primary financial regulatory agency may impose . . . standards . . . with respect to those entities for which it is the primary financial regulatory agency . . . .").

[3] *See* Study Regarding Obligations of Brokers, Dealers, and Investments Advisers, *supra* note 1 at 44,996 (requesting public comment in connection with the SEC's public study to evaluate "[t]he effectiveness of existing legal or regulatory standards of care for brokers, dealers, investment advisers, and persons associated with them when providing personalized investment advice and recommendations about securities to retail customers" and whether there are "gaps, shortcomings, or overlaps in legal or regulatory standards in the protection of retail customers relating to the standards of care for these intermediaries."). As of August 30, 2010, the Commission received over 2,500 responses. *See Comments on Study Regarding*

however, have failed to recognize the historically significant status of the fiduciary standard and why promoting such a standard is central to ensuring investor protection.

The concept of serving as a fiduciary is not new. In fact, centuries of law and business illustrate the importance of the concept. This paper illustrates the timelessness of the fiduciary standard through a review of how fiduciary principles have been recognized and enforced throughout history. As will be shown, law and society have established the fiduciary standard as the essential code of conduct for those entrusted to care for the property of others.

The firmly established history of the fiduciary standard should serve as a useful guide to the SEC and other regulators when promulgating rules that codify the fiduciary standard under the federal securities laws. Moreover, this history reveals three key principles for regulators to consider as they provide guidance on the application of the fiduciary standard: (1) fiduciary matters, including advice, demand a higher standard than normal marketplace transactions, such as sales of securities; (2) exceptions to the fiduciary standard undermine the fiduciary duty of loyalty; and (3) those charged with interpreting and enforcing the fiduciary standard should not consciously weaken it.[4]

II. A Historical Standard

Under the federal securities laws, investment advisers have long been regulated as trusted advisors subject to the fiduciary standard while broker-dealers have been regulated as salespeople subject to a fair dealing standard.[5] The fair dealing standard is considered a commercial standard that arises when a broker-dealer holds itself out as willing to transact with investors.[6] By entering the

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Obligations of Brokers, Dealers, and Investment Advisers, SEC.GOV, http://www.sec.gov/comments/4-606/4-606.shtml (last visited Nov. 7, 2010).

[4] *See* Meinhard v. Salmon, 164 N.E. 545, 546 (N.Y. 1928) ("Many forms of conduct permissible. . . for those acting at arm's length, are forbidden to those bound by fiduciary ties. . . . [T]he punctilio of an honor the most sensitive, is then the standard of behavior . . . .").

[5] *See* Kristina A. Fausti, *A Fiduciary Duty for All?*, 12 DUQ. BUS. L. J. 183, 185-190 (2010).

[6] *Id.* at 187 ("Both the SEC and FINRA standards of care have long been viewed as commercial standards that reflect the role of broker-dealers as salespeople in the investment marketplace.").

investment marketplace, the broker-dealer is deemed to warrant that it will deal and transact fairly with all of its customers.[7] In contrast, the fiduciary standard has been viewed to go beyond fair dealing because of the unique nature of the relationship between an investment adviser and investor. As Professor Tamar Frankel explains, "at the heart of fiduciary relationships is *entrustment of property or power* that clients hand over to their fiduciaries in order to enable fiduciaries to perform a service to them."[8] Moreover, fiduciaries provide socially important expert services to "entrustors" that require a high level of expertise.[9]

These concepts of trust and expert service underlying fiduciary relationships have a long history within many different societies.[10] Historians have traced the roots of fiduciary principles back to the Code of Hammurabi (ca. 1790 BC) in Babylon.[11] Hammurabi established one of the first written codes of law and set forth the rules governing the behavior of agents entrusted with property, demonstrating fiduciary considerations at the very beginning of recorded legal history.[12] Like the Code of Hammurabi, most primitive law deals with the entrusting of property for safekeeping, pledges of good faith and other indicia of trust.[13]

In the Judeo-Christian tradition, fiduciary principles can be traced to both the Old and the New Testament.[14] For example, courts have linked the fiduciary duty of loyalty to the biblical principle that

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[7] *Id*. at 187-88.

[8] Tamar Frankel, *Fiduciary Duties of Brokers-Advisers-Financial Planners and Money Managers* 3 (Boston Univ. Sch. of Law Working Paper No. 09-36, 2010), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1446750.

[9] *Id.* ("Fiduciaries provide socially important expert services to 'entrustors' (and society) such as professional services (law, medicine, financial services).").

[10] *See* Blaine F. Aikin, *The Role of Fiduciaries is Timeless*, INVESTMENT NEWS, Aug. 15, 2010, http://www.investmentnews.com/ article/20100815/ REG/308159995 (citing various texts from civilizations throughout recorded history which recognize many of the principles underlying the fiduciary relationship).

[11] Joseph F. Johnston, Jr., *Natural Law and the Fiduciary Duties of Business Managers*, 8 J. MKTS & MORALITY 27, 29 (2005).

[12] *Id.*

[13] *Id.*

[14] *Id*.

no person can serve two masters.[15] Chinese historical texts also recognize fiduciary principles of trust and loyalty.[16] One of the three basic questions of self-examination attributed to Confucius (551 BC–479 BC) asks: "In acting on behalf of others, have I always been loyal to their interests?"[17] Modern Chinese law also recognizes such fiduciary concepts.[18]

Aristotle (384 BC–322 BC) consistently recognized that in economics and business, people must be bound by high obligations of loyalty, honesty and fairness and that society suffers when such obligations are not required.[19] The Romans refined and formalized fiduciary law even further. In fact, the term "fiduciary" originated in Roman law, and means "'a person holding the character of a trustee, or a character analogous of a trustee, in respect to the trust and confidence involved in it and the scrupulous good faith and candor which it requires.'"[20] Cicero (103 BC–46 BC) noted the relationship of trust between an agent and principal (known to Romans as mandatory and mandator, respectively), and emphasized that an agent who shows carelessness in his execution of trust behaves very dishonorably and "is undermining the entire basis of our social

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[15] *Id.* at 29 & n.4 (citing Pepper v. Litton, 308 U.S. 295, 311 (1939); United States v. Miss. Valley Generating Co., 364 U.S. 520, 549, 550 n.14 (1961) ("The moral principle upon which the statute is based has its foundation in the Biblical admonition that no man may serve two masters, . . . a maxim which is especially pertinent if one of the masters happens to be economic self-interest.")).

[16] Johnston, *supra* note 11, at 29 ("The ethical norms arising from relationships of trust and confidence are not limited to Western societies[;] . . . Chinese history, for example, reflects a similar fiduciary principle.").

[17] *Id.*

[18] *Id.* (citing THE GREAT QING CODE 162 (William C. Jones trans., 1994) (providing for criminal punishment for one who receives deposit of property of another and consumes such property without authority); BASIC PRINCIPLES OF CIVIL LAW IN CHINA 317, 321 (William C. Jones ed., 1989) (recognizing "contracts of entrustment" and an obligation of brokers to act "honestly, justly, in good faith, and not in a way contrary to the notion of fairness.").

[19] *See*, *e.g.*, James O'Toole, *Advice from Aristotle*, http://www.scu.edu/ethics/publications/submitted/otoole/business-ethics-aristotle.html.

[20] Ron A. Rhoades, *What are the Specific Fiduciary Duties of Financial Advisors?* Jan. 1, 2008, at 2, http://www.fiduciarynow.com/WhatAreTheSpecificFiduciaryDutiesofFinancialAdvisors.pdf (citing BLACK'S LAW DICTIONARY (5th Ed. 1979)).

system."[21] Moreover, Cicero noted that, "legal proceedings for betrayal of a commission [agency] are established, involving penalties no less disgraceful than those for theft."[22]

Fiduciary relationships have also "occupied a significant body of Anglo-American law and jurisprudence for over 250 years."[23] These fiduciary duties "originated in [courts of] Equity."[24] Courts of Equity granted relief in numerous circumstances involving one person's abuse of confidence and, over time, concrete rules and precise terms related to fiduciary relationships began to form as Equity evolved.[25] In fact, "[t]he term 'fiduciary' itself was adopted to apply to situations falling short of 'trusts,' but in which one person was nonetheless obliged to act *like* a trustee."[26]

In 1928, Justice Benjamin Cardozo's seminal opinion in *Meinhard v. Salmon* articulated fiduciary obligations under modern U.S. law. In part, Justice Cardozo stated:

> Many forms of conduct permissible in a workaday world for those acting at arm's length, are forbidden to those bound by fiduciary ties. A trustee is held to something stricter than the morals of the market place. Not honesty alone, but the punctilio of an honor the most sensitive, is then the standard of behavior. As to this there has developed a tradition that is unbending and inveterate. Uncompromising rigidity has been the attitude of courts of equity when petitioned to undermine the rule of undivided loyalty by the "disintegrating erosion" of particular exceptions. Only thus has the level of conduct

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[21] Johnston, *supra* note 11, at 30.

[22] Marcus Tullius Cicero, THE ORATION FOR SEXTUS ROSCIUS OF AMERIA (Charles Duke Yonge, trans., London, G. Bell and Sons, 1916), *available at* http://oll.libertyfund.org/?option=com_staticxt&staticfile=show.php%3Ftitle=570&chapter=87171&layout=html&Itemid=27.

[23] Robert Cooter & Bradley Freeman, *An Economic Model of the Fiduciary's Duty of Loyalty*, 297 Tel AVIV UNIV. STUD. L. 297, 298 (1990) (citing Keech v. Sanford (1726), Sel. Cas T. King 61; 25 E.R. 223), *available at* http://works.bepress.com/cgi/viewcontent.cgi?article=1055&context=robert_cooter).

[24] Deborah A. DeMott, *Beyond Metaphor: An Analysis of Fiduciary Obligation*, 1988 DUKE L.J. 879, 880 (Nov. 1988) (citing Sealy, *Fiduciary Relationships,* 1962 CAMBRIDGE L.J. 69, 69-72).

[25] *Id.*

[26] *Id.*

> for fiduciaries been kept at a level higher than that trodden by the crowd. It will not consciously be lowered by any judgment of this court.[27]

Justice Cardozo's opinion has been cited widely in U.S. jurisprudence and academic and professional writing.[28] It is also worth noting that while fiduciary principles mostly developed in common law in the U.S., they have also been codified in statutes, as discussed further *infra*.

III. Defining Fiduciary

The review of various societies' views on relationships of trust reveals that concepts of fiduciary responsibility have been established since primitive law and have withstood the test of time. With the introduction of regulatory reform this past year, however, some advocates for rulemaking would like to ignore this strong history and rewrite fiduciary duties.

On June 17, 2009, the Obama Administration issued its framework for financial regulatory reform, which declared that "[s]tandards of care for all broker-dealers when providing investment advice about securities to retail investors should be raised to the fiduciary standard to align the legal framework with investment advisers."[29] A little more than one year later, the Dodd-Frank Act gave the SEC the authority to adopt rules promulgating a fiduciary duty for both broker-dealers and investment advisers.[30]

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[27] Meinhard v. Salmon, 164 N.E. 545, at 546 (N.Y. 1928) (citation omitted).

[28] *See*, *e.g.,* N.L.R.B. v. Amax Coal Co., 453 U.S. 322, 330 (1981); S.E.C. v. Chenery Corp., 318 U.S. 80, 98 (1943) (Black, J., dissenting); Big Rivers Electric Corp. v. Schilling (*In re* Big Rivers), 355 F.3d 415, 436 (6th Cir. 2004); NCAS Realty Mgmt. Corp. v. Nat'l Corp. for Hous. P'ships, 143 F.3d 38, 39 (2d Cir. 1998); Bennett v. Bennett (*In re* Bennett), 989 F.d2 779, 789-90 (5th Cir. 1993); Andrew S. Gold, *The New Concept of Loyalty in Corporate Law*, 43 U.C. DAVIS L. REV. 457, 493 (Dec. 2009).

[29] U.S. DEPARTMENT OF THE TREASURY, FINANCIAL REGULATORY REFORM: A NEW FOUNDATION: REBUILDING FINANCIAL SUPERVISION AND REGULATION 71 (2009), *available at* http://financialstability.gov/roadtostability/regulatoryreform.html.

[30] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 913(f)-(g), 124 Stat. 1376, 1827-30 (2010) (authorizing the SEC to "commence a rulemaking, as necessary or appropriate . . . to address the legal or regulatory standards of care for brokers, dealers, investment

While investment advisers have long been subject to a fiduciary standard under the Investment Advisers Act of 1940 ("Advisers Act"), broker-dealers have only been held to a fair dealing standard under the Securities Exchange Act of 1934, even when they provide investment advice services.[31] Because broker-dealers have not been regulated as fiduciaries in the past, soon after the release of the Administration's framework in 2009, members of the brokerage industry began to question the definition and meaning of "fiduciary."[32] As the industry and its regulators have identified and debated these questions, investment intermediaries have become increasingly concerned over how the SEC will define and apply fiduciary concepts.

Those questioning the meaning of fiduciary argue that it has been defined differently across U.S. federal and state law.[33] However, such arguments ignore key points about the framework of fiduciary obligations. In the evolution of law from Roman times through the present, the fiduciary standard has embodied the core duties of loyalty (placing beneficiaries interests first), due care (prudence and competence) and good faith (honest intentions, full

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advisers, persons associated with brokers or dealers, and persons associated with investment advisers for providing personalized investment advice about securities to such retail customers . . ." and authorizing the SEC to establish a fiduciary duty for brokers and dealers, respectively).

[31] There is a so-called "broker exemption" in the Advisers Act for broker-dealers who provide advice that is "solely incidental to the conduct of his business as a broker or dealer and who receives no special compensation therefor . . . ." Investment Advisers Act of 1940, 15 U.S.C. § 80b-2(a)(11) (2006); *see also* Fausti, *supra* note 5, at 186-187 (paraphrasing two key components of the "broker exemption" in the Investment Advisors Act of 1940).

[32] *See Industry Groups Differ on Fiduciary Standard*, FINANCIAL ADVISOR, Oct. 6, 2009, http://www.fa-mag.com/fa-news/4532-industry-groups-differ-on-fiduciary-standard-.html.

[33] *See Industry Perspectives on the Obama Administration's Financial Regulatory Reform Proposals: Hearing Before the H. Comm'n on Financial Services*, 111th Cong. 22 (2009) (statement of Randolph C. Snook, Executive Vice President of the Securities Industry and Financial Markets Association), *available at* http://www.house.gov/apps/list/hearing/financial svcs_dem/snook.pdf; *see also Industry Groups Differ on Fiduciary Standard, supra* note 33 (reporting divergent approaches to the fiduciary standard, which "have governed the two sides for nearly 70 years," for which investment advisers and broker-dealers advocate).

disclosure and applied diligence).[34] Moreover, throughout the development of common law, courts have imposed a high standard of morality upon fiduciaries.[35] Thus, "[l]oyalty, fidelity, faith and honor form fiduciary law's basic vocabulary."[36] Furthermore, courts and regulators have gone further to explain that the fiduciary duty goes beyond basic concepts of honesty, good faith and fair dealing, and prohibits any professional from taking unfair advantage of an investor's trust.[37]

Distinctions in fiduciary functions better explain any differences in laws themselves. The historical development of fiduciary law by courts and a function-based approach by regulators suggest that it is not the definition of fiduciary that varies, but rather

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[34] Scott Thomas FitzGibbon, *Fiduciary Relationships Are Not Contracts*, 82 MARQ. L. REV. 303, 308-10 (1999) (citing Birnbaum v. Birnbaum, 539 N.E.2d 574, 576 (N.Y. 1989):

> [I]t is elemental that a fiduciary owes a duty of undivided and undiluted loyalty to those whose interests the fiduciary is to protect. This is a sensitive and 'inflexible' rule of fidelity . . . requiring avoidance of situations in which a fiduciary's personal interest possibly conflicts with the interest of those owed a fiduciary duty . . . . [A] fiduciary . . . is bound to single-mindedly pursue the interests of those to whom a duty of loyalty is owed . . . ." (citations omitted).

[35] Tamar Frankel, *Fiduciary Law*, 71 CALIF. L. REV. 795, 829-830 (1983).

[36] *Id*. at 830 (citation omitted).

[37] Meinhard v.Salmon, 164 N.E. 545, 546 (1928) ("A trustee is held to something stricter than the morals of the market place. Not honestly alone, but the punctilio of an honor the most sensitive, is then the standard of behavior."); *see* ROBERT E. PLAZE, DIVISION OF INVESTMENT MANAGEMENT, U.S. SEC. & EXCH. *COMM'N*, THE REGULATION OF INVESTMENT ADVISERS BY THE SECURITIES AND EXCHANGE COMMISSION 13 (Nov. 22, 2006) (describing the fiduciary duty owed to clients by a registered investment adviser as prohibiting, among other things, "taking unfair advantage of a client's trust" and stating that "[a] fiduciary owes its clients more than mere honesty and good faith alone"); *see also* SEC Chairman Mary L. Schapiro, Address at the New York Financial Writers' Association Annual Awards Dinner (June 18, 2009), *available at* http://www.sec.gov/news/speech/2009/spch061809mls-2.htm (arguing that "a fiduciary owes its customers and clients more than mere honesty and good faith alone" and "must at all times act in the best interest of customers or clients.").

the role the fiduciary plays and the related level of trust involved in the relationship that drives differences in requirements and prohibitions prescribed by laws and regulations. For example, courts traditionally developed fiduciary law by defining various relations as fiduciary and designing rules for those relations.[38] Statutes have similarly sought to set rules based on the roles of fiduciaries. Accordingly, the Employee Retirement Income Security Act ("ERISA") sets requirements and prohibitions based on the role of a fiduciary for a qualified retirement plan,[39] the Uniform Prudent Investor Act ("UPIA") addresses the role of a fiduciary serving private trusts,[40] and the Advisers Act governs investment advice fiduciaries.[41] Notwithstanding the context of the fiduciary relationship and the applicable functional requirements, trust, loyalty, due care and good faith always remain at the foundation.

With regard to investment advice, SEC Commissioner Luis Aguilar has recognized that "the fiduciary relationship between an

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[38] Frankel, *supra* note 35, at 804-805:

> This method of developing the law was adequate in the past because new types of fiduciaries were recognized gradually over the centuries. The 'use' emerged during the twelfth and thirteenth centuries in England, and the trust developed over the fourteenth through seventeenth centuries. Partnerships appeared in the sixteenth century, and evolved into joint stock companies and corporations. Emancipated servants and employees emerged from domestic relations law to become agents and factors. It was therefore sufficient to describe an arrangement, call it fiduciary, and decide on appropriate rules." (citations omitted).

[39] Employee Retirement Income Security Act, 29 U.S.C. §§ 1001-1461 (2006) (establishing requirements and prohibitions applicable to persons named as fiduciaries in employee benefit plan documents and to persons considered fiduciaries for the purposes of the Act based on their conduct and authority).

[40] NATIONAL CONFERENCE OF COMM'RS ON UNIFORM STATE LAWS, UNIFORM PRUDENT INVESTOR ACT (Apr. 18, 1995), *available at* http://www.law.upenn.edu/bll/archives/ulc/fnact99/1990s/upia94.pdf (discussing the regulation of investment responsibilities of trustees arising under the Uniform Prudent Investor Act).

[41] Investment Advisers Act of 1940, 15 U.S.C. §§ 80b-1 to b-21 (2006) (imposing a fiduciary duty on investment advisers).

investment adviser and its client is a bedrock principle that underpins the Advisers Act."[42] In fact, in 1963, the U.S. Supreme Court stated that the Advisers Act "reflects a congressional recognition 'of the delicate fiduciary nature of an investment advisory relationship,' as well as a congressional intent to eliminate, or at least to expose, all conflicts of interest which might incline an investment adviser—consciously or unconsciously—to render advice which was not disinterested."[43] Commissioner Aguilar has further noted that "[t]he fiduciary standard is a dynamic, living principle that provides investors with true protection."[44]

The SEC Investor Advisory Committee's Investor as Purchaser Subcommittee (the "Subcommittee") has also recognized a federal fiduciary standard under the Advisers Act.[45] In a February 2010 memo, the Subcommittee noted that statutes, SEC rules and common law principles comprise an important aspect of the SEC's

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[42] Luis A. Aguilar, SEC Comm'r, SEC's Oversight of the Adviser Industry Bolsters Investor Protection, Address at the Investment Advisers Association Annual Conference (May 7, 2009), http://www.sec.gov/news/speech/2009/spch050709laa.htm.
[43] SEC v. Capital Gains Research Bureau, Inc., 375 U.S. 180, 191—92 (1963) (quoting 2 LOUIS LOSS ET AL., SECURITIES REGULATION (2d ed. 1961), 1412).
[44] Aguilar, *supra* note 42:

> There is only one fiduciary standard and it means that a fiduciary has an affirmative obligation to put a client's interests above his or her own. As a result, a fiduciary acts in the best interests of the client, even if it means putting a client's interest above his own . . . . A fiduciary standard has real teeth because it is an affirmative obligation of loyalty and care that continues through the life of the relationship between the adviser and the client, and it controls all aspects of their relationship. It is not a check-the-box standard that only periodically applies.

[45] Press Release, Sec. and Exch. Comm., SEC Investor Advisory Committee Forms Subcommittees to Tackle Ambitious Agenda on Behalf of Investors (Sept. 15, 2009), http://www.sec.gov/news/press/2009/2009-197.htm (announcing the formation of a subcommittee to "consider the fiduciary duty owed to investors by those who provide investment advice").

role in developing and implementing the federal fiduciary duty.[46] The Subcommittee also noted that while the federal fiduciary duty applies only under the Advisers Act, a non-federal fiduciary duty may apply nonetheless in other contexts outside of the Advisers Act, such as under state common law and state securities laws.[47]

IV. Fiduciary Application

Ultimately, the application of the fiduciary standard to all investment advice providers, including broker-dealers, will have serious practical implications for how the investment industry as a whole operates. A primary goal of regulatory reform, and the more broad application of the fiduciary standard, has been to enhance investor protection.[48] In order to achieve this goal of enhancing investor protection, regulators should rely on three key principles from Justice Cardozo's opinion in *Meinhard v. Salmon*. First, those acting in a fiduciary capacity are subject to a higher standard than those acting at arm's length within the investment marketplace. Second, exceptions to fiduciary obligations only promote "disintegrating erosion" of the duty of undivided loyalty. And third, the fiduciary standard has been protected and maintained over time by courts and other legal guardians unwilling to lower it.

Many members of the brokerage industry have used the concept of harmonized regulation[49] to rationalize proposals for new

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[46] Memorandum from the Investor as Purchaser Subcommittee to the SEC Investor Advisory Committee 2 (Feb. 15, 2010), http://www.sec.gov/spotlight/invadvcomm/iacmemofiduciaryduty.pdf.

[47] *Id.* at 7. Moreover, the Subcommittee recognized that SEC action can greatly impact the scope and substance of non-federal fiduciary duties; such action may range from informally guiding parties in their application of the fiduciary duty to formally preempting a conflicting standard. *Id.* at 8. On the other hand, SEC inaction could leave room for other actors and entities, such as state and federal courts, state regulators, FINRA, and arbitration panels to fill the fiduciary space. *Id.* at 8-9 ("[I]naction may leave the fiduciary space open to be filled by a variety of actors . . . .").

[48] *See* FINANCIAL REGULATORY REFORM: A NEW FOUNDATION: REBUILDING FINANCIAL SUPERVISION AND REGULATION, *supra* note 29, at 55 (recognizing that Congress, the President, and financial regulators took "significant measures to address . . . inadequacies in our consumer protection framework" and proposing further "comprehensive reform").

[49] The Administration's framework for regulatory reform called for legislators and regulators to "harmonize" the investment adviser and broker-

(and arguably diluted) standards of care that would address varying business and service models of investment intermediaries.[50] These alternative standards, however, place greater emphasis on accommodating special interests and promoting concepts of fair dealing (the standard traditionally applied to broker-dealers) rather than fiduciary concepts of loyalty, due care and utmost good faith.[51] In order to protect fiduciary principles and investors, the SEC should view the proposals for harmonized regulation and alternative standards of care in light of the three aforementioned considerations articulated in Justice Cardozo's opinion in *Meinhard v. Salmon.* Such a review reveals that: (1) the proposed alternative standards that promote fair dealing are not as high as the fiduciary standard; (2) requests for exceptions that address different business models will

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dealer regulatory regimes. *Id.* at 71 (proposing to "[e]stablish a fiduciary duty for broker-dealers . . . and harmonize the regulation of investment advisers and broker-dealers"). The framework also notes that the SEC should be permitted to align duties for financial professionals across financial products. *Id.* The recommendation put forth by the Obama Administration to harmonize investment adviser and broker-dealer regulatory schemes and extend the fiduciary duty to all investment advice providers likely originated within the walls of the SEC. *See* Fausti, *supra* note 5, at 197-99 (citing early SEC support for the fiduciary measure resulting from conclusions in the RAND Report and public statements by the SEC as indications that the Obama Administration's recommendations likely originated within the SEC).

[50] Letter from Dale E. Brown, President & CEO, Financial Services Institute to Elizabeth M. Murphy, Secretary, Sec. and Exch. *Comm'n.* 3-4 (Aug. 30, 2010), http://www.sec.gov/comments/4-606/4606-2687.pdf (advocating for a universal fiduciary standard of care that is "carefully designed to promote universal access to advice, presser investor choice, and enhance investor protection"); *Enhancing Investor Protection and the Regulation of Securities Markets*: *Hearing Before the U.S. Senate Committee on Banking, Housing and Urban Affairs*, 111th Cong. 5 (Mar. 10, 2009) (statement of T. Timothy Ryan, Jr., President and Chief Executive Officer, Securities Industry and Financial Markets Association) (arguing that fiduciary standards "should be crafted so as to be flexible enough to adapt to new product and services as well as evolving market conditions . . . ."), *available at* http://banking.senate.gov/public/index.cfm?FuseAction=Hearings. Testimony&Hearing_ID=faf91bea-ca58-4bc1-873d-33739dbb4f76&Witness_ID=f2cf02f4-d63e-4bd0-a16c-3786fbc08c19).

[51] *See* Aguilar, *supra* note 42 (expressing "great concern" that proposals define "standards of suitability" and would dilute "the existing high fiduciary standard).

only serve to erode the foundation of trust and loyalty that have withstood the test of time; and (3) the SEC, as the primary overseer and enforcer of the fiduciary standard for investment intermediaries, should not consciously weaken the fiduciary standard by granting requests for alternative standards or exceptions.

A more practical regulatory approach that would honor the standards set forth by Justice Cardozo would seek to align and coordinate existing and new regulatory rules in a way that complements, but does not erode, the principles-based fiduciary standard. SEC Chairman Mary Schapiro and Commissioner Elisse Walter have both supported the application of a consistent fiduciary standard of conduct and have noted the importance of adopting rules to address the varied roles and functions of different investment intermediaries—an approach consistent with how fiduciary roles traditionally have been defined in law throughout time. Under such a regulatory regime, the principles-based fiduciary standard would guide professional conduct and enhance enforcement, while clear and strong rules would draw lines for behavior and prevent abuse.[52] However, where rules do not address specific behavior, investment intermediaries would be expected to honor and default back to fiduciary principles, placing their client's interests first.

V. Conclusion

Implementing a fiduciary standard for all advice providers will take time and will not necessarily cure all regulatory issues. As the SEC seeks to bring more clarity and consistency to the obligations of investment intermediaries, the SEC will have to contemplate distinctions between investment advice providers and product providers. In addition, other issues regulators must address

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[52] The North American Securities Administrators Association ("NASAA") has best articulated the need for balancing principles and rules. *See* NORTH AMERICAN SECURITIES ADMINISTRATORS ASSOCIATION, PROCEEDINGS OF THE NASAA FINANCIAL SERVICES REGULATORY REFORM ROUNDTABLE: A MAIN STREET AGENDA FOR WALL STREET REFORM 11-12 (Dec. 11, 2008), http://www.nasaa.org/content/Files/Proceedings_NASAA_Regulatory_Reform_Roundtable.pdf (arguing that if "the fundamental cornerstone of [regulatory reform] is that the customer comes first," then such a system may avoid problems associated with the "tortured construct" distinguishing brokers from investment advisers instead of viewing the two as functionally equivalent).

include: (1) tailoring guidance around the Advisers Act exemption for advice "solely incidental" to brokerage business;[53] (2) setting requirements for inherently conflicted brokerage activity such as sales activity for initial public offerings ("IPOs");[54] and (3) determining whether interactions with institutional and retail clients warrant similar regulatory treatment.[55] None of these issues have easy solutions.

Ideally, the SEC will codify the definition of fiduciary and recognize the historical significance of fiduciary principles as the agency engages in rulemaking. As lobbying efforts by special interests increase in the coming months, however, there is a real risk that investment intermediaries and regulators will get caught up in a game of semantics and lose sight of investor protection goals. The solution ultimately lies in helping regulators focus on three key facts: (1) investors are under the serious misconception that all investment professionals are equally accountable to serve investors' best interests;[56] (2) the existing fiduciary standard is rooted in a strong foundation of loyalty, due care and good faith; and (3) upholding these time-honored fiduciary principles and extending them to all

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[53] *See* Investment Advisers Act of 1940, 15 U.S.C. § 80b-2(a)(11).

[54] The securities industry has argued that broker-dealers would lose their ability to sell IPOs to individual investors if broker-dealers are subject to the fiduciary standard. *See Fiduciary Standard May Imperil IPOs at Retail Brokerages,* INVESTMENT NEWS, Apr. 15, 2010, http://www.investmentnews.com/article/20100815/REG/308159981.

[55] The Dodd-Frank Act primarily addresses the fiduciary standard in the context of personalized investment advice provided to retail investors. The legislation, however, gives the SEC authority to impose a fiduciary standard for investment advice services provided to other investors as well. *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 913(g), 124 Stat. 1376, 1829-30 (2010).

[56] *See* ANGELA A. HUNG ET. AL., INVESTOR AND INDUSTRY PERSPECTIVES ON INVESTMENT ADVISERS AND BROKER-DEALERS 89-90 (2008), http://www.sec.gov/news/press/2008/2008-1_randiabdreport.pdf (finding that "[r]espondants were slightly more likely to report [the belief] that investment advisers rather than brokers are required to act in the client's best interest. . . ." and that "these differences . . . are statistically significant"). This report by the RAND Corporation showed that investors struggle to understand the different legal standards of care to which investment advisers and broker-dealers are held. *Id.* In fact, the report seems to support a conclusion that most investors are under the impression that all financial professionals have an obligation to put investors' interest first. *Id.*

investment advice providers is the best way to bring securities laws into alignment with existing investor expectations and provide meaningful investor protection.

THE FIDUCIARY STUDY: A TRIUMPH OF SUBSTANCE OVER FORM?

MERCER BULLARD[*]

I. Introduction

The Dodd-Frank Act of 2010[1] brought closure to some regulatory issues, but it failed to bring closure to the issue of whether broker-dealers should be subject to a fiduciary duty when providing retail investment advice.[2] Investor advocates and financial planners lobbied Congress in support of the fiduciary duty;[3] the insurance industry fought against it.[4] Unable to achieve a consensus, Congress deflected the issue to the U.S. Securities and Exchange Commission ("SEC" or "Commission"). Section 913 of the Dodd-Frank Act requires the SEC to conduct a study of the fiduciary issue, which is already serving as a kind of pre-rulemaking combat zone in which the battle over the fiduciary duty will continue for years to come.[5] In

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[1] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. 111-203, 124 Stat. 1376 (2010).

[2] For an excellent discussion of this issue, *see* Arthur B. Laby, *Reforming the Regulation of Broker-Dealers and Investment Advisers*, 65 BUS. LAW. 395, 413-24 (2010) (arguing that brokers who provide investment advice should be treated as fiduciaries and should be subject to the Advisers Act).

[3] *See*, *e.g.*, Letter from Financial Planning Coalition to Conferees (June 23, 2010) (on file with author) (urging the Senate to reject the Harkin Amendment because it "is contrary to the goals of strengthening investor confidence in American financial markets and enhancing investor protection."); Press Release, Consumer Federation of America, Statement of CFA Director of Investor Protection Barbara Roper In Support of House Fiduciary Duty Provision (June 15, 2010), http://admin.consumerfed.org/elements/www.consumerfed.org/file/Roper_Statement_fiduciary_duty_press_conference.pdf ("[We are] urg[ing] the Conference Committee to adopt the House language on fiduciary duty.").

[4] *See*, *e.g.*, Action Alerts, Ass'n for Advanced Life Underwriting & Nat'l Ass'n of Ins. and Fin. Advisors (Dec. 2009) (providing form letters for AALU and NAIFA members to send to members of Congress opposing fiduciary duty) (on file with author).

[5] *See* Dodd-Frank Act § 913(b)-(b)(1) (requiring the Commission to conduct a study on "the effectiveness of existing legal or regulatory standards of care for brokers, dealers, investment advisers, persons associated with brokers or dealers, and persons associated with investment advisers for providing

the first three weeks of the comment period on the study, the SEC received more than 1,300 letters.[6]

Section 913 generally frames the study as an investigation of standards of conduct, as reflected in its fourteen references to legal "standard(s)" or "standards of care."[7] This orientation echoes the common critique that investment advisers and broker-dealers provide similar advisory services but are subject to different regulatory standards. Specifically, advisers are subject to a fiduciary duty under the Investment Advisers Act of 1940 ("Advisers Act").[8] Broker-dealers are not.[9] The issue therefore seems to be whether to impose

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personalized investment advice and recommendations about securities to retail customers.").

[6] *See* Study Regarding Obligations of Brokers, Dealers, and Investment Advisers, Exchange Act Release No. 34-62577 (July 27, 2010), *available at* http://www.sec.gov/rules/other/2010/34-62577.pdf (requesting comment on study); *Comments on Study Regarding Obligations of Brokers, Dealers, and Investment Advisers*, SEC.GOV, http://www.sec.gov/comments/4-606/4-606.shtml (last visited Aug. 22, 2010) (providing access to all comments received by the SEC in response to its "Study Regarding Obligations of Brokers, Dealers, and Investment Advisers").

[7] *See, e.g.,* Dodd-Frank Act § 913(b)-(b)(1) ("The Commission shall conduct a study to evaluate . . . the effectiveness of existing legal or regulatory standards of care for brokers, dealers, investment advisers, persons associated with brokers or dealers, and persons associated with investment advisers . . . ."); *Id.* at § 913(d)-(d)(2) (requiring that the Commission file a report describing the "findings, conclusions, and recommendations of the Commission from the study required under subsection (b), including . . . an analysis of whether any identified legal or regulatory gaps, shortcomings, or overlap in legal or regulatory standards in the protection of retail customers relating to the standards of care for brokers, dealers, investment advisers, persons associated with brokers or dealers, and persons associated with investment advisers . . . .").

[8] *See* SEC v. Capital Gains Research Bureau, Inc., 375 U.S. 180, 191 (1963) (finding a fiduciary duty under Section 206 of the Advisers Act); Transamerica Mtg. Advisors, Inc. v. Lewis, 444 U.S. 11, 17 (1979) (finding that Section 206 "establishes 'federal fiduciary standards' to govern the conduct of investment advisers."); Santa Fe Indus. Inc. v. Green, 430 U.S. 462, 472 n.11 (1977) (citing *Capital Gains Research Bureau, Inc.*, 375 U.S. at 194) ("Congress intended the Investment Advisers Act to establish federal fiduciary standards for investment advisers.").

[9] This essay uses the term "broker-dealers" to refer to broker-dealers that are not subject to the Advisers Act, although many are. Broker-dealers that provide investment advice can avoid regulation under the Advisers Act by qualifying for the exclusion under Section 202(a)(11)(C) of the Act. *See*,

the specific, fiduciary standards of conduct on broker-dealers that apply to investment advisers under the Advisers Act.[10]

For the reasons discussed in this essay, it would be a mistake for the SEC's fiduciary study to focus on specific standards of conduct, in part because the fiduciary duty is inherently principles-based. To regulate conduct through rulemaking is to remove that conduct from the truly fiduciary sphere. The conduct standards established by a quintessentially fiduciary duty are only found in and revealed through case-by-case adjudication. To evaluate the fiduciary duty in terms of specific conduct requirements misunderstands its impetus, which is about *how*—not *what*—conduct requirements are imposed. The central question for the fiduciary study should be the efficacy of principles-based common law duties in the regulation of broker-dealers' retail investment advice.

This common law/rules-based dichotomy is not the only model that would provide a more fruitful vehicle for studying the fiduciary duty than viewing the study as an analysis of specific standards of conduct. Examples of other useful models include traditional lines of legal inquiry such as public versus private rights of action, allocation of regulatory oversight authority, comparative dispute resolution mechanisms, federalism, procedural rules and separation of powers. These models provide the positive regulatory epistemology in which securities regulation operates and retail investment advice is regulated. It is the operation of these models, not the content of specific conduct standards, that are in dire need of analysis and reform.

Investment Advisers Act of 1940, 15 U.S.C. § 80b-2(a)(11)(C) (2010) (stating that the term "investment adviser" does not include "any broker or dealer whose performance of such services is solely incidental to the conduct of his business as a broker or dealer and who receives no special compensation therefor . . . ."). The exclusion requires that the advice be solely incidental to the brokerage services provided and that no special compensation be received. *See* Laby, *supra* note 2, at 407, 417 (asset-based fees and triggering of regulation under the Advisers Act).

[10] *See*, *e.g.*, Donald Langevoort, *Brokers as Fiduciaries*, 71 U. PITT. L. REV. 439, 448 (2010) ("The question, then, is whether to resort to the other authority, to regulate more substantively.").

II. The Fiduciary Duty as Principles-Based Regulation

The fiduciary duty represents a form of principles-based regulation that establishes standards of conduct only to the extent that one can identify consistent fact patterns in cases in which the fiduciary duty has been applied. It is a standard of conduct in only the loosest terms, as elegantly reflected in Judge Cardozo's characterization of the fiduciary duty in *Meinhard v. Salmon*:

> Many forms of conduct permissible in a workaday world for those acting at arm's length, are forbidden to those bound by fiduciary ties. A trustee is held to something stricter than the morals of the market place. Not honesty alone, but the punctilio of an honor the most sensitive, is then the standard of behavior.[11]

Judge Cardozo's punctilio, like Section 913's "best interest of the customer" and ERISA's "solely in the interest of the participants and beneficiaries,"[12] is an umbrella principle that is realized through concrete applications in particular cases.

There is no catalogue of conduct requirements that comprises the fiduciary duty under the Advisers Act. The fiduciary duty reflects requirements that have evolved as common law, that is, as a set of principles that are reflected in the decisions of courts, not as a collection of rule-based dictates.[13] The fiduciary duty is precisely that misconduct which cannot be captured by rules but that can only be regulated effectively through a common law process. The frequent complaint that the fiduciary duty should be imposed only if it can be defined as a set of conduct rules misunderstands the principles-based nature of the fiduciary duty.

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[11] Meinhard v. Salmon, 164 N.E. 545, 546 (N.Y. 1928).

[12] Dodd-Frank Act § 913(g)(1) (authorizing the Commission to promulgate rules establishing a duty "to act in the best interest of the customer"); ERISA § 404(a)(1), 29 U.S.C. § 1104(a)(1) ("[A] fiduciary shall discharge his duties with respect to a plan solely in the interest of the participants and beneficiaries . . . .").

[13] *See* Tamar Frankel, *Fiduciary Duties as Default Rules*, 74 OR. L. REV. 1209, 1231 (1995) ("[R]ules are varied, fact-specific, and developed at the adjudication stage.").

The codification of conduct standards does not implement fiduciary duties as much as displace them.[14] A mutual fund sales charge generally will not violate a fiduciary duty in a particular case if it is no greater than the maximum allowed by rule. Similarly, the failure to disclose compensation generally will not violate a broker-dealer's fiduciary duty if it has disclosed all of the information that is required in the transaction confirmation rule.[15] The mutual fund sales charges and transaction confirmation rules have occupied the relevant conduct space, in some cases permitting anti-fiduciary conduct, in other cases prohibiting fiduciary conduct and in no cases tailoring the rule to the particular facts of the case. Conduct rules are an alternative to, not an expression of, the fiduciary duty.

Thus, the essence of the fiduciary duty is conduct that is not prohibited by rule. Actions that violate a conduct rule may also violate a fiduciary duty, but the latter violation is, in a structural sense, superfluous. To argue that broker-dealers should be subject to a fiduciary duty requires evidence that the duty would prohibit conduct that would not otherwise be prohibited under broker-dealer regulation. The fiduciary duty is not needed to regulate misconduct that otherwise violates anti-fraud rules.[16] It must find its ultimate justification in conduct that only the fiduciary duty will reach.[17] And

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[14] *See id*. at 1234 (stating that bargaining around fiduciary means the following: to "bargain around the right of the entrustor to rely on and trust his fiduciary. To bargain with his fiduciary, the entrustor must fend for himself rather than rely on his fiduciary. Thus, the first bargain will change the relational mode in which the parties operate.").

[15] *See* FINRA Manual, NASD Rule 2830, *available at* http://finra.complinet.com/en/display/display.html?rbid=2403&record_id=4368&element_id=3691&highlight=2830#r4368 (addressing mutual fund sales charges); 17 C.F.R § 240.10b-10 (2010) (addressing transaction confirmation); *see also infra* Part IV and notes 35-37.

[16] Conversely, it is not the job of the fiduciary duty to prevent common fraud. *See*, *e.g.*, Arthur D. Postal, *What Did the Fiduciary Standard Do to Stop Madoff?* NATIONAL UNDERWRITER (Feb. 23, 2010), http://www.lifeandhealthinsurancenews.com/News/2010/2/Pages/NAIFA-What-Did-The-Fiduciary-Standard-Do-To-Stop-Madoff.aspx?k=madoff (discussing whether to impose a fiduciary standard on life insurance agents who only currently need to "verify that a product sold to a consumer appears to suit the needs of that consumer").

[17] *See*, *e.g.*, Moore v. Regents of Univ. of Cal., 793 P.2d 479, 480 (Cal. 1990) (finding that a physician's taking of cells from a patient's spleen did

this truly fiduciary sphere of conduct can only be identified *ex post* in the facts of judicial decisions, not ex ante in the prospective iteration of rules.

III. Framing the Fiduciary Inquiry

The common law/rules-based law dichotomy discussed *supra* is not the only model in the epistemology of securities regulation that offers a useful tool for studying the fiduciary duty. There are many traditional models of legal processes and structures that would provide a more helpful basis for study than would a comparison of different conduct standards. The remainder of this essay briefly discusses some of these models, including public versus private rights of action, allocation of regulatory oversight authority, comparative dispute resolution mechanisms, federalism, procedural rules and separation of powers.

In order to provide a more concrete illustration of these models in action, this essay uses the practice of revenue sharing to illustrate how the fiduciary inquiry should be framed. "Revenue sharing" refers to payments by mutual fund investment advisers to brokers as compensation for selling fund shares.[18] Revenue sharing disclosure provides a useful vehicle for framing the fiduciary inquiry because investment advisers and broker-dealers generally are viewed as being treated differently in this area. Investment advisers are subject to a fiduciary duty under Section 206 of the Advisers Act to disclose revenue sharing payments to their clients. Brokers are not.[19] One might argue that this is precisely the kind of inconsistent conduct standard on which the fiduciary study should focus.

On closer inspection, however, the issue of revenue sharing disclosure does not demonstrate a problem with disparate standards

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not constitute conversion but failure to obtain the patient's consent thereto violated fiduciary duty).

[18] *See* Mercer E. Bullard, *Dura, Loss Causation, and Mutual Funds: A Requiem for Private Claims?* 76 U. CIN. L. REV. 559, 570 (2008) ("Revenue sharing generally refers to cash payments made by a fund affiliate to brokers.").

[19] *See* Michael Koffler, *The Brave New World of Fiduciary Duty for Broker-Dealers and Investment Advisers*, SUTHERLAND ASBILL & BRENNAN LLP, at 13, 24 (Apr. 2010), http://www.investmentadvisor.com/Issues/2010/ April-2010/PublishingImages/Envestnet_Fiduciary%20Duty.pdf (subjecting broker-dealers to a fiduciary duty would require that they disclose the revenue sharing payments).

of conduct. Rather, it illustrates how the fiduciary inquiry turns primarily on issues other than conduct standards. For example, the idea that the higher fiduciary standard under the Advisers Act applies to investment advisers breaks down in the context of private claims. There is no private right of action under Section 206 of the Advisers Act.[20] With respect to private enforcement of the Act's duty to disclose revenue sharing payments and other fiduciary claims, investment advisers and broker-dealers are similarly situated.

The conventional wisdom that broker-dealers are not subject to fiduciary duties also cannot withstand scrutiny. *Both* investment advisers and broker-dealers are subject to private fiduciary claims under state law alleging a failure to disclose material information such as revenue sharing payments.[21] It is possible that state courts apply materially different standards of conduct to broker-dealers and investment advisers that, acting as fiduciaries, fail to disclose revenue sharing to their clients. There is no research supporting this view, however, or any obvious reason why this would be the case beyond the differences in outcomes that are inherent in the common law process.[22] The similar standards applied to advisers and broker-

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[20] Transamerica Mtg. Advisors, Inc. v. Lewis, 444 U.S. 11, 24 (1979) (finding no private right of action under Section 206 of the Advisers Act).

[21] *See*, *e.g.*, Kelly Wiese, *Verdicts & Settlements June 20, 2010: Settlement approved in A.G. Edwards Case*, MO. L. MEDIA, June 20, 2010, available at 2010 WLNR 12936709 (describing settlement of state law claims based on failure to disclose revenue sharing); *see also* McCracken v. Edward D. Jones & Co., 445 N.W.2d 375, 381 (Iowa Ct. App. 1989) (inferring a breach of a fiduciary duty by failure to inform inexperienced client of investment risks); *see generally* Tamar Frankel, *Fiduciary Duties of Brokers-Advisers-Financial Planners and Money Managers*, 9-10 (Boston Univ. Sch. of Law, Working Paper No. 09-36, 2010), *available at* http://www.bu.edu/law/faculty/scholarship/workingpapers/Frankel-Fiduciary-Duties.html ("The California Court of Appeals held that 'the stockbroker has a *fiduciary duty* . . . to ascertain that the investor understands the investment risks in the light of his or her *actual* financial situation.'").

[22] It is not intended to be conceded here that: (1) talking about the consistent application of standards of conduct in a fiduciary context even makes sense to the extent that the fiduciary duty as common law is not susceptible to a taxonomy more precise than basic, black letter principles, or (2) the "unpredictability" of the common law is inefficient. *See generally* Paul Mahoney, *The Common Law and Economic Growth: Hayek Might be Right* (Univ. of Virginia Law Sch. Legal Studies, Working Paper No. 00-8, 2000), *available at* http://papers.ssrn.com/paper.taf?abstract_id=206809 (finding higher rates of real per capita growth in common law economies); Ross

dealers in the context of private fiduciary claims under federal and state law belies the framing of the fiduciary duty issue as being about harmonizing disparate standards of conduct rather than being about rationalizing the symbiotic relationship between private and public claims or finding the optimal balance of state and federal power.

Many fiduciary claims are not brought in state court, but before an arbitration panel. Broker-dealers' clients have the right to arbitration of their claims,[23] and those that sign customer agreements with mandatory arbitration clauses are required to submit to arbitration.[24] Fiduciary claims are among the most common claims brought in arbitration,[25] including claims of undisclosed revenue sharing payments,[26] but the standards of conduct applied by arbitrators unfortunately cannot be evaluated. FINRA,[27] which administers broker-dealer arbitration, does not require that arbitrators follow any particular substantive law and arbitrators are not required

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Levine ET AL., *Financial Intermediation and Growth: Causality and Causes* (World Bank Policy Research, Working Paper No. 205 1999) *available at* http://ssrn.com/abstract=247793 (finding that common law systems enhance financial intermediary development, which causes higher economic growth).

[23] *See* FINRA Manual, FINRA Rule 12200, *available at* http://finra.complinet.com/en/display/display.html?rbid=2403&record_id=5185&element_id=4106&highlight=12200#r5185 [hereinafter *FINRA Rule 12200*] (requiring members to arbitrate dispute if requested by customer).

[24] *See* Shearson/Am. Express, Inc. v. McMahon, 482 U.S. 220, 226 (1987) ("The Arbitration Act . . . mandates enforcement of agreements to arbitrate statutory claims."); FINRA Rule 12200.

[25] *See About FINRA Dispute Resolution: Dispute Resolution Statistics*, FINRA, http://www.finra.org/ArbitrationMediation/AboutFINRADR/Statistics/index.htm (last visited Nov. 7, 2010) (showing "breach of fiduciary duty" as most common type of controversy in FINRA arbitration, in each case by a significant margin, for 2006, 2007, 2008, and 2009, and 2010 through September 2010); Will Deener, *Suit Says Edward Jones Withheld Information: Law Firm Predicts Number of Complaints Against Broker Will Grow*, DALLAS MORNING NEWS, July 8, 2005, at 4D (describing dozens of revenue sharing disclosure cases filed in arbitration by a single firm).

[26] *See*, *e.g.*, *Aucoin v. Gauthier*, 35 So.3d 326, 330-31 (La. Ct. App. 2010) (holding that the arbitration panel's dismissal of claims based on, *inter alia*, failure to disclose revenue sharing payments was subject to the doctrine of *res judicata*).

[27] The Financial Industry Regulatory Authority, or FINRA, is the self-regulatory organization for broker-dealers.

to explain their rulings.[28] How can the SEC's fiduciary study be about standards of conduct if the conduct standards applied in a significant forum in which investors bring private fiduciary claims are unknowable? Here, it is the rules of FINRA arbitration that provide a more compelling subject for the fiduciary study than disparate standards of conduct.

The standard of conduct applied in FINRA arbitration is arguably a federal one, or quasi-federal in light of FINRA's quasi-governmental status, which reverses the disparate application of the federal fiduciary duty to broker-dealers and investment advisers as described above. While investment advisers are not subject to a private right of action based on the federal fiduciary duty under the Advisers Act, broker-dealers could be viewed as being subject to a private right of action based on a quasi-federal fiduciary duty in FINRA arbitration. In this light, it is broker-dealers, not investment advisers, who appear to be subject to a higher, federal fiduciary standard.[29]

It is not only under private rights of action that the supposed fiduciary gap between advisers and broker-dealers loses coherence. In the public enforcement arena, FINRA conduct rules cover some of the high ground claimed by the fiduciary duty under the Advisers Act,[30] thereby further blurring the perceived fiduciary gap between

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[28] *See* FINRA Manual, FINRA Rule 12904(f), *available at* http://finra.complinet.com/en/display/display.html?rbid=2403&record_id=11407&element_id=4192&highlight=12904#r11407 ("The award may contain a rationale underlying the award."); *see generally* Barbara Black, *Making It Up as They Go Along: The Role of Law in Securities Arbitration*, 23 CARDOZO L. REV. 991, 995-98 (2002) (discussing whether and to what extent FINRA arbitrators apply substantive law).

[29] Investment advisers' clients may also be subject to mandatory arbitration clauses, assuming that enforcing such a clause would not violate an adviser's fiduciary duty, but arbitration under these clauses may occur outside of FINRA's oversight. State actions against broker-dealers for failing to disclose revenue sharing payments, which have successfully weathered federal preemption arguments, further undermine the fiduciary inquiry as being one of disparate standards of conduct.

[30] *See*, *e.g.*, FINRA Manual, FINRA Rule 2010, *available at* http://finra.complinet.com/en/display/display_main.html?rbid=2403&element_id=5504 ("A member, in the conduct of its business, shall observe high standards of commercial honor and just and equitable principles of trade."); *Langevoort, supra* note 10, at 444 ("The question, then, is whether to resort to the other authority, to regulate more substantively."); Barbara Black, *Brokers and Advisers: What's in a Name?* FORDHAM J. CORP. FIN. L. 31,

advisers' and broker-dealers' conduct standards. As stated by the Commission, FINRA rules "embod[y] basic fiduciary responsibilities,"[31] such as a fiduciary duty to obtain best execution of transactions.[32] The rules reflect a principles-based common law model.[33]

What this brief review of a particular standard of conduct begins to reveal is that the heart of the fiduciary inquiry is not conduct standards at all, but how the dynamics of traditional models of law play out in the fiduciary context. The SEC's fiduciary study should be focused on the relationship between fiduciary standards of conduct and, *inter alia*, the: (1) efficacy of common law versus rules-based law, (2) most efficient combination of private and public enforcement mechanisms, (3) proper balance of state and federal sources of law, (4) relative merits of arbitration and litigation and (5) allocation of oversight responsibility between FINRA and the Commission. In each case, the question of whether brokers should be required to disclose revenue sharing payments, for example, is not nearly as pressing or fundamental as the question of how such fiduciary standards of conduct should be established, promulgated and enforced.

IV. The Fiduciary Inquiry and Separation of Powers

The separation of powers model deserves special consideration in the fiduciary inquiry, again as aptly illustrated by the revenue

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52-53 (2005) (discussing FINRA claim that its advertising rules are the "highest" in the industry).

[31] E.F. Hutton & Co., Inc., Exchange Act Release No. 25887, 1988 SEC LEXIS 1398, at *15 (July 6, 1988).

[32] Order Execution Obligations, Exchange Act Release No. 37619A, 61 FR 48290 (Sept. 6, 1996) ("[T]his duty of best execution must evolve as changes occur in the market.").

[33] *See*, *e.g.*, FINRA Manual, FINRA Rule 2440, *available at* http://finra.complinet.com/en/display/display.html?rbid=2403&record_id=4337&element_id=3660&highlight=2440#r4337 ("[A] member buys for his own account from his customer, or sells for his own account to his customer . . . shall buy or sell at a price which is fair, taking into consideration all relevant circumstances . . . ."); FINRA Manual, FINRA IM-2440-1, *available at* http://finra.complinet.com/en/display/display.html?rbid=2403&record_id=4338&element_id=3661&highlight=2440#r4338 (addressing the 5% mark-up limit policy stating that, notwithstanding 5% limit, a mark-up of 5% or less may be unfair or unreasonable).

sharing disclosure issue. Mutual funds are not required to provide detailed information about revenue sharing in their prospectuses or Statements of Additional Information ("SAI").[34] Nor are broker-dealers specifically required to include revenue sharing payments in transaction confirmations under the confirmation rule, Rule 10b-10.[35] The Commission once argued that a broker-dealer may be required to include more information than what is set forth in Rule 10b-10, such as 12b-1 mutual fund fees, which are a close cousin of revenue sharing payments.[36] The Second Circuit rejected this argument, however, in an opinion drafted by then-Judge Sotomayor. The Court reasoned that the Commission, through its own Rule 10b-10, "'has decided precisely' what disclosure was needed with regard to conflicts of interest arising from third-party payments to broker-dealers."[37]

Recognizing a regulatory gap that needed filling, the Commission proposed to require that confirmations disclose the precise amounts of revenue sharing payments earned from a fund

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[34] The SAI is the part of the mutual fund registration statement that is not required to be provided to investors except upon request. *See* Mercer E. Bullard, *The Mutual Fund as a Firm: Frequent Trading, Fund Arbitrage and the SEC's Response to the Mutual Fund Scandal*, 42 HOUS. L. REV. 1271, 1318 (2006).

[35] *See* 17 C.F.R § 240.10b-10 (addressing transaction confirmation); *In re* Morgan Stanley & Van Kampen Mut. Fund Sec. Litig., 2006 WL 1008138, at *7 (S.D.N.Y. Apr. 18, 2006) ("Form N-1A requires the disclosure of the total fees paid by the investor in connection with a securities purchase, as well as total commissions paid by the fund, but it does not require disclosure of how differential compensation is allocated. Nor does it require disclosure of the sales contests or management bonuses.").

[36] *See* Press v. Quick & Reilly, Inc., 218 F.3d 121 (2d Cir. 2000) ("We need not labor long on plaintiffs' contention that the broker-dealer defendants failed to make adequate disclosures about the fees under Rule 10b-10, because we find that we are bound by the SEC's interpretation of its regulation, *i.e.,* that the general disclosures made by the fund prospectuses and SAIs are sufficient to satisfy the broker-dealers' duty under Rule 10b-10 to disclose third party remuneration.").

[37] Confirmation Requirements and Point of Sale Disclosure Requirements for Transactions in Certain Mutual Funds and Other Securities, Securities Act Release No. 8358, Exchange Act Release No. 49,148, Investment Company Act Release No. 26,341, 69 Fed. Reg. 6438, 6445 n.55 (proposed Feb. 10, 2004) (quoting *Press,* 218 F.3d at 131-32) [hereinafter *Point-of-Sale Proposal*].

complex by the broker-dealer.[38] It also proposed a new "point-of-sale" rule to address, in part, the disclosure of revenue sharing fees by broker-dealers at or before the client makes the decision to buy shares of the fund.[39]

Notwithstanding the apparent uncertainty of broker-dealers' revenue sharing disclosure obligations and the Second Circuit's position on the preclusive effect of the confirmation rule, the Commission has sued a number of broker-dealers for failing to disclose revenue sharing payments in violation of the rule.[40] Acting in its private attorney general capacity, the Commission has extracted more than $100 million in disgorgement, payable to victims of the nondisclosure of revenue sharing payments.[41] These revenue sharing

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[38] *Id.*; *see also* Point of Sale Disclosure Requirements and Confirmation Requirements for Transactions in Mutual Funds, College Savings Plans, and Certain Other Securities, Securities Act Release No. 85,470, Exchange Act Release No. 51,274, Investment Company Act Release No. 26,778, 70 Fed. Reg. 10,521 (proposed Mar. 4, 2005) [hereinafter *Point-of-Sale Proposal Request for Additional Comments*] (stating that the SEC was "reopening the comment period on proposed rules . . . that would require broker-dealers to provide their customers with information regarding the costs and conflicts of interest that arise from the distribution of mutual fund shares, 529 college savings plan interests, and variable insurance products.").

[39] *Point-of-Sale Proposal Request for Additional Comments*, Securities Act Release No. 85,470, Exchange Act Release No. 51,274, Investment Company Act Release No. 26,778, 70 Fed. Reg. at 10,522 (proposing new "point of sale" rule for comment).

[40] *See*, *e.g., In re* Citigroup Global Markets, Inc., Securities Act Release No. 8557, Exchange Act Release No. 51,415, *2005 SEC LEXIS 674* (Mar. 23, 2005), http://www.sec.gov/litigation/admin/33-8557.pdf (alleging that a broker-dealer failed to disclose material facts to customers in the offer and sale of mutual fund shares); *In re* Edward Jones & Co., L.P., Securities Act Release No. 8520, Exchange Act Release No. 50,910, 2004 SEC LEXIS 3013 (Dec. 22, 2004), http://www.sec.gov/litigation/admin/33-8520.htm (alleging that a broker failed to disclose a conflict of interest to customers arising out of certain payments it received through revenue sharing, directed brokerage, and other arrangements in connection with the offer and sale of mutual funds to its customers); *In re* Morgan Stanley DW Inc., Securities Act Release No. 8339, Exchange Act Release No. 48,789, 2003 SEC LEXIS 2732 (Nov. 17, 2003), http://www.sec.gov/litigation/admin/33-8339.htm#foot3 (alleging that a broker-dealer failed to disclose material facts to customers in the offer and sale of mutual fund shares.).

[41] *See*, *e.g.*, *In re* John Hancock Inv. Mgmt. Servs., LLC, Exchange Act Release No. 55,946, Investment Company Act No. 27,872, 2007 SEC LEXIS

cases broach the subject of, if not exemplify the danger of, housing executive, judicial and legislative functions in a single administrative agency.

It is this danger that was the impetus for Justice Frankfurter's famous gloss on the fiduciary duty in *SEC v. Chenery Corp.*: "to say that a man is a fiduciary only begins the analysis; it gives direction to further inquiry."[42] In that case, the Court vacated an SEC order permitting a reorganization on the condition that the officers and directors who planned the reorganization not personally profit from it.[43] The Commission had found that allowing the officers and

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1358 (June 25, 2007) http://www.sec.gov/litigation/admin/2007/34-55946.pdf (requiring a broker to repay $16.8 million in disgorgement and prejudgment interest); *In re* Hartford Investment Fin. Servs., LLC, Exchange Act Release No. 54,720, Investment Company Act Release No. 27,549, 2006 SEC LEXIS 2571 (Nov. 8, 2006), http://www.sec.gov/ litigation/admin/2006/33-8750.pdf (requiring a broker to repay $40 million); *In re* Deutsche Inv. Mgmt. Am., Inc., Exchange Act Release No. 54,529, Investment Company Act Release No. 27,505, 2006 SEC LEXIS 2172 (Sep. 28, 2006), http://www.sec.gov/ litigation/admin/2006/34-54529.pdf (requiring a broker to repay $16.3 million); I*n re* IFMG Sec. Inc., Securities Act Release No. 8720, Exchange Act Release No. 54,139, 2006 SEC LEXIS 1589 (July 13, 2006), http://www.sec.gov/litigation/admin/ 2006/33-8720.pdf (requiring a broker to repay $2.8 million); In the Matter of Am. Express Fin. Advisors Inc., Securities Act Release No. 8720, Exchange Act Release No. 52,861, 2005 SEC LEXIS 3076 (Dec. 1, 2005), http://www.sec.gov/litigation/admin/33-8637.pdf (requiring a broker party to repay $15 million); Capital Analysts Inc., Securities Act Release No. 8556, Exchange Act Release No. 51,414, 2005 SEC LEXIS 673 (Mar. 23, 2005), http://www.sec.gov/litigation/ admin/33-8556.pdf (requiring a broker to repay $350,000); *Edward Jones*, *supra* note 40 (requiring a broker to repay $37.5 million); *Morgan Stanley*, *supra* note 40 (requiring a broker to repay $25 million).

[42] SEC v. Chenery Corp., 318 U.S. 80, 85-86 (1943) (*Chenery I*).

[43] At the time, the Commission was authorized to review and modify reorganizations of companies registered under the Public Utility Holding Company Act. *See* 15 U.S.C. § 79(g) & (i) (giving the Commission the power described above). The Act was repealed in 2005. *See* Pub. L. 109-58, 119 Stat. 974 (Aug. 8, 2005) (repealing sections 79 to 79z-6 of the U.S. Code pertaining to the Public Utility Holding Company Act). Pursuant to the reorganization, the directors and officers would have been entitled to exchange their preferred shares for common stock representing 10 percent of the common stock of the surviving entity and having a book value 3.5 times that of the preferred stock. *See Chenery I*, 318 U.S. at 96 (J. Black dissenting).

directors to profit from the reorganization would violate their fiduciary duty to the affected shareholders.[44]

Justice Frankfurter did not disagree with the fiduciary standard of conduct announced and applied by the Commission. Rather, he disagreed with the way in which the Commission had exercised its policymaking authority. Justice Frankfurter found that the "Commission dealt with this as a specific case, and not as the application of a general rule formulating rules of conduct for reorganization managers," instead basing its decision "upon the applicability of principles of equity announced by courts."[45] He concluded that, because there was no judicial precedent supporting the SEC's fiduciary standard and the Commission had not "promulgated a general rule of which its order here was a particular application," its order could not be upheld.[46]

The Court reversed itself when the case returned on appeal four years later.[47] In *Chenery II*, Justice Murphy rejected the view that the Commission needed to have promulgated a rule that had "capture[d]" the particular facts in the case.[48] The Court held that:

> [T]he agency must retain power to deal with the problems on a case-to-case basis if the administrative process is to be effective. There is thus a very definite place for the case-by-case evolution of

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[44] *See Fed. Water Serv. Corp., 1941 SEC LEXIS 1787, at *51* (Mar. 24, 1941) ("We hold further that in the process of formulation of a "voluntary" reorganization plan, the management of a corporation occupies a fiduciary position toward all of the security holders to be affected, and that it is subjected to the same standards as other fiduciaries with respect to dealing with the property which is the subject matter of the trust.").

[45] *Chenery I*, 318 U.S. at 86-87, 93 ([T]he Commission "purported merely to be applying an existing judge-made rule of equity.").

[46] *Id.* at 92-93 ("[B]efore transactions otherwise legal can be outlawed or denied their usual business consequences, they must fall under the ban of some standards of conduct prescribed by an agency of government authorized to prescribe such standards—either the courts or Congress or an agency to which Congress has delegated its authority.").

[47] *See SEC v. Chenery Corp.*, 332 U.S. 194 (1947) (*Chenery II*).

[48] *Id.* at 202-203 ("[T]he agency may not have had sufficient experience with a particular problem to warrant rigidifying its tentative judgment into a hard and fast rule. Or the problem may be so specialized and varying in nature as to be impossible of capture within the boundaries of a general rule.").

> statutory standards. And the choice made between proceeding by general rule or by individual, ad hoc litigation is one that lies primarily in the informed discretion of the administrative agency.[49]

Justice Murphy's position that the potentially "retroactive effect [of case by case administrative rulemaking] was not necessarily fatal to its validity" generally still holds today.[50]

The revenue sharing cases squarely present the issue that Justices Frankfurter and Murphy were debating. That issue, in Justice Frankfurter's words, is "the rule of law in its application to the administrative process and the function of this Court in reviewing administrative action."[51] In these cases, the Commission exercised prosecutorial discretion, made common law, adjudicated guilt, imposed punitive sanctions and recovered ill-gotten gains on behalf of private citizens—all in an effectively unreviewable capacity[52]—in apparent contradiction to the rules contemporaneously proposed by its own legislative offices.[53] The SEC's executive, judicial and legislative roles create at least the appearance of a "forbidden conjoining of powers"[54] in a fourth branch of government that has a broader range of functions (albeit covering a narrow range of

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[49] *Id.* at 203; *see also* Am. Power & Light Co. v. SEC, 329 U.S. 90, 106 (1946) (regarding Congressional delegation of authority to the Commission: "Nor is there any constitutional requirement that the legislative standards be translated by the Commission into formal and detailed rules of thumb prior to their application to a particular case. If that agency wishes to proceed by the more flexible case-by-case method, the Constitution offers no obstacle.").

[50] *Chenery II*, 332 U.S. at 203.

[51] *Id.* at 209.

[52] This assumes not that *all* settlements are "effectively unreviewable" and have the force of law, but rather settlements with entities under these circumstances. This distinction warrants further explanation, but this is, unfortunately, beyond the scope of this essay.

[53] *See generally* Langevoort, *supra* note 10, at 446 (noting differences in state and federal regulators' and courts' views of revenue sharing). *Cf.* Geman v. SEC, 334 F.3d 1183 (10th Cir. 2003) (imposing a fiduciary duty based on the Advisers Act on conduct not subject to the Act on the basis of common law agency principles apparently derived from the federal law).

[54] Peter L. Strauss, *The Place of Agencies in Government: Separation of Powers and the Fourth Branch*, 84 COLUM. L. REV. 573, 579 (1984).

conduct) than any other branch.[55] Indeed, the most urgent issue for the SEC's fiduciary study may be one of the proper exercise of government power. What mix of administrative roles should the Commission assume with respect to the fiduciary duty as opposed to other types of legal duties that it is tasked with administering?

V. Conclusion

It is unfortunate that the fiduciary debate is often framed as being about substantive standards of conduct, and even more unfortunate that Section 913 of the Dodd-Frank Act's description of the study seems to reflect this perspective. Justice Frankfurter's "only begins the analysis" gloss on the fiduciary duty may reveal far more about the best direction for the fiduciary inquiry than Judge Cardozo's conduct-oriented "punctilio of an honor most sensitive." The fiduciary duty is indeed "most sensitive"—too sensitive, in fact—to be captured by specific conduct rules. The law punishes those who ignore such elemental imperatives.

The Commission should use the fiduciary study as a vehicle for considering the interaction of the fiduciary duty with different models of regulation. The revenue sharing disclosure issue discussed *supra* suggests that where the law lacks coherence is its current resolution—in the context of regulating broker-dealers' advisory activities—of issues relating to, *inter alia*, principles-based regulation, federalism, dispute resolution mechanisms, allocation of oversight authority and, particularly, separation of powers. There are many other analytical models that should be brought to bear on the fiduciary issue. This brief discussion touches on only a few.[56]

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[55] *See* FTC v. Rubberoid Co., 343 U.S. 470, 487 (1952) (J. Jackson dissenting) ("[Administrative agencies] have become a veritable fourth branch of the Government, which has deranged our three-branch legal theories much as the concept of a fourth dimension unsettles our three-dimensional thinking."); *see generally* Strauss, *supra* note 54 (discussing the contested role of agencies as outside the three branches of government explicitly stated in the Constitution).

[56] Examples include the contractual and inalienable models of fiduciary duties. S*ee generally* Arthur B. Laby, *The Fiduciary Obligation as the Adoption of Ends*, 56 BUFF. L. REV. 99 (2008). Examples also include consideration of legal duties as a reflection of investors' behavior as rational or irrational actors. *See generally* Lauren Willis, *Against Financial Literacy*, 94 IOWA L. REV. 197 (2008).

Just as the fiduciary duty may be innately inhospitable to codification, it may be too factually calibrated to be left to administrative authority as presently exercised. The context for Justice Frankfurter's *Chenery I* critique was not, after all, a questioning of the standard of conduct applied by the Commission, but rather of the ad hoc foundation for the fiduciary duty on which the Commission relied. His opinion was a prescient recognition of the particular threats posed by the evolving administrative state, informed undoubtedly by his personal connection with the creation of the federal securities laws and the Commission itself.[57]

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[57] *See* Joel Seligman, THE TRANSFORMATION OF WALL STREET: A HISTORY OF THE SECURITIES AND EXCHANGE COMMISSION AND MODERN CORPORATE FINANCE 57-72 (Houghton Mifflin Co. 1982) (discussing Justice Frankfurter's dominant role and impact on the Supreme Court.).

IMPLEMENTING REGULATORY HARMONIZATION AT THE SEC

ARTHUR B. LABY*

I. Introduction

There is an irony embedded in Section 913 of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act").[1] Section 913 requires the Securities and Exchange Commission ("SEC" or "Commission") to conduct a wide-ranging study regarding gaps or deficiencies in the regulation of broker-dealers and investment advisers.[2] These firms often perform similar functions but are regulated differently under an antiquated regulatory scheme. Congress set forth no fewer than fourteen items the SEC must consider, including a catchall: "any other consideration" the SEC deems appropriate.[3] Section 913 also grants the SEC new rulemaking authority.[4] The Commission's new authority, however, falls short of empowering it to fully address the study's potential findings. Thus, the provision intended to address gaps or shortcomings in regulation has a gap of its own—a gap between problems the SEC must study on one hand and the tools provided to

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[1] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 913, 124 Stat. 1376, 1824 (2010) (mandating study and rulemaking regarding obligations of brokers, dealers, and investment advisers).

[2] *Id.* at § 913(b)-(b)(1) ("The Commission shall conduct a study to evaluate . . . the effectiveness of existing legal or regulatory standards of care for brokers, dealers, investment advisers . . . .").

[3] *Id.* at § 913(c)(1)-(14) (providing a list of fourteen considerations the SEC must consider in its study, including, under subsection (14), "any other consideration that the Commission considers necessary and appropriate in determining whether to conduct a rulemaking under subsection (f).").

[4] *Id.* at § 913(c) ("The Commission may commence a rulemaking, as necessary or appropriate in the public interest and for the protection of retail customers (and such other customers as the Commission may by rule provide), to address the legal or regulatory standards of care for brokers, dealers, investment advisers, persons associated with brokers or dealers, and persons associated with investment advisers for providing personalized investment advice about securities to such retail customers.").

address the study's findings on the other. The irony might be intentional. Congress recognized that additional legislation may be needed in an ongoing effort to reform the regulation of brokers and advisers. The SEC's report must state whether deficiencies exist that should be addressed through additional legislative changes.[5]

In light of the inconsistency between the study's scope and the SEC's new authority, one might ask how the Commission should proceed. Should the study focus on problems the SEC can resolve through rulemaking? Or is the suggested rulemaking part of a larger agenda to enhance the regulation of financial services providers? This essay analyzes the SEC's new authority and suggests a process for the SEC to pursue when conducting the study and beyond. Elsewhere I have discussed substantive aspects of this debate, addressing several of the considerations the SEC must examine.[6]

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[5] *Id.* § 913(b)(2) (requiring evaluation of potential regulatory gaps, shortcomings, and overlaps).

[6] *See* Arthur B. Laby, *Reforming the Regulation of Broker-Dealers and Investment Advisers*, 65 BUS. LAW. 395 (2010) (exploring the history of the harmonization debate and arguing that the broker-dealer exclusion in the Investment Advisers Act has outlived its usefulness). *The Business Lawyer* article is responsive to considerations (1), (2), (6), (9), (10), (11), (12), and (13) set forth in section 913(c); *see also* Arthur B. Laby, *Fiduciary Obligations of Broker-Dealers and Investment Advisers*, 55 VILL. L. REV. 101 (2010) (discussing differences between duties imposed on brokers and advisers today, focusing on the nature of the relationship, requirements of disclosure, and restrictions on principal trading). The *Villanova Law Review* article is responsive to considerations (2), (6), (7), and (11) set forth in the statue. Other articles address substantive aspects of this debate. *See, e.g.,* Barbara Black, *Brokers and Advisers—What's in a Name?*, 11 FORDHAM J. CORP. & FIN. L. 31 (2005) (advocating to expand broker-dealers' obligations to their customers); Donald C. Langevoort, *Brokers As Fiduciaries*, 71 U. PITT. L. REV. 439, 448 (2010) (discussing challenges in expanding brokers' duties to their customers); Michael Koffler, *Six Degrees of Separation: Principles to Guide the Regulation of Broker-Dealers and Investment Advisers*, 41 SEC. REG. & L. REP. (BNA) 776 (Apr. 27, 2009) (discussing harmonization of the regulation of broker-dealers and investment advisers); Thomas P. Lemke & Steven W. Stone, *The Madoff "Opportunity:" Harmonizing the Overarching Standard of Care for Financial Professionals Who Give Investment Advice*, WALL ST. LAW., June 2009, at 1, *available at* http://bx.businessweek.com/retirement-scams/view?url=http%3A%2F%2Fwww.morganlewis.com%2Fpubs%2FWSL_TheMadoffOpportunity_June2009.pdf (describing how the Madoff scandal has reinvigorated efforts to harmonize the regulation of broker-dealers and

When considering process, one might best view Section 913 as directing the SEC to move along two tracks. The first track is conducting the required study independent of the rulemaking authority provided later in the section. The key to conducting a comprehensive study is to unburden the SEC from a background requirement to later address each of its findings. The SEC, in other words, should feel free to conduct a robust analysis and draw bold conclusions, even if additional legislation is necessary and some of its conclusions cannot be addressed at this time. In any case, the rulemaking authority in Section 913 ought not shackle the SEC's willingness to conduct a comprehensive inquiry.

Parts II and III of this essay discuss the required study and the authority for new rules; Part IV points out gaps between these provisions. To assist the SEC in conducting a comprehensive analysis, Part V suggests reference to the "Yellow Book," a set of government auditing standards published by the U.S. Government Accountability Office ("GAO").[7] Part VI concludes this essay.

II. Study

The SEC's study must be comprehensive. Section 913 instructs the Commission to "evaluate" two items.[8] The first is the "effectiveness" of existing legal or regulatory standards of care for brokers, dealers, investment advisers and their associated persons, for providing personalized investment advice and recommendations about securities to retail customers.[9] The study must take into

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investment advisers); Tamar Frankel, *Fiduciary Duties of Brokers-Advisors-Financial Planners and Money Managers* 18 (Boston Univ. School of Law Working Paper No. 09-36, 2009), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1446750 (arguing for imposing a fiduciary duty on all financial intermediaries, including broker-dealers); Thomas Lee Hazen, *Stock Broker Standards of Conduct—Principles, Rules and Fiduciary Duties* (unpublished manuscript, 2010), *available at* http://works.bepress.com/thomas_hazen/2 (exploring whether new broker-dealer regulation should address specific types of conduct).

[7] U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-07-731G 1, GOVERNMENT AUDITING STANDARDS 1 (2007) [hereinafter *GOVERNMENT AUDITING STANDARDS*] (providing a "framework for performing high-quality audit work with competence, integrity, objectivity, and independence.").

[8] Dodd-Frank Act § 913(b) (providing two criteria for the SEC to conduct its study regarding fiduciary obligations of brokers, dealers, and advisers).

[9] *Id.* at § 913(b)(1).

account standards imposed by Congress, the Commission, the Financial Industry Regulatory Authority (FINRA) and other federal and state standards.[10] The second item the SEC must evaluate is whether there are gaps, deficiencies, or overlaps in these standards that should be addressed "either by rule or statute."[11] Including the term "statute" is significant, suggesting that additional legislation may be needed. Although the SEC may conclude that current legislation is adequate, the evaluation must take place.[12]

The SEC must consider fourteen items when performing its analysis.[13] These mandatory considerations make the study a formidable task. The Commission must examine the types of services provided across the broker-dealer and investment adviser communities.[14] It must assess legislation and regulation at the federal and state levels, including standards promulgated by FINRA.[15] The study must compare and contrast broker and adviser regulation, pointing out specific instances where one exceeds the other.[16] The SEC must inquire into investor perceptions and understanding regarding regulation, asking whether differences cause confusion.[17] It must assess how scarce resources of the SEC, the states and FINRA are being used, and whether such use is efficient.[18] The study also requires the SEC to speculate on the effects of changes to the regulatory scheme on both investors and regulators.[19] The time frame to complete the work is short; the SEC was given only six months from the passage of Dodd-Frank to finish.[20]

III. Rulemaking

Congress included two rulemaking provisions in Section 913. The first, Section 913(f), states that the Commission may commence a rulemaking to address the legal and regulatory standards

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[10] *Id.*
[11] *Id.* at § 913(b)(2).
[12] *Id.* at § 913(b).
[13] *Id.* at § 913(c).
[14] *Id.* at § 913(c)(4).
[15] *Id.* at § 913(c)(5).
[16] *Id.* at § 913(c)(6).
[17] *Id.* at § 913(c)(7)(A)-(B).
[18] *Id.* at § 913(c)(10)(C)(i)-(ii).
[19] *Id.* at §§ 913(c)(9), (c)(13)(B).
[20] *Id.* at § 913(d)(1).

imposed on brokers and advisers for providing personalized advice.[21] This section instructs the SEC to consider the findings, conclusions and recommendations in the study when writing new rules.[22] Section 913(f) is ambiguous. Although it purports to give the SEC new authority, stating that the SEC "may commence a rulemaking . . . to address the legal or regulatory standards of care for brokers . . ." it is general in nature.[23] The Dodd-Frank Act's instruction to "address" is necessarily limited by fiscal considerations and existing language of the federal securities laws. By contrast, the second rulemaking provision, Section 913(g), is specific. Section 913(g), entitled "Authority to Establish a Fiduciary Duty for Brokers and Dealers," comprises detailed amendments to the Securities Exchange Act of 1934 ("Exchange Act") and the Investment Advisers Act of 1940 ("Advisers Act") to accomplish that objective.[24]

How will the SEC and the courts view these two provisions? A well-known canon of statutory construction is that the specific governs over the general, but only where the specific is meant to limit the general.[25] Another canon, fanciful as it sounds, is that a later provision prevails over an earlier inconsistent one in the same statute.[26] Here the better view is that Section 913(g) does not limit Section 913(f) because no conflict or inconsistency exists.[27] Congress simply was taking no chances, spelling out in Section 913(g) the authority to create enhanced duties for brokers, although that same

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[21] *Id.* at § 913(f).
[22] *Id.*
[23] *Id.* ("The Commission shall consider the findings conclusions, and recommendations of the study required under subsection (b).").
[24] *Id.* at § 913(g).
[25] *See, e.g.*, D. Ginsberg & Sons, Inc. v. Popkin, 285 U.S. 204, 208 (1932) (citations omitted) ("Specific terms prevail over the general in the same or another statute which otherwise might be controlling."); *see also In re* Philadelphia Newspapers, LLC, 599 F.3d 298, 307 (3d. Cir. 2010) (stating that the specific governs the general canon applies only when the specific provision clearly limits the general (citing Varity Corp. v. Howe, 516 U.S. 489, 511 (1996))).
[26] *See* REED DICKERSON, THE INTERPRETATION OF STATUTES 249 (1975) (discussing methods of judicial statutory interpretation).
[27] Another difference is Section 913(f) gives the SEC authority to "commence" a rulemaking whereas section 913(g) gives authority to "promulgate" rules, but this is a distinction of little substance. Dodd-Frank Act §§ 913(f)-(g). The power to commence a rulemaking must include the power to adopt rules.

authority is covered more generally by (f). That said, to avoid risk that a court could vacate new rules on legal authority grounds, the SEC is likely to hew closely to the well-defined authority in Section 913(g). Moreover, because Section 913(f) requires the SEC to consider the study's findings, a rule adopted under Section 913(f) could be subject to challenge based on potential flaws in the study.

Because the SEC is likely to rely on the authority in Section 913(g), one must explore the scope of authority in that section to identify gaps between the scope of authority and the scope of the study. Understanding Section 913(g) entails cross-referencing between the revised provisions of the Exchange Act and the Advisers Act. Section 913(g)(1) amends the Exchange Act such that the SEC can adopt rules to provide that a broker or dealer, when providing personalized investment advice about securities to a retail customer, has the same standard of conduct applicable to an adviser under Section 211 of the Advisers Act.[28] What then is the standard applicable under Section 211 of the Advisers Act? Section 913(g)(2) amends Section 211 of the Advisers Act to provide that the SEC can adopt rules to provide that the standard of care for brokers, dealers and advisers, shall be to act in the "best interest" of their customers.[29] This raises the question of whether "best interest" is tantamount to a fiduciary standard, a matter of disagreement.[30] If one believes a best

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[28] *Id.* at § 913(g)(1) (authorizing the SEC to promulgate rules regarding brokers' and dealers' duties to customers when dispensing personalized investment advice).

[29] *Id.* at § 913(g)(2) ("Section 211 . . . is further amended by adding at the end the following new subsections [that the] . . . Commission may promulgate rules to provide that the standard of conduct for all brokers, dealers, and investment advisers, when providing personalized investment advice about securities to retail customers (and such other customers as the Commission may by rule provide), shall be to act in the best interest.").

[30] Some courts suggest "best interest" is the same or similar as fiduciary duty. *See* CFTC v. Weintraub, 471 U.S. 343, 348-49 (1985) (citations omitted) ("The managers, of course, must exercise the privilege in a manner consistent with their fiduciary duty to act in the best interests of the corporation and not of themselves as individuals."); *see also* Goldstein v. SEC, 451 F.3d 873, 881 (D.C. Cir. 2006) (citation omitted) (explaining that the SEC recognizes the fiduciary duty is a "best interest" standard); U.S. v. Tiojanco, 286 F.3d 1019, 1021 (7th Cir. 2002) (stating that advisory clients have an understanding that advisers will act in their best interests). A common formulation of fiduciary duty, however, suggests that the duty to act in another's best interest is only one component of the fiduciary

interest standard implies a fiduciary standard, then the Commission has been given the authority to establish a fiduciary duty standard for brokers that give advice. Material conflicts must be disclosed, Congress wrote, although they can be consented to.

In addition, according to the new language in Section 211, such rules, if adopted, shall provide that the standard of conduct applicable to broker-dealers be "no less stringent" than the standard applicable to advisers under Sections 206(1) and 206(2) of the Advisers Act.[31] When interpreting Sections 206(1) and (2), the general antifraud provisions in the Act, the Supreme Court stated, in the 1963 case of *SEC v. Capital Gains Research Bureau, Inc.*, that advisers as fiduciaries must comply with a duty of utmost good faith and full and fair disclosure of material facts.[32] Years later, the Supreme Court explained that Congress intended the Advisers Act to establish a federal fiduciary standard for advisers, although the fiduciary duty does not appear in the statute.[33] Thus, by reference to Sections 206(1) and (2) and a "best interest" standard, Congress has arguably given the SEC authority to place a federal fiduciary duty on broker-dealers.

IV. Gaps

The SEC's rulemaking authority under the Dodd-Frank Act is not without limitation. Section 913(g) does not give the SEC authority to impose on broker-dealers the full panoply of requirements imposed on advisers. The statute does direct the SEC to facilitate simple and clear disclosure to investors, and it provides the SEC with authority to prohibit or restrict certain sales practices,

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obligation. *See* BLACK'S LAW DICTIONARY 581 (9th ed. 2009) (stating that a fiduciary must act "with the highest degree of honesty and loyalty toward another person *and* in the best interests of the other person . . . .).

[31] Dodd-Frank Act § 913(g)(2) ("[the] rules shall provide that such standard of conduct shall be no less stringent than the standard applicable to investment advisers under section 206(1) and (2) of . . . [the Investment Advisers] Act when providing personalized investment advice about securities . . . .").

[32] 375 U.S. 180, 194 (1963) (citations omitted) (discussing fiduciary duty in the investment advisory context).

[33] Santa Fe Industries, Inc. v. Green, 430 U.S. 462, 472 n.11 (1977) ("Congress intended the Investment Advisers Act to establish federal fiduciary standards for investment advisers.").

conflicts of interest and compensation schemes.[34] These provisions, however, do not give the SEC power to require brokers to register as advisers and become subject to all provisions of the Advisers Act.

Moreover, absent from the language in Section 913(g)(2) are references to Advisers Act Sections 206(3) and 206(4). Section 206(3) places a restriction on principal trading by advisers.[35] Section 206(3) recognizes implicitly that anytime one party tries to sell something to another, there is an inherent conflict of interest in the relationship. As fiduciaries, advisers are severely restricted from selling to or buying from clients.[36] Advisers must provide prior written notification and obtain consent before each trade.[37] Most advisers, therefore, simply refrain from engaging in principal trades. Broker-dealers by contrast face no such restriction. Thus, one of the most fundamental tenets against self-dealing, and an important mechanism by which Congress ensured advisers act in clients' best interest, is omitted from the explicit rulemaking authority over broker-dealers.

Recall that the standard to be imposed on brokers shall be "no less stringent" than the standard imposed on advisers under Sections 206(1) and (2) of the Advisers Act.[38] Thus, the standard imposed under Sections 206(1) and (2) could act as a floor, giving the SEC the flexibility to impose on brokers the requirements in Advisers Act Section 206(3). Even if the SEC had such authority, however, it is unlikely to impose the restrictions of Section 206(3) on all broker-dealers because of the effects that such restrictions might have on market liquidity.[39]

Similar questions are raised by the failure of Section 913(g)(2) to reference Section 206(4) of the Advisers Act. Section 206(4) is a general grant of rulemaking authority, permitting the SEC

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[34] Dodd-Frank Act § 913(g)(1) (2010).

[35] Investment Advisers Act of 1940 § 206(3), 15 U.S.C. § 80b-6(3) (2006) (requiring that an adviser not sell or purchase any security from a client as principal "without disclosing to such client in writing before the completion of such transaction the capacity in which he is acting and obtaining the consent of the client to such transaction.").

[36] *Id.*

[37] *Id.*

[38] Dodd-Frank Act § 913(g)(2).

[39] *See* Laby, *Reforming the Regulation of Broker-Dealers and Investment Advisers*, *supra* note 6, at 424-34 (discussing substantive and procedural issues that would result from imposing fiduciary duties on broker-dealers).

to adopt prophylactic rules reasonably designed to prevent fraud.[40] The SEC has adopted several rules under Section 206(4). Examples include rules governing certain advertisements,[41] custody over client funds or securities,[42] voting proxies in clients' best interests,[43] and compliance policies and procedures.[44] The omission of Section 206(4) from Section 913(g)(2) suggests that Congress has not given the SEC authority to adopt such rules for broker-dealers that provide advice to the same extent that such rules can be imposed on advisers.

Again, the phrase "no less stringent than" in Section 913(g)(2) of the Dodd-Frank Act[45] might give the SEC authority to impose on broker-dealers all requirements adopted under Section 206(4) for advisers, but there are questions regarding that approach. Many Section 206(4) rules apply only to advisers that are registered or required to be registered as investment advisers under Section 203 of the Advisers Act. The Dodd-Frank Act does not on its face include authority to require brokers to register as advisers. Thus, if the fact of registration is tied to the necessity for certain rules under Section 206(4), the authority in Section 913(g)(2) might not extend to those particular rules.

The SEC already has authority to adopt antifraud rules for brokers under Section 10(b) of the Exchange Act, but that authority is narrower than the authority under the Advisers Act.[46] Section 10(b)

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[40] 15 U.S.C. § 80b-6(4) (authorizing the SEC to adopt rules and regulations designed to prevent "fraudulent, deceptive, or manipulative" conduct by investment advisers).

[41] Advertisements by Investment Advisers, 17 C.F.R. § 275.206(4)-1 (2010) (proscribing certain forms of advertising by investment advisers).

[42] Custody or Possession of Funds or Securities of Clients, 17 C.F.R. § 275.206(4)-2 (2010) (establishing standards for investment advisers with custody of client funds or securities).

[43] Proxy Voting, 17 C.F.R. § 275.206(4)-6 (2010) (providing that investment advisers must adopt and implement written policies and procedures reasonably designed to ensure that they vote client securities in the best interests of the client).

[44] Compliance Procedures and Practices, 17 C.F.R. § 275.206(4)-7 (2010) (requiring that investment advisers adopt, implement, and annually review written compliance policies and procedures).

[45] Dodd-Frank Act § 913(g)(2).

[46] Securities Exchange Act of 1934 § 10(b), 15 U.S.C. § 78j(b) (2006) (proscribing manipulative and deceptive conduct in contravention of any SEC rule or regulation adopted in the public interest or for investor protection).

applies in the context of a purchase or sale of a security. The Advisers Act contains no such requirement and applies more broadly to the dispensation of advice. A similar disability exists under Exchange Act Section 15(c), which also grants authority to adopt antifraud rules.[47] The broader point regarding the failure to reference Sections 206(3) and (4) of the Advisers Act is simply that the rulemaking authority in Section 913(g) of the Dodd-Frank Act may stop short of allowing the SEC to create a unified standard of care.

Perhaps the most significant gap between the required study under Section 913(b) of the Dodd-Frank Act and the grant of rulemaking authority is demonstrated through a review of consideration 10 of the study.[48] Consideration 10 requires the SEC to examine the impact of eliminating the broker-dealer exclusion from the definition of investment adviser in the Advisers Act.[49] Eliminating the exclusion was the approach taken in an earlier draft and would have required brokers that give advice to be regulated as advisers in all respects, unless later exempted.[50] If the SEC were to conclude in its study that the exclusion should be eliminated, Congress, not the SEC, would have to implement that change.

The gaps that exist between the required study and the proposed rulemaking commend the SEC to bifurcate the two tasks.

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[47] *Id.* at 15 U.S.C. § 78o(c) (directing the SEC to adopt rules and regulations designed to prevent "fraudulent, deceptive, or manipulative" acts and practices by brokers and dealers).

[48] Dodd-Frank Act § 913(b).

[49] *Id.* at §913(c)(10) (requiring the SEC to consider "the potential impact of eliminating the broker and dealer exclusion from the definition of 'investment adviser' under section 202(a)(11)(C) of the Investment Advisers Act of 1940 . . . ."); Investment Advisers Act § 202(a)(11)(C), 15 U.S.C. § 80b-2(a)(11)(C) (2006). The exclusion is applicable as long as the broker's advice is "solely incidental" to brokerage services and the broker receives "no special compensation" for providing advice. Special compensation refers to any non-commission based compensation. *See* S. REP. NO. 76-1775, at 22 (1940) ("The term 'investment adviser' is so defined as specifically to exclude . . . brokers (insofar as their advice is merely incidental to brokerage transactions for which they receive only brokerage commissions) . . . .").

[50] SEN. COMM. ON BANKING, HOUSING & URBAN AFFAIRS, 111TH CONG., RESTORING AMERICAN FINANCIAL STABILITY ACT: CHAIRMAN'S MARK TEXT (Comm. Print 2009), *available at* http://banking.senate.gov/public/_files/111609FullBillTextofTheRestoringAmericanFinancialStabilityActof2009.pdf.

Although the study must inform the SEC's rulemaking, the study must be far more comprehensive. It presents an unprecedented opportunity to apply the SEC's resources, including empirical research, subject-matter expertise, industry knowledge and historical insight, to analyze how the industry has evolved since the 1930's and 1940's and how laws and regulations can be modernized to better serve investors.

V. Approach

Other than the list of considerations and an injunction to seek and consider public comment, Congress gave no public guidance to the SEC with respect to methodology or approach to the study. An examination of the statutory language, however, is a useful starting point. Key words in the legislation are "evaluate" and "effectiveness."[51] The Commission must "evaluate" existing standards and whether "legal or regulatory gaps" exist.[52] To "evaluate" is "to examine and judge concerning . . . worth, quality, significance, amount, degree, or condition . . . ."[53] Thus, the SEC cannot merely discuss, it must form judgments and arrive at conclusions regarding the considerations set forth.

Moreover, the SEC must evaluate the "effectiveness" of existing standards, including legal and regulatory standards, and the Commission's own inspection and examination program.[54] Effectiveness is the ability to bring about a desired result, condition, or outcome.[55] It is a relational concept. The Commission must locate a benchmark of what is to be achieved through application of the standards and compare regulation as it exists today to the benchmark. Only then can it judge whether the standards are effective; that is,

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[51] *See* Dodd-Frank Act § 913(b)-(b)(1).
[52] *Id.* at § 913(b)(2).
[53] WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE UNABRIDGED 787 (Phillip Babcock Grove ed., Merriam-Webster Inc. 1986) [hereinafter *WEBSTER'S DICTIONARY*].
[54] Dodd-Frank Act § 913(b)(1).
[55] See WEBSTER'S DICTIONARY, *supra* note 53, at 724-25 (defining "effect" as the "power to bring about a result" whereas "effectiveness" defines the quality or state of being effective").

whether they achieve the desired end. Proof of effectiveness "'in the air'" will not suffice.[56]

For additional guidance on how to formulate a study with these points in mind, the Commission might turn to the GAO's Government Auditing Standards, often called the Yellow Book.[57] The Yellow Book comprises Generally Accepted Government Auditing Standards ("GAGAS") to "provide a framework for conducting high quality government audits."[58] Although the SEC study might not qualify as an audit in the technical sense, the Yellow Book contains standards not only for financial audits, but also for attestation engagements and performance audits.[59] Performance audits are engagements intended to produce conclusions based on evaluation of evidence against stated criteria, such as "requirements, measures, or business practices."[60] Performance audits provide objective analysis so persons charged with oversight can improve program performance and operations.[61] The SEC study is akin to a performance audit, intended to evaluate federal and state regulation toward the goal of enhanced oversight and greater accountability.

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[56] *See* Palsgraf v. Long Island R.R. Co., 162 N.E. 99, 341 (N.Y. 1928) (quoting SIR FREDERICK POLLOCK, THE LAW OF TORTS 455 (11th ed. 1920)) ("'Proof of negligence in the air, so to speak, will not do'").

[57] GOVERNMENT AUDITING STANDARDS, *supra* note 7, at 1. I thank David Gootnick, Director, International Affairs and Trade, GAO, for bringing the Yellow Book to my attention.

[58] *Id.* at 5-6 ("The professional standards and guidance contained in this document, commonly referred to as generally accepted government auditing standards (GAGAS), provide a framework for conducting high quality government audits and attestation engagements . . .").

[59] *Id.* at 6, 17 (describing the Yellow Book's standards for "attestation engagements" and "performance audits").

[60] *Id.* at 17 ("Performance audits are defined as engagements that provide assurance or conclusions based on an evaluation of sufficient, appropriate evidence against stated criteria, such as specific requirements, measures, or defined business practices.").

[61] *Id.* ("Performance audits provide objective analysis so that management and those charged with governance and oversight can use the information to improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability").

The Yellow Book offers examples of objectives to be considered when evaluating program effectiveness.[62] Effectiveness objectives, according to the Yellow Book, often are related to efficiency objectives, which the SEC must consider as well.[63] Examples of audit objectives in these categories include assessing the extent to which legislative and regulatory goals are being achieved, assessing the ability of alternative approaches to yield better performance, analyzing the cost-effectiveness of a program or activity, determining whether a program produced intended results and determining the status of program operations.[64] These examples are familiar and many appear in Section 913 of the Dodd-Frank Act.

Finally, to evaluate effectiveness, the Commission must make findings.[65] Here too the Yellow Book provides guidance by outlining what is meant by a "finding." A finding includes four elements: criteria, condition, cause and effect.[66] Let us focus briefly on these elements.

The study should develop "criteria," which is essential to measuring effectiveness. Criteria are benchmarks against which performance is compared.[67] Criteria identify the expectation of the evaluator and serve as a context for evaluating evidence in the study. Developing criteria for evaluating the effectiveness of broker-dealer and investment adviser oversight could be difficult. One might examine Congressional goals in these areas. Section 2 of the Exchange Act, for example, outlines the necessity for regulation and focuses on facilitating a national market system.[68] References to

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[62] *Id.* at 18-20 ("Performance audit objectives may vary widely and include assessments of program effectiveness, economy, and efficiency; internal control; compliance; and prospective analyses").
[63] *Id.* at 18 ("Program effectiveness and results audit objectives are frequently interrelated with economy and efficiency objectives.").
[64] *Id.* at 18-19.
[65] Dodd-Frank Act § 913(d)-(d)(2)(A).
[66] GOVERNMENT AUDITING STANDARDS, *supra* note 7, at 154-56.
[67] *Id.*. at 141-42 ("Criteria represent the laws, regulations, contracts, grant agreements, standards, measures, expected performance, defined business practices, and benchmarks against which performance is compared or evaluated. Criteria identify the required or desired state or expectation with respect to the program or operation.").
[68] Securities Exchange Act of 1934 § 2, 15 U.S.C. § 78b (2006) (explaining that "transactions in securities . . . are affected with a national public interest which makes it necessary to provide for regulation and control of such transactions . . .

investor protection in Section 2 appear in the context of facilitating commerce. The purposes behind the Advisers Act, preserving the advisory relationship and exposing conflicts of interest, are different.[69] Similarly, one might ask what are the goals of the SEC's inspection and examination program? Are these examinations pedagogical in nature, a deterrent against misconduct, or both? When evaluating the effectiveness of the regulatory schemes, goals can serve as possible criteria.

Next, the staff must identify "condition." Condition is the situation that exists now, and it is investigated, determined and documented throughout the audit.[70] Information about condition might be drawn from a number of sources, including enforcement investigations and cases brought by the SEC, FINRA and state regulators; data from inspections and examinations conducted by the SEC, FINRA, or the states; survey data, such as that collected by the Rand Institute for Civil Justice;[71] and information from industry groups such as the Securities Industry and Financial Markets Association, the Investment Adviser Association and the Investment Company Institute.

The GAO's third element of a finding is "cause." Cause identifies the reason a condition exists; it explains the gap between

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including . . . to require appropriate reports to remove impediments to and perfect the mechanisms of a national market system . . . .").

[69] *See* S. REP. NO. 76-1775, at 21-22 (1940) (describing the problems and abuses of investment advisory services as encompassing individuals and companies that either "handle pools of liquid funds of the public or give advice with respect to security transactions" and noting that prior law did not limit or restrict the activities of such individuals who may solicit funds).

[70] GOVERNMENT AUDITING STANDARDS, *supra* note 7, at 155 ("Condition is a situation that exists. The condition is determined and documented during the audit.").

[71] ANGELA A. HUNG ET. AL., INVESTOR AND INDUSTRY PERSPECTIVES ON INVESTMENT ADVISERS AND BROKER-DEALERS (2008), http://www.sec.gov/news/press/2008/2008-1_randiabdreport.pdf (providing the SEC with a description of the current state of the investment advisory and brokerage industries for its evaluation of the legal and regulatory environment concerning investment professionals). Dodd-Frank has clarified the SEC's authority to engage in investor testing programs. *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 912, 124 Stat. 1376, 1824 (2010) (authorizing the Commission to engage in temporary investor testing programs as the Commission determines are in the public interest or would protect investors).

the desired state (the criteria) and the actual state (the condition).[72] Cause might include factors outside the SEC's control, such as legislative language, or factors within its control, such as gaps in the SEC's own rules or shortcomings with implementation or enforcement. In many cases, identifying cause will assist the evaluators in preparing proposals for change.

The final element of a finding is "effect." Effect is the impact of the difference between the condition and the criteria; effect is the result of the condition.[73] Measuring effect is difficult as well. Has a gap in regulation caused lower levels of investment—or is the level of investment dependent on factors exogenous to the regulatory scheme? Did gaps lead to spectacular frauds such as the Bernard Madoff investment scandal, or can the Madoff fraud be blamed on other factors? Are there negative effects to additional disclosure? One line of research suggests that additional conflict of interest disclosure by a financial services provider might make matters worse, not better, for investors.[74] The possibility of such negative effects should not be ignored, although resorting to outright bans of certain sales practices has problems of its own.[75] Again, the point is that the SEC should review effects, whatever they might be, as part of its findings.

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[72] GOVERNMENT AUDITING STANDARDS, *supra* note 7, at 155 ("The cause identifies the reason or explanation for the condition or the factor or factors responsible for the difference between the situation that exists (condition) and the required or desired state (criteria), which may also serve as a basis for recommendations for corrective actions.").

[73] *Id.* at 156 ("The effect is a clear, logical link to establish the impact or potential impact of the difference between the situation that exists (condition) and the required or desired state (criteria). The effect or potential effect identifies the outcomes or consequences of the condition.").

[74] *See* Daylian M. Cain, et. al., *When Sunlight Fails to Disinfect: Understanding the Perverse Effects of Disclosing Conflicts of Interest*, 37 J. CONSUMER RES. (forthcoming Feb. 2011) (explaining that disclosure, particularly if made in person, might reduce the ability to resist conflicted advice, and disclosure might increase regulators' willingness to permit conduct that really should be banned).

[75] *See* Langevoort, *supra* note 6, at 448 (explaining that, in some cases, brokers' additional compensation might have salutary effects on investors).

VI. Conclusion

The SEC has been grappling with questions posed in the Dodd-Frank study for over 10 years. The Commission has accumulated vast knowledge on this topic, supplemented by the Rand study, scholarly articles and numerous responses to the request for comment. The study, therefore, represents a singular opportunity to think carefully about the regulatory scheme, the future of the industry and most importantly investor protection. It would be appropriate for the Commission to suggest legislative changes to Congress if needed. By contrast, the grant of rulemaking authority to the SEC is limited in several respects and stops short of empowering the SEC to impose on broker-dealers the universe of duties currently imposed on advisers. Thus, the SEC's two tasks—study and possible rulemaking—are best viewed as complementary but independent assignments.

BROKERS, FIDUCIARIES AND A BEGINNING

REZA DIBADJ[*]

I. Introduction

Under our securities regime, investment advisers[1] are considered to be fiduciaries, whereas broker-dealers[2] are not. This historical divergence emerges from a combination of statute and federal common law: brokers were exempted from the definition of "investment adviser" in 1940,[3] while the United States Supreme Court in 1963 declared investment advisers to have fiduciary obligations.[4]

The Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"), signed into law on July 21, 2010,[5]

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[1] Per § 202(a)(11) of the Investment Adviser Act of 1940,

> 'Investment adviser' means any person who, for compensation, engages in the business of advising others, either directly or through publications or writings, as to the value of securities or as to the advisability of investing in, purchasing, or selling securities, or who, for compensation and as part of a regular business, issues or promulgates analyses or reports concerning securities. . . .

15 U.S.C.S. § 80b-2(a)(11) (2010).

[2] Per §3(a) of the Securities and Exchange Act of 1934, a broker is "any person engaged in the business of effecting transactions in securities for the account of others." 15 U.S.C.S. § 78c(a)(4) (2010). A dealer is "any person engaged in the business of buying and selling securities for such person's own account through a broker or otherwise." 15 U.S.C.S. § 78c(a)(5) (2010).

[3] The definition of "investment adviser" excludes "any broker or dealer whose performance of such services is solely incidental to the conduct of his business as a broker or dealer and who receives no special compensation therefor . . . ." 15 U.S.C.S. § 80b-2(a)(11)(C) (2010).

[4] SEC v. Capital Gains Research Bureau, 375 U.S. 180, 194 (1963) ("Nor is it necessary in a suit against a fiduciary, which Congress recognized the investment adviser to be . . . ."). The term "fiduciary," however, does not appear in the Investment Advisers Act.

[5] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

effectively questions whether this bifurcation makes sense. The new legislation acts along three principal dimensions. First, it asks the Securities and Exchange Commission ("SEC") to study "the effectiveness of existing legal or regulatory standards of care for brokers, dealers, investment advisers . . . for providing personalized investment advice and recommendations about securities to retail customers"[6] and ascertain "whether there are legal or regulatory gaps, shortcomings, or overlaps in legal or regulatory standards."[7] Second, it suggests the SEC commence a rulemaking "to address the legal or regulatory standards of care for brokers, dealers, investment advisers . . . for providing personalized investment advice about securities to such retail customers."[8] Third, Congress gives the SEC the statutory authority to make the standard of conduct of brokers-dealers congruent with that of investment advisers when advising retail customers[9] and to make this standard the following: "[T]o act in the best interest of the customer without regard to the financial or other interest of the broker, dealer or investment adviser providing the advice. In accordance with such rules, any material conflicts of interest shall be disclosed and may be consented to by the customer."[10]

This essay, structured in three parts, argues that though the new legislation represents a positive beginning, the difficult work lies ahead. Part I suggests that there is much to applaud in the new legislation: it gives the SEC the authority to simplify and unify functionally similar financial services and thereby reduce investors' confusion; moreover, it gets beyond the conventional contractarian rhetoric to interpose fiduciary protections for investors. Part II addresses two objections to making broker-dealers subject to a fiduciary standard: (1) that sales activities are not fiduciary in nature, and (2) that brokers also acting as dealers and underwriters will be in

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[6] *Id.* at § 913(b)(1). Topics to study include "the potential impact of eliminating the broker and dealer exclusion from the definition of 'investment adviser' under section 202(a)(11)(C) of the Investment Advisers Act of 1940 . . . ." *Id.* at § 913(c)(10).

[7] *Id.* at § 913(b)(2).

[8] *Id.* at § 913(f).

[9] § 913(g)(1) of the Dodd-Frank Act adds a new § 15(k)(1) to the Exchange Act notes that "the Commission may promulgate rules to provide that . . . the standard of conduct for such broker or dealer with respect to such customer shall be the same as the standard of conduct applicable to an investment adviser. . . ." *Id.* at § 913(g)(1).

[10] *Id.* (adding a new § 211(g)(1) to the Investment Advisers Act).

conflict with their customers. Neither of these concerns is sufficient to eschew the fiduciary standard. Finally, Part III outlines the two practical issues that must be confronted if the fiduciary standard is to protect investors: (1) its definition and (2) its enforcement.

II. A Laudable Step

The Dodd-Frank Act represents a positive and important starting point for reform for two principal reasons. First, it offers the SEC the possibility of unifying the regulation of functionally similar services: a step that would simplify the law and reduce investor confusion. Second, the paradigm it suggests—fiduciary duty—is particularly germane to the provision of investment advice to retail customers, the locus of Dodd-Frank's efforts in this regard.[11]

To begin with, retail investors are confused about the difference between a broker-dealer and an investment adviser.[12] This becomes altogether unsurprising once one recognizes that broker-dealers and investment advisers "often provide practically indistinguishable services to retail investors and direct them to the same products,"[13] as well as enjoy similar compensation structures. As such, the broker-dealer exclusion to the definition of "investment

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[11] *See supra* notes 6-8 and accompanying text (explaining the tasks charged to the SEC laid out by the Dodd-Frank Act). The term "retail customer" is further defined in the statute: "For purposes of this section, the term 'retail customer' means a natural person, or the legal representative of such natural person, who—(1) receives personalized investment advice about securities from a broker or dealer or investment adviser; and (2) uses such advice primarily for personal, family, or household purposes." Dodd-Frank Act § 913(a).

[12] *See* ANGELA A. HUNG ET AL., RAND INSTITUTE FOR CIVIL JUSTICE, INVESTOR AND INDUSTRY PERSPECTIVES ON INVESTMENT ADVISERS AND BROKER-DEALERS, 112 (2008) (explaining that such investors fail to grasp "key distinctions between investment advisers and broker-dealers").

[13] Elisse B. Walter, *Regulating Broker-Dealers and Investment Advisers: Demarcation or Harmonization?*, 35 J. CORP. L. 1, 2 (2009). *See also* Tamar Frankel, *Fiduciary Duties of Brokers-Advisers-Financial Planners and Money Managers* (Boston Univ. Sch. of Law, Working Paper No. 09-36 12, 2009), *available at* http://www.bu.edu/law/faculty/scholarship/workingpapers/documents/FrankelT101009Revsep2010.pdf ("B[roker]-d[ealer]s' functions cannot be distinguished from those of advisers and financial planners.").

adviser"[14]—while perhaps meaningful in 1940—seems precarious today.[15] Put simply, "[a]lthough the nature of their services can appear identical to retail investors, broker-dealers and investment advisers are subject to different regulatory schemes and standards of conduct, which has led to investor confusion and concern about the adequacy of retail investor protection."[16]

One might be tempted to try to unify the regulation of broker-dealers and investment advisers by making both groups subject to the regulatory regime for brokers rather than the fiduciary standard for investment advisers. Unfortunately, though, the standards governing broker-dealer regulation have the dubious distinction of being both inadequate and confusing at the same time—an unsatisfying smorgasbord of doctrines that leaves investors wanting.

Given that "nowhere in the Exchange Act's registration provision is the duty of a broker-dealer to his customers spelled out,"[17] courts and the SEC have evolved a series of doctrines. In a very limited set of circumstances—namely, when brokers are

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[14] *See* 15 U.S.C.S. § 80b-2(a)(11)(C) (2010).

[15] *See, e.g.*, Arthur B. Laby, *Reforming the Regulation of Broker-Dealers and Investment Advisers*, 65 BUS. LAWYER 395, 424 (2010) ("Thus, the idea that most advice provided today by broker-dealers is or could be considered solely incidental to brokerage sounds fanciful. It comes as no surprise that brokerage firms market themselves as providing trusted advice, calling themselves financial advisers, as opposed to stockbrokers."). Perhaps unsurprisingly, the SEC's recent attempt to expand the exception was invalidated by the United States Court of Appeals for the District of Columbia Circuit. *See* Fin. Planning Ass'n v. SEC, 482 F.3d 481 (D.C. Cir. 2007) (finding that the text of § 80b-2(a)(11)(C) provided an exemption only for broker-dealers who did not receive special compensation for investment advice and that the SEC had exceeded its authority in trying to broaden this exception); Certain Broker-Dealers Deemed Not to be Investment Advisers, Exchange Act Release No. 51,523, 70 Fed. Reg. 20,424 (Apr. 19, 2005) (explaining the SEC's expansion of the broker-dealer exception).

[16] Barbara Black, How to Improve Retail Investor Protection After the Dodd-Frank Wall Street Reform and Consumer Protection Act 2 (2010) (unpublished manuscript), *available at* http://works.bepress.com/barbara_black/2/.

[17] Cheryl Goss Weiss, *A Review of the Historic Foundations of Broker-Dealer Liability for Breach of Fiduciary Duty*, 23 J. CORP. L. 65, 88 (1997).

managing discretionary accounts,[18] or have created a special relationship of "trust and confidence"[19]—courts have invoked fiduciary obligations.[20] Nevertheless, broker-dealers are generally not considered fiduciaries.[21] As such, the three predominant doctrines regulating them are not fiduciary ones: the "shingle" theory,[22] the "suitability" rule,[23] and "commercial honor."[24] All three ideas have

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[18] *See* SEC v. Charles Zandford, 535 U.S. 813, 823-24 (2002) (finding that defendant stockbroker violated his fiduciary duty to his client by committing fraud in connection with a transaction for that client).

[19] *See, e.g.*, Frederick Mark Gedicks, *Suitability Claims and Purchases of Unrecommended Securities: An Agency Theory of Broker-Dealer Liability*, 37 ARIZ. ST. L.J. 535, 555 (2005) ("The special circumstances theory, then, provides that broker-dealers owe fiduciary duties to a customer whenever they create a relationship of trust and confidence in their dealings with that customer.").

[20] *See, e.g.*, Thomas Lee Hazen, Stock Broker Standards of Conduct—Principles, Rules and Fiduciary Duties 3 (2010) (unpublished manuscript), *available at* http://works.bepress.com/thomas_hazen/2/ ("[I]t has long been the case that stock brokers owe fiduciary duties when acting in certain capacities.").

[21] *See, e.g.*, Weiss, *supra* note 17, at 108 ("Under some circumstances, a broker may have a fiduciary duty to a particular customer. That duty, however, is not posited due merely to the broker's status as a broker-dealer."); Frankel, *supra* note 13, at 13 ("B[roker]-d[ealer]s are not generally considered fiduciaries. That is even though broker-dealers pose very high risk to entrustors.").

[22] *See, e.g.*, Gedicks, *supra* note 19, at 557 ("[T]he 'shingle' theory of broker-dealer liability holds that merely by identifying themselves as brokers and dealers in securities—by 'hanging out a shingle'—broker-dealers impliedly represent that they will deal fairly with the public.").

[23] *See, e.g.*, Weiss, *supra* note 17, at 96 ("'Suitability' is a cause of action that refers to the requirement, imposed on brokers by the self-regulatory organizations, or by the SEC for non-members, to exercise varying degrees of diligence in inquiring about the customer's resources, sophistication, and investment objectives when making recommendations."). The suitability rule, often phrased informally as "know your customer" and "know your security," is promulgated by the self-regulatory organization for broker-dealers:

> (a) In recommending to a customer the purchase, sale or exchange of any security, a member shall have reasonable grounds for believing that the recommendation is suitable for such customer upon the basis of the facts, if any,

their roots in contract law: under the "shingle" theory, the broker is impliedly representing that she will deal fairly with customers;[25] the suitability rule is akin to the due diligence one performs in contract; and "commercial honor" reads like an implied contractual obligation of good faith. To be sure, there have been instances where these concepts have been used to help investors,[26] but overall they

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> disclosed by such customer as to his other security holdings and as to his financial situation and needs.
> (b) Prior to the execution of a transaction recommended to a non-institutional customer, other than transactions with customers where investments are limited to money market mutual funds, a member shall make reasonable efforts to obtain information concerning:
> (1) the customer's financial status;
> (2) the customer's tax status;
> (3) the customer's investment objectives; and
> (4) such other information used or considered to be reasonable by such member or registered representative in making recommendations to the customer.

FINRA Manual, NASD Rule 2310, available at http://finra.complinet.com/en/display/display.html?rbid=2403&record_id=4315&element_id=3638&highlight=2310#r4315.

[24] FINRA Manual, FINRA Rule 2010, available at http://finra.complinet.com/en/display/display.html?rbid=2403&record_id=6905&element_id=5504&highlight=2010#r6905 ("A member, in the conduct of its business, shall observe high standards of commercial honor and just and equitable principles of trade.").

[25] *See, e.g.*, Weiss, *supra* note 17, at 67 ("The 'shingle theory' derived from a theoretical implied representation of fairness based in contract law . . . ."); Frankel, *supra* note 13, at 9 ("B[roker]-d[ealer]s were viewed and regulated as securities salespersons, and the SEC imposed on them a duty of fairness in their contracts with their customers—the 'shingle theory.' The SEC has held that once broker-dealers hang their shingles and invite clients, broker-dealers should follow a *high ethical contract standard*, and deal fairly with their clients.").

[26] For example:

> [U]nder the shingle theory, it has been held fraudulent to engage in unauthorized trading in a customer's account, to charge excess markups or markdowns, to "churn" a customer's account to obtain commissions, to accept customers' securities while insolvent, or to fail to consum-

represent anemic investor protections because contract law is an inapposite construct to regulate the provision of investment advice to retail customers.

The fiduciary concept, on the other hand, is much more appropriate in this context. After all, clients are trusting their broker or adviser, and "[a]t the heart of fiduciary relationships is *entrustment of property or power* that clients hand over to their fiduciaries in order to enable fiduciaries to perform a service to them."[27] Given the temptations to abuse property or power, "[f]iduciary law aims at reducing the fiduciaries' temptations to misappropriate entrustment."[28] It is essential to note that fiduciary law is not contract law: "[t]he main difference between the two systems revolves around the right of one party to rely on the other. Entrustors are entitled to rely on their fiduciaries to a greater extent than contracting parties are entitled to rely on each other."[29]

> mate a transaction or make prompt delivery without disclosure of appropriate facts.

Weiss, *supra* note 17, at 88-89.

[27] Frankel, *supra* note 13, at 3.

[28] *Id.* at 5. *See also* Tamar Frankel, *Fiduciary Law*, 71 CALIF. L. REV. 795, 832 (1983) (observing that the central problem in a fiduciary relationship is the potential "abuse of delegated power").

[29] Tamar Frankel, *Fiduciary Duties as Default Rules*, 74 OR. L. REV. 1209, 1275-76 (1995). Frankel provides a useful exposition of the differences:

> *First*, because fiduciary law is aimed at reducing the entrustors' risks, the law regulates mostly the fiduciaries. Contract law regulates both parties equally. *Second*, although most types of fiduciary relationships are grounded in the consent of both parties, fiduciary law is triggered primarily by the consent of the fiduciary to serve. . . . Contracts require, in all cases, the consent of all parties. *Third*, fiduciary law is easily applicable because entry into fiduciary relationships involves low costs, requiring no formalities or special conditions. These requisites are far less formal than the requisites for contract. *Fourth*, because fiduciary law addresses the entrustors' risks from relationships, the rules dictate how fiduciaries should behave. Contract rules are far less intrusive. *Fifth*, because entrustors' risks from the relationship vary, fiduciary rules that address these risks vary more than contract rules. *Sixth*, the focus on the entrustor's potential harm from the relationship explains the ascendancy of fiduciary rules over other legal arrangements. Because the private arrangements and other rules

Fiduciary law is attractive in the regulation of investment advice for a number of reasons. Unlike classical contract law, it is well attuned to unequal bargaining power and informational asymmetries which so often characterize the relationship between retail investors and their financial service providers. It recognizes that it is very difficult to predict terms ex ante in long-term relational contracts,[30] and as such imposes extra-contractual obligations to protect the party who has entrusted property or power—a traditional idea supported by modern research in game theory[31] and transaction cost economics.[32]

By far the most important feature of fiduciary duty, however, is that its *sine qua non* is loyalty. As one commentator sums it up, "the duty of loyalty that is the essence of fiduciary duty protects beneficiaries against opportunistic behavior by fiduciaries."[33] This is

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> that govern the relationships are not deemed sufficient to protect entrustors, fiduciary law is superimposed on the other rules.

Id. at 1225-26 (emphasis added).

[30] *See, e.g.*, William W. Bratton, *Game Theory and the Restoration of Honor to Corporate Law's Duty of Loyalty*, *in* PROGRESSIVE CORPORATE LAW 139, 160 (Lawrence E. Mitchell ed., 1995) ("[C]omplete contractual protection *ex ante* is not cost effective because of informational asymmetries and a long list of possible future relational problems."); Melvin Aron Eisenberg, *The Structure of Corporation Law*, 89 COLUM. L. REV. 1461, 1465-66 (1989) ("It is almost impossible to deal adequately with this potential for ex post opportunism by ex ante contracting.").

[31] *See, e.g.*, Bratton, *supra* note 30, at 153 ("[T]he game theoretic firm implies a new endorsement of the traditional dual justification of fiduciary law.").

[32] *See, e.g.*, D. Gordon Smith, *The Critical Resource Theory of Fiduciary Duty*, 55 VAND. L. REV. 1399, 1428 (2002) ("Courts supply fiduciary duties as default rules to reduce the costs associated with providing the fiduciary with incomplete instructions."); Kenneth B. Davis, Jr., *Judiciary Review of Fiduciary Decision Making—Some Theoretical Perspectives*, 80 NW. U. L. REV. 1, 20-21 (1985) (characterizing fiduciary law "as a low transaction cost alternative to ad hoc bargaining between fiduciary and principal"). Transaction costs include "search and information costs, bargaining and decision costs, policing and enforcement costs." Carl J. Dahlman, *The Problem of Externality*, 22 J.L. & ECON. 141, 148 (1979).

[33] Smith, *supra* note 32, at 1402. *See also* Weiss, *supra* note 17, at 66-67 ("The relation of parties to a contract might be adverse, whereas a fiduciary is required to act in the interests of the other party. Where a fiduciary duty exists, loyalty is coextensive with the entire duty.").

in marked distinction to the professional standards—"shingle" theory, "suitability," or commercial honor"—under which broker-dealers are regulated. In the context of investment advice, "[t]he centerpiece of the fiduciary duty is the requirement that investment advisers act in the best interest of their clients."[34] Thus, it is no coincidence that "[i]t is the treatment of conflicts of interest that largely separates investment advisers and broker-dealers under the fiduciary and fair dealing standards."[35] Otherwise thoughtful proposals—advocating, for instance, that "broker-dealers and investment advisers should be held to professional standards of care and competence"[36]—seemingly ignore the fact that beyond "care and competence," investors are seeking loyalty. Thankfully, fiduciary law understands this well.

III. Some Misplaced Objections

Before proceeding further, it is important to address two objections to making brokers subject to a fiduciary standard: (1) that sales activities are not fiduciary in nature, and (2) that brokers also acting as dealers and underwriters will be in conflict with their customers.

The first objection is hardly convincing. It can perhaps be best summarized by the notion that "selling is not a fiduciary occupation."[37] While it may have been true historically that brokers-dealers were primarily concerned with buying and selling securities, they are now increasingly focused on providing investment advice.[38]

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[34] Steven D. Irwin et al., *Wasn't My Broker Always Looking Out for My Best Interests? The Road to Become a Fiduciary*, 12 DUQ. BUS. L.J. 41, 50 (2009).

[35] Kristina A. Fausti, *A Fiduciary Duty for All?*, 12 DUQ. BUS. L.J. 183, 189 (2010).

[36] Black, *supra* note 16, at 4.

[37] Donald C. Langevoort, *Brokers as Fiduciaries*, 71 U. PITT. L. REV. 439, 440 (2010). *See also id.* at 445 ("[T]o fiduciarize the sale of investment products prompts the question of why we do not even think about doing the same in so many other areas where consumers are also at risk of overpaying.").

[38] *See supra* Part II (discussing modern developments in the activities of broker-dealers); Matthew P. Allen, *A Lesson from History, Roosevelt to Obama—The Evolution of Broker-Dealer Regulation: From Self-Regulation, Arbitration, and Suitability, to Federal Regulation, Litigation, and Fiduciary Duty*, 5 ENTREPRENEURSHIP BUS. L.J. 1, 23 (2010) ("The

Moreover, they are providing such advice on an intangible good and typically on an ongoing basis—hardly the stuff of one-off transactions for tangible goods where the informational asymmetries are less pronounced. This is not even to mention that "there are few reported decisions holding a securities broker to the standard of care to which virtually every other trade or profession is held."[39]

The second objection is more nuanced, but also ultimately unpersuasive. The argument focuses on the notion that it is difficult for a broker acting as trader or underwriter to act in the best interest of her client.[40] After all, the objection goes, "[w]hen acting as a dealer, the firm seeks to buy low and sell high—precisely what the customer seeks. It is hard to see how any dealer can act in the 'best interest' of his customer when trading with her."[41] Several nuanced responses have been proposed to this dilemma, including requiring disclosure[42] and permitting principal trades "only for readily marketable liquid instruments."[43] The most effective solution, however, is also the simplest: requiring both disclosure *and* consent before a principal transaction, as is already required under § 206(3) of the Investment Advisers Act.[44] To the extent that such a requirement will in practice restrict principal trading by brokers—as

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rationale for not imposing fiduciary duties on brokers-dealers under the suitability rule is based on the rationale underlying the job descriptions of broker-dealers at the time the '33 and '34 Acts were enacted—broker-dealers merely bought and sold securities, they did not offer or provide investment advice to customers as part of their primary duties.").

[39] Steven A. Ramirez, *The Professional Obligations of Securities Brokers Under Federal Law: An Antidote for Bubbles?*, 70 U. CIN. L. REV. 527, 567 (2002).

[40] *See, e.g.*, Laby, *supra* note 15, at 439 ("An obligation to act in the sole interest—or even the best interest—of a customer cannot easily be squared with the self-interest inherent in trading for one's own account or the interest of a broker-dealer in completing a distribution for an issuer.").

[41] *Id.* at 425.

[42] *See id.* at 429-30 (suggesting that the SEC make permanent its temporary rule requiring broker-dealers to make oral or written disclosures before a principal transaction takes place).

[43] *Id.* at 431.

[44] *See* 15 U.S.C.S. § 80b-6(3) (2010) (stating that investment advisors are required to disclose to their clients in writing certain conflicts of interest and to obtain client consent before moving ahead with the transaction).

it already has for investment advisers[45]—then this would represent a positive protection for investors.[46]

The problem of an underwriter having divided loyalties—between the issuer for whom it is working and the investor to whom it is selling the offering[47]—can similarly be addressed in a variety of ways. The fiduciary standard could be prioritized toward investors,[48] the offering could be supervised by an independent underwriter[49]—or most straightforwardly, broker-dealers could be prohibited from acting as underwriters.

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[45] *See* Laby, *supra* note 15, at 408 ("[S]ection 206(3) is effectively a ban on principal trading for advisers.").

[46] In a similar vein, consider Donald Langevoort's observation:

> To be most potent, then, reform would have to be structural to make brokers into fiduciaries: turn broker-customer dealings to a solely fee-based relationship, with a prohibition on any incentives apart from those based on the customer's (now client's) financial success. In essence, this would require a segregation of the broker function from the dealer function, via a "Chinese Wall" that would have to be watched constantly and very carefully for cracks and leaks. The broker, in other words, becomes solely an investment adviser, with the ability to execute trades.

Langevoort, *supra* note 37, at 449. Broker-dealers, of course, may not be pleased with such a development. *See* Laby, *supra* note 15, at 407 ("Notwithstanding the prospect of owing fiduciary obligations, the primary reason many brokers oppose application of the Advisers Act is due to restrictions on conducting principal transactions imposed on advisers but not brokers.").

[47] *See* Laby, *supra* note 15, at 428 ("Acting on behalf of both the issuer and investor client raises a conflict of duty. This conflict is similar to a conflict of interest, but instead of a conflict between the broker-dealer's self-interest and its duty to a customer or client, the firm is faced with conflicting demands of two opposing clients.").

[48] *See id.* at 432 ("In propounding a fiduciary standard for brokers, Congress could clarify that the broker-dealer's primary duty runs to the investor, not the underwriting client.").

[49] *See id.* at 433 ("An additional possible reform to help ensure that an underwriter acts in a fiduciary capacity with respect to customers is to require an issuer conducting a public offering to engage an independent outsider to superintend the offering, with a skeptical eye to ensuring the interests of investors.").

IV. Practical Realities

Beyond these objections, two practical issues must be confronted to make the fiduciary standard useful in practice: (1) meaningfully specifying the duties it entails and (2) enforcing them. As the Supreme Court once famously observed, "to say that a man is a fiduciary only begins analysis; it gives direction to further inquiry."[50] The natural place to look, of course, is the fiduciary duty imposed on investment advisers, but there is precious little jurisprudence on the issue.[51] This is particularly troubling in an era where the fiduciary construct is under attack both in the law of corporations[52] and the law of unincorporated associations.[53] In a nutshell, the law of business associations "has relaxed—*without either explanation or justification*—the fiduciary strictures imported from trusts and agency so as to permit direct and indirect self-dealing

[50] SEC v. Chenery, 318 U.S. 80, 85-86 (1943). *See also* Hazen, *supra* note 20, at 23 ("However, the fact that the relationship is a fiduciary one only takes one so far. The key question is to determine what actual duties arise out of the relationship.").

[51] *See, e.g.*, Black, *supra* note 16, at 9 ("Neither *Capital Gains* nor *Transamerica Mortgage Advisors*, however, presented the Court with the opportunity to explore concretely the nature of fiduciary duties owed by an investment adviser providing individualized investment advice, and there is limited case law or regulatory guidance on the issue.").

[52] *See* Reza Dibadj, *Delayering Corporate Law*, 34 HOFSTRA L. REV. 469, 470 (2005) ("Existing fiduciary duties are little more than rhetorical flourish."); J. Robert Brown, Jr., *The Irrelevance of State Corporate Law in the Governance of Public Companies*, 38 U. RICH. L. REV. 317, 318 (2004) ("Over time, state courts interpreted the [fiduciary] duties in a manner that left little substance."); William W. Bratton & Joseph A. McCahery, *The Equilibrium Content of Corporate Federalism*, 41 WAKE FOREST L. REV. 619, 691 (2006) ("[T]he genius of Delaware lawmakers lies in their ability to generate a thick fiduciary law without at the same time imposing a significant compliance burden.").

[53] *See generally* Reza Dibadj, *The Misguided Transformation of Loyalty into Contract*, 41 TULSA L. REV. 451 (2006) ("Unfortunately, the law of unincorporated associations is engaged in a misguided march: it is transforming the duty of loyalty into a contractarian construct. This article argues that these developments reflect doctrinal confusion, outworn economics, and weak policy. If anything, the duty of loyalty needs to be strengthened, not watered down.").

and other diversionary transactions"[54] to rely instead on "the *imagery* of contract and consent."[55]

There is a risk that a similar evisceration might occur even if the regulation of broker-dealers and investment advisers were unified under a fiduciary rubric. Consider that very recently, when faced with interpreting an investment adviser's fiduciary duty with respect to the receipt of compensation, a unanimous Supreme Court noted that "to face liability . . . an investment adviser must charge a fee that is so disproportionately large that it bears *no reasonable relationship* to the services rendered and could not have been the product of *arm's length bargaining*."[56] The Court also placed great importance on whether proper process was followed in determining the fee.[57] Much like in the law of business associations, the focus seems to be on contract and process—not a deeper judicial inquiry into the fairness of the transaction that one might expect in fiduciary analysis.[58] As such, the burden will likely be on the expert agency, the SEC, to articulate and specify the notion that fiduciary obligations rise above contractual ones, and that process cannot simply redeem unfair transactions. One possibility would be to return to first principles in the laws of trusts[59] and agency.[60] Put succinctly in the words of one

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[54] Victor Brudney, *Corporate Governance, Agency Costs, and the Rhetoric of Contract*, 85 COLUM. L. REV. 1403, 1434 (1985) (emphasis added).
[55] *Id.* (emphasis added).
[56] Jones v. Harris Associates, No. 08-586, slip op. at 9 (2010) (emphasis added). The case was brought under § 36(b) of the Investment Company Act of 1940 which stipulates that "the investment adviser of a registered investment company shall be deemed to have a fiduciary duty with respect to the receipt of compensation for services, or of payments of a material nature, paid by such registered investment company, or by the security holders thereof, to such investment adviser." 15 U.S.C. § 80a-35(b) (2006).
[57] *See* Harris Associates, No. 08-586, slip op. at 15 ("When a board's process for negotiating and reviewing investment-adviser compensation is robust, a reviewing court should afford commensurate deference to the outcome of the bargaining process.").
[58] As Justice Thomas noted in his concurrence, "[w]hatever else might be said about today's decision, it does not countenance the free-ranging judicial 'fairness' review of fees. . . ." *Id.*, No. 08-586, slip op. at 2 (Thomas, J., concurring).
[59] *See, e.g.*, Allen, *supra* note 38, at 70-73 (stating that review of trustee's fiduciary standards may be helpful in understanding where broker-dealer duties may be heading).
[60] *See, e.g.*, Gedicks, *supra* note 19, at 546 ("This article argues that the common law of agency supplies a powerful justification for holding broker-

Commissioner, "I believe it is important that the Commission explain what the fiduciary standard requires."[61]

A second practical difficulty involves enforcing the fiduciary duty in a way that gives aggrieved investors redress. The Dodd-Frank Act gives the SEC enforcement authority to enforce the applicable standard of conduct that might emerge, thereby harmonizing enforcement of broker-dealers to that of investment advisers when offering investment advice to retail customers.[62] The central

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dealer firms liable for customer losses from unrecommended securities investments.").

[61] Walter, *supra* note 13, at 9; *see also* Fausti, *supra* note 35, at 197 ("Ultimately, with or without legislation, the responsibility for extending the fiduciary standard will lie with the SEC."). *Cf.* Langevoort, *supra* note 37, at 456 ("Simply placing the fiduciary label on the securities industry and leaving the rest to ad hoc decisions will produce a platform that is neither stable nor functional.").

[62] Dodd-Frank Act § 913(h)(1) amends § 15 of the Securities and Exchange Act as follows:

> The enforcement authority of the Commission with respect to violations of the standard of conduct applicable to a broker or dealer providing personalized investment advice about securities to a retail customer shall include—
>
> (1) the enforcement authority of the Commission with respect to such violations provided under this Act; and
>
> (2) the enforcement authority of the Commission with respect to violations of the standard of conduct applicable to an investment adviser under the Investment Advisers Act of 1940, including the authority to impose sanctions for such violations, and
>
> the Commission shall seek to prosecute and sanction violators of the standard of conduct applicable to a broker or dealer providing personalized investment advice about securities to a retail customer under this Act to the same extent as the Commission prosecutes and sanctions violators of the standard of conduct applicable to an investment advisor under the Investment Advisers Act of 1940.

Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 913(h)(i), 124 Stat. 1376, 1829 (2010).

question, though, is whether the SEC has sufficient resources?[63] Consider that while a self-regulatory organization ("SRO"), the Financial Industry Regulatory Authority ("FINRA"), provides front-line enforcement against broker-dealers, there is no SRO for investment advisers.[64] The problem becomes particularly acute when one considers that the SEC currently "registers and regulates 11,300 investment advisers,"[65] and enforcement harmonization would add "the registration and regulation of 4,900 brokerage firms, 174,000 brokerage branch offices and over 650,000 registered representatives."[66]

To be sure, some of the strain on public enforcement might be alleviated. Commentators have already begun proposing solutions in this regard. For example, even though § 410 of the Dodd-Frank Act increases the threshold of assets under management to trigger investment adviser registration from $25 million to $100 million,[67] the threshold might be increased even further;[68] or one might consider expanding exemptions from registration while subjecting broker-dealers and advisers to antifraud liability.[69] Another possibility might involve changing the SEC's funding mechanism to enhance resources for enforcement.[70]

Another avenue toward relieving the burden on the SEC would be to contemplate the creation of an SRO for investment advisers. Interestingly, § 914 of the Dodd-Frank Act directs the SEC

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[63] *See, e.g.*, Laby, *supra* note 15, at 439 ("In addition, regulating brokers that give advice as advisers would swell the number of advisers subject to registration and have sweeping implications for the SEC's resources.").

[64] *See* Irwin et al., *supra* note 34, at 48 ("Where broker dealers have a self-regulatory organization (FINRA), there is no self-regulation for investment advisers.").

[65] Allen, *supra* note 38, at 48.

[66] *Id.*

[67] *See* Dodd-Frank Act § 410.

[68] *Cf.* Laby, *supra* note 15, at 435 ("The first is to raise the monetary threshold for the amount of assets under management that triggers SEC registration for investment advisers.").

[69] *See, e.g., id.* ("The second and preferred solution is to exempt from Advisers Act registration certain broker-dealers providing advice, while preserving antifraud regulation under the Advisers Act for the exempt firms.").

[70] *See, e.g.,* Joel Seligman, *Self-Funding for the Securities and Exchange Commission*, 28 NOVA L. REV. 233 (2004).

to study this issue.[71] While worthy of discussion, such an approach is at least in tension with the concern that arbitration proceedings conducted under the auspices of SROs are unfair to investors; presumably based on these concerns, § 921 of the Act gives the authority to the SEC to restrict mandatory pre-dispute arbitration.[72]

The more meaningful solution, however, may lie neither with the SEC nor an SRO but with private enforcement. As a starting point, it is important to remember that under the Securities and Exchange Act of 1934, which regulates trading transactions, investors are generally unable to bring a private right of action unless they can show fraud—hence the overwhelming importance of § 10(b) and Rule 10b-5 to securities litigation. More specifically, showing that a broker-dealer violated an SRO regulation is not sufficient to sustain a private cause of action,[73] unless the violations are so egregious that these transgressions can be used to make a case under §10(b) and Rule 10b-5. In reality, "suitability and negligent recommendation cases have all but been eliminated from federal court."[74]

A private plaintiff might get more creative and plausibly sue for negligent investment advice by looking to § 12(a)(2) of the Securities Act of 1933, which provides a rescissionary remedy if a security is sold "by means of a prospectus or oral communication"[75] which contains a material misstatement or omission, unless the seller

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[71] *See* Dodd-Frank Act § 914(a)(2)(B) (directing the SEC to examine "the extent to which having Congress authorize the Commission to designate one or more self-regulatory organizations to augment the Commission's efforts in overseeing investment advisers would improve the frequency of examinations of investment advisers.").

[72] *See id.* at § 921 ("The Commission, by rule, may prohibit, or impose conditions or limitations on the use of, agreements that require customers or clients of any broker, dealer, or municipal securities dealer to arbitrate any future dispute between them arising under the Federal securities laws, the rules and regulations thereunder, or the rules of a self-regulatory organization if it finds that such prohibition, imposition of conditions, or limitations are in the public interest and for the protection of investors.").

[73] *See, e.g.*, Ramirez, *supra* note 39, at 548 ("Noticeably absent from the entire scheme of mandatory self-regulation is any authorization of a private right of action for a violation of an SRO rule or regulation."); Weiss, *supra* note 17, at 101 ("The weight of opinion rejects the proposition that a breach of SRO suitability rules provides a private right of action.").

[74] Irwin et al., *supra* note 34, at 48.

[75] 15 U.S.C. § 77l(a)(2) (2006).

can show that "he did not know, and in the exercise of reasonable care could not have known of such untruth or omission."[76] This would appear to be an attractive cause of action for a plaintiff. After all, in contrast to §10(b) and Rule 10b-5, which require the plaintiff to establish scienter, in a §12(a)(2) action, the burden is on the defendant to show that he took reasonable care. Unfortunately for investors, however, in 1995 the Supreme Court in the *Gustafson* case held § 12(a)(2) inapplicable to aftermarket transactions.[77] As such the 1933 Act route appears unpromising as well, unless the investor has purchased her shares in a public offering.

Beyond the 1933 and 1934 Act, one is naturally tempted to look to the Investment Advisers Act. Perhaps surprisingly, the statute only does slightly better.[78] Ironically, while in 1963 the Supreme Court embraced the fiduciary standard in interpreting the Act in the *Capital Gains*[79] decision, in 1979 it sharply restricted the ability of investors to bring private actions under the standard in the *Transamerica* case.[80] In a 5-4 opinion, the Court held that "there exists a limited private remedy under the Investment Advisers Act of 1940 to void an investment advisers contract, but that the Act confers no other private causes of action, legal or equitable."[81] As with the 1934 Act, then, damages are unavailable to aggrieved investors for

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[76] *Id.*

[77] *See* Gustafson v. Alloyd Co., 513 U.S. 561, 578 (1995) ("Under Alloyd's view any casual communication between buyer and seller in the aftermarket could give rise to an action for rescission, with no evidence of fraud on the part of the seller or reliance on the part of the buyer. In many instances buyers in practical effect would have an option to rescind, impairing the stability of past transactions where neither fraud nor detrimental reliance on misstatements or omissions occurred. We find no basis for interpreting the statute to reach so far.").

[78] *See, e.g.*, Allen, *supra* note 38, at 84 ("If broker-dealers are fiduciaries, and broker-dealers are treated like investment advisers as SEC commentators and Congress have suggested they should be, then it is possible plaintiffs will be relegated to bringing breach of fiduciary duty claims under the Advisers Act, which provides very limited private remedies?").

[79] *See* SEC v. Capital Gains Research Bureau, 375 U.S. 180, 194 (1963).

[80] *See* Transamerica Mortgage Advisors v. Lewis, 444 U.S. 11 (1979).

[81] *Id*. at 24. *See also* Irwin et al., *supra* note 34, at 51 ("Private rights of action under the 1940 Act are limited to voiding an investment advisory contract and for rescission or restitution of any consideration paid (such as advisory fees) under the contract.").

the negligence of their advisers.[82] In sum, unless they can show fraud or be willing to countenance private arbitration, investors are essentially left without private remedy.[83]

Perhaps most interestingly, the Dodd-Frank Act does not change this state of affairs. As one scholar aptly points out, the legislation "provides no explicit remedy for an investor harmed by an investment advice provider's negligence or breach of fiduciary duty. Thus, after the enactment of Dodd-Frank, investors who purchased securities in trading transactions are still without a federal damages remedy unless they can establish fraud."[84] Furthermore, it is very unlikely that contemporary federal courts will imply a private cause of action as a matter of federal common law[85] or even lessen the scienter requirement in securities fraud cases.[86] Thus, relief would have to come from Congress, which could permit a private cause of action for damages for breach of a broker-dealer or investment adviser's fiduciary duty.[87] A starting point may be legislative action

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[82] *See, e.g.*, Black, *supra* note 16, at 11 ("[T]he only investors' remedy in the Advisers Act is a limited rescissionary remedy; there is no provision for compensating losses caused by negligent investment advisers.").

[83] *Cf.* Allen, *supra* note 38, at 28 ("There exists no express or implied private right of action under the '34 Exchange Act for violation of FINRA's suitability or other rules. So before the advent and Supreme Court-approval of industry arbitration agreements in the 1970's, most suitability claims were brought as section 10(b) and Rule 10b-5 implied private rights of action.").

[84] Black, *supra* note 16, at 19.

[85] In other words, it is unlikely that a twenty-first century federal court would agree with the notion that "in the absence of a private right of action for damages, victimized clients have little hope of obtaining redress for their injuries." Transamerica Mortgage Advisors v. Lewis, 444 U.S. 11, 35 (1979) (White, J., dissenting).

[86] Interestingly, the Supreme Court declared investment advisers to have fiduciary obligations by reading out the intent requirement in§ 206 of the Investment Advisers Act. *See* SEC v. Capital Gains Research Bureau, 375 U.S. 180, 192 (1963) ("It would defeat the manifest purpose of the Investment Advisers Act of 1940 for us to hold, therefore, that Congress, in empowering the courts to enjoin any practice which operates 'as a fraud or deceit,' intended to require proof of intent to injure and actual injury to clients.").

[87] *Cf.* Black, *supra* note 16, at 5 ("Despite the frequent expression of the need to improve retail investor protection, at no time did Congress give serious consideration to amending federal securities legislation to provide an explicit damages remedy for careless and incompetent investment

that would make §12(a)(2) applicable to trading transactions, effectively "overruling" *Gustafson*.

V. Conclusion

The Dodd-Frank Act's mandate to the SEC to conduct a study to improve the regulation of broker-dealers and investment advisers, as well as its granting of statutory authority to the SEC to interpose a fiduciary duty on broker-dealers, is to be commended. Should the SEC choose to follow Congress' lead, it has the opportunity to simplify and unify regulation in an area crucial to investor protection.[88]

Espousing a fiduciary standard also gives the message that fiduciary law, and its concomitant moral component,[89] is important—a particularly relevant message in an era where the fiduciary principle is under attack in the law of business associations generally. This point cannot be overemphasized. As Justice Harlan Stone reflected in the wake of excesses of the 1920s:

> I venture to assert that when the history of the financial era which has just drawn to a close comes to be written, most of its mistakes and major faults will be ascribed to the failure to observe the fiduciary principle, the precept as old as holy writ,

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advice."). Of course, if one espouses the fiduciary concept, then the cause of action would not only be for breaches of the duty of care, but also of loyalty.

[88] As one SEC Commissioner notes:

> I believe that there are numerous advantages to harmonizing legislations. First and foremost, it would provide a clear congressional statement that all financial professsionals should be held to the same high standard of conduct. It would also address investor confusion by providing a unified system of regulation for all financial professionals offering comparable securities products and services.

Walter, *supra* note 13, at 10.

[89] *See, e.g.*, Frankel, *supra* note 28, at 830 ("This moral theme is an important part of fiduciary law. Loyalty, fidelity, faith, and honor form its basic vocabulary.").

> that "a man cannot serve two masters . . . . Yet those who serve nominally as trustee, but relieved, by clever legal devices, from the obligation to protect those whose interests they purport to represent, . . . financial institutions which, in the infinite variety of their operations, consider only last, if at all, the interests of those whose funds they command, suggest how far we have ignored the necessary implications of that principle.[90]

Stone's words are at least as relevant today as they were in 1934.[91]

Objections to the fiduciary standard—namely, that selling securities is not a fiduciary activity or that brokers cannot serve two masters when acting as dealers or underwriters—remain unconvincing. Rather, for reform to make a difference, the real challenges will lie in defining the duty carefully and in enforcing it effectively. Notwithstanding the difficult work ahead, Dodd-Frank presents a beginning and an opportunity.[92]

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[90] Harlan F. Stone, *The Public Influence of the Bar*, 48 HARV. L. REV. 1, 8-9 (1934).

[91] As Tamar Frankel reminds us, "[u]nlike status and contract societies, a fiduciary society emphasizes not personal conflict and domination among individuals, but cooperation and identity of interest pursuant to acceptable but imposed standards. . . . A contract society values freedom and independence highly, but it provides little security for its members." Frankel, *supra* note 28, at 802.

[92] *Cf.* Irwin et al., *supra* note 34, at 61 ("Despite the plethora of unanswered questions, simple enactment of a fiduciary standard is an important step in restoring confidence in our financial markets.").

FINANCIAL INNOVATION, LEVERAGE, BUBBLES AND THE DISTRIBUTION OF INCOME

MARGARET M. BLAIR*

I. Introduction

Although Congress has passed and the President has signed the Dodd-Frank Wall Street Reform and Consumer Protection Act, one of the most important problems facing regulators is scarcely addressed in the bill, leaving it to regulators to address as they work out the details of a new regulatory scheme. This is that financial innovation has made it possible for financial firms to utilize vastly too much "leverage"—to supply too much credit to others and to borrow too much in order to provide this credit. The effect has been a financial system in the U.S. (and globally as well) that is too large in several senses: it uses too much debt, it creates too much credit, it thereby fuels asset bubbles that expose the rest of the economy to too much risk and its employees and investors are paid too much because they are generally paid for appearing to add value, even if the value later evaporates when the bubbles burst.

This assertion challenges the pre-financial crisis conventional view that the growth and innovativeness of the financial sector unequivocally improve the efficiency with which investors save and capital is aggregated and deployed to finance productive investment,[1]

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and helps to allocate risk to those who can most efficiently bear it.[2] The recent financial market crisis, however, provides good reason to

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assistance; Andrew Yi, Jiali Zhang, Jake Byl, and Jon Silverstein also helped with research on the project. All remaining errors are those of the author.

[1] Raghuram G. Rajan & Luigi Zingales, *Financial Dependence and Growth*, 88 AM. ECON. REV. 559, 561-62 (1998) ("There has been extensive theoretical work on the relationship between financial development and economic growth. Economists have emphasized the role of financial development in better identifying investment opportunities, reducing investment in liquid but unproductive assets, mobilizing savings, boosting technological innovation, and improving risk taking. All these activities can lead to greater economic growth."); Martin Neal Baily, Robert E. Litan & Matthew S. Johnson, Brookings Inst., The Origins of the Financial Crisis (Nov. 2008), http://www.brookings.edu/papers/ 2008/11_origins_crisis_ baily_litan.aspx?p=1 ("The financial crisis that has been wreaking havoc in markets in the U.S. and across the world since August 2007 had its origins in an asset price bubble that interacted with new kinds of financial innovations that masked risk; with companies that failed to follow their own risk management procedures; and with regulators and supervisors that failed to restrain excessive risk taking."); ROBERT E. LITAN, BROOKINGS INST., IN DEFENSE OF MUCH, BUT NOT ALL, FINANCIAL INNOVATION 15-38 (Feb. 17, 2010), http://www.brookings.edu/~/media/Files/rc/opinions/2010/0217_ financial_innovation_litan/0217_financial_innovation_litan.pdf ("My ultimate verdict is that . . . there is a mix between good and bad financial innovations, although on balance I find more good ones than bad ones.").

[2] Raghuram G. Rajan, *Has Financial Development Made the World Riskier?*, 2005 ECON. SYMP. 313, 314-15, *available at* http://www. kansascityfed.org/Publicat/sympos/2005/PDF/Rajan2005.pdf (explaining how new choices by individual savers and increased investment in illiquid assets by banks has changed the nature of risk and risk taking in capital markets); Mike Konczal, *Shadow Banking: What It Is, How it Broke, and How to Fix It*, THE ATLANTIC, July 13, 2009, *available at* http:// www.theatlantic.com/business/archive/2009/07/shadow-banking-what-it-is-how-it-broke-and-how-to-fix-it/21038 (cataloging the shadow banking system's ability to move certain types of risks off banks' balance sheets and discussing the new forms of risk the shadow banking produced); Ben S. Bernanke, Chairman, Fed. Reserve Sys., Speech at The Credit Channel of Monetary Policy in the Twenty-first Century Conference: The Financial Accelerator and the Credit Channel (June 15, 2007) [hereinafter Bernake Speech], *available at* http://www.federalreserve.gov/newsevents/speech/ bernanke20070615a.htm ("Economic growth and prosperity are created primarily by what economists call 'real' factors—the productivity of the

challenge these claims. Financial services and financial innovation undoubtedly facilitate productive investment up to a point. But, in the last few decades, the U.S. economy has invested a growing share of GDP in a financial system that, at least at the margin, is using too much debt, creating too much credit and absorbing more in the way of social and economic resources than it is producing.

Regulators now confront a financial sector that has grown too large in several senses: First, financial innovation has made it possible for numerous financial institutions that are outside the regulated part of the banking system to provide credit, liquidity and money-like financial instruments. This network of non-bank institutions, together with the securities they issue and trade, has been called a "shadow banking system" because, while this network has become integral to the way regulated banks operate, it has operated largely outside the regulations that govern banks and other depository institutions.[3] Activity in the shadow banking system facilitates the use of much higher levels of leverage than can or would be used in the formal banking system and the shadow banking system thereby engages in numerous transactions that might not have happened at all in the past because no bank or bank-like institution

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workforce, the quantity and quality of the capital stock, the availability of land and natural resources, the state of technical knowledge, and the creativity and skills of entrepreneurs and managers. But extensive practical experience as well as much formal research highlights the crucial supporting role that financial factors play in the economy."); Timothy F. Geithner, President and Chief Executive Officer, Fed. Reserve Bank of N.Y., Remarks at the Global Association of Risk Professionals (GARP) 7th Annual Risk Management Convention & Exhibition in New York City: Risk Management Challenges in the U.S. Financial System (Feb. 28, 2006), *available at* http://www.ny.frb.org/newsevents/speeches/ 2006/gei060228. html (describing the general benefits the financial system brings to the world economy but also noting that the global financial system is vulnerable to intermittent panics and mania); Lorenzo Bini Smaghi, Member of the Executive Board, European Central Bank, Speech at the Nomura Seminar: Has the Financial Sector Grown Too Big? (Apr. 15, 2010), *available at* http://www.ecb.int/press/key/date/2010/html/sp100415.en.html (arguing that efficient financial markets produce growth but that overly large financial markets can also introduce economic risk).

[3] Tobias Adrian & Hyun Song Shin, *The Shadow Banking System: Implications for Financial Regulation* 2009, at 14-16 (Fed. Reserve Bank of N.Y., Staff Report No. 382, 2009) (discussing pre-2008 increase in bank leverage as a cause of the Financial Crisis and proposing regulatory frameworks to check the financial system).

would have been willing, or permitted by regulators, to engage in such transactions. Many of these transactions may have facilitated useful investment in the real economy, but a substantial share of the additional transactions made possible by the shadow banking system has been wasteful or even destructive.

The shadow banking system evolved largely for the purpose of hiding leverage from regulators or getting it outside of the reach of regulators. Yet, prior to the crisis, regulators and legislators chose not to intervene and not to try to extend regulatory oversight to these new institutions and financial instruments, largely accepting the industry's argument that less regulation and more innovation would lead to greater growth in the economy.[4]

Second, some scholars and policy analysts have argued that problems in the financial system arose because large banks and other financial institutions are "too big to fail."[5] This is one facet of the problem. But a more serious problem is that the system in the aggregate is too big and too highly leveraged. Regulators have not previously been able to prevent institutions outside the banking system from operating with excessive leverage and engaging in other high-risk transactions, as AIG and many other institutions did. The Dodd-Frank Act addresses this problem only indirectly, by authorizing the Board of Governors of the Federal Reserve System to take over the regulation of financial institutions, including non-bank institutions, deemed to be a threat to the safety and soundness of the financial system.[6] Yet it may not be clear which institutions constitute such a threat until it is too late for regulators to prevent a panic aimed at assets in the shadow banking system, such as what we saw in the fall of 2008.[7]

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[4] Konczal, *supra* note 2 (proposing new regulations that would prevent a repeat of the 2008 financial crisis).

[5] SIMON JOHNSON & JAMES KWAK. 13 BANKERS: THE WALL STREET TAKEOVER AND THE NEXT FINANCIAL MELTDOWN 202-03 (2010) (detailing the genesis of the term "too big to fail" and the organizations to which the concept applies).

[6] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, §§ 112-13, 124 Stat. 1394-1402 (2010).

[7] Markus K. Brunnermeier, *Deciphering the Liquidity and Credit Crunch 2007-2008*, 23 J. ECON. PERSPECTIVES. 77, 82-91 (2009) (providing a timeline for key events surrounding the Financial Crisis); Gary B. Gorton & Andrew Metrick, *Securitized Banking and the Run on Repo* 13-14 (Nat'l Bureau of Econ. Research, Working Paper No. 15223, 2009) (providing a timeline for the credit crisis during 2007 and 2008); Daniel Covitz, Nellie

The objection that many economists and policy analysts may make to my assertion that the system is too large and too highly leveraged arises from an assumption that an efficient and unregulated capital market will not, consistently and systematically, provide "excessive" credit, nor should it systematically finance inefficient investments. Standard economic theory tells us that any such problem should be self-correcting in a market economy: investors who provide financing to the banks and shadow banks should refuse to provide further financing if the institution becomes too highly leveraged. Further, if the prices of assets financed by such leverage are driven up by excessive debt financing, they should be less attractive as investments, encouraging investors to redirect their investment dollars.

I argue, however, that financial markets might not always be self-correcting even if all investors are fully rational. Why? The reason is that finance is different from other sectors because what it creates is credit, and credit acts like a monetary stimulus to the economy, pushing up prices in the same way that printing excess money would be expected to drive up inflation. Unregulated financial firms can create an almost endless supply of credit simply by operating at higher degrees of leverage.[8] Leverage greatly enhances the return on equity for bank shareholders and other investors in the shadow banking system in good times, when asset values are rising. It also increases the losses in bad times and those losses often fall on others, such as creditors of the financial firms. Moreover, neither creditors nor shareholders in a financial firm bear all of the costs when a financial firm fails. This is because the failure of a single institution may force that institution to sell assets quickly, and if the institution is large, this can drive asset prices further down, causing other institutions to have losses so that they too are forced to sell.[9] In

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Liang & Gustavo Suarez, Fed. Reserve Bank of S.F., The Anatomy of a Financial Crisis: The Evolution of Panic-Driven Runs in the Asset-Backed Commercial Paper Market 2 (2009).

[8] In certain sectors of the financial market, "leverage" has become a term of art that means the ratio of the total value of an asset to the amount of equity (or sometimes "capital") used to finance the asset. In more traditional and common usage of the term, it means the ratio of debt to equity, or debt to total assets. All of these ratios are ways of measuring the degree to which a firm or investor is relying on borrowed money to make its investments.

[9] Brunnermeier, *supra* note 7, at 92-94 ("A *loss spiral* arises for leveraged investors because a decline in the value of assets erodes the investors' net

extreme situations, as we have seen in the recent financial crisis, taxpayers may be called upon to prop up troubled institutions to prevent a downward spiral of asset prices that can devastate the whole economy.

These factors provide a third sense in which the financial sector is too large: for the reasons reviewed above, and others which I will explain below, individual institutions will tend to operate with leverage that is too high and will encourage customers to borrow too much. In this way, the financial system as whole tends to generate too much credit if it is not prevented from doing so by regulators.[10]

The effect of excessive credit on the system as a whole can be explained by a simple analogy to the idea of the "money multiplier" and the "quantity theory of money" from Econ 101. The idea behind the "money multiplier" is that activities of the banks in the banking system have the effect of increasing the amount of "money" in an economy beyond the amount that is put into the economy by the Federal Reserve Bank ("Fed"). Nonetheless, the Fed can roughly control the amount of money banks add to the economy by regulating banking activity. Through this mechanism, the Fed can try to prevent inflation by keeping the supply of money from growing too fast.[11] An innovative financial sector, however, can create lots of substitutes for money (such as credit cards, money market mutual funds, home equity lines of credit and commercial paper), and these substitutes have not been as well-regulated as are traditional banking activities. A rapid expansion in vehicles that

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worth much faster than their gross worth (because of their leverage) and the amount that they can borrow falls.").

[10] John Geanakoplos, *Solving the Present Crisis and Managing The Leverage Cycle* (Yale University's Cowles Foundation for Research in Economics, Discussion Paper No. 1751, 2010) (providing a fully developed analysis of the role of leverage in the business cycle). Tobias Adrian & Hyung Song Shin, *The Changing Nature of Financial Intermediation and the Financial Crisis of 2007-2009*, 2 ANN. REV. ECON. 603, 603-18 (2010) (examining the relationship between excessive leverage and asset bubbles).

[11] The Fed also tries to regulate the inflation rate by setting key interest rates, but regulation of the monetary aggregates has been an important tool for influencing the macroeconomy at various times historically. Bernanke Speech, *supra* note 2 ("In an amendment to the Federal Reserve Act in 1977, the Congress formalized the Federal Reserve's reporting of monetary targets by directing the Board to 'maintain long run growth of monetary and credit aggregates . . . so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates.'").

provide credit to the economy can have the same effect that we would expect from a rapid expansion in the money supply. Moreover, the ability of the financial system to provide credit instruments dramatically increases as financial firms themselves rely heavily on debt or leverage. In this way, excessive leverage in the system as a whole has increased the effective supply of money and credit. And, I argue, repeated cycles of excess credit have caused multiple rounds of "inflation" that have shown up not as general increases in prices, but as "bubbles" in the prices of various classes of assets.

Asset bubbles are a major problem because they have significant and pernicious effects on the allocation of capital and the distribution of wealth and income in the real economy. In particular, when excessive leverage drives up asset prices, financial market participants who financed the investments in the assets, and others, may forecast further price increases. These forecasts serve to justify supplying more credit to investors in those asset classes, which help to further drive up prices in a self-fulfilling way. This flow of credit into the financing of certain asset classes helps fuel a pricing bubble. Participants in the process may be unaware that their actions, collectively, are having this effect—in fact, if they knew that the price increases they were observing were a bubble, presumably investors would be less willing to buy at inflated prices. However, it can be difficult for investors to identify a price bubble until it bursts.

Meanwhile, when prices of broad classes of assets go up generally, most investors experience themselves as making money by buying and selling such assets, and they may believe that the traders and money managers who help them manage their investments must be brilliant. Those who buy the assets grow richer by investing in the assets as the bubble develops, and even those who sell off the underlying assets to the more optimistic investors, get richer because they sell at inflated prices. Thus, inflation in asset prices creates the illusion that the financial sector is actually creating value for the economy as a whole as it invests in and trades those assets whose prices are being bid up. Investors then attribute the growth in their portfolio values to the skills of their money managers (and are willing to pay them well), when in reality, the cause is leverage-driven asset inflation.

The standard story about the causes of the financial crisis emphasizes that financial institutions were investing in "risky" assets. This is true in that it is always more risky to invest leveraged dollars than to invest unleveraged dollars, and many individual

investors and financial institutions were operating with extraordinarily high leverage by the mid-2000s. But what was it that made the investments so risky and simultaneously so attractive? Why were so many investors willing to turn their savings over to money managers who were operating in this risky way? Are most investors not risk-averse?

I argue below that, although investors are generally risk averse, they nonetheless may want to use high levels of leverage in boom times because leverage can boost the returns even on mediocre investments. For this reason, investors were repeatedly willing to turn resources over to people who work in the financial sector who were using high levels of leverage. Moreover, investors allowed financiers and money managers to pay themselves substantial wages and bonuses for creating and trading risky securities that involved so much leverage because investors perceived themselves as sharing in the high returns. As a result, leverage in the system as a whole allowed the financial sector to take a growing share of national income in the form of wages, salaries, fees and bonuses, causing compensation per employee in the financial sector to grow from $35,000 per year in 1980 (in inflation-adjusted 2009 dollars) to approximately $100,000 per year per employee (including secretaries and clerks) since 2002—a fourth sense in which the financial sector has become too large.

In other words, by generating inflation in the asset classes they were financing, participants in the financial sector were able, for an extended period, to show gains on the portfolios they were managing that appeared to more than offset the costs of their own compensation. Investors are more than happy to pay high fees, salaries, commissions and bonuses to financial market actors who arrange financing for them on good terms or help them get into investments that appear to be making money. As long as the bubble had not yet burst, the illusion of value creation therefore caused investors to accept higher leverage and to justify extraordinary compensation packages for the participants in the financial sector. In this way, bubbles tend to redistribute wealth and income to the people whose actions, collectively, are causing the financial bubble. This redistribution is not necessarily reversed when the bubble bursts. The creators of the bubble, in fact, keep much of the wealth and income they capture during each cycle of bubbles, even after the

bubbles burst.[12] In this way, cyclical instability in the financial markets acts as a one-way ratchet for financial sector compensation, and a bubble-prone economy is an economy in which the distribution of income and wealth is likely to be widening.[13]

How much distortion in the distribution of income and wealth has resulted from repeated cycles of bubble and burst in the financial markets? We do not have a wholly accurate way to measure bubbles, but consider what gross domestic product ("GDP") would have been in 2007, the last year before the recession, if the financial sector's share of GDP had stayed what it was in 1980. The National Income and Product Accounts ("NIPA") show that, at its peak in 2007, the financial and insurance sectors accounted for 7.9% of GDP. This compares with 4.9% in 1980. In other words, the financial sector captured three percentage points more of GDP—about $412 billion worth—in 2007 than it had in 1980. This is equivalent to a transfer of about $1365 from every person in the U.S. in 2007 to the financial sector and to the people who work in that sector.

Meanwhile, much of the value we thought the economy created in the mid-2000s turned out to be illusory—value that went away when the bubble burst. The Pew Financial Reform Project

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[12] As Nelson Schwartz and Louise Story reported recently, hedge fund managers were paid hundreds of millions of dollars, even in the disastrous year of 2008, and were capturing billions of dollars per year again by 2009. Nelson Schwartz & Louise Story, *Pay of Hedge Fund Managers Roared Back Last Year*, N.Y. TIMES, Apr. 1, 2010, at B1 ("But in a startling comeback, top hedge fund managers rode the 2009 stock market rally to record gains, with the highest-paid 25 earning a collective $25.3 billion . . . beating the old 2007 high by a wide margin.").

[13] Steven N. Kaplan & Joshua Rauh, *Wall Street and Main Street: What Contributes to the Rise of the Highest Incomes?* 33-35 (Ctr. Research Sec. Prices, Working Paper No. 615, 2007) (discussing the rise in compensation for Wall Street executives and corporate lawyers and concluding that this rise contributes to the rise in the United States' income disparity); Thomas Philippon & Ariell Reshef, *Wages and Human Capital in the U.S. Financial Industry: 1909-2006* 29-31 (Nat'l Bureau of Econ. Research, Working Paper No. 14644, 2009) (concluding that deregulation and corporate finance have played a causal role in increased wages and educational attainment for financial sector workers); Thomas Philippon, *The Evolution of the U.S. Financial Industry from 1860 to 2007: Theory and Evidence* 26-27 (N.Y.U., Nat'l Bureau of Econ. Theory, Center for Econ. Policy Research, 2008), *available at* http://pages.stern.nyu.edu/~tphilipp/papers/ finsize.pdf ("This paper argues that the role of Finance in economic activity varies over time, and that this is reflected in the income share of the financial sector.").

estimates that from September 2008 through the end of 2009, the U.S. GDP was $648 billion lower as a result of the financial crisis than it otherwise would have been.[14] In addition, some $3.4 trillion in apparent real estate wealth had disappeared, and another $7.4 trillion in apparent stock market wealth had also been lost.

Finally, one of the most troubling aspects of the fact that the financial sector takes such a large share of total national income and wealth is that wealth captured by financiers (or by any special interest group) can be used to influence policy and resist reform. In this way, income inequality, as well as a bubble-prone economy, may perpetuate itself because principals in the financial industry have much greater access to the halls of power in Washington and greater influence over regulatory agencies.[15]

The Dodd-Frank Act, passed by Congress in the summer of 2010, gives various regulatory bodies the authority and some of the tools they need to begin actively regulating some parts of the shadow banking system that were previously outside their reach. But regulators, especially the Federal Reserve and the Federal Deposit Insurance Corporation ("FDIC"), are taking their cues from the Basel Committee, an international organization that coordinates bank regulations across the leading countries. The Basel Committee has put forward a proposed set of principles that, if implemented, could begin to tighten controls on leverage.[16] It remains unclear, however, whether regulators will have the political will to set and enforce standards that are tough enough to get leverage under control.

II. Explosion in Financial Innovation

The financial system in the United States is vastly different today from what it was three or four decades ago, with many more

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[14] Phillip Swagel, *Cost of the Financial Crisis: The Impact of the September 2008 Economic Collapse*, at 9 (Pew Econ. Policy Group, Fin. Reform Project, Briefing Paper No. 18, 2010), *available at* http://www.pewfr.org/project_reports_detail?id=0033 ("The difference between the CBO forecast and the actual outcome for GDP comes to a total of $648 billion in 2009 dollars for the five quarters from the beginning of October 2008 to the end of December 2009, equal to an average of $5,800 in lost income for each of the roughly 111 million U.S. households.").

[15] *See infra*, at 44-47.

[16] See discussion of the status of Basel Committee efforts in Part VIII below.

institutional players, offering different kinds of savings vehicles, credit vehicles and financial services. This section explains six significant innovations in the financial sector that, collectively and individually, led to less transparency, less regulation, more leverage and more risk.

A. Money Market Funds

Many of the changes that are important to this story have their roots in the period of high inflation in the U.S. in the 1970s.[17] At that time, banks were restricted in terms of the interest they could pay on deposits. With inflation exceeding 10% by the end of the decade, individual and institutional investors were interested in finding safe alternatives to deposits that would pay attractive interest rates. Financial institutions responded by developing "money market mutual funds."[18] Money market mutual funds are not insured by the FDIC like deposit accounts at banks, but they were backed by large and seemingly highly-secure financial firms as well as regulated by the SEC (which regulates all mutual funds). Money market funds are also required to hold relatively safe short-term instruments such as Treasury bills, certificates of deposits (issued by banks) and commercial paper.

These new vehicles for savings were important because they provided highly liquid assets for investors that could, like "money" in cash or checking accounts, be readily spent on investment or on consumption. These funds, however, were managed by institutions that were not regulated by the FDIC. Data from the Federal Reserve show that in December of 1974, there was only about $1.6 billion invested in money market mutual funds (both retail and institutional) in the U.S., which compared with about $902 billion of so-called

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[17] J. Bradford De Long, *America's Only Peacetime Inflation: The 1970s* 2 (Nat'l Bureau of Econ. Research, Historical Working Paper No. 84, 1996) (discussing causes and nature of 1970s inflation).

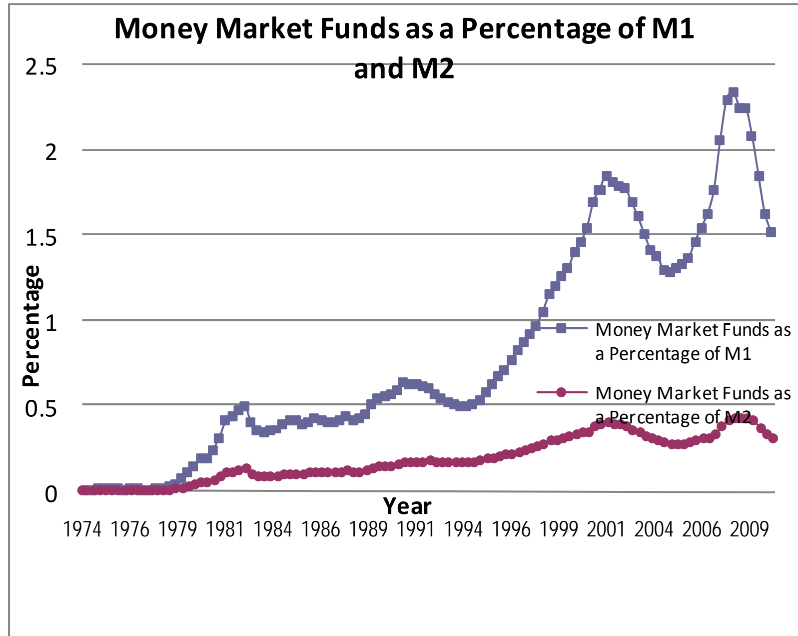
[18] A "money market mutual fund" (also called a "money market fund") is a type of mutual fund that is required by law to invest in low-risk securities, such as short-term bonds. ELLIE WILLIAMS, INVESTOR'S DESK REFERENCE 172 (2001) (detailing features common to money market funds). By contrast, a "money market deposit account" is an account available at banks that earns interest at a rate set by the bank based on rates available in money markets. *Id.* at 171. Money market deposit accounts usually impose limits on the ability of customers to make withdrawals, so they are not as liquid as checking accounts. *Id.*

"M2", which measures all currency, checking accounts, travelers' checks, small time deposits and savings accounts at banks and depository institutions, bank CDs and retail money market mutual funds. [19] Figure 1 below shows how the dollar value of money market mutual funds has grown since then as a percentage of M1 (currency, checking accounts and travelers' checks only) and M2. The aggregate value of money market funds peaked at about 230% of M1, and 43% of M2 in the spring of 2008.[20]

[19] Retail money market mutual funds (those available to small investors) are included in the Fed's measure of "M2," but institutional money market funds (those available to corporate and institutional investors) are not. BD. OF GOVERNORS, FED. RESERVE SYS., THE FEDERAL RESERVE SYSTEM: PURPOSES & FUNCTIONS 22 (2005) [hereinafter BD. OF GOVERNORS] (explaining what categories of accounts and financials the Fed uses to compute the various measures of the money supply). Institutional money market funds were included in the Fed's broader measure of money, "M3," until the Fed stopped measuring M3 in early 2006. BD. OF GOVERNORS, FED. RESERVE SYS., STATISTICAL RELEASE H.6: MONEY STOCK MEASURES: DISCONTINUANCE OF M3 (2005), http://www.federalreserve.gov/releases/h6/discm3.htm.

[20] Money invested in money market mutual funds has declined somewhat relative to M1 and M2 since mid-2008, partly because M1 and M2 have grown as the Fed has added money to the economy to help stave off recession, and also because nervous investors moved funds out of money market mutual funds and into instruments they believe are safer such as insured bank accounts (part of M1 or M2) or into short-term Treasury securities.

Fig. 1. Growth of Money Market Funds



Source: Author's calculations based on Bd. of Governors, Fed. Reserve Sys., Flow of Funds Accounts of the United States, Tables L.121 and H.6. More details on file with author.

As is suggested by this figure, money market mutual funds (both retail and institutional) are now a major part of the "shadow banking system" in the U.S., a vast system by which savings of individuals and short-term assets of business are aggregated and credit is provided to individuals and businesses outside the channels of traditional banking.

B. Junk Bonds

A major financial market innovation of the 1980s was the use of high-yield "junk" bonds to finance leveraged buyouts. "Junk" bonds are bonds that are rated below investment grade (BB or lower) by credit rating agencies. Leveraged buyouts ("LBOs") were so-named because they were transactions in which an investor or group of investors ("LBO entrepreneurs") bought all or controlling interests in the equity of publicly-traded companies to take the companies

private. The investors paid for their purchases with money borrowed by using the expected cash flow of the acquired firm as collateral, and they planned to pay off the debt by restructuring and dismantling the firms, sometimes retaining a valuable core of the business. The LBO entrepreneurs were often able to borrow as much as 90% or more of the purchase price, a previously unheard of degree of leverage in corporate financing outside of the banking system itself.

Because the leverage used was so high, some or all of the bonds issued by the buyers to finance the acquisition were considered quite risky. Therefore, the bonds paid an unusually high interest rate, giving them their polite name of "high-yield bonds" and their pejorative name of "junk bonds." The advantage to issuing firms of using junk bonds was that the firms were able to bypass banks and raise money without subjecting themselves to the oversight that a bank would (presumably) insist on if the firm borrowed the money from the bank. Moreover, most banks would not have loaned money at all to firms with leverage ratios (debt/total assets) of 90% or more. Investors have been willing to buy these securities for their portfolios, on the other hand, because they believed that a substantial part of the default risk associated with these securities could be "diversified" away[1] (although the willingness of investors to invest in junk bonds varies greatly between good times and bad times). Although leveraged buyout activity subsided, junk bonds have continued to be important financing tools for the corporate sector in the U.S., representing 8.9 percent of all corporate offerings in 1999, and 6.6 percent of all corporate offerings—some $210 billion worth—in 2009.[2]

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[1] One of the leading proponents of using junk bonds to finance takeovers was Michael Milken, at Drexel Burnham Lambert, who argued that junk bonds were good investments for investors because the risks associated with junk bonds could be diversified away. DAVID HENDERSON, ESSAYS IN PUBLIC POLICY: THE TRUTH ABOUT THE 1980S 21 (1994) ("Research by economists, which the entrepreneurial junk-bond dealer Michael Milken trumpeted to his customers, showed that lenders could hold a diversified portfolio of such bonds and earn a higher return, even adjusted for the risk of default, than they could earn by holding investment-grade bonds."). In the last decade, the illusion that the default risk of junk bonds could be diversified away was enhanced through the use of "securitization" of these bonds and derivative products that were supposed to offset remaining risk. See sections below on securitization and derivatives.

[2] Bryan Keogh, *Junk Bonds Capture Record Share of Sales as Yields Decline: Credit Markets*, BLOOMBERG, Apr. 9, 2010, http://www.bloomberg.

Junk bonds played a niche role in the financial market crisis of 2007-2009. Many regulated financial institutions, such as banks, money market funds and pension funds, are not allowed to invest in junk bonds because they are, by definition, below "investment grade." Thus in recent years some financial market players have constructed portfolios of junk bonds and "securitized" these portfolios by selling new securities backed by the portfolio of junk bonds. The cash flows on a portfolio of bonds can be divided up in such a way that some of these secondary securities are classified as very safe. This means that banks, insurance companies, money market funds and pension funds are permitted to hold them. Recent estimates indicate that as much as $700 billion of high-yield corporate debt is currently outstanding and will come due and need to be paid off or refinanced from 2012 through 2014.[3]

C. Private Investment Funds

An important financial innovation in the 1990s and 2000s was the development of private investment funds such as venture capital funds, private equity funds and "hedge" funds. Private investment funds operate outside the regulated part of the financial sector. They can do so because they only accept investments from wealthy individuals and financial institutions that are considered to be sophisticated investors ("qualified purchasers") under the terms of the Investment Company Act,[4] which regulates mutual funds and other investment companies that are open to investment by less sophisticated individual investors. Venture capital funds specialize in providing financing for start-up companies and firms that do not yet

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com/apps/news?pid=20601009&sid=aXd7tp95rlLA ("Global sales of junk bonds were $210 billion in 2009, or 6.6 percent of all corporate offerings, Bloomberg data show. The previous high was in 1999 at 8.9 percent. In the U.S., companies have sold $74 billion of high-yield debt—rated below Baa3 by Moody's Investors Service and less than BBB- by S&P—a record 22 percent of the overall market, compared with 13 percent in 2009.").

[3] Nelson D. Schwartz, *Corporate Debt Coming Due May Squeeze Credit*, N.Y. TIMES, Mar. 16, 2010, at A1 ("The result is a potential financial doomsday, or what bond analysts call a maturity wall. From $21 billion due this year, junk bonds are set to mature at a rate of $155 billion in 2012, $212 billion in 2013 and $338 billion in 2014.").

[4] Investment Company Act of 1940, 15 U.S.C. §§ 80a–2(a)(51), 80a-3(c)(7) (2010) (providing an exemption from regulation as an investment company for securities issuers whose securities are held by "qualified purchasers").

have sufficient cash flows or promise of profits in the future to be able to sell equity shares to the public. Private equity funds typically invest in large blocks of publicly-traded companies to get control, or they buy out the entire company to take it private and restructure it, with the idea of selling it back to the public again a few years later. Hedge funds specialize in investing in commodities, currencies and derivative securities. All of these classes of investments are potentially very high risk, and therefore many banks and regulated financial institutions are restricted in their ability to make such investments directly.

The U.S. government doesn't collect data on the private investment funds part of the financial sector, but Kaplan and Rauh report data from several consulting firms that indicate that, as of 2005, hedge funds had approximately $900 billion to $1 trillion under management, venture capital funds had about $26 billion and private equity funds had about $131 billion.[5] This compares with total financial assets in the commercial banking sector of about $9.844 trillion in 2005.[6] Participants in the private investment fund sector, especially hedge funds, were actively involved in the speculation and trading that led up to the financial crisis. The private investment fund sector has operated largely outside the reach of regulatory authorities, although, the Dodd-Frank Act provides that any such firm can be subject to regulation by the Federal Reserve if it is identified as posing a threat to the stability of the financial system.[7]

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[5] Kaplan & Rauh, *supra* note 13, at tbl.3a-3b (providing data on the amount of money under management within different types of investment pools).

[6] BD. OF GOVERNORS, FED. RESERVE SYS., FLOW OF FUNDS ACCOUNTS OF THE UNITED STATES, Table L.109, available at http://www.Federalreserve.gov/RELEASES/z1/.

[7] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No 111-203, § 113, 124 Stat. 1398-1402 (2010) ("The Council, on a nondelegable basis and by a vote of not fewer than 2⁄3 of the voting members then serving, including an affirmative vote by the Chairperson, may determine that a U.S. nonbank financial company shall be supervised by the Board of Governors and shall be subject to prudential standards, in accordance with this title, if the Council determines that material financial distress at the U.S. nonbank financial company, or the nature, scope, size, scale, concentration, interconnectedness, or mix of the activities of the U.S. nonbank financial company, could pose a threat to the financial stability of the United States.").

D. Asset Securitization

One of the most important processes through which non-bank financial firms have taken over large parts of the financing activity that historically would have been done by banks had its start, ironically, in financial innovation by the U.S. government. This is the process of "securitization" of financial assets. Prior to the 1980s, banks that made loans to businesses or individuals usually held the loans in their own portfolios until the loans were paid off. In the 1970s, in an effort to make it easier for families to buy houses, the Government National Mortgage Association ("GNMA" or "Ginnie Mae") began buying mortgages from banks so banks could then reinvest the money they received for old mortgages in newly issued mortgages. GNMA formed portfolios or pools of mortgages that they purchased from banks and then sold securities based on the cash flow from these mortgages.

In the early days of securitization of mortgages, the securities offered a pro-rata share in the income from an entire bundle of mortgages backing the security.[8] By the late 1980s, when the Federal National Mortgage Association ("Fannie Mae"), and the Federal Home Loan Mortgage Corporation ("Freddie Mac") began securitizing mortgages, the securities were "tranched," meaning that they were structured so that some classes of securities were to receive the income from the mortgages that were paid off first, and other classes were to be paid only after the more senior classes were paid. If, in general, no more than 5% of a particular pool of mortgages would be expected to default, a claim on the first 50% of the mortgages to pay off would be very low risk because the default risk would all be concentrated on the securities whose claims are based on the second 50% of mortgages to be paid off (of which 10% would now be expected to default). The security that represents a claim on the first "tranche" of mortgages, then, might receive a high enough credit rating that regulated financial institutions would be allowed to invest in them.[9] Banks, in particular, were not required to

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[8] This structure, in which there are no classes of securities, and no priorities are established, is called "pass through securitization." Joshua Coval, Jakub Jurek & Erik Stafford, *The Economics of Structured Finance*, 23 J. ECON. PERSPECTIVES. 3, 5-6 (2009) (providing basic anatomy of collateralized debt obligations with specific attention to the tranching of the these products).

[9] Brunnermeier, *supra* note 7, at 78-79 (discussing rights of holders of debt in the 'super senior tranche' category).

hold as much risk capital relative to investments in securitized instruments as they would have been required to hold to be invested in the original loans.[10] In other words, they could invest in mortgage-backed securities ("MBS") on a more highly leveraged basis than they could when investing directly in mortgages.

Once the model of securitizing mortgages was fully developed, banks and investment banks applied the idea to other classes of assets, such as automobile loans, credit card balances, insurance policies, corporate bonds, including junk bonds, student loans, equipment leases and small business loans. The general name for these securities is asset-backed securities ("ABS"). From 1995 through 2004, ABS amounts outstanding grew by 19 percent per year.[11]

From 2000 onward, the packaging and reselling of financial assets through securitization proceeded at an extraordinary pace. Financial institutions found that if they could sell off their loans as soon as they made them, they would capture the transaction fees for creating the individual loans and the servicing fees for serving as the collection agent for those loans. They could also quickly recover their investment dollars, enabling them to turn around and do it again, and again and again.[12] This process made a virtual avalanche of credit available to individuals and businesses.[13]

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[10] Rene M. Stulz, *Credit Default Swaps and the Credit Crisis*, 24 J. ECON. PERSPECTIVES. 73, 80 (2010) ("[F]inancial institutions generally were able to hold less regulatory capital if they packaged loans in securities and held them on their balance sheet than if they just kept the loans on their balance sheet. . . .").

[11] Tarun Sabarwal, *Common Structures of Asset-Backed Securities and their Risks*, 4 CORP. OWNERSHIP & CONTROL 258, 258-65 (2006) ("In nominal terms, over the last ten years, (1995-2004), ABS amount outstanding has grown about 19 percent annually.").

[12] The Securities Industry and Markets Association estimates that from 2002 through 2008, 55 to 60% of home mortgages were securitized, while around 30 to 35% of commercial mortgages, multi-family mortgages, and consumer credit were securitized. SECURITIES INDUSTRY & FINANCIAL MARKETS ASS'N, RESTORING CONFIDENCE IN THE SECURITIZATION MARKETS 37 (2008), http://www.americansecuritization.com/uploadedfiles/RestoringConfidenceSecuritizationMarketsReport.pdf (providing data regarding the ratios of different mortgages that were securitized to overall mortgages written broken down by category of mortgage).

[13] Brunnermeier, *supra* note 7, at 78-79 ("The creation of new securities facilitated the large capital inflows from abroad. . . . Financial innovation

The repackaging of credit instruments through securitization made individual securities as well as whole classes of securities more opaque, in that it became difficult to assess the actual riskiness of the securities. The process of bundling ABSs together and issuing new securities based on pools of ABSs—called collateralized debt obligations ("CDO")—only exacerbated the problem. Even worse, at the peak of the bubble, some investment banking firms and other participants in the credit markets were actually creating so-called "synthetic CDOs," which were securities with no assets backing them that were designed, rather like fantasy-league baseball teams, to provide a payoff that mimicked a hypothetical portfolio of actual securities. Neither the seller nor the buyer of synthetic CDOs necessarily owned the underlying mortgages, or loans, or asset-backed securities on which the bet was based. Depending on the details of how they were structured, they could give the parties to the bet the same schedule of contingent gains or losses as if they were holding the actual assets, but with little or no money down, creating the possibility of an almost infinitely leveraged investment!

As it became increasingly difficult to evaluate the riskiness of layers of various securities, financial firms began adding insurance policies to the bundles to ensure that the credit rating agencies would still classify them as low risk. These insurance policies were designed to pay off if the assets underlying the securities went into default. These insurance policies were not called "insurance," however. They were called credit default swaps ("CDS"). This was important because if they had been classified as insurance contracts, they likely would have been regulated by insurance regulators at the state level in the U.S., and the sellers of the policies might have been required to hold sufficient collateral to be able to make good on their promises to pay in the event of default.[14] "Swaps," however, are a type of derivative contract, which I take up in the next section. Importantly, swaps were not regulated or traded on exchanges. The

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. . . led to an unprecedented credit expansion that helped feed the boom in housing prices.").

[14] Because CDS issuers were not required to hold much in the way of collateral for their potential obligations, the issuers of CDSs were also able to operate with extraordinarily high effective leverage. See discussion of leverage in parts II and III below.

Dodd-Frank Act requires that all swaps suitable for clearing must be cleared through a central exchange.[15]

As the business of issuing and trading securitized credit instruments grew in the last couple of decades, several new categories of credit market institutions have become important, and the Federal Reserve has begun collecting aggregate data on the activities of these institutions. Figure 2 below shows the growth in assets in a subset of financial institutions in the "shadow banking

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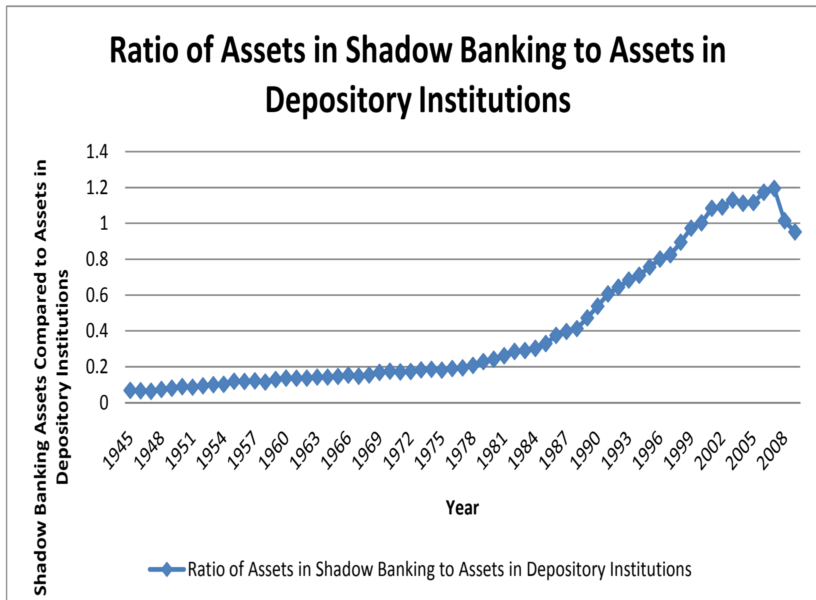
[15] § 723 of the Dodd-Frank Act (to be codified at 7 U.S.C. § 2) requires clearing and exchange trading for swaps to be regulated by the Commodity Futures Trading Commission ("'(1) IN GENERAL.—"(A) STANDARD FOR CLEARING.—It shall be unlawful for any person to engage in a swap unless that person submits such swap for clearing to a derivatives clearing organization that is registered under this Act or a derivatives clearing organization that is exempt from registration under this Act if the swap is required to be cleared.") and § 763 of the Dodd-Frank Act (to be codified at 15 U.S.C. § 78a *et seq.*) sets out parallel rules for swaps regulated by the Securities and Exchange Commission ("'(a) IN GENERAL.—"(1) STANDARD FOR CLEARING.—It shall be unlawful for any person to engage in a security-based swap unless that person submits such security-based swap for clearing to a clearing agency that is registered under this Act or a clearing agency that is exempt from registration under this Act if the security-based swap is required to be cleared."). Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No 111-203, §§ 723, 763, 124 Stat. 1675-82, 1762 (2010). MARK JICKLING & KATHLEEN ANN RUANE, CONGRESSIONAL RESEARCH SERVICE, THE DODD-FRANK WALL STREET REFORM AND CONSUMER PROTECTION ACT: TITLE VII, DERIVATIVES 5 (2010) ("Title VII of the Dodd Frank Act creates largely parallel clearing and exchange trading requirements for swaps and security-based swaps as those terms are defined by Title VII and will be further defined by the CFTC and the SEC."). Under the terms of the Dodd-Frank Act, an exchange will be created for trading of standardized swaps, and such swaps will be required to go through this exchange. These rules will not affect customized swaps, but such swaps must be reported to a trade repository or to the CFTC or SEC. WEIL, GOTSHAL & MANGES LLP, FINANCIAL REGULATORY REFORM: AN OVERVIEW OF THE DODD-FRANK WALL STREET REFORM AND CONSUMER PROTECTION ACT 11, *available at* http://www.weil.com/files/upload/NY%20Mailing%2010%20FRR%20100721%20Weil_Dodd_Frank_Overview_2010_07_21.pdf ("The cornerstone of [Dodd-Frank] with respect to derivatives is the centralized clearing requirement. Congress has mandated centralized clearing for all swaps that the CFTC or the SEC determines should be cleared through a registered clearinghouse, and that are otherwise accepted by one or more clearinghouses for clearing.").

system" that are active in securitizations,[16] relative to total assets in traditional depository institutions, including banks, savings institutions and credit unions. As is clear from this figure, growth in the securitization part of the shadow banking system took off during the 1980s, and by 2008 this subset of the financial sector accounted for substantially more in total assets than did traditional depository institutions.

Fig. 2: Growth in Assets in Shadow Banking System Relative to Assets in Banks



Source: Author's calculations based on Flow of Funds Accounts of the United States, Bd. of Governors, Federal Reserve System, Table L.1. Shadow banking assets is the sum of assets in government sponsored enterprises, agency- and GSE-

[16] These include government-sponsored enterprises such as Ginnie Mae and its cousins, Fannie Mae and Freddie Mac, plus a category called "Agency- and GSE-backed mortgage pools" which are specially-created entities that exist solely for the purpose of holding mortgages backed by GSEs and issuing the securities based on them. It also includes a category called "ABS issuers," which are similar to mortgage pools, but they hold other kinds of loans, such as student loans or credit card loans. Furthermore, it includes finance companies, like GE Capital, that are subsidiaries of non-bank corporations but that exist to provide credit to customers of GE. Finally, it includes brokers and dealers, including investment banks.

backed mortgage pools, ABS issuers, finance companies and brokers and dealers. Depository institutions assets is the sum of commercial banking, savings institutions and credit unions. More details on file with author.

E. Derivatives

Since the mid-1990s, hedge funds have led the way in a massive expansion in issuing and trading derivatives. Derivatives are contracts whose value depends on some underlying asset. Such contracts are actually better understood as bets. Swaps and options, for example, are essentially bets that counterparties make among themselves about whether some underlying asset will decline in value, or increase in value.

Derivative transactions are usually explained as a mechanism for hedging other positions in the portfolios of one or both parties to the transaction. "Credit default swaps" ("CDS"), for example, were ostensibly sold to provide insurance for the holders of asset-backed securities ("ABS") and CDOs, so that if the underlying loans defaulted, the holder of the securities based on those loans would be protected.[17] Reliable records on CDS were not kept until 2001, and in that year, the notional value of all CDS at the end of the year was $919 billion (see Figure 3.). By the end of 2005, there were $17 trillion worth of CDS outstanding, almost twice the total amount of

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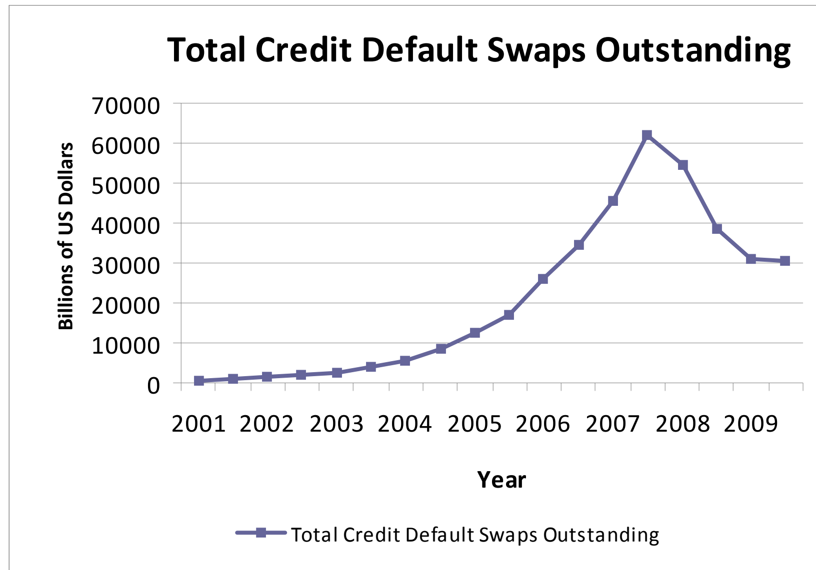
[17] Because CDS supposedly provided such protection, banks that invested in MBS, ABS, or CDOs were not required to hold as much capital if the bank also held CDS protecting those instruments, so the availability of CDS made it possible for banks to leverage themselves even higher. BASEL COMM. ON BANKING SUPERVISION, INTERNATIONAL CONVERGENCE OF CAPITAL MEASUREMENT & CAPITAL STANDARDS [BASEL I] (1988) (determining risk-weighted capital requirements for loans backed by mortgages). *See also* Jeffrey T. Prince, et al., *Synthetic CDOs*, *in* FRANK J. FABOZZI & STEVEN V. MANN, EDS., THE HANDBOOK OF FIXED INCOME SECURITIES 696 (2005), *available at* http://halfchai.files.wordpress.com/ 2009/07/frank-j-fabozzi-the-handbook-of-fixed-income-securities-7the.pdf ("Under Basel I, banks must hold 8% regulatory capital against the par of assets that are 100% risk weighted. Most regulators will lower this regulatory capital requirement to 1.6% (20% of the 8%), where risk is transferred via a default swap as long as the swap counterparty is an Organization for Economic Cooperation and Development (OECD) institution. If the risk is transferred in a credit-linked note (CLN) format and the collateral for those notes is very high quality, such as Treasurys, the risk weighting could be even lower.").

household mortgage debt at the time.[18] At the peak of CDS activity, in 2007 (just before the financial market collapse), there were $62 trillion worth of CDSs outstanding—almost twice the total of all credit market assets held by the financial sector in the U.S.[19]

Fig. 3. Total Credit Default Swaps Outstanding (Billions of USD)



Source: International Swaps and Derivatives Association, "ISDA Market Survey."

This is evidence that some CDSs and other derivatives were not really being used to offset risk associated with holding some underlying debt instrument. No well-run insurance company would sell a homeowner $1 million worth of insurance on a $500,000 house because that would give the homeowner a huge incentive to burn the house down. The same logic should apply to the derivatives market.

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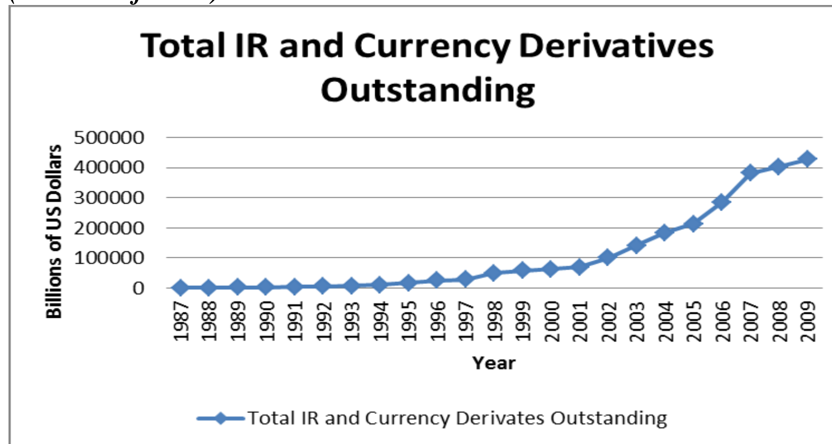
[18] Federal Reserve Flow of Funds Accounts, Table L.100 reports that in 2005, households and non-profit organizations had total house mortgage debt of $8.848 trillion. BD. OF GOVERNORS, FED. RESERVE SYS., STATISTICAL RELEASE Z.1: FLOW OF FUNDS ACCOUNTS OF THE UNITED STATES: 2005-2009 Table L.100 (2010).

[19] Federal Reserve Flow of Funds Accounts, Table L.1 reports that the financial sector of the U.S. economy held $36.535 trillion in credit market assets in 2007. BD. OF GOVERNORS, FED. RESERVE SYS., *supra* note 38, at Table L.1.

By the mid-2000s, however, many institutional investors that were buying CDS did not hold the underlying loans or mortgages, nor even any ABSs or CDOs based on them, in their portfolio. Some investors that did hold the underlying assets were vastly "over-insured."

The only way to make sense of what was happening is to understand that to "over-insure" is a way to place a bet which you win if some bad event occurs. In the mid-2000s, many financial market participants were using derivatives not so much to offset other risks but to place bets with each other about a whole variety of financial indicators and securities. By the mid-2000s, for example, there were vastly more currency and interest rate swaps outstanding than could possibly be needed to offset underlying risks in currency and bond markets that the bettors were actually bearing. In Figure 4, we see that, by 2007 there were nearly $400 trillion worth of other derivatives (interest rate swaps, currency swaps, interest rate options and equity derivatives) outstanding. Because derivatives permit an investor to bet on an underlying market with very little up-front commitment of funds, derivatives can be extremely highly-leveraged investments.

Fig. 4. Total Interest Rate and Currency Derivatives Outstanding (Billions of USD)



Source: International Swaps and Derivatives Association, "ISDA Market Survey."

F. "Repos"

"Repurchase agreements," nicknamed "repos" in the credit markets, are exchanges in which one party, usually a financial firm, sells a financial instrument to another financial firm at a discount to its market value, with a promise to buy the instrument back a short time later at its full market price. The difference between the price the seller gets and the price the seller will have to pay to buy the instrument back provides a return to the buyer for the use of the money during the intervening days. Thus, a repo is like a secured loan, in which the "borrower" puts some asset—such as a treasury security, bond, or CDO—into a collateral account until the borrower pays off the loan. An important legal difference between a repo and a secured loan is that in a repurchase agreement, legal title to the underlying security actually passes to the purchaser.[20]

Repurchase agreements can have terms of several months or more, but they have come to be used by financial firms for very short-term funding needs, especially for overnight borrowing. Repos have been regarded as very safe and liquid investments for banks and money market mutual funds because they are typically quite short-term, and the investor/lender can always take possession of the underlying asset if the seller/borrower defaults.

In the last few years leading up to the financial crisis, investment banks, brokers and dealers came to rely heavily on repos as a source of funding, with repos accounting for more than a third of total liabilities of brokers and dealers from 2005-2007.[21] Banks have also increasingly turned to repos as a source of investment funds to supplement deposits, with repos in some recent years accounting for as much as 9% of commercial bank liabilities.[22] Data on repos have been collected only sporadically, but the Bank of International Settlements estimates that the repo market doubled in size from 2002

[20] The possibilities are more complicated than this summary suggests, since for some types of repos the security is held by a third party. These are sometimes called "tri-party repos." But those details are not necessary for my purposes in this essay.
[21] BD. OF GOVERNORS, FED. RESERVE SYS., *supra* note 38, at Table L.207.
[22] *Id.*

to 2007, when gross amounts outstanding totaled about $10 trillion each in the U.S. and Europe, and another $1 trillion in Britain.[23]

One of the factors that may have been driving the use of repos is that the accounting treatment of these transactions is somewhat flexible, depending on the details of the particular agreements. In cleaning up the September 2008 bankruptcy of Lehman Brothers Holdings, Inc., investigators uncovered evidence that Lehman Brothers classified large quantities of repos as "sales" transactions, rather than financing transactions, thereby hiding as much as $50 billion in effective debt both from the market and from regulators.[24] In late March of 2010, the Securities and Exchange Commission undertook a broad investigation of about two-dozen large financial and insurance companies to see if other firms have similarly been misusing repos to hide debt. In early April, the *Wall Street Journal* reported that at least 18 large banks, including Goldman Sachs Group Inc., Morgan Stanley, J.P. Morgan Chase & Co., Bank of America Corp. and Citigroup Inc. were understating their debt levels throughout 2009 and into 2010 by an average of 42%, mostly by engaging in repo transactions at the end of each reporting period in which they temporarily "sold" assets in exchange for cash.[25]

In the next section, I take up the question of how excessive leverage in the financial sector has been used to enhance profits, and in Section IV, I discuss how leverage helps to generate asset bubbles.

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[23] GARY B. GORTON, SLAPPED BY THE INVISIBLE HAND: THE PANIC OF 2007 44 (2010); Peter Hordahl & Michael R. King, *Developments in the Repo Markets During the Financial Turmoil*, 2008 BIS Q. REV. 37, 37.

[24] Fawn Johnson, *UPDATE: SEC Queries Large Institutions on Repurchase Agreements*, DOW JONES NEWSWIRE, Mar. 29, 2010 ("The SEC's inquiry follows recent revelations that Lehman Brothers Holdings Inc. allegedly used repurchase agreements to mask some $50 billion in debt before it collapsed in 2008.").

[25] Kate Kelly, Tom McGinty & Dan Fitzpatrick, *Big Banks Mask Risk Levels*, WALL ST. J., April 9, 2010 ("Major banks have masked their risk levels in the past five quarters by temporarily lowering their debt just before reporting it to the public. . . . A group of 18 banks—which includes Goldman Sachs Group Inc., Morgan Stanley, J.P. Morgan Chase & Co., Bank of America Corp. and Citigroup Inc.—understated the debt levels used to fund securities trades by lowering them an average of 42% at the end of each of the past five quarterly periods, the data show. . . .").

III. "Shadow Banking" in the Financial System

For the last three decades, the growth of activity in the "shadow banking system" has outpaced that of the banks and other depository institutions, so that, as we noted above, by 2007, assets in the shadow banking system had come to exceed those in the formal banking system by a wide margin.

In a 2008 speech, Timothy Geithner, then President and CEO of the Federal Reserve Bank of New York, reported some indicators of the growth of the shadow banking system:

> In early 2007, asset-backed commercial paper conduits, in structured investment vehicles, in auction-rate preferred securities, tender option bonds and variable rate demand notes, had a combined asset size of roughly $2.2 trillion. Assets financed overnight in triparty repo grew to $2.5 trillion. Assets held in hedge funds grew to roughly $1.8 trillion. The combined balance sheets of the then five major investment banks totaled $4 trillion. In comparison, the total assets of the top five bank holding companies in the United States at that point were just over $6 trillion, and total assets of the entire banking system were about $10 trillion.[26]

Adrian and Shin use data from the Federal Reserve, Flow of Funds, to report on some of the components of the shadow banking system and compare it to data on bank-based assets.[27] They find that at the end of 2007, bank-based assets totaled $12.8 trillion, whereas what they call "market-based institutions" had assets totaling $16.6 trillion.[28] Market-based institutions, as they use the term, means

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[26] Timothy Geithner, President & Chief Executive Officer, Fed. Reserve Bank of N.Y., Reducing Systemic Risk in a Dynamic Financial System (June 9, 2008), *available at* http://www.bis.org/review/r080612b.pdf.

[27] Adrian & Shin, *supra* note 3, at 1-5 (displaying several charts titled "US Flow of Funds, Federal Reserve" that compare the percentage of assets held by shadow banks compared with the percentage of assets held by commercial banks).

[28] *Id.* at 1 (displaying a chart comparing "bank based" total assets to "market based" total assets). These data suggest a ratio of assets of market-based

institutions that fund themselves by issuing securities (rather than by accepting deposits).[29]

This matters because the market-based institutions that Adrian and Shin refer to avoid many of the regulations that apply to banks. Two types of regulations in particular that apply to banks are important for this story. The first are "reserve requirements," and the second are "capital requirements." Reserve requirements determine how much of the funds that are deposited in banks by bank customers may be loaned out or invested to earn a return.[30] Capital requirements are more complicated in application, but they essentially determine what share of total assets must be financed with equity capital rather than with debt.[31] Both types of regulation matter for the "multiplier" effect that banking activity has on the effective supply of money (and credit) in the economy.

A. Reserve Requirements and the Money Multiplier

When banks receive deposits of money from their customers, they are normally eager to invest the money by making loans or buying securities, because the way that they make profits is to earn more on the loans and investments than they have to pay in the form

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financial institutions to bank asset of 1.3, which is close to the ratio I report in Fig. 2 the ratio of shadow banking assets to bank assets.

[29] Adrian and Shin's explanation of what they mean by "market-based institutions" corresponds to what I included as components of the "shadow banking system" in Fig. 2 above. *Id*. at 1 (displaying a chart breaking the components of "market based" banking into "ABS issuers, Broker Dealers, Finance Co., GSE Mortgage Pools, and GSE").

[30] Reserve requirements are determined by the Federal Reserve. "Reserve requirements are the amount of funds that a depository institution must hold in reserve against specified deposit liabilities. Within limits specified by law, the Board of Governors has sole authority over changes in reserve requirements. Depository institutions must hold reserves in the form of vault cash or deposits with Federal Reserve Banks." Board of Governors of the Federal Reserve, Reserve Requirements, http://www.federalreserve.gov/monetarypolicy/reservereq.htm (last visited Oct. 24, 2010).

[31] The Federal Reserve also determines capital requirements, but in a highly flexible way that specifies a target level of capital as a percentage of so-called "risk-weighted" assets. The targets that the Fed implements are influenced by international standards set by Basel Committee on Banking Supervision and the Bank of International Settlements. See further discussion of capital requirements below.

of interest on the deposits. But they are not permitted to loan out all of the deposited money. Instead, they are required by law to put a certain percentage of those deposits aside as reserves in the form of cash in the vault or as deposits in reserve accounts with the Federal Reserve. The rationale for this requirement is to make sure that the bank always has some cash available to pay out when their depositors write checks on their balances or want to make withdrawals. The amount that banks are required to keep as reserves is known as a "reserve requirement." Since the reserve requirement is a fraction of total deposits, we have what is called a "fractional-reserve banking system."

The reserve requirement can affect how much new money will be created by the banking system for every new dollar that the Fed injects into the economy. The Fed creates money in one of two ways—it creates currency by printing new bills and stamping out new coins and it increases the liquid funds available by purchasing the bank's Treasury securities with cash.[32] Once a bank has received cash for some of its securities, the bank will have excess reserves and can then loan out a fraction of that new cash. However, the total money available to lend is not limited to the first bank's loan. In a fractional-reserve system, the banking system multiplies the amount of new money. Here is how this works:

Suppose that Bank A receives $1,000,000 in new cash from the Federal Reserve. And suppose that the reserve requirement is 10%, meaning that the bank must hold at least $100,000 of the new cash in reserve. But Bank A can loan out the rest, or $900,000, which it does to Customer A.

Say that Customer A pays the $900,000 to a builder who has built a new McMansion for A. The builder then deposits her $900,000 into Bank B. Now Bank B has excess reserves, and can loan out 90% of the new deposits, or $810,000 to some Customer B. Customer B, in turn, spends the money, and those who receive the money deposit it into Bank C. Bank C thus receives $810,000 of new deposits, of which it can now loan out $729,000. The customer who receives the $729,000 again deposits it in some other bank, which can then loan out $656,100. Etc. When you repeat this process, the

[32] The Federal Reserve does not have to create actual currency in order to pay "cash" for the securities it purchases. Instead, it can increase the money that a bank has in its reserve account held by the Fed by simply making an accounting entry.

amount of money in circulation increases in a predictable way, as noted below:

Fed injection of cash into Bank A:	$1,000,000
New deposit into Bank B:	900,000
New deposit into Bank C:	810,000
New deposit into Bank D:	729,000
Etc:	
Total new deposits in banking system:	$10,000,000

The total sum of this infinite series is $1,000,000, divided by the reserve ratio, or in this case, $1,000,000/.1 = $10,000,000. In setting the reserve requirement, the Federal Reserve can generally control the amount of what it calls "M1" (cash plus checkable deposits plus travelers' checks) in the economy by controlling how much cash and reserves (cash plus bank reserves are called the "monetary base") it injects into the system. In this simple example, $1 million of new money in the monetary base results in $10,000,000 of new M1. The ratio of new M1 created for every new dollar in the monetary base is called the "money multiplier." In a fractional-reserve system with a 10% reserve requirement, in which the only way that money can be held in the private sector is in the form of checkable deposits, and in which banks always loan out as much money as they are entitled to loan out under the regulations, the money multiplier would be $10,000,000/$1,000,000 = 10.

In practice, the amount of money in the economy is multiplied by the action of banks as described above, but there are other factors at work so that the multiplier is less than 10. For example, many people hold money outside the banking system, in the form of cash (in cash registers in retail stores, for example). The multiplier can work only on the money deposited in banks. The money multiplier is also reduced if banks do not loan out or invest all of the money they would be entitled to loan out under the reserve requirement rules. In the wake of the financial crisis, many banks have been very wary about making new loans, so they have held on to new cash when they get it. This caused the money multiplier to collapse in late-2008, which has made it more complicated for the Federal Reserve to create enough new money to offset the sudden constriction of credit and liquidity in the system in 2008 and 2009.[33]

[33] The M1 money multiplier has been less than 1 since late 2008, meaning that when the Federal Reserve adds a dollar of cash or reserves to the

But in normal times, the M1 money multiplier (the ratio of M1 to the monetary base) is greater than 1, meaning that for every dollar of cash and bank reserves that the Federal Reserve creates and injects into the banking system, banks create more than $1 worth of checkable deposits, so that M1 expands by more than the additional dollar.[34]

As should be clear by now, while the Federal Reserve directly controls only the monetary base, in practice it has substantial influence over M1 through its control over the monetary base and its control over the reserve requirement. But M1 is no longer the only "money" in the economy. In practice, financial innovation has created new ways in which people and businesses can hold financial assets, or spend money, without actually handling cash or even writing checks on checkable deposits. An individual may have a home equity line of credit, for example, which enables her to borrow against the equity in her house, as needed. The homeowner could also make payments on the line of credit by setting up an automatic payment arrangement with her bank in which the bank takes assets out of the customer's savings or money market account at certain times each month. Businesses may have a line of credit with a bank or with a supplier, and the "payables" associated with that line of credit might even be settled from time to time by bank transfers from the business's accounts to those of the suppliers.[35] Large corporations and financial institutions also have important alternatives to checkable deposits where they can either lend or borrow for very short terms. Businesses can issue and sell "commercial paper," which are very short-term bonds, or raise money by selling securities

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banking system, less than a dollar of new M1 is actually created. This is an example of a classic Keynesian "liquidity trap." The Federal Reserve Bank of St. Louis keeps track of monetary aggregates and regularly posts data on the M1 multiplier. *See* Federal Reserve Bank of St. Louis, M1 Money Multiplier (MULT), http://research.stlouisfed.org/fred2/series/MULT (last visited Oct. 24, 2010) (showing a chart where the money multiplier is less than 1).

[34] Paul Krugman and Robin Wells state that the normal money multiplier is about 1.9, but in recent years, the multiplier has been trending downwards. PAUL KRUGMAN & ROBIN WELLS, MACROECONOMICS 395 (2d ed. 2009). An important reason for this is that a rising share of transactions taking place use such near-money instruments as money market funds and lines of credit, so that the economy needs less in the way of cash and checkable deposits for a given level of economic activity. See discussion infra.

[35] Payroll deposit plans are an example of this.

together with a promise to repurchase the securities in the "repo market." In many instances, especially in the case of individual consumers or small businesses, assets may have to flow through a bank checking account to pay off credit balances, but they may appear only very briefly as funds in a checkable account. Thus to understand how liquidity is supplied by the financial system, we need to also understand these other mechanisms, and how they influence economic activity.

In addition to M1, the Federal Reserve also tracks a broader measure of the money supply, called M2, which includes all of M1 plus time deposits, savings accounts, retail money market funds and bank CDs. Throughout the last half of the 20th century (until 2006), the Federal Reserve also tracked an even broader measure called M3, which included large time deposits, institutional money market funds and repurchase agreements. And we could easily imagine an even broader measure that might include credit card accounts, lines of credit, or commercial paper. What becomes clear as we think about these broader categories of what is sometimes called "near money," is that various forms of credit often serve as a substitute for money in the economy. While the Federal Reserve has significant influence over the narrow measures of money in the economy, it has much less influence over the supply of credit more generally, except through its influence on interest rates.

B. Leverage and the Supply of Credit

As discussed above, financial innovation has now created numerous alternative ways that investors can invest surplus funds and numerous ways that individuals and businesses can get credit that can almost completely bypass the banking system. In the last three decades, the supply of credit from outside the banking system has vastly outgrown the supply of money and credit made available by banks. This is clear from Figure 2 above, which shows the growth of assets in the shadow banking system relative to assets in traditional depository institutions.[36] The ratio of "shadow banking"

[36] Recall that the assets of a bank or other financial institution consist almost entirely of its financial investments, such as its portfolio of loans or securities, which are a source of credit for the "real" economy, where goods and services are created and exchanged. Thus the total assets of banks, or other financial firms, is a good measure of the amount of credit financial firms are supplying to the economy.

assets to banking assets was very small in the 1940s and early 1950s, but by the mid-1990s, it exceeded 1, and it has stayed well above 1 since then. This means that more total credit is available to the U.S. economy now through the five types of institutions tracked by the Federal Reserve that I have identified as heavily involved in securitization (finance companies, government-sponsored entities, mortgage pools, ABS issuers and brokers and dealers) than through banks.

Although the total amount of *money* that banks can create (in the form of additional checkable deposits) is constrained by the reserve requirement that banks face, the total amount of *credit* (including near money instruments) that banks and other financial institutions can create is constrained ultimately not so much by the reserve ratio, but by the ability of these institutions to raise capital from sources other than bank deposits—by borrowing, selling debt securities, or selling stock. With these other sources of finance capital, a key factor limiting aggregate credit is the degree to which the institutions may be "leveraged."[37]

Leverage is a measure of the degree to which an institution relies on debt rather than equity for financing. Sometimes it is measured in terms of the ratio of total debt to total assets of the borrowing firm, and sometimes as the ratio total assets to equity. In the banking sector, banks not only face reserve requirements, they also face what are called "capital" requirements.[38] Capital requirements, to oversimplify, determine the amount by which a bank's total assets (cash plus loans or other investments) must exceed its liabilities (deposits, plus any borrowing in credit markets).[39] Capital requirements determine how much of a financial

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[37]A key distinction between reserve requirements and capital requirements is that reserve requirements are designed to ensure that a bank maintains enough of its assets in highly liquid form that it can pay out money to depositors on demand. The capital requirement is intended to ensure that the bank stays solvent—that the value of its assets always exceeds its liabilities.

[38] Outside of the regulated banking sector, capital levels have not historically been regulated, although prior to the financial crisis, most economists believed that the market would impose constraints by refusing to lend to institutions that were already too highly leveraged.

[39] "Capital" is a term of art in the bank regulatory world, and capital requirements are very complex. Douglas J. Elliott, *A Primer on Bank Capital,* THE BROOKINGS INST., 1-2 (Jan. 28, 2010), http://www.brookings.edu/~/media/Files/rc/papers/2010/0129_capital_elliott/0129_capital_primer_elliott.pdf ("Capital is one of the most important concepts in banking. . . .

cushion, over and above its liabilities, a bank must have, or, conversely, how leveraged it can be. In the U.S., bank regulators have the authority to require banks to satisfy capital requirements in addition to reserve requirements, but capital requirements have varied and have been applied in complex ways over the years.

Since 1974, the U.S. has participated in international efforts through the Bank of International Settlements and the Basel Committee on Bank Supervision to coordinate capital requirements across countries. Under the so-called Basel I agreement, reached in 1988, internationally active banks in the G10 countries were supposed to hold minimum capital levels determined by a rather complex formula. To oversimplify, the requirement called for banks to hold capital equal to up to 8% of assets.[40] Capital requirements under Basel I never had the force of law, but bank regulators in the U.S. have used the various Basel agreements as guidelines for regulating bank capital.

A subsequent international agreement was negotiated in the late 1990s and early 2000s. The new agreement, Basel II, announced in 2004, created a more complex system for determining the risk

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[I]t can be difficult for those outside the financial field to grasp."). This is because, for regulatory purposes, some kinds of long-term debt, as well as equity, may count as "capital." And banks may also raise funds by issuing hybrid securities such as "preferred shares," which will count as capital. Also, capital requirements are applied only to assets that are considered risky. If a bank holds U.S. Treasury securities, for example, those are considered to be riskless and liquid, so banks are not required to hold any capital to support such assets. Thus, in the regulatory world, capital requirements are stated in terms of the ratio of "regulatory capital" to "risk-weighted assets."

[40] BASEL COMM. ON BANKING SUPERVISION, *supra* note 16 ("The committee confirms that the target standard ratio of capital to weighted risk assets should be set at 8% (of which the core element will be at least 4%)."). The requirement under Basel I called for banks to hold what is called "Tier 1" capital equal to at least 4% of risk-weighted assets, and total capital (the sum of "Tier 1" capital and "Tier 2" capital) equal to at least 8% of risk-weighted assets. To determine risk-weighted assets, each asset was assigned to a risk category, and capital requirements were determined on an asset-by-asset basis. DANIEL K. TARULLO, BANKING ON BASEL: THE FUTURE OF INTERNATIONAL FINANCIAL REGULATION 55-59 (2008) (discussing how capital would be broken down into both Tier 1 & Tier 2, and that both combined had to be at least "8 percent of risk-weighted assets," and also explaining how to assign each asset into one of five distinct categories based on the asset's risk level).

weights on assets, as well as for the classification of assets as capital. It allowed the largest banks to use their own internal models to determine the risk classification of many assets, and it relied more on supervisory review as well as the hope that markets will provide some discipline to rein in the amount of leverage a bank uses. Although early drafts of the agreement proposed new rules that would have had the effect of increasing capital requirements, under the agreement ultimately reached, many banks were able to reduce the total amount of capital they held.[41] The U.S. never fully implemented Basel II,[42] but in practice, banking regulators often permitted banks to have significantly less than 8% of their assets in equity capital. The Basel Agreement is undergoing significant revision now, in the wake of the financial crisis, and it should play a significant role in how regulators approach the problem of regulating leverage in the financial sector in the months and years ahead, a subject I will return to in Part VIII below.

In the years leading up to the financial crisis, banks and other financial institutions raised a growing amount of the funds for lending by borrowing in the "credit markets"—such as by issuing commercial paper, selling asset-backed securities, or entering into repurchase agreements. For financial institutions, leverage is often the key to profitability. To understand this, consider a home-buyer who gets a 90% mortgage to buy a $100,000 house. With a large mortgage like that, the home-buyer only has to have $10,000 in cash to buy the house. Moreover, if the house goes up in value by 5%, from $100,000 to $105,000 during the first year after the buyer moves in, he will have $15,000 in equity at the end of the year—a 50% return on the initial $10,000 investment. Of course, if the house declines in value by only 5%, the equity in the house falls by 50%. A mere 10% decline in the value of the house would completely wipe out the homeowner's equity in his house.

More generally, if investors think the underlying assets are likely to rise in value, they will see it as highly profitable to use as much leverage as the markets will allow them to use, so that they can

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[41] TARULLO, *supra* note 40, at 59-130, provides an extended discussion of the political and economic issues that arose in response to Basel I and Basel II.

[42] Elliot, *supra* note 39, at 11 ("[B]asel II rules have a number of explicit . . . calculations . . . to capture operational risk. U.S. regulators have not adopted this portion of Basel II and consequently do not use these calculations.").

invest as much as possible in those assets.[43] Beyond that rationale, leverage has become important in the financial sector because competitive pressures from various kinds of non-bank institutions that offer bank-like services, as well as from international banks, have helped to keep margins low on many bank services. Thus to improve their returns on capital, banks attempt to increase the amount of assets they manage and services they provide for any given level of regulatory capital. If a financial institution can borrow enough in the credit markets, it can greatly increase its total assets, which can drive up its expected return on equity. In good years, when the value of the institution's investments rises, its shareholders earn high returns. In fact, even a very small return on total assets for the institution as a whole can still provide a high return on equity if the institution is sufficiently leveraged. In bad years, shareholders in highly-leveraged financial firms may take a big hit, and could even be wiped out. But if shareholders are diversified and if failures of financial institutions are random,[44] on average, investors will earn more if the institutions are highly leveraged.

For this reason, banks have financed a growing share of their total assets by borrowing in the credit markets, and other types of financial institutions have also ratcheted up their borrowing. Figure 5 below measures the aggregate ratio of credit market debt to credit market assets of banks, savings institutions and credit unions (all depository institutions). This ratio has climbed from less than .02 (2%) prior to the 1960s (when banks relied almost entirely on deposits), to more than .16 (16%) by the late 2000s.

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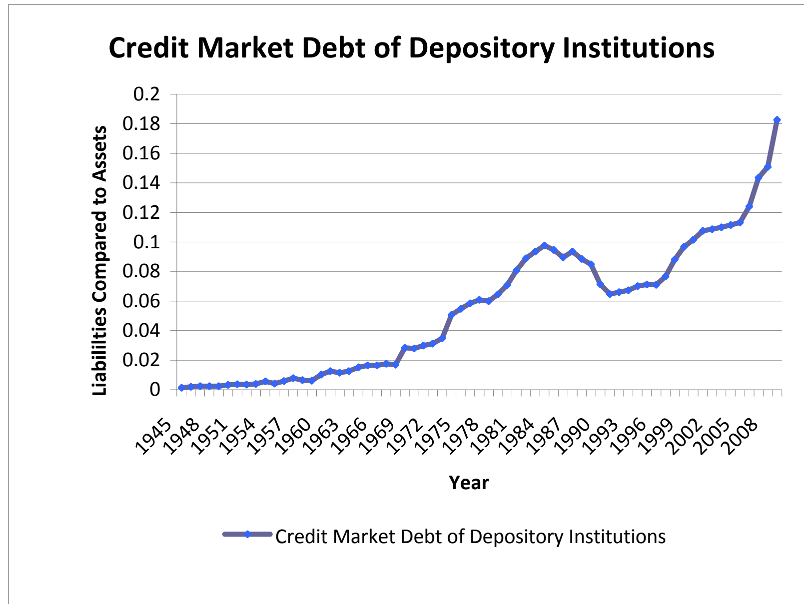
[43] Wilmarth estimates that household mortgage debt nearly quadrupled, from $2.7 trillion in 1991 to $10.5 trillion in 2007. *See* Arthur E. Wilmarth, *The Dark Side of Universal Banking: Financial Conglomerates and the Origins of the Subprime Financial Crisis*, 41 CONN. L. REV. 963, 1009 (2009) ("Household mortgage debt nearly quadrupled between 1991 and 2007, rising from $2.7 trillion to $10.5 trillion.").

[44] This is a big "if." The principle behind the idea of reducing risk through diversification requires that returns on the various investments in a portfolio are not correlated with each other. It turned out that investments in housing, while distributed across geographic markets, price ranges, and credit risks, were still highly correlated with each other, so that diversification within the category of housing investments did not eliminate or even substantially reduce default risk. Coval, Jurek, & Stafford, *supra* note 7, at 15-17.

Fig. 5: Reliance of Banks and Other Depository Institutions on Credit Market Financing.



Source: Authors' calculations from Federal Reserve Flow of Funds data, Table L.1. Credit market debt owed by the commercial banking sector divided by credit market assets held by the commercial banking sector. More details on file with author.

Figure 6 plots the total leverage (total liabilities divided by total assets) of U.S. depository institutions, compared with the total leverage of the five shadow banking sectors used to calculate the data in Figure 2.[45] In this figure, we see that the aggregate leverage of depository institutions has actually declined from what it was during the late '70s and early '80s, and is now somewhat below .9 (90%).[46]

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[45] For purposes of this analysis, I am measuring aggregate leverage in the financial system using data from the Federal Reserve for assets and liabilities in the financial sector. I make no attempt to report the more complex measure of regulatory capital as a share of risk-weighted assets that regulators would focus on.

[46] The aggregate amount of leverage of depository institutions in the U.S. hit very high levels in the 1980s because depositors sought to move large amounts of savings out of banks and thrifts and into money market mutual funds which paid higher rates of interest. Meanwhile, depository institutions, especially savings and loans, could not liquidate assets, which

But while the aggregate leverage ratio for the banking sector has declined, as measured by Flow of Funds data, this does not give the full picture. An important reason why banks and other depository institutions have been able to reduce their leverage ratios (or increase their capital ratios) is that they have developed ways to get assets and associated liabilities off the balance sheets of the regulated parts of their operations. Many of these assets are now being financed by securities issued by so-called "special purpose entities" or "special purpose vehicles" ("SPV") or "special investment vehicles" ("SIV") or sometimes "conduits," created by banks, finance companies, investment banks, government sponsored entities and brokers and dealers for the sole purpose of holding the assets and issuing the special securities.[47]

Asset-backed securities, derivatives and special purpose entities enabled banks and other financial institutions to create what Michael Simkovic calls "hidden leverage."[48] "Hidden leverage" techniques were considered advantageous for these institutions because they made it possible for the institutions to borrow at more attractive rates by hiding their existing debts and creating an exaggerated appearance of creditworthiness. Simkovic reports that

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included mortgages and other long term loans, fast enough to offset the decline in deposits. Many savings and loans and a number of banks failed during this period. Leverage in the depository institution sector was brought down after 1988, at least partly in response to Basel I. TARULLO, *supra* note 40, at 67 ("A Working Party on Bank Capital and Behavior established to evaluate the impact of Basel I as the committee began the Basel II exercise concluded that the average capital level had risen from 9.3 percent in 1988 to 11.2 percent in 1996.").

[47] Achara and Schnable assert that "the economic rationale for setting up conduits has always been to reduce capital requirements imposed by bank regulation." *See* Viral V. Acharya & Philipp Schnabl, *How Banks Played the Leverage "Game"?*, Nov. 21, 2008, *available at* http://w4.stern.nyu.edu/salomon/docs/crisis/Leverage_WP_Final.pdf. Similarly, Jeremy Stein observes that "it has become apparent in recent years that another important driver of securitization activity is regulatory arbitrage—a purposeful attempt by banks to avoid the constraints associated with regulatory capital requirements." Jeremy C. Stein, *Securitization, Shadow Banking, and Financial Fragility*, May 6, 2010, *available at* http://www.esri.go.jp/jp/workshop/100624/100624_Stein_2.pdf.

[48] *See* Michael Simkovic, *Secret Liens and the Financial Crisis of 2008*, 3 AM. BANKR. LAW J. 253, 253-56 (2009) ("[T]he financial crisis involves . . . collateralized debt obligations and credit default swaps. . . . [T]he roots of the financial crisis . . . [were caused by] hidden leverage.").

securitization can sometimes reduce interest rates by 150 basis points compared with a similar secured loan.[49]

The Federal Reserve Flow of Funds data account for some of this kind of financing through two new subsectors of the financial sector labeled "Mortgage Pools," and "ABS Issuers." "Mortgage pools" is a category that is really more like an accounting entry in the Flow of Funds data in that it has an aggregate leverage ratio of 1 by construction. ABS Issuers are separate legal entities, such as the "special purpose entities" mentioned above. They have an aggregate leverage ratio of 1 or somewhat higher than 1. While ABS issuers and other special purpose entities are legally separate from the sponsoring institutions that create them and sell their securities, during the financial crisis, the big banks or investment banks that sponsored them generally stood behind the securities issued by the entities. Apparently for reputational reasons, when such entities began failing during the financial crisis, the big banks often took them back onto their balance sheets.[50]

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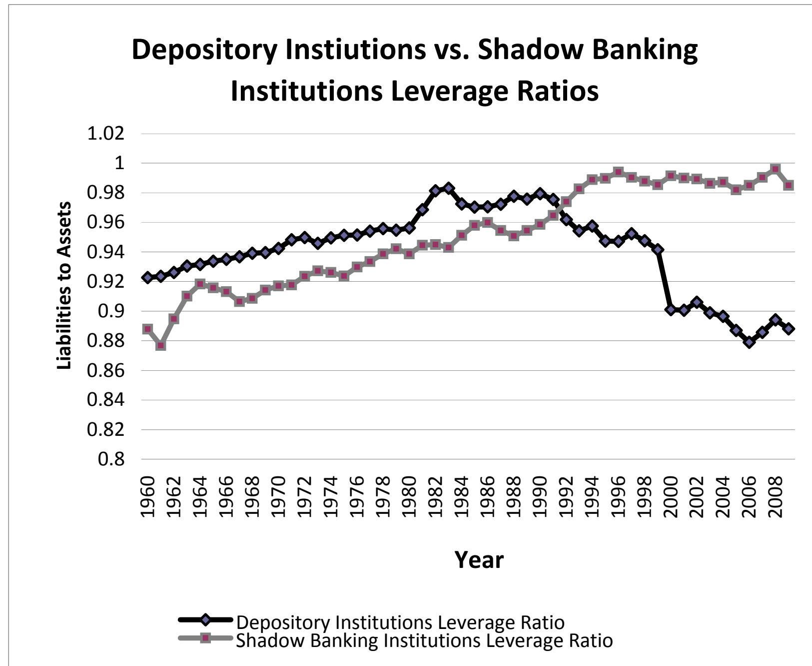
[49] *Id.* at 264 ("Securitization can reportedly lower interest rates by 150 basis points compared to an equivalent secured loan.").

[50] "What is striking about these shadow-banking vehicles is that many of them operated with strong guarantees from their sponsoring banks. And indeed, when the SIVs and conduits got into trouble, the banks honored their guarantees, stepping up and absorbing the losses." Stein, *supra* note 46, at 6; *see also* Dan Gallagher & Simon Kennedy, *Citigroup Says It Will Absorb SIV Assets*, MARKET WATCH, Dec. 14, 2007, http://www.marketwatch.com/story/citigroup-to-take-49-bln-of-siv-assets-onto-balance-sheet (reporting CitiGroup's announcement that it "will take $49 billion worth of assets from several investment vehicles that have been damaged by the credit market crisis and add them to its own balance sheet."); Neil Unmack & Sebastian Boyd, *HSBC Will Take on $45 Billion of Assets From Two SIVs*, BLOOMBERG, Nov. 26, 2007, http://www.bloomberg.com/apps/news?pid=newsarchive&sid=a96W_ouLIr4g (observing HSBC's bailout of Cullinan Finance Ltd. and Asscher Finance, Ltd., two structured investment vehicles it created). Acharya and Schnabl claim that "the vast majority of assets in SIVs were taken back on bank balance sheets." Acharya & Schnabl, *supra* note 46.

Fig. 6: Leverage Ratios of Banking (Depository Institutions), and Shadow Banking Sectors.



Source: Authors' calculations from Flow of Funds Accounts of the United States, Bd. of Governors, Federal Reserve Sys.,Tables L.109, L.114, L.115, L.124, L.125, L.126, L.127 and L.129. More details on file with the author.

When we aggregate the liabilities and assets of the five sectors that are key players in the shadow banking system (reported in Figure 6), and take the ratio to get a sense of the aggregate amount of leverage in the shadow banking system, we see that it is close to 1, and has been since the mid-1990s. Thus, with a growing share of financial assets financed by highly levered shadow banking institutions, the effective leverage in the system as a whole rose to about .94, or 94% by the time the financial crisis began to unfold. This is equivalent to a capital ratio of only 6% for the combined system in the U.S. (the banking system plus the shadow banking

system),[51] substantially lower than the 8% capital ratio recommended under Basel I.[52]

IV. The Macroeconomics of Shadow Banking: Why Leverage Matters

The aggregate amount of leverage in the financial system as a whole has not previously been a factor that regulators and macroeconomic policy makers have paid much attention to,[53] although, as noted before, regulators at both the national and international level have tried to establish international capital standards for banks. Leverage matters at the level of individual financial institutions because leverage magnifies both percentage gains relative to equity and percentage losses relative to equity in the institution. Leverage also affects that probability that an institution will be able to repay all of its creditors. Thus, investments made in highly leveraged institutions or by highly leveraged institutions are inherently more risky than the same investments would be if they were made to or by an institution with a much higher share of equity capital.

Leverage also matters for systemic reasons. Leverage adds riskiness to the economy as a whole because it magnifies spillover

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[51] As I am using these ratios here, the capital ratio plus the leverage ratio equals 1 or 100%, by construction.

[52] This may also understate the amount of leverage that major banks and investment banks were using, to the extent that financial firms did not consolidate the debt of their SIVs, or to the extent that "repo" transactions enabled banks to temporarily sell assets and add cash for the last few days of each reporting period. In the spring of 2010, investigators at the Federal Reserve Bank of New York found that at least 18 major banks were engaging in this practice during 2009. *See* BD. OF GOVERNORS, FED. RESERVE SYS., STATISTICAL RELEASE Z.1: FLOW OF FUNDS ACCOUNTS OF THE UNITED STATES: 2005-2009 Table L.100 (2010). Numerous insiders have reported that major investment banks and other players in the shadow banking system were operating with 30 to 1 leverage ratios or more in the years leading up to the crisis. *See, e.g.,* Robert A. Johnson, *Reform and its Obstacles*, THE AM. PROSPECT, Apr. 26, 2010, *available at* http://www.prospect.org/cs/articles?article=reform_and_its_obstacles ("On the eve of the crisis, leverage ratios of 30 to one and beyond were commonplace.").

[53] The emphasis on capital ratios through the Basel process has primarily been about the safety and soundness of individual financial institutions, especially systemically important institutions.

effects—if one institution comes up short in its ability to repay one loan, then very likely it will also be unable to repay other loans that it has taken out. Moreover, if Bank A cannot repay the money it owes to Bank B, this may mean that Bank B will be unable to repay some of its loans if Bank B was also highly leveraged. This in turn may increase the probability that Bank C or D will be unable to repay their loans if they have loaned money to Bank B. Thus, in a financial system in which most of the participants are highly leveraged, a bad loan is highly contagious. Problems with liquidity or solvency at one set of borrowers can spill over to other lenders and their customers. For this reason, the degree of leverage of any given institution may not truly be a private matter between it and its investors, because there may be social costs that fall on outsiders when an institution is over-leveraged.

Leverage also adds risk to the economy for another reason that has to do with what I will call the "credit multiplier" effect of leverage. To make this clear, imagine that we have a financial institution, which I will call a "bank," that has a 25% capital requirement.[54] And suppose this bank has $25 in equity capital, and $75 worth of deposits. To keep the math simple, and so that we can focus on the effect of the capital ratio, we will also ignore the effect of any reserve requirement our "bank" may face. This gives it a balance sheet that looks like panel A of Figure 7 below, in which $25 of equity plus $75 of liabilities (such as deposits) finances $100 of total assets. If the capital requirement for this bank is now reduced to, say 10%, the bank can substantially grow its balance sheet. Its $25 in equity can now be paired with $225 in liabilities, to support $250 in total assets. In this way, "capital" in a financial institution can finance total assets worth 1/(capital requirement) times capital. With a 10% capital requirement, banks can finance assets worth 1/.1 = 10 times the dollar amount of capital in the banks. If financial institutions are allowed to operate with only 5% of capital (or less), those institutions can finance 20 or more times that amount of total assets.

[54] For purposes of this analysis, I am using the concept of capital requirements in a very simplistic way to mean, essentially, the ratio of equity to total assets.

Fig. 7. The "Credit Multiplier."

Panel A
25% Capital Requirement

Assets	Equity
$100	$25
	Liabilities
	$75

Panel B
10% Capital Requirement

Assets	Equity
$250	$25
	Liabilities
	$225

If the capital requirement declines for all the banks in an economy at the same time, so that they are all trying to increase the size of their balance sheets, you might ask where they will all be able to get the additional loans that can enable the banks in Figure 7 to acquire the additional assets and expand their balance sheets? In fact, you should also ask where the additional assets will come from. If a financial system with a 10% capital requirement suddenly becomes a financial system with only a 5% capital requirement overnight, where would the additional debt capital and assets come from to allow the whole system to expand its balance sheets?

One answer to that question is that financial institutions would happily lend money to each other (because a loan to Bank A by Bank B is an asset on Bank B's balance sheet; and Bank B also wants to expand, so it is happy to borrow money from Bank C to loan to Bank A, etc.). Of course, one may think that the banks in the aggregate cannot all make money if all they are doing is borrowing from and lending to each other.[55] So, in addition to simply buying

[55] Although it may sound crazy, in the years leading up to the financial crisis, there is good reason to believe that a substantial part of the rapid expansion of balance sheets in the financial sector was the result of institutions essentially borrowing and lending to each other. Adrian and Shin observe, for example, that "expanding assets [of financial institutions] means finding new borrowers," and that securitization allowed "banks and other intermediaries to leverage up by buying each other's securities." Adrian & Shin, *supra* note 10, at 616. To be sure, trading a certain amount of assets and liabilities with each other can create value. In this simplified model, for example, we have not introduced any of the messy realities of a

each other's securities, the financial institutions in which the capital requirement declines will probably also try to provide as much new financing to the real side of the economy as they can. This new financing could be used to create new assets (such as to build new houses, or start new businesses). Thus a lower capital requirement in the system as a whole would probably lead to some expansion in the real economy.[56] A lower capital requirement is thus expansionary in the same way, and for the same reasons, that an increase in the money supply is expansionary.[57]

But if credit expands in the financial sector faster than the real economy can respond by creating new assets, some of the expansion of credit might be used by investors in the real economy to

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real economy, in which some assets are riskier than others, and some loans are for a short term while others are for longer term. In a real economy, the financial sector can add value by matching parties who have surplus savings with parties who need cash and trading securities until the relevant risks fall on those who are best situated to bear the risk. Of course, institutions can also simply create and trade securities to collect the fees or for the sheer thrill of the gamble. When we look at the total notional value of credit default swaps in existence just before the credit market froze up (Fig. 3 above), it certainly suggests that something like thrill-seeking was going on.

[56] Adrian and Shin suggest that leverage is the "forcing variable" in financial firms (rather than the passive outcome of investment decisions), and that they expand or contract their balance sheets to achieve the preferred leverage level. Adrian & Shin, *supra* note 10, at 608 ("[E]quity appears to play the role of the forcing variable, and the adjustment in leverage primarily takes place through expansions and contractions of the balance sheet rather than through the raising or paying out of equity. We can understand the fluctuations in leverage in terms of the implicit maximum leverage permitted by creditors in collateralized borrowings transactions. . . .").

[57] The theory I am articulating about the role of leverage in economic expansion is similar to a theoretical approach referred to by macro-economists as the "bank-lending channel". *See, e.g.,* Ben S. Bernanke, Chairman, Fed. Reserve Sys., Speech at the Credit Channel of Monetary Policy in the Twenty-First Century Conference, The Financial Accelerator and the Credit Channel (June 15, 2007), *available at* http://www.federalreserve.gov/newsevents/speech/bernanke20070615a.htm ("The theory of the bank-lending channel holds that monetary policy works in part by affecting the supply of loans offered. . . . [B]y affecting banks' loanable funds, monetary policy could influence the supply of intermediated credit."). Among contemporary macroeconomists, efforts by the Federal Reserve to expand money and credit in the economy as a whole is referred to as "quantitative easing."

bid up the prices of existing assets. A very rapid expansion of bank credit, especially one in which the growth of credit is concentrated in certain sectors of the economy, might even cause serious inflation in some categories of assets—in other words, a rapid expansion of credit might cause "asset bubbles."

Thus we see that the capital requirement in a financial system, or its inverse, the degree of leverage allowed in the system, works in a way that is analogous the reserve requirement in the banking system. A fractional reserve requirement permits the banking system to create cash and checkable deposits ("M1") that are a multiple of the amount of any new cash and reserves that the Federal Reserve injects into the banking system; and in a similar way, a fractional capital requirement permits a financial system to create total credit in the system that is a multiple of the amount of equity capital supplied by investors.

Moreover, just as a rapid expansion of money (whether we consider "M1" or "M2" or some other measure of money) in the economy can cause generalized inflation, if a financial system rapidly expands the amount of credit it is supplying to the economy, this could also cause inflation (or a bubble), especially in the asset classes that are being financed by the new credit.[58]

It should not be too surprising that credit can be multiplied in an economy in a way analogous to the way money is multiplied and that a credit expansion can have effects that are very similar to a monetary expansion. As we have seen in the discussion above about

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[58] Geanakoplos also argues that an increase in leverage in the financial system can cause asset bubbles, but the mechanism he identifies is somewhat different. John Geanakoplos, *Solving the Present Crisis and Managing The Leverage Cycle* 3-7 (Cowles Found., Discussion Paper No. 1751, 2010) ("With markets stable . . . lenders are happy to reduce margins and provide more cash. . . . Good . . . news . . . also encourage[s] declining margins which in turn cause the massive borrowing that inflates asset prices still more."). He models the degree of leverage at the level of individual transactions or securities as the total value of the security or investment, divided by the amount of cash down that that the purchaser must pay. He observes that when leverage is "loose," investors can buy assets with only a small down payment. Asset prices will be driven up in this environment, he says, because optimistic buyers "can get easy credit and spend more." *Id.* at 2. The point I am making in this paper would end up in the same place if I adopted the Geanakoplos mechanism, but I adopt the money supply analogy because it helps to highlight what happens when there is a general expansion in credit.

substitutes for money in a modern economy, and about the various ways that the Federal Reserve measures the money supply and the various components of the money supply, there is really no bright line that separates what we call "money" from other forms of credit. What monetary authorities call M1 is just the most liquid, most immediately spendable types of assets: cash, checkable bank deposits and travelers' checks. M2 includes all of this plus other categories that are almost as liquid, including funds in savings accounts, and retail money market mutual funds. The next broader aggregate, what was called "M3" when the Federal Reserve still measured it, included all of M2, plus large time deposits, institutional money market mutual funds and repurchase agreements. In other words, M3 included several categories of assets that are highly liquid but not immediately spendable, some of which are created in the shadow banking system where limits on leverage have been much looser, rather than in the banking system.

The idea that money is credit and that credit—especially very short-term sources of credit—is a form of money has been neglected in recent years by scholars and policy-makers in the fields of finance and macroeconomics.[59] One indication that this idea has been neglected is the very fact that the Federal Reserve, which is responsible for regulating banking, and which has a goal of encouraging full employment and preventing inflation, stopped measuring M3 in early 2006. At the time that it announced that it

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[59] Macroeconomists and macroeconomic policy makers are giving renewed attention to this idea lately, however, Adrian & Shin, *supra* note 10, at 616, observe that, "[i]n a market-based financial system, banking and capital market developments are inseparable, and fluctuations in financial conditions have a far-reaching impact on the workings of the real economy." Adrian and Shin also observe that prior to 1980, the literature on monetary policy focused on the relationship between monetary aggregates and the supply of credit in the economy, but "with the emergence of the market-based financial system, the ratio of high-powered money to total credit (the money multiplier) became highly unstable. As a consequence, monetary aggregates faded from both the policy debate and the monetary policy literature. However, there is a sense in which the focus on balance sheet quantities is appropriate. The mechanisms that have amplified fluctuations in capital market conditions are the fluctuations in leverage and the associated changes in haircuts in collateralized credit markets." *Id.* at 615. A "haircut" is the term of art for the percentage discount that an asset seller will have to give the asset buyer on the front end of a "repo" transaction. It is a measure of leverage.

would no longer collect and report the data necessary to measure M3, the Federal Reserve issued a Statistical Release that announced this change, and explained merely that "M3 does not appear to convey any additional information about economic activity that is not already embodied in M2 and has not played a role in the monetary policy process for many years."[60] Yet M3 might have been an important window on what was going on in the markets for very short-term credit in the months and years leading up to the crisis, especially in the market for "repos," which froze up almost completely in the fall of 2008.[61]

There are a few economists who have continued to estimate and report an estimate of M3 since the Fed quit measuring it. Figure 8 below was borrowed from the website of John Williams, who has made a living in recent years by collecting data and providing his own estimates of many statistics that the federal government estimates, such as inflation, GDP and money supply growth. Here, Williams reports the Fed's measures of the annual change in M1, M2 and M3, with the M3 series ending in early 2006, and Williams' own estimates for M3 growth continuing after that through early 2010.[62]

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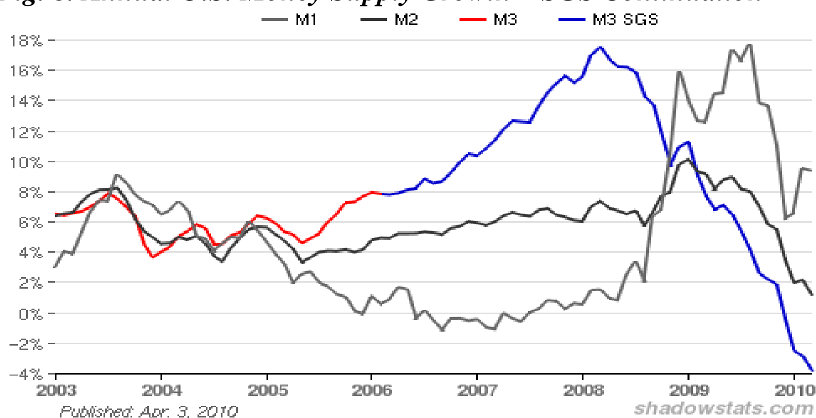
[60] BD. OF GOVERNORS, FED. RESERVE SYS., *supra* note 18.

[61] Gary Gorton similarly speculates that if the Federal Reserve had continued to monitor M3, it might have anticipated the bubble and responded earlier. "The repos included in the old money measure of M3 were narrowly those done only by the limited number of primary dealers that are approved to do business with the Fed. The [whole] repo market . . . was much broader and was not included in M3 or indeed measured at all. If this broader repo market had been included, presumably M3 would have been on a steep upward trajectory that would have been noticed and questioned. But this did not happen. Instead, about a year and a half after the calculation and publication of M3 ceased, the Panic of 2007 erupted in the much broader repo market. In other words, the shadow banking system was so far off the radar screen that instead of increasing the coverage of the repo counted for M3, the calculation was discontinued." GORTON, *supra* note 23, at 176.

[62] *See* John Williams, *Money Supply Charts*, SHADOW GOV'T STATISTICS, http://www.shadowstats.com/alternate_data/money-supply-charts (last visited Oct. 29, 2010) (showing a chart that is duplicated in this article as Fig. 8). I do not know how accurate Mr. Williams's measure of M3 is, but other economists who have attempted their own measures of M3 report data that looks substantially similar. *See, e.g.,* NOWANDFUTURES BLOG, http://blog.nowandfutures.com (displaying different blog comments, some related to M3.)

Fig. 8. Annual U.S. Money Supply Growth—SGS Continuation



Source: John Williams, ShadowStats.com, available at http://www.shadowstats.com/alternate_data/money-supply-charts, April 3, 2010.

These data suggest that M3 was growing at an explosive rate in the years and months leading up to the financial crisis. I suspect that the rapid growth rate was being driven by activity in the securitizations and "repo" markets, only some of which would have been picked up and measured even if the Fed had continued measuring M3. But it seems to me that the problem was not that M3 was not providing valuable information, but that M3 was not picking up some of the most important information. Rather than discontinuing M3, the Fed might have done better by continuing to measure M3, and beginning to collect and report a broader measure of money and credit that we might call "M4" that would provide a much better window onto activities in the "shadow banking system."[63]

Williams' estimates for M3 also suggest that it would be valuable for other reasons for the Fed to track what is happening to broader measures of money and credit. Note that, in Fig 8, we see that when the crisis hit in the second half of 2008, the growth rate of M3 quickly collapsed, and by the end of 2009, it had fallen below zero (meaning that the supply of M3 in the economy was shrinking). It has stayed below zero well into 2010. We also see that one of the Fed's responses to the financial crisis was to expand M1 as fast as it

[63] Gorton seems to endorse this view as well. "It is not only that M3 did not capture the right measure of money because it did not measure the full extent of the repo market, it is also that currently we do not know what the money supply really is either." GORTON, *supra* note 43, at 177.

could. We see in Figure 8 that the growth rate of M1 goes from negative in mid-2007, to as much as 16 to 18% per year in 2009. Many pundits and commentators have watched what has happened with M1 and have expressed concern that the Fed's actions will lead to inflation in the months and years ahead.[64] Yet, if Williams' numbers are correct, this suggests that broader measures of the money supply were still declining well into 2010, which would be contractionary, perhaps even deflationary, rather than expansionary. Measures of the money multiplier also suggest that, even with the Fed pumping money into the economy to unfreeze the credit markets and stave off the recession, broad measures of the money supply were declining rather than growing in mid-2010. The Fed is trying to be expansive but can't push money into the system fast enough to completely offset the contractionary effects of the effort by financial institutions to "deleverage."[65]

In sum, leverage matters because leverage determines the amount of new credit that financial institutions can create, and credit, like money (which is really the same thing), provides the grease that keeps the economy humming. Supplying enough of that grease is important to a well-functioning economy, but providing too much too fast probably causes asset bubbles, generalized inflation, or perhaps both. Excessive credit also exposes the economy to crashes

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[64] AnnaMaria Andriotis, *Will Federal Reserve Policies Cause Inflation?,* SMART MONEY, Apr. 6, 2010, http://www.smartmoney.com/investing/stocks/market-update-tuesday-apr-6-2010-21798/ ("[A] growing concern is whether inflation is around the corner."). Warren Buffett, Op-Ed., *The Greenback Effect*, N.Y. TIMES, Aug. 18, 2009, at A27 (discussing how the large current account deficit will need to at least be partially financed by printing money, thereby causing inflationary risks).

[65] By late summer of 2010, economists were debating whether the U.S. economy would experience a "double dip" recession, accompanied by deflation, and what the policy response should be to prevent such an outcome. *See, e.g.,* Simon Constable, *Economist Shiller Sees Potential for 'Double Dip' Recession*, WALL ST. J., Aug. 28, 2010, *available at* http://online.wsj.com/article/SB10001424052748704147804575455370525902224.html ("Robert Shiller, professor of economics . . . said he thought the second dip down of the so called double-dip recession 'may be eminent. . . .' [H]e thinks the U.S. economy is 'teetering on the brink of deflation.'"). *Chances of Double Dip Now Over 40%: Roubini*, CNBC, Aug. 26, 2010, http://www.cnbc.com/id/38863025. ("The chances of a double-dip recession are now more than 40 percent. . . . [T]he biggest threat to the economy is deflation. . . .").

when institutions decide they must reduce their leverage. To get an idea of how severe these problems can be in an economy in which leverage ratios are extremely high in the financial sector, note that if the financial sector is required to hold 8% of its assets in capital, it can support 12.5 times the amount capital in total assets on its balance sheets. But if the required capital ratio falls to 6%, the same institutions will now try to carry 16.7 times the amount of capital on their balance sheets. With a capital ratio at 4%, financial institutions would want to carry 25 times the amount of capital on their balance sheets, at 3%, 33 times, and at 2%—a level that a number of large institutions reached going into the financial crisis—an institution will try to grow its balance sheet to 50 times the amount of capital it has.

More generally, once capital ratios get very low, small changes in target capital ratios result in very large changes in the amount of total assets that financial institutions want to hold. If the ratio is allowed to drop a bit, institutions scramble to make more loans or buy more assets, which will add fuel to any asset bubble already underway. And if institutions suddenly have to reduce their leverage, they can be forced to reduce the size of their balance sheets dramatically, even disastrously. The result is substantial systemic instability in financial markets.

We don't have a direct way to measure whether the amount of credit supplied to an economy at any point in time is the right amount or perhaps too much. But the amount of debt held by the financial sector (which is credit to the rest of the economy) in the U.S. economy relative to GDP has more than doubled in the last three decades, going from $2.9 trillion, or 125% of GDP in 1978, to $36 trillion, or 259% of GDP in 2007.[66] During the same period, the supply of money, as measured by M1 and M2, declined as a share of GDP, with M1 going from 16% of GDP in 1978 to 10% of GDP in 2007 and M2 going from 60% of GDP in 1978 to 54% in 2007.[67] This is just another way of showing that a substantial part of the expansion in credit in the economy in the last three decades must have happened outside of the banking system, where M1 and M2 are created.

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[66] JOHNSON & KWAK, *supra* note 5, at 59.

[67] Author's calculations from Federal Reserve Statistical Release, H.6, Money Stock Measures, Table 1. BD. OF GOVERNORS, FED. RESERVE SYS., STATISTICAL RELEASE H.6: MONEY STOCK MEASURES: HISTORICAL DATA Table 1 (2010).

In the next part, I argue that the "shadow banking system," in which leverage ratios are not restricted, has strong tendencies to create too much credit.

V. Excessive Credit and the Rollercoaster Economy

So far, I have argued that a financial system that can create too much credit is likely to produce a real economy that is prone to asset pricing bubbles. We have lately experienced just how devastating the cycle of bubble and burst can be on the lives of most working people. The bubble part of the cycle feels good. Unemployment is low, wages are growing, more people are able to buy houses and take vacations and government revenues are increasing, making it possible to provide more services that people want. But, like a rollercoaster, the higher it goes on the way up, the more precipitous the slide back down and the harder the crashes when they come. Numerous articles and studies have documented the costs of the financial market crisis and worldwide recession of 2008-2009. The Pew Economic Policy Group Financial Reform Project, for example, estimates that 5.5 million American jobs were lost, and U.S. households lost an average of almost $5,800 each in income from September of 2008 through the end of 2009 due to the decline in GDP.[68] The stock market lost $7.4 trillion in that same period, and 500,000 more homes were foreclosed in that period than had been predicted by the Congressional Budget Office just prior to the crash in September 2008.[69]

And these only measure effects in the U.S. Millions more jobs were lost overseas. Unemployment at the end of 2009 was almost as high (9.9%) in the Euro area as it was in the U.S. at the same time (10%), and in some European countries such as Ireland, Spain and several Eastern European countries the unemployment rate was above 12% at the end of 2009.[70] The Asian Development Bank estimates that global financial assets, including stocks, bonds and

[68] Swagel, supra note 14, at 10-11.
[69] *Id.* at 14, 17.
[70] *Harmonized Unemployment Rate by Gender*, EUROSTAT, http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=teilm020&tableSelection=1&plugin=1 (last modified Oct. 29, 2010).

currencies, fell in value by more than $50 trillion in 2008, the equivalent of an entire year of global GDP.[71]

One reason that the crash has been so bad is that, when financial institutions get overleveraged, the process of deleveraging is more painful the more overleveraged the institutions were in the first place.[72] This is due to the problems previously mentioned. When leverage is high to begin with, small changes in leverage can produce very large swings in the total value of assets that financial institutions hold, and if one loan goes bad, it can spill over to cause other loans to go bad. A bad loan at one bank is more likely to cause problems at other banks the more highly leveraged the first bank is. To illustrate this with a simplified example, consider again the bank illustrated in Figure 7, only now assume it has a ratio of debt to total assets of 98%.[73] This means its balance sheet would look like the following:

Assets	**Equity**
$1250	$25
	Liabilities
	$1225

Here we see that our bank has total liabilities (including deposits) of $1,225, which, together with the original equity capital of $25 supports $1,250 in total assets, for a 98% leverage ratio. Now suppose that the assets consist of twenty-five loans, with a payoff value of $50 each. Furthermore, suppose that one of those loans

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[71] Shamin Adam, *Global Financial Assets Lost $50 Trillion Last Year, ADB Says*, BLOOMBERG, Mar. 9, 2009, http://www.bloomberg.com/apps/news?pid=20601068&sid=aZ1kcJ7y3 LDM.

[72] In time series data for the U.S. economy, Adrian and Shin observe that peaks in leverage among leading banks (“primary dealers”) are associated with the onset of financial crises. Adrian & Shin, *supra* note 10, at 609 (“Financial crises tend to be preceded by marked increases in leverage and are subsequently followed by sharp deleveraging.”).

[73] There were rumors that numerous Wall Street firms may have been this highly leveraged at the beginning of the crash in 2008, and there seems to be widespread agreement that “haircuts” in the market for asset-backed securities (essentially the amount of down payment required to purchase the securities) were “on the order of 2%.” Stein, *supra* note 46, at 8. Geanakoplos presents data showing that the down payments required on subprime and alt-A mortgages in 2006 was only 2.7%. Geanakoplos, *supra* note 10, at 13.

defaults and the bank is required to "write off" the total value of that loan, leaving the bank with only $1,200 in assets.

Note that once this happens, all of the shareholders' equity has been wiped out, and the bank is insolvent—it has $1,225 worth of liabilities and only $1,200 worth of assets. This means that the bank will have to default on one or more of its loans, or it might be unable to pay depositors if they rush to withdraw their deposits. If the bank is a traditional regulated bank, the Federal Deposit Insurance Corporation (FDIC), which provides a guarantee for depositors, might take over the bank, preventing depositors from making a run on the bank to get their money back.

But if the bank had been heavily financed with short-term loans (such as repos), the various lenders to the bank are likely to get nervous; they will not want to allow the bank to refinance its short-term loans or continue to borrow. In fact, the bank might be in default on some of its loans already because its assets have declined. Thus, the bank may be forced to sell some assets so that it can pay off some loans and restore its balance sheet. If numerous other banks are experiencing the same kinds of problems, they will all be trying to sell assets at the same time. This is likely to drive down the value of those assets in the market, so the bank could find that it has to take another write-down of its assets. A further write-down means that the bank must default on more of its loans, which causes other banks to write down more of their loans to our initial bank. In this way, the crisis quickly spreads to other institutions.

My point here is that even if the banks in this economy were all merely lending to and borrowing from each other, the whole system is more vulnerable to financial crisis the more leveraged all of its participants are. In fact, the decision that each financial institution makes about how leveraged it will be involves something of a prisoner's dilemma:[74] each institution will be better off—more profitable on average—if it uses more leverage,[75] but all of the

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[74] A prisoners' dilemma is a model in game theory which is structured so that if individual participants "rationally pursue any goals . . . all meet less success than if they had not rationally pursued their goals individually." *Prisoner's Dilemma*, STANFORD ENCYCLOPEDIA OF PHILOSOPHY, Oct. 22, 2007, http://plato.stanford.edu/entries/prisoner-dilemma/.

[75] Leverage improves returns for shareholders on average because shareholders capture all of the upside gain if the investments work out, but if the investments don't work out, shareholders are protected on the downside because they have "limited liability." Shareholders take the first

institutions together may be worse off if the system as a whole is more leveraged.[76] This is because there is likely to be more "systemic" risk in the economy as a whole if most financial institutions are highly leveraged.

In fact, however, it is more complicated than this because there is an offsetting effect of greater leverage in the system as a whole. To the extent that higher systemic leverage drives asset price inflation, as I have argued above in Part IV, most institutions will not only be better off if they use higher amounts of leverage, they may also be better off if other institutions use more leverage—at least as long as price levels are still on their way up. This is because aggregate leverage, not just individual leverage, drives asset inflation, and rising asset prices tend to make the decision by an individual institution to use leverage look that much smarter in retrospect. So if Bank A borrows $1,225 to invest in $1,250 worth of assets that are tied to housing prices (for a leverage ratio of 98%, or capital ratio of only 2%), Bank A will be more likely to make money on that investment if other banks are doing the same thing, thereby causing housing prices to ratchet up. That $1,250 housing asset may be worth $1,300 next year, and if so, Bank A now has $1,300 in assets and only $1,225 in liabilities. Its equity capital has gone up by 200% to $75, and its leverage ratio has fallen to 94%. This works until the bubble bursts.[77]

While operating with high leverage ratios is attractive in a rising market, it is deadly if market prices begin to fall, even if by only a tiny amount at first. Thousands of home mortgages in the U.S.

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hit when investments don't work out, but if there is only a small amount of shareholders equity (or "capital" in banks), creditors will also experience losses when the investments don't work out. Thus, on average, higher leverage shifts more risk onto creditors and makes shareholders better off.

[76] Viral V. Acharya, Lesse H. Pedersen, Thomas Philippon, and Matthew Richardson note that banks and other financial institutions do not take into account the full cost of risks they take, especially due to leverage, because much of the costs of that risk are externalized to other financial institutions or creditors or to society at large. Viral V. Acharya, Lesse H. Pedersen, Thomas Philippon & Matthew Richardson, *Measuring Systemic Risk* 5 (Fed. Reserve Bank of Cleveland, Working Paper No. 10-02, 2010).

[77] As Citibank's executive Chuck Prince put it, "When the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you've got to get up and dance." Michiyo Nakamoto & David Wighton, *Citigroup Chief Stays Bullish on Buy-outs*, FIN. TIMES, July 9, 2007.

were in trouble, for example, even before housing prices started declining. This was because numerous investors bought houses (or invested in housing related assets) with very little money down, counting on the idea that as house prices went up, the borrowers could refinance if they couldn't make the mortgage payments on the original loan. Such investors were likely to be in trouble even if housing prices simply stopped rising.

Once an asset bubble peaks in a highly leveraged economy, all of the machinery that was expanding leverage, expanding credit and encouraging additional spending on assets goes into reverse. Now Bank A will be one of the first to be in trouble if it was too highly leveraged. But when Bank A defaults, that will rapidly ripple out to other institutions.

In this way, even if all participants in a market economy are rational, and if leverage is not regulated and limited, the financial sector will still tend to employ too much leverage. Other things being equal, excessive leverage, in turn, is likely to promote boom and bust cycles in the real economy. Boom and bust cycles tend to be devastating, however, not just to investors who bought inflated assets at the peak, but also to millions of individuals who did nothing more than take jobs in the booming part of the economy. When the bust part of the cycle hits, individuals at the margins of the labor market tend to bear the brunt of the decline in economic activity. This includes minorities, those with low skills, new high school graduates and college graduates who were not employed before the crash and have very little experience and even older people who work in parts of the economy that depend heavily on surplus disposable income, such as tourism.

Meanwhile, individual bankers, traders, brokers and other financial intermediaries who helped to create the bubble may actually be better off in a rollercoaster economy and thus have significant incentives to try to impede reform, especially reform that would limit leverage. The reason is that compensation practices in the financial sector of the economy often allow certain financial sector employees to get paid enormous sums of money during good years, without having to pay back that money in bad years.

VI. Asset Bubbles Drive Excessive Compensation in the Financial Sector

The financial sector has grown substantially, measured as a percentage of total GDP in the U.S., from about 5% in 1980 to

around 7.5% in 2008.[78] And people who work in this sector have enjoyed much faster growth in compensation than the average person in other parts of the economy for the last three decades.[79] Compensation per employee in finance has gone from about $35,000 per year in 1980 (in inflation-adjusted 2009 dollars) to approximately $100,000 per year per employee (including secretaries and clerks) since 2002.[80] Here, I hypothesize that both of these trends are, at least in part, a product of the tendency of the financial sector to operate in ways that generate asset bubbles.

The compensation paid to people who work in the finance sector of the economy is part of the transaction costs associated with managing financial assets and channeling savings into productive investments.[81] Financial wealth has grown somewhat relative to total wealth in recent years, so it might at first not seem surprising that the amount of money paid out for managing that wealth has grown relative to GDP.[82] But consider that many of the components of total transactions costs—especially information costs and computational costs—have fallen dramatically in the last thirty years. Thus, one might expect that the cost of providing financial services to the economy, while having grown in absolute terms, might have declined over the last thirty years as a share of total income or total wealth. Indeed, this has happened to some degree in some parts of the financial sector. In the mutual fund industry, for example, as more funds eschew stock picking and timing and instead follow an index fund strategy, fees have declined from an average of 2.32% of assets

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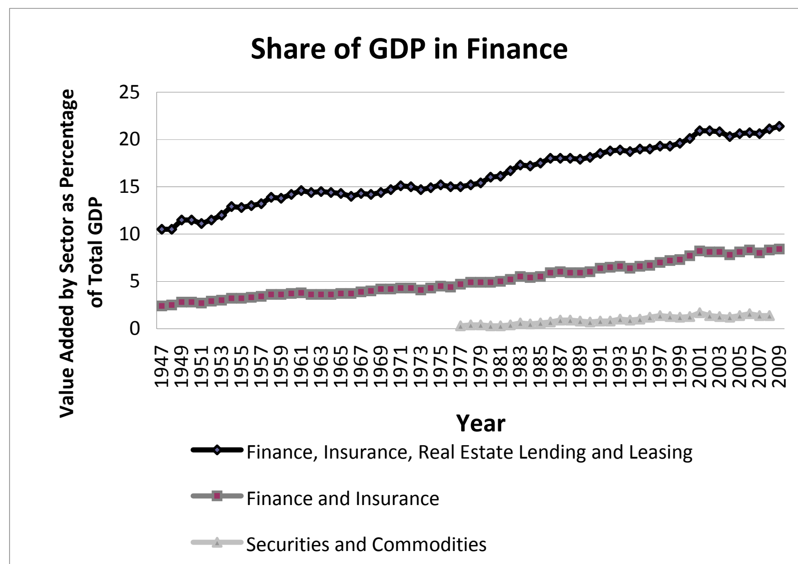
[78] *See infra* Fig. 9. Finance has grown relative to GDP in other countries as well. *See generally* Andrew Haldane, Simon Brennan & Vasileios Madouros, *What is the Contribution of the Financial Sector: Miracle or Mirage?, in* THE FUTURE OF FINANCE: THE LSE REPORT 87 (2010).
[79] *See infra* Fig. 11.
[80] *Id.*
[81] Philippon, *supra* note 13, at 5-8.
[82] Financial assets as a share of total household net worth ranged from about 68% to 74% from 1946 through 1994, but climbed out of that range in the 1990s, and reached 78.8% in 2007, and 83.2% in 2009. The jump up in the ratio in the last few years is probably the result of the decline in housing values during the recession, even as government debt rose significantly. BD. OF GOVERNORS, FED. RESERVE SYS., STATISTICAL RELEASE Z.1: FLOW OF FUNDS ACCOUNTS OF THE UNITED STATES:2005-2009, , *supra* note 38, at Table B.100 (Balance Sheet of Households, line 8 (Financial assets) divided by line 42 (Net worth)).

under management for stock funds in 1980 to 1.13% in 2005.[83] For bond funds, fees have declined from an average of 2.05% in 1980 to 0.90% of assets under management in 2005.[84] Despite declining as a share of assets, the total fees paid to mutual funds, however, grew from $1.3 billion in 1980 to $73.1 billion in 2005, because the value of assets under management has grown so much.[85]

Figure 9 shows that the "output" of the financial sector has grown from around 5% of GDP in 1980 to around 7.5% of measured GDP in 2008, although this appears to be a continuation of a trend that goes back at least to 1945.

Fig. 9. Share of GDP in Finance



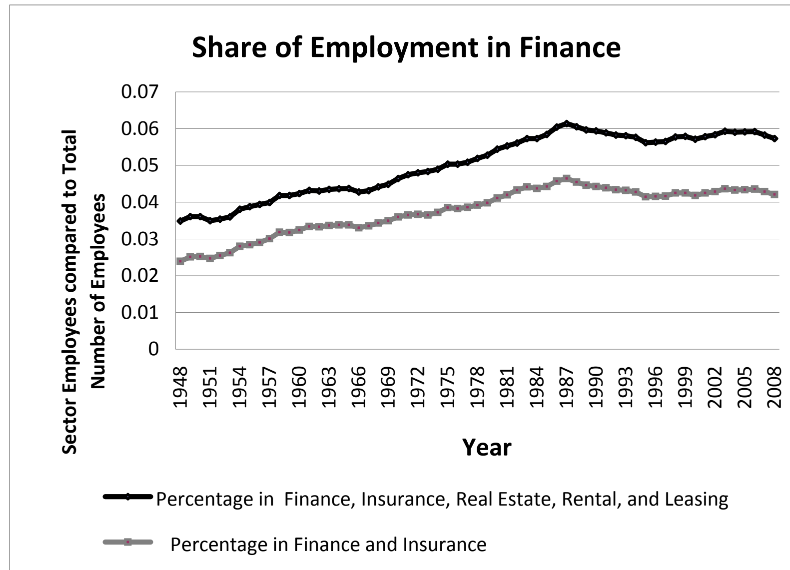
Source: Author's calculations from *Gross Domestic Product by Industry Accounts, Value Added by Industry as a Percentage of Gross Domestic Product,* U.S. Bureau of Economic Analysis, Sept. 30, 2010. More details on file with author.

In Figure 10, we see that the share of total employment in finance, after growing steadily from 1945 to 1985, has not continued to grow since the mid-1980s. In other words, the delivery of financial

[83] Kaplan & Rauh, *supra* note 13, at tbl.5b.
[84] *Id.*
[85] *Id.*

services requires roughly the same share of the workforce as it did in the mid-1980s.

Fig. 10. Share of Employment in Finance



Source: Author's calculations from *1947-97 NACIS-Based GDP-by_Industry Data*, U.S. Bureau of Economic Analysis, *GDPbyInd_VA_NAICS_1998-2009*, U.S. Bureau of Economic Analysis. More details on file with author.

This suggests that compensation per employee in finance has grown substantially. Figure 11 shows that compensation in the broadly defined finance sector (including real estate) began growing faster than compensation in the economy as a whole around 1980. By the late 1980s, compensation in the subset of finance that includes finance and insurance only (not real estate) began growing even faster. By the early-2000s, compensation per employee (including clerks and secretaries) in the securities and commodities sector (which includes investment banking) had reached six-figure territory. Philippon estimates that in 2007, the bonuses alone on Wall Street exceeded $200,000 per employee.[86]

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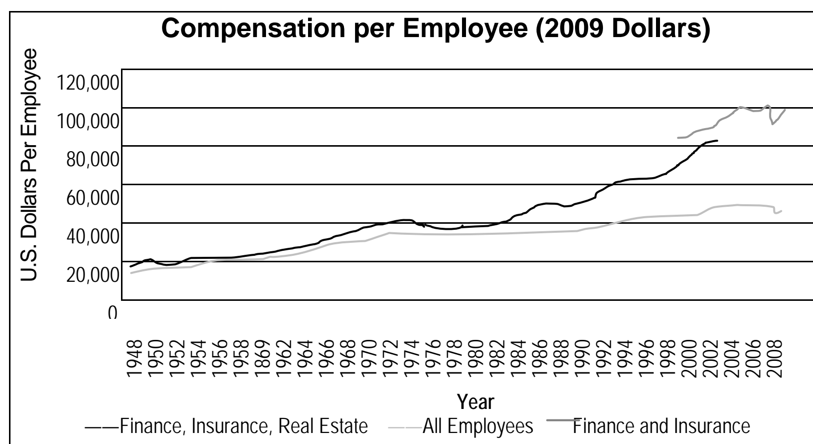
[86] Thomas Philippon, *Are Bankers Paid Too Much?*, VOX, Feb. 2, 2009, http://www.voxeu.org/index.php?q=node/2966. ("The bonuses of Wall Street reached more than $200,000 per employee in 2007.").

Fig. 11. Compensation per Employee—Finance and All Other



Source: Author's Calculations from *Table 6.2B. Compensation of Employees by Industry*, U.S. Bureau of Economic Analysis, Aug. 20, 2009, (covering years 1948-1987); *Table 6.2C. Compensation of Employees by Industry*, U.S. Bureau of Economic Analysis, Aug. 20, 2009, (covering years 1987-2000); *Table 6.2D. Compensation of Employees by Industry*, U.S. Bureau of Economic Analysis, Aug. 05, 2010, (covering years 1998-2009). BEA changed the way it defined various industries in 1998, so continuous data could not be constructed for employees in finance, insurance and real estate, or for employees in finance and insurance. More details on file with author.

The acceleration in the growth of incomes in the financial sector relative to the rest of the economy corresponds in timing to a dramatic widening of the income distribution in the U.S., which also began in the 1980s. Piketty and Saez have documented that across the economy, incomes have grown much faster at the upper reaches of the income distribution since the 1980s, and upper income earners have captured a growing share of total income in the U.S.[87] They show that at the end of World War II, the top 1% of income earners earned about 10 to 12% of all income, and this continued until 1952, when the share of the top 1% dropped below 10% and stayed at about 10% or less until 1988.[88] After that, the share of the top 1% began climbing steadily, reaching 23.5% in 2007, almost up to the

[87] Thomas Piketty & Emanuel Saez, *Income Inequality in the United States, 1913-1998*, 118 Q. J. ECON. 1, 7-14 (2003).
[88] *Id.* at 9-10.

previous high of 23.9% in 1928.[89] In 2008, the share of the top 1% fell a bit, but Saez shows that from 1993 through 2008, the top 1% of income earners captured 52% of all the income growth for the whole economy.[90] Within the top 1%, the distribution also widened, so that the top .01% captured a growing share of the income of the top 1%, also peaking in 2007.[91]

The correspondence between the increase in the share of GDP accounted for by finance, and the increase in the share of income captured by the top echelons of income earners, does not, of course, prove that the former explains the latter. Kaplan and Rauh, however, attempt to estimate the proportion of individuals in the highest income brackets in the U.S. that are employed in the finance sector.[92] They observe that it has become common in investment banks that many individual traders, partners and other executives are very highly paid.[93] Through a complex process, they estimate that about 10,000 top-tier managing directors at investment banks received enough pay in 2004 to place them in the top brackets of income earners in the U.S., and that, collectively, investment bankers alone may have accounted for as much as 6 to 11% of the top 0.01% of the income distribution in that year.[94] This measure does not include highly paid employees of other categories of financial firms, which would presumably add thousands of additional individuals from banks, hedge funds, mortgage brokers and other financial firms, who are paid enough to put them into the top income brackets.

Thomas Philippon and Ariell Reshef have conducted groundbreaking work that explains the high compensation levels of

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[89] Emmanuel Saez, *Striking it Richer: The Evolution of Top Incomes in the United States (Updated with 2008 Estimates)*, July 17, 2010, http://elsa.berkeley.edu/~saez/saez-UStopincomes-2008.pdf. Point estimates based on figure.

[90] *Id*. at tbl.1, fig.2.

[91] *Id.* at fig.3.

[92] Kaplan & Rauh, *supra* note 13, at tbl.8a.

[93] *Id.* Goldman Sachs is reported to have paid more than $1 million in bonuses to each of 953 employees in 2008, and set aside a large enough bonus pool in 2009 to pay up to $700,000 each to 31,700 employees. Graham Bowley, *Bonuses Put Goldman in Public Relations Bind*, N. Y. TIMES, Oct. 16, 2009, at B1.

[94] Kaplan & Rauh, *supra* note 13, at 17. ("Using our assumptions, we estimate that the 10,000 top-tier managing directors at investment banks generate enough AGI to explain at least 5.8% (Pareto) or 11.2% (exponential) of the top 0.01% of the AGI distribution.").

people who work in the financial sector.[95] They assembled data on wages, education and occupations from 1910 to 2005 and show that the financial sector of the U.S. economy employed people with substantially higher levels of education on average than in the rest of the economy from 1910 through 1930.[96] Then, average education levels in finance dropped to levels much closer to the economy-wide average in the early 1930s and stayed there until 1980.[97] After 1980, the average education level in finance once again rose past where it was relative to the rest of the economy prior to 1930, and it has continued to climb.[98] Since the early 2000s, financial firms have had almost twice the share of employees with more than a high school education than is found in the rest of the economy.[99] Philippon and Reshef show that like education levels, compensation in the financial sector relative to compensation in the rest of the economy has also exhibited a long U-shaped pattern, in which it was quite high in the period prior to 1930 (more than 1.5 times the level of the rest of the economy), dropped after 1930 to levels no more than about 10% higher than the rest of the economy, and then climbed back up after 1980 to as much as 1.7 times pay levels in the rest of the economy.[100]

Using regression analysis, Philippon and Reshef demonstrate convincingly that the higher education and skill level in the financial sector prior to 1930 and after 1980 correspond to periods when initial public offerings for new businesses were especially frequent.[101] They hypothesize that greater skill is needed to assess creditworthiness and to price credit instruments issued by new businesses than is needed to price the risk of other securities, such as government bonds or bonds issued by larger stable companies.[102] Thus, in periods when corporate finance activities dominated the financial markets, the financial sector has employed more highly educated people. Regression

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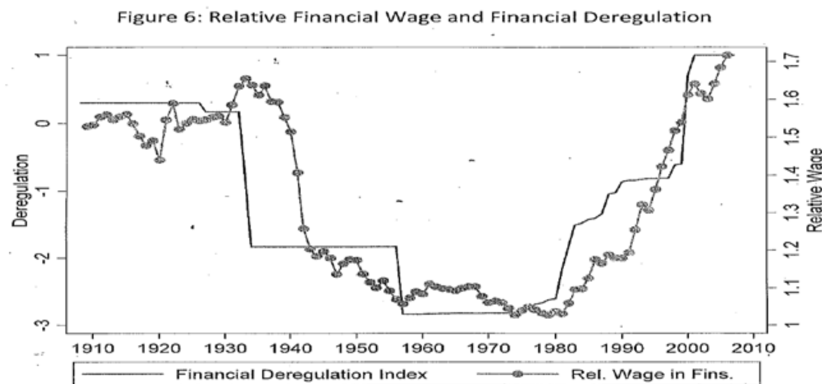
[95] Philippon & Reshef, *supra* note 13.
[96] *Id.* at 8.
[97] *Id.*
[98] *Id.*
[99] *Id.*
[100] *Id.*
[101] *Id.* at 16.
[102] *Id.*

analysis supports this hypothesis, but makes it clear that this does not explain the whole pattern.[103]

Phillipon and Reshef also hypothesize that the returns to education and skills in the financial sector are likely to be much higher in periods when finance is not highly regulated than in periods when it is, because there is less room for innovation in the latter periods.[104] The authors construct several indices of financial regulation and show that these indices are highly significant in predicting the relative education level and the relative wage level in finance.[105] One figure is especially telling. Figure 12 below is borrowed from Figure 6 in Philippon and Reshef.[106] This shows that when the authors' financial deregulation index drops in the early 1930s as a result of the imposition of an extensive regulatory structure for finance during the Great Depression, the relative wage paid in finance also drops within a few years, and when finance is deregulated in the years from 1980 to 2000, the relative wage climbs back up to new highs.

Fig. 12. The Relationship between Wages in Finance and Deregulation



Source: Philippon & Reshef, *supra* note 14, at Fig. 6.

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[103] *Id.* at 15-17 (listing information technology, financial patents, credit risk, and deregulation as other variables responsible for higher education and skill level in the financial sector during those time periods).

[104] *Id.* at 17. (explaining deregulation as another possible reason for high levels of education).

[105] *Id.* (explaining the indices used).

[106] *Id.* at Fig. 6.

Philippon and Reshef conclude that education can explain most of the higher pay in finance prior to the 1980s, but since 1980, the pay for financiers has risen substantially beyond the level that can be explained by higher education.[107] The authors also show that the higher pay in finance cannot be explained by higher risks associated with working in finance, nor can it be explained by unobserved characteristics of the people who work in finance.[108] Thus, they ultimately conclude that economic "rents . . . account for 30% to 50% of the wage differentials observed since the late 1990s."[109]

The idea that financiers are capturing "rents" naturally leads to the question of where the rents come from in finance. Since finance is a transaction cost, for financiers to capture "rents" of such magnitude implies that there are considerable inefficiencies involved in the provision of financial services. One source of such rents could be economic power that providers of financial services have relative to their suppliers or customers, but presumably it would be difficult for financial institutions to sustain their market power over time if there were a large and growing number of firms in the market. Joel Houston and Kevin Stiroh report the number of firms in each of four sectors within finance (commercial banks, savings institutions, insurance firms and other financials) for the time periods 1975-1984, 1985-1994 and 1995-2005.[110] In each subsector, the number of firms grew significantly over time, with the total for the sector growing from 423 firms (on average) in 1975-1984 to 1,026 firms in 1995-2005.[111] Although the financial crisis resulted in some consolidation, there are still hundreds of banks and other financial institutions operating in the U.S., and even the largest banks face competition from international firms, as well as from institutions in the shadow banking system. So, it seems unlikely that the "rents" being captured by individuals employed in the financial sector are monopoly rents. Nonetheless, further work should perhaps be done to determine whether banks have been able to charge higher than competitive market prices for their services in recent decades.

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[107] *Id.* at 29. ("In both cases, excess wages in the financial sector appear only from the mid-1980s onward.").
[108] *Id.* (stating that "a large part of the excess wage in Figures 11 and 12 is due to rents.").
[109] *Id.* at 30.
[110] JOEL F. HOUSTON & KEVIN J. STIROH, FED. RESERVE BANK OF N.Y., THREE DECADES OF FINANCIAL SECTOR RISK Table 1 (2006).
[111] *Id.*

Do financial market firms perhaps control some scarce resource or intellectual capital? Large amounts of resources are undoubtedly expended by individuals and firms in the financial markets in attempts to gain an information advantage, computing advantage, or trading advantage,[112] but analysts repeatedly find that financial markets are efficient enough that investors are rarely able to "beat the market" more often than might be expected as the result of pure chance.[113] Moreover, Philippon and Reshef find very little evidence that either of two measures of technology, information technology ("IT") intensity (the share of IT and software in the capital stock of the financial sector), or financial patents, help explain relative wages in finance, though financial patents do appear to help explain relative levels of education among financial industry employees.[114]

So what could be the source of the rents that have made it possible to pay the people who work in the sector so much more than they could expect to earn with the same education and skills in some other sector? To answer these questions, it might be helpful to know how much value the financial sector provides to the economy as a whole. Unfortunately, the data on the contribution of the financial sector to GDP is not particularly helpful in answering this question. This is because in the financial sector, there is no independent measure of the created value. Moreover, there is no agreed-upon unit of output in the industry, such as the number of cars or trucks in the

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[112] For example, some "fast-moving computer-driven investment firms" are purchasing data from stock exchanges and using supercomputers to attempt to gain a trading advantage by calculating stock prices a fraction of a second before most other investors see the numbers. Scott Patterson, *Superfast Traders' New Edge*, WALL ST. J., June 4, 2010, at C1.

[113] *See* Michael C. Jensen, *The Performance of Mutual Funds in the Period 1945-1964*, 23 J. FIN. 389, 415 (1968) ("The evidence on mutual fund performance discussed above indicates not only that these 115 mutual funds were *on average* not able to predict security prices well enough to outperform a buy-the-market-and-hold policy, but also that there is very little evidence that any *individual* fund was able to do significantly better than that which we expected from mere random chance."); Burton G. Malkiel, *Returns from Investing in Equity Mutual Funds 1971 to 1991*, 2 J. FIN. 549, 570-71 (1995) ("Most investors would be considerably better off by purchasing a low expense index fund, than by trying to select an active fund manager who appears to possess a 'hot hand.'").

[114] Philippon & Reshef, *supra* note 13, at 15-16 (stating that neither IT intensity nor financial patents explain relative wages in finance).

automotive industry. Economists who compute the national accounts essentially measure the value added by finance as the difference between the interest and profits earned by financial firms, and the interest those firms pay their investors, plus revenues from specific fees charged for services.[115] In other words, the value of the output of finance is, by definition, assumed to be the same as the value that is captured by the employees and investors in the finance sector. This means that our measures of the value that is added by the services that finance provides can't be cleanly separated out from the economic return on the capital that the finance sector is using or managing. While the economic return on assets under management in finance includes some implicit provision for services that are not directly priced, it also includes some allowance for risk. But our measures of the value added to GDP by finance are not adjusted for risk. This means that the measured value added will be larger when the financial sector invests in a risky way so they earn a higher rate of return.[116]

The possibility that the higher returns in the financial sector in recent decades is little more than compensation for taking more risk is consistent with the theory I propose here, which is that financiers and shareholders of financial firms have earned "rents" because the apparent returns in the business have seemed to be higher than they are because of asset value inflation, and they have been further exaggerated by extraordinary levels of leverage.[117] One

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[115] JACK E. TRIPLETT & BARRY A. BOSWORTH, PRODUCTIVITY IN THE U.S. SERVICES SECTOR: NEW SOURCES OF ECONOMIC GROWTH 106 (2004). Part of what the financial sector earns, is, of course, paid out to the people who work in the sector in wages, and economists also generally assume that the people who work in finance contribute value equivalent to what they are paid. Philippon, *supra* note 13, at 5-6 (discussing many different economist's theories for why wages paid in the finance sector are so high).

[116] Susanto Basu & J. Christina Wang, *Risk Bearing, Implicit Financial Services, and Specialization in the Financial Industry* 14-16 (Fed. Reserve Bank of Boston, Public Policy Discussion Paper No. 06-3, 2005) (demonstrating that the riskier a bank's investments are, the higher rate of return it can expect); Haldane, Brennan & Madouros, *supra* note 77, at 91-94 (also demonstrating that the riskier a financial company's investments, the higher rate of return it will receive).

[117] Haldane, Brennan & Madouros find that "virtually all of the increase in ROE of major UK banks [since 2000] appears to have been the result of higher leverage. Banks' return on assets—a more precise measure of their productivity—was flat or even falling over this period." The higher returns

might expect that if returns are high due to taking higher risks, those returns should show much higher variance and should occasionally lead to substantial losses. Indeed, this has happened. Houston and Stiroh, for example, show that the variance of returns in the commercial banking sector increased by 74% from the 1975-1984 period to the 1985-1994 period.[118] After that, their measure of variance leveled off at the higher level in the period 1995-2005.[119] This latter period, as we showed in Figure 6 above, corresponds to when the banking sector was bringing its measured on-the-books leverage down, as more and more of the risks were moved off-balance sheet, into the shadow banking sector, where it is much harder to measure.

Financial firms, their investors and their employees have an incentive to take on greater risk via greater leverage because the incidence of returns and losses, from their perspective, is not symmetric. Firms get high fees, employees take home huge bonuses and shareholders get dividends in good years, when portfolio values rise, but they rarely have to give back any previously paid dividends or compensation when portfolio values decline. The downside risk falls on others, including creditors, and even, as we have seen, taxpayers.

Since 2007, trillions of dollars of nominal value have been lost on financial assets. To the extent that this is a correction to a pricing bubble in financial assets, this strongly suggests that the compensation paid in the financial sector was higher during the bubble years (and maybe throughout much of the last few decades) than it should have been in some sense—higher than it would otherwise have been if the assets being managed were not being artificially inflated in value by excess leverage.

VII. Why Reform Will Be Difficult

The financial sector in the U.S. not only accounts for a disproportionate share of GDP and of total compensation paid to employees, it also has vastly more influence on the rules of the game—the regulatory framework within which financial institutions

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to the financial sector in recent decades (as measured by contribution to GDP), they argue, is "likely to have been an act of risk illusion." Haldane, Brennan & Madouros, *supra* note 77, at 99-100.

[118] HOUSTON & STIROH, *supra* note 110, at Table 4.

[119] *Id.*

operate—than would be expected based on the number of people this sector employs or even its share of GDP. This is partly a result of the fact that the large paychecks that go to participants in the financial sector can be used to gain access to politicians and other policy makers. But in addition to influence that comes from money, finance has had outsized influence on policy for two other reasons. The first is the steady flow of people from the financial sector into high-level positions in Washington and the reverse flow of people from policy and regulatory positions in Washington into high-level positions on Wall Street. This "revolving door" helps ensure that policy makers are sympathetic to arranging the rules to protect and promote the health of Wall Street. The second is that, for most of the last three decades, finance has had great intellectual respectability, even cachet. Since at least the mid-1980s, the idea that unfettered financial markets will efficiently allocate society's resources and that a thriving financial sector generates stronger overall economic growth have dominated scholarly research in economics, finance and law. The dominance of this idea has put a high burden of proof on any challenger to show why particular regulations or limits on the actions, contracts, or securities created by financial market actors might be beneficial.

Much has been written about all three of these sources of financial sector power and influence, and I will not attempt to summarize all of it here.[120] But I will briefly summarize some of the more significant evidence that the finance sector has had substantial influence on setting and implementing the policies that made the financial crisis possible and will likely continue to impede any attempt at reform.

A. The Money Channel

As described in the previous section, the financial sector of the U.S. has been capturing a growing share of the total GDP and total compensation paid to employees. This flow of money into finance has helped to sustain a massive flow of money into politics. In terms of the sheer dollar volume of money going to political contests, lobbying and influence in Washington, no other sector of the economy comes close to finance. The Center for Responsive

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[120] For a fascinating, if somewhat terrifying, study of the ties that have bound Washington and Wall Street over the past few decades, see JOHNSON & KWAK, *supra* note 5, at 88-119.

Politics, a non-profit, non-ideological organization which collects and tracks data on the role of money in politics and makes the data available to the public on its website, notes that "[t]he financial sector is far and away the largest source of campaign contributions to federal candidates and parties, with insurance companies, securities and investment firms, real estate interests and commercial banks providing the bulk of that money."[121]

In the 2008 election cycle, for example, the finance, insurance and real estate sector accounted for 19.7% of the $2.42 billion donated to Congressional and Presidential campaigns.[122] In spite of the fact that the whole sector was in financial turmoil in 2008, this was actually up slightly from the 20-year average of 19.35% of donations to Congressional and Presidential campaigns.[123] The sector spends enormous amounts on lobbying as well, accounting for almost 14% of all dollars spent on lobbying in the 2008 election cycle.[124] So far, in 2010, the finance sector has spent 13.3% of all lobbying dollars.[125] Moreover the sector accounts for about 19% of all lobbyists.[126]

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[121] *Finance/Industry/Real Estate*, OPENSECRETS.ORG, http://www.opensecrets.org/industries/indus.php?ind=F (last visited Dec. 16, 2010).

[122] Author's calculation based on data from *Totals by Sector*, OPENSECRETS.ORG, http://www.opensecrets.org/bigpicture/sectors.php?cycle=2008&Bkdn=DemRep&Sortby=Rank (last visited Dec. 16, 2010). CRP tracks only donations by PACs and by individuals who contribute $200 or more because these donations must be publicly reported. The data on the financial sector for this calculation and the ones that follow include the health insurance industry as part of the insurance subset of the financial sector. *Insurance*, OPENSECRETS.ORG, http://www.opensecrets.org/industries/indus.php?cycle=2010&ind=F09 (last visited Dec. 16, 2010).

[123] Author's calculation based on data from *Totals by Sector*, OPENSECRETS.ORG, http://www.opensecrets.org/bigpicture/sectors.php?cycle=2008&Bkdn=DemRep&Sortby=Rank (last visited Dec. 16, 2010).

[124] Author's calculations based on data from *Ranked Sectors 2008*, OPENSECRETS.ORG, http://www.opensecrets.org/lobby/top.php?showYear=2008&indexType=c (last visited Dec. 16, 2010).

[125] Author's calculations based on data from *Ranked Sectors 2010*, OPENSECRETS.ORG, http://www.opensecrets.org/lobby/top.php?showYear=2010&indexType=c (last visited Dec. 16, 2010).

[126] *Id.*

The flow of money into politics from finance has been bipartisan: "The sector contributes generous sums to both parties, with Republicans traditionally collecting more than Democrats," according to Center for Responsive Politics.[127] "Yet in the past two election cycles, bankers have suddenly shifted their cash toward Democrats. The sector gave at least 55 percent of their contributions to the GOP from 1996 to 2004, but actually gave a slight majority of their donations to Democrats in the 2008 cycle."[128]

B. The People Channel

At least as important to influencing policy as money and campaign contributions have been are the extraordinary flow of people from positions in the White House, Congress and the regulatory agencies into highly paid jobs in Wall Street firms and from Wall Street firms into positions of influence in Washington. Top executives from Goldman Sachs alone have served as Cabinet members and senior advisors to the last three Presidents and have been enormously influential in the deregulation of much of the financial sector since the late 1980s. At the apex of power, Robert Rubin, previously a co-chairman of the board at Goldman, was President Clinton's director of the National Economic Council ("NEC") and then Secretary of Treasury in Clinton's second term; Stephen Friedman, another former Goldman co-chair, was director of NEC for George W. Bush and later chairman of the New York Federal Reserve Bank; Henry Paulson, chair of Goldman from 1999 to 2006, was Bush's Secretary of Treasury.[129]

Just as senior executives from the financial sector have moved frequently into top policy jobs in Washington, former federal employees have gone to work for Wall Street. A new report from the

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[127] *Finance/Industry/Real Estate*, OPENSECRETS.ORG, http://www.opensecrets.org/industries/indus.php?ind=F (last visited Dec. 16, 2010).
[128] *Id.*
[129] Johnson and Kwak also identify Gary Gensler and Robert Steel, both undersecretaries of Treasury under Clinton and Bush; Sen. Jon Corzine, who became a member of the Senate Banking Committee; William Dudley, president of the New York Fed; Joshua Bolten, director of the Office of Management and Budget and chief of staff to President Bush; and Neel Kashkari, head of the Troubled Asset Relief Program (TARP), all as Goldman Sachs alumni. See JOHNSON & KWAK, *supra* note 5, at 94.

Center for Responsive Politics[130] finds that the financial sector has hired seventy-three former members of Congress and 1,447 other former federal employees to lobby on their behalf, either as full-time employees of one of the large banks or as consultants, since the beginning of 2009.[131] "These people are influential because they have personal relationships with current members [of Congress] and staff," according to David Arkush, director of Public Citizen's Congress Watch division.[132]

The flow of people goes the other direction too. The same Center for Responsive Politics study identifies eighty-two staff members for Senators and House members serving on the Senate Banking Committee or House Financial Services Committees in 2010 who previously worked as lobbyists for the finance industry.[133]

Another way that the "people channel" has helped the finance sector become powerful has been the steady diversion of our top science, math and engineering graduates into finance and away from the fields for which they were trained. Claudia Goldin and Lawrence Katz recently found that the share of Harvard graduates that go into the financial sector has increased dramatically from a few decades ago:

> Among those who graduated around 1970, 22 percent of the men were in finance or management 15 years later. Among those who graduated around 1990, the figure was 38 percent. The proportion of male graduates working in finance alone increased from 5 percent to 15 percent during the same period. And a *Harvard Crimson* survey [in 2007] found that among graduating seniors heading straight to work . . . 58 percent of the men were headed for finance or

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[130] *See Banking on Connections: Financial Services Sector Has Dispatched Nearly 1500 "Revolving Door" Lobbyists Since 2009*, OPENSECRETS.ORG, June 3, 2010, http://www.opensecrets.org/news/FinancialRevolvingDoors pdf.

[131] *See id.* at 3 (discussing the industry's use of former federal employees and former congressmen).

[132] Press Release, OpenSecrets.org, Report: Revolving Door Spins Quickly between Congress, Wall Street (June 3, 2010), http://www.opensecrets.org/ news/2010/06/report-revolving-door-spins-quickly.html.

[133] OPENSECRETS.ORG, *supra* note 130, at 9-10 ("82 [financial sector lobbyists] worked for members who currently serve on the committees").

> consulting, and more than 20 percent of all men for investment banks."[134]

Prof. Vivek Wadhwa at Duke University similarly told Congress recently that, "30-40% Duke Masters of Engineering Management students . . . chose to become investment bankers or management consultants rather than engineers."[135]

This influx of talent is not only a response to the fact that so much money can be made in finance, but it also reflects the fact that, for the last three decades, finance has been an exciting place to be intellectually.

C. The Intellectual Channel

Despite the money, the talent and the connections, the financial sector might not have become so influential in policy circles if the ideas that the financial sector was promoting had been regarded as boring or intellectually disrespectable. But not only were these ideas respectable, the important ideas in finance were elegant, seductive and exciting. The most important of these ideas, and the one that formed the basis of all the others, was what came to be called the efficient capital market hypothesis ("ECMH"), or sometimes just the efficient market hypothesis. The ECMH asserts that, when assets are freely traded in deep and liquid markets, the price at which the assets trade will, at any point in time, take into account all of the information available to the market about those assets.[136] One important implication of the ECMH is that changes in the price of securities traded on deep markets should be random and

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[134] Elizabeth Gudrais, *Flocking to Finance*, 2008 HARV. MAG., 18, 18-19.

[135] Vivek Wadhwa, Pratt Sch. of Eng'g, Duke Univ., Testimony to the U.S. House of Representatives Committee on Education and the Workforce (2006), *available at* http://www.cggc.duke.edu/pdfs/051606_Testimony _of _Vivek_Wadhwa.pdf.

[136] The "strong form" version of this hypothesis says the price incorporates and reflects all information about the asset, whether public or private; the "semi-strong form" says price reflects all public information; and the "weak form" says the current price reflects all past price and trading volume information. *See*, *e.g.,* FRANKLIN ALLEN, RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 363 (9th ed. 2008) ("[I]n an efficient market it is not possible to find expected returns greater (or less) than the risk-adjusted opportunity cost of capital. This implies that every security trades at its fundamental value . . . .").

should only happen if new information comes into the market. If new information is genuinely "news," investors should not be able to predict which direction securities prices might go next. Another important implication is that market-determined prices could be trusted to be the "right" prices.

Although a few finance theorists and practitioners had observed prior to the 1960s that markets for financial securities seemed to behave as if changes in the prices of securities were random and as if investors could not predict which direction prices would go next, the theory was not developed formally until Eugene Fama did so in his Ph.D. dissertation, published in 1965. By 1970, the idea was becoming accepted among theorists and was being used to develop other securities pricing models and, importantly, incorporated into finance theory taught to management and business students.

The ECMH can be neither directly proven, nor disproven, because there is no independent source of pricing information that can be regarded as the "true" price against which one might test the hypothesis that the price that comes out of a free exchange in a liquid market is identical to that "true" price. But there is substantial evidence that securities price changes are not predictable. And it turns out that if one simply assumes that the hypothesis is true, then one can put forth an almost infinite array of secondary hypotheses about how various assets should be priced relative to other assets. The simplest example is that any security should trade at the same price at a given point in time, whether it trades in Chicago, or New York, or London. If shares of Microsoft stock traded at a higher price in London than in New York, there would be an opportunity for a trader to buy Microsoft shares in New York and sell them at the same time in London and (except for the transactions costs) make an instant profit without taking any risk or tying up any capital. This kind of transaction is called "arbitrage."

A slightly more complex example involves two very similar securities: (1) a newly issued 24 month $1,000 face value U.S. Treasury note that pays 4% interest, with interest payments made at the end of each calendar quarter; and (2) an existing $1,000 face value Treasury note that pays 4% interest at the end of each quarter and that has 24 months remaining before the principal is repaid. These two securities should have exactly the same price because they have exactly the same cash flows, even if the second security was originally a 10-year note that now only has 24 months left. And both of these should be priced at almost exactly the same price as a

package of two assets: an AAA-rated zero coupon bond that will pay $1,000 in 24 months (but nothing in between), plus an AAA-rated annuity that will make eight payments of $10 each at the end of each quarter from now until 24 months from now.

Once the idea is accepted that securities with similar cash flow characteristics should trade for about the same price, it becomes possible to create mathematically precise asset pricing models for pricing all kinds of contracts and securities that range from simple to extremely complex. This is because any security can be thought of as a package of simpler securities, each of which might be easier to price. These models can be constructed on and run by computers to give asset traders second-by-second information about what any given asset should sell for (relative to other assets), so that the trader (or the computer) can then look for anomalies or opportunities for arbitrage. The computer models used to price complex securities use huge amounts of information. But as the cost of computing and information processing came down dramatically in the 1980s and 1990s, financial firms began deploying armies of highly-skilled economists, mathematicians, computer programmers and even engineers to build and operate asset pricing and trading models. Still more armies of mathematically-trained finance theorists as well as other scientists and engineers worked on developing new securities, including various kinds of derivatives, that were designed to have various risk and cash flow properties that the firms thought would be attractive to investors.

Although the ECMH was developed to apply to securities markets, the idea was taken much further to imply that free and active markets always do a good job of pricing assets of all kinds and that free markets, in general, always do a good job of allocating resources to their most productive use. This highly seductive belief in the benefits of free markets, then, has provided intellectual respectability since at least 1980 to an entire body of policy choices designed to free up financial markets from regulation by any arm of government. In the 1980s, Congress chose not to regulate the so-called "market for corporate control," which was the appealing name given by free market advocates to the wave of hostile takeovers and leveraged buyouts of corporations in that decade. In the 1990s, financial firms advocated for, and got permission to, merge across state lines and across different subsectors (i.e., banking, insurance, brokerage and funds management). This steady elimination of the boundaries between different categories of financial institutions culminated in the passage of Gramm-Leach-Bliley Act of 1999,

which had the effect of repealing the Glass-Steagall Act. The Glass-Steagall Act had been in place since the 1930s to separate retail banking from investment banking so that banks that were accepting deposits from individual investors could be insured, regulated and protected from bank runs. Also in the 1990s, policy-makers not only failed to establish a regulatory structure for the new types of derivative securities that were being invented by Wall Street, but they actually put up a legal fence around many such securities, protecting them from regulation.[137]

After 2000, a whole raft of other rules were changed and tweaked that had the effect of eliminating most restrictions on the kinds of securities and contracts that financial firms could offer to investors or to borrowers. The cumulative effect of this increasingly relaxed regulatory posture toward the financial sector was to reduce or remove barriers to the use of increasing amounts of leverage. In the Appendix, I identify a series of regulatory changes that have made it possible for banks and other financial firms to take on increasing amounts of leverage and for a shadow banking system to emerge with virtually no limits to the amount of leverage and few safeguards to prevent the financial sector from stimulating asset bubbles, which appear to justify extraordinary levels of compensation.

VIII. Approaches to Reform

I have argued in this article that the single most important reform that needs to be made in the financial sector to reduce the likelihood of repeated bubbles and crashes in the financial markets is a reduction in the amount of leverage that financial firms use to finance their investment activities. In the months leading up to the financial market crash, numerous U.S. financial institutions were rumored to be operating with leverage ratios as much as 97% to 98%—implying ratios of assets to capital of as much as 30 to 1, or even 50 to 1.[138] Financial institutions with so much debt on their

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[137] *See generally*, The Commodity Futures Modernization Act of 2000, Pub. L. No. 106-554, 114 Stat. 2763 (2000).

[138] For example, Citigroup was estimated to have a ratio of "tangible common equity" to tangible assets of just over 2% in the first quarter of 2008, or a leverage ratio of almost 98%, while Bank of America's leverage ratio was almost 97%. Rolfe Winkler, *Bank Buffers Increase, Still Not High Enough*, REUTERS, Feb. 11, 2010, http://blogs.reuters.com/rolfe-winkler/

balance sheets had almost no cushion to absorb any decline in the value of their assets when housing prices and mortgage-related assets began to get into trouble in 2007. Small declines in asset values in 2007 and 2008 initially caused leverage ratios to climb even higher, as the value of the institution's overall assets decreased. As institutions panicked, they sold assets to raise more capital, further driving down asset values.

Under substantial pressure from bank regulators in the fall of 2008 and throughout 2009, large U.S. banks brought their capital ratios up to around 6% (implying a leverage ratio of 94%) by the end of 2009.[139] And most international banks have similarly improved their capital positions for the time being. But while there is fairly widespread agreement among economists, policy analysts and regulators that capital ratios ought to be higher in the future,[140] it is less clear whether regulators will be able to make this happen.

2010/02/11/bank-capital-buffers-increase-still-not-high-enough/ (graphing capital buffers). Tangible common equity is a conservative measure of bank capital. Elliott, *supra* note 38, at 4 ([Tangible common equity] "is an even more conservative definition of capital than common equity."). See also references in note 70. Note that, technically, the banking sector had fairly high ratios of regulatory capital to assets in 2007—perhaps as high as 10%. *See* Bloomberg News, *Greenspan Sees Need to Raise Capital Levels*, WASH. POST, Mar. 19, 2010, http://www.washingtonpost.com/wp-dyn/content/article/2010/03/18/AR2010031801809.html?sid=ST2010031805667 (stating that banks were at 10 percent in mid 2007). But this did not take into account all of the effective leverage in the shadow banking system that had been hidden by the use of special investment vehicles for securitizing mortgages and other assets, nor all the contingent liability in the derivative positions of large financial institutions.

[139] *See id.* (showing that the four major banks had close to a 6% capital buffer in 2009).

[140] "The most pressing reform that needs fixing in the aftermath of the crisis, in my judgment, is the level of regulatory risk-adjusted capital," says Former Federal Reserve Chairman Alan Greenspan. Greenspan argues that required capital ratios should be increased to as much as 14% of assets. Bloomberg News, *supra* note 138. Brookings Institution scholar Douglas Elliott asserts that "[t]here is strong consensus among policymakers that there need to be higher minimum capital requirements for banks . . . ." Douglas Elliott, Brookings Inst., *A Further Exploration of Bank Capital Requirements: Effects of Competition from Other Financial Sectors and Effects of Size of Bank or Borrower and of Loan Type* 1 (2010), http://www.brookings.edu/~/media/Files/rc/papers/2010/0129_capital_elliott/0129_capital_requirements_elliott.pdf.

To understand the problem, note first that bank regulators have probably had the authority to compel U.S. banks to hold more capital and reduce their leverage for decades. Elliott observes that the framework governing bank capital requirements today was established by the Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991,[141] which specifies certain minimum ratios, but "leaves regulators the ability to establish tougher requirements and to take account of non-numerical factors such as an assessment of whether a bank is being operated in a safe and sound manner."[142] Moreover, other bank regulators, such as the Federal Reserve Board and the Office of the Comptroller of the Currency ("OCC"), could also impose their own capital standards, although in practice regulators have coordinated their efforts and applied common standards.[143] Yet, while regulators seem to have had considerable authority to regulate leverage, for the most part, they did not do so.

One reason for this result is that, since the late 1980s, regulators in the U.S. have also tried to coordinate their capital standard requirements with bank regulators in the other leading industrial countries in an attempt to minimize the attractiveness of arbitrage across jurisdictions. These efforts led to the Basel Agreements, discussed in Section III.B above. Although the Basel Agreements have never had the force of law, regulators have used them as a guideline. Under Basel I, regulators began applying a two-tiered approach to measuring capital in banks (the numerator in the capital ratio requirement) and a risk-weighted approach to measuring the assets (the denominator in the capital ratio requirement). As capital ratio requirements became more complicated, banks increasingly figured out ways to game the system by investing in assets that had high returns but were judged by rating agencies as having low risk, such as mortgage-backed securities. Regulators were largely complicit in this game,[144] although technically measured

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[141] *See generally* The Federal Deposit Insurance Corporation Improvement Act of 1991, 12 U.S.C. §§ 1811-1835 (1991).

[142] Elliott, *supra* note 38, at 8.

[143] *Id.* at 8 ("In practice, they have coordinated their minimum capital requirements in order to avoid encouraging regulatory arbitrage, a condition where business flows to entities regulated under the loosest standards.").

[144] The relative simplicity of the Basel I standards "permits changes in the form of an asset or transaction to result in a different capital requirement being assigned to what is essentially the same risk," according to Tarullo.

regulatory capital rose as a share of risk-weighted assets at U.S. banks from 1988, when Basel I was adopted, to 1996, when the Basel Committee began working to revise the agreement.[145]

Under Basel II, adopted in 2004, the formulas for measuring regulatory capital and risk-weighted assets became even more complicated. And, even more troubling, large banks were permitted to use their own internal models to assign risk weights to bank assets.[146] The net effect was widely believed to have resulted in a loosening of capital requirements in practice.[147] Basel II was never fully implemented prior to the financial market crisis, and since the financial crisis, the leading countries that are members of the Basel Committee have acknowledged that the Basel II standards had the effect of reducing capital requirements (increasing permitted leverage).[148] These countries have been working on revising them

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TARULLO, *supra* note 39, at 79. *See also* Elliott, *supra* note 38, at 9-11 (discussing problems regulating under this system).

[145] TARULLO, *supra* note 39, at 67 ("There is little question but that the risk-adjusted capital ratios of banks in committee member countries rose following the adoption of Basel I.").

[146] *See* Erik F. Gerding, *Code, Crash, and Open Source: The Outsourcing of Financial Regulation to Risk Models and the Global Financial Crisis*, 84 WASH. L. REV. 127, 127 (2009) ("Bank regulators should scrap those provisions of Basel II that allow certain banks to set their own capital requirements according to their internal risk models.").

[147] Senator Ted Kaufman, Democrat of Delaware, criticized the reliance on internal bank models in Basel II in a letter to President Obama as the Dodd-Frank Act was being negotiated, observing that "[b]y outsourcing their regulatory responsibilities to the banks that they were supposed to regulate, bank regulators were making an implicit admission that the size and complexity of the megabanks had exceeded their comprehension." He further criticized the Federal Reserve for, in his view, failing to enforce a leverage requirement. "By trying to tie capital requirements to so-called 'risk-based' measurements," he said, "the Federal Reserve—the main driver of the Basel process—apparently hoped to eliminate the basic leverage requirement. In fact, former Fed Governor Susan Bies told banks that 'the leverage ratio down the road has got to disappear.'" Letter from Edward E. Kaufman, Senator, U.S., to Barack Obama, President, U.S., Banking on Basel. . . Again (June 16, 2010), *available at* http://kaufman.senate.gov/imo/media/doc/6-16-10%20Basel%20cap%20standards%20speech4.pdf.

[148] *See*, *e.g.,* Alan S. Blinder, *Two Cheers for the New Bank Capital Standards*, WALL ST. J., Sept. 30, 2010, http://online.wsj.com/article/SB10001424052748704523604575511813933977160.html ("Basel II actually reduced capital requirements relative to Basel I. Even before the

again to produce Basel III.[149] This is important because the massive financial reform bill passed by Congress over the summer of 2010, the Dodd-Frank Act,[150] does not directly deal with the leverage problem by establishing new, hard limits on leverage for banks or other financial institutions. The statute's only reference to any specific leverage ratio is that it requires the Federal Reserve to impose a maximum leverage ratio of up to 15 to 1 (93.3% debt to total assets, equivalent to a capital ratio of about 6.7%) for banks that are determined to be a "grave threat to the financial stability of the United States."[151] Beyond that, the Dodd-Frank Act does not get into specifics about regulating leverage, leaving it to regulators to work out the details; the Fed and the FDIC have indicated that they will take their cues from the work of the Basel Committee.[152]

However, the Dodd-Frank Act might yet lead to better regulation of leverage in the financial sector as a whole, including in the shadow banking sector, because it provides that if any firm or institution (not just banks) is designated by the new Financial Stability Oversight Council ("Oversight Council") to be a "grave threat," that institution will subsequently be regulated by the Fed and subject to the same sorts of stress tests and "15-to-1" leverage limits that are applied to banks that are so designated.[153] In making any such determination, "the extent of leverage" of the firm is one of

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financial wreckage of 2007-2009, that looked like a mistake. After the crisis, it looked absurd.").

[149] The Basel Committee reached agreement on a new set of standards on Sept.13, 2010, but this draft must be accepted by the leading economic countries that are parties to the Basel process for the new standards to take effect. Moreover, the new standards don't necessarily apply to the shadow banking sector.

[150] *See generally* Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No 111-203, 124 Stat. 1376 (2010).

[151] *Id.* § 165(j)(1).

[152] Sen. Kaufman was quoted after the passage of the Dodd-Frank Act to the effect that "[t]he financial reform bill includes only a promise of higher capital requirements for U.S. banks, which we were told were going to be negotiated on an international level." Yalman Onaran & Alison Vekshin, *Dodd, Frank Plan to Hold Hearings on Basel Capital Regulations*, WASH. POST, July 29, 2010, http://www.washingtonpost.com/wp-dyn/content/ article/ 2010/07/28/AR2010072805776.html.

[153] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No 111-203, § 113 Stat. 1398-1402 (2010).

eleven factors that are to be considered.[154] Importantly, however, the statute provides that, for purposes of meeting minimum capital requirements that are imposed on large banks and systemically important nonbank institutions, the "computation of capital . . . shall take into account any off-balance-sheet activities of the company."[155] This provision has the potential to help bring all of the relevant assets and liabilities into the light of day. And, in theory, if the Oversight Council requires substantial players in the money markets to expand their disclosure to include off-balance sheet activities, better disclosure might also help the market to better police itself. But, here again, the details are largely left to regulators to work out in the months and years ahead.[156]

All of this raises the stakes for the work underway by Basel Committee. In late 2009 and early 2010, the Basel Committee moved to revise requirements under Basel III to impose much stricter capital requirements.[157] In response, a number of prominent U.S. banking

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[154] *Id.*

[155] *Id.* § 165(k).

[156] Ezra Klein, *Why You Should Care About Basel III*, WASH. POST, July 27, 2010, http://voices.washingtonpost.com/ezra-klein/2010/07/why_you_should_care_about_base.html ("The Dodd-Frank bill . . . leaves many important things to be decided by the regulators. Of those, the most important is the level of capital that banks have to hold. . . . The Basel III process is a way of getting countries around the world to agree on how much capital banks will carry.").

[157] *See Banks Face Tighter Capital Standards Under Basel*, REUTERS, Dec. 17, 2009, http://www.reuters.com/article/idUSTRE5BF1ET20091217 ("The new rules proposed by the Basel Committee on Banking Supervision will introduce stricter limits on what counts as top-level assets and on risk exposure from trading in derivatives and securities . . . The announcement contained little detail on the size of a planned global leverage ratio which would limit banks' ability to lend but the committee said the new standards would probably take effect by the end of 2012. It said there would be a grace period for transition."). More recently, Treasury Secretary Timothy Geithner and former Federal Reserve Board Chairman Alan Greenspan, for example, appeared together on PBS show Nightly Business Report in May, 2010, emphasizing the importance of increased capital requirements. Geithner at one point said "[t]he only way I am aware of to design a more stable system is to use capital requirements to set and enforce constraints in leverage on institutions that could pose catastrophic risks to the financial system." About which Darren Gersh, Nightly Business Report Correspondent, observed "[r]egulators at the Federal Reserve and around the world are working on new standards that are expected to require banks to raise

industry and regulatory leaders made public statements to the effect that they believed Basel III would raise capital requirements substantially, complaining that this would compel them to reduce lending, which could slow the recovery. The banking industry responded by putting together studies that purported to show that the tighter requirements would slow down economic recovery and complained that banks would need to raise $700 billion in common equity between now and 2015 to meet the higher standards.[158] Independent estimates of the amount of new capital banks would need to raise were not so high. By late July, when the proposed new "capital and liquidity reform package" was released,[159] it appeared that the toughest new standards had been watered down: The minimum required level of capital to total assets was reduced to 3% instead of 4%;[160] the definition of capital, which had been strictly limited in the earlier drafts of the proposal, had been expanded to include a number of categories of assets that might not prove liquid in a crisis;[161] the expected need to raise new capital was reduced;[162]

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hundreds of billions of dollars of new capital." And Greenspan added, "[i]f capital is large enough, all the losses accrue to them and not to the debt holders and definitely do not default and therefore you don't have serial contagion." *Nightly Business Report: Capital Standards & Financial Regulatory Reform* (PBS television broadcast May 17, 2010) transcript *available at* http://www.pbs.org/nbr/site/onair/transcripts/capital_standards_and_financial_regulatory_reform_100517/.

[158] Chris Bryant & Brooke Masters, *Bankers Fear Effect of Basel Rules*, FIN. TIMES, June 10, 2010, http://www.ft.com/cms/s/0/92a3e422-747c-11df-b3f1-00144feabdc0.html ("The IIF estimates that banks will need to raise $700bn of common equity and issue $5,400bn of new long-term wholesale debt over the period 2010-15 to meet the new requirements."). *See also*, The Banks Battle Back, THE ECONOMIST, May 27, 2010, *available at* http://www.economist.com/node/16231434 ("That hasn't stopped the banks from fighting their quarter.").

[159] Press Release, Basel Committee on Banking and Supervision, The Group of Governors and Heads of Supervision Reach Broad Agreement on Basel Committee Capital and Liquidity Reform Package (July 26, 2010), *available at* http://www.bis.org/press/p100726.htm.

[160] Eric Dash, Matthew Saltmarsh & Nelson D. Schwartz, *Basel Group Agrees to New Global Rules for Banks*, N.Y. TIMES, July 27, 2010, http://www.nytimes.com/2010/07/28/business/global/28bank.html (discussing the plan's 3% leverage ratio).

[161] *See id.* ("The standards announced Monday are less onerous than previous proposals and give banks more leeway to define what counts as high-quality, or Tier 1, capital."); Floyd Norris, *In Basel, Eternal Work in*

and the phase-in period was delayed from 2014 to 2018.[163] The Basel Committee voted in mid-September to approve standards that are actually substantially tougher than expected, calling for a minimum level of common equity in banks of 4.5% (up from only 2% under Basel II) to be phased in over eight years. By itself, this does not sound very impressive, but on top of this, the proposal calls for a minimum level of "total capital" (which includes some asset categories in addition to equity capital) of 8%, plus a "capital conservation buffer" of another 2.5%, for total minimum capital plus conservation buffer in excess of 10% of total assets.[164]

Details of the new standards are being debated and negotiated in the fall of 2010 and G-20 (Group of 20 Finance Ministers and Central Bank Governors) members endorsed the framework for the new standards at the G-20 summit in Seoul, South Korea, in November 2010. The devil will be in the details and it will still be up to regulators to implement the new standards.[165] Moreover, these standards will not apply to non-bank shadow banking institutions, unless those institutions are designated as systemically risky by the Oversight Counsel. So substantial political will is still

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Progress, N.Y. TIMES, July 30, 2010, at B1 ("In December, none of those assets were to be counted in capital. Now all can be, albeit to a limited extent.").

[162] Norma Cohen, Brooke Masters & Megan Murphy, *US Banks Receive Basel III Boost*, FIN.TIMES, Aug. 18, 2010, http://www.ft.com/cms/s/0/ 0d5 4e652-ab01-11df-9e6b-00144feabdc0.html ("The analysis by BarCap's debt capital markets group estimates that the 35 largest US banks will have to come up with half as much new capital as had been expected . . . .").

[163] Joe Ortiz, *Wishy-Washy Capital Rules Follow the Cozy Stress Tests*, WALL ST. J., July 27, 2010, http://blogs.wsj.com/source/2010/07/27/wishy-washy-capital-rules-follow-the-cozy-stress-tests/(examining the delay).

[164] Press release, *Group of Governors and Heads of Supervision Announces Higher Global Minimum Capital Standards*, Bank for International Settlements, Basel Committee on Banking Supervision, (Sept. 12, 2010).

[165] On Dec. 16, 2010, the Basel Committee released the Basel III rules text. Over the long run, the rules should require substantial increases in capital ratios at many banks, as well as improvements in measures of leverage and liquidity. But the new standards are to be implemented gradually (over eight years), and "calibrated" over time to "assess whether its proposed design and calibration is appropriate over a full credit cycle and for different types of business models." Basel III rules text and results of the quantitative impact study issued by the Basel Committee, Bank of International Settlements Press Release, Dec. 16, 2010, available at http:www.bis.org/ press/p.101216.htm.

required for regulators to further restrict the financial sector's ability to expand credit in dangerous ways.

IX. Conclusions

While much of the policy discussion about financial market reform in the wake of the most severe financial crisis since the Great Depression has focused on protecting consumers and preventing future bailouts of financial institutions, the most important reform that needs to be made is to develop, institute and enforce limits on the ability of financial market firms to create too much credit and operate with too much leverage. Credit used safely and prudently helps businesses and individuals invest more than they could if they were limited to using only their own savings, so it is extremely important to a healthy economy that credit be available. But relying too much on credit makes individuals and businesses vulnerable to any interruption in income that they are counting on to service the loans they have taken out.

More importantly for our purposes here, credit provides an alternative to money and acts like money in stimulating the economy. When financial institutions that provide credit to the real economy borrow too much, they become overleveraged, which can lead to dangerous asset bubbles and make the financial markets unstable. Worse, excessive leverage in the financial sector can set the stage for sudden and catastrophic contractions when multiple financial institutions all try to deleverage quickly and at the same time. Although it is in society's interest to restrict the extent to which financial institutions can borrow to avoid such situations, it is not necessarily in the interest of the executives, fund managers and traders to limit the amount of leverage they use. This is because the payoffs for financial firms operating with leverage are asymmetric—when times are good, leverage greatly enhances the profitability of financial firms as well as the paychecks of the people who work for them. But when the outcome of investments financed with leverage is bad, the people who invest in or work in financial firms rarely bear the full brunt of the losses their firm experiences. In fact, there is good reason to believe that financial market participants are, on average, paid more the more volatile and bubble prone the economy is, so they have little incentive to adopt prudent practices that help keep the economy safe from such disturbances.

For this reason, financial markets will not be self-correcting and self-regulating and the decisions that bank regulators make over

the next few months and years are of critical importance. If financial firms and financial markets are not more tightly regulated to limit the amount of leverage that can be used, the outcome will be more bubbles, more crashes and even greater income and wealth inequality as finance captures a growing share of society's resources.

Appendix

Legal and Regulatory Changes that Permitted Financial Institutions to Take on Excess Leverage

Non-Regulation of the Use of Off-Balance Sheet Entities to Hide Debt: Beginning in the late 1970s and early 1980s, regulatory and accounting rules passively allowed financial institutions to use "off-balance sheet" financing tricks in which they created new legal entities ("special purpose vehicles" (SPVs), or "special investment vehicles" (SIVs)) which sold securities and used the proceeds to purchase troubled assets from financial institutions. Thus, the assets were off the books of the financial institutions and isolated in the SPVs, and since the financial institutions were not contractually obligated to make good on the securities issued by the institutions, the transactions would have the effect of hiding the debt and bad assets from regulators and investors.[166]

Depository Institutions Deregulation and Monetary Control Act of 1980: The Depository Institutions Deregulation and Monetary Control Act of 1980 established a process for phasing out interest rate restrictions that applied to banks and thrift institutions and permitted depository institutions to begin offering accounts that could compete with money market mutual funds.[167] Money market accounts at banks have not been subjected to the same reserve requirements as checking or regular savings accounts.

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[166] *See* Al L. Hartgraves and George J. Benston, *The Evolving Accounting Standards for Special Purpose Entities and Consolidations*, 16 ACCT. HORIZONS 245, 247 (2002) (discussing the lack of regulation for SPE's); *see generally* Elaine Henry, Oscar J. Holzmann & Ya-wen Yang, *The Recent Credit Crunch and GAAP*, 19 J. CORP. ACCT. & FIN. 89 (2008).

[167] 1 FEDERAL DEPOSIT INSURANCE CORP., HISTORY OF THE 80S: LESSONS FOR THE FUTURE 91-93 (1997) *available at* http://www.fdic.gov/bank/historical/history/ (explaining how the government aimed to increase competition and remove differences); FED. RESERVE BANK OF BOSTON, DEPOSITORY INSTITUTIONS DEREGULATION AND MONETARY CONTROL ACT OF 1980, *available at* http://www.bos.frb.org/about/pubs/deposito.pdf ("The act has nine titles covering a wide range of subjects, including reserve requirements, access to and pricing of Federal Reserve services, a phaseout of Regulation Q and new powers for thrift institutions.").

Approval of Less Strict Accounting Rules by the Federal Home Loan Bank Board: In 1981, in hopes of avoiding forcing too many thrift institutions into receivership, the Federal Home Loan Bank Board approved less strict accounting rules. These weakened rules made it possible for thrifts to delay recognizing losses on assets, allowing them to operate with less in the way of actual assets than they would have needed to meet capital requirements under prior rules while the regulators looked the other way. Some thrift institutions began trying to attract funding from the "money markets" (markets for short term debt) in addition to deposits.[168]

Weakening of the Banking Act of 1933 (Glass-Steagall Act): Restrictions preventing banks from engaging in investment banking activities, in place since the 1930s, were weakened steadily from 1986 through 1999 as the Federal Reserve reinterpreted the restrictions in ways that allowed banks to begin to invest in and trade commercial paper, municipal bonds and mortgage-backed securities.[169]

Basel I: The U.S. signed on to the first Basel Agreement (Basel I) in 1988, which recommended that banks in countries that are part of the agreement should be required to maintain capital ratios of at least 8%—equivalent to a leverage ratio of a little less than 12 to 1.[170] Basel I (officially the Basel Committee on Banking Supervision of the Bank of International Settlements) is an international agreement on banking regulation but applies only to banks, and it has no force of law. U.S. banks immediately began resisting this standard as too restrictive.[171]

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[168] MATTHEW SHERMAN, CTR. ECON. & POLICY RESEARCH, A SHORT HISTORY OF FINANCIAL DEREGULATION IN THE UNITED STATES 7 (2009) ("The legislation authorized thrifts to engage in commercial loans up to 10 percent of assets and offer a new account to compete directly with money market mutual funds.").
[169] *Id*. at 8-10 (recounting new markets that banks were allowed to enter).
[170] TARULLO, *supra* note 39, at 55 (discussing the agreement's tiers and 8% requirement).
[171] *See id*. at 64 ("As would be the case in Basel II, this conceptual overhaul was prompted by the loud and persistent complaints of internationally active banks.").

The Financial Modernization Act of 1999 (Gramm-Leach-Bliley Act): The Gramm-Leach-Bliley Act repealed the Glass-Steagall Act, eliminating all restrictions against the combination of banking, securities and insurance operations for financial institutions and all restrictions that had prevented banks from engaging in many of the activities and practices that investment banks, brokerage firms and even private investment companies engage in.[172] The passage of this act is significant because securities firms and investment banks are regulated only by the Securities and Exchange Commission, not by the Federal Reserve or other bank regulators and are not subject to the same supervision or capital restrictions as banks.[173]

Commodity Futures Modernization Act of 2000: Federal Reserve Chairman Alan Greenspan and Treasury Secretary Robert Rubin quashed initial efforts by the Commodity Futures Trading Commission to begin regulating new derivative instruments, such as credit default swaps, in the late 1990s, and Congress sealed the deal in 2000 when it passed the Commodity Futures Modernization Act of 2000, which exempted derivatives from regulation.[174]

Basel II: Signed in 2004, Basel II loosened limits on capital and provided that assets should be "risk-weighted" so that a bank with lower risk assets can be allowed to operate with less capital.[175] The Fed allows large banks to use their own internal risk models to determine the "risk-weighted" value of their assets.[176]

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[172] SHERMAN, *supra* note 168, at 10 (exploring the effect the Gramm-Leach-Bliley Act had on commercial banking).
[173] Jim Zarroli, *With Change, Era Of Investment Banks Ends* (NPR radio broadcast Sept. 22, 2008) *available at* http://www.npr.org/ templates/story/ story.php?storyId=94900635 (discussing how bank holding companies are regulated by the Federal Reserve).
[174] *See generally* The Commodity Futures Modernization Act of 2000, Pub. L. No. 106-554, 114 Stat. 2763 (2000).
[175] TARULLO, *supra* note 39, at 124-26 (charting the credit risk framework of Basel II).
[176] *Id*. at 135 ("[T]he committee evidenced no reconsideration of the . . . disquiet with the role of external rating agencies in Basel II, much less with the core reliance of the IRB approaches on internal risk models.").

2004 SEC Rule: In April 2004, the Securities and Exchange Commission promulgated a rule which allowed large broker dealers to evaluate assets based on their own internal risk models, thereby outsourcing duty to monitor risk to the regulated banks.[177]

[177] *See generally* 17 C.F.R. § 240.15c3-1 (2010); *see also* Securities & Exchange Commission, Final Rule: Alternative Net Capital Requirements for Broker-Dealers That Are Part of Consolidated Supervised Entities (June 8, 2004), http://www.sec.gov/rules/final/34-49830.htm#P22_3483 ("These amendments are intended to reduce regulatory costs for broker-dealers by allowing very highly capitalized firms that have developed robust internal risk management practices to use those risk management practices, such as mathematical risk measurement models, for regulatory purposes.").

THE HISTORY OF REGULATION OF CLEARING IN THE SECURITIES AND FUTURES MARKETS, AND ITS IMPACT ON COMPETITION

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I. Introduction

In 2008, the Antitrust Division of the United States Department of Justice ("DOJ") made the following comment in a letter to the Department of the Treasury:

> (T)he Department believes that the control exercised by futures exchanges over clearing services . . . has made it difficult for exchanges to enter and compete in the trading of financial futures contracts. If greater head-to-head competition for the exchange of futures contracts could develop, we would expect it to result in greater innovation in exchange systems, lower trading fees, reduced tick size and tighter spreads, leading to increased trading volume.[1]

In the futures industry today, as in the past, most clearinghouses are owned by a "parent" exchange, a model known as "vertical integration." By contrast, the securities and options markets use a model known as "horizontal integration" with a single centralized clearinghouse:respectively, the Depository Trust &

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[1] Comment letter from the United States Department of Justice entitled Review of the Regulatory Structure Associated with Financial Institutions, to the United States Department of the Treasury, TREAS-DO-2007-0018 (January 31, 2008).

Clearing Corporation for equities and the Options Clearing Corporation for equity and equity index options. The central clearing model allows participants in the market to buy and sell the same instrument in multiple marketplaces while choosing their execution venue based on the best price available and the costs and efficiency of transacting at a venue.

After a series of mergers over the past decade, one company, the CME Group, is responsible for over 95% of the average daily volume of exchange-traded commodity futures contracts.[2] In the past 15 years, several competing exchanges have attempted to establish a futures exchange capable of competing with the CME Group or its affiliates in their established products. Such efforts have, at best, made small inroads into the CME's market share.

By comparison, in the other two major exchange markets in the United States, equities and securities options, no exchange claims more than a 30% market share. Unlike the futures industry, in equities a variety of trading venues exist today. These venues include so-called "dark pools" that offer block trading facilities, and both order- and price-driven markets. Even NYSE Euronext, the United States' biggest equities market, does not have more than a third of the average daily volume of trading in its own listed shares in the United States.[3] The markets for options on securities are similarly competitive, featuring a variety of execution venues. The industry's oldest exchange, the Chicago Board Options Exchange, leads the industry with approximately 30% of options cleared in the month of April 2010, with four other venues each capturing over 10%.[4]

In Parts II and III we examine the history of regulation of clearing and its integration with market structure in the stock trading and securities options markets. In Part IV we explore the trail of clearing regulation in futures much of it occurring concurrently, but very differently, from its cousin markets in securities. In Parts V and VI we discuss how the respective paths of regulation of clearing in securities and futures markets affected such different market structures and levels of competition among marketplaces. Finally, in Part VII the article discusses approaches to enhance the

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[2] Futures Industry Association, U.S. Volume Report, Feb. 2010.

[3] NYSE, Monthly Volume Summary (Sept. 2010), http://www.nyse.com/pdfs/NYSE_Euronext_Transactions_Data.pdf.

[4] The Options Clearing Corporation, http://www.optionsclearing.com/webapps/exchange-volume (last visited Oct. 12, 2010) (providing access to data regarding options and futures volume by exchange for April 2010).

competitiveness of the futures industry by focusing on the market structure of its clearinghouses.

II. Securities

A. Pre-1975 History

In 1934, Congress passed the Securities Exchange Act ("Exchange Act") to regulate securities exchanges at the federal level, mostly in reaction to concerns about the Stock Market Crash of 1929 and the ensuing Great Depression.[5] Section 4 of the Exchange Act created the Securities Exchange Commission ("SEC") to enforce both the Exchange Act and the Securities Act of 1933 ("Securities Act").[6] Although the Securities Act was passed a year prior to the Exchange Act, no comprehensive federal agency existed at the time to regulate the securities industry.[7] Securities regulation before this time was a piecemeal system of state laws colloquially referred to as "Blue Sky Laws."[8] The Exchange Act, created to regulate the secondary trading of securities, subjected the various exchanges to SEC regulation by requiring them to register with the SEC. Once an exchange registers, it must act in strict accordance with SEC regulations.[9] The SEC has the power to sanction a non-compliant exchange. Thus, the SEC wields a potent tool to incentivize the exchanges to comply with regulations. The creation of a single entity

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[5] Jerry W. Markham & Daniel J. Harty, *For Whom the Bell Tolls: The Demise of Exchange Trading Floors and the Growth of ECNs*, 33 J. CORP. L 865, 876 (2008).

[6] 15 U.S.C. § 78d (2006) (transferring responsibility to enforce the Securities Act to the Securities and Exchange Commission and away from the FTC).

[7] Joel Seligman, THE TRANSFORMATION OF WALL STREET 51-52 (3d ed. 2003).

[8] Hall v. Geiger-Jones Co., 242 U.S. 539 (1917) (upholding the constitutionality of state securities laws).

[9]The Securities Exchange Act of 1934, enacted on June 6, 1934, is codified at 15 U.S.C §78f (2006) and regulates national securities exchanges. The Exchange Act did not confine itself to regulating only exchanges. It regulated secondary trading of securities, which included not only exchanges, but also brokers and issuers of securities. The Act also contained additional anti-fraud and anti-manipulation provisions and an ongoing duty of issuers to file current information on a regular basis.

operating at the federal level greatly changed the regulation of the securities industry.

Notwithstanding the innovation in securities regulation that arose in the 1930s, neither the Exchange Act nor the ensuing legislation expanding the SEC's powers over the next several decades gave the SEC comprehensive power[10]to regulate the clearance and settlement of securities.[11] In the absence of contrary federal legislation, state laws regulated the clearance and settlement of securities, a system that had evolved from the early Blue Sky Laws and continued until 1975.[12]

Clearinghouses have long existed as an intermediary for trades in order to improve the integrity and efficiency of capital markets by reducing the risk associated with trading.[13] Clearinghouses typically function to guarantee both sides of a trade, acting as both a buyer to every seller and a seller to every buyer in all transactions. This guarantee greatly reduces the risk of default inherent in bilateral transactions.

Traditionally, each exchange owned its own clearing agency. Each clearinghouse completed all clearing services for transactions that occurred on its parent exchange, precluding competition in the clearing industry. In 1975, the Stock Clearing Corp. ("SCC"), owned by the New York Stock Exchange ("NYSE"), and the American Stock Exchange Clearing Corp. ("ASECC"), owned by the American Stock Exchange ("Amex") accounted for the clearing of about 73% of all shares traded nationally.[14] National Clearing Corporation ("NCC"), the clearing agency owned by the National Association of Securities Dealers ("NASD"), accounted for 12%, and the major

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[10] In addition to the Exchange Act, the SEC also enforces the Securities Act of 1933, the Trust Indenture Act of 1939, the Investment Company Act of 1940, and the Investment Advisers Act of 1940, and most recently, the Sarbanes-Oxley Act of 2002.

[11]Larry E. Bergmann, Sr. Assoc. Director, Div. of Mkt. Regulation, Sec. and Exch. Comm'n, Speech at the International Securities Settlement Conference: The U.S. View of the Role of Regulation in Market Efficiency (Feb. 10, 2004) (transcript available at http://www.sec.gov/news/speech/spch021004leb.htm) [hereinafter Bergmann Speech].

[12]*Id.*

[13]U.S. CONGRESS, OFFICE OF TECHNOLOGY ASSESSMENT, ELECTRONIC BULLS & BEARS: U.S. SECURITIES MARKETS & INFORMATION TECHNOLOGY, OTA-CIT-469, 94 (1990).

[14]Bradford Nat. Clearing Corp. v. Securities and Exchange Commission, 590 F.2d 1085, 1095-96 n. 13 (D.C. Cir. 1978).

regional exchanges' clearinghouses accounted cumulatively for another 15%.[15]

B. Paperwork Crisis

By the late 1960s, as trading volumes continued to rise, the securities industry faced a growing problem: paperwork. At the time, paper stock certificates physically changed hands after each transaction. According to the SEC, a brokerage firm used approximately thirty-three different documents when executing a single transaction.[16] Among these documents were a floor report, a comparison, transfer instructions, contract sheets and a settlement statement.[17] As trading occasionally reached twelve million shares a day, hundreds of messengers traveled all over Wall Street between broker-dealers, transfer facilities of banks, inter-dealer clearing systems and others, increasing the risk of errors every day.[18] The back offices of brokers and dealers were so overworked that exchanges began closing hours earlier than the traditional time, and even stopped trading on Wednesdays to give the back offices time to catch up with the massive amounts of paperwork.[19]

Even for the few broker-dealers that managed to take advantage of the limited computer technology available at the time, problems could escalate quickly. By the time a back office could effectively research errors of a specific date, the resulting errors had often increased to a point where a firm simply could not keep track of the actual physical securities that they were supposed to have in their possession. Losses caused by failures to receive and deliver

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[15] The regional exchanges and respective clearinghouses were the Boston Stock Exchange (Boston Stock Exchange Clearing Corp.), the Midwest Stock Exchange, (Midwest Clearing Corp.), the Pacific Stock Exchange, (Pacific Clearing Corp.), and the Philadelphia Stock Exchange (Stock Clearing Corp. of Philadelphia). *Id.*

[16] Bergmann Speech, *supra* note 11.

[17] Dale A. Oesterle, *Regulation NMS: Has the SEC Exceeded its Congressional Mandate to Facilitate a "National Market System" in Securities Trading?*, 1 N.Y.U. J.L. & BUS.613, 617 (Summer 2005).

[18] *No More Paper: A Brief History of Paper Certificates*,THE DEPOSITORY TRUST AND CLEARING CORP., http://www.dtcc.com/leadership/issues/nomorepaper/industry/history.php (last visited Nov. 4, 2010).

[19] Kenneth Silber, *The Go-Go Sixties*, RESEARCH MAGAZINE (March 31, 2008), http://www.researchmag.com/Issues/2008/4/Pages/The-Go-Go-Sixties.aspx.

securities ("fails") reached four billion dollars as problems escalated.[20] The pervasiveness of the fails problem ultimately caused volumes all over the industry to decrease and left many firms with substantial liabilities. Insufficient clearing and settlement capabilities and poor error resolution contributed to the crisis as well. Systems that were acceptable ten years earlier could not process the volume of shares traded daily, which had more than quadrupled since the beginning of the 1960s. In late 1969, a steep decline in share prices caused trading volumes to begin to drop.[21] The sudden loss in commission revenues combined with the operational issues resulted in approximately 160 NYSE member broker-dealers permanently closing, merging, or filing for bankruptcy during this period of time.[22]

C. Response

The SEC began altering the regulatory landscape by issuing several releases that restructured the back offices of broker dealers to increase both their efficiency and public confidence in the industry. The SEC "established new standards for the maintenance of books and records by brokers and dealers, imposed requirements for the custody, and limited use, of their customers' funds and securities and tightened net capital requirements applicable to them."[23] One new rule required quarterly accounting and verification of all securities held by brokers and dealers in an attempt to reduce fails and improve transparency in markets.[24] Another rule heightened net capital requirements for broker-dealers in an effort to prevent further

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[20] Eli Weinberg, Joseph F. Neil. Jr. & Joseph P. Coricaci, *Development of a National System for Clearing and Settling Securities Transactions* in2 EXPLORATIONS IN ECONOMIC RESEARCH 353, 356 (National Bureau of Economic Research ed. 1975).

[21]The Application of the National Securities Clearing Corp. for Registration as a Clearing Agency, Exchange Act Release No. 13163, 11 SEC Docket 1448, 1451 (Jan. 13, 1977) [hereinafter Exchange Act Release No. 13163].

[22]Bergmann speech, *supra* note 11.

[23] Exchange Act Release No. 13163, *supra* note 21, at 1451.

[24] Quarterly Securities Counts by Certain Exchange Members, Brokers and Dealers, Exchange Act Release No. 34-9376, 36 Fed. Reg. 21178, 21178 (Oct. 29, 1971).

liquidations of broker-dealers.[25] A third rule required a would-be broker-dealer registrant to provide more information regarding its finances and business arrangements.[26]

Congress also took several regulatory steps. In order to shore up investor confidence, Congress passed the Securities Investors Protection Act of 1970 ("SIPA"), which provided for the creation of the Securities Investor Protection Corporation ("SIPC").[27] SIPA was supposed to imitate the spirit and effect of the Glass-Steagall Act of 1933, which among other things created the Federal Deposit Insurance Corporation to insure the deposits of bank customers and help prevent runs on banks.[28] Similarly, because of the numerous failures of broker-dealers, the SIPC was intended to insure the accounts of broker-dealer customers up to a fixed amount with backing from the U.S. government.

Furthermore, Congress asked the SEC to study the securities industry to determine how the back office crisis developed in the first place, and to recommend remedial measures to prevent volume related problems from happening in the future. In 1971, the SEC produced its Study on Unsafe and Unsound Practices ("Study I") and its Institutional Investor Study ("Study II").[29]

Study I concluded that to pursue effectively the goal of creating a nationwide system for securities transactions, the SEC needed additional control of the clearing and settlement processes.[30] It believed that the "archaic method of achieving [clearing and settlement] which [had] nearly drowned the financial community in a tidal wave of uncontrolled paper," needed to be simplified into a "modernized nationwide system for securities transactions."[31]

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[25] Net Capital of Certain Brokers-Dealers; Restricted Rates and Minimum Requirements, Exchange Act Release No. 34-9633, 37 Fed. Reg. 11970, 11970(June 14, 1972).
[26]Disclosures in Broker-Dealer Registration Application Respecting Personnel, Facilities, and Financing Required to Operate Business, Exchange Act Release No. 34-9594, 37 Fed. Reg. 9668 (May 12, 1972).
[27]15 U.S.C. §78aaa (2006).
[28]12 U.S.C. §227 (2006).
[29]SEC, Study of Unsafe and Unsound Practices of Brokers and Dealers, H.R. Doc. No. 92-231 (1971) [hereinafter Study I]; SEC, Institutional Investor Study Report of the Securities and Exchange Commission, H.R. Doc. No. 92-64, Part 1 (1971) [hereinafter Study II].
[30] Study I, *supra* note 29, at 36.
[31]*Id.* at 36, 1.

In communicating the results of Study II to Congress, the SEC publically encouraged "the creation of a strong central market system for securities of national importance."[32] The central market would allow all investors, big or small, to compete equally. Furthermore, the central market would stand as a national system for the public dissemination of market information such as trading price and volume information.[33] The two pillars of the 1975 legislation, national clearing and competition between brokers and dealers, arose from these two studies.

The House and Senate also conducted their own hearings and studies on the paperwork crisis.[34] Those investigations reached similar conclusions on the importance of a national clearing system. They demonstrated that while trading and sales boomed in the 1960s, the broker-dealers responded by increasing their "front-office" sales support to interact with customers. However, broker-dealers did not implement a complementary investment in back-office operations to manage the growing demands of operations and processing.[35] The SEC later cited these studies to advocate for centralized common clearing, believing that a "lack of uniform methods of doing business and the failure of clearing and settlement entities to coordinate their various systems increased the brokers' and dealers' costs and their accounting and control problems."[36]Congress concluded that the main obstacle to solving this problem was a lack of coordination in the clearing industry. At the time, no single organization existed which could coordinate and direct the various stakeholders in the clearing and settlement industry.[37]

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[32] Study II,*supra* note 29, at xxiv.

[33]Oesterle, *supra* note 17, at 618.

[34]SUBCOMM.OFS. COMM. ON BANKING, HOUSING, AND URBAN AFFAIRS, 92D CONG.,SECURITIES INDUSTRY STUDY (2d Sess. Comm. Print 1972); SUBCOMM.ON SECURITIES OF S. COMM. ON BANKING, HOUSING, AND URBAN AFFAIRS, 93D CONG.,SECURITIES INDUSTRY STUDY, (1st Sess. Comm. Print 1973); SUBCOMM.ON COMMERCE AND FIN.OF H.R. COMM. ON INTERSTATE AND FOREIGN COMMERCE, 92D CONG., SECURITIES INDUSTRY STUDY, (2d Sess. Comm. Print 1972).

[35]Subcomm.on Commerce and Fin. of H.R. Comm. on Interstate and Foreign Commerce, 92d Cong., *supra* note 34, at 4.

[36] Exchange Act Release No. 13163, *supra* note 21, at 1452.

[37]*See*Subcomm. of S. Comm. on Banking, Housing, and Urban Affairs, 92d Cong., *supra* note 34, at 16-17.

D. Buildup

The securities industry, attempting to prevent another crisis, took steps that helped build momentum towards central clearing. One of these important steps occurred in July 1972 when the NYSE and the Amex founded the Securities Industry Automation Corporation ("SIAC") to handle the facilities management of their clearing-houses, the SCC and the ASECC respectively.[38] The NYSE owned two thirds of SIAC and the Amex owned the other third. By outsourcing the actual processing to SIAC, the parent organizations hoped to achieve significant cost savings with a more uniform process by utilizing economies of scale. Since the SCC and the ASECC were still operating separately and both exchanges still had rules tying their clearing functions to their own clearinghouses, this was not a true merger. Regardless, the creation of SIAC was an important first step.[39]

During this time period, the NASD's clearinghouse, the NCC, requested that both SIAC and Bradford National Corporation ("BNC") submit bids on a similar management contract because the NCC was losing significant amounts money as a result of low over-the-counter ("OTC") volume.[40] Ultimately, BNC won the NCC bid. As a result, the majority of the nation's securities clearing was for the first time under the control of two companies and was being handled in a uniform, professional manner which allowed the industry to operate in a much more efficient fashion.

In an industry-wide undertaking that mirrored Studies I and II, the Securities Industry Association ("SIA") formed a committee in 1973 to discuss the "chaos" of the clearing industry.[41] The committee hoped to solve problems relating to coordinating with eight different clearinghouses for securities and physical delivery problems. The committee produced a seven-point proposal for the creation of a national clearing system. As a result, under the aegis of the SIA, the exchanges and the NASD appointed a twenty-two-person committee, the National Securities Processing Committee, to formulate a

[38]Bradford Nat. Clearing Corp. v. Sec. and Exch.Comm'n, 590 F.2d 1085, 1097 (D.C. Cir. 1978).
[39]*See Id.*
[40] Exchange Act Release No. 13163, *supra* note 21, at 1455-1457.
[41]*See*WEINBERG, NEIL &CORICACI,*supra* note 20, at 358.

national proposal.[42] The Committee developed a twenty-two-point plan. Six of the most pertinent points were as follows:

> (1) It must be a continuous net settlement system. (2) A communications network is needed to tie the various facilities together. (3) Each broker must have the capability of having one position per security, regardless of where traded; in other words, each broker will be able to meet all his trades in General Motors into one accumulative position. (4) Positions will be marked to market daily. (5) All net money balances may be settled at one location, and securities may be deposited at various locations throughout the country for immediate credit without any discrimination in regard to geography. (6) Free securities may be withdrawn at various locations. The goal of this was to permit a firm that happened to be based on the West Coast and yet was a member of the New York and American and NCC to be able to clear all its trades in Los Angeles through facilities located there.[43]

While this Committee did not directly result in the formation of a national or central clearing system, these points would appear again soon during the formation and registration of the National Securities Clearing Corporation ("NSCC"). The formation of the Committee signifies that the government did not force central clearing on the industry, but instead had serious support from the market.

It is important to note that there were several significant voices that cried out at this time against taking the competition out of clearing, in particular, the regional exchanges and SEC Chairman Ray Garrett.[44] The regional exchanges believed that each of their clearinghouses performed functions that were specific to their business and quite distinct. Regional exchanges wanted the focus to be on a national clearing system, not a national clearing entity.[45] Chairman Garrett believed in the importance of a national depository

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[42] *Id.*
[43] *Id.* at 358-59.
[44] *Id.* at 368.
[45] *Id.*

and a clearing system but not a single central clearinghouse.[46] Garrett told the NYSE in a letter that he believed that the innovative techniques that would develop as a result of competition between clearing organizations provided significant incentives to keep those clearing organizations alive.[47]

Another major development in the evolution of a central clearing and settlement system for securities was the development of depositories in the late 1960s. The NYSE founded the Central Certificate Service in 1968 to serve as a depository for shares of stock that investors chose to leave with their brokers – instead of taking possession of them individually.[48] The goal was to immobilize the massive amount of stock certificates that, up until the creation of these depositories, had to physically change hands with every transaction. Using a "sophisticated computer system" which cost $8 million a year, the Central Certificate Service handled shares which accounted for 70% of the volume of at the NYSE, even though the deposited shares only accounted for 15% of total stock certificates.[49] Shares could simply be moved from one account to another and held in a broker's name at the depository instead of the certificates having to be physically transported. The Central Certificate Service soon became the Depository Trust Company ("DTC") and started handling the shares of both the Amex and NASD. By 1973, the DTC had over $65 billion worth of securities on deposit. One study showed that creating the DTC at that time resulted in a 30-35% reduction in the physical movement of certificates. Similar depositories sprung up in the Midwest (Midwest Securities Depository Company, $519 million on deposit) and the Pacific (Pacific Securities Depository, $520 million on deposit).[50] At the time, some complained that the DTC and a centralized clearing system were not integrated. Ultimately the creation of the NSCC as separate from the DTC set a standard for the industry that did not change until the merger of the DTC and the National Securities Clearing Corporation in 1999.[51]

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[46]Ray Garrett, Jr., Chairman, Sec. and Exch. Comm'n, Remarks at The Investment Association meeting in New York City: New Challenges for the Securities Industry (Oct. 3, 1973).
[47]*See*WEINBERG, NEIL &CORICACI,*supra* note 20, at 368.
[48]*Wall Street: Attack on the Snarl*, TIME, May 24, 1968, at 92-93.
[49]*Id.*
[50] Weinberg, *supra* note 20, at 360-61.
[51]*Responding to Wall Street's Paperwork Crisis*, DTCC.COM, http://www.dtcc.com/about/history (last visited Oct. 20, 2010).

E. Amendments

In March of 1972, the SEC presented to Congress the Securities Transaction Processing Act of 1972.[52] In 1975, Congress finally passed the proposed legislation in the form of the Securities Acts Amendments of 1975 ("1975 Amendments") to give the SEC the appropriate tools to develop a "national market system" in the securities industry.[53] As part of those amendments, Congress added a section on the "National System for Clearance and Settlement of Securities Transactions" to the Exchange Act.[54] The 1975 Amendments include congressional findings that state both the impetus and the goals behind the inclusion of this section in the 1975 Amendments. These findings focused on the importance of an efficient, linked clearance system to reduce costs and protect investors using up-to-date technology.[55] The chapter then directs the

[52] William J. Casey, Chairman, Sec. Exch. Comm'n, Address at the Conference of State Bank Supervisors: The Securities Transaction Processing Act of 1972 (Apr. 8, 1972).
[53] Donald L. Calvin, *The National Market System: A Successful Adventure in Industry Self-Improvement*, 70 Va. L. Rev. 785, 785 (1984); Securities Acts Amendments of 1975, Pub. L. 94-29, 89 Stat. 97.
[54] National System for Clearance and Settlement of Securities Transactions was added to the Securities Exchange Act of 1934 as Pub. L. No. 94-29, 89 Stat. 141 (codified as amended at 15 U.S.C. § 78q-1 (2006)).
[55](a) Congressional findings; facilitating establishment of system

(1) The Congress finds that—

(A) The prompt and accurate clearance and settlement of securities transactions, including the transfer of record ownership and the safeguarding of securities and funds related thereto, are necessary for the protection of investors and persons facilitating transactions by and acting on behalf of investors.

(B) Inefficient procedures for clearance and settlement impose unnecessary costs on investors and persons facilitating transactions by and acting on behalf of investors.

(C) New data processing and communications techniques create the opportunity for more efficient, effective, and safe procedures for clearance and settlement.

(D) The linking of all clearance and settlement facilities and the development of uniform standards and procedures for clearance and settlement will reduce unnecessary costs and increase the protection of investors and persons facilitating transactions by and acting on behalf of investors.

SEC to use its authority "to facilitate the establishment of a national system for the prompt and accurate clearance and settlement of transactions in securities."[56] The goals of the national settlement system were very clear throughout the legislative process: avoid another Paperwork Crisis and establish a safe, modern national clearing and settlement system.[57]

The 1975 Amendments require clearing agencies to register with the SEC, thus submitting them to extensive SEC regulation, similar to the original Exchange Act provision granting the SEC power over the exchanges through registration.[58] The 1975 Amendments direct the SEC to withhold registration unless the applicant is "so organized and has the capacity to be able to facilitate the prompt and accurate clearance and settlement of securities transactions," and to have rules which support both that goal and the goal to "foster cooperation and coordination with persons engaged in the clearance and settlement of securities transactions, [and] to remove the impediments to and perfect the mechanisms of a national system for [clearing and settling]."[59] Furthermore, in consideration of possible antitrust implications, the 1975 Amendments require that a clearinghouse's rules cannot "impose any burden on competition *not necessary or appropriate* in furtherance of the purposes of the Act."[60] This statutory language, when read closely, gives the SEC the ability to balance anticompetitive concerns against the purposes of the newly amended Exchange Act. After the passage of these Amendments in September 1976, thirteen clearinghouses applied for registration under an exemption that allowed the SEC to grant

Id. 15 U.S.C. §78q-1(a).

[56] Market Reform Act of 1990, Pub. L. 101-432, 104 Stat. 931 (codified as amended at 15 U.S.C. § 78q-1(a)(2)(A) (2006)). In 1990, the following language was added: "(ii) to facilitate the establishment of linked or coordinated facilities for clearance and settlement of transactions in securities, securities options, contracts of sale for future delivery and options thereon, and commodity options."

[57] *See*Bergmann Speech, *supra* note 11.

[58] National System for Clearance and Settlement of Securities Transactions was added to the Securities Exchange Act of 1934 at Pub. L. No. 94-29, 89 Stat. 141 (codified as amended at 15 U.S.C. § 78q-1 (2006)).

[59] *Id.* at 15 U.S.C. 78q-1(b)(3)(i) and (ii).

[60] *Id.* at 15 U.S.C. 78q-1(b)(3)(iii) (emphasis added).

registration for up to eighteen months while reaching a final determination.[61]

F. The National Securities Clearing Corporation ("NSCC")

The NYSE, Amex and the NASD decided to merge their respective clearinghouses together in the form of the NSCC and applied for SEC registration under 15 U.S.C §78q-1 on March 29, 1976.[62] Merger discussions had been ongoing as far back as 1973 in recognition of both the operational efficiencies and the cost savings that would result from such a merger.[63]After the passage of the 1975 Amendments, the parties involved renewed the discussions that resulted in the NSCC.[64]

After significant deliberation, the SEC announced on November 3, 1976 that it was considering approval of the application, subject to several conditions.[65] The SEC held an informal hearing in which twenty-three different organizations were represented and granted a far longer comment period than it usually granted registration applications. Broker-dealers across the country widely supported it. Regional exchanges, their affiliated clearing agencies and the DOJ Antitrust Division all registered their concerns with NSCC registration.[66]

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[61] The entities which applied were the Depository Trust Company, Bradford Securities Processing Services, Inc., American Stock Exchange Clearing Corporation, Stock Clearing Corporation of Philadelphia, Boston Stock Exchange Clearing Corporation, Stock Clearing Corporation, Midwest Securities Trust Company, the Options Clearing Corporation, Midwest Clearing Corporation, Pacific Securities Depository Trust Company, Pacific Clearing Corporation, National Clearing Corporation, and TAD Depository Corporation. Securities Exchange Act of 1934, Exchange Act Release No. 12759, 10 SEC Docket 352 (Sept. 1, 1976).

[62] National Securities Clearing Corporation, Exchange Act Release No. 12489, 41 Fed. Reg. 23255 (June 9, 1976).

[63]Bradford Nat. Clearing Corp. v. Sec. and Exch.Comm'n, 590 F.2d 1085, 1096 (D.C. Cir. 1978).

[64]*Id.* at 1097.

[65]Application of Nat'l Sec. Clearing Corp. for Registration as a Clearing Agency, Exchange Act Release No. 12954, 41 Fed. Reg. 49721 (Nov. 10, 1976).

[66]Bradford, 590 F.2d at 1099.

Finally, on January 13, 1977, the SEC granted the NSCC temporary registration, subject to four conditions set forth in the November 3rd Order ("Temporary Order") and further directives set forth.[67] The SEC cited the 1975 amendments as the base of its registration powers, stating "[t]he directive of the 1975 Amendments that the commission use its authority to facilitate the establishment of a national system [when deciding on the NSCC's application]."[68]

In its approval, the SEC cited Study I to support its conclusion that, "[t]here is no area of the securities business which offers more opportunity for reducing costs as well as exposure [to market disruption] . . . than the improvement and modernization of the systems for clearing, settlement, delivery and transfer of securities."[69] Continuing with this theme when discussing the actual NSCC application, the SEC noted, "[t]he importance of the NSCC's establishment . . . [to a national system] . . . can be gauged only against the backdrop of a decade of industry effort."[70] It was readily apparent that the SEC viewed the NSCC as the natural evolution of the clearing industry in reaction to the Paperwork Crisis and the 1975 Amendments. The SEC also pointed out that the lack of progress towards a national clearing system was attributable to the close relationship between the clearinghouses and their parent organizations, as well as the parent organizations fear that they could lose both the revenue from and the control of the clearinghouses.[71]

When reaching its determinations, the SEC cited the legislative history of the 1975 Amendments for the proposition that the "new authority conferred on the Commission 'is designed to . . . avoid any delay in achieving the comprehensive regulation.'"[72] The SEC believed that establishing a true national clearance and settlement system was essential to its larger goal of building a national market system.[73]In light of the direction in the 1975 Amendments section on the creation of national clearing to balance fair competition versus the other goals outlined, the SEC ultimately

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[67]*See* Exchange Act Release No. 13163, *supra* note 21.
[68]*Id.* at 9.
[69]*Id.* at 5.
[70]*Id.* at 12.
[71]*Id.* at 13.
[72]*Id.* at 20, quoting Securities Acts Amendments of 1975, Report of the Senate Comm. on Banking, Housing and Urban Affairs to Accompany S. 249, S. Rep. No. 94-75, 94th Cong., 1st Sess. 4 (1975).
[73]*Id*. at 40.

believed that the NSCC application must be considered in the context of the urgency of prompt implementation of the entire 1975 Amendments.[74] The SEC thought that the competition among brokers and dealers was the "paramount" concern of the Exchange Act.[75] The SEC stated that the existing rules and procedures tying Amex clearing to the ASECC and NYSE clearing to the SCC were effectively impeding competition between brokers and dealers located in major financial centers with those located outside financial centers. It believed that the 1975 Amendments could be used to effectuate substantial improvement.[76]

With those objectives in mind, the Temporary Order granted registration to the new NSCC organization with the following conditions: (1) the NSCC was required to offer to establish full interfaces with registered clearing agencies not part of the NSCC merger for free to assuage concerns that the NSCC would discourage the national system with anti-competitive behavior;[77] (2) users of the NSCC system would be able, regardless of location, to compare Amex, NYSE and OTC eligible transactions, further emphasizing the conception of a truly "national" market; (3) the NSCC would have to permit competing clearing organizations to use its branch network across the country, and allow clearing organizations to offer their services to brokers and dealers outside of New York City[78] to prevent the NSCC from discouraging brokers and dealers outside of New York City from using other clearing systems to compare transactions; and (4) the NSCC would be required to share its OTC comparison software with registered clearing agencies upon request, and comparisons of OTC transactions between agencies would be done by a single agency and shared freely.[79]

In granting the registration, the SEC also discussed the effect of the NSCC on competition among securities exchanges. As explored in greater detail in *Bradford v. SEC*, the portion of the 1975 Amendments that discusses clearing lists competition as one of several factors to be considered, contrasted with the section on the establishment of the national market system that mentions

[74] *Id.* at 20-21.
[75] *Id.* at 28.
[76] *Id.* at 34.
[77] *Id.* at 26.
[78] *Id.* at 32. Participating clearinghouses would be required to pay their proportionate share of overhead.
[79] *Id.* at 33.

enhancement of competition as a main objective in reference to brokers and dealers.[80] Two regional exchanges claimed to have concerns over their economic viability going forward if their respective clearinghouses sustained significant economic losses, and a third believed that it would have an "adverse effect" on its operations.[81]The SEC believed that the above-imposed conditions would alleviate those concerns.[82]

In addition, the SEC considered alternative approaches to the registration of the NSCC to determine whether or not there was a less anticompetitive way to achieve the goals of the 1975 Amendments with equal or greater effectiveness. They considered (1) a network of fully interfaced clearinghouses; (2) a merger of the NCC with any other clearinghouses; and (3) the NCC discontinuing its clearing and settlement business and solely operating its OTC operations.[83]

The SEC believed that because none of the alternatives would be able to provide the same capabilities nationwide that the NCC's existing (and expanding) branch network offered, the alternatives could not encourage competition between brokers and dealers both inside and outside New York City in the same manner the proposed NSCC would.[84] Additionally, none of these alternatives could be executed with the same speed and cost savings.[85] The SEC's analysis makes it clear that it believed a central clearing agency was the best possible way to encourage competition.[86] The SEC stated, "rather than adopting approaches appropriate to a natural monopoly, the Commission has sought to free the competitive potential present in the clearing and settlement area by imposing conditions on NSCC's registrations designed to *sever existing restrictive ties* between clearing agencies and their affiliated securities markets."[87] Ultimately, the Temporary Order granted registration to the NSCC, subject to conditions and further monitoring.

The merger was to take place in two phases. During Phase I, the clearinghouses would remain tied to their associated exchanges

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[80]Bradford Nat. Clearing Corp. v. Sec. and Exch.Comm'n, 590 F.2d 1085, 1095 (D.C. Cir. 1978).
[81]*See* Exchange Act Release No. 13163,*supra* note 21.
[82]*Id*. at 35.
[83]*Id.* at 39.
[84]*Id.*
[85]*Id.*
[86]*Id.* at 39-40.
[87]*Id.* (emphasis added).

under the prior rules, but the NSCC, through SIAC, would operate all three clearing agencies as separate divisions.[88] During Phase II, the NSCC would actually convert the separate clearing divisions into a single integrated entity, with the goal of providing all of the services in one organization that were previously available at the NCC, SCC and ASECC.[89] One aspect of the plan that would later become controversial was geographic price mutualization ("GPM"); it had the express goal of fostering greater competition between brokers and dealers around the country.[90] This provision was inserted to help promote the growth of the national market system, which was the impetus behind the 1975 Amendments.[91] The NSCC planned to base its fee structure around the total cost of its clearing service, not the actual cost of the individual transactions.[92] As a result, while every customer around the country would have paid the same rate under this GPM scheme, it was argued that New York brokers and dealers, whose geographic proximity to the NSCC resulted in lower actual costs, would have been subsidizing the out-of-state brokers by paying the same fees without the same costs.[93]

Another development that helped clear the way for the eventual primacy of the NSCC was the rule changes outlined in SEC Release No. 14636, which approved rule changes by several exchanges promulgated at the request of the SEC.[94] In its 1978 Annual Report, the SEC stated that it had eliminated or amended over one hundred exchange and NASD rules in the prior year after

[88]Bradford Nat. Clearing Corp. v. Securities and Exchange Commission, 590 F.2d 1085, 1098 (D.C. Cir. 1978).
[89]*Id.* at 1098.
[90]*Id.* at 1099.
[91] G. Bradford Cook, Chairman, Sec. and Exch. Comm'n, Speech: The Central Market System: Putting the Markets to Work for the Investor (Mar. 15, 1973).
[92]Bradford, 590 F.2d at 1099.
[93]*Id.*
[94] Am. Stock Exch., Inc, Et Al., Exchange Act Release No. 14636, Release No. 34-14636, 1978 WL 196700 (Apr. 7, 1978). The exchanges included the American Stock Exchange, the Boston Stock Exchange, the Chicago Board Options Exchange, the Intermountain Stock Exchange, the National Association of Securities Dealers, the New York Stock Exchange, the Pacific Stock Exchange, and the Philadelphia Stock Exchange. The Release notes that not all rule changes submitted in response to the September 1977 were approved in this Release. The rule changes were approved pursuant the power granted in §19(b) of the Exchange Act.

review.[95] The rule changes affected the rescission of the traditional industry-wide rules providing that trades on an exchange had to be cleared and settled on that exchange's affiliated clearinghouse. The changes were intended to remove what the SEC noted was a central obstruction to competition among clearinghouses for the clearance and settlement business of broker-dealers to the broker-dealers' freedom to select among clearing agencies.[96] The SEC eliminated these ties with the clear intent to promote competition in the clearing industry.

While some clearinghouses were concerned about the power the NSCC might wield in this new regulatory environment, other clearinghouses believed that eliminating the tradition of captive clearing would allow them to compete with the NSCC. Ironically, severing the ties which held the regional clearinghouses captive to their parent exchanges had the ultimate effect of allowing brokers and dealers trading on regional exchanges to clear and settle on the NSCC, removing another impediment to central clearing for equities. As discussed above, several exchanges were worried about the loss of revenue from clearing fees from their business as a result of experiencing competition in the clearing industry for the first time. Ultimately, while the 1975 Amendments would cause significant upheaval in the securities industry, it was not the loss of clearing fees that had the biggest effect on the regional exchanges; rather, it was the ease of trading on other exchanges facilitated by central clearing and new linkages.

G. *Bradford v. SEC*

While attaining registration from the SEC was a significant hurdle for the NSCC, the NSCC still had one major obstacle in its way. BNC, the facilities manager of the NCC and the Pacific Clearing Corporation, and Bradford Securities Processing Services, a registered clearing corporation, (collectively, "Bradford"), sued the SEC to force a review of the SEC decisions approving the NSCC registration.[97] Bradford brought two major claims: (1) The

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[95] 44TH ANN. REP. OF THE SEC at 32 (1978).
[96] *Id.*
[97] Securities Change Act of 1934, Exchange Act Release No. 13163, 1977 WL 173551 (Jan. 13, 1977); In re Nat'l Securities Clearing Corp, Securities Exchange Act Release No, 13456 (Apr. 21 1977); Bradford Nat. Clearing

anticompetitive impact of the NSCC's existence would outweigh any potential benefits and, as a result, registration should have been denied; and (2) even if conditional registration was appropriate, the SEC should have taken exception to some aspects of the NSCC plan as outlined.[98]

The newly formed NSCC had chosen SIAC to administer its actual clearing operations. Since SIAC already operated the clearing of both the SCC and the ASECC, the SEC believed that SIAC would have the ability to most efficiently assume the clearing and data processing responsibilities for the new combined entity.[99]Towards that end, the NSCC exercised a termination clause in Bradford's existing operations contract with the NCC.[100] Bradford, desiring the NSCC contract, attempted to submit a bid and was informed that the NSCC would not be accepting bids until SIAC negotiations were completed. Ultimately, Bradford was never allowed to submit a competitive bid for the facilities management and processing contract.[101]Bradford's concerns about both the future of the clearing industry as a whole and not being allowed to submit a competitive bid against SIAC were the catalysts for bringing suit.

While the suit dealt with competitive concerns, it was not an antitrust case, but an administrative review petition brought under the Exchange Act. The Court made it clear that antitrust concerns would not be given any more weight than they would normally when reviewing an administrative action.[102] Keeping this in mind, the Court, citing both the supporting legislation and the legislative history, stated its belief that Congress desired to give the SEC "substantial flexibility of choice in 'bold(ly) and effective(ly)' accomplishing the herculean task of rapidly restructuring an entire industry."[103] The 1975 Amendments gave the SEC extensive power over the shape of the national clearing system with the power to

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Corp. v. Securities and Exchange Commission, 590 F.2d 1085, 1085 (D.C. Cir. 1978).

[98]Bradford, 590 F.2d at 1106.

[99]*Id.* at 1098.

[100]Securities Exchange Act of 1934, Exchange Act Release No. 13163, 1977 WL 173551 (Jan. 13, 1977).

[101]Bradford, 590 F.2d at 1106.

[102]*Id.* at 1104.

[103]*Id.* (*citing*Senate Comm. on Banking, Housing and Urban Affairs, Securities Acts Amendments of 1975, S.Rep.No.75, 94th Cong., 1st Sess. 1-88 (1975), U.S.Code Cong. &Admin.News 1975, at 179.)

register clearinghouses, and Congress expected them to exercise substantial discretion pursuing the goals and objectives outlined.[104] Therefore, the Court believed that the SEC deserved greater deference than usual in reviewing an administrative action because of the power explicitly delegated in the 1975 Amendments.

As described above, the SEC planned to put in place the national clearing and settlement system as quickly as possible. The Court believed that the goal of rapid implementation was apparent in the SEC's decision to grant temporary registration to the NSCC. Moreover, the SEC's willingness to take on significant monitoring responsibilities showed the importance that the SEC placed on national clearing. As it stood, the NSCC's temporary registration was granted with a host of conditions.[105] Even after the Temporary Order was issued, the SEC continued to have a series of public hearings and public comments to explore a delay in moving from Phase I of the merger to Phase II.[106] The Court believed that the hearings did not represent a loss of confidence in the NSCC by the SEC, but instead was a furtherance of the SEC's expanded regulatory presence in this area.[107]

When discussing the Temporary Order, the Court said, "[t]he upshot of the four conditions plus NSCC's proposal is that, for purposes of comparing NYSE and Amex transactions, NSCC is essentially a public utility that is afforded a monopoly but must offer its services to all qualified customers [its own participants or other clearing agencies] at cost."[108] This statement reflects the Court's position on the NSCC merger. The Court based its opinion on a crucial distinction in the way that competitive concerns are discussed in the 1975 amendments.

> Despite their interdependence and their common subjection to broad SEC authority, the national market and clearing systems were not perceived by Congress as identical pillars supporting the legislators' conception of a modernized approach to securities marketing. Most importantly, Congress' directives to the Commission with respect to the two

[104]*Id.* at 1094.
[105]*Id.* at 1099.
[106]*Id.* at 1102.
[107]*Id.*
[108]*Id.* at 1101

> systems vary slightly but significantly. Although in facilitating the establishment of both systems, the SEC is required to adhere to "the findings and to carry out the objectives set forth" in the first subsection of each of the two relevant provisions, those findings and objectives are not entirely parallel. [Sections 11A(a), 17A(a), 15 U.S.C. § 78k-1(a), § 78q-1(a).] Thus, while both lists of objectives include the full exploitation of technological advances in communication and data processing equipment, efficiency and the linkage of all relevant facilities nationally, only the national market system objectives include the "enhance(ment)" of "fair competition among brokers and . . . exchange markets . . . " and only the national clearing system objectives include promptness and the development of uniform standards and procedures. [Sections 11A(a)(1), 17A(a)(1), 15 U.S.C. 78k-1(a)(1), § 78q-1(a)(1)].[109]

Fair competition among brokers and dealers was listed as a primary objective for the national market system, but not the national clearing and settlement system. This distinction allowed the Court to view the NSCC registration in the light of support for the national market system, instead of solely in the context of competition in the clearing industry. The Court's interpretation of the goals of the 1975 Amendments was that:

> [they] would allow an investor anywhere in the United States to initiate and then complete a securities transaction with the aid solely of a local broker of his choice, dealing on a regional exchange and clearing through a regional agency also of his choosing, and having available throughout the process the most complete and up-to-date national information possible.[110]

In light of these important goals, the Court concluded that the 1975 Amendments only required the SEC to reach a conclusion that any

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[109] *Id.* at 1095-96.
[110] *Id.*

anticompetitive effects of registration were "necessary or appropriate" to the achievement of its objectives.[111] The Court stated that an independent review of the 1975 Amendments and their legislative history supported the SEC's view that it need only balance fair competition against the 1975 Amendments' other important objectives instead of viewing fair competition as its primary concern.[112]

The importance of that balancing becomes evident when the Court, in support of upholding the Temporary Order, states, "even if the SEC could have struck a Better [sic] balance in favor of achieving the Act's goals and against anticompetitive impacts, its decision passes statutory muster so long as the former achievements by whatever margin outweigh the latter impacts."[113] The Court believed that, under the power granted to the SEC by the 1975 Amendments, the SEC decision was legal, even if it was not the decision that had the least anticompetitive nature. The Court also stated that it believed the SEC's choice to be a reasonable one, and that, even if it had the ability to review the decision outside of the mandated balancing, it would have supported the decision. The Court based its decision on the NSCC's potential for rapid development, as well as the belief that the NCC, either on its own or merging with another clearinghouse, might not have been able to compete with a ASECC/SCC clearing house, which would have instantly controlled over 73% trades.[114] If the NSCC had failed, the new national clearing system would have lost the benefit of the NCC's existing national network.

The Court balanced three main benefits against the consequences of granting a possible monopoly: the merger of the three industry leaders would bring significant cost savings by bringing together extensive experience and scale; the NSCC's technological and financial ability to contribute to the establishment of the national market system; and the significant improvement the NSCC would bring to competition among brokers and dealers.[115]The Court believed that, while the potential for a monopoly did exist, the SEC had actually taken several steps to provide for competition where, in the past, none had truly existed because of the rules tying

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[111]*Id.* at 1105 (*citing* S.Rep.No. 75, 94th Cong., 1st Sess. 1-88 (1975)).
[112]*Id.* at 1106.
[113]*Id.* at 1107.
[114]*Id.*; *see* note 13.
[115]*Id.* at 1108.

the regional clearinghouses to their respective exchanges.[116] The SEC had abolished those rules, imposed the four conditions on the NSCC registration discussed above, and had dedicated substantial resources to continual monitoring of the newly created NSCC.[117]The Court believed those steps to be sufficient and also believed that the SEC's "vigilance (could) forestall any irreparable anticompetitive harms from accompanying NSCC's registration."[118] Consequently, the Court did not see fit to overturn the registration granted by the temporary order.

The Court did not, however, agree with all of the SEC's decisions, remanding for further review two decisions of the Temporary Order. The first concerned the geographic price mutualization ("GPM") provision.[119] Both Bradford and the Justice Department vehemently opposed GPM for the way it forced New York brokers to subsidize out of state brokers and because the scale of the subsidy potentially allowed the NSCC to hurt rival clearinghouses by engaging in predatory pricing.[120]The SEC argued that GPM would help in establishing the regional branch offices envisioned by the NSCC, and believed that because regional competitors could participate in the branch offices this would not affect regional competitors.[121] Because the SEC had found that the clearing industry was not a natural monopoly, the Court believed the SEC should have reached the conclusion that regional competition could have forced prices down to competitive levels.[122] The SEC also argued that GPM allowed the NSCC to offset the costs of operating regional branches through the fees it charged its New York customers.[123]Regional participants who had to cover their share of operating costs for a regional branch office, unlike the NSCC, had no New York offices to subsidize the expense.[124]The Court did not

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[116]Id. at 1110.
[117]*Id.* at 1108.
[118]*Id.*
[119]*Id.* at 1112-13.
[120]*Id*. at 1111.
[121]*Id.* at 1112.
[122]*Id.*
[123]The Application of the National Securities Clearing Corporation for Registration as a Clearing Agency, Exchange Act Release No. 13163, 11 SEC Docket 1448, 1466 (Jan. 13, 1977) (stating that the revenues from the NY branch in addition to GPM will allow the NSCC to maintain an extensive branch network.)
[124]Bradford, 590 F.2d at 1112.

believe that Condition 3 did enough to promote competition in this area.[125] Since GPM would allow the NSCC to set prices below cost, the Court found this to be contradictory to the premise of encouraging competition between clearinghouses and not sufficient justification for allowing the pricing policy.[126] The Court remanded the GPM issue to the SEC to promulgate a better explanation or force the NSCC to abandon the Rule.[127]

The Court also remanded the SEC's decision not to force the NSCC to open the facilities contract to competitive bidding on the basis that the SEC reached its decision using improper reasoning.[128] The SEC said in its Temporary Order that as long as SIAC could guarantee safe, accurate and efficient services to the NSCC, the NSCC could render that decision on the facilities contract solely as an exercise of its business judgment.[129] In a brief, the SEC went so far as to claim that the 1975 Amendments regulated clearing, not data processors.[130] The Court disagreed with that statement.[131] It ruled that because the SEC had been given broad powers to effectuate the national market and clearing systems, without the ability to regulate the actual clearing processes, the SEC would be limited to "nothing more than the ability to regulate 'shell corporation(s)'."[132] Repudiating the SEC's argument, the Court stated that that proper test for determining the extent of the SEC's regulatory authority was "whether any exercise of 'business judgment' by a clearing agency may affect the realization of the national clearing system as envisioned by Congress".[133] Since the Court viewed SIAC as the actual data processor because it was doing the work, the impact of SIAC's bid and operations could be clearly shown to have a "statutory nexus to authority."[134] The Court remanded the decision on SIAC contract under the new stated test and then explained that nothing in the Temporary Order prohibited either the NSCC or the

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[125]*Id.*
[126]*Id.*
[127]*Id.* at 1112-13.
[128]*Id.* at 1113.
[129]The Application of the National Securities Clearing Corporation for Registration as a Clearing Agency, Exchange Act Release No. 13163, 11 SEC Docket 1448, 1470 (Jan. 13, 1977).
[130]Bradford, 590 F.2d at 1113.
[131]*Id.*
[132]*Id.*
[133]*Id.* at 1114.
[134]*Id.*

Court from taking interim steps or alterations in the process of pursuing full registration.[135]

Ultimately, while the Court did remand both the geographic mutualization and the NSCC's facilities management contract for further consideration by the SEC, it concurred with the SEC's decision to register the NSCC.[136] The SEC viewed the *Bradford* case as a "key step in achieving the national clearance and settlement system envisioned by the Congress."[137] The SEC also stressed in its 44th Annual Report that the Court reached its decision because the NSCC was "virtually certain to be dependable, stable, efficient – and more rapidly achievable than any other alternative," making clear to the public the benefits of the NSCC.[138] In the end, after more legal maneuvering, Bradford settled with the NSCC out of court, waiving the right to further contest the termination of its operations contract with the NCC, and the NSCC was able to begin clearing of OTC products from the NCC.[139]

The registration process of the NSCC continued over the next several years. The SEC, monitoring the NSCC merger process extensively, issued numerous orders and rulings pertaining to the geographic mutualization, the management contract and a few smaller issues that held up the process and the agency reaffirmed the registration.[140] The SEC approved the fully-merged phase of the

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[135]*Id.* at 1116.

[136]*Id.*

[137]44 SEC ANN. REP. at 30 (1978).

[138]*Id.* at 97-98

[139]The Application of the National Securities Clearing Corporation for Registration as a Clearing Agency, Exchange Act Release No. 17562, 22 SEC Docket 129, 132 (Feb. 20, 1981).

[140]Full Registration as Clearing Agencies, Exchange Act Release No. 20221, 28 SEC Docket 1175, 1191 (Sept. 23, 1983); *see also* Proposed Rule Change by National Securities Clearing Corp., Exchange Act Release No. 18327, 46, Fed. Reg. 61,379 (Dec. 16, 1981) (soliciting comments pertaining to a proposed rule change to fee schedules with geographically mutualized pricing); Submission of Report Evaluating Facilities Management Alternatives by the National Securities Clearing Corp., Exchange Act Release No. 18296, 46 Fed. 60,082 (Dec. 8, 1981) (acknowledging a report prepared by independent public accountants on NSCC's choice of facilities manager); Application of the National Securities Clearing Corporation for Registration as a Clearing Agency, Exchange Release No. 17562, 22 SEC Docket 129 (Feb. 20, 1981) (reaffirming registration decision).

NSCC plan in April of 1983[141] and granted full registration on September 23, 1983.[142]The SEC also granted full registration of several other distinct clearinghouses and depositories at that time.[143]

III. Options

Compared to the relatively labored process of creating a single clearinghouse in the securities market, the establishment of a central clearinghouse in the equity options market was simple. As the modern options market system was founded in the 1970s, it was easier to establish industry norms at the outset rather than re-working the framework of an entire industry.

In 1973, the SEC approved the application of the Chicago Board Options Exchange, Inc. ("CBOE") for registration as a national securities exchange.[144] Prior to the registration of the CBOE as an exchange, options, as a general rule, were not traded on the exchange level.[145]All options trading transactions occurred in the OTC market through the Put and Call Broker and Dealers Association, at such low volumes that, in October of 1973 alone, volume on the CBOE exceeded that of the entire year of 1972.[146]

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[141]Order Approving Proposed Rule Change, Exchange Release No. 19705, 27 SEC Docket 955 (April 26, 1983) (stating the proposal to allow the NSCC to move into Phase II is approved).

[142] Registration as Clearing Agencies, Exchange Act Release No. 20221, 28 SEC Docket 1175, 1198 (Sept. 23, 1983) (announcing NSCC is granted full registration as a clearing agency).

[143]*Id.* (declaring the following are registered as clearinghouses: Midwest Clearing Corporation, Midwest Securities Trust Company, The Options Clearing Corporation, NSCC, The Depository Trust Company, Stock Clearing Corp of Philadelphia, Philadelphia Depository Trust Company, Pacific Clearing Corporation, and Pacific Securities Depository Trust Corporation).

[144]Application of The Chicago Board Options Exchange, Inc. for Registration as a National Securities Exchange, Exchange Act Release No. 9985, 1 SEC Docket, 11, 11 (Feb. 1, 1973).

[145]*Id.*

[146] George Lee Flint, Jr., *SEC and FRB Treatment of Options: An Experiment in Market Regulation*, 53 TEX. L. Rev. 1243, 1243 n.5 (1975), citing Berton, *Options Trading: A Booming Market*, FINANCIAL WORLD, June 20, 1973, at 25 (stating that volume in 1972 averaged around four thousand contracts per week).

In the past, options writers almost always wrote a new option contract for every option they would sell, not using prior options contracts written by themselves or others.[147] The customization of each contract made valuing the options without a uniform market highly difficult, so the secondary market was quite small.[148] For an investor desiring to purchase a specific option, overhead was high because that investor's broker would be required to spend significant time making inquiries to find someone willing to write the required option.[149] Another factor, the lack of a liquid market, made it difficult to value options to allow traders to buy and sell them easily.[150] Without a robust secondary market, making a profit from options involved exercising the options and requiring the writer to physically deliver the underlying stock.[151]

The key to the success of the CBOE, in contrast to the prior OTC markets, was the standardization and clearing of the options contracts. The CBOE created a subsidiary clearinghouse, the Chicago Board Options Exchange Clearing Corporation ("CBOECC"), in the same manner as the captive clearinghouses of the securities exchanges.[152] Unlike a securities clearinghouse, however, the CBOECC cleared products not inherently uniform in nature.[153] Every share of the same class of stock of a company is fundamentally the same, and therefore is a fungible good. The terms of an options contract were, up until that point, entirely negotiable between the writer and the buyer. The CBOECC, much like a traditional securities clearinghouse, became the buyer to every seller and the seller to every buyer.[154] The consequence of this, however, was that the CBOECC directly issued the options itself, which gave the CBOECC, and through it, the CBOE, the power to dictate the terms of the options which traded on the CBOE.[155]

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[147] *Id*. at 1246, citing Stephen F. Gates, *The Developing Option Market: Regulatory Issues and New Investor Interest*, 25 U. FLA. L. REV. 421, 422 (1973) (declaring that options writers wrote each option contract anew, and paid little attention to previous options valuations).
[148] *Id*.
[149] *Id.*, citing Steven T. Anderson, *Chicago Options*, 27 BUS.LAW.7, 9 (1971).
[150] *Id.* at 1246-47.
[151] *Id.* at 1246.
[152] *Id.*
[153] *Id.* at 1246-47.
[154] *Id.*
[155] *Id.* at 1246-47 n.24.

The existence and guarantee of a central counterparty for the options contracts greatly facilitated the growth of options trading.[156] It allowed the CBOE to standardize the options contracts, and thus encourage the existence of a secondary market for the options contracts after their origination.[157]Standardization eliminated the drawbacks of the OTC market, overhead costs and liquidity issues, which had once prohibited the formation of a market in these options.[158]

Recognizing the novelty of the "complex problems and special risks to investors and to the integrity of the marketplace" inherent in exchange trading of options, the SEC adopted Rule 9b-1 under the Exchange Act; the rule barred a national exchange from affecting any transaction in options without prior SEC approval of an exchange's submission outlining its options trading rules and regulations.[159] This new rule departed from the equity securities regulations under which exchanges would adopt rules under their authority as a self-regulatory organization ("SRO") and allowed the SEC to alter or augment the rules only in statutorily circumscribed circumstances.[160]

Under Rule 9b-1, a submission, which was either an initial plan or proposed modification by an exchange or the SEC itself, would first go through a notice and comment period under Section 4 of the Administrative Procedure Act.[161] As a part of rule 9b-1, the SEC required that plans filed under the rule had to include provisions to address a broad spectrum of factors, including the clearance or settlement of options.[162]

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[156]*Id*. at 1246-47.
[157]*Id.*
[158]*Id.*
[159]Adoption of Rule 9b-1, Exchange Act Release No. 10552, 3 SEC Docket 224, 224(Dec. 13, 1973).
[160]*Id.*
[161]*Id.*; Administrative Procedure Act § 4, 5 U.S.C. §553 (2006).
[162]*Id.* "Plans filed by exchanges pursuant to Rule 9b-1 are required to include all rules, regulations, by-laws and other requirements of the exchange that related 'solely or significantly to transactions in options,' and must contain specific provisions related to:

(1) the effecting of transactions in options on the exchange by members thereof for their own account and the accounts of customers;
(2) The clearance and settlement of transactions in options;
(3) The endorsement and guarantee of performance in options;
(4) The reporting of transactions in options; and

The SEC granted registration to the CBOE to operate as a "pilot project" and limited trading of options based on approximately thirty underlying stocks, which had to be registered and listed on another national securities exchange and also have significant liquidity and volume.[163]When the CBOE actually launched on April 26, 1973, it listed call options on only sixteen underlying NYSE stocks and had only 305 members.[164] By the end of the fiscal year 1974, it had doubled the underlying stocks on which it listed options to 32 and had grown to include 560 members.[165] The average daily volume was up to 23,000 contracts,[166] as opposed to the roughly 4,000 contracts traded *per week* before the advent of the CBOE.

Other exchanges took note of the success of the CBOE and contacted the SEC with inquiries about launching their own options exchanges.[167] Taking into account the increased interest from both the exchanges and the public, the SEC chose to have public hearings in February of 1974 to consider several matters relating to options trading.[168] Among these questions were whether options trading served the public good, whether more than one exchange should trade options and what regulatory scheme should manage the budding options industry.[169]

As the SEC contemplated the future shape of the exchange-traded options marketplace it determined that prior to the expansion of the CBOE pilot program, all concerned parties should work together to develop a common clearinghouse.[170] This conclusion was communicated through a series of letters to both the CBOE and two exchanges, the Amex and the Philadelphia Stock Exchange, which both intended to launch options trading.[171] The letters also

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(5) The listing and delisting and the admission to and removal of trading privileges on the exchange for options."

[163] Application of The Chicago Board Options Exchange, Inc. for Registration as a National Securities Exchange, Exchange Act Release No. 9985, 1 SEC Docket, 11, 11 (Feb. 1, 1973) [hereinafter Exchange Act Release No. 9985].

[164]40 SEC ANN. REP. at 8 (1974).

[165]Exchange Act Release No. 9985, *supra*note163.

[166]*Id.*

[167]Commission Study of Multiple Exchange Option Trading, Exchange Release No. 10490, 3 SEC Docket 39, 39 (Nov. 14, 1973).

[168]SEC ANN. REP, *supra* note 164, at 8.

[169]*Id.*

[170]Exchange Act Release No. 10981, 5 SEC Docket 41 (Aug. 22, 1974).

[171]*Id.*

recommended the exchanges work together on standardizing options terms, disseminating last-sale data and making provisions for the availability of options quotations.[172] Since there was no preexisting infrastructure in the options sector, the SEC was able to mandate central clearing and other national market system goals from the very beginning. The CBOECC, after significant input from the SEC, was spun off from the CBOE to become the common clearinghouse for the entire options industry, the Options Clearing Corporation ("OCC").[173]

IV. Futures

A. The Beginning

From the start, futures have been regulated separately and independently from securities and options. Consequently, significant differences exist in how both futures exchanges and their clearing-houses developed as compared to their counterparts in securities and options.

Futures contracts began trading in the 19th century as a standardized form of the forward grain contracts that farmers historically used to hedge against the cyclical nature of supply and demand for grains.[174] During harvest time a glut of supply would develop, driving grain prices down to a point sometimes less than the costs of production and transportation.[175] As time passed, however, supplies would eventually dry up and the cost of grain would increase at a rapid rate.[176] Forward contracts were developed to guarantee delivery of grain in the future at a price specified at the time of contract.[177] This innovation greatly stabilized the price of

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[172]*Id.* (stating that during this period of time, the Philadelphia Stock Exchange was referred to as the "PBW StockExchange."PBW stood for "Philadelphia-Baltimore-Washington, a reference to a wide area of the East Coast which the Exchange focused in.).
[173]Exchange Act Release No. 11146, 5 SEC Docket 774.
[174]Jerry W. Markham, *The Commodity Exchange Monopoly – Reform Is Needed*, 48 WASH. & LEE L.REV., 977, 979 (1991).
[175]*Id.*
[176]*Id.*
[177]*Id.*

grain as it allowed buyers and sellers to lock in prices in anticipation of future uncertainty.[178]

In 1848 organized trading began at the Chicago Board of Trade ("CBOT"), which opened for business as a centralized location for the buying and selling of commodities forward contracts.[179]Over time, the forward contract terms and conditions became standardized, facilitating growth of the secondary market for the resale of these contracts.[180] Once contracts were standardized, they could also be offset—where a sale extinguishes any responsibility for performing on the prior purchase, or the reverse—and this fungibility of standardized contracts greatly increased the amount of trading that was possible.[181] By 1873, the CBOT had adopted regular hours for futures trading.[182] At this point, commodities trading grew so much in popularity that alternate markets allowing trading in off-hours were established. Often referred to as "bucket shops," they operated by allowing patrons to gamble on the change in the price of the CBOT contract.[183] The CBOT attempted to exert control over the market by declaring that any after-hours trades were unenforceable.[184]

Eventually, the debate between farmers, exchanges and bucket shop operators attracted the attention of state legislatures. Several states passed anti-bucket shop laws, which were then challenged in court. Ultimately, these cases were consolidated into the *Board of Trade v. Christie*, in which the Supreme Court both determined the base legality of futures contracts and ruled that the commodity exchanges had a proprietary right to the prices coming

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[178]*Id.*
[179]Jake Keaveny, *In Defense of Market Self-Regulation: An Analysis of the History of Futures Regulation and the Trend Toward Demutulalization*, 70 BROOK L.REV., 1419, 1422-23 (2004-05) (*citing*JERRY W. MARKHAM, THE HISTORY OF COMMODITY FUTURES TRADING AND ITS REGULATION 4 (1987)).
[180] Markham, *supra* note 174, at 979.
[181]*Id.* at 979-80.
[182]Markham, *supra* note 5, at 872, citing JERRY W. MARKHAM, HISTORY OF COMMODITY FUTURES TRADING AND ITS REGULATION 4-5 (1987).
[183]Jonathan Ira Levy, *Contemplating Delivery: Futures Trading and the Problem of Commodity Exchange in the United States*, 1875-1905, 111 AM. HIST. REV. 307, 316 (2006) (describing "bucket shops" and how they allowed the general public to gamble on futures contracts).
[184] Markham, *supra* note 5, at 872.

from their pits.[185] Therefore, without access to the prices, the bucket shops could not operate legally. Additionally, according to Jerry Markham, a noted scholar of the financial industry, the CBOT's successful efforts to enlist states in declaring bucket shops illegal and limiting access to its price quotations to members formed the basis of the legal monopoly given to the futures exchanges in subsequent federal legislation.[186]

Dating back to the original existence of standardized futures contracts, a clearinghouse guaranteed the performance of all parties to the contract.[187] The existence of a clearinghouse permitted a party to go long or short a contract, offset the two and unlike forward contracts, avoid delivery if so desired.[188] As a result speculators were more likely to inject volume into the market, encouraging a liquid market to function without concerns over delivery.[189] Phillip McBride Johnson, a former CFTC Chairman, believes that, around 1925, the CBOT's clearinghouse, the Board of Trade Clearing Corporation ("BOTCC"), became the first "true mechanism for addressing counterparty credit risk through a centralized guarantee system."[190] Chairman Johnson cited a statement by the Secretary of Agriculture of the time, William Jardine, "[t]his comment indicates that the development of . . . clearing systems by the futures markets had the full support of the Federal government at that time," in support of the argument that the development of a modern, captive clearinghouse had the blessing of the United States government.[191]

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[185] Board of Trade v. Christie Grain & Stock Co., 198 U.S. 236, 248-51 (1905) (explaining the legality of futures contracts and that the prices coming from exchanges are due protection).

[186] Markham, *supra* note 5, at 872-72, citing Jerry W. Markham, *"Confederate Bonds," "General Custer," and the Regulation of Derivative Financial Instruments*, 25 SETON HALL L. REV. 1, 12-14 (1994).

[187] Markham, *supra* note 5, at 871.

[188] Merrill Lynch, Pierce, Fenner& Smith, Inc. v. Curran, 456 U.S. 353, 358 (1982).

[189] Markham, *supra* note 5, at 871 n.34, citing *Merrill Lynch*, 456 U.S at 359.

[190] Phillip McBride Johnson, *In Defense of 'Captive' Clearing*, 3 CAPITAL MARKETS L.J. 417, 418 (2008).

[191] The actual quote reads: "This comment indicates that the development of central clearing systems." However it is important to note that central clearing systems in that context does not carry the same meaning it does today, but in this context means a central clearinghouse for the CBOT. *Id.* at 417-18.

Like the securities industry before the 1975 Amendments, each commodity futures exchange had its own captive clearinghouse, a model that has persisted for the majority of the futures industry until this day.[192] Vertical integration of both trading and clearing was well established by the time of the passage of federal regulatory legislation in the 1920s.

Regardless of the fact that the Supreme Court approved of the legality of futures contracts in *Christie*, persistent nation-wide concerns about price-manipulation of commodities energized a national populist movement to either abolish or regulate futures trading.[193] The futures industry simply could not shake the popular belief that futures contracts amounted to little more than gambling. However, President Hoover believed in the futures markets, stating that the "CBOT is the "most economical and efficient agency of the marketing of foodstuffs anywhere in the world."[194] This debate culminated in the passing of the Futures Trading Act of 1921 ("FTA").

The FTA, passed on August 21, 1921, empowered the Secretary of Agriculture to designate exchanges meeting certain requirements as contract markets in grain futures.[195] Contracts not executed on a contract market were subject to a punitive twenty-cent per bushel tax.[196] The FTA acknowledged the legitimate purpose of futures contracts for the shifting of risk and the important role of speculators injecting liquidity into these markets.[197] The FTA also sought to instill confidence in markets by regulating price manipulation and keeping futures trading on the contract markets.[198] Much like the Exchange Act would 13 years later, the FTA exerted power over the exchanges by requiring them to meet certain criteria

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[192]*Id*. at 417 (describing a Treasury invitation for comments regarding the possible divorcing of futures clearing organizations from particular futures exchanges).

[193] William L. Stein, *The Exchange Trading Requirement of the Commodity Exchange Act*, 41 VAND. L. REV. 473, 477 (1988).

[194]Keaveny, *supra* note 179, at 1424 (quoting *Hearing on Futures Trading Before the House Comm. On Agric.*, 66th Cong., 583 (1921)).

[195]Futures Trading Act of 1921, Pub. L. No. 67-66, 42 Stat. 187, *invalidated* by Hill v. Wallace, 259 U.S. 44 (1922)(declaring that the Secretary of Agriculture is empowered to designate exchanges as contract markets in grain futures).

[196]*Id.* (declaring a twenty cent per bushel tax on contracts not executed).

[197]Stein, *supra* note 193, at 477.

[198]*Id.*

to qualify as contract markets. However, the next year, in May of 1922, the Supreme Court in *Hill v. Wallace* struck down the FTA as an unconstitutional use of the taxing power.[199] The Court believed that instituting a tax with the primary purpose of compelling the boards of trade to comply with federal legislation was an improper use of the taxing power.[200]

In response, Congress passed a similar, but not identical bill, the Grain Futures Act of 1922 ("GF Act"), four months later.[201] The GF Act, based on the constitutional underpinning of the Constitution's "Commerce Clause," asserted that market volatility burdened interstate commerce, thus banning the trading of futures contracts on any board of trade not licensed as a contract market.[202] Like the FTA, the GF Act required a board of trade to fulfill certain requirements to be qualified as a contract market.[203] These requirements formalized

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[199] Hill v. Wallace, 259 U.S. 44, 72 (1922) (granting an injunction preventing the taxing portions of the FTA from being enforced).

[200] *Id*. at 66-67.

[201] Grain Futures Act of 1922, Pub. L. No. 67-331, 42Stat. 998 (codified as amended at 7 U.S.C. §§1-25 (1925-1926)).

[202] *See* Keaveny,*supra* note 179, at 1426 (describing how Congress relied on the Commerce Clause in passing the Grain Futures Act and the influence of market volatility on contract bans).

[203] Requirements for designation as a contract market under the GF Act:

a. The keeping of a record with prescribed details of every transaction of cash and future sales of grain of the Board or its member in permanent form for three years, open to inspection of representatives of the Departments of Agriculture and of Justice.
b. The prevention of the dissemination by the Board or any member of misleading prices.
c. The prevention of manipulation of prices or the cornering of grain by the dealers or operators on the Board.
d. The adoption of a rule permitting the admission as members of authorized representatives of lawfully formed co-operative associations of producers having adequate responsibility engaged in the cash grain business, complying with and agreeing to comply with, the rules of the Board applicable to other members, provided that no rule shall prevent the return to its members on a pro rata patronage basis the money collected by such association in the business, less expenses.

US Futures Trading and Regulation Before the Creation of the CFTC, CFTC.gov,

the exchanges' roles as self-regulators by requiring them to have measures and standards in place to prevent price manipulation. As part of that effort, exchanges, for the first time, were obligated to require the clearing members of each exchange to provide daily reports on customers.[204] The GF Act created the Grain Futures Commission (a predecessor of the Commodity Futures Trading Commission)—composed of the Secretary of Agriculture, the Secretary of the Treasury and the Attorney General—to license contract markets. It also created the Grain Futures Administration ("GFA") as an agency in the U.S. Department of Agriculture to administer the GF Act. Unlike its predecessor, the GF Act was upheld as constitutional the next year in *Chicago Board of Trade v. Olsen*.[205]

The words "clear" and "clearing" do not appear at all in the original Grain Futures Act in 1921.[206] The GF Act, while requiring that contracts be executed on a board of trade, did not refer to clearing.

Ultimately, the GF Act proved ineffective and was discredited by a variety of trading scandals and a ruling of the Supreme Court that significantly impaired the Grain Futures Commission's ability to pursue punitive actions against market manipulators.[207] Furthermore, the Great Depression exacerbated popular concern over securities and commodities markets. As the wave of sentiment for reform grew, the Securities Act in 1933, the Exchange Act in 1934 and lastly the Commodity Exchange Act ("CEA") in 1936 were passed into law.[208] These three acts, all passed during the same era, created a regulatory regime for futures and securities that exists to this day. The banking committees of Congress formulated the legislation and maintained responsibility for

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http://www.cftc.gov/About/HistoryoftheCFTC/history_preCFTC.html (last visited Nov. 13, 2010) [hereinafter Futures Trading History].

[204]*See* Keaveny,*supra* note 179, at 1427 (discussing the GFA's "new role" and its requirement that "the clearing members of each exchange to provide daily reports that include the market positions of its customers").

[205]262 U.S. 1, 42(1923).

[206]*See generally* Grain Futures Act.

[207]Markahm, *supra* note 174, at 981 ("The Grain Futures Act proved to be ineffective in preventing market abuses."). *See*Wallace v. Cutten, 259 U.S. 229, 237 (1935) (finding that cannot use GF Act to punish action that "on the face of the statute, is merely to be prevented").

[208] Commodity Exchange Act of 1936, Pub. L. No. 74-675, 49Stat. 1491 (codified as amended at 7 U.S.C § 1-25 (2000)).

regulating securities[209] while the agriculture committees did so for commodity futures.[210]

B. The Commodity Exchange Act ("CEA")

The CEA kept much of the earlier GF Act as a starting point and, as a result, the statute continued to vary greatly from securities legislation of the time. One important distinction came in the regulatory bodies responsible for oversight of the separate industries. The SEC, created by the Exchange Act, existed as an independent federal agency.[211] The SEC has five independent commissioners who, once appointed by the President, serve staggered five-year terms, ostensibly free from political interference.[212]The Grain Futures Commission, renamed the Commodity Exchange Commission, was still composed of the Treasury and Agriculture Secretaries and the Attorney General, with the day-to-day operations being handled by the Commodity Exchange Authority ("the Authority"), which was an agency within the Department of Agriculture.[213] Consequently, commodity regulation was much more susceptible to political pressure, and unlike the SEC, its principal regulators had a variety of other responsibilities.[214]

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[209] The predecessors to the Senate Committee on Banking, Housing and Urban Affairs and the House Committee on Financial Services wrote the securities legislation while the predecessors to the Senate Committee on Agriculture, Nutrition, and Forestry and the House Committee on Agriculture wrote the Commodity Exchange Act.
[210]At the time these divisions may have appeared logical when considering the agricultural basis of futures contracts, but especially when viewed in light of the later development of financial derivatives, the separation has less purpose today. When major reforms were made to the Exchange Act (1975 Amendments) empowering the SEC to pursue the formation of a national clearing system, a similar major reform bill, the Commodity Future Trading Commission Act of 1974, did not contain a like provision, at least partly because it was written by a different committee.*See generally* Commodity Futures Trading Commission Act of 1974, Pub. L. No. 93-463, 88 Stat. 1389 (codified at 7 U.S.C §§ 4-22 (1940)).
[211] Markham, *supra* note 174, at 982.
[212]Commodity Futures Trading Commission Act of 1974, Pub. L. No. 93-463, 88 Stat. 1389 § 201 (codified in 7 U.S.C §§ 4-22 (1940) (establishing the board's composition).
[213]Commodity Exchange Act of 1936, Pub. L. No. 74-675, 49Stat. 1491, §3.
[214]*See*Markham,*supra* note 174, at 982.

The Exchange Act took the dual steps of prohibiting specific practices and empowering the SEC to adopt its own rules, defining and prohibiting fraud and manipulation as it saw fit. In contrast, while the CEA broadly prohibited fraud and manipulation, it did not attempt to define these terms, leaving these prohibitions largely powerless.[215] Furthermore, while the CEA prohibited some specific practices, it failed to define them precisely, leaving the statutory power of the Commission subject to interpretation, thus making it more difficult for the CEA to affect change at an industry-wide level.[216]

The CEA expanded the power of the earlier GF Act in several respects. The Authority was responsible for several additional commodities and was empowered, for the first time, to set speculative limits.[217] Additionally, one important regulation required brokerage firms to register as futures commission merchants ("FCMs") and imposed upon them the requirement of segregating customer funds from their own monies in trust accounts.[218] Still, there were significant problems with the way the CEA was structured. The CEA did not regulate individuals trading for their own accounts, and speculative limits did not apply to commercial traders—parties generally responsible for a large portion of speculative trading.[219]

The CEA statutorily expanded the role of clearinghouses but did not directly provide for regulation of the clearinghouses themselves.[220] The first time clearing is mentioned in Section 4b, the language of CEA simply assumes that clearing occurs with respect to

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[215] *Id.* at 982-83.

[216] *Id.* (comparing the terms "wash sales," "fictitious trades" and "accommodation trading") (citing 7 U.S.C. §6 (1988)).

[217] Futures Trading History, *supra* note 203 ("The Commodity Exchange Act replaces the Grain Futures Act and extends Federal regulation to a list of enumerated commodities that includes cotton, rice, mill feeds, butter, eggs, and Irish potatoes, as well as grains.");*See* Commodity Exchange Act, *supra* note 213, §4(a).

[218] Commodity Exchange Act §4d(1)-(2) (requiring merchants to register and create separate accounts).

[219] Markham, *supra* note 174, at 983 (explaining that the CEA did not regulate individuals and did not apply limits to commercial traders).

[220] *See generally* Commodity Exchange Act.

futures trades.[221] The law requires such orders to be executed "on the floor of the exchange . . . at public outcry . . . and shall be duly reported, recorded and *cleared* in the same manner as other orders executed on such exchange."[222]

Notwithstanding the absence of a specific regulatory scheme for the clearing of futures trading, the CEA formally recognized the role that clearinghouses played. Section 4d of the CEA required FCMs to segregate margin accounts[223] and Section 6a banned from trading any association or corporation which, "shall fail to meet its obligations with any established clearing house or clearing agency of any contract market . . . ."[224] Thus, the CEA established legal obligations of market participants to clearinghouses. The requirement of segregating funds, a traditional fiduciary duty in many contexts, also cemented the view of clearinghouses as fiduciaries and as an essential component of customer protection underpinning the purpose of the CEA as a whole. The CEA also improved institutional credibility of clearinghouses by restricting clearinghouse access to corporations or associations in good standing and not in arrears.

Section 6a also declares that no contract market could exclude an association or corporation that had the requisite certifications and satisfied the various capital requirements.[225] By extension, since a trade on a contract market was expected to be cleared, a clearinghouse could not refuse any corporation or association meeting the requirements. In essence, clearinghouses had to be used as a necessary part of futures trading, and given this status, they had to be accessible to eligible parties in a non-discriminatory manner.

As commodities trading expanded, the CEA continually needed to be amended to expand the power of the Authority to regulate each new commodity futures contract. Enacting a broad grant of power giving the CEA blanket authority over commodities and futures contracts would have been entirely more efficient but was not the case when the CEA was adopted. While the power and

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[221]*See* Commodity Exchange Act § 4b (providing that exchanges will be "cleared in the same manner as other orders executed on such an exchange").
[222]*Id.* (emphasis added).
[223]*Id.* § 4d.
[224]*Id.* § 6a.
[225]*Id.* (declaring that no contract market could exclude any association or corporation "having adequate financial responsibility").

regulatory efforts of the government remained much the same over this period of time, the body administering it changed frequently.[226]

Over the next four decades, Congress passed several smaller amendments to the CEA that gradually increased the Authority's regulatory powers.[227] The Authority gained the ability to issue subpoenas, publish large trader reports, set fees for FCMs and other registrants and eventually publish monthly reports on trading activities.[228] In 1968, in the first major derivatives legislation passed since the CEA in 1936, the CEA was amended to give the Authority the ability to disapprove rules filed by a board of trade and the authority to suspend the contract market designation of any board of trade which failed to enforce its own rules.[229] Consequently, courts developed a body of law that supported the exchanges' power to enforce their rules to assure the compliance of members with defined standards of conduct.[230] Ultimately, however, the expansion of regulatory powers over exchange members failed to assuage the public's concerns about speculators inflating prices in the futures markets.

The 1968 amendments to the CEA for the first time added rules directly governing the conduct of clearing agencies. Section 6 of the 1968 amendments amended Section 4d of the CEA to include a prohibition against clearing agencies (among other parties) from "hold(ing), dispos(ing) of, or us(ing) any [sums deposited in a segregated account such as] money, securities, or property as belonging to the depositing futures commission merchant or any person other than the customers of such futures commission

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[226] In 1936, the Commodity Exchange Administration was formed within the USDA. In 1942, the Commodity Exchange Administration was merged with other agencies to be known as the Agricultural Marketing Administration ("AMA") and was re-labeled the Commodity Exchange Branch of the AMA. By the end of the year, the AMA was merged into the Food Distribution Branch, and the Commodity Exchange Branch became the Compliance Branch. After a few more wartime reorganizations, the authority settled with the Commodity Exchange Authority, an agency of the USDA, where it would rest until 1974. *See* Futures Trading History, *supra* note 203.

[227] *Id.* (documenting amendments to the CEA prior to 1974).

[228] *Id*.

[229] Act of Feb. 19, 1968, Pub. L. 90-258, 82 Stat. 26-34 (codified as 7 U.S.C. §9(a) (2000))(allowing the Commission to not "promulgate rules" under certain conditions).

[230] *See* Keaveny,*supra* note179, at 1431.

merchant . . . ."[231] While this regulation did not single out clearinghouses, it was the first direct regulation of them. Notwithstanding the foregoing statutory amendment covering the conduct of clearinghouses, Congress did not use the opportunity of amending the CEA to adopt a plenary scheme to regulate the business of clearinghouses. However, Congress was concurrently highly focused on clearinghouse oversight in the securities markets because of the havoc caused by the Paperwork Crisis.[232] In the near-term aftermath of the 1968 CEA amendments, public criticism of the futures markets continued. Market prices for grains and soybeans reached a record level in 1973, and critics blamed excessive speculation for the sharp run-up.[233] Advocates of an independent agency to regulate the futures industry pointed to the inherent conflict of the Department of Agriculture in maintaining responsibility for both market regulation and the income of farmers. Yet another reason cited to justify amending the CEA was the belief that the CBOT would soon offer futures contracts on financial products, which indeed soon came to pass.[234]

C. The Commodity Futures Trading Commission Act ("CFTC Act")

Responding to the situation, in 1974 Congress passed the Commodity Futures Trading Commission Act ("CFTC Act"), which replaced the Authority with the Commodity Futures Trading Commission ("CFTC").[235] The CFTC was an independent regulatory agency for the futures industry, a more SEC-like organization. The CFTC consisted of five independent commissioners serving staggered five-year terms with exclusive jurisdiction over its bailiwick, the trading of futures and options on all commodities.[236]

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[231] Act of Feb. 19, 1968,*supra* note 229, § 6(b).
[232]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, 360 (2003).
[233]Futures Trading History, *supra* note 203.
[234] House Comm'n On Agriculture, Commodity Futures Trading Commission Act of 1974, H.R. Rep. No 975 93d Cong., 2d Sess. 41 (1974).
[235]Commodity Futures Trading Commission Act of 1974, Pub. L. No. 93-463, 88 Stat. 1389 § 201 (codified in 7 U.S.C §§ 4-22 (1940)) (granting jurisdiction to the Commodity Futures Trading Commission).
[236]*Id.*

No longer did Congress have to continually update the CEA as new contracts became popular on the exchanges. All contract markets had to submit rules regulating both futures contracts and trading requirements for prior approval.[237] The CFTC Act also authorized contract markets to discipline their members for rule violations, subject to the oversight and approval of the CFTC.[238] The goal of the CFTC Act was to greatly increase the oversight and regulation of the futures industry and give both the regulators and the exchanges the ability to influence the conduct of market participants. For example, the CFTC Act granted the CFTC the ability to intervene in the trading of contract markets when it believed circumstances dictated such intervention was necessary to prevent an emergency such as price manipulation.[239]

The passage of the CFTC Act, however, did not address, in any detail, the market structure or regulation of the clearinghouse part of the futures business. In contrast, at the same time the CFTC Act passed, the SEC and the banking committees in Congress were publically advocating for the National Market System that was to become the basis of the 1975 Amendments. In the two separate agriculture committees responsible for overseeing the futures industry, the concept of a national market system was never mentioned.[240] In the Joint Explanatory Statement on the CFTC Act, clearing is discussed in the context of a new requirement for clearinghouses to both maintain and deliver daily records of every trade made on an exchange; a requirement necessary for the CFTC to properly enforce the CEA.[241]

In contrast to the Congressional work in recasting securities industry regulation being done concurrently with the adoption of the CFTC Act, the new futures statute did not create a plenary scheme of regulating clearinghouses or the ownership of the clearing function by the associated trading business—an ownership structure that largely precluded multiple exchanges from offering fungible products and competing for trading volume. The Conference Committee mentions clearing two other times in its CFTC Act. The first is in the context of prohibiting CFTC commissioners and

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[237]*Id.* § 210.
[238]*Id.* § 301(8).
[239]*Id.* §215.
[240]*See generally*H.R. REP. No. 93-1383 (1974).
[241]H.R. REP. NO. 93-1383 at 42 (1974) (discussing the daily trading report requirement).

employees from accepting employment or compensation from "any person, exchange, or clearinghouse subject to regulation by the Commission".[242] The second mention appears in Section 417 of the CFTC Act, which calls for the CFTC to submit a report discussing the insurance of "owners of commodity futures accounts and persons handling or clearing trades" in the case of bankruptcy or failure of an FCM.[243]

Unlike the 1975 Amendments to the Exchange Act passed a year later, there is little discussion in the CFTC Act of clearing and no discussion of the concept of a national clearing system.[244] The NSCC simply did not recognize the important and distinct role clearinghouses play in the futures industry, nor did it make any effort to synchronize the market structure of vertical integration of trading and clearing functions in the futures markets with the newly created structures in the securities markets. Most surprisingly, the issues that were of such concern in the banking committees amending the Exchange Act went unmentioned by the agriculture committees amending the CEA.

Instead, the CFTC accepted that, as a result of the close relationship between the contract markets and their captive clearinghouses, "any clearing organization would be a creature of the exchange(s) that it served."[245] In 1976, the CFTC, responding to a claim by the BOTCC that it was a separate corporate entity from its parent contract market, stated that it saw "little significance in [that] statement, particularly in light of its view of the public interest test contained in section 5(g)."[246] The CFTC believed that, as a result of the integration in the trading and clearing functions and the duty of contract markets to insure the integrity of their contracts, the contract markets themselves were responsible for their clearing. Since the contract markets were regulated by the CFTC under the CEA, separate regulations overseeing clearing were not on the CFTC's list of priorities.[247]

Soon after passage of the CFTC Act, the role of the futures industry in the finance world greatly changed with the introduction of

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[242] Commodity Futures Trading Commission Act §101, *supra* note 212.
[243] *Id.* §417.
[244] *See generally id.*
[245] Johnson, *supra* note 190, at 421.
[246] *Id.* (quoting 41 F.R. 40091 (17 September 1976), *reprinted in* [1975-77 Transfer Binder] Comm. Fut. L. Rep. (CCH) 20,208, at 21,140).
[247] *Seeid.*

futures on financial products, including indexes on securities. The CFTC approved the first certificate futures contract, a contract on Government National Mortgage Association ("Ginnie Mae") pass-through mortgage-backed certificates, on September 11, 1975.[248] Two months later, the Chicago Mercantile Exchange ("CME"), another major futures exchange, offered, with CFTC approval, the first money market futures contract—a futures contract on 90-day Treasury bills.[249] Over the next several years, as some of these contracts proved highly successful, several more types of contracts were introduced, including those on longer term U.S. government debt and the contract that was to become the most successful, the Eurodollar futures contract series.[250] Today the Eurodollar futures contract is widely recognized as the most traded money market contract in the world.[251] By 1996, financial futures accounted for over half of the total volume of exchange-traded futures contracts.[252]

The approval and subsequent trading of financial futures resulted in a jurisdictional dispute between the CFTC and the SEC that lasted several years.[253] The SEC asserted that the futures on the Ginnie Mae mortgage-backed certificates were securities, and thus, the SEC had responsibility. When the SEC approved the application of the CBOE to trade options on the same Ginnie Mae mortgage-backed certificates, the CBOT sued, claiming that the CFTC held authority over the mortgage-backed certificates.[254] Discussions between the two regulatory agencies resulted in the "Shad-Johnson Accord," which delineated the extent of the two agencies' respective

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[248]*History of the CFTC in the 1970s*, CFTC.gov, http://www.cftc.gov/About/HistoryoftheCFTC/history_1970s.html (last visited Oct. 8, 2010) (describing the first financial futures contract).

[249]*Id.See* Galen Burghardt, THE EURODOLLAR FUTURES AND OPTIONS HANDBOOK7-8 (2003) (recounting the first money market futures contract).

[250]Burghardt, *supra* note 249, at 7-8.

[251]*See Id*. at 15 (comparing Eurodollar futures to CDs and the Three-Month Treasury Bill).

[252] Roberta Romano, *A Thumbnail Sketch of Derivative Securities and Their Regulation*,55 MD. L. REV. 1, 12 (1996).

[253] David B. Esau, *Joint Regulation of Single Stock Futures: Cause of Result of Regulatory Arbitrage and Interagency Turf Wars?*, 51 CATH. U. L. REV. 917, 921 (2001-2002) (recounting the "jurisdictional dispute" between the SEC and CFTC).

[254]*Id.*

authority.[255] The accord gave the CFTC jurisdiction over futures on broad-based stock indexes and individual government securities, the SEC jurisdiction over security-based options, and prohibited the trading of futures on individual stocks and narrow-based stocks indexes.[256] Futures contracts on broad-based stock indexes traded on futures exchanges created, for the first time, a direct nexus between the two industries.

D. The Commodity Futures Modernization Act ("CFMA")

In 1999, at the direction of agriculture committees in Congress, the President's Working Group ("PWG") submitted a report entitled "Over-the-Counter Derivatives Markets and the Commodity Exchange Act ("OTC Report")."[257] The OTC Report, requested by Congress to analyze and develop policy relating to the OTC derivatives market, was the first major step towards what would become the Commodity Futures Modernization Act of 2000 ("CFMA").[258]

The OTC Report's main recommendation was to exclude the trading of financial derivatives by certain eligible parties from the CEA. The report indicated that this would remove "legal uncertainty" and "unnecessary regulatory burdens" from OTC markets.[259] As part of the effort to "promote innovation, competition, efficiency and transparency in OTC derivatives markets, to reduce systematic risk

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[255]*See generally* Shad-Johnson Jurisdictional Accord of 1982, Pub. L. No. 97-303, 96 Stat. 1409 (codified in the Futures Trading Act of 1982, Pub. L. No. 97-444 96 Stat. 2294 and the Securities Act of 1982, Pub. L. 97-303, 96 Stat. 1409) (amending the CEA and the Exchange Act).

[256]*See generally id.* (clarifying jurisdictional questions and adding prohibitions on trading). The Shad-Johnson Agreement was named after the chairman of the two agencies who negotiated the agreement.

[257] The President's Working Group at this time consisted of Lawrence Summers, Secretary of the Treasury; Alan Greenspan, Chairman of the Federal Reserve; William Rainer, Chairman of the CFTC; and Arthur Levitt, Chairman of the CFTC. Over-the-Counter Derivatives Markets and the Commodity Exchange Act, Report of the President's Working Group (Nov. 9, 1999), *available at* http://www.ustreas.gov/press/releases/reports/otcact.pdf [herein President's Working Group Report].

[258]Commodity Futures Modernization Act of 2000, Pub. L. 106-554, 114 Stat. 2763 (2000).

[259]President's Working Group Report, *supra* note 257, at 1.

and to allow the United States to maintain leadership in these rapidly developing markets," the PWG analyzed the clearing of derivatives.[260] Noting that the CEA did not explicitly provide for direct oversight of clearing systems by the CFTC, the PWG believed that "Congressional action [was] necessary to establish appropriate policy guidance for the establishment and oversight of clearing systems for OTC derivatives."[261] While acknowledging that the CFTC had always exercised its regulatory power over clearinghouses via its oversight of their parent exchanges, the PWG recommended that Congress enact legislation that would provide a "clear basis for the regulation of clearing systems" by the CFTC.[262] The PWG made seven recommendations: 1) clearing organizations clearing futures, commodity options, and options on futures should clear non-security related OTC derivatives subject to CFTC regulation; 2) securities clearing organizations should also clear OTC derivatives other than certain non-financial products; 3) the CFTC should have authority to regulate the clearing of OTC derivatives other than certain non-financial commodities; 4) all clearing systems for OTC derivatives should organize subject to some jurisdiction; 5) the CFTC should mandate that a clearing system would not become subject to another regulator as a result of clearing OTC derivatives; 6) the CFTC should establish a trading system which clears OTC products which does not submit, by itself, that trading system to the CEA; and 7) should allow clearing through foreign clearing systems under approved regulation.[263]

The next major step in creating the CFMA was the release of a "New Regulatory Framework ("Framework")," a CFTC staff report to Congress on February 22, 2000, that recommended significant changes to the CEA.[264] The framework recommends promulgating many of the proposals of the OTC Report and notes that all of the recommendations could be implemented under the CEA using its administrative authority.[265] The Framework sought to create a "flexible structure that [would replace] the current one-size-fits all

[260]*Id.* at 15.
[261]*Id.* at 1.
[262]*Id.* at 20.
[263]*Id.* at 20-21.
[264]Report of the Commodity Futures Trading Commission Staff Task Force, A New Regulatory Framework (Feb. 2000), *available at* http://www.cftc.gov/files/opa/oparegulatoryframework.pdf.
[265]*Id.*, Executive Summary, at i.

style of regulation."[266] It recommended establishing three separate types of trading facilities subject to different levels of regulation; differentiated by the type of products traded on them and the sophistication of the market participants. The Framework also aspired to replace the rules-based structure of the existing regulatory structure and replace them with flexible "core principles."[267]

The Framework made three main recommendations in support of the goal of encouraging competition and flexibility in the clearing of derivatives: 1) A clearinghouse or clearing agency should be able to operate independently of an execution facility; 2) The CFTC should explore schemes under which a clearinghouse regulated by another approved regulatory body could clear transactions for some trading facilities; 3) Clearing organizations should henceforth be expected to follow a set of governing core principles.[268]

The PWG's recommendations directly resulted from the OTC Report's findings that a "clear basis" for the regulation of clearing by the CFTC should be established for the first time. The Core Principles outlined in the Framework, later added to the CEA after some revision by the CFMA, covered a wide range of topics, including competition, risk management and procedures.[269] The core principles gave enormous discretion to the exchanges to devise their contracts and practices while placing difficult time limits on the CFTC to object.[270] The CFMA also contained a discreet section on the registration and regulation of clearinghouses, including a bar against anticompetitive rules and practices.[271]

On November 22, 2000, the CFTC approved a set of final rules that promulgated the majority of the Framework, while noting in a press release that the new regulations in no way diminished the need for prompt action on the CFMA which was under debate in

[266]*Id*., Letter from William J. Rainer, Chairman of the Commodity Futures Trading Commission, (Feb. 22, 2002) at 1.
[267]*Id.*
[268]*Id.* at 22.
[269]*Id.* at 23-26.
[270] Provisions Common to Registered Entities, 17 C.F.R. § 40.6 (c)(2)-(c)(3) (2008), LEXSTAT 17 CFR 40.6.
[271] Commodity Exchange Act, ch. 545, § 5b, 49 Stat. 1491 (1936) (codified at 7 U.S.C. § 7a-1 (2006)).

Congress at the time.[272] The CFTC championed the replacement of the "one-size-fits-all" regulations with the "broad, flexible 'Core Principles'."[273]

One month later, President Clinton signed the CFMA into law. The statute overhauled much of the CEA by providing legal certainty to OTC markets by exempting many of them from the jurisdiction of the CFTC, and set out to provide "greater stability to markets during times of market disorder by allowing the clearing of transactions in over-the-counter derivatives through appropriately regulated clearing organizations."[274] Simultaneously, the CFTC withdrew most of the New Regulatory Framework in light of the superseding legislation covering the reforms.[275]

The CFMA enacted much of the clearing framework described in the OTC Report and Framework in the form of the new Section 5b of the CEA.[276] The CFMA officially mandated that contracts traded on Designated Contract Markets ("DCM") must clear through a derivatives clearing organization ("DCO"), with the exception of security futures products cleared on a registered securities clearinghouse. The newly enacted legislation, much as other similar legislation, uses a registration requirement as the mechanism through which the CFTC gains regulatory power over the clearing organizations.[277] Section 5b(a) states that a DCO may not act

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[272]CFTC Approves Rules Implementing New Regulatory Framework, C.F.T.C. Release #4475-00 (November 22, 2000). *See also* A New Regulatory Framework for Clearing Organizations, 65 Fed. Reg. 78020 (December 13, 2000) (to be codified at 17 C.F.R. pt. 39); A New Regulatory Framework for Multilateral Transaction Execution Facilities, Intermediaries and Clearing OrganizationsPart II, 65 Fed.Reg. 77962 (December 13, 2000) (to be codified at 17 C.F.R pts. 1, 5, 15, 36, 37, 38, 100, 170 and 180).

[273] CFTC Approves Rules Implementing New Regulatory Framework, *supra* note 272.

[274]Commodity Futures Modernization Act of 2000, *supra*note258.

[275] A New Regulatory Framework for Multilateral Transaction Execution Facilities, Intermediaries and Clearing Organizations; Rules Relating to Intermediaries of Commodity Interest Transactions; A New Regulatory Framework for Clearing Organizations; Exemption for Bilateral Transactions, 65 Fed. Reg. 82272 (Dec. 28, 2000) (to be codified at 17 C.F.R pts. 1, et al.).

[276] Commodity Exchange Act, ch. 545, § 5b, 49 Stat. 1491 (1936) (codified at 7 U.S.C. § 7a-1 (2006)).

[277] Commodity Exchange Act, ch. 545, § 5b(a), 49 Stat. 1491 (1936) (codified at 7 U.S.C. § 7a-1(a) (2006)).

as a DCO (as defined by the CEA) for futures contracts, commodity options and options of futures contracts unless registered with the CFTC.[278]

The CFMA defined a DCO as follows:

> The term "derivatives clearing organization" means a clearinghouse, clearing association, clearing corporation, or similar entity, facility, system, or organization that, with respect to an agreement, contract, or transaction—
>
> (i) enables each party to the agreement, contract, or transaction to substitute, through novation or otherwise, the credit of the derivatives clearing organization for the credit of the parties;
>
> (ii) arranges or provides, on a multilateral basis, for the settlement or netting of obligations resulting from such agreements, contracts, or transactions executed by participants in the derivatives clearing organization; or
>
> (iii) otherwise provides clearing services or arrangements that mutualize or transfer among participants in the derivatives clearing organization the credit risk arising from such agreements, contracts, or transactions executed by the participants.[279]

There are exceptions for certain exempted or excluded products—mostly OTC products—and for securities futures products to be cleared by a clearing agency registered under the Exchange Act. Single stock futures, formerly illegal before the passage of the CFMA, could be cleared by either a DCO or a registered clearinghouse under the Exchange Act.[280] The CFMA included a clause to "grandfather" existing clearing organizations from a new registration requirement provided they had cleared for a DCM prior to the enactment of the CFMA.[281] This clause ensured that the clearing

[278] Commodity Exchange Act § 1a, 7 U.S.C. § 1a (2006).
[279] *Id.*
[280] *See* 7 U.S.C. § 7a-1(a)(2) (2006).
[281] Commodity Exchange Act, ch. 545, § 5b(d), 49 Stat. 1491 (1936) (codified at 7 U.S.C. § 7a-1(d) (2006)).

organizations already in existence would immediately be governed by the CFMA.

The CFMA also introduced the above-mentioned principle-based regulation. For DCOs, the CFMA introduced fourteen core principles with which a DCO had to demonstrate compliance to achieve and maintain registration with the CFTC.[282] By contrast, DCMs had eighteen core principles and the newly created derivatives trading execution facility ("DTEF") had nine.[283] The DCO Core Principles discussed, among others, the following subjects: Financial Resources; Participant and Product Eligibility; Risk Management; Settlement Procedures; Treatment of Funds; Default Rules and Procedures; Rule Enforcement; System Safeguards; Reporting; Recordkeeping; Public Information; Information Sharing; and Antitrust Considerations.[284]

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[282]Commodity Exchange Act, ch. 545, § 5b(c)(2), 49 Stat. 1491 (1936) (codified at 7 U.S.C. § 7a-1(c)(2) (2006)).

[283] Commodity Exchange Act, ch. 545, § 5b(d), 49 Stat. 1491 (1936) (codified at 7 U.S.C. § 7(d) (2006)); Commodity Exchange Act, ch. 545, §5 a(d), 49 Stat. 1491 (1936) (codified at 7 U.S.C. § 7a(d) (2006))

[284] Commodity Exchange Act, ch. 545, § 5b(d), *supra* note 283. The CFTC website summarizes Core Principles B-N as follows:

1. (B) Adequate financial, operational, and managerial resources.
2. (C) Appropriate standards for participant and product eligibility.
3. (D) Adequate and appropriate risk management capabilities.
4. (E) Ability to complete settlements on a timely basis under varying circumstances.
5. (F) Standards and procedures to protect member and participant funds.
6. (G) Efficient and fair default rules and procedures.
7. (H) Adequate rule enforcement and dispute resolution procedures.
8. (I) Adequate and appropriate systems safeguards, emergency procedures, and plan for disaster recovery.
9. (J) Obligation to provide necessary reports to allow the CFTC to oversee clearinghouse activities.
10. (K) Maintenance of all business records for five years in a form acceptable to the CFTC.
11. (L) Publication of clearinghouse rules and operating procedures.

The CFTC published its proposed implementation of the CFMA's section on clearing in the "New Regulatory Framework for Clearing Organizations" on May 14, 2001, and after a comment period, made the new clearing rules final on August 29, 2001.[285]

V. The Impact of the Regulatory Schemes for Clearing on Market Competition

A. Securities

In the securities markets, as discussed above, central clearing came about in response to the 1975 Amendments. While central clearing had an immediate effect on the national clearing system, the goal of bringing about true competition between markets did not occur as quickly. The writers of the 1975 Amendments hoped to create a national market system where large institutional investors, wealthy individuals and small retail investors would participate equally in the market. At that time concern over the growing role of large investors hung over the industry and the SEC hoped to prevent the existence of different markets for the different tiers of investors with different execution costs and prices. One SEC report on a possible future structure of a national market system stated that "[i]nvestors should not pay more than the lowest price at which someone is willing to sell nor sell for less than the highest price a

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12. (M) Participation in appropriate domestic and international information-sharing agreements.
13. (N) Avoidance of actions that are unreasonable restraints of trade or that impose anti-competitive burdens on trading."

(capital letters added) Clearing Organizations—CFTC, http://www.cftc.gov/industryoversight/clearingorganizations/index.htm (last visited October 28, 2010).

[285] A New Regulatory Framework for Trading Facilities, Intermediaries and Clearing Organizations, Proposed Rule, 66 Fed. Reg. 14262 (Mar. 9, 2001) (to be codified as 17 C.F.R. pts. 1, 5, 15, 36, 37, 38, 40, 41, 100, 166, 170, 180); A New Regulatory Framework for Clearing Organizations, Final Rule, 66 Fed.Reg. 45604 (Aug. 29, 2001) (to be codified as 17 C.F.C. pt 39).

buyer is prepared to offer."[286] In the 1975 Amendments, findings regarding the national market system were articulated as follows:

> (C) It is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to assure—
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> (i) economically efficient execution of securities transactions;
>
> (ii) *fair competition among brokers and dealers, among exchange markets and between exchange markets and markets other than exchange markets*;
>
> (iii) the availability to brokers, dealers and investors of information with respect to quotations for and transactions in securities;
>
> (iv) *the practicability of brokers executing investors' orders in the best market*; and
>
> (v) an opportunity, consistent with the provisions of clauses (i) and (iv) of this subparagraph, for investors' orders to be executed without the participation of a dealer.
>
> (D) The linking of all markets for qualified securities through communication and data processing facilities will foster efficiency, enhance competition, increase the information available to brokers, dealers and investors, facilitate the offsetting of investors' orders and contribute to best execution of such orders.[287]

While the 1975 Amendments had admirable goals, it took over twenty years to see true competition among exchanges. The intermarket linkages created by the 1975 Amendments did not immediately have their intended effects. While the new "Consolidated Quotation System," more commonly known as the Consolidated Tape, widely disseminated last sale information for equities, there was no obligation for a broker or dealer other than the

[286] David A. Lipton, *Best Execution: The National Market System's Missing Ingredient*, 57 NOTRE DAME L. REV. 499, 451 (1982) (*quoting* SEC Future Structure of the Securities Markets, 37 Fed. Reg. 5286, 5287 (1972)).
[287] 15 U.S.C. § 78k-1(a) (2006) (emphasis added).

one posting the best bid or offer to use those quotes or go to the best market.[288] Another system, the Intermarket Trading System (ITS), allowed a broker to execute an order in the best market from any exchange.[289] The Consolidated Tape and ITS sought to create a truly national market system where brokers learned where the best price in the market was and either changed their bid-ask to follow suit or simply executed their trades on that market.[290] However, when NYSE, Amex and five regional exchanges in 1978 created ITS, it was a voluntary system.[291] As a result, brokers had no obligation to use the best price when executing their orders and often specialists on regional exchanges simply quoted at NYSE prices because they did not want to compete with the NYSE market makers.[292] Consequently this system had the unintended effect of reinforcing the dominance of the NYSE.

Over the next three decades, four significant developments brought about the current composition of the equities markets. The first was the growing role of technology in the finance world. Since the development of the 1975 Amendments, both dealers and markets have moved away from trading floors to electronic markets. This is best illustrated by the growth of Nasdaq, which started as an electronic quotations system for OTC dealers in 1971.[293] In 1980 the system began showing the best bid and offer, but a trader still needed to make a phone call to make the deal. Four years later, Nasdaq created an electronic matching system and small order automatic execution system. While large trades were still handled over the phones, increased ease of use due to the new technology caused the market to quickly grow and, by 1992, Nasdaq accounted for 42% of

[288] Temporary Order, Exchange Act Release No. 34-15009, 34,851, 34,852 (July 28,1978). *See also* Exchange Act Release No. 16518, 19 SEC Docket 367 (Jan. 22, 1980).
[289] Temporary Order, Exchange Act Release No. 34-14661, 43 Fed. Reg. 17,419, at 17,421 (Apr. 24, 1978).
[290]Lipton, *supra* note 286, at 488.
[291]*Id.*
[292] Daniel J. Harty& Jerry W. Markham, *For Whom the Bell Tolls: The Demise of Exchange Trading Floors and the Growth of ECNs*, 33J. CORP. L. 855, 879 (2008).
[293]NASDAQ.COM FAQ, http://www.nasdaq.com/help/helpfaq.stm (last visited Oct 20, 2010).

total volume share on all U.S. equity markets,[294] beating out the NYSE for volume of annual shares traded.

Mindful of its mandate to provide the best price to all investors, in 1996 the SEC adopted the Order Handling Rules, the second major catalyst for market competition. The SEC promulgated the rules in reaction to the growing popularity of electronic communications networks ("ECNs").[295] ECNs started as alternative trading systems that provided after-hours trading to large investors electronically.[296] Although they originally were not a part of the national market system created in 1975, as ECNs became more efficient and popular, ECN spreads would occasionally become narrower than the public markets.[297] The Order Handling Rules required a market maker or specialist to either report quotes made on ECNs to an exchange or the NASD or otherwise trade on an ECN that provided its quotes to an exchange or the NASD.[298] Because the Order Handling rules did not regulate ECNs directly nor require all participants in the market to follow the reporting rules, the SEC promulgated Regulation ATS in 1998.[299]

Regulation ATS, the third spur to market competition, aimed to "establish a regulatory framework for alternative trading systems and to more fully integrate them into the national market system."[300] Under this regulation, alternative trading systems ("ATS") like ECNs could choose to register either as a broker-dealer or to register as an exchange.[301]In addition, ATSs that registered as broker dealers were required to submit quotes to the public market for NMS-regulated stocks in which they accounted for five percent or more of trading

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[294]JERRY W. MARKHAM, A FINANCIAL HISTORY OF THE UNITED STATES VOL. III: FROM THE AGE OF DERIVATIVES INTO THE NEW MILLENNIUM (1970-2001) 208 (M.E. Sharpe 2002).

[295]*See generally* Order Execution Obligations, Exchange Act Release No. 34-37619A, 61 Fed. Reg. 48290 (Sept. 12, 1996).

[296] S.E.C. Division of Market Regulation, *Special Study: Electronic Communication Networks and After-Hours Trading* (June 2000), *available at* http://www.sec.gov/news/studies/ecnafter.htm.

[297]*Id*.

[298] Order Execution Obligations, 61 Fed. Reg. 48,290 (Sept. 12, 1996).

[299] ATS stands for "Alternative Trading Systems." Regulation of Exchanges and Alternative Trading Systems, Exchange Act Release No. 34-40760, 68 S.E.C. Docket 2045 (Dec. 8, 1998) (promulgating regulations for Alternative Trading Systems).

[300] SEC Division of Market Regulation, *Special Study*, *supra* note 296.

[301]*Id*.

volume in that security.[302] Exchange members could only execute publicly displayed orders.[303] The regulations subjected ATSs with 20% or more of trading volume in the market to various system and discrimination requirements to make qualifying ATSs function more as an exchange.[304] Over the next several years, ECNs like BATS, Archipelago, Instinet, Brut and Island began to capture significant market share from the more traditional exchanges.[305]

In 2005, intending to drive even more significant changes in the equities markets, the SEC promulgated Regulation NMS to modernize and update its rules while maintaining a balance between "vigorous" competitive markets and obtaining the best price for the average investor.[306] Regulation NMS, the fourth regulatory effort to enhance competition, consisted of four different rules: the order protection rule, the access rule, the sub-penny pricing and the market data rules.[307] The "trade-through" rule, as the order protection rule is commonly referred to, aims to prevent the execution of trades on a trading center at prices inferior to trades executed on NMS regulated-stocks.[308] The rule defines a trading center as including "national securities exchanges, exchange specialists, ATSs, OTC market makers and block positioners."[309] One complaint about the order protection rule is that although the rule requires brokers to execute trades on the market that have the top of the book price, the rule does not take into consideration the rest of the book for filling out the order nor the quickest trade execution.[310] Critics also point to another problem: the quickest execution may not be offered by the trading venue with the cheapest top-of-book price.[311] The access rule seeks

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[302] *Id*.
[303] *Id*.
[304] *Id*.
[305] MICHAEL GORHAM & NIDHI SINGH, ELECTRONIC EXCHANGES: THE GLOBAL TRANSFORMATION FROM PITS TO BITS 73 (Elsevier, Inc., 2009).
[306] Regulation NMS, Exchange Act Release No. 34-51808, 70 Fed. Reg. 37,496, 37499-37500 (June 25, 2005).
[307] *Id*. at 37501-37504.
[308] *Id*. at 37504.
[309] *Id*.
[310] *See* Stavros Gadinis, *Market Structure for Institutional Investors: Comparing the U.S. and E.U. Regimes*, 3 VA. L. & BUS. REV. 311, 350 (2008).
[311] Stavros, *supra* note 310, at 250.

to allow non-discriminatory access to quotes and the sub-penny rule allows quotations to occur at sub-penny prices.[312]

With the increase in volume in electronic trading and sub-penny trading, spreads have narrowed. In addition, electronic trading has helped give rise to high-frequency traders, who utilize powerful computers and highly specialized algorithms to make trades at millisecond speed.[313]Although critics contend that high frequency trading takes profits away from the average investor without access to the same technical capabilities, these traders greatly increase market liquidity.[314] Additionally, transaction costs continue to fall as competition between securities trading venues increases and the ease of transacting in multiple markets increases.[315] One ECN founded in 2005, BATS Exchange, Inc., acquired significant market share in the past five years and ultimately made the decision in August 2008 to register as an exchange.[316] As a result of the new regulatory scheme, competition among exchanges has become fierce, resulting in the reduction of market share by listing venues for their own listed stocks. In March 2010, trading on the NYSE accounted for approximately 33% of trading of NYSE-listed securities (down from 84% in 2004) and 12.7% of the overall market.[317] For the same month, the trading of Nasdaq-listed stocks on Nasdaq only accounted for approximately 28% of the market for its listed stocks (down from 56% in the final quarter of 2003), and its overall U.S. securities

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[312]Regulation of the National Market System, 17 C.F.R. § 242.610 (2005), LEXSTAT 17 CFR 242.610; Regulation of the National Market System, 17 C.F.R. § 242.612 (2005), LEXSTAT 17 CFR 242.612.

[313]Mark D. Perlow& C. Dirk Peterson, *SEC Publishes Concept Release on Market Structure, Proposes Risk Management Rules for Sponsored Access*, K&L Gates Newsstand (Feb. 15, 2010), http://www.klgates.com/newsstand/detail.aspx?publication=6219.

[314]*Id.*

[315]Nina Mehta, *SEC Opens Discussion of Regs ATS and NMS*, Traders Magazine (Oct. 9, 2009), http://www.tradersmagazine.com/news/sec-strategic-plan-ats-nms-104472-1.html?ET=tradersmagazine:e417:47854a:&st=email (last visited Apr. 21, 2010).

[316]Serena Ng & Aaron Lucchetti, *BATS Exchange Gains SEC's Approval*, WALL ST. J. (Aug.19, 2008).

[317]*See* NYSE Euronext Monthly Volume Summary, http://www.nyse.com/pdfs/NYSE_Euronext_Transactions_Data.pdf (last visited October 13, 2010).

market share was 19.24%.[318] BATS Exchange, the third largest exchange, captured approximately 9.5% of the market for that month.[319]

B. Options

The securities options markets had a much simpler, although not completely turbulence-free, route to bringing about competition between markets. After the SEC-mandated spin-off of the OCC from CBOE to create a central clearinghouse, the SEC slowly approved options pilot programs at four more exchanges, the Amex, the Philadelphia Stock Exchange, the Pacific Stock Exchange and the Midwest Stock Exchange.[320] With the options exchanges in their nascent developmental stages, the SEC initially opted to delay imposing the requirements of the full national market system to give the exchanges a chance to build trading volume. The SEC even enforced a moratorium on multiple listings and expansion of options contracts for the majority of the 70s.[321] In 1980 the SEC ended the moratorium, but deferred further action hoping to spur the creation of a "fairer, more efficient market structure within which multiple trading would occur."[322] Meanwhile, the SEC approved an "Allocation Plan" submitted by the options exchanges.[323] This plan designated specific exchanges to be the trading venues for new

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[318] *See* Market Share Statistics, http://www.nasdaqtrader.com/trader.aspx?id=marketshare (last visited Apr. 20, 2010); *Nasdaq losses widen as market share continues to decline*, FINEXTRA.COM (Feb. 26, 2004), http://www.finextra.com/News/fullstory.aspx?newsitemid=11278.

[319] BATS Global Markets Reports March Volumes (Apr. 1, 2010), http://batstrading.com/resources/press_releases/BATSGlobal_March2010_FINAL.pdf.

[320] *See* Order Directing Options Exchanges To Submit an Inter-Market Linkage Plan Pursuant to Section 11A(a)(3)(B) of the Securities Exchange Act of 1934, Exchange Act Release No. 34-42029, 64 FR 57674 (Oct. 26, 1999); Exchange Act Release No. 11423, 6 S.E.C. Doc. 894 (May 28, 1975); Exchange Act Release No. 34-12283, 41 FR 14454 (Apr. 5, 1976); Exchange Act Release No. 34-13045,41 FR 54783 (Dec. 15, 1976).

[321] Termination of the Options Moratorium, Exchange Act Release No. 16701, 19 SEC Docket 998, (March 26, 1980).

[322] *Id*.

[323] *See* Exchange Act Release No. 16863 (May 30, 1980) 20 S.E.C. Docket 237 (June 5, 1980).

options resulting in a monopoly system for specific option contracts.[324]

Over the next decade, the SEC encouraged the options exchanges to pursue the development of intermarket linkages and to study and discuss multiple listings.[325] The exchanges submitted a study of these proposals and concluded pursuing linkages and multiple listings was not in the interest of the exchanges.[326] In 1986 the SEC came to a different conclusion, and released a Staff Report which indicated that, although their volume was concentrated in a single exchange venue, multiple-listed options on OTC stocks had significantly narrower bid-ask spreads than single listed options on the exchange-listed stocks.[327] One of the studies used data in support of the "'contestable markets' theory, which maintains that effective competition does not depend on the number of actual competitors, but rather only upon the ease of entry and exit into the market."[328] Because central clearing existed in the options industry, as opposed to the futures industry, investors could buy contracts on one exchange and sell them on another to close out their positions, making the decision on execution venue much simpler. As a result, after deliberation, in 1989, the SEC adopted Rule 19c-5 of the Exchange Act, which provided that "no rule, stated policy, practice, or interpretation of this exchange shall prohibit or condition, or be construed to prohibit or condition or otherwise limit, directly or indirectly, the ability of this exchange to list any stock options class because that options class is listed on another options exchange."[329]

In spite of the promulgation of Rule 19c-5 and quite a bit of discussion in the 1990s, the SEC's request for intermarket linkages

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[324] *Id.*

[325] *Id.*; Exchange Act Release No. 34-22026, 50 FR 20310 (May 15, 1985); Exchange Act Release No. 34-24613, 52 FR 23849 (June 25, 1987).

[326] Multiple Trading of Standardized Options, Exchange Act Release No. 34-26870, 54 FR 23963 (June 5, 1989); Interim Report of the American, Pacific, and Philadelphia Stock Exchanges and the Chicago Board Options Exchange in Response to Release No. 34-16701(Jan. 8, 1981).

[327] Exchange Act Release No. 26870, *supra* note 326(*citing* Directorate of Economic and Policy Analysis, *The Effects of Multiple Trading on the Market for OTC Options* (Nov. 1986); *citing* Office of the Chief Economist, *Potential Competition and Actual Competition in the Options Market* (Nov. 1986) [herein "OCE Study"]).

[328] *Id*. (citing OCE Study at 2).

[329] *See* Exchange Act Release No. 26870, *supra*note 326; 17 C.F.R. § 240.19c—5(a)(3) (2010).

did not come to immediate fruition.[330] With the Allocation Plan no longer in place, the options exchanges agreed to a "Joint Plan" approved by the SEC in 1991 that delineated the procedures for the exchanges to follow for multiple listings of new options and for the listings of existing options.[331] A purported "gentleman's agreement," however, kept exchanges from listing options on securities already listed on another exchange for the next decade.[332]

The state of limited competition among listing venues persisted until the end of the decade when three events occurred: (1) the first all-electronic options exchange was founded, (2) the SEC increased its pressure on the industry to properly comply with Rule 19c-5 and its earlier requests to develop intermarket linkages and (3) the exchanges began multiple listings of each other's biggest contracts following intervention by the DOJ. In 1998, two years before it would actually begin operations, the International Securities Exchange ("ISE"), the first new exchange registered in over two decades, announced plans to compete with the existing exchanges by listing their best performing options contracts.[333] ISE brought competition to the options industry, planning on competing by offering improvements in price, technology and speed. When ISE launched in May 2000, it began listing contracts rapidly, establishing its viability. By the end of 2003, ISE was the world's largest options exchange.[334]

In November 1998, the DOJ opened an investigation into the alleged collusion between the existing options exchanges, and the SEC opened one shortly thereafter.[335] Soon thereafter, in August 1999, the "gentleman's agreement" broke down when the CBOE announced it would trade options on Dell, traditionally a Philadelphia Exchange contract. When the Amex soon followed suit, the Philadelphia Exchange quickly retaliated by listing options on

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[330]*See* Securities Exchange Act Release No. 42029, *supra* note 320.

[331] Exchange Act Release No. 29698, 56 FR 48594 (Sept. 25, 1991).

[332] Carl A. Royal, *Competition Among Options Exchanges Heats up*, FUTURES INDUSTRY MAGAZINE (Aug./Sept. 2000), http://www.futures industry.org/fi-magazine-home.asp?a=653.

[333]GORHAM & SINGH, *supra* note 305, at 136.

[334]Daniel Gross, *The Collapse of the American Stock Exchange*, SLATE MAGAZINE (Jan. 13, 2004), http://www.slate.com/id/2093830.

[335]Comparative Impact Statement, United States v. AMEX, (Sept. 11, 2000), http://www.justice.gov/atr/cases/f6400/6460.pdf.

several CBOE- and Amex-exclusive contracts.[336] Soon the Amex and the CBOE were directly competing in their most active contracts and the fourth options exchange, the Pacific, followed suit as well. Market share in the formerly monopolized contracts was soon democratized by the multiple listings, and by the end of 2001 almost every moderately active options contract was listed and traded at multiple exchanges.[337]

Ultimately, the DOJ filed an antitrust claim in June 2000 against the options exchanges seeking to enjoin the exchanges from continuing their collusion, regardless of their actions since the previous summer.[338] The DOJ noted that this sudden change in behavior was not "explained by concurrent changes in the market or the fundamentals of the underlying stocks."[339] In December 2000, the Washington D.C. Federal District Court found in favor of the DOJ, enjoining the defendant exchanges from engaging in anti-competitive conduct.[340]

The SEC pursued multiple actions simultaneously. The first was to reiterate its earlier requests regarding intermarket links to enable the creation of an efficient national market with best execution for customers. Starting in February 1999, the SEC repeatedly requested the development of such a plan, ultimately ordering its submission by October 1999.[341] Then, the next July, the SEC approved a plan combining proposals from ISE, CBOE and Amex.[342] The combined proposal focused on exchange competition on a variety of fronts, not solely on price and time priority. They also focused on competition by including quick turnaround on fills, low costs, superior order handling systems, low error rates and enhanced liquidity and depth of the markets. [343]

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[336] *See* Royal, *supra* note332.
[337] *Id.*; GORHAM & SINGH, *supra* note305, at 136.
[338] Complaint, United States v. AMEX (Sept. 11, 2000), http://www.justice.gov/atr/cases/f6400/6468.pdf.
[339] Comparative Impact Statement, *supra* note 335.
[340] Final Judgment, United States v. AMEX,2001-1 Trade Cas. (CCH) P73258 (D.D.C. Dec. 6, 2000), *available at* http://www.justice.gov/atr/cases/f201200/201201.pdf (holding in favor of the DOJ).
[341] *See* Exchange Act Release No. 42029, *supra* note 320.
[342] Joint Industry Plan; Order Approving Options Intermarket Linkage Plan Submitted by the American Stock Exchange LLC, Chicago Board Options Exchange, Inc., and International Securities Exchange LLC, Exchange Act Release No. 43086, 65 FR 48023 (Aug. 4, 2000).
[343] *See* Royal, *supra* note 332.

The SEC also believed that the traditional options exchanges had inadequately discharged their responsibilities over the prior ten years as SROs to comply with the Exchange Act on several counts.[344] The allegations were based on their efforts to limit multiple listings and frustrate Rule 19c-5.[345] As a result, the SEC issued an Order requiring the exchanges to take a variety of actions aimed at encouraging competition in the options markets and furthering the goal of a national market system.[346]

In the ensuing decade, clearing and execution fees have decreased while volume on the options exchanges has increased. In 2000, the year the ISE launched, ISE traded 50,000 contracts a day, the CBOE traded 1.2 million contracts a day and the industry as a whole traded just 2.9 million contracts a day. By the end of the decade, in 2009, ISE traded 3.8 million contracts a day, the CBOE traded 4.5 million contracts a day and the entire options industry traded 14.4 million contracts a day. The CBOE, after the increase in competition, increased volume approximately 366% and the industry increased volume by a staggering 498%.[347]

VI. Compare and Contrast

Having reviewed the history of the securities and securities options markets subsequent to the imposition of central clearing, this work now turns to a discussion of clearing in the futures industry. Regardless of central clearing, the equity and equity options markets have been significantly affected by the rapid growth of technology in

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[344] *See* Order Instituting Public Administrative Proceedings Pursuant to Section 19(h)(1) of the Securities Exchange Act of 1934, Making Findings and Imposing Remedial Sanctions, Exchange Act Release No. 43268 (Sept. 11, 2000), Administrative Proceeding File No. 310282.
[345] *Id.* at 5.
[346] *Seeid.*
[347] *See* Historical Volume Query, THE OPTIONS CLEARING CORP., http://www.optionsclearing.com/webapps/historical-volume-query (last visited May 10, 2010); Volume and Share Statistics, ISE.COM, http://www.ise.com/WebForm/volume_statistics.aspx?categoryId=482 (last visited May 10, 2010); CBOE Annual Report 2000, CBOE.COM, http://www.cboe.com/AboutCBOE/AnnualReportArchive/AnnualReport2000.pdf (last visited May 10, 2010); Press Release, *CBOE 2009 Trading Volume Exceeds One Billion Contracts for Second Straight Year* (Jan. 4, 2010), http://www.cboe.com/AboutCBOE/ShowDocument.aspx?DIR=ACNews&FILE=cboe_20100104.doc (last visited May 10, 2010).

the last two decades. In the securities markets, the creation and subsequent popularity of ECNs, as well as the promulgation of Regulation ATS, eased entry into the market, which made competing with traditional exchanges like the NYSE a much more realistic objective for a new entrant. Similarly, the founding of ISE marked a major turning point in the options industry, both in total volume and in competition. For the average trader or broker, trading on different exchanges or execution venues has now become as easy as a click of a mouse. Central clearing greatly facilitates such ease of access to multiple venues because traders do not have to worry about which exchange they trade on. All shares clear at a common venue.

In the futures industry, although similar technology has taken root, there is no common or central clearing venue, thus a contract bought on one exchange must have its matching sale done on the same exchange in order to offset the position. Market participants do not enjoy the same flexibility in transacting on multiple competing execution venues as a result of the long-standing structure of vertical integration of a trading venue with its clearinghouse. Despite occasional efforts by upstarts to take liquidity away from the dominant exchange, the CME Group enjoys 95% of the market for domestic futures and options contracts.[348] As the primary regulator, the SEC has played a significant role in the development of market competition for equities and securities options markets by mandating central clearing and consistently advancing new rules to further market competition.

In contrast, the futures industry has no national market system. Consequently, the futures exchanges do not have a consolidated tape, national best bid and offer, or a best execution requirement to benefit customers in those few situations where the same contract trades at different venues. Elsewhere, the SEC took vital pro-competitive actions in pursuit of encouraging competition between trading venues. In securities, among other important actions, the SEC directed the exchanges to rescind any existing rules tying clearing and settlement to one specific venue.[349]

The 2008 DOJ review of the futures markets, specifically financial futures, finds that the current clearing structure "discourag[es] innovation and perpetuat[es] high prices for exchange

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[348] *See* Futures Industry Association, U.S. Volume Report (Feb. 2010).

[349] Securities Exchange Act Release No. 14636 at 1, 1978 WL 196700 (S.E.C. Apr. 7, 1978).

services."[350] As a part of its argument, it noted that competition in the futures industry typically was limited to the introduction of new products, and that lasted only until one exchange had captured the majority of the liquidity in the product.[351] Because traders worry about not being able to exit a position, brokers most often execute orders on the exchange with the most liquidity.

Central clearing of futures products would allow fungibility between similar contracts traded on different exchanges, which would enable traders to execute according to the best price without worrying about liquidity problems.[352] The DOJ also believed that a single clearinghouse for the entire industry would allow more correlated contracts and financial products to offset each other, thus reducing the total sum of money necessary to margin a clearing member's positions, citing the $1.4 billion reduction in clearing liabilities which occurred subsequent to the CBOT's switch to the CME clearinghouse.[353] The DOJ analyzed the repeated failures to challenge the CME Groups hold on the financial futures market and noted both that (1) during the brief periods of competition, the market benefits in better prices and innovation and (2) that exchange control over the open interest and clearing facilities inhibits both competition in and entry to the market.[354]

Noting that the CFMA's new direct authority over DCO's did not require that the current clearing structure be maintained, the DOJ urged the Department of the Treasury to initiate a more formal study of the benefits that central clearing could bring to the futures industry.[355]

VII. Possible Routes for Central Clearing to Happen in the Futures Markets

The CFTC does not have a congressional mandate to create a national clearing system for futures as the SEC did in the 1970s.

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[350]U.S. DEP'T OF JUSTICE, REVIEW OF THE REGULATORY STRUCTURE ASSOCIATED WITH FINANCIAL INSTITUTIONS, 1 (Jan. 31, 2008), http://www.justice.gov/atr/public/comments/229911.pdf.
[351]*Id.* at 6.
[352]*Id*.
[353]*Id*. at 7, n. 18 (citing *Q3 2003 Chicago Mercantile Holdings, Inc. Earnings Conference Call,* Fin. Disclosure Wire, Nov. 5, 2003, at 8).
[354]*Id*. at 16.
[355]*Id.* at 22.

However, if as the DOJ suggested in its letter to the Treasury of January 31, 2008, the CFTC were to decide to press for central clearing due to its new principles-based regulation, there appear to be several viable paths for it to do so as a regulator without any specific action or directive of Congress to change the market structure.

Core Principles in the CEA require both DCOs and DCMs to avoid anticompetitive conduct. DCO Core Principle N, "Antitrust Considerations," reads:

> (N)Antitrust considerations
> Unless appropriate to achieve the purposes of this chapter, the derivatives clearing organization shall avoid—
> (i) adopting any rule or taking any action that results in any unreasonable restraint of trade; or
> (ii) imposing any material anticompetitive burden on trading on the contract market.[356]

Additionally, DCM Core Principle 18 provides an even tougher standard for exchanges in abiding by antitrust obligations. Its language is identical to that of DCO Core Principle N, except that in the first sentence the phrase "necessary or" appears before "appropriate."[357] Thus, DCMs cannot engage in prohibited anti-competitive conduct unless doing so is "necessary," not just appropriate. Given such a high bar governing anticompetitive conduct by DCMs, the CFTC may act on the basis of the parent exchange using its control of the captive DCO to refuse clearing access by competing exchanges that offer the same or similar contracts to those offered by the offending DCM.

Under Section 12(a)(1), the CFTC has the power, to ensure "efficient execution" of the CEA, to "make such investigations at it deems necessary to ascertain the facts regarding the operations of boards of trade and other persons subject to the provisions of this chapter"[358] The CFTC's investigative power can be used to support a finding of anticompetitive DCM and DCO conduct in violation of Core Principles 18 and N, respectively. If the CFTC were to make a finding that a futures exchange used its control of the captive

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[356] 7 U.S.C. § 7a-1(c)(2)(N) (2006).
[357] 7 U.S.C. § 7(d)(18) (2006).
[358] 7 U.S.C. § 12(a)(1) (2006).

clearinghouse to restrict competition with other futures exchanges in violation of Core Principles 18 and N, the CFTC as regulator would have the authority to remedy what it finds in violation of the statute it was created to uphold. If such a finding is made, the CFTC has the power to alter or supplement the rules of a registered entity that fails to alter their rules upon request of the CFTC as long as it had ample opportunity for notice and hearing. Section 12a(7) provides this power, "insofar as necessary or appropriate by rule or regulation or by order," if the CFTC deems that such an alteration is needed for "the protection of persons producing, handling, processing, or consuming any commodity traded for future delivery on such registered entity, or the product or byproduct thereof, or *for the protection of traders or to insure fair dealing in commodities traded for future delivery on such registered entity*."[359]

> Such rules, regulations, or orders may specify changes with respect to such matters as—
> (A)terms or conditions in contracts of sale to be executed on or subject to the rules of such registered entity;
> (B)the form or manner of execution of purchases and sales for future delivery;
> (C)other trading requirements, excepting the setting of levels of margin;
> (D)safeguards with respect to the financial responsibility of members;
> (E)the manner, method and place of soliciting business, including the content of such solicitations; and
> (F)the form and manner of handling, recording and accounting for customers' orders, transactions and accounts.[360]

Section 12(a)(1), added by the CFMA, replaces a previous section, 5a(a)(12)(A), with some key differences. First, section 12(a)(1) replaced the phrase "contract market" with "registered entity", thus extending this power of the CFTC over all entities registered with the CFTC, including DCOs.[361] Second, the list of matters outlined in

[359] 7 U.S.C § 12a(7) (2006) (emphasis added).
[360] *Id.*
[361] PHILIP M. JOHNSON & THOMAS L. HAZEN, DERIVATIVES REGULATION1038-39 (Aspen Publishers 2004).

Section 12a(7) is expansive, not exhaustive, awarding the CFTC the ability change additional rules as appropriate.[362]

Separate from the CFMA's Core Principles, the CFTC Act added the following language to the CEA in 1974:

> The Commission shall take into consideration the public interest to be protected by the antitrust laws and endeavor to take the least anticompetitive means of achieving the objectives of this chapter, as well as the policies and purposes of this chapter, in issuing any order or adopting any Commission rule or regulation (including any exemption under section 6(c) or 6(b) of this title), or in requiring or approving any bylaw, rule, or regulation of a contract market or registered futures association established pursuant to section 21 of this title.[363]

The foregoing provision requires the CFTC to consider the least anticompetitive means of achieving the goals of the CEA when issuing its own orders and regulations as well as approving those of DCMs. The CFTC, however, has in the past asserted that "antitrust policy must recede to regulatory needs" in arguing that it does not always have the responsibility to choose the least anticompetitive means of achieving the goals of the CEA.[364]

The provisions and core principles in the CEA are not the same as the definitive, powerful mandate the SEC received in the 1975 Amendments. Even with that mandate, the securities exchanges themselves made the pro-active decision to merge their clearinghouses to form the NSCC. Although the SEC forced the spin-off of the OCC, that came about as a function of both the SEC's statutory authorization and the timing of the founding of the options industry.

Even if mandating the creation of a central clearinghouse were beyond the regulatory powers of the CFTC without a specific act of Congress, the CFTC could still "alter or supplement" the rules of existing DCOs to accommodate competition, where very little exists today.

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[362] *Id.* at1038.
[363] 7 U.S.C. § 19(b) (2006).
[364] *See*Johnson,*supra* note 362, at 971.

Viewing the options for clearing as a spectrum between the vertical and horizontal clearing model, the proposal closest to the common clearing model would be to require non-discriminatory open access to clearing facilities, including the ability to transfer open position between clearinghouses in order to offset obligations or reduce margin requirements. In this model, market participants would be able to clear their trades at a clearing venue of their choice, causing the venues to compete for business as well as exchanges. Inasmuch as each clearinghouse would have the responsibility to risk manage the positions within its four walls, such "open access" would not create any new systemic risk.

At the other end of the spectrum would simply be the ability to move blocks of open interest from one exchange to another. Since 2002, the NYMEX, now a part of the CME Group, has offered traders a transaction that enabled a trader to simultaneously liquidate a Brent Crude Oil futures contract at the International Petroleum Exchange (now ICE Europe) and establish an identical position at NYMEX via matched block trades.[365] As the NYMEX/ICE transaction currently operates, both sides of the trade pay a fee to execute such a trade, so it does not represent true fungibility. This mechanism, on a wider scale, could at the very least build confidence in market participants about their ability to move open interest if needed.

In addition to the CFTC's powers to force competition among exchanges, the DOJ could choose to follow up on its 2008 comments to the Department of the Treasury with an antitrust lawsuit against exchanges that control their clearing organizations to protect their trading activities against competition.

If the DOJ continues to believe that the current regulatory structure allows a dominant futures exchange to exercise its control over its clearinghouse for monopolistic market power in violation of the Sherman Antitrust Act, it is possible that the DOJ might simply take matters into its own hands and bring suit to sever the clearinghouses from their parent exchanges. While an extensive analysis of antitrust is not within the scope of this article, it is the authors' view that the current clearinghouse structure in the futures markets frustrates competition.

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[365] *See* Letter from Jean A. Webb, Secretary, CFTC, to J. Robert Collins Jr, then-President, NYMEX (May 2, 2002) (notifying NYMEX of the CFTC's approval of NYMEX Rule 6.21D).

VIII. Conclusion

The difference in the current state of the SEC-regulated markets and the CFTC-regulated markets is striking. The roots of this difference can be traced back to several key divergences in the developmental history of their markets, especially the differences in clearing over the last forty years. For the securities industry, from the very beginning the existence of an independent federal regulator, the SEC, gave the markets the protection of a powerful governmental agency with a clear mandate. Additionally, oversight from the finance committees in Congress enabled regulation to be in sync with the realities and needs of the finance industry. The SEC's mandate and regulatory abilities grew even stronger with the 1975 Amendments. By the time the options markets came into existence, the SEC had been operating for forty years. The experience and established role of the SEC played a significant role in its actions in mandating central clearing in these markets as well.

In contrast, the futures industry, with its roots in agriculture, has not received the same regulatory attention throughout its existence. From the beginning, the futures markets did not have an independent or powerful national agency regulating them. Unlike the finance committees, the agriculture committees overseeing the commodities industry did not have the same experience regulating investment markets, nor the same goals and aims in regulating them. As a result, in the 1970s, when the CFTC was finally created, Congress did not anticipate the regulatory powers needed in light of the explosion of growth in the industry subsequent to the introduction of financial futures, nor did it recognize the pivotal role that the clearing industry would play in the market structure of the financial markets. Over thirty years later, the futures industry features a monopoly and the other two major markets do not. While several factors have contributed to the current environment, the stark difference in clearing models stands out as a major contributing factor. With the growing interest in regulating derivatives as a key driver of our financial markets, regulation of the commodities industry should now mature to provide for competitive market structures in the way the securities industry has over time.

The CFTC Act was written right before the explosion of financial futures contracts that changed the landscape of the futures industry. Thus, it did not anticipate the regulatory powers needed in light of the impending changes in the futures markets. More than thirty years later, the futures industry is being recognized as a crucial

part of the economy, yet it features an exchange monopoly while the other two major exchange markets do not. Improving the level of competition in the futures industry, whether through regulatory action, legislative changes, or enforcement action in the antitrust arena, would enhance services, customer pricing and innovation as it has in so many other industries.

THE CHANGING FACE OF MONEY

CHRISTOPHER M. BRUNER[*]

I. Introduction

It is a truism that each generation views money differently. Parents of baby boomers, having lived through the Great Depression, are understandably said to be savers. Boomers themselves, on the other hand, while "arguably the most prosperous generation in American history," have tended to short-change saving for retirement—though often to assist their adult children, "from paying their college loans and allowing them to move home and live rent free, to paying off their credit card debt and making mortgage payments for them."[1] Tellingly, the U.S. personal savings rate plummeted from 10.1 percent in 1970 to 0.8 percent in 2005, while the household financial obligations ratio rose from 13.4 percent in 1980 to 17.6 percent in 2007.[2] Consumer spending, meanwhile, "has become the largest component of U.S. gross domestic product," representing over two-thirds of U.S. economic activity.[3]

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[1] Ameriprise Financial, *The Ameriprise Financial Money Across Generations Study*, Sept. 2007, at 3, 7, 9.

[2] *See* Harold James, *The Enduring International Preeminence of the Dollar, in* THE FUTURE OF THE DOLLAR 24, 36 (Eric Helleiner & Jonathan Kirshner eds., 2009); Federal Reserve Board, Household Debt Service and Financial Obligations Ratios, http://www.federalreserve.gov/Releases/ housedebt/. The household financial obligations ratio represents the ratio of various estimated payments (i.e. mortgages, consumer debt, automobile leases, rental payments on tenant-occupied property, homeowners' insurance, and property taxes) to disposable personal income. *Id.*

[3] Elaine L. Chao & Kathleen P. Utgoff, *100 Years of U.S. Consumer Spending: Data for the Nation, New York City, and Boston*, Rep. 991 Dep't of Labor (May 2006). *See also* Stephanie Rosenbloom, *Upbeat Signs Revive Consumers' Mood for Spending,* N.Y. TIMES, Apr. 6, 2010, http://www.nytimes.com/2010/04/07/business/07shop.html.

In this light, perhaps there is some justice in the refrain that kids these days don't know the value of a dollar. To be fair, however, the dollar itself is a moving target. For example, silver certificates from my grandfather's collection suggest that the value of the U.S. dollar may have been a more straightforward matter back in the day. One such certificate, series 1957A, forthrightly states: "This certifies that there is on deposit in the Treasury of the United States of America one dollar in silver payable to the bearer on demand." A dollar bill plucked from my billfold, though aesthetically similar, provides no such certification. Cryptically labeled "Federal Reserve Note," my series 2006 dollar offers no explanation of its value, simply declaring its adequacy as "legal tender for all debts, public and private."

As I write this essay, the dollar's adequacy is a matter of considerable debate. In the wake of a catastrophic financial and economic crisis, there is strong visceral appeal to the notion that one could hand in paper currency and demand a tangible lump of precious metal in return.[4] Amidst reports of a potential downgrade of U.S. sovereign debt;[5] volatility in credit default swaps on U.S. Treasury securities (a form of quasi-insurance against default);[6]

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[4] *Cf.* Colin Barr, *Dollar takes another drubbing,* CNNMONEY.COM, Oct. 6, 2010, http://finance.fortune.cnn.com/2010/10/06/dollar-takes-another-drubbing/ (linking the rising price of gold to the expectation of increases in the money supply); Carolyn Cui, *Gold Vaults to New High,* WALL ST. J., Sept. 29, 2010, at A1-A2 (linking gold's rise to concern that "if the Federal Reserve pumps more money into the system, its efforts might hurt the value of the U.S. dollar and possibly stoke inflation"); Liam Hallingan, *Policy makers must do more than print money and hope for the best,* THE TELEGRAPH, Sept. 25, 2010, http://www.telegraph.co.uk/finance/comment/liamhalligan/8025121/Policy-makers-must-do-more-than-print-money-and-hope-for-the-best.html ("[I]t's no surprise that many investors are now taking refuge in tangible assets, anything that Western governments can't debase by printing more of.").

[5] *See, e.g.,* Joanna Slater, *Moody's Puts U.S., U.K. on Chopping Block*, WALL ST. J., Dec. 8, 2009, at C2.

[6] *See, e.g.,* Katy Burne, *Cost to Insure US Govt Debt 30% Higher Since August—Fitch,* WALL ST. J., Oct. 15, 2010, http://online.wsj.com/article/BT-CO-20101015-707783.html. *See also* Stephen Bainbridge, *What, Me Worry? Credit Default Swaps on US Treasuries*, http://www.professorbainbridge.com/professorbainbridgecom/2010/02/what-me-worry-credit-default-swaps-on-us-treasuries.html (Feb. 20, 2010, 23:01 EST) (noting that "the price of credit default swaps on US treasuries has been rising lately").

clamoring by dollar-saturated foreign governments to reduce global reliance on the greenback in international trade and finance;[7] and concerns regarding the efficacy and consequences of the Federal Reserve's expansion of the money supply following the crisis,[8] there is growing anxiety at home and abroad that our monetary foundation may be eroding.

Such headlines raise important questions about how we finance our lives—both individually and collectively. What would it mean to reduce global reliance on the dollar? What alternatives exist, and how might they affect the United States? What is the value of a dollar in the first place? How might the dollar's value change in the wake of the crisis?

In this essay I argue that widespread failure to comprehend the intrinsic nature of modern money loomed large in the recent crisis, and that broader comprehension of its meaning is a precondition for effective post-crisis reforms. First, I provide a brief history of money, emphasizing its gradual divergence from inherent value. I then consider the value of today's dollar in economic, legal and psychological terms, arguing that each perspective conveys a single over-arching lesson—that better comprehending our money requires better comprehending ourselves. The introspection that this exercise demands reveals with unique clarity some of the critical lessons of the crisis and its aftermath.

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[7] *See, e.g.,* Andrew Batson, *China Takes Aim at Dollar,* WALL ST. J., Mar. 24, 2009, at A1 ("China called for the creation of a new currency to eventually replace the dollar as the world's standard, proposing a sweeping overhaul of global finance that reflects developing nations' growing unhappiness with the U.S. role in the world economy."); Robert Fisk, *The demise of the dollar,* THE INDEPENDENT, Oct. 6, 2009, http://www.independent.co.uk/news/business/news/the-demise-of-the-dollar-1798175.html (reporting that "Gulf Arabs are planning—along with China, Russia, Japan and France—to end dollar dealings for oil"); John Ydstie, *Dollar Loses Its Luster As Reserve Currency,* NPR, Oct. 9, 2009, http://www.npr.org/templates/story/story.php?storyID=113650226 (reporting that "there's been renewed talk in some quarters of finding an alternative for the dollar as the world's major reserve currency—and, also, pricing oil in something other than dollars").

[8] *See supra* note 4.

II. A Brief History of Money

Money evolved as a means of facilitating transactions in goods and services. Adam Smith, having outlined the benefits of a division of labor in Book I of *The Wealth of Nations*, speculates that exchanging one's surplus for that of another in earlier times "must frequently have been very much clogged and embarrassed in its operations"—because in a barter economy, value-enhancing exchanges occur only when each party requires precisely what the other offers.[9] This, concludes Smith, must have led "every prudent man in every period of society" to seek to have on hand "a certain quantity of some one commodity or other, such as he imagined few people would be likely to refuse in exchange for the produce of their industry."[10]

A widely valued commodity, as Smith suggests, can perform the core functions that economists ascribe to money. Niall Ferguson explains that in addition to providing "a medium of exchange" avoiding the "inefficiencies of barter," money serves as "a unit of account, which facilitates valuation and calculation," as well as "a store of value, which allows economic transactions to be conducted over long periods as well as geographical distances."[11] While any number of resources might serve as a medium of exchange, a unit of account and a store of value, there has long been a strong attraction to metals. Ferguson observes that the ideal commodity must be "available, affordable, durable, fungible, portable and reliable," and that metals like gold and silver "were for millennia regarded as the ideal monetary raw material" precisely because they possess this suite of practical attributes.[12]

Due to the widespread use of gold and silver coins through the ages, and their resulting popular association with wealth, there has long been a colloquial tendency to speak of money and such

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[9] ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS ¶ I.4.2 (W.B. Todd ed., OUP 1997) (1776).

[10] *Id.*

[11] NIALL FERGUSON, THE ASCENT OF MONEY 24 (Penguin Books 2009). *See also* Eric Helleiner & Jonathan Kirshner, *The Future of the Dollar: Whither the Key Currency?, in* THE FUTURE OF THE DOLLAR, *supra* note 2, at 1, 3-4.

[12] FERGUSON, *supra* note 11, at 24-25. *See also* Ali Khan, *The Evolution of Money: A Story of Constitutional Nullification,* 67 U. CIN. L. REV. 393, 402 (1999) (suggesting that the limited supply of gold and silver facilitated market stability).

metals as if they possessed some fixed, intrinsic worth. That money itself is subject to the same law of supply and demand as any commodity, however, is a lesson that nations have learned the hard way. Smith, for example, recounts that Spain's "discovery of the abundant mines of America reduced, in the sixteenth century, the value of gold and silver in Europe to about a third of what it had been before"—the straightforward consequence being that "when they were brought thither they could purchase or command less labour."[13] Quantifying value at a point in time is of course critical to money's economic utility, rendering it, in Smith's words, "the great wheel of circulation."[14] As Smith rightly observes, however, value "does not so properly consist in the piece of gold, as in what [one] can get for it"—that is, its purchasing power, which inevitably varies over time.[15]

Money, then, has always been at most a proxy for real value. Over the course of centuries, however, creative financial innovations have progressively taken the concept to further heights of abstraction, gradually substituting for metals the paper bills we take for granted today. While gold reigned supreme as the "traditional standard of value" from the earliest use of coins (about 700 B.C.), paper money evolved alongside it, eventually displacing it over the last century.[16]

Thought to have originated in third-century B.C. China, accounts of paper money first reached Europe through Marco Polo's account of Kublai Khan's money in the late-thirteenth century A.D.[17] Explaining that "the Great Khan" had "mastered the art of alchemy," Polo describes the production of paper money from the bark of mulberry trees—appropriately enough, the food source for that engine of ancient commerce, the silk worm.[18] Kublai Khan's paper money exemplifies what economists today call "fiat money"—money not linked to any commodity, but simply declared by a sovereign to constitute legal currency.[19] While the value of modern fiat money is substantially a function of market perception (explored

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[13] SMITH, *supra* note 9, ¶ I.5.7.
[14] *Id.* ¶ II.2.23.
[15] *Id.* ¶ II.2.19.
[16] *See* MARY ELLEN SNODGRASS, COINS AND CURRENCY 187 (2003).
[17] *See, e.g.,* HERNANDO DE SOTO, THE MYSTERY OF CAPITAL 222 (2000); A. HINGSTON QUIGGIN, A SURVEY OF PRIMITIVE MONEY 248 (1949); SNODGRASS, *supra* note 16, at 317.
[18] MARCO POLO, THE TRAVELS 147 (Ronald Latham trans., Penguin 1982).
[19] *See* SNODGRASS, *supra* note 16, at 163.

below), Kublai Khan took a far more direct approach, simply decreeing that anyone within his kingdom refusing to accept this money would be executed (as would forgers). Polo assures the reader that "all peoples and populations who are subject to this rule are perfectly willing to accept these papers in payment."[20]

While Europeans would ultimately adopt paper money as well, it would emerge first in the marketplace, and its rise would accompany that of modern banking systems and debt markets. Negotiable "bills of exchange" arose during the Middle Ages to facilitate trade among merchants, permitting those selling on credit to "either use the bill as a means of payment in its own right or obtain cash for it at a discount from a banker willing to act as broker"—the core business of the Medici in fifteenth-century Florence.[21] Northern European commercial centers built on their model, developing systems permitting direct debit-based payments (the Amsterdam Wisselbank); "fractional reserve banking," allowing depositors' money to be lent to borrowers, with only some small fraction retained to satisfy withdrawals (the Stockholms Banco); and finally banknotes, the issuance of which was eventually monopolized by a single state-recognized entity (the Bank of England).[22]

In Europe the value of this new form of currency long remained linked to metals. As Smith describes it, eighteenth-century paper money effectively represented an efficiency-enhancing stand-in for metals, deriving value from the public's faith in its exchangeability for gold and silver. "When the people of any particular country have such confidence in the fortune, probity and prudence" of the issuing bank, "those notes come to have the same currency as gold and silver money."[23] Smith accordingly suggests that "judicious operations of banking, by substituting paper in the room of a great part of this gold and silver," permit more of a nation's capital to be put to productive use at any given time, because the gold and silver itself need not be bound up in the form of

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[20] *See* POLO, *supra* note 18, at 147-148.
[21] FERGUSON, *supra* note 11, at 43-45.
[22] *Id.* at 49-50. Fractional reserve banking, in particular, creates a multiplier effect, increasing the money supply as successive banks effectively lend and re-lend the same money, in each case retaining only a small portion as reserves. *Id.* at 51-52.
[23] SMITH, *supra* note 9, ¶ II.2.28.

circulating money—just as a "waggon-way through the air" would permit a greater portion of the nation's land to be tilled.[24]

Notes of the Bank of England were made legal tender in 1718 when the institution became a "Royal Bank,"[25] but imbuing paper money with the status of legal tender was long approached with great suspicion in the United States.[26] Indeed, the gradual shift toward paper money in the United States over the late nineteenth and early twentieth centuries was largely crisis-driven and, at each step, legally controversial. While the U.S. Constitution gives Congress express authority "[t]o coin Money, regulate the Value thereof, . . . and fix the Standard of Weights and Measures,"[27] its authority to create paper money was left entirely unclear by the framers.[28] The efficiency benefits of banknotes were well understood, and in fact bearer notes convertible into gold or silver issued by state-chartered banks became "the functional money of the United States" in the early nineteenth century, constituting "the bulk of the money supply" by the 1860s.[29] The federal government itself, however, would turn to paper money only episodically, to finance war efforts in the face of dwindling gold and silver reserves—notably in the War of 1812, and then more concertedly in the Civil War.[30]

United States notes were initially issued in 1862,[31] and the constitutionality of making them legal tender for private debts—particularly in peacetime—was a hotly contested matter that would not be definitively resolved by the U.S. Supreme Court until 1884.[32] Notwithstanding the lack of express constitutional authority for Congress to create a national paper currency, the Court nevertheless

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[24] *Id.* ¶ II.2.86.

[25] *See* Khan, *supra* note 12, at 412-413, n.95.

[26] *See, e.g.,* Gerard N. Magliocca, *A New Approach to Congressional Power: Revisiting the* Legal Tender Cases*,* 95 GEO. L.J. 119, 134 (2006) ("Paper money was greeted with great hostility by constitutional lawyers until the 1860s.").

[27] U.S. CONST. art. I, § 8, cl. 5.

[28] *See, e.g.,* Khan, *supra* note 12, at 404-407.

[29] *See id.* at 408-417, 430.

[30] *See id.* at 421-426; Magliocca, *supra* note 26, at 134-137.

[31] *See* U.S. Dep't of Treas., Legal Tender Status, https://ustreas.gov/education/faq/currency/legal-tender.shtml. United States Notes remain legal tender, but because they "serve no function that is not already adequately served by Federal Reserve Notes, their issuance was discontinued, and none have been placed in to [sic] circulation since January 21, 1971." *Id.*

[32] *See* Magliocca, *supra* note 26, at 120-124.

concluded in *Juilliard v. Greenman* that Congress possesses such power "as incident to the power of borrowing money, and issuing bills or notes of the government for money borrowed"—a conclusion "fortified" by Congress' express authority to coin money and to regulate foreign and interstate commerce.[33]

In a strongly worded dissent, Justice Field argued that the power to coin money included nothing beyond "mould[ing] metallic substances" into coins suitable for circulation, while the power to borrow money included nothing more than authority for the government itself "to contract for a loan of money."[34] This latter power, he emphasized, "is a very different one from a power to deal between parties to private contracts in which the government is not interested, and to compel the receipt of these promises to pay in place of the money for which the contracts stipulated."[35] Field went further, however, arguing that paper could not conceivably replace metals as "a standard of value" because it lacks the practical intrinsic attributes of metals, which "are not dependent upon legislation" and "cannot be manufactured or decreed into existence."[36] He ominously concluded that "only evil [was] likely to follow" from the Court's holding, in matters of fiscal and monetary policy, given the "inborn infirmity" of paper money.[37] "If Congress has the power to make the notes a legal tender and to pass as money or its equivalent," he asked, then "why should not a sufficient amount be issued to pay the bonds of the United States as they mature?"[38] Likewise, "why should there be any restraint upon unlimited appropriations . . . if the printing press can furnish the money that is needed for them?"[39]

Cases challenging the legitimacy of paper money would long continue to arise. The Supreme Court's opinion in *Juilliard v. Greenman*, however, effectively ended the legal debate regarding its constitutionality.[40] As the Ninth Circuit, facing one such challenge in

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[33] Juilliard v. Greenman, 110 U.S. 421, 447-450 (1884). *See also* U.S. CONST. art. I, § 8, cls. 2-3, 5.

[34] Julliard, 110 U.S. at 459-463 (Field, J., dissenting).

[35] *Id.* at 461-462.

[36] *Id.* at 462-463.

[37] *Id.* at 470.

[38] *Id.*

[39] *Id.*

[40] For additional background on the impact of *Juilliard v. Greenman* and related cases on the Supreme Court's analysis of Congress' constitutional powers, see generally Magliocca, *supra* note 26. *See also* Khan, *supra* note 12, at 426-429.

1974, wistfully reflected, "[w]hile we agree that golden eagles, double eagles and silver dollars were lovely to look at and delightful to hold, we must at the same time recognize that time marches on."[41]

The controversy over United States notes demonstrated that imbuing slips of green paper with legal tender status was difficult enough to comprehend, but further challenges lay ahead as the exchangeability of paper money for gold and silver eroded. Federal Reserve notes were essentially banknotes at the time of their creation in 1913—negotiable, redeemable for gold on demand and not a form of legal tender for private debts. However, following the enormous wave of bank failures in the 1930s, accompanied by substantial withdrawals of gold from the banking system, Congress acted to halt redemption and force acceptance of Federal Reserve notes as legal tender for all public and private debts.[42] The President was authorized to prohibit export of gold; the U.S. Treasury was authorized to demand delivery of all gold coins, bullion and gold certificates in exchange for U.S. currency; and so-called "gold clauses," creating obligations requiring payment in gold coin at a stated standard of weight and fineness, were declared dischargeable by payment in any legal tender.[43] In a series of decisions that came to be known as the "gold clause cases," the U.S. Supreme Court upheld repayment of the face value of various obligations in depreciated

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[41] Milam v. United States, 524 F.2d 629, 630 (9th Cir. 1974, as amended 1975) (rejecting Milam's demand that a $50 Federal Reserve note be redeemed in gold or silver, citing *Juilliard v. Greenman*). *See also* United States v. Gardiner, 531 F.2d 953 (9th Cir. 1976) (rejecting the argument that no tax was owed because Federal Reserve notes received did not constitute lawful money, citing *Milam*); Leitch v. Dep't of Revenue, 1982 Ore. Tax LEXIS 26 (Or. T.C. 1982) (rejecting argument that Federal Reserve notes must be converted to gold and silver before tax could be assessed, citing *Juilliard v. Greenman*); Leitch v. Dep't of Revenue, 1994 Ore. Tax LEXIS 32 (Or. T.C. 1994) (rejecting argument that assessed value of property should be reduced based on theory that paper money is unconstitutional, citing *Juilliard v. Greenman*); Radue v. Zanaty, 308 So. 2d 242 (Ala. 1975) (declaring "null and void" statements written on checks "to the effect that they were to be paid only in gold or silver coin," citing *Juilliard v. Greenman*).

[42] *See* Khan, *supra* note 12, at 436-437. *See also* 31 U.S.C. §§ 5103 (rendering Federal Reserve notes "legal tender for all debts"), 5118(b) ("The United States Government may not pay out any gold coin.").

[43] *See* Norman v. Baltimore & Ohio R.R. Co., 294 U.S. 240, 291-297 (1935).

currency, including railroad bonds,[44] U.S. gold bonds,[45] and U.S. gold certificates.[46] In a strongly worded dissent reminiscent of Field's dissent in *Juilliard v. Greenman*, Justice McReynolds charged that, "under the guise of pursuing a monetary policy, Congress really has inaugurated a plan primarily designed to destroy obligations, repudiate national debts and drive into the Treasury all gold within the country, in exchange for inconvertible promises to pay, of much less value."[47] Observing that the government itself had realized billions in "counterfeit profits" through a "legislative fiat" based on "debasement of the dollar," McReynolds—in a similarly ominous conclusion—warned that a "[l]oss of reputation for honorable dealing" would bring "unending humiliation."[48]

No longer exchangeable for gold or silver, the supply of "money" would effectively become synonymous with the liabilities of the financial system, giving its definition "a somewhat arbitrary quality."[49] Today, economists define the money supply in various ways, including not only currency and bank deposits, but differing forms of "near money" as well—highly liquid "cash equivalents" such as money market fund shares and even government securities.[50] Meanwhile, the tangibility of money has greatly attenuated in an era of electronic transfers—to the point that physical money "accounts for just 11 per cent of the monetary measure known as M2," the broader of the two measures used in the United States. Modern money—essentially a representation of the creditor-debtor relationship—is fundamentally an expression of faith in the complex of mediating institutions that constitute the financial system.[51]

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[44] *See generally id*.
[45] *See* Perry v. United States, 294 U.S. 330 (1935).
[46] *See* Nortz v. United States, 294 U.S. 317 (1935).
[47] *See Perry*, 294 U.S. at 369 (McReynolds issuing a single dissent in response to all of the "gold clause cases").
[48] *See id.* at 381.
[49] *See* FERGUSON, *supra* note 11, at 52.
[50] *See* JOHN DOWNES & JORDAN ELLIOT GOODMAN, BARRON'S DICTIONARY OF FINANCE AND INVESTMENT TERMS 426-427, 445 (6th ed. 2003).
[51] FERGUSON, *supra* note 11, at 30-31, 52-53, 343. *See also* Federal Reserve Bank of New York, The Money Supply, http://www.newyorkfed.org/aboutthefed/fedpoint/fed49.html; DOWNES & GOODMAN, *supra* note 50, at 426-427; Khan, *supra* note 12, at 442. The Federal Reserve uses two measures of the money supply—M1 and M2. The former "is restricted to the most liquid forms of money; it consists of currency in the hands of the public; travelers checks; demand deposits, and other deposits against which

Notwithstanding the United States' effective abandonment of the gold standard in 1933,[52] the status of the U.S. dollar would be bolstered—and its intrinsic nature would grow even more complex and abstract—due to the increasingly central position of the United States in a globalizing world. Just as individuals and firms use money to exchange, measure, and store value, so do nations. In the nineteenth century, the British pound sterling became what economists today call an "international currency"—a stable currency considered particularly attractive for international transactions, investment of government reserves and anchoring of less stable currencies (accomplished through currency pegs).[53] The British pound's position as an international currency was underwritten by gold convertibility, as well as the "hegemonic role of Victorian Britain as an enforcer of *Pax Britannica* and the position of the City of London . . . as the world's clearing house."[54] By the 1940s, the economically and militarily dominant United States and the U.S. dollar had assumed this role through the post-war Bretton Woods system, which—following the dislocation of the interwar period—prioritized price stability through fixed exchange rates based on dollars (nominally convertible into gold), and freedom to pursue expansionary fiscal and monetary policies aimed at promoting domestic social stability.[55] Given the system of fixed exchange rates,

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checks can be written." *See* Federal Reserve Bank of New York, *supra*. The latter adds to these "savings accounts, time deposits of under $100,000, and balances in retail money market mutual funds." *Id.* As of September 2010, M1 stood at $1.77 trillion, while the broader M2 stood at $8.71 trillion. *See* Federal Reserve Board, Federal Reserve Statistical Release: Money Stock Measures, Oct. 14, 2010, http://www.federalreserve.gov/releases/h6/20101014/ (seasonally adjusted figures).

[52] *See supra* note 42 and accompanying text; U.S. Dep't of Treas., *supra* note 31; U.S. Dep't of Treas., History of the Treasury, https://ustreas.gov/education/history/events/1900-present.shtml.

[53] *See* Helleiner & Kirshner, *supra* note 11, at 3-7.

[54] ALAN DIGNAM & MICHAEL GALANIS, THE GLOBALIZATION OF CORPORATE GOVERNANCE 94 (2009).

[55] *Id.* at 94-101. *See also* FERGUSON, *supra* note 11, at 306 (observing that, for purposes of the exchange-rate regime, "the dollar itself would notionally remain convertible into gold, vast quantities of which sat, immobile but totemic, in Fort Knox"). Note that while U.S. citizens lost the ability to convert currency into gold in 1933, "the Treasury would convert dollars into gold for foreign governments as a means of maintaining stability and

controls on the flow of money across borders were required to permit the pursuit of expansionary policies without "suffering the outflow of capital in search of a higher rate of interest or a lower rate of inflation."[56]

The Bretton Woods system "was extremely successful in promoting stability and economic growth in the aftermath of [World War II]," but by the 1970s the increasing impracticability of controlling cross-border capital movements, coupled with a growing U.S. trade deficit, rendered it unsustainable.[57] On August 15, 1971, the United States abandoned gold convertibility entirely, allowing its currency to float freely against other currencies. "From that day onward," as Ferguson observes, "the centuries-old link between money and precious metal was broken."[58]

As it turns out, severing that link did not diminish the dollar's long-term global centrality, as a practical matter (explored below).[59] It has arguably rendered the value of today's dollar more difficult to comprehend, however, as a conceptual matter.

III. The Value of a Dollar

The foregoing history, though cursory, permits refinement of the core question: What is the value of a dollar? Recall my grandfather's silver certificates, with their express assurance that the holder could convert them into silver—literally true until June 24,

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confidence in the dollar." Federal Reserve Bank of Richmond, FAQs: Gold & Silver, http://www.richmondfed.org/faqs/gold_silver/.

[56] RAWI ABDELAL, CAPITAL RULES 5, 44-47 (2007). *See also* FERGUSON, *supra* note 11, at 59, 307 (explaining that a country cannot simultaneously pursue free capital movements, a fixed exchange rate, and autonomous monetary policy—the so-called "trilemma"). For additional background, see generally John Gerard Ruggie, *International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order,* 36 INT'L ORG. 379 (1982).

[57] *See* DIGNAM & GALANIS, *supra* note 54, at 99-101.

[58] FERGUSON, *supra* note 11, at 59. Note that where a country's currency floats freely, its depreciation can help correct a trade deficit by raising the relative price of that country's imports and decreasing the relative price of its exports. *See* RAJ BHALA, DICTIONARY OF INTERNATIONAL TRADE LAW 269-270 (2008).

[59] *See, e.g.,* James, *supra* note 2, at 26-29; Jonathan Kirshner, *After the (Relative) Fall: Dollar Diminution and the Consequences for American Power, in* THE FUTURE OF THE DOLLAR, *supra* note 2, at 191, 204-207.

1968.[60] As we have seen, the value of paper money convertible into metal is abstract enough. But contrast with this today's dollar, offering no explanation of its value beyond the label "Federal Reserve Note" and the assertion of its adequacy as legal tender.

Is this the Great Khan's money all over again? Yes and no. Federal Reserve notes are decidedly fiat money—by statute they most assuredly constitute "legal tender for all debts, public charges, taxes and dues."[61] As the Treasury explains, however, this merely renders it "a valid and legal offer of payment for debts when tendered to a creditor." There being no federal law mandating their acceptance, "[p]rivate businesses are free to develop their own policies on whether or not to accept cash unless there is a State law which says otherwise."[62]

The label "Federal Reserve Note" refers to the fact that our paper money is a creation of the Federal Reserve System—since 1913, our central bank.[63] Curiously, while federal law provides that Federal Reserve notes "shall be redeemed in lawful money on demand,"[64] it is unclear what this "lawful money" could consist of (in the absence of gold or silver convertibility) aside from more Federal Reserve notes.[65] Indeed, the U.S. Treasury confirms that "Federal Reserve notes are not redeemable in gold, silver, or any

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[60] *See* U.S. Dep't of Treas., Buying, Selling & Redeeming, https://ustreas.gov/education/faq/currency/sales.shtml.

[61] *See* 31 U.S.C. § 5103.

[62] *See* U.S. Dep't of Treas., *supra* note 31. "For example, a bus line may prohibit payment of fares in pennies or dollar bills. In addition, movie theaters, convenience stores and gas stations may refuse to accept large denomination currency (usually notes above $20) as a matter of policy." *Id.* Legal tender status effectively amounts to the same thing in England and Wales. *See* Bank of England, Banknote Frequently Asked Questions, http://www.bankofengland.co.uk/banknotes/about/faqs.htm ("Whether or not notes have legal tender status, their acceptability as a means of payment is essentially a matter for agreement between the parties involved.").

[63] *See* Federal Reserve Board, The Structure of the Federal Reserve System, http://www.federalreserve.gov/pubs/frseries/frseri.htm.

[64] *See* 12 U.S.C. § 411.

[65] *See, e.g.,* Khan, *supra* note 12, at 439-441 (concluding that "lawful money for the redemption of Federal Reserve notes is non-existent"). The same is true of Bank of England notes, which—notwithstanding an express promise on the face of the note "to pay the bearer on demand" the given sum in pounds—"can only be exchanged for other Bank of England notes of the same face value." *See* Bank of England, *supra* note 62.

other commodity, and receive no backing by anything."[66] The statute further provides, however, that these notes are "obligations of the United States."[67] To get them, a Federal Reserve Bank must set aside "collateral in amount equal to the sum of the Federal Reserve notes" requested,[68] and, once issued, the notes "become a first and paramount lien on all the assets of such bank."[69] The point, according to the U.S. Treasury, is that "if the Congress dissolved the Federal Reserve System, the United States would take over the notes"—that is, assume the obligations they represent—but "would also take over the assets, which would be of equal value." Federal Reserve Banks may acceptably set aside various forms of collateral, but according to the Treasury, most collateral in fact takes the form of "U.S. Government securities."[70]

In the first instance, then, today's dollar would seem to derive its value, as a legal matter, from its status as a liability of the Federal Reserve, which in turn derives value from a federal government guarantee. But whence the value of the federal government guarantee? To be sure, there would be collateral on hand, per federal law, if Congress ever saw fit to dissolve the Federal Reserve System—which it expressly reserved the right to do in the Federal Reserve Act.[71] But the collateral backing these obligations of the United States would themselves, according to the Treasury, predominantly consist of obligations of the United States. In the government's own hands, the collateral supporting the value of Federal Reserve notes would represent IOUs to itself—an accounting fiction.[72]

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[66] *See* U.S. Dep't of Treas., *supra* note 31.
[67] *See* 12 U.S.C. § 411.
[68] *See id.* § 412.
[69] *See id.* § 414.
[70] U.S. Dep't of Treas., *supra* note 31; U.S. Dep't of Treas., Distribution of Currency and Coins, https://ustreas.gov/education/fact-sheets/currency/distribution.shtml. *See also* 12 U.S.C. § 412 (providing that collateral may include, among other things, "any obligations which are direct obligations of, or are fully guaranteed as to principal and interest by, the United States or any agency thereof").
[71] *See* Federal Reserve Act § 31 (omitted from U.S. Code) ("The right to amend, alter, or repeal this Act is hereby expressly reserved.").
[72] *Cf.* Richard W. Stevenson, *Baby Steps Toward Accord on Social Security,* N.Y. TIMES, Nov. 14, 1999, at 4 (describing the "accounting fiction" of withdrawing excess payroll taxes from the Social Security trust fund in

Though perhaps difficult to imagine, this thought experiment does tend to suggest that the value of the U.S. government's guarantee must ultimately derive from some source other than the "collateral" nominally supporting the issuance of Federal Reserve notes. Presumably its value must be underwritten by Congress' fundamental constitutional power to "lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts . . . of the United States."[73] To be sure, laying and collecting taxes in the form of Federal Reserve notes to support the value of Federal Reserve notes would seem pointlessly circular,[74] though the U.S. Supreme Court has suggested that Congress possesses constitutional authority to tax in-kind[75]—say, in the form of some valuable commodity.

To be clear, I do not mean to suggest that there is any realistic possibility of events actually unfolding in this manner in the foreseeable future. I trace the legal value of today's dollar back to its apparent source to emphasize a reality that many will find uncomfortable: The dollar in your billfold essentially derives its value from *you*—more specifically, your productive capacity.[76]

Few Americans could be expected to explain the metaphysics of modern money.[77] But the notion that our currency is

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exchange for government securities—"nothing more than a promise to pay back the money").

[73] U.S. CONST. art. I, § 8, cl. 1.

[74] *See* 12 U.S.C. § 411 (rendering Federal Reserve notes "receivable . . . for all taxes").

[75] *See* Lane County v. Oregon, 74 U.S. 71, 77-78 (1869) (upholding a state tax requiring payment "in gold and silver coin," observing that the power to tax "is as complete in the States as the like power, within the limits of the Constitution, is complete in Congress"); Leonard & Leonard v. Earle, 279 U.S. 392, 396-397 (1929) (upholding a state "privilege tax equal to 10% of the market value of the empty [oyster] shells resulting from [oyster packer's] operations," citing *Lane County v. Oregon*). *See also* Eduardo Moises Penalver, *Regulatory Taxings,* 104 COLUM. L. REV. 2182, 2208-2211 (2004). For general discussion of the constitutional tension between taxation and takings doctrine, see generally Penalver, *supra*.

[76] *Cf.* U.S. Dep't of Treas., *supra* note 31 (suggesting that "Federal Reserve notes are 'backed' by all the goods and services in the economy").

[77] On the low rate of U.S. financial and economic literacy, see Dana Markow & Kelly Bagnaschi, *What American Teens & Adults Know About Economics* (Apr. 26, 2005); William B. Walstad & Max Larsen, *Results From a National Survey of American Economic Literacy* (Gallup 1992), http://www.amstat.org/sections/srms/Proceedings/papers/1993_211.pdf.

intrinsically a reflection of our own worth may nevertheless account for the great symbolic value of money. While commonly associated with material wealth and power in narrow instrumental terms,[78] a moment's glance at any currency demonstrates its simultaneous potency as a vehicle for national self-representation.

Consider the resonance of banknotes featuring great UK writers and thinkers—including Adam Smith, who appears on the £20 note with an illustration of the "division of labour in pin manufacturing" and "the great increase in the quantity of work that results."[79] The €20 note, interestingly, couples a map of Europe with an imaginary bridge—Benedict Anderson's "imagined community" at work, symbolizing the bridging of disparate cultures and economies, to which the common currency itself is expected to contribute.[80] The Canadian $5 bill, appropriately enough, depicts outdoor hockey—itself a unifying symbol of national culture in a diverse and geographically far-flung country.[81]

Contrast with these our own drab Federal Reserve notes, which depict (in the words of the U.S. Treasury Bureau of Engraving and Printing) "portraits of famous, deceased American statesmen." This may tend to suggest a preoccupation with leadership and strength—though the inscription "In God We Trust" perhaps conveys simultaneous misgivings about our ability to pull it off alone.[82]

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[78] *See, e.g.,* FERGUSON, *supra* note 11, at 1 (observing this tendency).

[79] *See* Bank of England, Current Banknotes, http://www.bankofengland.co.uk/banknotes/current/index.htm.

[80] *See* European Central Bank, Banknotes, http://www.ecb.int/euro/banknotes/html/index.en.html. For Anderson's theory of national identity, see BENEDICT ANDERSON, IMAGINED COMMUNITIES (rev. 1991).

[81] *See* Bank of Canada, Bank note series, 1935 to present: $5 (upgraded), http://www.bankofcanada.ca/en/banknotes/general/character/2001-04_05b.html. The inscription, a quote from Canadian novelist Roch Carrier (presented both in English and in French), reads: "The winters of my childhood were long, long seasons. We lived in three places—the school, the church and the skating rink—but our real life was on the skating rink."

[82] *See* Bureau of Engraving and Printing, U.S. Currency Small Denominations, http://www.moneyfactory.com/uscurrency/smalldenominations.html. The inscription was proposed in 1863 by Salmon P. Chase, Secretary of the Treasury, as a reflection of "increased religious sentiment existing during the Civil War." Since 1938, all U.S. coins have included this inscription, which in 1956 was declared the national motto. It first appeared on paper money on the reverse of 1957 one-dollar silver certificates (including my grandfather's). *See* U.S. Dep't of Treas., History of "In God

IV. The Mirror of Money

Given the apparent circularity of the dollar's legal value, we might characterize the matter another way. Perhaps the dollar's practical value is a function of public faith in the quality of U.S. policy—reflected most directly in the ability to sell the U.S. government securities serving as nominal "collateral." After all, the bond market "passes a daily judgment on the credibility of every government's fiscal and monetary policies" through "its ability to punish a government with higher borrowing costs."[83]

Indeed, the role of market perception becomes clearest in times of crisis, which reveal the deeper psychology of the public's relationship with its money. Perhaps it is the very potency of money as a vehicle for symbols of national pride that renders a currency's decline so viscerally painful, even shameful.[84] Sociologist Elias Canetti famously characterized hyperinflation—a steep fall in the purchasing power of money—as a reflection of collective psychology, a "crowd phenomenon," in which a currency "suddenly loses its identity." He remarks of his own experience of hyper-inflation that

> [w]hat used to be one Mark is first called 10,000, then 100,000, then a million. . . . It is no longer like a person; it has no continuity and it has less and less value. A man who has been accustomed to rely on it cannot help feeling its degradation as his own. He has identified himself with it for too long and his

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We Trust," https://ustreas.gov/education/fact-sheets/currency/in-god-we-trust.shtml. *See also* 31 U.S.C. §§ 5112(d)(1), 5114(b); Newdow v. Lefevre, 598 F.3d 638 (9th Cir. 2010) (reaffirming that printing "In God We Trust" on currency does not violate the Establishment Clause of the First Amendment to the U.S. Constitution).

[83] FERGUSON, *supra* note 11, at 69. *See also* Christopher M. Bruner, *States, Markets, and Gatekeepers: Public-Private Regulatory Regimes in an Era of Economic Globalization,* 30 MICH. J. INT'L L. 125 (2008); Christopher M. Bruner & Rawi Abdelal, *To Judge Leviathan: Sovereign Credit Ratings, National Law, and the World Economy,* 25 J. PUB. POL'Y 191 (2005).

[84] *Cf.* Belinda Goldsmith, *Money means more to people since financial crisis: poll,* REUTERS, Feb. 22, 2010, http://uk.reuters.com/article/idUKTRE61L2FK20100222.

> confidence in it has been like his confidence in himself.[85]

Though worlds away from such extremes, similar undercurrents are detectable in post-crisis American popular culture. The satirical newspaper *The Onion* describes an "existential" breakdown by Federal Reserve Chairman Ben Bernanke who, while reporting to the Senate Finance Committee, comes to the sudden recognition that "money is, in fact, just a meaningless and intangible social construct." News of the revelation that "money is nothing more than an elaborate head game" spreads across the country, leaving citizens marveling at "the little green drawings of buildings and dead white men they once used to measure their adequacy and importance as human beings."[86]

Like all good satire, this magnifies something real—the growing sense of unreality associated with our financial system and our money. While the intricacies of the recent crisis lie beyond the scope of this essay, the upshot is that our banking system's flair for expanding credit defeated itself soundly. Securitization—which involves pooling debt (e.g. residential mortgages) and then selling it to investors, freeing up money for new loans—spun well out of control due to the proliferation of investment structures of unmanageable complexity, obscuring the risks and encouraging weak lending standards to sustain the process.[87] The resulting growth in personal indebtedness and build-up of risk in the financial system were matched and reinforced by growth of public indebtedness, as East Asian exporters and oil-rich nations continued to lend their substantial trade surpluses back to us by buying U.S. Treasury securities—a "recycling" process thought to have reduced interest

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[85] ELIAS CANETTI, CROWDS AND POWER 183-186 (Carol Stewart trans., Noonday Press 1998) (1960). *See also* JOHN MAYNARD KEYNES, THE ECONOMIC CONSEQUENCES OF THE PEACE 235-240 (1920).

[86] *U.S. Economy Grinds to Halt as Nation Realizes Money Just a Symbolic, Mutually Shared Illusion,* ONION, Feb. 16, 2010, http://www.theonion.com/articles/us-economy-grinds-to-halt-as-nation-realizes-money,2912/.

[87] *See generally* Christopher M. Bruner, *Corporate Governance Reform in a Time of Crisis*, 36 J. CORP. L. (forthcoming 2010), http://ssrn.com/abstract=1617890; ROBERT POZEN, TOO BIG TO SAVE? (2010).

rates on long-term Treasuries, fueling investor demand for higher-yield mortgage-backed securities.[88]

Adam Smith, while recognizing that "judicious" banking could expand the nation's productive capital, also warned that "commerce and industry . . . cannot be altogether so secure, when . . . suspended upon the Daedalian wings of paper money."[89] The same might be said of our further expansion of credit, suspended upon the Daedalian wings of securitized debt. Our use of securitization has been anything but "judicious," and the heights to which it carried us only left us further to fall.

Our enormous public debt, however, reflects a longer-term and more fundamental problem.[90] Over the last few decades the United States has moved from net creditor to net debtor, accounting for about three-quarters of global capital imports by 2000.[91] Our global trade deficit grew from $329 billion in 1999 to $816 billion in 2008, and as of March 2010, the total U.S. public debt stood at $12.5 trillion—$8 trillion of which was held by the public, including $1.9 trillion held by China, Japan and various oil exporters.[92] Continuing bailouts, stabilization efforts and rising Social Security and Medicare obligations will make matters considerably worse, creating enormous

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[88] *See* Bruner, *supra* note 87, at 5-7; POZEN, *supra* note 87, at 7-12; Francis E. Warnock & Veronica Cacdac Warnock, *International Capital Flows and U.S. Interest Rates* (FRB International Finance Discussion Paper No. 840, 2006), http://ssrn.com/abstract=813044.

[89] SMITH, *supra* note 9, ¶ II.2.86.

[90] *See, e.g.,* Sewell Chan, *Bernanke Warns of "Unsustainable" Debt,* N.Y. TIMES, June 9, 2010, http://www.nytimes.com/2010/06/10/business/economy/10fed.html; Chuck Marr, *Letting High-Income Tax Cuts Expire Is Proper Response to Nation's Short- and Long-Term Challenges* (Center on Budget and Policy Priorities, July 26, 2010); Editorial, *A Real Debate on Taxes,* N.Y. TIMES, Aug. 23, 2010, http://www.nytimes.com/2010/08/24/opinion/24tue1.html.

[91] *See* James, *supra* note 2, at 32-34. *See also* Luke Burgess, *The Role of the U.S. Dollar as Reserve Currency: Is the Dollar in Danger?,* GOLDWORLD.COM, Jan. 29, 2009, http://www.goldworld.com/articles/us+dollar-reserve-currency/359.

[92] *See* U.S. Census Bureau, Trade in Goods (Imports, Exports and Trade Balance) with World, Seasonally Adjusted, http://www.census.gov/foreign-trade/balancec0004.html; TreasuryDirect, The Debt to the Penny and Who Holds It, http://www.treasurydirect.gov/NP/BPDLogin?application=np; U.S. Dep't of Treas., Major Foreign Holders of Treasury Securities, http://www.ustreas.gov/tic/mfh.txt.

challenges for U.S. policymakers.[93] We could gamble that surplus-generating governments will continue to finance our deficits, and hope that U.S. households sobered by the crisis might save more, but neither can be taken for granted.[94]

The dollar's future depends critically on how attractive global market actors and governments find the dollar moving forward. The core U.S. advantage is a high degree of security and stability, underwritten by a predictable, functional legal system and deep, liquid markets. Our regulatory and market institutions have clearly taken a battering, yet the dollar remains relatively stable (at this writing) for two reasons. First, China and other exporters are locked in because they already hold so much. They may advocate re-denominating dollar-based markets (notably oil) and seek alternative reserve currencies, but their enormous dollar holdings strongly disincentive rocking the boat too vigorously.[95] Second, while concerns regarding U.S. deficits may eventually undermine the dollar's status—undercutting our ability to fund deficit spending through overseas borrowing—this assumes the existence of some better alternative. Given the euro's woes following the Greek debt debacle—revealing the inability of European institutions to deal effectively with crises—the U.S. dollar retains its relative luster for the time being.[96]

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[93] *See* David P. Calleo, *Twenty-First Century Geopolitics and the Erosion of the Dollar Order, in* THE FUTURE OF THE DOLLAR, *supra* note 2, at 164, 180-181; Shahien Nasiripour, *Elizabeth Warren Warns About Commercial Real Estate Crisis, 'Downward Spiral' For Small Businesses, Local Banks,* HUFFINGTONPOST.COM, Feb. 11, 2010, http://www.huffingtonpost.com/2010/02/11/commercial-real-estate-wa_n_458092.html; Nelson D. Schwartz, *Corporate Debt Coming Due May Squeeze Credit,* N.Y. TIMES, Mar. 15, 2010, http://www.nytimes.com/2010/03/16/business/16debt.html. *See also supra* note 90.

[94] *See* FERGUSON, *supra* note 11, at 362; POZEN, *supra* note 87, at 327-330.

[95] *See* James, *supra* note 2, at 31, 35; Batson, *supra* note 7; Keith Bradsher, *Europe's Debt Woes Start to Complicate China's Money Moves,* N.Y. TIMES, Apr. 29, 2010, http://www.nytimes.com/2010/04/30/business/30yuan.html; Fisk, *supra* note 7; POZEN, *supra* note 87, at 329-330; Ydstie, *supra* note 7.

[96] *See, e.g.,* Bradsher, *supra* note 95; Benjamin J. Cohen, *Toward a Leaderless Currency System, in* THE FUTURE OF THE DOLLAR, *supra* note 2, at 142, 147-152; James, *supra* note 2, at 28-29; Kirshner, *supra* note 59, at 194-195; Ronald McKinnon, *U.S. Current Account Deficits and the Dollar Standard's Sustainability: A Monetary Approach, in* THE FUTURE OF THE

The critical point, however, is that failure to address our deficits will leave the dollar's future entirely in the hands of others. As noted above, there have been bad signs in the market, including reported threats of sovereign downgrade and volatility in credit default swaps on U.S. Treasuries. Outright default is not the issue, of course, given our extraordinary ability to borrow in our own currency. The real risk lies in turning on the printing presses, leading to inflation. As Robert Pozen observes, "due to its involvement in the bailout program, the Federal Reserve has increased the size of its balance sheet from $850 billion in mid-2007 to over $2 trillion in mid-2009, and has decreased its holdings of U.S. Treasuries from 90 percent to 30 percent of its portfolio." This deterioration, Pozen suggests, could undermine the Federal Reserve's independence and capacity to take politically unpopular actions to fight inflation (i.e. raising interest rates).[97] Treasury Secretary Timothy Geithner insists that the United States is "deeply serious" about tackling deficits, touting a new bipartisan "fiscal responsibility" commission, but the prospects remain bleak.[98]

DOLLAR, *supra* note 2, at 45, 65; Eric Helleiner, *Enduring Top Currency, Fragile Negotiated Currency: Politics and the Dollar's International Role*, *in* THE FUTURE OF THE DOLLAR, *supra* note 2, at 69, 73-75; POZEN, *supra* note 87, at 330-331; Herman Schwartz, *Housing Finance, Growth, and the U.S. Dollar's Surprising Durability, in* THE FUTURE OF THE DOLLAR, *supra* note 2, at 88, 90-91, 114-115; Daniel Whitten, *Zoellick Says U.S. Dollar's Primacy Not a Certainty*, BLOOMBERG.COM, Sept. 27, 2009, http://www.bloomberg.com/apps/news?pid=20601087&sid=aINN4BM6Fy5w; Ydstie, *supra* note 7. On the practical challenges of returning to a gold standard, see Alan Greenspan, *Can the U.S. Return to a Gold Standard?,* WALL ST. J., Sept. 1, 1981, at 30.

[97] POZEN, *supra* note 87, at 332-334. *See also* Tobias Adrian & Hyun Song Shin, *The Changing Nature of Financial Intermediation and the Financial Crisis of 2007-09* 22-27 (FRB Staff Report no. 439, Apr. 2010); McKinnon, *supra* note 96, at 48-50.

[98] *See* Judith Burns, *Geithner Defends U.S. Bond Rating,* WALL ST. J., Feb. 8, 2010, http://online.wsj.com/article/SB10001424052748703427704575051544279868172.html; Peggy Noonan, *Can Washington Meet the Demand to Cut Spending?,* WALL ST. J., Feb. 19, 2010, http://online.wsj.com/article/SB10001424052748703315004575073793778656392.html; Press Release, White House Office of the Press Secretary, President Obama Establishes Bipartisan National Commission on Fiscal Responsibility and Reform (Feb. 18, 2010), http://www.whitehouse.gov/the-press-office/president-obama-establishes-bipartisan-national-commission-fiscal-responsibility-an.

Meanwhile, doubts regarding the Federal Reserve's capacity to combat weaknesses in the economy by printing more money—coupled with fears that its efforts to do so may further hinder its ability to fight inflation in the long-run—have fueled a flight back to gold and silver, while threatening to undermine the credibility of the Federal Reserve System and the U.S. dollar alike.[99] *Onion*-esque references to further infusions of "funny money"[100] and "cyber-cash"[101] into the financial system (through sustained low interest rates and purchases of Treasury securities and mortgage-related "assets"—so-called "quantitative easing") reflect a growing sense that our monetary system is eroding as the Federal Reserve flounders in search of a response to problems that are in fact far more fundamental than the availability of further credit. These include, among other things, our massive existing debt, our "bloated consumer economy," and lower costs of production elsewhere.[102]

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[99] *See supra* note 4. *See also* Paul R. La Monica, *The Fed's gold problem,* CNNMONEY.COM, Sept. 19, 2010, http://money.cnn.com/2010/09/16/news/economy/thebuzz/index.htm. On the Fed's commitment to very low interest rates and increasing the money supply as a means of spurring economic recovery, see Sewell Chan, *Fed Move on Debt Signals Concern About Economy,* N.Y. TIMES, Aug. 10, 2010, http://www.nytimes.com/2010/08/11/business/economy/11fed.html; Sewell Chan, *Federal Reserve Official Sees Chance of a New Boom-and-Bust Cycle,* N.Y. TIMES, Aug. 13, 2010, http://www.nytimes.com/2010/08/14/business/economy/14fed.html (describing the position of consistent dissenter and "inflation hawk" Thomas Hoenig, president of the Federal Reserve Bank of Kansas City); Sewell Chan, *Fed Stands Pat and Says It Is Still Ready to Buy Debt,* N.Y. TIMES, Sept. 21, 2010, http://www.nytimes.com/2010/09/22/business/economy/22fed.html.

[100] *See* Editorial, INVESTOR'S BUS. DAILY, Sept. 28, 2010, http://www.investors.com/NewsAndAnalysis/Article/548729/201009281855/Stop-Printing-Money.aspx.

[101] *See* Hallingan, *supra* note 4.

[102] *See, e.g.,* Graham Bowley, *Cheap Debt for Corporations Fails to Spur Economy,* N.Y. TIMES, Oct. 3, 2010, http://www.nytimes.com/2010/10/04/business/04borrow.html (observing that corporations' reluctance to spend an estimated $1.6 trillion in cash "underscores the limits of Washington policy makers' power to stimulate the economy"); Michael Casey, *The Bernanke Put,* WALL ST. J., Sept. 28, 2010, http://online.wsj.com/article/SB10001424052748703882404575519780484088928.html (observing that "America's economic malaise stems from factors outside of the Fed's control," including "a massive debt overhang" and "global imbalances" leading businesses to move production to other countries); Charles Hugh

While I have suggested here that our debt presents enormous long-term challenges, it bears emphasizing that one could quite rationally favor fiscal stimulus, on the one hand, without favoring monetary stimulus, on the other. As Nobel Prize-winning economist Paul Krugman has observed, "fiscal expansion [is] relatively certain in its effect: if the government goes and buys a trillion dollars' worth of stuff, that will create a lot of jobs. On the other hand, if the Fed goes out and buys a trillion[] dollars' worth of long-term bonds"—increasing the money supply through quantitative easing—"the effect is quite uncertain, with many possible slips between the cup and the lip."[103] He elaborates, "[t]he truth is that it's very hard for central banks to get traction in a zero-rate world," as "nobody is sure how much effect quantitative easing will have on long-term rates."[104] In the meantime, as another observer adds, while the ultimate consequences of quantitative easing remain "difficult to predict," it is "no surprise that many investors are now taking refuge in tangible assets"—notably gold and silver, which, as markets have long understood, "governments can't debase by printing more of."[105]

Smith, *Here's Why Quantitative Easing 2 Will Fail Spectacularly,* BUS. INSIDER, Oct. 11, 2010, http://www.businessinsider.com/quantitative-easing-fail-spectacularly-2010-10 ("[T]he 'problem' in the U.S. economy is not a lack of credit or high costs of credit: the problem is too much debt and the fact that there is no market demand which requires expanding business.").

An inflation rate below the Federal Reserve's implicit two-percent target has led some at the Fed to fear deflation, a "spiral of declining wages and prices." *See* Chan, *Federal Reserve Official Sees Chance of a New Boom-and-Bust Cycle, supra* note 99. When short-term interest rates are effectively zero, the Federal Reserve's remaining mechanism by which to attempt to spur economic activity is to increase the money supply. *See, e.g.,* Paul Krugman, *Monetary Versus Fiscal*, CONSCIENCE OF A LIBERAL BLOG (N.Y. TIMES), Oct. 6, 2010, http://krugman.blogs.nytimes.com/2010/10/06/monetary-versus-fiscal/.

[103] *See* Krugman, *supra* note 102.

[104] *See id*. *See also Quantitative Easing*, FIN. TIMES LEXICON, http://lexicon.ft.com/term.asp?t=quantitative-easing (observing that there are substantial risks, including that "a central bank can lose money on its purchases," and that if taken too far, quantitative easing can "destroy the value of the currency" as well as "confidence in an economy").

[105] *See* Hallingan, *supra* note 4. *Compare with* Juilliard v. Greenman, 110 U.S. 421, 463 (1884) (Field, dissenting, observing that gold and silver "are not dependent upon legislation or the caprices of the multitude," and "cannot be manufactured or decreed into existence").

V. Conclusion

The dynamics explored above reveal the dollar's value to be a function of our own merits. Ferguson aptly characterizes money as "the mirror of mankind," reflecting "the way we value ourselves and the resources of the world around us."[106] But our own mirror has been fogged by the dollar's role as reserve currency and our unflagging capacity to obscure financial risks—a tendency reflected not only in the securitization structures precipitating the crisis, but also in the abuse of the Federal Reserve's balance sheet that has followed. Our key challenge, then, will be mustering the self-awareness and discipline to discern our own warts in an imperfect mirror.

A dollar bill ought to prompt the question, "how good a credit are we?" Perhaps the way forward is to harness the great symbolic value of the dollar itself—say, by issuing a new series of bills with a mirror on the front and the National Debt Clock on the back.[107] Given other pressing matters, I suspect this will not make the congressional agenda anytime soon. In the meantime, only the mind's eye will allow us to see the dollar and ourselves for what we truly are.

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[106] FERGUSON, *supra* note 11, at 363.

[107] On the debt clock, see Clyde Haberman, *Debt Alarm Ringing? Hit Snooze Button*, N.Y. TIMES, Dec. 4, 2009, at A26.

CRITICISMS OF COLLATERALIZED DEBT OBLIGATIONS IN THE WAKE OF THE GOLDMAN SACHS SCANDAL

NEAL DECKANT*

I. *Introduction*

Following a string of downturns and scandals in the past several years, CDOs have become a household phrase. In 2008, primary issuances froze as the CDO market collapsed.[1] It was worth over $2 trillion at its peak.[2] On April 16, 2010, the SEC launched a $1 billion lawsuit against Goldman Sachs over allegedly fraudulent disclosure statements in its synthetic CDO originations.[3] The suit was high-dollar, high-profile and unprecedented.[4] Shortly afterward, on July 21, 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act") was signed into law, promising massive financial overhaul.[5]

Discourse exploded in the wake of the Goldman suit. Critics blamed CDOs for inflating the housing bubble and helping to bring about the recession,[6] credit rating agencies for inflating CDO

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[1] Jody Shenn, *CDO Market Is Almost Frozen, JPMorgan, Merrill Say*, BLOOMBERG, Feb. 5, 2008,

[2] *Id.*

[3] Gregory Corcoran, *SEC v. Goldman: The News Release + the Complaint*, WSJ DEAL JOURNAL BLOG, Apr. 16, 2010, http://blogs.wsj.com/deals/2010/04/16/goldman-v-sec-the-news-release/

[4] David S. Morgan, *Spitzer: SEC Likely to Win Against Goldman*, CBS NEWS, Apr. 20, 2010, .

[5] Matthew G. Lamoreaux, *Obama Signs Dodd-Frank Reform Bill*, J. OF ACCOUNTANCY, July 21, 2010, http://www.journalofaccountancy.com/Web/20103125.htm.

[6] *See, e.g.,* Joe Nocera, *A Wall Street Invention Let the Crisis Mutate*, N.Y. TIMES, Apr. 16, 2010. http://www.nytimes.com/2010/04/17/business/17nocera.html

ratings,[7] and originators and short sellers, like Goldman Sachs and Paulson, for marketing synthetic CDOs that were expected to fail.[8] Unfortunately, despite the large volume of discourse, few mainstream commentators discussed CDOs with a high degree of technical clarity. In fact, numerous mainstream newspaper articles simply referred to CDOs as "complex," offering few technical details about their structure or function.[9]

This article will begin by offering the first detailed definition of CDOs to appear in a law review article.[10] A solid grasp of the various types of CDOs and how they are originated is essential to understand further topics, such as common criticisms against CDOs, the Goldman case and whether the Dodd-Frank Act's measures are effective. First, I will differentiate between the two basic classes of CDOs: cash and synthetic. For each of these two classes, I will make further distinctions between arbitrage and balance sheet CDOs, as well as cash flow and market value CDOs. In addition, I will provide a basic overview of how CDOs are rated and sold to investors.

Next, I will discuss the most common criticisms of CDOs. In essence, this section will focus on what went wrong. First, critics argue that originators were incentivized to churn low-quality mortgages into CDOs, which helped create the housing bubble.[11] In

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[7] *See, e.g.,* Robert Oak, *Credit Ratings Agencies Complicit in Global Financial Casino Gambling Hall Dupe*, ECONOMIC POPULIST, Apr. 23, 2010.

[8] *See, e.g.,* Mark Trumbull, *Goldman Sachs vs. SEC: "Vampire Squid" or "Doing God's Work"?*, CHRISTIAN SCIENCE MONITOR, Apr. 21, 2010, http://www.csmonitor.com/Money/2010/0421/Goldman-Sachs-vs.-SEC-Vampire-squid-or-doing-God-s-work (observing, with humor, that one critic described Goldman Sachs as "a great vampire squid wrapped around the face of humanity").

[9] *See, e.g.,* Aline van Duyn, *More Turmoil Looms in CDO Market*, FINANCIAL TIMES, June 21, 2010.

[10] A previous article of mine summarized current developments in CDO regulation and contained a partial definition of CDOs and their structure, but my discussion was limited. Neal Deckant, Recent Development, *Reforms of Collateralized Debt Obligations: Enforcement, Accounting and Regulatory Proposals*, 29 ANN. REV. BANKING & FIN. L. 79 (2009). In my research, I was surprised at how difficult it was to find a clear, concise, technical overview of the various types of CDOs.

[11] *See, e.g.,* Ryan Chittum, *Audit Notes: Yes, There Was a Housing Bubble; Magnetar; Facebook*, COLUM. JOURNALISM REV., Apr. 21, 2010, http://

other words, by selling securitized mortgages to investors, originators could remove low-quality mortgages from their balance sheets and earn an origination fee in the process.[12] Second, critics argue that credit rating agencies had a fundamental conflict of interest, which incentivized inflated ratings.[13] Third, critics argue that some investment firms improperly used synthetic CDOs to create risky, over-leveraged "bets," instead of using the instruments to hedge legitimate risk.[14] Fourth, critics argue that some originators did not adequately disclose important details, such as whether an independent third-party selected the portfolio.[15] This criticism is especially salient in light of the Goldman Sachs scandal.[16]

The SEC's case against Goldman Sachs will provide an effective case study of each of these criticisms. Not only is the Goldman case high-profile and high-dollar, but the criticisms against CDOs are highly relevant to the fact set. I will discuss the facts of the case, detailing how each criticism appears. In other words, I will provide an explanation of what "went wrong" with Goldman, and I will tie it into the prior discussion of common criticisms of CDOs.

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www.cjr.org/the_audit/housing_bubble_magnetar_facebook.php (concluding that CDOs played a siginificant role in the housing bubble).

[12] C.W. Griffin, *Mortgage Crisis Starts with CDOs*, AHWATUKEE FOOTHILL NEWS, Dec. 15, 2009, http://www.ahwatukee.com/commentary/article_b58cb55a-f885-5e56-ac41-716d05f5280b.html. When many sources discuss "origination fees," the term is used in a broad sense to not only mean transaction fees but also fees to act as the servicer, fees to set up a trust account, and brokerage fees in selling the SPV interests. Each of these services may offer lucrative business. The originator decides which of these services it will provide, and which it will contract to an outside party. For a discussion of the various benefits that originators and outside contractors may provide for an SPV, such as escrow agents, trustees, custodians, and servicers, *see generally* Tamar Frankel & Mark Fagan, LAW AND THE FINANCIAL SYSTEM 45-67 (2009).

[13] *See generally* Tamar Frankel & Mark Fagan, LAW AND THE FINANCIAL SYSTEM, 167-72 (providing a general discussion of the various credit rating agency conflicts of interest).

[14] Nocera, *supra* note 6.

[15] *See, e.g.* Felix Salmon, *Deutsche Bank and CDO Disclosure*, REUTERS, Apr. 26, 2010, http://blogs.reuters.com/felix-salmon/2010/04/26/deutsche-bank-and-cdo-disclosure/ (highlighting some possible questions and conflicts that may arise from inadequate disclosure).

[16] As will be discussed later, the Goldman Sachs scandal is centered on allegedly inadequate disclosure statements.

Finally, I will examine various corrective measures, such as SEC rules and key provisions of the Dodd-Frank Act. These measures were introduced around the time of the Goldman Sachs scandal. They were designed to correct specific problems with CDOs and securitization. If implemented properly, they may go a long way towards restoring investor confidence.

II. Definitions and History

In short, a CDO is a basket of assets or income streams that are pooled together, split into subordinated repayment rights ("tranches"), rated by a credit rating agency and sold to investors.[17] The assets may consist of cash assets, such as bonds, loans, preferred securities, mortgages, or even tranches of other CDOs.[18] When a CDO is created from a cash asset, it is called a cash CDO.[19] Alternatively, a CDO may be created from income streams that result from a pool of credit default swaps, a type of derivative.[20] When a CDO is created from credit default swaps ("CDSs") instead of cash assets, it is called a synthetic CDO.[21] There are other distinctions and classifications, but cash CDOs and synthetic CDOs are the two fundamental classes.

The first cash CDO was issued in the late 1980s, when investment banks like Morgan Stanley wished to securitize pools of assets.[22] Regular issuance of cash CDOs began in 1995, and Moody's

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[17] *See generally* Sivan Mahadevan et al., MORGAN STANLEY STRUCTURED CREDIT INSIGHTS (3d ed. 2007). I rely heavily on this book in the definitional section. In my research, Mahadevan's book is unparalleled in offering a detailed, technical overview of CDO structuring, issuance, and rating. While this information is available in other sources, Mahadevan's book is the best consolidated source.

[18] *Id.* at 12. When CDOs are created from tranches of other CDOs, they are colloquially dubbed "CDO-squared." Nonetheless, if the underlying assets are cash assets, this is still a cash CDO. This structure may be repeated recursively—CDOs can be created from CDO tranches, which are created from CDO tranches. Such a holding is called a "CDO^n."

[19] *Id.*

[20] *Id.* at 28-29.

[21] *Id.*

[22] *Id.* at 6.

created a ratings model for CDOs in 1996.[23] Around 2007, near the market's peak, $500 billion in cash CDOs were originated annually.[24]

In comparison, synthetic CDOs were created quite later, in 1997.[25] At the time, synthetic CDOs were a much smaller portion of the market than cash CDOs, but they were an equally important section.[26] For example, one could have profited from the collapse of the housing bubble by taking short positions on synthetic CDOs that contained subprime mortgage credit risk as the underlying obligation.[27] This practice is hotly controversial.[28] As will be explained later in this article, Paulson & Co. sparked the Goldman Sachs scandal by taking short positions on synthetic CDOs created from a collection of CDSs based on subprime mortgages. Indeed, the downturn in the housing market drove synthetic CDO issuances in the past few years.[29] In 2007, near the CDO market's peak, synthetic transactions were valued at over $1.5 trillion annually.[30]

A. Cash CDOs

1. Origination and Structuring

To create a cash CDO, an originator begins with a given basket of assets, such as loans, bonds, preferred securities, mortgages, or holdings in other CDOs.[31] The originator then incurporates a special purpose vehicle ("SPV") and transfers these assets to the SPV.[32] The SPV is then divided into subordinated repayment rights, called tranches.[33] Each tranche corresponds to a given subordination in repayment, with a corresponding yield to cover the

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[23] *Id.*
[24] *Id.* at 1.
[25] *Id.* at 6.
[26] *Id.* at 13.
[27] *See, e.g.,* Marisa Taylor, *Paulson and Co. Made a $3.7 Billion Profit on Collapse of the Subprime Mortgage Market*, Apr. 18, 2010, http://rainbow warrior2005.wordpress.com/2010/04/18/paulson-co-made-a-3-7-billion-profit-on-collapse-of-subprime-mortgage-market/ (explaining that Paulson made $3.7 billion from "betting against" the housing market).
[28] *See, e.g., id.*
[29] Mahadevan, *supra* note 17, at 1.
[30] *Id.*
[31] *Id.* at 12.
[32] *Id.* at 14.
[33] *Id.* at 3.

risk of default.[34] For example, senior tranches are paid first.[35] Since they have the lowest risk, they are assigned the lowest yield.[36] On the other hand, junior tranches are paid last.[37] Accordingly, junior tranches have the highest risk and therefore offer the highest rates of return.[38] When choosing a CDO, investors must not only pick a CDO that contains underlying assets that they are comfortable with, but they must also pick the right tranche, taking into account risk of default and expected return.

To mitigate the difficulty in choosing the correct tranche, credit rating agencies rate each tranche before they are sold.[39] In theory, this allows investors to quickly assess the risks of each tranche before deciding on the proper expected return. In practice, CDOs are notoriously difficult and costly to rate.[40] And, as will be discussed, credit rating agencies have a fundamental conflict of interest.[41] They are relied upon for accurate ratings, but there is an incentive to issue inflated ratings to earn repeat business.[42] Despite these issues, the credit rating is an essential step in CDO origination. After the ratings are assigned, the tranches are sold to investors.

2. Source of the Assets: Balance Sheet and Arbitrage CDOs

A further distinction of cash CDOs may be made between balance sheet and arbitrage CDOs. This distinction examines where the assets came from—either the originator already had the assets on its balance sheets, or it acquired the assets with the intent of creating

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[34] *I'm Shocked, Shocked to Find that Subprime is in this CDO!*, http:// accruedint.blogspot.com/2007/03/im-shocked-shocked-to-find-that.html (Mar. 9, 2007) (explaining the process of subordination in CDO tranches).
[35] *Id.*
[36] *Id.*
[37] *Id.*
[38] *Id.*
[39] Lisbeth Freeman, *Who's Guarding the Gate? Credit-Rating Agency Liability as "Control Person" in the Subprime Credit Crisis*, 33 VT. L. REV. 592-93 (2009).
[40] *See generally* Frankel & Fagan, *supra* note 13, at 149-51 (discussing the various difficulties in rating securitizations).
[41] *See generally id.* at 167-72 (providing a broad discussion of the various conflicts of interest credit rating agencies have).
[42] *See generally* Freeman, *supra* note 39, at 592-93 (explaining why many CDOs received artificially high credit ratings).

a CDO. If the originator creates the CDO using cash assets already on its balance sheets, it is a balance sheet CDO.[43] The originator usually sells assets that it already owns to the SPV for cash in a "true sale."[44] The originator is repaid from the proceeds of the initial sale of the tranches plus an origination fee. Since the SPV retains the same assets throughout its life, there is typically little management after the initial sale.[45] As will be discussed later, because the originator removes the assets from its balance sheets and earns an origination fee, balance sheet CDOs incentivize originators to pool together bearish assets, remove them from their balance sheets, get a credit rating agency to put a high rating on it and sell it to investors.[46] However, there are variations on this system. The originator may choose to retain an equity interest in order to overcollateralize or bolster investor confidence, meaning that the assets may remain on its balance sheets.[47] Nonetheless, if the CDO's assets were originally owned by the originator and came from its balance sheets, it is a balance sheet CDO.

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[43] Tamara Patton, *Going to Market: Understanding Market Value CDOs*, TD SECURITIES, July 2000, http://www.securitization.net/knowledge/transactions/tdcdo.asp (explaining the difference between balance sheet and market value CDOs).

[44] Rosaleen Marzi, *Legal Considerations for CDO Transactions*, THE SECURITIZATION CONDUIT, Mar. 22, 2002, http://www.thefreelibrary.com/Legal+considerations+for+CDO+Transactions-a0137012486 (observing that the major credit rating agencies require a legal opinion letter of a "true sale" in many types of securitizations). A true sale is not required when an originator, such as an FDIC-insured bank, is not subject to the Bankruptcy Code. But the credit rating agencies still require assurance that the rights of the investors will not be prejudiced upon the event of a bankruptcy. A legal opinion letter to this effect is usually necessary. Frankel & Fagan, *supra* note 13, at 153.

[45] Mahadevan, *supra* note 17, at 16.

[46] Masazumi Hattori & Kazuhiko Ohashi, *Incentives to Issue Low-Quality Securitized Products in the OTD Business Model*, BANK OF JAPAN: INSTITUTE FOR MONETARY AND ECONOMIC STUDIES, Discussion Paper No. 2009-E-26, Nov. 29, http://www.imes.boj.or.jp/english/publication/edps/2009/09-E-26.pdf ("In the presence of asymmetric information between the lender and investors regarding the credit quality of potential borrowers, overvaluation from the lender's perspective can occur for low-quality securitized products, which inefficiently induces the lender not to screen borrowers and hence to issue the securitized products of low credit quality.").

[47] Mahadevan, *supra* note 17, at 16, 19.

In an arbitrage CDO, the originator actively seeks to acquire assets with the intention of creating a CDO, whereby it can profit from the spread between the funding costs and the asset's returns.[48] That is, the originator seeks to acquire assets that it may package and resell as a CDO. The incentive for the originator is realization of origination and management fees in the acquisition of assets, as well as the trading, monitoring and sale of the tranches.[49]

In 1998, fifty-two percent of cash CDOs were arbitrage and forty-eight percent were balance sheet, but by 2006, the percentage of arbitrage CDOs rose to ninety-three percent.[50] This means that near the market's peak in 2006-08, the vast majority of originators actively sought to acquire assets with the sole intent to resell them as CDOs, instead of using assets it already owned.

3. Source of the Funds: Cash Flow and Market Value CDOs

A final distinction of cash CDOs may be made between cash flow CDOs and market value CDOs. This distinction examines the source of the funds—either the assets contain sufficient income streams or the manager must monitor the market value of the assets. In a cash flow CDO, the assets have a cash flow such that they are expected to satisfy repayment obligations of all the tranches.[51] That is, if the assets have an income stream that satisfies all the tranche repayment obligations, little management is required. The SPV buys and holds most assets, and the manager only needs to divide up the incoming payments.

In market value CDOs, the assets are such that they may not necessarily have sufficient income streams to satisfy the tranches.[52] Instead, the manager actively values the underlying assets' market value, using mark-to-market accounting.[53] The manager must periodically sell off and acquire assets to satisfy cash flow to the tranches.[54]

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[48] Patton, *supra* note 43.
[49] Mahadevan, *supra* note 17, at 16.
[50] *Id.* at 17.
[51] Patton, *supra* note 43.
[52] Mahadevan, *supra* note 17, at 17.
[53] *Id.*
[54] Patton, *supra* note 43.

If all these distinctions seem confusing, note that a CDO is a contractual relationship and these terms are intended to explain the most common variations. At its core, a cash CDO is simply a collection of assets that are pooled, divided into subordination rights, rated and sold to investors. The distinction between balance sheet and arbitrage CDOs explains where the assets come from, and the distinction between cash flow and arbitrage CDOs explains where the funding to the tranches comes from. While these distinctions among types of cash CDOs can be somewhat academic, the difference between cash and synthetic CDOs is more fundamental.

B. Synthetic CDOs

1. Origination and Structuring

Unlike cash CDOs, synthetic CDOs only have one underlying type of obligation: credit default swaps ("CDSs").[55] By way of introduction, CDSs are a type of derivative traditionally used to hedge credit risk.[56] A party taking a short position pays periodic sums to a party taking a long position to protect against credit default on certain assets.[57] In return, if a credit default does occur on that asset, the party with the long position must cover the cost of the default by paying the party in the short position.[58] Like paying an insurance premium, the short party makes periodic payments to the long party, but if a trigger occurs in the event of a credit default, the long party must cover the cost.[59] The short parties make periodic payments in order to protect themselves from a collection of credit risks, while the long parties receive incoming payments for assuming credit risk.[60]

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[55] Frankel & Fagan, *supra* note 13, at 194.
[56] Credit Default Swap, INVESTOPEDIA, http://www.investopedia.com/terms/c/creditdefaultswap.asp (last visited Nov. 4, 2010).
[57] A Beginner's Guide to Credit Default Swaps, http://richnewman.wordpress.com/2007/12/09/a-beginners-guide-to-credit-default-swaps/ (Dec. 9, 2007, 18:21 EST).
[58] Mahadevan, *supra* note 17, at 29.
[59] *How Does a Credit Default Swap Work?*, Accrued Interest, Apr. 22, 2007, http://accruedint.blogspot.com/2007/04/how-does-credit-default-swap-cds-work.html ("A CDS is a lot like an insurance policy . . . if there is a default, the buyer is essentially made whole because s/he gets par for the bonds.").
[60] Mahadevan, *supra* note 17, at 29.

Similar to cash CDOs, synthetic CDOs are created by transferring a basket of CDSs to an SPV.[61] The only difference is that cash CDOs are comprised of assets, while synthetic CDOs are comprised of CDSs. All the short parties make periodic payments to the SPV, which then disburses the income to the long parties.[62] If one of the credit events triggers (e.g. a default occurs), then the parties taking long positions must pay a percentage of the default.[63] Again, subordination rights are established. Senior parties receive payment first and bear the lowest percentage amount of loss in the event of a default, and junior parties receive payment last and bear the largest percentage amount of loss.[64]

Once subordination rights are structured, a credit rating agency assigns a rating to each tranche, and the long and short positions are marketed to parties.[65] Like cash CDOs, ratings are difficult and costly to establish.[66]

2. Funded and Unfunded Synthetic CDOs

In the event of a large default, the long parties may not be able to cover the amount of the default. Because of this possibility, some synthetic CDOs are funded. Funded CDOs mean that upon assuming the credit risk, parties taking long positions must contribute cash up front to an escrow fund maintained by the CDO manager.[67] If a default occurs and the parties in long positions are unable to cover, the fund may be used to ensure payment to the parties holding short positions.[68] Funding also disincentivizes parties from over-leveraging long positions. In an unfunded CDO, a distressed party could be tempted to over-leverage long positions, since long positions require

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[61] *Id.*
[62] *Id.*
[63] *Id.*
[64] *Id.*
[65] *Id.* at 36.
[66] All of the difficulties of rating cash CDOs are present in synthetic CDOs, namely a large pool of underlying assets and the uncertain effect of subordination. For a discussion of general difficulties in rating securitizations, *see generally* Frankel & Fagan, *supra* note 13, at 149-51.
[67] Mahadevan, *supra* note 17, at 35.
[68] *Id.*

no upfront cash and receive regular income.[69] The problem comes when there is a default.

3. Source of the CDSs: Balance Sheet and Arbitrage Synthetic CDOs

Similar to cash CDOs, a distinction may be made between balance sheet and arbitrage synthetic CDOs. In a balance sheet CDO, the originator creates credit default swaps using its own assets and liabilities. The originator often takes a short position in order to offload credit risks onto parties in long positions, while retaining ownership of the assets.[70] By contrast, in an arbitrage CDO, the originator uses third-party credit risks to create the CDSs.[71] In this way, the distinction between balance sheet and arbitrage CDOs is just a way to differentiate between whether the assets were initially on the originator's balance sheets or whether they came from a third source.[72]

4. Derivatives: The Underlying Obligation in Synthetic CDOs

To be clear, the underlying obligations in synthetic CDOs (credit default swaps) are derivatives.[73] Unlike the cash assets found in cash CDOs, they are not intended to be a growth-enhancing investment.[74] CDSs involve "parties" and "counterparties" taking long and short positions, instead of "investors" purchasing a portion

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[69] Felix Salmon, *The Silver Lining to Synthetic CDOs*, REUTERS, Apr. 11, 2010, http://blogs.reuters.com/felix-salmon/2010/04/11/the-silver-lining-to-synthetic-cdos/ ("[S]ynthetic CDOs did make it much easier for banks, in particular, to take on enormous amounts of highly-leveraged exposure to the subprime market, by holding on to unfunded super-senior tranches.").
[70] Mahadevan, *supra* note 17, at 32.
[71] *Id.* at 33.
[72] *Id.* at 32-33.
[73] Frankel & Fagan, *supra* note 13, at 194.
[74] For a great introductory discussion on the nature of derivatives and their uses in hedging, *see generally* Kenneth A. Froot, David S. Scharfstein & Jeremy C. Stein, *A Framework for Risk Management*, HARV. BUS. REV., Nov.-Dec. 1994; Robert M. McLaughlin, OVER-THE-COUNTER DERIVATIVE PRODUCTS: A GUIDE TO BUSINESS AND LEGAL RISK MANAGEMENT AND DOCUMENTATION 70 (1998).

of an income stream.[75] With derivatives, one party's gain is the counterparty's loss, and the net present value of a position is intended to be zero.[76] In other words, the price of the payments from the short party is, theoretically, priced at the probability of default multiplied by the magnitude of the default. Positions in CDSs and synthetic CDOs may be highly effective in hedging volatility, instead of creating long-term growth.[77] In practice, certain parties have attempted to use synthetic CDOs to create long-term growth which is a source of criticism of CDOs that I will address in the next section.[78]

III. The Most Common Criticisms Against CDOs

CDOs have been heavily criticized in the past several years. The CDO market, worth over $2 trillion, collapsed from 2007 to 2008.[79] Commentators also criticized the role CDOs played in creating the housing bubble, the subprime crisis and helping to bring about the recession.[80] These issues became even more poignant after the Goldman Sachs scandal surfaced and talks about financial reform began in earnest. [81]

A. The Role CDOs Played in the Housing Bubble, Subprime Crisis and Recession Due to Churning Low-Quality Mortgages

One of the greatest sources of criticisms against CDOs stems from the role they played in bringing about the current U.S. financial crisis.[82] First, critics claim that CDOs artificially inflated housing

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[75] Robert M. McLaughlin, OVER-THE-COUNTER DERIVATIVE PRODUCTS: A GUIDE TO BUSINESS AND LEGAL RISK MANAGEMENT AND DOCUMENTATION 68-70 (1998).
[76] *Id.*
[77] *See generally* Froot, *supra* note 74; McLaughlin, *supra* note 75 (arguing that derivatives should be used mainly to hedge volatility, not create growth).
[78] *See* Taylor, *supra* note 27.
[79] Shenn, *supra* note 1.
[80] Griffin, *supra* note 12.
[81] Please note that the sources presented in this section are not intended to be exhaustive, but illustrative of the most common criticisms.
[82] Some sources criticize the process of "securitization" instead of CDOs, specifically. The differing terminology is irrelevant. Mortgages (and other assets) are securitized through an SPV and sold as an interest in a CDO.

prices through churning, which helped create a housing bubble.[83] Second, critics point to the ways in which CDOs incentivized subprime lending.[84] Third, critics note that the massive losses and write-downs from CDOs may have played a major role in bringing about the credit crisis and recession.[85]

1. Background on Housing Prices

Median home values surged from the late 1990's to 2006.[86] The U.S. Census provides data on new home sales from 1963 to the present, which is a rough estimation of the overall health of the housing market.

Year	Median Price	Change
1990	122,900	2.42%
1991	120,000	-2.36%
1992	121,500	1.25%
1993	126,500	4.12%
1994	130,000	2.77%
1995	133,900	3.00%
1996	140,000	4.56%
1997	146,000	4.29%
1998	152,500	4.45%
1999	161,000	5.57%
2000	169,000	4.97%

[83] *See, e.g.,* Chittum, *supra* note 11.
[84] *See generally* Hattori & Ohashi, *supra* note 46.
[85] *See, e.g.,* William Galston, *Shocking Revelations on Wall Street (And Obama's Tone-Deaf Response)*, NEW REPUBLIC, Sept. 28, 2010, http://www.tnr.com/blog/william-galston/77985/wall-street-obama-financial-crisis ("[T]he CDO collapse . . . sparked the Great Recession."); Radi Khasawneh, *Hope, Optimism and CDOs*, FINANCIAL NEWS, Oct. 27, 2010, http://www.efinancialnews.com/story/2010-10-07/cdo-market-optimism ("CDOs, of course, were the villains of the financial crisis. The vehicles of debt, which was backed by a dizzying array of other debt, exploded in such spectacular fashion in 2007—triggering meltdown at many an institution.").
[86] *Median and Average Sales Prices of New Homes Sold in the United States*, CENSUS, http://www.census.gov/const/uspriceann.pdf [hereinafter "Census"].

2001	175,200	3.67%
2002	187,600	7.08%
2003	195,000	3.94%
2004	221,000	13.33%
2005	240,900	9.00%
2006	246,500	2.32%
2007	247,900	0.57%
2008	232,100	-6.37%
2009	216,700	-6.64%

The data reveals that new house prices increased roughly four to five percent per year, from 1996 to 2005.[87] There are some outlier years, but prices began their hike around 1996.[88] Values then leveled around 2006-07[89] and fell about six percent in 2008 and 2009.[90]

Recall that regular issuance of mortgage-backed cash CDOs began in 1995 and halted in 2007-08.[91] It is no coincidence that the boom in securitizations through cash CDOs roughly corresponds to the rise and fall of the housing bubble. Indeed, the use of CDOs to securitize mortgages is often cited as a reason why the housing bubble and subprime crisis occurred.[92]

2. Churning Mortgages and the Housing Bubble

To understand the role CDOs played in creating the housing bubble and subprime crisis, one must first consider how banks loaned money to buyers prior to the popularization of cash CDOs. Traditionally, banks gave buyers a loan that was collateralized by the value of the home and typically required a 20% down payment and rigorous credit check.[93] The banks would hold the mortgage on their

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[87] *Id.*
[88] *Id.*
[89] *Id.*
[90] *Id.*
[91] Mahadevan, *supra* note 17, at 6; Shenn, *supra* note 1.
[92] *See, e.g.,* Griffin, *supra* note 12. ("The housing bubble could never have occurred without mortgage-backed, collectivized debt obligations (CDOs).").
[93] *Id.*

books, collecting income streams over the course of many years.[94] The banks would be the only party exposed to the risk of default.[95] This risk incentivized banks to lend quality mortgages to credit-worthy individuals, so that each mortgage would be an investment that could remain on the bank's balance sheets for decades.

Critics argue that CDOs eliminated the incentive for banks to originate quality mortgages.[96] Instead of holding mortgages on its balance sheets, a bank could securitize pools of mortgages through CDOs and resell them to investors, acting as a CDO originator instead of an investor in a mortgage.[97]

As long as the originating bank is able to successfully sell interests in mortgage-backed CDOs, this process entails little to no risk because the investors in the CDO realize the loss, not the originating bank.[98] The bank also earns origination and transaction fees for providing initial lending for the mortgage and creating the CDO.[99] With securitization through CDOs, banks are incentivized to originate as many mortgages as possible, regardless of their quality.[100]

Many critics blame the banks. The consensus of these critics is that "[t]he housing bubble could never have occurred without mortgage-backed, collectivized debt obligations (CDOs). This practice of bundling mortgages into large debt packages and selling them to pension funds and other investors promoted reckless gambling in a formerly safe, sound market."[101] More pointedly, one commentator writes that "mortgage lenders became obsessed with fast bucks from initial fees. Insulated from risk, they abandoned all pretense at sane credit criteria."[102] Another commentator writes that CDOs "encourage[d] subprime originators in the Inland Empire to

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[94] *Id.*
[95] *Id.*
[96] *Id.*
[97] *Id.*
[98] *See generally* Hattori & Ohashi, *supra* note 46.
[99] *See general id.*
[100] *See generally id*.
[101] Griffin, *supra* note 12. Note that a "collectivized debt obligation" is a less common name for a CDO, but it is referring to the same thing as a "collateralized debt obligation."
[102] Felix Salmon, *The Silver Lining to Synthetic CDOs*, REUTERS, Apr. 11, 2010, http://blogs.reuters.com/felix-salmon/2010/04/11/the-silver-lining-to-synthetic-cdos/.

give $600,000 mortgages to itinerant strawberry pickers, just to keep their channels full."[103]

As credit became available to more and more buyers, regardless of their creditworthiness, the larger pool of buyers consistently increased housing demand from 1996-2006.[104] As demand increased, price increased. This is one popular explanation of the housing bubble.

3. The Subprime Crisis

With housing prices artificially inflated through CDOs, plus an abundance of low-quality mortgages across the market, the financial industry was a powder keg ready to explode. Mortgage lenders did "not represent the borrowers . . . [i]nstead, they [were] more like independent salespeople . . ." who sought origination fees by repacking pools of dubious mortgages into CDOs and selling them to investors.[105]

Subprime mortgages were the spark that ignited the crisis. As might be expected, the first series of mortgages that defaulted were the ones lent to borrowers lacking a quality credit history, the subprime mortgages.[106] In January 2007, during the start of the country's economic problems, over fourteen percent of subprime mortgages were over sixty days delinquent.[107]

After the bubble began to collapse, home values plummeted. Values of new homes were roughly level in 2007 but fell over six percent in both 2008 and 2009.[108] "[M]ortgages were bundled together and sold to investors as collateralized debt obligations (CDOs) . . . . When the higher risk underlying mortgages started to default, investors were left with properties that were quickly losing value."[109] For many homes, the value of the house was worth less

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[103] *Id.*
[104] *Cf.* CENSUS, *supra* note 86.
[105] Alistair Barr, *Subprime Crisis Shines Light on Mortgage Brokers*, MARKETWATCH, Apr. 10, 2007, http://www.marketwatch.com/story/subprime-crisis-shines-spotlight-on-mortgage-broker-practices.
[106] *See Id.*
[107] *Id.*
[108] CENSUS, *supra* note 87.
[109] *Subprime Meltdown*, Investopedia, http://www.investopedia.com/terms/s/ subprime- meltdown.asp.

than the outstanding mortgage.[110] That is, the mortgage was undercollateralized; if a buyer were to default, the mortgage holder may not be able to recoup the amount of the default by reselling the property.

Even worse, in many cases, buyers were incentivized to purposefully default.[111] If a homeowner's mortgage was worth more than the actual value of the home, the owner could decide to "cut his losses" and walk away, instead of continuing to pay an above-market price for his home.[112] "If their payments are rising and the houses are worth less than they owe, they'll just walk away," said Bill Wheaton, director of MIT's Center for Real Estate.[113] And again, each foreclosure meant realization of losses by the mortgage holder.

4. Recession

As financial firms realized massive losses and write-downs due to the bursting of the housing bubble and the subprime crisis, the U.S. economy slid into a recession. While the exact cause of the recession is still debated, popular sentiment holds that the CDO driven subprime crisis was, at the very least, a significant contributing factor.[114] In conclusion, critics blame CDOs for helping to bring about the housing bubble, subprime crisis and recession. It is yet unclear whether this was a one-time catastrophe, or whether securitization will continue to pose serious risks to the financial system.

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[110] Chris Arnold, *Economists Brace for Worsening Subprime Crisis*, NPR, Aug. 7, 2007, http://www.npr.org/templates/story/story.php?storyId=12561184.
[111] *Id.*
[112] *Id.*
[113] *Id.*
[114] *See Financial Crisis of 2007-2010*, WIKIPEDIA, http://en.wikipedia.org/wiki/Financial_crisis_of_2007%E2%80%932010 ("The CDO in particular enabled financial institutions to obtain investor funds to finance subprime and other lending, extending or increasing the housing bubble and generating large fees."). I am aware that it is taboo to cite Wikipedia. I use this source merely to show that popular opinion draws a strong link between the housing bubble and the current U.S. financial crisis not to prove a factual point. Even so, this Wikipedia article is well-written and well-researched.

B. Inflated Ratings and Credit Rating Agency Conflicts of Interest

An important step in originating a CDO is for a credit rating agency to assign a rating to each tranche.[115] It is extremely difficult for an individual investor to gauge the risk of default on a given tranche, since determining a credit rating is time-consuming, costly and requires a great deal of expertise.[116] In theory, a reliable credit rating reduces information costs, since it allows an investor to gauge the risk that a tranche will default.[117]

But after the onset of financial problems in 2007, credit rating agencies began to downgrade ratings on scores of CDO tranches.[118] Downgrades hurt the market value of firms holding CDOs, resulting in further write-downs. "We will see additional forced selling of CDOs when downgrades eventually occur," said a UBS AG analyst.[119]

In short, the downgrades indicate that the credit ratings were inflated. Inflated credit ratings have been a major source of criticism against CDOs.[120] Worse yet, the reason behind the inflated ratings is due to a fundamental conflict of interest that originators have with credit rating agencies.[121]

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[115] Frankel & Fagan, *supra* note 13, at 148.
[116] *See generally id.* at 149-51 (discussing the rating process).
[117] *Id.* at 162.
[118] *See, e.g.,* Darrell Hassler, *Fitch, S&P Warns Investors About Subprime Mortgage CDOs, Bonds*, BLOOMBERG, June 22, 2007, http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aFmS14SrROTQ.
[119] *Id.*
[120] For example, in April 2010, the Senate Committee on Homeland Security and Government Affairs held hearings regarding the role that inflated ratings played in bringing about the recession. These hearings included the way that inflated ratings negatively affected the CDO market. Press Release, Senate Committee on Homeland Security and Government Affairs, Senate Subcommittee Holds Third Hearing on Wall Street and the Financial Crisis: The Role of Credit Rating Agencies (Apr. 22, 2010) (http://
hsgac.senate.gov/public/index.cfm?FuseAction=Press.MajorityNews&ContentRecord_id=2778a107-5056-8059-7625-aa17151c8b72).
[121] Frankel & Fagan, *supra* note 13, at 171 (discussing the basic conflict of interest in the "issuer-pays" model.).

As discussed, securitization caused banks and mortgage lenders to shift from being investors to being CDO originators.[122] Instead of holding a mortgage on their books, lenders would pool mortgages together and resell them as a CDO, earning origination fees in the process.[123] But banks and lenders knew that their CDOs needed positive ratings to stay in the origination business.[124] Indeed, credit rating agencies were keenly aware of the importance of a positive credit rating.[125]

Unfortunately, credit rating agencies faced a fundamental conflict of interest.[126] Simply put, originators paid credit rating agencies high fees to rate their instruments.[127] Some credit rating agencies earned over fifty percent of their revenues from securities.[128] All parties involved knew the necessity of high ratings, and credit rating agencies knew that assigning high ratings would mean return business. To this end, credit rating agencies actually advised originators on ways to obtain high ratings.[129]

This conflict of interest is a source of significant criticism. Fortunately, the Dodd-Frank Act and new SEC rules contain measures that bring greater accountability to credit rating agencies and maintain their independence, which I discuss later. It remains to be seen whether these measures will fully correct this conflict of interest.

C. Betting With Synthetic CDOs, Instead of Hedging Legitimate Risk

Another major source of criticism is that financial institutions took risky "bets" in synthetic CDOs, a type of derivative. That is, instead of using derivatives to hedge volatility, these institutions took positions in synthetic CDOs with the intention of

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[122] Griffin, *supra* note 12.
[123] *Id.*
[124] *See* Frankel & Fagan, *supra* note 13, at 163 (noting that the major credit rating agencies counseled issuers on how to structure their securitizations in order to maximize ratings.).
[125] *Id.*
[126] *Id.* at 171.
[127] Freeman, *supra* note 39, at 601.
[128] *Id.* at 602.
[129] *Id.* (rating agencies are now actively engaged with the investment banks in determining the proper structures to maximize ratings…").

earning long-term growth.[130] Some firms made money, but many others lost considerable sums when their derivative bets went sour.[131]

Simply put, derivatives are not intended to be a growth-enhancing investment.[132] Unlike investments in assets, derivatives are contracts that involve "parties" and "counterparties," and one party's gain corresponds to another party's loss.[133] For example, in synthetic CDOs, the income earned by the long position is intended to be set at the risk of credit default multiplied by the magnitude of the default.[134] In theory, given a sufficiently large pool of CDSs, the amount the short position pays to the long position exactly equals the sum total of credit defaults that the long position pays to the short position.[135] "[T]he objective in designing [a swap] is to ensure that at the outset the net present value ("NPV") of all exchanges of the payments to be made by both sides will equal zero."[136]

In practice, because valuing positions in synthetic CDOs involves forward-looking projections of credit risk, it is impossible to know the value of a position with certainty. Some managers, such as Paulson of the Goldman Sachs scandal, apparently believed that certain positions were undervalued.[137] Because he took significant short positions in synthetic CDOs backed by subprime mortgage risk, Paulson apparently believed that the risk of mortgage default was actually higher than the rating agencies anticipated. Paulson turned out to be correct, and he profited.[138] But given the nature of derivatives, for every party like Paulson that profits, there is a counterparty that loses.[139]

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[130] Nocera, *supra* note 6 ("Once synthetic C.D.O.'s became popular, Wall Street no longer needed to feed the beast with new subprime loans. It could make an infinite number of bets on the bonds that already existed.").

[131] *See, e.g.,* Taylor, *supra* note 27.

[132] *See* McLaughlin, *supra* note 75 at 68.

[133] *Id*. at 68, 70.

[134] *Id.* at 71.

[135] *Id.*

[136] *Id.*

[137] It is impossible to know that Paulson *actually* believed that the risk of default in subprime mortgages were underestimated, but that appears to be the case since he heavily leveraged his fund in short positions of synthetic CDOs backed by subprime mortgage risk.

[138] *See* Taylor, *supra* note 27 ("[P]aulson & Co., made a $3.7 billion profit by betting against the housing market.").

[139] *See* McLaughlin, *supra* note 75, at 70.

Many managers made "bets," believing that certain positions were undervalued, and many were wrong. Some critics believe that such bets are an inappropriate use of derivatives. In *A Framework for Risk Management*, Professors Kenneth A. Froot, David Scharfstein and Jeremy Stein advance guidelines for effective derivative use.[140] Because derivatives are intended to be zero-NPV, where one party's gain is another party's loss, they recommend that companies put excess cash into growth-enhancing investments.[141] In turn, growth-enhancing investments will increase future cash flows and bring profits to shareholders.[142] They argue that companies should stick to this core model, whether or not the companies participate in financial services.[143] However, for almost every conceivable company, volatility and risk may threaten cash flows and impair the company's ability to make growth-enhancing investments.[144] Fortunately, when used properly, derivatives can allow a company to hedge cash flow risk, allowing it to continue its investments.[145] "The role of risk management is to ensure that a company has the cash available to make value-enhancing investments."[146] If derivatives are used to hedge risk, they can help bring regularity and certainty to a company's cash flow, which may be used for investment and growth.

But risk actually increases if a company uses derivatives with the intent of creating growth. Several major companies lost considerable sums with inappropriate derivative bets.[147] If one takes an unnecessary large position in a derivative, it will, in fact, increase cash flow risk.[148] Derivatives will only decrease cash flow volatility and risk when they hedge by trading the risk of a massive loss for regular "insurance" payments.[149] When a company violates these principles, it puts itself at a risk of loss. Many companies took risky bets, believing it could quickly generate cash, and lost equity. For this reason, in its complaint against Goldman Sachs, the SEC

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[140] Froot, *supra* note 74.
[141] *Id.* at 91-94.
[142] *Id.*
[143] *Id.*
[144] *Id.*
[145] *Id.*
[146] *Id.* at 94.
[147] *Id.* at 91-92 (including Proctor & Gamble and Metallegscheft).
[148] *Cf.* Froot, *supra* note 74, at 91-94.
[149] *Id.*

concluded that, "[s]ynthetic CDOs . . . contributed to the recent financial crisis by magnifying losses . . ."[150]

D. Fair Value Accounting

Yet another source of criticism against CDOs was the harmful effect of fair value (mark-to-market) accounting. Basically, if a fund wants to have GAAP compliant accounting statements, then it must value its CDO holdings at fair value, per Statement of Financial Accounting Standards No. 157.[151] In short, this means that the book value of the fund's holdings is determined using the market price of the CDO.[152]

Unfortunately, difficulties rapidly surface when one attempts to determine market price of a CDO holding.[153] First, bids may vary considerably.[154] Given the complexity and highly individualized nature of CDOs, parties may not agree on a bid price.[155] Second, if the market is illiquid, it may be difficult to actually obtain a bid, or limited bids may not accurately reflect the value of the CDO.[156] Arriving at a price is difficult in itself, and this difficulty may result in misleading financial statements.

Moreover, fair value accounting may have incentivized firms to sell their holdings at fire sale rates as the market collapsed in 2007. Suppose that a firm has a CDO holding worth $100. If similar holdings are actively traded for $100, then the firm must report the holding's book value at $100. But when the CDO market was distressed, similar holdings may have been sold at only $60.[157] Here,

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[150] Securities and Exchange Commission v. Goldman Sachs & Co., Complaint, http://www.sec.gov/litigation/complaints/2010/comp-pr2010-59.pdf [hereinafter "SEC v. Goldman Sachs complaint"], at 1.

[151] Mark McQueen, *Accountants Failed Investors With "Fair Value" Accounting*, SEEKING ALPHA, Aug. 7, 2007, http://seekingalpha.com/article/43688-accountants-failing-investors-with-fair-value-accounting.

[152] *Fair Value*, INVESTOPEDIA, http://www.investopedia.com/terms/f/fairvalue.asp.

[153] McQueen, *supra* note 151.

[154] *Id.*

[155] *Id.*

[156] *Id.*

[157] Eric B. Poer, "Inactive" Market Presents Challenges for Fair Value Accounting, BANKING DAILY, Feb. 12, 2009 ("Amid the 2008 credit crisis, these financial instruments became highly illiquid because their complex nature made it extremely difficult to determine both the underlying value as

the nature of the firm's holding did not change, but the firm must report a forty percent loss due to the nature of the market.[158] Now suppose that the market is expected to get worse. The firm is incentivized to sell the holding at only $60, because a further decline in the market will result in further losses on its book value.[159] In doing so, the firm actually realizes a forty percent loss on its investment.[160] Ironically, had the firm simply held the CDO to maturity, it is quite possible that no actual losses would have been realized.[161] Yet, fair value accounting creates a perverse incentive for firms to unload assets at fire sale prices in a distressed market, realizing actual losses, in order to prevent losses on the book value of equity.[162] Fair value accounting may not be appropriate in distressed markets. These issues became especially salient when the CDO market collapsed.

E. Inadequate Disclosure During Issuance

A final criticism is that CDO originators, particularly those issuing synthetic CDOs, gave investors inadequate disclosure and warnings about various risks.[163] This issue remains controversial, as it is the primary point of the Goldman Sachs scandal.[164]

Goldman Sachs, the originator of synthetic CDOs, neglected to tell parties taking long positions that a prominent hedge fund manager, Paulson, handpicked mortgages he believed would fail, with the intent of taking a short position.[165] Did Goldman Sachs have the duty to inform its customers of the identity of the party taking a short position? Is it relevant that the short party was a prominent hedge fund manager? How relevant is it that Paulson handpicked the underlying mortgages? Must an originator always tell its customers who arranged the underlying assets, or is it only important if it the

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well as the accompanying risk. Those companies forced by circumstances, such as bankruptcy and capital requirements, to sell these instruments received only pennies on the dollar.").

[158] *Id.*

[159] *Cf. id.*

[160] *Id.*

[161] *Id.*

[162] *Cf. Id.*

[163] *See, e.g.,* SEC v. Goldman Sachs complaint, *supra* note 150.

[164] *See generally id.*

[165] *See generally id.*

party is taking a short position? There are more questions than answers. This issue will be discussed after the full set of facts of the Goldman Sachs scandal are introduced in the next section.

IV. SEC v. Goldman Sachs: A Case Study

On April 16, 2010, the SEC launched a billion-dollar civil suit against Goldman Sachs for engaging in allegedly fraudulent practices in synthetic CDO origination.[166] At the time, Goldman Sachs had a pristine record. The suit was high-profile and hotly controversial.[167]

Some commentators welcomed the suit as the start of a new era, bringing greater honesty and integrity to capital markets.[168] However, other commentators accused the SEC of furthering Congress's Democratic policy agenda considering the suit was filed just as Congress began discussing Dodd-Frank financial reform in earnest.[169] The vote to bring suit against Goldman was 3-2, split across party lines.[170]

In any event, Securities and Exchange Commission v. Goldman Sachs & Co. ("the Goldman Sachs case") highlights many of the previously discussed criticisms against CDOs. Reviewing the facts of the case will serve as an effective case study and summary of public criticisms against CDOs.

A. Background Facts

The SEC brought a Rule 10b-5 and Section 17(a) fraud suit against Goldman Sachs for material misstatements and omissions in

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[166] *Id.* at 22.

[167] Morgan, *supra* note 4.

[168] *See, e.g.,* Ian Fraser, *SEC vs. Goldman Sachs Suggests Changed Days for Wall Street*, QFINANCE, Apr. 23, 2010, http://www.qfinance.com/blogs/ian-fraser/2010/04/23/sec-vs-goldman-sachs-suggests-changed-days-for-wall-street.

[169] *See, e.g.,* Jack McHugh, *SEC v. Goldman Sachs; Timing and Methods are Curious*, THE BIG PICTURE, Apr. 19, 2010, http://www.ritholtz.com/blog/2010/04/sec-v-goldman-sachs-timing-and-methods-are-curious/.

[170] Jesse Westbrook, *SEC Said to Vote 3-2 to Sue Goldman Sachs Over CDOs*, BUSINESSWEEK, Apr. 19, 2010, http://www.businessweek.com/news/2010-04-19/sec-said-to-vote-3-2-to-sue-goldman-sachs-over-cdo-disclosures.html.

originating synthetic CDOs.[171] The SEC argues that Goldman Sachs materially mislead investors when it marketed the underlying portfolio of a synthetic CDO as being chosen by a neutral third-party when, in fact, a prominent hedge fund made the selections, intending to take short positions.[172] The short party profited while the long parties realized the loss.[173]

Paulson & Co., a prominent hedge fund managed by billionaire investor John Paulson, was the short party.[174] The fund's strategy was to take short positions on credit default swaps where the underlying obligation consisted of subprime mortgages.[175] Paulson likely believed that credit rating agencies underestimated the credit risk of subprime mortgages as consequently that the short position was undervalued.[176] Seeking to profit when the mortgages defaulted, Paulson contacted Goldman Sachs to originate subprime mortgage-based CDOs with his fund taking a short position.[177]

In 2004-05, Goldman Sachs began originating synthetic CDOs based on subprime mortgages, which it called "ABACUS."[178] In 2007, Paulson approached Goldman Sachs to originate a synthetic CDO in which he would take the short position.[179] Goldman Sachs, then, planned to market long positions to its customers.[180]

However, according to the SEC's complaint, Goldman Sachs knew that its customers would not enter into a long position if they knew that a prominent hedge fund in a short position had picked the underlying assets.[181] For this reason, Goldman Sachs hired ACA Management, LLC ("ACA") to act as the collateral manager.[182] However, ACA was only the manager on paper. In practice, Paulson handpicked a list of 123 low-grade mortgages he believed would

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[171] SEC v. Goldman Sachs complaint, *supra* note 150, at 3.
[172] *Id.* at 11-15.
[173] Taylor, *supra* note 27.
[174] *Id.* at 5.
[175] *Id.*
[176] Iit is impossible to know what Paulson *actually* believed, but the very fact that he took significant short positions sends a market signal that he believed they were undervalued.
[177] *Id.* at 6.
[178] *Id.* at 4.
[179] *Id.* at 6.
[180] *Id.* at 7.
[181] *Id.*
[182] *Id.* at 7-8.

default and forwarded the list to Goldman Sachs.[183] Goldman Sachs then forwarded the list to ACA, stating that it wished to create the synthetic CDO with those mortgages.[184] ACA ultimately approved ninety of the original 123 to create the synthetic CDO.[185]

According to the SEC's complaint, Goldman Sachs did not disclose to investors that Paulson had personally selected the original list of 123 acceptable mortgages.[186] In fact, Goldman Sachs led ACA to believe that Paulson was taking a long position.[187] Goldman Sachs knew that ACA would have been reluctant to approve the mortgages if it knew that Paulson had handpicked them with the intent of taking a short position.[188] The SEC alleges that Goldman Sachs purposefully mislead ACA into believing that Paulson was taking a long position, in order for ACA to pick from the list of pre-approved mortgages without objection.

Additionally, Goldman Sachs did not mention Paulson's role in the selection process when it marketed the long positions, and the disclosure documents made no mention of it.[189]Fabrice Tourre, the Goldman Sachs employee who marketed the long positions, took an almost cavalier attitude. He wrote to customers that the portfolio was "selected by ACA," while internal communications stated that it was "selected by ACA/Paulson."[190] Given that Goldman Sachs and Tourre believed that its customers would not take long positions if they knew about Paulson's role, the SEC accused both Goldman Sachs and Tourre of fraud.[191] Paulson was not a party to the suit.[192]

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[183] *Id.* at 9.
[184] *Id.*
[185] *Id.* at 11.
[186] *Id.* at 2.
[187] *Id.* at 13. ("GS&Co also misled ACA into believing that Paulson was investing in the equity of ABACUS 2007-AC1 and therefore shared a long interest with CDO investors.")
[188] *Id.*
[189] *Id.* at 11.
[190] *Id.* at 17.
[191] *See id.* at 1-2.
[192] *See generally id.*

B. How Criticisms of CDOs Apply to the Facts of the Case

The facts of the Goldman case are particularly insightful when one recalls the previously discussed criticisms against CDOs. In fact, almost every criticism appears in the fact set.

First, Paulson and Goldman had an almost uncanny awareness of the housing bubble and upcoming subprime crisis. The complaint states that, "Paulson came to believe that synthetic CDOs whose reference assets consisted of certain Triple B-rated mid-and-subprime RMBS would experience significant losses and, under certain circumstances, even the more senior AAA-rated tranches of these so-called 'mezzanine' CDOs would become worthless."[193] Similarly, Tourre stated in private emails that there was "[m]ore and more leverage in the system, [t]he whole building is about to collapse anytime now . . ." and that "the cdo biz is dead we don't have a lot of time left."[194] Paulson and Goldman Sachs appeared to have been keenly aware of the dire state of synthetic CDOs backed by subprime mortgages.

By entering into short positions of synthetic CDOs backed by subprime mortgages, Paulson signaled that he believed that the credit risks of subprime mortgages were underestimated and that scores of subprime mortgages were likely to default. It is unclear how, exactly, Paulson was aware of the imminent bursting of the housing bubble. Given his considerable skill and expertise with CDOs, perhaps he was aware of the role they played in churning mortgages and fueling subprime lending.

Second, Paulson may have expressed knowledge of the credit rating agencies' conflict of interest. He wrote that, "It is true that the market is not pricing the subprime RMBS wipeout scenario. In my opinion this situation is due to the fact that rating agencies, CDO managers and underwriters have all the incentives to keep the game going . . ."[195] This is a telling comment. It reveals that Paulson knew origination and transaction fees incentivized originators to continue churning CDOs. More significantly, the comment may also reveal that Paulson knew that rating agencies earned significant revenue from CDO valuations, especially from big customers like

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[193] *Id.* at 6.
[194] *Id.* at 7.
[195] *Id.* at 6.

Goldman Sachs, so they were incentivized to inflate ratings in order to earn return business.

Inflated ratings were critically important to Paulson's strategy. If the credit ratings corresponded to the actual risk of default, then the short position would have been fairly priced, and Paulson would likely break even. In order for the short positions to be undervalued, the ratings would need to be inflated. Ultimately, Paulson was correct. By October 2007, eighty-three percent of the mortgages were downgraded, and the rest were on negative watch.[196] Knowledge of the credit rating agencies' conflict of interest may have been a large motivator for Paulson to arrange the deal.

Interestingly, Paulson may have exploited Goldman Sachs' conflict of interest as well. At the time, Paulson was a billionaire investor, ran a prominent hedge fund and his fund paid Goldman Sachs $15 million to originate the ABACUS CDOs.[197] Goldman Sachs may have been induced to draft potentially fraudulent disclosure statements in order to keep Paulson as a customer. Professor Elizabeth Nowicki notes that, "This appears to be a straightforward case of a privileged client asking Goldman to help the client make a ton of money, and Goldman agreeing while simultaneously failing to make the appropriate disclosure . . ."[198] This explanation is plausible and highly compelling.

Third, parties exposed themselves to unnecessary risk by making "bets" with their derivative positions instead of legitimate hedging. That is, Goldman Sachs's customers were not hedging risk in the ABACUS CDOs. Given the nature of derivatives, a gain by one party exactly corresponded to losses by the counterparty.[199] Interests in the CDO were designed to be zero-NPV, and the price of each position was intended to correspond to its level of risk.[200] Paulson had reason to believe that the short positions were underpriced, since he apparently knew that the level of risk was underestimated. Nonetheless, he made a bet. He won the bet, but the counterparties in the long position lost. Had the counterparties stuck

[196] *Id.* at 3.
[197] *Id.*
[198] David Wessell, *A Narrative for the Crisis Emerges in Allegations*, WALL ST. J., Apr. 17, 2010, http://online.wsj.com/article/NA_WSJ_PUB:SB10001424052702304180804575188441300375102.html.
[199] McLaughlin, *supra* note 75**Error! Bookmark not defined.**, at 65-71.
[200] *Id.* at 68, 70.

with growth-enhancing investments and only used derivatives to hedge legitimate risk, they would not have sustained these losses.

Fourth, Goldman Sachs was accused of inadequate disclosure, as it had neglected to mention Paulson's identity or his role in selecting the underlying assets.[201] Given the relatively new nature of CDOs, particularly synthetic CDOs, the case raises larger questions about what level of disclosure is actually required. For example, a chief concern in the complaint was that Goldman Sachs did not disclose Paulson's identity as the short party.[202] But synthetic CDOs always have long and short parties, given that they are derivatives.[203] It seems unlikely that the parties' identities must always be disclosed to each other. Perhaps, then, it is important that the short party selected the underlying portfolio, given that short party would profit if it defaults. Moreover, the fact that Paulson managed a prominent hedge fund may be relevant. Then again, suppose that Paulson & Co. had been a small, unknown hedge fund. Would its exact identity been relevant? Would the fact that the short party arranged the portfolio still have been relevant? Unfortunately, these questions were left unanswered in the present case. On July 16, 2010, two hours after the Senate passed the Dodd-Frank Act, Goldman Sachs settled with the SEC for $550 million.[204]

It is important to note that the SEC did not bring any charges against Paulson.[205] The suit involved fraudulent disclosure by the originator, Goldman Sachs. The practice of short selling itself was never under attack. This distinction has escaped some journalists and commentators, who misinterpreted the suit as an attack on profiting through the act of short selling.[206] Short selling is legal and has legitimate uses. First, it sends signals to the market.[207] For example,

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[201] *See* SEC v. Goldman Sachs complaint, supra note 150 at 2.
[202] *Id.* at 11.
[203] Mahadevan, *supra* note 17, at 28-29.
[204] Christine Harper & Joshua Gallu, *Goldman Settlement `Victory' Ushers Change to Wall Street*, BLOOMBERG, July 16, 2010, http://www.bloomberg.com/news/2010-07-16/goldman-sachs-settlement-victory-ushers-in-change-may-cost-wall-street.html.
[205] *See generally* SEC v. Goldman Sachs complaint, *supra* note 150.
[206] *See, e.g.*, *Goldman Testifies: "We're Not That Smart." Jerks, Too.*, Apr. 28, 2010, http://attempter.wordpress.com/2010/04/28/goldman-testifies-were-not-that-smart-jerks-too//
[207] Johnny Tamny, *Another Defense of Short Selling*, REAL CLEAR MARKETS, Dec. 1, 2009, http://www.realclearmarkets.com/articles/2009/12/01/another_defense_of_short_selling_97529.html.

an observer may have noticed that Paulson, a financially sophisticated party, took an unusually large short position in subprime mortgages. The natural conclusion would be that Paulson had reason to believe that short positions were underpriced, meaning that the mortgages were more likely to default than the credit rating indicated. Second, short selling through synthetic CDOs may be used for legitimate hedging.[208] Suppose that a bank holds a large collection of subprime mortgages. It is therefore exposed to significant credit risk. The bank could originate a synthetic balance sheet CDO, take a short position and market long positions to customers. This is a cheap and effective way to hedge credit risk. Short selling is a legitimate financial tool. Goldman Sachs, on the other hand, may have committed fraud by leading its customers to believe that a neutral party selected the portfolio, when it was in fact selected by a hedge fund taking a short position.

Ultimately, the Goldman Sachs scandal highlighted a number of serious problems that plagued CDO issuance. As may be expected, these problems prompted a massive legislative response, both in terms of federal statutes and administrative rules.

V. Corrective Measures

Around the time of the Goldman Sachs scandal, various measures were introduced to correct some of the problems that led to the collapse of the CDO market. If implemented properly, these measures may restore investor confidence and prompt a new wave of primary issuances.

This section will highlight some of the most salient corrective measures. For several reasons, this discussion is not exhaustive. First, these measures come from a wide variety of sources. Second, many of these measures are not yet fully implemented, so their actual effects on the CDO market are still unknown. Once implemented, it is likely that some issues will be resolved, while new ones will arise. Third, many of these measures are rather far-reaching. They may intend to broadly regulate originators, credit rating agencies, or securitizations in general, but in doing so, they may alter CDO issuance as a secondary effect. Ultimately, the discussion will be speculative, but may serve as a forward-looking analysis of future issues in CDO issuance.

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[208] Frankel & Fagan, *supra* note 13, at 194.

A. Churning Low-Quality Mortgages: Risk Retention

Title IX, Subtitle D of the Dodd-Frank Act contains measures that broadly affect securitization in general, including CDOs.[209] The most significant measure is a risk retention requirement. Basically, originators and securitizers of asset-backed securities must retain a five percent holding in their assets.[210] The text of Subtitle D expressly states that CDOs are a type of asset-backed security, bringing CDO originators under the risk retention requirement.[211] The rules allow originators and securitizers to split the five percent holding between them, in some manner.[212] In short, originators and securitizers of CDOs can no longer remove an asset from their balance sheets after they sell it to an SPV—they must retain part of the risk.

Presumably, this requirement is intended to prevent originators from churning low-quality assets. Previously, banks lent mortgages with a view to distribute them under an "originate-to-distribute" model.[213] That is, as long as the banks could sell the mortgages in a securitization, there was little incentive to originate quality mortgages. Now, the interests of originators are aligned with those of investors, since they hold part of the assets. Ideally, originators are now incentivized to originate quality mortgages, and investors will be confident that the originator is concerned with the long-term viability of the underlying assets.

However, some difficulties are already apparent. First, it is unclear how originators should maintain this five percent holding in the assets. The statutory text does not specify whether it should be

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[209] *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Public L. No. 111-203, §§ 941-46, 124 Stat. 1890-98 (2010).
[210] Dodd-Frank Wall Street Reform and Consumer Protection Act, Public L. No. 111-203, §941, 124 Stat. 1890-96 (2010).
[211] Dodd-Frank Wall Street Reform and Consumer Protection Act, Public L. No. 111-203, §941(a), 124 Stat. 1890 (2010) ("The term 'asset-backed security' means a fixed-income or other security . . . that allows the holder of the security to receive payments that depend primarily on cash flow from the asset, including . . . a collateralized debt obligation.").
[212] Dodd-Frank Wall Street Reform and Consumer Protection Act, Public L. No. 111-203, §941(b), 124 Stat. 1893 (2010).
[213] *See* Hattori & Ōhashi, *supra* note 46.

part of a senior tranche, junior tranche, or equity holding.[214] If the originator may simply hold a senior tranche, it will be exposed to far less risk than if it were required to hold a junior tranche or equity, which minimizes the effectiveness of the statute. Second, there is some statutory ambiguity in the definition of "securitizer" and "originator."[215] These parties may split the five percent holding between them, but it is unclear how this should occur, in practice.[216] Third, this measure may tighten credit and dampen the economy. If originators must retain a five percent holding, they may only regain up to ninety-five percent of the value of their assets during a securitized sale. Under the prior model, originators could sell assets, regain the full value in cash and lend again. In theory, originators could lend indefinitely. Now, there is a finite end point, since originators must retain an interest in the assets. Indeed, the Dodd-Frank Act requires the Chairman of the Financial Services Oversight Council to prepare a study of the possible macroeconomic effects of the risk retention requirement.[217] Ultimately, this measure will hopefully align the incentives of originators with those of investors, at the cost of a possible liquidity crunch.

B. Credit Rating Agency Conflicts of Interest: Disclosure, Accountability and Independence

Another set of measures addresses the fundamental conflict of interest of credit rating agencies. That is, originators pay rating agencies to rate their CDO tranches.[218] Rating agencies also consult with originators on how to properly structure their CDOs to achieve a high rating.[219] However, the credit rating agencies know that a high rating is necessary to earn repeat business from any given originator. Therefore, rating agencies are incentivized to give inflated high ratings, especially if they can earn lucrative consulting fees in the process.

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[214] Grant E. Buerstetta, *Potential Impact of Dodd-Frank Act on CDO/CLO Transactions*, BLANK ROME LLP, Aug. 2010, http://www.blankrome.com/index.cfm?contentID=37&itemID=2289.
[215] *Id.*
[216] *Id.*
[217] Dodd-Frank Wall Street Reform and Consumer Protection Act, Public L. No. 111-203, §946, 124 Stat. 1898 (2010).
[218] *See* Freeman, *supra* note 39, at 602.
[219] *Id.*

Title IX, Subtitle C of the Dodd-Frank Act aims to bring greater accountability to credit rating agencies and to eliminate conflicts of interest with originators, including CDO originators.[220] In fact, Subtitle C begins with an express acknowledgment that a conflict of interest exists.[221] Among other provisions, Subtitle C requires nationally recognized statistical rating organizations ("NRSROs") to develop internal controls to ensure neutral ratings.[222] Each rating must be accompanied by a certification that the rating was not influenced by outside factors, such as business considerations.[223] In essence, credit rating agencies will be regulated similarly to accounting firms.[224]

In addition, the SEC promulgated new rules in 2009 that require greater disclosure and independence for credit rating agencies.[225] Most notably, credit rating agencies must disclose their rationale for assigning a rating higher than the asset would normally suggest.[226] This requirement may disincentivize inflated ratings. Moreover, credit rating agencies must maintain independence. They may not rate an instrument if they consulted with the originator on how to structure or price the instrument.[227] This requirement may be an attempt to eliminate the conflict of interest. Together with greater accountability in the Dodd-Frank Act, the days of inflated ratings are hopefully over.

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[220] *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Public L. No. 111-203, §§ 931-39H, 124 Stat. 1872-90 (2010).

[221] Dodd-Frank Wall Street Reform and Consumer Protection Act, Public L. No. 111-203, § 931(5), 124 Stat. 1872 (2010) ("In certain activities, particularly in advising arrangers of structured financial products on potential ratings of such products, credit rating agencies face conflicts of interest that need to be carefully monitored.").

[222] Dustin Hall, *Dodd-Frank Wall Street Reform Bill Significantly Modifies the Regulation of Credit Rating Agencies*, BRYAN CAVE, July 2, 2010, http://www.bankbryancave.com/dodd-frank-wall-street-reform-bill-significantly-modifies-the-regulation-of-credit-rating-agencies/ ("All NRSROs will be required to establish, maintain, enforce, and document an effective internal control structure for determining credit ratings.").

[223] *Id.*

[224] *Id.*

[225] Frankel & Fagan, *supra* note 13, at 172.

[226] *Id.*

[227] *Id.*

C. Speculative "Betting" with Derivatives Versus Hedging Legitimate Risk: Disclosure and Transparency

Another issue is that some parties in derivative transactions assume positions with the intent of speculative "betting," instead of hedging legitimate cash flow volatility.[228] As discussed, derivatives are zero-NPV.[229] They may be useful in hedging cash flow volatility, but when unnecessary positions are taken, they actually increase risk.[230] Unfortunately, this distinction is difficult to regulate. The Dodd-Frank Act does not appear to contain rigid requirements limiting the use of derivatives. Perhaps financial firms must learn to police themselves with effective risk management controls.

One answer may be greater disclosure and transparency. The Dodd-Frank Act establishes the Financial Stability Oversight Council ("FSOC"), which has certain authority to conduct risk assessments for financial companies.[231] The Act contains a number of provisions that require reporting to the FSOC, including disclosure of derivative positions.[232] Disclosure to the FSOC of a company's derivative positions may increase transparency and disincentivize speculation. However, some critics note that these reports are not available to the public.[233] Nonetheless, disclosure to federal regulators may be a step in the right direction.

D. Fair Value Accounting in an Inactive Market: Suspension of Fair Value Methods Under Certain Circumstances

When the CDO market collapsed, there was concern that fair value accounting worsened the damage. That is, investors in securitizations were induced to sell their holdings at fire sale

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[228] *See supra* Part III.c.
[229] *See supra* Part III.c.
[230] *See supra* Part III.c.
[231] Bobby Bartlett, *Dodd-Frank: "It Will Finally Bring Transparency to the Kinds of Complex, Risky Transactions that Helped Trigger the Financial Crisis"*, THE CONGLOMERATE, July 22, 2010, http://www.theconglomerate.org/2010/07/doddfrank-it-will-finally-bring-transparency-to-the-kinds-of-complex-risky-transactions-that-helped-.html.
[232] *Id.*
[233] *Id.*

prices.[234] Otherwise, they would be forced to record major losses on their books, due to valuing their holdings at fair value in a depressed market.[235]

Fortunately, the Emergency Economic Stabilization Act of 2008, colloquially known as the "bank bailout," granted the SEC the power to suspend fair value accounting for a company or class of securities if doing so is in the public interest.[236] Moreover, the Act also required the SEC to prepare a report on how fair value accounting contributed to the country's economic problems.[237] So, in situations where fair value accounting is against the public interest, such as when companies must record losses due to an inactive market, the SEC has authority to suspend it for a class of securities. It remains to be seen whether the SEC will use this new power effectively.

E. Broadening Disclosure During Issuance

The Goldman Sachs scandal left some questions unanswered. During the scandal, there was uncertainty regarding what information Goldman Sachs had to disclose. For example, the scandal never resolved whether Goldman Sachs was actually required to inform investors that Paulson was taking short positions.

Fortunately, the Dodd-Frank Act recently resolved this issue. Title IX, Subtitle D requires the SEC to pass disclosure requirements for asset-backed securities, which include CDOs.[238] First, the SEC must pass rules that require issuers to disclose information sufficient for investors to conduct due diligence, including the degree of risk retention by originators, the degree of compensation for the broker

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[234] *See* Poer, *supra* note 157.
[235] *Id.*
[236] 12 U.S.C.A. § 5237 (West 2010) ("The Securities and Exchange Commission shall . . . suspend, by rule, regulation, or order, the application of Statement Number 157 of the Financial Accounting Standards Board for any issuer . . . if the Commission determines that is necessary or appropriate in the public interest.").
[237] 12 U.S.C.A. § 5238 (West 2010) ("The Securities and Exchange Commission . . . shall conduct a study on mark-to-market accounting. . . . Such a study shall consider at a minimum . . . the impacts of such accounting on bank failures in 2008.").
[238] *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Public L. No. 111-203, §§ 941-46, 124 Stat. 1890-98 (2010). As mentioned, CDOs are expressly defined as asset-backed securities in § 941.

and originator and certain asset-level data.[239] Second, for each security they rate, credit rating agencies must disclose the representations, warranties and enforcement mechanisms available to investors.[240] Third, securitizers must clearly disclose all repurchase obligations, if applicable.[241] Finally, originators that file a registration statement for asset-backed securities must review the underlying assets and disclose the nature of their review.[242] These upcoming SEC rules should clarify what information CDO originators must disclose, but some ambiguities likely will remain.

Ultimately, recent rules and regulations address many of the problems that led to the collapse of the primary issuance market and the Goldman Sachs scandal. With so many new rules and regulations, some issues likely will be resolved, while new ones may emerge.

VI. Conclusion

CDOs have an uncertain future. Primary issuances ceased long ago, and there continues to be significant public distrust of unchecked securitization. The housing market is still distressed, and credit is still tight.

The financial landscape will continue to evolve. If CDOs are to regain their status as a viable and trustworthy financial instrument, confidence must be restored. This may be accomplished through effective regulation. To be sure, various statutory measures have been introduced, but it is still too early to determine their ultimate effects. Alternatively, the industry may eventually self-correct by learning from its past mistakes.

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[239] Dodd-Frank Wall Street Reform and Consumer Protection Act, Public L. No. 111-203, § 942, 124 Stat. 1896-97 (2010).

[240] Dodd-Frank Wall Street Reform and Consumer Protection Act, Public L. No. 111-203, § 943, 124 Stat. 1897 (2010).

[241] *Id.*

[242] Dodd-Frank Wall Street Reform and Consumer Protection Act, Public L. No. 111-203, § 945, 124 Stat. 1898 (2010).

TAXATION OF CREDIT DEFAULT SWAPS: A GUARANTEED SOLUTION?

CALEB SAINSBURY*

I. *Introduction*

The devastation resulting from the financial crisis of 2008 cannot be overstated. While myriad factors could have contributed to the recent economic crisis, one financial instrument that the crisis highlighted was the credit default swap ("CDS"). CDSs are complex financial derivatives that many blame for bringing down AIG and necessitating its subsequent bailout.[1] Although recent legislation has addressed to some extent the regulatory treatment of CDS contracts for purposes of the securities markets,[2] no regulatory treatment exists on the taxation of these instruments.[3] Practitioners agree that the revenue generated through these financial instruments should be taxed; however, significant disagreement exists as to how these instruments should be taxed.[4]

This disagreement poses a problem for a few reasons. First, CDSs are derivatives that by their nature are risky and unstable as

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[1] Matthew Karnitschnig, Liam Pleven, and Serena Ng, *Government Hikes AIG Bailout to $150 Billion with New Deal*, WALL ST. J., Nov. 10, 2008, at A1.

[2] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, §§ 721-774, 124 Stat. 1376 (2010) (Modifying various acts including Gramm Leach Bliley Act, and the Truth in Lending Act, among others).

[3] I.R.S. Notice 2004-52, 2004-32 I.R.B. 168 ("Treasury and the IRS believe that additional information is needed in order to respond to taxpayer requests for specific guidance regarding the appropriate tax treatment of amounts paid and received with respect to a CDS.").

[4] Bruce Kayle, *The Federal Income Tax Treatment of Credit Derivative Transactions*, *in* TAX LAW AND PRACTICE 2009, at 1071, 1108-1152 (PLI Tax Law and Estate Planning, Course Handbook Ser. No. 897, 2009) (discussing various ways that CDS transactions might be taxed).

demonstrated by the recent financial crisis.[5] The lack of agreement on how to tax the instruments potentially destabilizes the financial market even further by creating more uncertainty. Second, the volume of CDS contracts in existence creates the necessity of having a clear idea on how to treat CDSs for tax purposes. At the pre-financial crisis height of the CDS market, experts estimate that financial institutions had written hundreds of billions of dollars of CDS contracts on Fannie Mae and Freddie Mac assets[6] and AIG by itself had written at least $440 billion worth of CDS contracts.[7]

To its credit, the Department of the Treasury ("Treasury") has solicited information on CDS deals and guidance as how to tax those transactions.[8] In 2004, the Treasury requested information and suggestions pertaining to the common features of a CDS contract, how the income from CDS deals should be characterized, analogies between CDS and other financial instruments and CDS pricing.[9] Currently, however, the Treasury has not yet promulgated any rules on the issue.[10] The Treasury's inaction leaves financial entities with little guidance on how to structure deals to achieve tax-optimal results.[11] Various options are available to utilize as models for taxing CDSs, such as treating CDSs as a notional principal contract,[12] an

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[5] For a good example of how AIG's use of CDSs created a tangled web of investments in the financial community that eventually brought down AIG, see Serena Ng, *AIG, Goldman Unwind Soured Trades—Move on Mortgage Deals Leaves Insurer with Loss of About $2 Billion*, WALL ST. J., Apr. 12, 2010, at C1.

[6] Serena Ng & Liz Rappaport, *Crisis on Wall Street: Credit-Swap Players Puzzle over Fan-Fred Fallout—Lehman Situation Adds to Urgency to Settle Questions*, WALL ST. J., Sep. 15, 2008, at C3.

[7] Serena Ng, *The Financial Crisis: AIG at Risk: Financial Firms Gird for Backlash From Weakened AIG*, WALL ST. J., Sept. 17, 2008, at A10.

[8] I.R.S. Notice 2004-52, 2004-32 I.R.B. 168.

[9] *Id.*

[10] *Cf. Id.*

[11] Samuel D. Brunson, *Elective Taxation of Risk-Based Financial Instruments: A Proposal*, 8 HOUS. BUS. & TAX L. J. 1, 18-19 (Fall 2007). I do not delve into the many different new taxation schemes that scholars or practitioners could propose to tax CDSs. Instead, I focus on how CDSs can be placed within current taxation schemes.

[12] Steven L. Kopp & David Z. Nirenberg, *Credit Derivatives: Tax Treatment of Total Return Swaps, Default Swaps, and Credit-Linked Notes*, 87 J. TAX'N 82, 89-91 (August 1997).

option,[13] as an insurance contract,[14] or under a completely different tax regime.[15]

This note argues that fundamental CD transactions, where the protection buyer owns the underlying reference entity, should be taxed as guarantees. Naked CDS transactions occur when the protection buyer does not own the underlying reference entity and as a result these transactions challenge the basic guarantee/CDS analogy. In part II, I introduce both CDSs and guarantees. In part III, I examine the legitimate proposed options that exist to tax CDSs. In part IV, I examine the guarantee taxation scheme and the fit that exists between it and the basic CDS agreement. I also discuss the difficulties presented by naked CDS transactions. In part V, I look at the functional similarities of CDSs and guarantees as strength to support taxing CDSs similarly to guarantees. I end this note with a few suggestions for further research.

II. Introducing the Instruments

A. What is a CDS?

A CDS is a financial contract that allows a "protection buyer" to pay the "protection seller" a specific amount to guarantee that the protection seller will cover the protection buyer should a specific "credit event" occur.[16] The buyer (usually a sophisticated financial institution) will pay a fixed payment to the seller (also a sophisticated financial institution) in exchange for protections should certain credit events occur.[17] The International Swaps and Derivatives Association ("ISDA") has stated that a credit event can

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[13] *See* Ari J. Brandes, *A Better Way to Understand the Speculative Use of Credit Default Swaps* 14 STAN. J.L. BUS. & FIN. 263, 277-82 (Spring 2009).
[14] For a discussion on the similarities and differences between a CDS contract and an insurance contract *see* Arthur Kimball-Stanley, Note, *Insurance and Credit Default Swaps: Should Like Things be Treated Alike?*, 15 CONN. INS. L.J. 241, 265 (Fall 2008).
[15] *See generally* Brunson, *supra* note 11, at 18-19 (arguing that all financial instruments should be taxed on an elective method where the taxpayer can choose how she wishes the instrument to be taxed but cannot change that election later).
[16] Brunson, *supra* note 11, at 2-3.
[17] Don Bendernagel et al., *Credit Derivatives: Usage, Practice, and Issues*, *in* CORPORATE LAW AND PRACTICE 2004, at 409, 418 (PLI Corp. Law and Practice, Course Handbook Ser. No. 1458, 2004).

be at least one of the following: "bankruptcy, obligation acceleration, obligation default, failure to pay, repudiation/moratorium and restructuring."[18] Additionally, the parties may contractually agree upon whatever credit event they desire.[19] Unlike a basic insurance agreement, the credit event does not need to result in the protection buyer's actually losing money.[20] The parties can settle the CDS contracts by physical or cash settlement.[21]

An example helps explain the basic functions of a CDS deal. Suppose Company A issues $100 in corporate bonds. Company B buys those corporate bonds, yet worries about Company A's financial stability. So Company B negotiates an agreement with Company C where Company C would pay a specified sum if the bonds default.[22] That contract is a CDS, the bonds are the reference obligation and the default of the bonds is a credit event. For that protection guarantee, Company B would pay Company C a specified premium. Oftentimes, the CDS contract will require the insuring company to post collateral in case the value of the asset underlying the CDS falls.[23]

In addition to using CDSs to hedge against the risk of default, some financial institutions buy CDSs against a company even when they do not possess that company's bond or other debt instrument. Rather, they buy CDSs to speculate on the credit worthiness of that company.[24] Continuing the example above,

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[18] Jongho Kim, *From Vanilla Swaps to Exotic Credit Derivatives: How to Approach the Interpretation of Credit Events*, 13 FORDHAM J. CORP. & FIN. L. 705, 755-56 (2008).
[19] *Cf. Id.* at 757.
[20] Janis Sarra, *Symposium: Financial Market Destabilization and the Role of Credit Default Swaps: An International Perspective on the SEC's Role Going Forward*, 78 U. CIN. L. REV. 629, 632 (2009).
[21] Lawrence Lokken, *Taxation of Credit Derivatives*, Scholarly Article, University of Florida Levin College of Law, University of Florida Legal Studies Research Paper No. 2009-39, *available at* http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=689596 (last visited October 30. 2010).
[22] *See* Leah Campbell & Robin Choi, *State Initiatives to Regulate Credit Default Swaps Deferred Pending Federal Action*, METRO. CORP. COUNSEL, Sep. 2009, Northeast Edition, at 20, *available at* http://www.metrocorpcounsel.com/pdf/2009/September/20.pdf.
[23] Carrick Mollenkamp et al., *Behind AIG's Fall, Risk Models Failed to Pass Real-World Test*, WALL ST. J., Nov. 3, 2008, at A1.
[24] Campbell & Choi, *supra* note 22, at 20.

Company D believes that Company A will default on its loans, so it buys the CDSs against Company A from Company C. This type of transaction is called a "naked" CDS. The note discusses naked CDSs later and the problems that they pose for tax planning purposes.

B. What is a Guarantee?

Fundamentally, a guarantee is simply a promise by one party to meet the financial obligations of another party. Guarantees play a backstop role in the financial world. In its most basic form, a guarantee is a contractual agreement between two parties that actually involves three entities: the obligor, the creditor and the guarantor. If an obligor wants a loan from a creditor, but the creditor is uncertain that the obligor will be able to make the debt payments on the loan, either party may seek a guarantor to guarantee the debt payments of the obligor in order for the creditor to make the loan.[25] Although there is no standard definition for a guarantee, the Internal Revenue Code ("IRC") states that "the term 'guarantee' includes any arrangement under which a person…assures, on a conditional or unconditional basis, the payment of another person's obligation under any indebtedness."[26] An example from the insurance industry helps explain this concept.[27] Suppose Axel Insurance Corporation provides annuity policies to various corporate customers. Axel and the companies it insures worry that it will not have the funds to cover these policies should they all come due at the same time. To overcome this potential problem, Axel contacts Blaze Bank and works out an agreement whereby Blaze will cover any amount remaining should Axel fail to meet its financial obligations under the annuity contracts. In this situation, Axel is the obligor, the corporate companies it insures are the creditors and Blaze is the guarantor.

Guarantees operate across a wide sphere. A teenager's parents can act as a guarantor on their child's first car loan

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[25] For a more complete discussion on the definition and uses of a guarantee see W. Thomas Conner, Address Before the American Law Institute-American Bar Association Continuing Legal Education Conference: Recent Regulatory Developments Relating to Guarantees and Other Financial Support Agreements and Their Potential Impact on Variable Contract Issuers (Nov. 16-17, 2006), *in* SMO39 ALI-ABA 61, 68-73 (2006).
[26] Kayle, *supra* note 4, at 1125 (citing 26 U.S.C. § 163(j)(6)(D)(iii) (2010)).
[27] The basic structure of this example comes from Conner, *supra* note 25, at 65-66.

transaction. [28] A business can guarantee the personal loan of one of its founders. An investment bank may want to borrow cash from another financial actor but must first secure a guarantee from a traditional bank before the financial actor will lend the funds. These are just a few examples of how guarantee relationships work in everyday transactions.

III. Competing Taxation Solutions

Taxing CDSs like guarantees is not the only option available. Scholars and practitioners have developed theories about how the government should tax CDSs. Some have put forth the idea of treating CDSs as options,[29] as notional principal contracts,[30] as insurance,[31] or under a completely different regime.[32] The first three are generally regarded as credible possibilities. Thus, I will examine the tax structure that these different possibilities would place on the typical CDS arrangement.

A. Taxing CDSs as an Option?

A legitimate argument exists for treating CDSs as options for tax purposes based on the similarities between the features of an option and the features of a CDS.[33] The tax court has said that an option is a contract that "provides (A) the option to buy or sell, (B) certain property, (C) at a stipulated price, (D) on or before a specific future date or within a specified time period, (E) for consideration."[34] Another case has defined an option as "(1) a continuing offer to do an act, or to forbear from doing an act, which does not ripen into a contract until accepted; and (2) an agreement to leave the offer open

[28] The idea for these basic examples comes courtesy of David S. Miller, *Federal Income Tax Consequences of guarantees: A Comprehensive Framework for Analysis*, 48 TAX LAW. 103, 105-06 (Fall 1994).
[29] *See* Brandes, *supra* note 13, at 277-82.
[30] Kopp & Nirenberg, *supra* note 12, at 89-91.
[31] For a discussion on the similarities and differences between a CDS contract and an insurance contract *see* Kimball-Stanley, *supra* note 14.
[32] Brunson, *supra* note 11, at 18-19.
[33] Brandes, *supra* note 13, at 277-79.
[34] Brandes, *supra* note 13, at 278-79 (citing Fed. Home Loan v. Comm'r, 125 T.C. 248, 261 (2005)).

for a specified or reasonable period of time."[35] Other experts have defined an option as the payment of an amount for the right to conclude a transaction at a later date.[36]

A CDS could arguably fit within these definitions of an option. For example, CDSs contain similar features to options in that one can buy/sell CDS contracts, some CDS agreements are based on certain property, each CDS contract is sold at a specific price for consideration and each CDS contract expires on a certain date.[37] In the typical CDS contract the protection seller offers to pay a certain amount on the occurrence of a credit event and that offer is open for a specific period of time.[38] Indeed, the option arrangement that CDSs seem to fit most closely is that of a put option.[39] In a put option transaction the holder will pay a premium to the writer of the option and the writer will agree to purchase a specific property at a certain time for a certain price.[40] For example, A might pay a $100 premium to B in exchange for B's promise to purchase 300 shares of C Corporation from A if A should so demand 75 days hence for $5 per share.[41] CDSs resemble put options specifically when they are physically settled.[42] "A physically-settled swap can be seen as an option held by the credit protection buyer to sell reference obligations to the credit protection buyer for a strike price equal to the obligations' face amounts on the occurrence of a credit event."[43] Thus, because of the similarities between CDS and options, a compelling argument exists for classifying CDS as options for tax purposes.

The Treasury has issued fairly straight-forward guidelines on the taxation of options.[44] The purchaser of an option will capitalize

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[35] Kayle, *supra* note 4, at 1120-21 (citing Old Harbor Native Corp. v. Comm'r, 104 T.C. 191, 201 (1995)).
[36] Kevin J. Liss, *The Option Conundrum in Tax Law: After All These Years, What Exactly is an Option?* 63 TAX LAW 307, 311 (Spring 2010).
[37] Brandes, *supra* note 13, at 268-70..
[38] Kayle *supra* note 4, at 1121.
[39] DAVID MILLER, THE USE OF DERIVATIVES IN TAX PLANNING 100 (Frank J. Fabozzi ed., 1998). The interesting thing to note about the example from this source is that although the author uses the term "put option," he is actually describing the basic CDS arrangement.
[40] Lokken, *supra* note 21, at 16.
[41] *See Id.*
[42] *Id.*
[43] *Id.*
[44] *See e.g.,* Rev. Rul. 78-182, 1978-1 C.B. 265, 1978 WL 42024.

the cost of the option premium and the entity writing the option does not immediately include that premium in income.[45] Rather, the amount of gain or loss on the option will wait until the option is exercised, sold, or allowed to expire.[46] The character of the gain or loss will be the same character as the property to which the option refers,[47] and the source of the income depends on the residence of the taxpayer.[48] Continuing from the put option transaction above, if we assume that A has paid the $100 premium to B in exchange for the right to put 300 shares of C Corporation to B in 75 days for $5 per share from A then A's exercise of that option would be treated as a sale of 100 C shares by B for $1500 (300 times $5). For the purposes of this example, we will also assume that A has a tax basis of $500. A has an amount realized of $1500, he has an adjusted basis of $500 and he is paid an option premium of $100. The result is a gain of $900 ($1500 minus $600).[49] Likewise, at the time of exercise B will take that $100 it received into calculating gain or loss on the stock that it recently sold by decreasing its basis by the $100.[50] The character of both A and B's gain or loss will be determined by the stock that they held.

One could imagine carrying this option taxation scheme to CDSs in the following way. Assume the most basic CDS transaction: B purchases CDS coverage from C against the default of Corporation A's bonds. Under the option guidelines, neither B nor C would take that premium into account at the moment it occurred. Instead, they would wait until a recognizable event happened. That event could be the expiration, sale, or exercising of the contract if a credit event occurs. Just like the option regime, the parties could wait until that moment to take the income into account. Thus, this most basic type of CDS contract at first blush could fit for tax purposes as a contingent put option.

A thorough look at the relationship between CDS agreements and options shows fundamental inconsistencies that make it difficult

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[45] STAFF OF JOINT COMM. ON TAXATION, 110TH CONG., REPORT ON PRESENT LAW AND ANALYSIS RELATING TO THE TAX TREATMENT OF DERIVATIVES 15 (Comm. Print 2008) (citing Rev. Rul. 78-182, 1978-1 C.B. 265).

[46] *Id.*

[47] *Id.*(citing 26 U.S.C. § 1234 (2010)).

[48] *Id.* (citing 26 U.S.C. § 1234(b)(1) (2010)).

[49] *See* Lokken, *supra* note 21, at 17.

[50] Rev. Rul. 78-182, 1978-1 C.B. 265 (referring to section D3 of the ruling).

to classify CDSs as put options. A fundamental feature of any option agreement is the strike price. The strike price is the contractually agreed upon amount that the holder of the option will pay the option writer for the stock held by the writer. This analogy does not always hold in the CDS context where there is no equivalent to the strike price. One may argue that the strike price is equivalent to the amount of the payment should a credit event occur. This argument does not address the fundamental difference between the two instruments. The strike price is used so that the option holder can acquire an asset in exchange for consideration. This feature is not present in the CDS context. When the protection seller pays the protection buyer after a credit event, the protection seller is not acquiring an asset. Instead, it is transferring assets to the protection buyer and receiving nothing in return; it puts forth consideration but receive no consideration itself. This presents a fundamental difference in the function of these two financial instruments that cuts against treating them similarly for tax purposes.

The basic taxation framework for options also presents difficulty in the CDS context. As previously mentioned, the option taxation scheme takes a wait-and-see approach. No party recognizes any payment for tax purposes until the option is exercised, sold, or retired.[51] Options exist so that individuals and companies can bet on the direction of the underlying security. The typical CDS arrangement does not contemplate this type of transaction.[52] One can infer from the regulations that this uncertainty is one of the reasons why the Treasury allows option holders and writers to use a "wait-and-see" approach.[53] CDS payments between the parties are more certain than options and so a wait-and-see taxation approach is unnecessary. The contract will specify whether the payments are periodic or a one-time lump sum payment. Because those payments are more consistent, it would not make sense for protection sellers to hold off on the recognition of that income.

Finally, a structural argument exists that argues against treating CDSs as options for tax purposes. Most CDS agreements

[51] Rev. Rul. 78-182, 1978-1 C.B. 265 (pulling from § C of the ruling).
[52] Granted, this argument does not hold true for naked CDS situations where the protection buyer is using a CDS to short a company's stock.
[53] Rev. Rul 78-182, 1978-1 C.B. 265. In its introduction the ruling specifically discusses a financial actor's use of puts, calls, and straddles to deal with market volatility.

have a term of five years.[54] Option agreements, on the other hand, have a variety of terms in order to meet the parties' needs. Again, the wait-and-see approach is appropriate for options exactly because their terms are so varied. Because the structure of CDSs is more certain it does not make sense to place a tax scheme designed for an uncertain time frame onto a certain time frame. Considering that the basic pricing, payment flows and structure of CDSs and options differ, the option taxation scheme provides a less than adequate solution to the basic CDS taxation problem.

B. As a Notional Principal Contract?

In addition to treating CDS as a guarantee or an option, some have argued that CDSs should be treated for tax purposes as a notional principal contract ("NPC").[55] The Treasury defines an NPC as:

> a financial instrument that provides for the payment of amounts by one party to another at specified intervals calculated by reference to a specified index upon a notional principal amount in exchange for specified consideration or a promise to pay similar amounts.[56]

A notional principal amount is "any specified amount of money or property that, when multiplied by a specified index, measures a party's rights and obligations under the contract, but is not borrowed or loaned between the parties as part of the contract."[57]

Breaking down the definition of an NPC, the typical CDS agreement meets the definition of an NPC.[58] The first requirement is that the CDS must be a financial instrument. The Treasury Regulation provides examples financial instruments that qualify as NPCs,

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[54] Lokken, *supra* note 21, at 18.
[55] Kayle, *supra* note 4, at 1108-18.
[56] Treas. Reg. § 1.446-3(c)(1)(i) (1994).
[57] *Id.* § 1.446-3(c)(3). The inspiration for the presentation of these regulations can be attributed to David Garlock, Howard Leventhal & Alan Munro, *Ernst & Young Comments on Tax Treatment of Credit Default Swaps*, TAX NOTES 855, 858-59 (Feb. 14, 2005).
[58] *Id.* at 858 (noting that most practitioners agree that a typical CDS agreement following the ISDA Master Agreement meets the definition of a notional principal contract).

such as "interest rate swaps, currency swaps, basis swaps . . . and similar agreements."[59] The regulations also specify what an NPC is not: 1256(b) contracts, futures or forward contracts, general debt instruments, or option contracts.[60] In reviewing this initial requirement, CDS agreements seem to fit the basic contract envisioned by the regulations as qualifying as an NPC. Many of the contracts cited by the regulations as examples of an NPC are exotic derivatives, just like CDSs, and so the catch-all "similar agreements" may include CDS agreements. However, the regulations state that options contracts are not an NPC.[61] Thus, arguing for NPC treatment of CDS agreements forecloses the possibility of treating the CDS as an option.

The second requirement of an NPC is that it must include payments made in reference to a specified index.[62] A specified index is merely an "index that is based on objective financial information."[63] Three types of payments are permitted: periodic, termination and nonperiodic.[64] Periodic payments are those that are received under an NPC at intervals of a year or less.[65] A termination payment is one that is

> …made or received to extinguish or assign all or a proportionate part of the remaining rights and obligations of any party under a notional principal contract…. A termination payment includes a payment made between the original parties to the contract (an extinguishment), a payment made between one party to the contract and a third party (an assignment) and any gain or loss realized on the exchange of one notional principal contract for another. Where one party assigns its remaining rights and obligations to a third party, the original non-assigning counterparty realizes gain or loss if the assignment results in a deemed exchange of

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[59] Treas. Reg. § 1.446-3(c)(1)(i).
[60] *Id*. § 1.446-3(c)(1)(ii).
[61] *Id.*
[62] *Id*. § 1.446-3(c)(2).
[63] *See* Garlock et al., *supra* note **Error! Bookmark not defined.**, at 858 (citing Treas Reg. § 1.446-3(c)(2)(iii)).
[64] *See generally* Treas. Reg. § 1.446-3.
[65] Treas. Reg. § 1.446-3(e)(1) (1994).

contracts and a realization event under section 1001.[66]

A nonperiodic payment is a catch-all term that covers payments received under an NPC that are not a periodic payment or a termination payment.[67]

A basic example showing what type of financial instruments the regulations envision as an NPC helps to understand how the regulations capture certain types of financial transactions. For example, suppose X and Y enter into a contract whereby X will make monthly payments to Y based on the 90-day U.S. dollar LIBOR on $10 million and Y will pay X $100,000 (derived by taking one-fourth of 4 percent of $10 million) to X monthly.[68] [69] Both the LIBOR and the 4 percent meet the definition of a specified index.[70] The notional amount in this example is $10 million and that amount is the basis for which the payments each party makes to each other are computed.[71] The result is that this is an NPC.[72]

One can see how the basic CDS situation would fit the NPC regulations in the context of periodic payments. In a CDS agreement, the protection buyer will make periodic payments to the protection seller in exchange for the protection seller's coverage under the CDS. These payments are often calculated in reference to either a fixed or floating index based on a notional amount.[73] That notional amount is usually made by looking at the principal amount of the reference obligation.[74] Like the example above, there are periodic payments, an index and a notional amount. Furthermore, the protection buyer makes the payments for consideration.[75] Thus, the NPC regulations appear to be satisfied. The resulting character of the payments under

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[66] *Id.* § 1.446-3(h).
[67] *Id.* § 1.446-3(f)(1).
[68] Lokken, *supra* note 21, at 19.
[69] This is only a basic example. There are many different and complicated financial transactions that can fall within the definition of NPC. *See, e.g.*, KEVIN M. KEYES, DESCRIPTION OF NOTIONAL PRINCIPAL CONTRACTS 2-30. (Frank J. Fabozzi ed., 1998) (describing various financial transactions that constitute NPCs).
[70] *See* Lokken, *supra* note 21, at 19.
[71] *Id*.
[72] *Id.*
[73] Garlock et al, *supra* note **Error! Bookmark not defined.**, at 858.
[74] *Id.* at 858-59.
[75] Lokken, *supra* note 21, at 23 (citing Treas. Reg. § 1.446-3(c)(1)(i)).

a NPC is that the recipient recognizes the payments as income and the payor recognizes an expense for the period in which the payments were made.[76] Nonperiodic payments in a CDS contract would not change the result.[77]

Some have suggested that the protection seller's payment to the protection buyer after a credit event could qualify as a termination payment.[78] As the definition of termination payment sets forth, any payment made by a party to extinguish its rights under the contract would be a termination payment.[79] When the protection seller pays out the contractually specified amount to the protection buyer after the occurrence of a credit event, the protection seller is essentially extinguishing its obligations under the contract. This treatment, however, misses a key distinction between a payment event under a credit event and a termination payment. When a party makes a payment under a credit event it is because the contract requires it.[80] The regulations defining 'termination payment' suggest that the contract does not require the protection seller to make the payment.[81] Rather, the protection buyer chooses to close out their position. Thus, the definition of 'termination payment' under the regulations does not adequately encompass the payment that occurs upon a credit event.

A more thorough review of the regulations governing NPCs shows that taxing CDSs under this regime presents other difficult issues. First, as mentioned above, the regulations give examples of NPCs as being "interest rate swaps, currency swaps," etc.[82] At first glance, a reader might see the proliferation of the word "swap" in the regulations and think that because CDSs contain the word "swap" that these instruments are alike. However, significant differences exist in those instruments. For example, a currency swap involves the

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[76] *Id.* at 20 (citing Treas. Reg. § 1.446-3(e)(2)).
[77] The regulations would characterize the payments as nonperiodic and the parties would need to recognize both the income and expenses relating to that contract over the contract term. *See* Lokken, *supra* note 21, at 21(citing Treas. Reg. § 1.446-3(f)(2)(i)).
[78] Kayle, *supra* note 4, at 1115-16.
[79] Treas. Reg. § 1.446-3(h)(1).
[80] Kayle, *supra* note 4, at 1115-17.
[81] *Id.*
[82] *Id*. § 1.446-3(c)(1)(i).

literal exchanging of one currency for another.[83] An interest rate swap involves two parties who trade their respective interest streams with each other through contract.[84] CDSs, on the other hand, are not swapping anything. Indeed, the name "credit default swap" is misleading. The counterparties in a CDS transaction are not swapping assets that they currently have;[85] instead, they are working to provide a backstop should a credit event occur. This is a fundamental difference of these two transactions. Thus, from a technical perspective, CDSs are not similar creatures to the types of instruments covered by the treasury regulations.[86] A CDS is fundamentally different in its nature from the types of financial instruments that are governed as NPCs.

A second issue arises surrounding the treatment of the CDS credit event under the NPC regulations. Under a CDS contract, a credit event will trigger a payment from the protection seller to the protection buyer. The problem arises in how to treat that payment under the NPC regulations. Because the payment happens only once, one cannot classify it as periodic. At most, it must be a nonperiodic payment.[87] If the payment is classified as nonperiodic, then the regulations require that the payment be spread out over the life of the contract.[88] This is a problem in the CDS situation because there is no certainty that the credit event will occur. The parties cannot spread a nonperiodic payment over the terms of the contract if no one knows

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[83] U.S. COMMODITY FUTURES TRADING COMM'N, *CFTC Glossary*, *available at* http://www.cftc.gov/ConsumerProtection/EducationCenter/CFTCGlossary/glossary_co.html.

[84] CAL. DEBT & ADVISORY COMM'N, *Understanding Interest Rate Swap Math & Pricing* 1, 1-2, July 2007, *available at* http://www.treasurer.ca.gov/cdiac/publications/math.pdf (last visited Oct. 12, 2010).

[85] Companies that engage in interest rate or currency swaps for example are swapping their assets or the right to receive a stream of assets with one another.

[86] A further technical reason for not treating CDSs similarly to NPCs can be found in Brandes *supra* note 13, at 275-76(citing Treas. Reg. § 1.446-3(c)(1)(i)). Brandes points out that the definition of a NPC in the treasury regulations references "payment of amounts" between counterparties. This regulation presupposes money changing hands. In a CDS contract, the protection seller may never need to make a payment.

[87] Lokken, *supra* note 21, at 23.

[88] *Id.* (citing Treas. Reg. § 1.446-3(f)(2)).

whether the nonperiodic payment will occur.[89] The amount of the payouts would add to the confusion caused by this regime. In the recent financial crisis, AIG made billions of dollars in payouts to multiple companies.[90] The current NPC regulations would not adequately deal with those payments.

An interest rate swap highlights the contracts between an NPC and a CDS. In an interest rate swap, which is an NPC, two parties will contractually agree to swap payments based on certain indexes. Although the parties do not necessarily know the amount of the payment stream that they will receive because the index may be a floating one, both parties are certain of receiving payments of some kind. Contrast that situation with the CDS agreement where the protection buyer is uncertain if he will receive a payment and the protection seller is uncertain if he will have to make a payment. They know that they will each receive payments, but they do not know if there will be any cash flow to the protection buyer. Thus, the fundamental notion of payments in the NPC regulations is frustrated by the CDS situation because multiple uncertainties exist regarding certain payment streams.

A final problem with taxing a CDS like an NPC is that some CDS contracts call for a single payment from the protection buyer.[91] An NPC requires payments at "specified intervals."[92] "Specified intervals" requires multiple payments. Should this interpretation hold and should the Treasury decide to apply the NPC regulations to CDSs, then a significant portion of CDS contracts would escape NPC treatment simply by having a lump-sum payment.[93] The Internal

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[89] Garlock et al., *supra* note **Error! Bookmark not defined.**, at 859-61. The treasury has proposed regulations to deal with timing and character issues involving contingent nonperiodic payments. However, the authors of the cited article argue strongly against applying those regulations to CDSs should CDSs be classified as NPCs.

[90] Mary Williams Walsh, *A.I.G. Lists Firms To Which It Paid Taxpayer Money*, N.Y. TIMES, Mar. 16, 2009, at 1*available at* http://query.nytimes.com/gst/fullpage.html?res=9C0DE5D6173FF935A25750C0A96F9C8B63. ("Financial companies that received multibillion-dollar payments owed by A.I.G. include Goldman Sachs ($12.9 billion), Merrill Lynch ($6.8 billion), Bank of America ($5.2 billion), Citigroup ($2.3 billion) and Wachovia ($1.5 billion).").

[91] Garlock et al., *supra* note **Error! Bookmark not defined.**, at 859.

[92] *Id.* (citing Treas. Reg. § 1.446-3(c)(1) (1994)).

[93] *Id.*(stating how CDS contracts could avoid such regulation by requiring a lump-sum payment.).

Revenue Service ("IRS") could remedy the situation through a clarification of the regulations; nonetheless, the current form of the regulations remains a problem for purposes of classifying CDSs as NPCs.

C. As Insurance?

If CDSs provide payouts when unfortunate events happen, should we not just label these contracts as insurance and tax them the same way? Indeed, during the height of the financial crisis, certain states threatened to bring issues of CDS within the control of their insurance regulatory bodies.[94] This approach, however, suffers from multiple problems. First, if extended to its logical consequence, many different types of financial deals would be considered insurance on many different levels.[95] Take, for example, an average person investing in the commodities market. That person may have a long position in Middle Eastern oil but because they are not fully confident in their choice they also take a short position in that same market. They do this to hedge their position, or in other words, they are providing their long position with insurance should an undesired event occur. Likewise, a similarly significant problem exists for purposes of classifying CDS as insurance due to the way the insurance industry is regulated. Insurance is regulated at the state level and CDSs may not meet the definition of insurance in every state.[96] Trying to impose a tax on a CDS by treating it like insurance would pose a regulatory headache because the IRS would need to find a way to overcome the difficulties of working with not only fifty different state insurance agencies but also fifty different definitions of whether a CDS contract fits the definition of insurance. Thus, taxing CDSs as insurance is not a practical solution to the problem both because of definitional and functional issues.

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[94] *See* Serena Ng & Liz Rappaport, *Crisis on Wall Street: New York Tries Taming Credit-Default Swaps—State to Regulate Certain CDS Pacts as Insurance Deals*, WALL ST. J., Sep. 23, 2008, at C3 ("New York regulators are attempting to tame parts of the unregulated credit-default-swaps market by requiring some sellers of these contracts to become insurance companies.").

[95] The basic idea for this argument comes from Brandes, *supra* note 13, at 270-71.

[96] Brandes, *supra* note 13, at 271. Also, note that Brandes raises several other reasons why taxing CDSs as insurances do not mix in 271-74.

IV. The Guarantee Tax Structure and CDSs

A. The Guarantee Tax Structure is an Optimal Solution for CDSs

The IRS should treat guarantees and CDSs similarly for tax purposes because CDSs fit well within the current guarantee taxation scheme. In a guarantee, there are two basic parties: the party providing the protection (the guarantor) and the party covered by that protection (the obligor).[97] Although some uncertainty exists in the taxation of these parties, the basics of the transaction are fairly clear. Regarding tax treatment of the guarantor, the IRS has generally characterized guarantee fees paid by the obligor to the guarantor as ordinary income.[98] The guarantor takes those fees into account according to their normal method of accounting.[99] Should an actual credit event occur, the guarantor is normally entitled to deduct the payment when made as a "bad debt."[100] Some uncertainty does exist regarding the sourcing of the income. The sourcing of the income refers to whether the income is paid by a U.S. resident or a foreign person.[101] The obligor's residence should determine the source of the income.[102] The question is whether the obligor for sourcing purposes is the obligor under the reference asset or the party actually paying the fees.[103] The outcome of this question would result in different tax consequences for withholding purposes.[104]

Turing to the tax treatment of the obligor, periodic guarantee fees made by the obligor are currently deductible as an ordinary expense,[105] and a lump sum guarantee payment is treated as an

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[97] David S. Miller, *An Overview of the Taxation of Credit Derivatives*, 484 PLI/TAX 1287, 1293 n.3 (2000).
[98] *Id.* at 1294.
[99] *Id.*
[100] *Id.* at 1296 (quoting Treas. Reg. § 1.166-8 (a)(1)).
[101] *See generally* LEXISNEXIS TAX ADVISOR, CHAPTER 4B:3 RULES ON THE SOURCE OF INCOME (2010).
[102] Miller, *supra* note 97, at 1295 (citing Bank of America v. United States, 680 F.2d 142, 150 (Cl. Ct. 1982); private letter ruling 9651052 (June 19, 1996)).
[103] *Id.*
[104] Kayle, *supra* note 4, at 1128-30.
[105] Miller, *supra* note 97, at 1297 (citing Revenue Ruling 70-544, 1970-2 C.B. 6; Revenue Ruling 70-545, 1970-2 C.B. 7. See also Revenue Ruling

amortizable payment.[106] Sourcing for the obligor is easier to determine. Payments received by the obligor will be treated as directly from the issuer: those received from a foreign issuer will be foreign-source income, and those issued from a U.S. issuer will be U.S.-source income.[107]

In considering a solution to the problem of how to tax CDSs, issues of timing, character and source are critical.[108] The payments in the CDS situation find a satisfying solution in the guarantee context. Under a guarantee scheme, the basic tax treatment of the payments that flow between the protection seller and protection buyer find excellent treatment because these payments are similar in nature to the payments that the protection buyer makes to the protection seller. As mentioned above, guarantee fees that the debtor pays are treated as currently deductible business expenses.[109] In the CDS context, the payments are either a stream of payments or a lump-sum payment. Comparatively, the payments made by the obligor will be either in lump sum or as a stream of payments. If the guarantee scheme were to apply to CDSs, the protection buyer would deduct the payments made to the protection seller as an ordinary business expense.[110]

On the other end of the deal, the payments that the guarantor receives function analogously to the payments that the protection seller receives from the protection buyer. Using the guarantee scheme, the protection seller would take the payments when it receives them into ordinary income.[111] The analogy further applies to other significant aspects of a guarantee-type agreement. When a credit event occurs, payments made to the obligor are treated as a "bad debt" and the guarantor can deduct those payments as an expense.[112] Likewise, the protection seller would be able to treat those payments it makes on the instrument as a bad debt. The protection buyer in the CDS would treat any payments received from

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71-399, 1917-2 C.B. 433, amplified by Revenue Ruling 72-376, 1972-2 C.B. 647; Revenue Ruling 84-10, 1984-1 C.B. 155; General Counsel Memorandum 39113 (October 7, 1983) (corresponding to Revenue Ruling 84-10); private letter ruling 8110142 (December 12, 1980)).

[106] *Id.*

[107] *Id.*

[108] Lokken, *supra* note 21, at 14.

[109] Miller, *supra* note 28, at 110.

[110] Kopp & Nirenberg, *supra* note 12, at 92.

[111] *Id.*

[112] Miller, *supra* note 97, at 1296.

the protection seller on the occurrence of a credit event as the amount realized from a sale of the reference security or as a principal payment.[113] On the issue of timing, the payments made and received would be matched to the "periods to which the payments relate . . . ."[114] Thus, applying the guarantee scheme to tax CDSs seems logical because of the similarities between these two instruments with respect to the roles of the parties.

The sourcing rules currently in place for guarantees further support the argument for taxing CDSs like guarantees. Sourcing is a term of art that determines whether payments on an investment or other asset are subject to U.S. Federal tax.[115] For example, suppose a United States citizen were to buy and sell stock in a foreign corporation for a sizeable profit. That citizen would be subject to U.S. income tax rules because she lives in the United States, even though her gain results from a company that does not do business within the United States.[116] The sourcing rules applicable to guarantees are quite clear and provide a good pattern for CDS transactions as well.[117] The sourcing rules are codified in 26 U.S.C. §§ 861 and 862, but specific regulations apply to guarantees. For example, Reg. § 1.861-2(a)(5) states that "if interest is paid on an obligation of a resident of the United States by a nonresident of the United States acting in the nonresident's capacity as a guarantor of the obligation of the resident, the interest will be treated as income from sources within the United States."[118] Reg. § 1.862-1(a)(5) states that "if interest is paid on an obligation of a nonresident of the United States by a resident of the United States acting in the resident's capacity as a guarantor of the obligation of the nonresident, the interest will be treated as income from sources without the United States."[119] Thus, interest income from payments made on a

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[113] Kopp & Nirenberg, *supra* note 12, at 92.
[114] Kayle, *supra* note 4, at 1127.
[115] *See generally* LEXISNEXIS TAX ADVISOR, CHAPTER 4B:3 RULES ON THE SOURCE OF INCOME (2010).
[116] *Id.* at 4B:3.12[d].
[117] Kayle, *supra* note 4, at 1081 (describing the tax treatment of guarantees as "simple, intuitive and almost entirely settled").
[118] Treas. Reg. § 1.861-2(a)(5) (1997).
[119] I.R.S. Gen. Couns. Memo 38646 (Feb. 27, 1981) (citing Treas. Reg. § 1.862-1(a)(5) (1983)).

guarantee, regardless of the residency of the payer, are taxed according to the residency of the obligor, the income's source.[120]

This sourcing arrangement could apply to CDSs for several reasons. First, the guarantee sourcing rules fit within the basic framework of a CDS agreement. The sourcing rules mention payments made "on an obligation."[121] In a CDS transaction, the protection seller makes payments when a credit event occurs on a reference entity.[122] As contemplated in the sourcing rules, those payments are made on an obligation for the protection seller to cover the protection buyer.

Second, like guarantees, a CDS can involve multiple parties covering various aspects of a single, often complex transaction. The same financial institutions that provide these financial guarantees, however, may also be involved in CDS transactions. [123] This reduces transaction costs because financial institutions are already familiar with the guarantee sourcing rules and thus the learning curve for reporting these transactions for tax purposes would not be as steep. Given the industry-wide trend toward standardizing CDS contracts,[124] using the guarantee method of taxation would streamline the process so that all of the actors involved will know how to deal with their CDS contracts. This would facilitate a more efficient tax system overall as well as create less of an administrative headache for financial companies working in these areas.

Finally, from the perspective of the sourcing rules, it makes sense to tax CDS as guarantees because of the variety of companies that engage in CDS transactions. Many of the CDS deals involve not only U.S. companies, but rather they may include foreign companies, with or without branches in the United States.[125] With the current

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[120] I.R.S. Gen Couns. Memo 38646 (Feb. 27, 1981).

[121] Treas. Reg. §§ 1.861-2(a)(5) (1997), 1.862-1(a)(5) (1983).

[122] Brunson, *supra* note 11, at 2-3.

[123] See Serena Ng & Lavonne Kuykendall, *Crisis on Wall Street: MBIA is Sued Over a Split of Businesses*, WALL ST. J., Mar. 12, 2009, at C3 for an example of a major financial player being involved in both the CDS and financial guarantee business.

[124] Erika W. Nijenhuis & Diane G. Simons, *Securities Industry and Financial Markets Association (SIFMA) Letter to Steven A. Musher Regarding Standardized Credit Default Swaps*, 906 PLI/TAX 47, 51 (Apr. 12, 2010).

[125] For a brief example of Goldman Sachs and J.P. Morgan Chase making swap agreements with foreign institutions and countries see Luca Di Leo &

sourcing rules, these companies would know how to label their income without confusion. Writing a completely new set of sourcing rules for CDS transactions would increase the transactional costs for these companies and for regulators, and slow needed liquidity in the financial markets. Therefore, the sourcing rules currently in place provide further support for taxing CDSs as guarantees because of the sourcing rules currently in place.

B. Naked CDS Transactions Challenge the Basic Guarantee/CDS Analogy

Although an apt analogy in many respects, all of the elements of a CDS agreement would not fit comfortably into the taxation scheme of a guarantee. Classifying a CDS as a guarantee makes the most sense when the protection buyer owns the underlying obligation.[126] In a naked CDS transaction, the protection buyer does not own the underlying reference entity; rather the buyer is simply betting on the creditworthiness of the institution that has issued the obligation.[127] The protection buyer does not necessarily care that performance of that entity is guaranteed to happen.[128]

For example, suppose I get tired of being a lawyer and decide to enter the chocolate industry. Wanting to provide the best chocolate, I buy an interest in a cooperative cocoa bean farm in Madagascar. Being a wise investor, I realize that my profits will suffer should the farm fail to provide me with my monthly supply of cocoa beans. So, I negotiate with a financial company a CDS contract to cover any lost profits due to a loss of supply. The payout on the CDS will allow me to either keep those dollars or use them to buy cocoa beans from elsewhere. This arrangement represents the classical CDS context because I own the underlying entity.

Susanne Craig, *Europe's Economic Woes: Fed Examines Swaps Deals by Goldman and Others*, WALL ST. J. Feb. 26, 2010, at A10 (2010).

[126] David Z. Nirenberg & Steven L. Kopp, *Credit Derivatives: Tax Treatment of Total Return Swaps, Default Swaps, and Credit-Linked Notes*, 87 J. TAX'N 82, 91-92 (Aug. 1997).

[127] Sarah N. Lynch, *Crisis on Wall Street: New York will Suspend its CDS Plan*, WALL ST. J., Nov. 21, 2008, at C2.

[128] Kayle, *supra* note 4, at 1126-27. Here, Kayle argues that the possibility that the protection buyer does not own the reference entity in a CDS transaction militates against treating the CDS as a guarantee for tax purposes.

To extend this analogy to the naked CDS situation, suppose that Wall Street banks and other financial actors get wind of a potential violent rainstorm off the coast of Southeastern Africa. Hoping to make a profit, these banks and financial institutions negotiate CDS contracts with each other based on the likelihood that the cocoa farm will fail to provide me with my supply of cocoa beans for the week. This transaction takes place, at least in part, because each side believes its respective forecast is correct. The naked protection buyer seeks to pay a small premium for a big payout, and the protection seller believes that it will receive free money in the form of premiums on which it will never make good.[129] The difference between the financial actors and me in the example is that I actually own an interest in the cocoa bean farm whereas the investors do not. This naked CDS arrangement presents a problem because the financial actors who made the naked CDS deals will not be the ones who insist that the farm perform on its obligation to provide me with beans or go after the CDS protection seller to compensate me for my losses. Although concerned with the outcome for the purposes of the transaction, the financial actors deal only with each other. They do not care whether I get my beans. Thus, the normal guarantee relationship does not exist in a naked CDS transaction. Given the great number of naked CDS transactions in the marketplace,[130] this difference represents a significant issue.

Although significant, the issue is not insurmountable. There are a few ways to deal with this issue from a regulatory perspective. Perhaps the simplest solution would be to create a set of attribution rules for naked CDS transactions. In the context of corporate tax planning, the attribution rules are complex and designed to prevent

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[129] For an excellent article looking into AIG's business practices that exemplified the belief that it would never need to pay out big on CDS deals, see Carrick Mollenkamp et al., *Behind AIG's Fall, Risk Models Failed to Pass Real-World Test*, WALL ST. J., Nov. 3, 2008, at A1.

[130] Along with short-selling, naked CDS transactions are a beloved target for politicians and several proposals have been floated that would ban these transactions. *See, e.g.,* American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong §355 (2009); Prevent Unfair Manipulation of Prices Act of 2009, H.R. 2448, 111th Cong. § 7 (2009). Naturally, if these transactions were to be banned, then there would not be an issue for tax purposes here. However, a ban is unlikely and certainly was not a part of the recently passed Dodd-Frank bill. *See generally* Dodd-Frank, *supra* note 2.

corporations or individuals from sheltering income from taxes.[131] Although this stated goal of the attribution rules may not necessarily apply to the CDS context, the concept of applying attribution rules that create constructive ownership could work for tax purposes. For example, an investor with a naked CDS position could be attributed as owning the reference obligation. The investor would then take into account the timing, character and source of that reference obligation. Delineating how this tax scheme would work is outside the scope of this note; however, the possibility of applying such a scheme seems persuasive.

Another solution to the naked CDS problem might be to do nothing at all. This would preclude naked CDS integration with the reference obligation. The tax implication of doing nothing is that naked CDS holders would be subject to withholding taxes.[132] In addition to resolving the tax issue, from a public policy perspective, this would disincentivize investors from engaging in naked CDS transactions. Some public officials wish to ban the transaction[133] Providing less than ideal tax treatment might be a compromise with those who think the transactions should be allowed.

V. Functional Similarities between Guarantees and CDSs Strengthen the Argument for Treating CDSs and Guarantees Similarly for Tax Purposes

A. Risk-Hedging Roles

Both CDSs and guarantees serve a risk-hedging function. A lender uses a guarantee when it does not feel secure about the borrower. Without a guarantee, the lender will likely not loan the borrower the amount she requests. Likewise, a financial company use

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[131] For an exhaustive treatment of the attribution rules in a corporate tax-planning atmosphere, see Reuven S. Avi-Yonah & Karen B. Brown, *The Attribution Rules (Portfolio 554)*, BNA TAX & ACCOUNTING, available on file with the author of this note.

[132] Kayle, *supra* note 4, at 1129 (arguing that payments made by the protection buyer likely would meet the "fixed or determinable annual or periodical amounts ("FDAP")" requirement and, if the payments had a U.S. source, the payor would be required to withhold at a rate of 30 percent").

[133] American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong §355 (2009); Prevent Unfair Manipulation of Prices Act of 2009, H.R. 2448, 111th Cong. § 7 (2009).

CDS contracts to protect itself should the reference entity not perform as desired. The risk hedging function in both types of transactions allows these products to provide liquidity to the financial markets and facilitate transactions that otherwise would not be possible for one reason or another. Although two fundamentally similar transactions need not necessarily receive the same tax treatment, the functional similarity between CDSs and guarantees supports the idea that they should be treated similarly for tax purposes.

B. Secondary Liability Instruments

CDS and guarantees should be treated similarly for tax purposes because they both provide "secondary liability."[134] Neither a guarantee nor a CDS protection seller pays unless the original obligor remains solvent. For example, in a guarantee relationship, the guarantor will not need to pay the creditor until the obligor defaults on his payments.[135] Likewise, the protection seller will, generally, only need to pay out when a credit event occurs.[136] This "secondary liability" function of CDSs and guarantees strengthens the proposition that they should be treated similarly for tax purposes. Again, CDSs and guarantees perform the same basic function. Thus, it follows that it would make sense to tax these instruments similarly.

C. Cash Flow Triggers

Another reason that CDSs and guarantees should be taxed similarly has to do with the way the cash begins to flow between the protection buyer and seller and the guarantor and the creditor. In both of transactions, the cash does not begin to flow until either the occurrence of a credit event or a failure to make a payment.[137] At the

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[134] For a discussion on how guarantees are secondary liability instruments see David S. Miller, *Federal Income Tax Consequences of Guarantees: A Comprehensive Framework for Analysis*, 48 TAX LAW. 103, 107 (Fall 1994).
[135] *Id.* at 106-08.
[136] *International Finance: Regulators See Orderly CDS Market*, WALL ST. J. Mar. 10, 2009, at C2.
[137] Bruce Kayle, *Will the Real Lender Please Stand Up? The Federal Income Tax Treatment of Credit Derivative Transactions*, 50 TAX LAW. 569, 598 (Spring 2007).

time the parties enter into the transaction, most parties do not want the credit event to trigger or the obligor to miss a payment.[138] Certainly, in both situations whether the cash flows between the parties is not a foregone conclusion at the beginning of the contract. Indeed, by their very nature as "secondary liability" financial tools, the parties do not conceive them as being regularly used. This is important because for the purposes of finding a home for CDS in the tax world it makes sense to place CDS in an area that corresponds to one of the main features of a CDS; namely, there is neither a certainty nor an expectation that money will flow between the two counterparties in every transaction.

D. Industry Use

Since CDSs and guarantee contracts between businesses are often private affairs, it is difficult to consider how the industry views these two products. During the recent financial crisis, however, many companies struck deals involving financial guarantees and CDSs that ended poorly and resulted in litigation. These recent cases and the information contained in the court records provide an excellent glimpse into how the industry views these financial products. Furthermore, the cases tend to strengthen the argument that CDSs and guarantees should be treated similarly by showing that the financial industry uses the instruments in similar ways.

For example, in *In re Merrill Lynch Auction Rate Sec. Lit.*, the defendants used CDSs and guarantees to make financial bets. [139] Although the main issue of this case does not involve whether guarantees should be treated as CDSs,[140] it is nonetheless informative as to how the industry uses these instruments similarly. In this case, the Louisiana Stadium and Exposition District ("LSED") owned and operated the Louisiana Superdome ("Superdome").[141] LSED wanted to refinance its debt in order to take advantage of lower interest rates.[142] Merrill Lynch functioned as the underwriter and after a

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[138] This does not hold true for actors who engage in naked CDS transactions with the bet that a credit event will occur.

[139] *See In re Merrill Lynch Auction Rate Sec. Lit.*,No. 09 MD 2030, 2010 WL 1924719 (S.D.N.Y. May 11, 2010).

[140] The issues in this matter involved various contractual claims of LSED against Federal Guaranty Insurance Company (FGIC). *Id*. at 1.

[141] *Id.*

[142] *Id.*

series of unfortunate events involving LSED, Merrill Lynch advised LSED to issue securities with a synthetic fixed rate structure.[143] A synthetic fixed rate structure "is created when a borrower issues variable rate bonds then enters into a variable-to-fixed interest rate swap."[144] LSED eventually accepted Merrill Lynch's proposal and issued a series of bonds with these synthetic features.[145] LSED also purchased insurance policies for the bonds from Financial Guaranty Insurance Company ("FGIC").[146] At the same time that FGIC was engaged in business with LSED, it was also engaged in selling guarantees and CDS agreements to holders of securities of collateralized debt obligations ("CDOs").[147] When the housing market crashed, FGIC was unable to meet its insurance obligations to LSED. Further, it was unable to meet the increased demands placed on it by the weak housing market and the guarantee/CDS products it had sold backing the synthetic CDOs.[148] For the purposes of this note, the important aspect of the transaction was the fact that FGIC used CDSs and guarantees similarly. That is, it used them both to back CDOs. This shows that at least functionally, a major company in the financial industry was using these two products similarly, bolstering the argument that these two products should receive similar tax treatment.

Other case law examples demonstrate this practice. In *MBIA Ins. Corp. v. Merrill Lynch, Pierce, Fenner & Smith Inc.*, LaCrosse sold CDS protection to Merrill Lynch, backing CDOs.[149] The CDSs had been issued by MBIA.[150] MBIA created these CDS contracts by essentially mimicking financial guarantees. MBIA ensured that the CDOs would continue to perform by inserting financial guarantee

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[143] *Id.*
[144] GEORGE K. BAUM & CO., *Synthetic Fixed Rate—Interest Rate Swaps*, *available at* http://www.gkbaum.com/is /swap101.pdf (last visited Oct. 18, 2010).
[145] *Merrill Lynch*, 2010 WL 1924719 at 2.
[146] *Id*.
[147] *Id.*
[148] *Id.*
[149] MBIA Ins. Corp. v. Merrill Lynch, Pierce, Fenner & Smith Inc., No. 601324/09, 2010 WL 2347014 (N.Y. Sup. Ct. Apr. 9, 2010) (involving "11 credit default swap contracts (CDSs) whereby LaCrosse sold credit protect-tion to Merrill Lynch, in relation to underlying security, held by Merrill Lynch, in the form of 'collateral debt obligations' (CDOs)").
[150] *Id.* at 1

insurance policies in the CDS contracts.[151] As in the previous case, MBIA used financial guarantees and CDS contracts interchangeably. Indeed, in this situation, MBIA had inserted a "financial guarantee" into the CDS contract.[152] In light of the fact that the industry seems to treat these two financial products similarly from a business perspective, these two products should be taxed similarly for that same reason.[153]

1. The Similarities between CDSs and Guarantees Warrant Similar Tax Treatment for Purposes of Equity, Transparency and Market Risk.

Because of the similarities between CDSs and guarantees, taxing the two similarly would be equitable. All taxpayers who engage in CDS or guarantee transactions should be treated in a rational and equal way.[154] The basic guarantee taxation scheme is settled[155] and as long as the financial players follow the logical structure of a CDS transaction, then each of those transactions should be taxed in the same way.

The "step-transaction doctrine" prevents a CDS transaction from being structured so that it avoids taxation under the guarantee scheme and the corresponding effect on policy goals. In *Commissioner v. Court Holding Co.,* the Supreme Court stated that "the incidence of the tax depends on the substance of the transaction." [156] Determining how a transaction will be taxed depends on the substantive result of the transaction. A party may not insert various steps into a transaction in order to take the transaction outside of the

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[151] *Id.*
[152] *Id.*
[153] Although other similar cases do not explicitly interchange the terms as in the cases above, they do not draw a factual distinction between guaranteeing financial products through financial guarantees and CDSs. Rather, the practice is simply to guarantee financial products, and CDSs are a means used to achieve that goal. *See*, *e.g.*, In re Ambac Fin. Group, Inc. Sec. Lit., 693 F.Supp.2d 241, 249 (S.D.N.Y 2010) (observing that the general business model of AMBAC was to guarantee CDOs with no distinction made between CDSs and financial guarantees).
[154] Anthony C. Infanti, *Tax ~~Equity~~*, 55 BUFF. L. REV. 1191, 1197-99 (January 2008).
[155] Kayle, *supra* note 4, at 1081
[156] 324 U.S. 331, 334 (1945).

IRC when the result would have been taxable had those steps not been taken.[157] Thus, practitioners would have a difficult task trying to create a transaction that mechanically would not meet the rules, but would substantively function like a CDS, and still be successful in avoiding the tax. IRS officials will look to the overall effect of the transaction and not the initial mechanical steps.

For example, suppose that Dexter Corporation ("Dexter") decides to acquire all of the stock of Felix Corporation ("Felix") in exchange for stock of Dexter.[158] As soon as Dexter acquires Felix's stock, Dexter decides to liquidate and distribute Felix's assets to its shareholders. If these transactions were taken separately, there would be two separate transactions: a stock for stock acquisition followed by a liquidation. For the purposes of the step transaction doctrine, however, these transactions are "stepped" together so that for tax purposes the transaction is treated as a stock for assets transaction.[159] In the context of CDS and guarantee transactions, this doctrine helps prevent financial institutions from shirking the rules in order to avoid taxation.

Because the tax rules for basic guarantee transactions are fixed, taxing CDS transactions like guarantees would be transparent. Practitioners should know how to apply them in various situations. The transparency of the guarantee tax system, however, does not necessarily mean that the rules are simple.[160] Guarantee relationships can be complex and require complex tax planning.[161] However, the equitable and transparent nature of taxing CDS transactions like guarantees should outweigh the disadvantage of complexity, especially in light of the experience practitioners already have with guarantee taxation.

2. Reduce Market Risk?

In addition to the tax and policy implications of taxing CDSs like guarantees, a coherent and tested tax structure might reduce the riskiness associated with CDS contracts. Additionally, the regulators

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[157] *Id.*

[158] See *Step Transaction Doctrine*, PILLSBURY TAX PAGE, *available at* http://pmstax.com/acqbasic/stepTran.shtml (last visited September 25, 2010).

[159] *Id.*

[160] *See, e.g.,* Miller *supra* note 28.

[161] *Id.*

might be able to reduce some of the uncertainty involved. Reporting CDSs on income tax returns could give the IRS better data on CDSs, which could enable it to create guidelines that reign in the risk of these instruments without stifling their functionality.

E. Disparate Industry Treatment?

Although the above examples present similar industry treatment of CDSs and guarantees and thus an argument to tax the two instruments similarly, some case law indicates that the industry uses the two products differently. In *Deutsche Bank AG v. AMBAC Credit Prod., LLC,* there were three parties involved in the CDS transaction.[162] Deutsche Bank ("DB") was the protection buyer, AMBAC Credit Products ("ACP") was the CDS protection seller and Ambac Assurance Corporation (AAC) sold the financial guarantee.[163] In this transaction, AAC insured ACP so that ACP would be able to make any payments necessary under the CDS contract to DB.[164] AAC used a financial guarantee to support ACP's CDS contractual obligations with DB. Here, the parties used the two products separately in the same transaction.

The fact that these companies used CDSs and financial guarantees as two separate components in the same transaction does not weigh heavily against taxing CDS as guarantees given the nature of the deal. Even though the deal formally treated these products as two separate instruments, the basic function these products played in the deal was the same. In this transaction DB agreed to make payments to ACP in exchange for protection should the reference obligation default.[165] This was the CDS portion of the agreement. The financial guarantee portion of the agreement involves ACP and AAC's relationship.[166] AAC issued a financial guarantee that promised to cover any payments made from ACP to DB.[167] At their most basic level, these two transactions perform the same function in this transaction: they both guarantee that the expected cash flow will arrive. The CDS portion of the agreement guaranteed that the cash

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[162] Deutsche Bank AG v. AMBAC Credit Prod., LLC, No. 04 CIV. 5594 (DLC), 2006 WL 1867497 (S.D.N.Y. Jul. 6, 2006).
[163] *Id.* at 4.
[164] *Id.* at 4-5.
[165] *Id.* at 4.
[166] *Id.*
[167] *Id.*

flow from the bonds would be there and the guarantee portion of the deal guaranteed that the cash flow from the CDS agreement would continue to arrive should ACP be unable to make the payments.[168] Both portions of the deal acted as a backstop that ensured a continuing cash flow. Even though the parties treated these products as separate, the fact that the product's main objective was similar argues for treating them similarly for tax purposes. If the goal is to backstop a financial transaction, then CDS and guarantees are quite similar indeed.

VI. Conclusion

The basic CDS transaction is a complex yet useful tool for creating liquidity in the market because it allows financial institutions to engage in transactions that they otherwise might avoid were the CDS backstop unavailable. Likewise, guarantees provide liquidity and serve a backstop function by allowing obligors to complete transactions that the obligee would not want to engage in were it not for the presence of a guarantor. On this similarity rests the basic premise of this note. The similarity between these instruments supports an argument for a similar tax structure. Guarantees have an able tax structure in place that policy makers could use to either apply directly to CDSs or use as a guide in crafting a specific tax treatment for CDSs. Certain aspects of the guarantee taxation scheme do not clearly apply in the CDS context. Naked CDSs disrupt the analogy between CDSs and guarantees by removing the holder of the instrument from the reference obligation. Furthermore, although CDSs seem to be more similar to guarantees than any other financial instrument, other instruments compete for attention. A comprehensive analysis of the similarities between CDSs for practical and tax purposes might prove to be an interesting topic. Likewise, a closer look at the naked CDS arrangement and its tax implications also could prove useful in solving the CDS tax riddle. One thing seems certain, however: applying the guarantee tax model to CDS contracts would remove some uncertainty from the market by providing practitioners with a way to capture the vast payments that flow between the companies who use these instruments.

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[168] *Id.*