

2008

The Role of Financial Regulation in Private Financial Firms: Risk Management and the Limitations on the Market Model

James A. Fanto

Follow this and additional works at: <http://brooklynworks.brooklaw.edu/bjcfcl>

Recommended Citation

James A. Fanto, *The Role of Financial Regulation in Private Financial Firms: Risk Management and the Limitations on the Market Model*, 3 Brook. J. Corp. Fin. & Com. L. (2008).

Available at: <http://brooklynworks.brooklaw.edu/bjcfcl/vol3/iss1/2>

This Article is brought to you for free and open access by BrooklynWorks. It has been accepted for inclusion in Brooklyn Journal of Corporate, Financial & Commercial Law by an authorized administrator of BrooklynWorks. For more information, please contact matilda.garrido@brooklaw.edu.

THE ROLE OF FINANCIAL REGULATION IN PRIVATE FINANCIAL FIRMS: RISK MANAGEMENT AND THE LIMITATIONS OF THE MARKET MODEL

*James A. Fanto**

I. INTRODUCTION: THE OLD VERSUS THE NEW IN FINANCE

Remember the former world of finance? There were easily identifiable financial institutions that operated primarily in their allotted spheres, with their designated regulators and with most of their activity in the public eye. Firms registered as broker-dealers specialized in either investment banking (corporate finance and merger advice) or retail brokerage;¹ banks took in deposits and made mainly commercial loans;² and insurance companies underwrote policies, hedged their insurance risk in the reinsurance market, and were major buyers of company debt in private placements.³ The upstart was the private equity firm, which shook up the corporate and financial establishment in the 1990s, as it essentially reintroduced merchant banking into the United States and provided a new kind of investment for institutions and wealthy individuals.⁴ Stock exchanges, with a few rare exceptions, were quasi-public, essentially national organizations with a characteristic clientele, such as large capitalization firms for the New York Stock Exchange.⁵ This is, of course, an idealized portrait; the last twenty years of the 20th century also saw the beginning of an intense competition between, and a blending of, the different kinds of financial institutions, as each one encroached upon the territory of the others by offering similar products and services. Now there exists a very different financial world, where it is not always easy to categorize a particular financial institution,

* Professor, Brooklyn Law School.

1. See generally Arthur B. Laby, *Resolving Conflicts of Duty in Fiduciary Relationships*, 54 AM. U.L. REV. 75, 83–84 (2004) (“The activities of many financial firms can be divided roughly into two categories, investment banking and retail brokerage . . .”).

2. See Independent Bankers Ass’n of America v. C.T. Conover, 1985 U.S. Dist. LEXIS 22529, at *2 (M.D. Fla. Feb. 24, 1985) (“Section 2(c) of the BHCA as amended in 1970, defines the term ‘bank’ for purposes of that act as ‘any institution . . . which (1) accepts deposits that the depositor has a legal right to withdraw on demand, and (2) engages in the business of making commercial loans.’”).

3. See generally, Emeric Fischer, *Banking and Insurance – Should Ever the Twain Meet?*, 71 NEB. L. REV. 726 (1992).

4. See generally GEORGE P. BAKER & GEORGE DAVID SMITH, *THE NEW FINANCIAL CAPITALISTS: KOHLBERG KRAVIS ROBERTS AND THE CREATION OF CORPORATE VALUE* (1998) [hereinafter *NEW FINANCIAL CAPITALISTS*].

5. See generally Jaclyn Braunstein, *Pound Foolish: Challenging Executive Compensation in the U.S. and the U.K.*, 29 BROOK. J. INT’L L. 747, 766 (2004) (“[T]he NYSE is not a publicly traded entity and, as the world’s largest stock exchange, serves as a ‘quasi-public institution with an important regulatory function.’”) (internal citation omitted).

there has been a growth of private financial institutions,⁶ and financial regulators appear to be constantly trying to catch up with financial developments.

The Gramm-Leach-Bliley Act of 1999 (Gramm-Leach-Bliley) officially created the financial conglomerate, allowing diverse financial institutions to operate together under a single financial holding company.⁷ In this structure, the separate identities and functions of the financial institutions are nominally maintained.⁸ Commercial banks still conduct “banking,” while their investment bank, futures commission merchant, and insurance company affiliates focus on their traditional tasks.⁹ However, the financial institutions often supply overlapping products¹⁰ and are ultimately operated together in the financial conglomerate as the group’s services are offered to clients in combination.¹¹

6. See generally NEW FINANCIAL CAPITALISTS, *supra* note 4; Peter J. Wallison, *For Financial Regulation, Era of Big Government Really is Over*, STATE NEWS SERVICE, June 17, 2008, at 2–4 (“One of the most significant unremarked trends of the last twenty-five years has been the growth of private financial markets and private financial institutions From 1996 to 2006, the real assets of the ten largest private-sector banks in the world grew in nominal terms from \$4.6 trillion to \$17.4 trillion, a growth rate of 277 percent.”).

7. See Gramm-Leach-Bliley Act of 1999, Pub. L. No. 106-102, 113 Stat. 1338 (codified in scattered sections of 12, 15, 16, 18 U.S.C.).

8. See generally F. Jean Wells & William D. Jackson, *Major Financial Services Legislation: The Gramm-Leach-Bliley Act (P.L. 106-102): An Overview*, CONG. RESEARCH SERV. (1999), available at <http://epic.org/privacy/glba/RL30375.pdf> (last visited Nov. 10, 2008).

9. See generally *id.* See also Elizabeth F. Brown, *E Pluribus Unum-Out of Many, One: Why the United States Needs a Single Financial Services Agency*, 14 U. MIAMI BUS. L. REV. 1, 7 (2005) (“The [Gramm-Leach Bliley Act] repealed portions of the Glass-Steagall Act of 1933, the Bank Holding Company Act of 1956 and other laws in order to permit banks, securities firms, insurance companies, and other entities engaged in the provision of financial services to become affiliated with one another in order to form financial conglomerates. These types of affiliations allow financial services entities to cross sell each other’s products and services.”) (internal citations omitted); see also Isaac Lustgarten, *International Legal Developments in Review 1999: Business Regulation: The Gramm-Leach Bliley Act and International Banking*, 34 INT’L LAW 429 (Part II) (1999).

10. For example, a variable annuity requires a person to make payments until retirement, at which time that person receives a stream of income until his or her death that is based on the investment performance of the payments. It is offered by insurance companies, broker-dealers and banks, and it is classified as a securities product. See *Nationsbank of North Carolina, N.A. v. Variable Annuity Life Ins. Co.*, 513 U.S. 251 (1995).

11. Unfortunately, the best example of this is that, during the corporate scandals of the early 2000s, it was revealed that many parts of certain financial holding companies collaborated with the scandal-ridden firms. See generally *The Role of Financial Institutions in Enron’s Collapse: Hearing Before Permanent Subcomm. On Investigations of the S. Comm. on Gov’t Affairs*, 107th Cong., 107-618 (2002) (statement of Robert Roach, Chief Investigator); *In re Enron Corp.*, No. 01-16034, (Bankr. S.D.N.Y. 2003) (App. D, Third Interim Report of Neal Batson at 1), available at http://www.enron.com/media/3rd_Examiners_Report_AppendixD.pdf (last visited Nov. 11, 2008) (“Citigroup helped Enron implement-and in some cases designed-a number of SPE transactions.”).

In the private investment world, private equity has expanded to include venture capital, which specializes in start-up companies,¹² and hedge funds, which make their money from trading strategies.¹³ Investment banks have also embraced this private world, offering asset management comparable to the private financial participants (e.g., private equity firms), as well as providing services to them.¹⁴ However, the competition between regulated and unregulated firms is not all in one direction: private firms have become major providers of capital to nonfinancial firms and are now the equivalent of investment and commercial banks.¹⁵ Stock exchanges have also gone international to expand their product offerings, and have themselves become privately owned, for-profit companies.¹⁶ Moreover, they compete with broker-dealers, commercial banks, and private financial firms, which have created their own trading platforms.¹⁷

On the regulatory front, Gramm-Leach-Bliley reaffirmed the previous framework of functional regulation, which means that regulators maintain jurisdiction over their traditional clientele (e.g., the Securities Exchange Commission (SEC) over broker-dealers and the Office of the Comptroller of the Currency (OCC) over national banks) and the Board of Governors of the Federal Reserve regulates the holding company and provides a safeguard of last resort for the stability of the financial system.¹⁸ However, as will be discussed in more detail below, much financial activity, including

12. See generally NEW FINANCIAL CAPITALISTS, *supra* note 4; see also National Venture Capital Assoc., *The Venture Capital Industry: An Overview*, <http://www.nvca.org/def.html> (last visited Sept. 24, 2008).

13. See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-200, HEDGE FUNDS: REGULATORS AND MARKET PARTICIPANTS ARE TAKING STEPS TO STRENGTHEN MARKET DISCIPLINE, BUT CONTINUED ATTENTION IS NEEDED 1 (2008), available at <http://www.gao.gov/new.items/d08200.pdf> (last visited Nov. 10, 2008) [hereinafter GAO HEDGE FUND REPORT] (“[T]he term is commonly used to describe pooled investment vehicles that are privately organized and administered by professional managers and that often engage in active trading of various types of securities and commodity futures and options contracts.”).

14. The services fall under the rubric of “prime brokerage,” which generally means that a registered broker-dealer offers to a hedge fund transaction services for its trading and secured loans using the securities owned by the fund as collateral. See generally Philipp Hildebrand, *Hedge funds and prime broker dealers: steps towards a “best practice proposal”*, 10 FIN. STABILITY REV. 67 (2007), available at http://www.banque-france.fr/gb/publications/telechar/rsf/2007/etud2_0407.pdf (last visited Nov. 10, 2008).

15. See Andrew Crockett, *The evolution and regulation of hedge funds*, 10 FIN. STABILITY REV. 19, 22 (Apr. 2007), available at http://www.banque-france.fr/gb/publications/telechar/rsf/2007/etud2_0407.pdf (last visited Nov. 10, 2008).

16. The best example here is the former New York Stock Exchange, which is now NYSE Euronext, after going private and merging with a major European exchange. See generally NYSE.com, About Us, <http://www.nyse.com/about/1088808971270.html> (last visited Aug. 26, 2008).

17. See generally Scott Patterson & Aaron Lucchetti, *Boom in ‘Dark Pool’ Trading Networks Is Causing Headaches on Wall Street*, WALL ST. J., May 8, 2008, at C1 (describing alternative trading systems).

18. See generally 12 U.S.C. § 1844(c)(2), (4) & (5) (2008).

private financial firms, remains outside the direct jurisdiction of any financial regulator.¹⁹

This essay addresses whether financial regulators have taken the most appropriate regulatory approach towards the diverse and complex private financial activities that occur both inside and outside regulated financial conglomerates. Part II identifies the various kinds of private financial activities and examines the general approach of financial regulation to the unregulated private firms conducting those activities. Part III reviews the migration of those activities into regulated financial firms and the primary strategy of regulators regarding those activities, as well as the similarities between this strategy and the regulators' approach with respect to unregulated firms, particularly in risk management. Next, Part IV addresses questions raised by the current financial crisis about the effectiveness of these similar approaches. Then, Part V discusses major obstacles to improving risk management in private firms and in regulated firms conducting comparable activities, especially the structure of employment and compensation in the securities industry today. In conclusion, Part VI provides several observations about the possibility of reform with respect to private financial activities.

II. THE PRIVATE FINANCIAL WORLD²⁰

Private financial institutions are typically organized in a uniform fashion. Financial specialists, often former investment bankers and traders, set up financial advisory firms, which may or may not be registered with the SEC as an investment adviser or broker-dealer.²¹ These firms, in turn, organize investment funds to which institutional investors and high-net-worth individuals subscribe.²² The funds are unregulated because they do not raise money through a public capital-raising²³ and because the funds themselves qualify for one of the exceptions to the Investment Company

19. See discussion *infra* Part III.

20. For current purposes, private financial institutions are those institutions involved in private equity and alternative asset management.

21. Under the Investment Advisers Act of 1940, an investment adviser need not register with the SEC if it does not hold itself out to the public as such, nor acts as an adviser to a registered investment company, and if it has fewer than 15 clients in the preceding 12 months. See 15 U.S.C. § 80b-3(b)(3) (2008). "Client" refers to a fund established by the adviser, not to the beneficial owners of the fund. A person need not register as a "broker" or "dealer" unless it engages "in the business of effecting transactions in securities for the account of others," (15 U.S.C. § 78c(a)(4)(A) (2008)), or "in the business of buying and selling securities for such person's own account through a broker or otherwise." 15 U.S.C. § 78c(a)(5)(A). A key term in this definition is "business." Since the adviser purchases and sells securities for the client fund, it is not considered to be a broker or dealer.

22. See 15 U.S.C. § 80a-3(c)(7).

23. In other words, funds raise money through private placements, which can be exempt from the requirement to register the securities offering with the SEC. See 15 U.S.C. § 77d (2008); 17 C.F.R. § 230.506 (2008).

Act of 1940.²⁴ The funds, in turn, specialize in a particular kind of investment and/or investing strategy depending upon the expertise of the investment manager. In general, private equity funds focus on long-term investments in existing firms that are often taken private to be rehabilitated.²⁵ In contrast, venture capital funds invest in start-up firms,²⁶ while hedge funds focus on trading strategies with extensive use of derivatives to hedge risk or to speculate.²⁷ Thus, depending upon the kind of fund, investors will be more or less restricted in receiving the return on their investment. Many funds also use extensive leverage in their investments in order to boost their returns, as do investors in the funds.²⁸

Some private financial firms prefer to remain unregulated and thus elect not to become registered broker-dealers or investment advisers.²⁹ Apart from abortive efforts to regulate these private financial participants, the approach of U.S. financial regulators to them has been twofold.³⁰ First, financial regulators indirectly regulate: they gather information about, and exercise some influence over, the activities of private financial firms through their power over regulated firms, such as banks and broker-dealers.³¹ These latter, regulated firms provide products and services to the private firms, such as trading services and margin in the case of broker-dealers³² and loans and investment products, such as participation in

24. Investment companies are exempt from registration if their shares are not offered publicly and if either their shares are not beneficially owned by more than 100 investors, 15 U.S.C. § 80a-3(c)(1), or their purchasers are “qualified” (i.e., individuals owning at least \$5 million in investments, or firms owning at least \$25 million in investments). 15 U.S.C. § 80a-3(c)(7).

25. See Investopedia.com, Private Equity, <http://www.investopedia.com/terms/p/privateequity.asp> (last visited Nov. 9, 2008).

26. See National Venture Capital Association, *supra* note 12.

27. See Investopedia.com, Hedge Fund, <http://www.investopedia.com/terms/h/hedgefund.asp> (last visited Nov. 9, 2008).

28. See Thomas Schneeweis, Hossein Kazemi & Vassilis Karavas, *Leverage Impacts on Hedge Fund Risk and Return Performance*, ISENBURG SCH. OF MGMT., U. MASS. at 1 (2004), available at <http://www.lyracapital.com/documents/Leverage-final.pdf> (last visited Nov. 9, 2008). They do this in accordance with a basic principle of financial economics that, if one borrows money at a fixed rate of return in order to invest it, together with one’s own money, at a greater rate, the return on the investor’s contribution will be greatly magnified. See also Investopedia.com, Leverage, <http://www.investopedia.com/terms/l/leverage.asp> (last visited Nov. 9, 2008).

29. See GAO HEDGE FUND REPORT, *supra* note 13, at 12–13 (discussing registration of hedge fund advisers).

30. The most notorious example was the SEC’s rule amendment to Rule 203(b)(3)-1, which changed the definition of client for adviser registration purposes from the “fund” to the “beneficial owners” of the fund (i.e., limited partners or members in limited liability companies), except for funds with the lengthy lock-ups typical of private equity or venture capital funds. This rule was struck down as outside the SEC’s power by the Court of Appeals for the District of Columbia Circuit. See *Goldstein v. SEC*, 451 F.3d 873 (D.C. Cir. 2006).

31. This is the general practice in sophisticated economies throughout the world with respect to hedge funds. See generally Daniele Nouy, *Indirect supervision of hedge funds*, 10 FIN. STABILITY REV. 95 (2007).

32. On this indirect regulation through broker-dealers, see GAO HEDGE FUND REPORT, *supra* note 13, at 19.

syndicated loans and structured vehicles, in the case of commercial banks.³³ The private participants are also counterparties with regulated financial firms in the trading of many, often exotic, financial instruments, particularly complex derivatives, such as credit derivatives.³⁴ Financial regulators can thus gather information about the activities and risk exposure of private firms and their sponsors from the regulated firms, especially since the risk models and capital positions of the regulated firms have to take account of and reflect their dealings with these firms.³⁵ Indeed, financial regulators can influence the conduct of the unregulated firms simply by insisting that particular transactions with them occur in a specified way or that the provision of leverage to them be restricted (e.g., by requiring more capital in a regulated firm in order to engage in a particular transaction with a private firm).³⁶

Second, financial regulators encourage the alternative asset management industry to adopt “best practices” for its members and thus to regulate itself.³⁷ For example, the President’s Working Group on Financial Markets, which is composed of the main U.S. financial regulators,³⁸ recently received reports of proposed best practices for hedge funds³⁹ and for hedge fund investors.⁴⁰ Financial regulators are being particularly astute here, for they must know that self-regulation is often a predecessor to official regulation, which occurs after the private parties have created a regulatory model that they cannot enforce among themselves, and when regulators step in and transform the model into a public good.⁴¹ In a related

33. *Id.* at 24–25.

34. *See id.* (noting that hedge funds account for more than 80% of the credit derivatives market). These would be instruments in which, among other things, an investor essentially purchases protection for the risk of holding debt of a particular company. *See* Investopedia.com, Credit Derivative, <http://www.investopedia.com/terms/c/creditderivative.asp> (last visited Nov. 9, 2008).

35. *See* Nouy, *supra* note 31. *See also* GAO HEDGE FUND REPORT, *supra* note 13, at 2.

36. *See* Nouy, *supra* note 31. *See also* GAO HEDGE FUND REPORT, *supra* note 13, at 2.

37. *See, e.g.*, REPORT OF THE ASSET MANAGERS’ COMMITTEE TO THE PRESIDENT’S WORKING GROUP ON FINANCIAL MARKETS, BEST PRACTICES FOR THE HEDGE FUND INDUSTRY (2008), available at <http://www.ustreas.gov/press/releases/hp927.htm> (last visited Nov. 9, 2008) [hereinafter ASSET MANAGERS’ COMMITTEE REPORT].

38. The Group is chaired by the Secretary of the Treasury and includes the Chairs of the Federal Reserve, the SEC, and the Commodity Futures Trading Commission. *See* United States Department of the Treasury, Office of Financial Market Policy, Mission, <http://www.treas.gov/offices/domestic-finance/financial-markets/fin-market-policy/> (last visited Nov. 9 2008).

39. These reports were provided by hedge fund managers themselves. *See* ASSET MANAGERS’ COMMITTEE REPORT, *supra* note 37.

40. These reports were provided by institutional investors. *See id.*

41. That is, a particular sector of the financial industry initially agrees with financial regulators to adopt best practices under the view that adequate self-regulation may make regulation unnecessary. However, once the best practices become standard, it is in the interest of sector members to have the government enforce them, so that a participant cannot “free ride” on the enhanced reputation of the sector without actually complying with the standards. For efforts in the United Kingdom to promote self-regulation of hedge funds, see HEDGE FUND WORKING GROUP,

vein, financial regulators also encourage participants to develop standards with respect to activities and transactions that unregulated financial firms engage in, often with regulated firms as their counterparties.⁴² By doing so, financial regulators avoid devoting scarce resources to gaining expertise in an area in which they have no experience.⁴³

Financial regulators are not necessarily focused on preventing the failure of a private financial firm. While financial regulators should be indifferent, they may actually hope that such a failure would lead the remaining private participants to agree to regulation and/or to enter into regulated financial groups, which would lead to a consolidation and maturation of the private financial industry. The real concern for financial regulators, which justifies their monitoring, is that the failure of an unregulated financial firm might adversely affect a regulated financial institution, which could, in turn, lead to a cascade of additional failures of financial institutions, a freezing up of the financial system, and, in the worst scenario, a drastic decrease in overall economic activity.⁴⁴ This amplification of financial institution failure is known as systemic risk.⁴⁵ Financial regulators faced this kind of situation in 1998 when they had to deal with the failure of the celebrated hedge fund, Long-Term Capital Management, which triggered more regulatory attention to the systemic risks posed by hedge funds.⁴⁶

The failure of a private financial firm, if it is large enough, could also give rise to widespread media and political attention.⁴⁷ Increasingly, ordinary individuals are exposed to private financial firms through their investments in pension funds and in other institutional investors, which in turn invest in these private firms' alternative investment vehicles.⁴⁸ Indirect financial harm to ordinary individuals from the failure of a private firm

HEDGE FUND STANDARDS: FINAL REPORT (2008), *available at* http://www.hfsb.org/sites/10109/files/final_report.pdf (last visited Nov. 10, 2008).

42. *See, e.g., id.*

43. For an example of this kind of self-regulation, see Int'l Swaps and Derivatives Ass'n., Inc., <http://www.isda.org> (last visited Nov. 10, 2008). In particular, this Association adopted guidelines on structured products in response to the recent subprime financial crisis. *See, e.g.,* STRUCTURED PRODUCTS: PRINCIPLES FOR MANAGING THE DISTRIBUTOR-INDIVIDUAL INVESTOR RELATIONSHIP, INT'L SWAPS AND DERIVATIVES ASS'N., INC. (Exposure Draft May 12, 2008), *available at* http://www.sifma.org/private_client/pdf/GlobalRSP-Distributor-PrinciplesMayExposureDraft.pdf (last visited Nov. 10 2008).

44. Roger Ferguson & David Laster, *Hedge Funds and Systemic Risk*, 10 FIN. STABILITY REV. 45, 50 (2007).

45. *See id.* at 49.

46. *See generally* ROGER LOWENSTEIN, WHEN GENIUS FAILED: THE RISE AND FALL OF LONG-TERM CAPITAL MANAGEMENT (2000).

47. *See generally* Raghuram G. Rajan, *Financial conditions, alternative asset management and political risks: trying to make sense of our times*, 10 FIN. STABILITY REV. 137, 141-142 (2007).

48. *See* Riva D. Atlas & Mary Williams Walsh, *Pension Officers Putting Billions Into Hedge Funds*, N.Y. TIMES, Nov. 27, 2005, at A1, *available at* <http://www.nytimes.com/2005/11/27/business/yourmoney/27hedge.html> (last visited Nov. 9, 2008).

could lead to media demands for regulation and attention from politicians begrudgingly responding to the crisis.⁴⁹ If the failure were significant enough, financial regulators would also be blamed for not having been more aggressive in regulating, or advocating the regulation of, the private firms.⁵⁰

The current financial crisis that was sparked by the failure of the subprime mortgage market is a good example of this kind of acute media and political attention on financial regulation.⁵¹ It has brought to the forefront the following valid concerns about an approach that relies on indirect regulation of private financial firms coupled with their self-regulation.⁵² First, some regulated firm personnel have strong incentives not to monitor closely private firms. For example, traders within investment banks who are directly involved in the provision of transaction services to private firms are reluctant to limit such business even when required by their firm's risk management. Even investment bank and commercial bank management may resist the limits, for they are competing with other banks for the business of private firms. This problem is exacerbated because the personnel and management of investment and commercial banks may not rationally compare the gains from short-term trading and other gains from ignoring the position limits with the discounted present value of the long-term dangers arising from ignoring these limits. As will be discussed more below, current employment and compensation practices in regulated firms undermine a proper recognition of the discounted long-term dangers.⁵³ This fact applies to bank executives as well, since in the financial conglomerates that deal with private firms and that are publicly traded firms, executives have the typical enormous compensation contracts that make them impervious to any financial disaster.⁵⁴

Second, the current model of indirect regulation may be extremely difficult to carry out for regulated institutions, which are actually few in number and all critical to the financial system.⁵⁵ Obtaining adequate

49. See e.g., Jackie Calmes, *Obama and McCain have different approaches to Wall Street*, INT'L HERALD TRIB., Sept. 16, 2008, available at <http://www.iht.com/articles/2008/09/16/america/16record.php> (last visited Nov. 10 2008) (noting that both Obama and McCain have responded to the recent turmoil in the financial industry with calls for increased regulation).

50. Crockett, *supra* note 15, at 25.

51. See discussion *infra* Part IV.

52. On some of the following points, see generally Nouriel Roubini, *Hedge Funds: Do We Need To Regulate Them and How?* (June 2007) (on file with author).

53. See discussion *infra* Part V.

54. See, e.g., *Supplemental Information on CEO Pay and the Mortgage Crisis*, Memorandum from the Majority Staff, Comm. on Oversight and Government Reform to Members of the Comm. on Oversight and Government Reform, 110th Cong. (2008) (describing enormous compensation contracts of CEOs (departing) of financial institutions that performed poorly during the mortgage crisis).

55. In the United States, only the financial conglomerates, like Citigroup and JP Morgan, have the capacity to provide services to the private financial institutions. See Hildebrand, *supra* note 14, at 72.

information from the private firms with whom they do business is difficult because private firms are in competition with the regulated firms, giving them a competitive incentive not to share all their information, and increasing the likelihood that they will spread their business among different financial firms.⁵⁶ For example, a regulated financial institution may find it difficult to get a complete understanding of the amount of leverage in a particular hedge fund, since investors may borrow funds to make an investment in a fund of funds, the fund of funds may use leverage for its investments in the hedge fund, and the fund itself may borrow from numerous financial intermediaries.⁵⁷

The appropriateness of the current approach to private financial firms may come down to the adequacy of the risk management models used by regulated firms in their dealings with unregulated counterparties, as well as of the models used by unregulated firms to manage their own risks. To be adequate in the former case, the model would have to take account of the risk that the investment or commercial bank would not have all the necessary information about its unregulated counterparty (or that the counterparty might act opportunistically in withholding certain of this information), specify how the financial institution responds to this risk (e.g., imposing higher margins, taking bigger “haircuts” on the collateral of the private firm, limiting exposure to the private firm), and rigorously enforce this response among its personnel. The model would have to assume that the unregulated firm’s undisclosed direct and indirect leverage could be greater than what is disclosed and then consider the consequences for the regulated firm if a liquidity crisis arose for the private firm and for the market more generally. A private financial firm needs similar models addressing the same risks in the unregulated counterparties that it transacts with. As discussed later in this essay, the question is whether current risk models are up to these tasks and whether they can be adequately applied.⁵⁸

III. PRIVATE FINANCIAL FIRMS WITHIN THE REGULATED WORLD

Private financial firms and their activities have also migrated into regulated financial conglomerates due to Gramm-Leach-Bliley. As discussed above, it officially approved the formation of financial holding companies that engage, or that own companies that are engaged, in all kinds of financial activities.⁵⁹ The statutory list it provided of permissible financial activities is broad and covers all functions of a full-service investment bank, including investment advisory services and merchant

56. See Crockett, *supra* note 15, at 26.

57. See Roubini, *supra* note 52, at 9.

58. See discussion *infra* Part IV.

59. See discussion *infra* Part II.

banking.⁶⁰ Significantly, the statute also empowered the Federal Reserve and the Treasury Department to add activities to the list and set forth open-ended criteria for them to use, such as changes in the competitive market for financial services, technological developments for delivering financial services, and the ability of the holding companies to compete in the financial services marketplace.⁶¹ Thus, as private financial firms offer new kinds of financial products and services, as well as technological innovations in their delivery, Gramm-Leach-Bliley permits financial holding companies to acquire the private firms or engage themselves in similar activities.

Therefore, a financial conglomerate can create, “in house,” the equivalent of a private financial firm or, for the right price, acquire a private firm, such as a private equity firm or a hedge fund adviser. Financial conglomerates have done both to gain market share in these financial activities. To take one notable example, the current CEO of Citigroup, Vikram Pandit, came to Citigroup when it acquired his hedge fund firm.⁶² Now, financial conglomerates, through their asset management divisions, offer their own private equity and hedge funds to their wealthy clientele, which are chiefly institutions and high net worth individuals.⁶³ They often compete with the private financial firms to whom they provide prime brokerage services.⁶⁴ The financial conglomerates also engage, for their own account, in proprietary trading and investing, particularly similar to hedge fund activity.⁶⁵ Private financial firms have thus been partly “domesticated” by becoming a part of regulated financial conglomerates.

The regulation of private financial activities conducted within financial conglomerates should pose less difficulty for financial regulators, who have collective jurisdiction over the conglomerates.⁶⁶ Yet it is important to emphasize the nature of this regulation. Particularly since Gramm-Leach-Bliley, financial regulators focus not so much on whether and how a

60. See 12 U.S.C. § 1843(k)(4) (2008).

61. See 12 U.S.C. § 1843(k)(2)–(3).

62. Pandit was a founding member and chairman of Old Lane, L.P., a hedge fund and private equity manager. Before that, he was the President and Chief Operating Officer of Morgan Stanley’s investment banking business, which emphasizes the movement of personnel back and forth between regulated and unregulated financial firms. Citigroup.com, Biography of Vikram Pandit, <http://www.citi.com/citigroup/profiles/pandit/bio.htm> (last visited Aug. 22, 2008).

63. See generally *Goldman LBO Fund to Raise about \$20B*, AFX INTERN’L FOCUS, Mar. 27, 2007.

64. See generally *Bank of the Year for M&A: Goldman Sachs*, THE BANKER, Oct. 1, 2001, available at http://www.thebanker.com/news/fullstory.php/aid/4325/Bank_of_the_year_for_M_A:_Goldman_Sachs.html (last visited Nov. 10, 2008) (“Many critics believed that Goldman’s active private equity investment and management of private equity money for third party investors would generate conflict of interest between the bank and its clients.”).

65. See Emma Trincal, *Hedge Funds Acquisitions: Good for Returns?*, HEDGEWORLD DAILY NEWS, Feb. 5, 2007, available at http://www.hedgeworld.com/preview_news.cgi?section=peop&story=peop2873.html&area=premium&source=wealth_management (subscription required).

66. 12 U.S.C. § 1844 (2008).

financial conglomerate can engage in particular financial activities, but upon the competency of the group's management and adequacy of the group's capital to support them.⁶⁷ In other words, the role of financial regulators is no longer primarily to determine the appropriateness of a particular financial activity for a group. There are several reasons for this regulatory position, aside from Gramm-Leach-Bliley. First, financial regulators do not have the resources to regulate substantively and quickly evolving financial activities; they must leave this kind of regulation to the market participants.⁶⁸ Second, the position is based upon a particular normative view of the most economical way to regulate financial institutions: if the financial institutions themselves (and the managers of these institutions) have their own money at risk in the activities and not just investors' money, they have self-interested reasons for taking the necessary safeguards with respect to the activities.⁶⁹

Determining adequate capital for financial institutions is no longer just an issue of setting a certain baseline percentage of capital relative to the assets, the traditional leverage ratio in financial institutions.⁷⁰ Rather, for some time, determining adequacy of capital has required a "risk-based" approach: capital should be proportional to the risk of the assets themselves, because the riskier the assets, the more capital is required.⁷¹ Moreover, even off-balance sheet activities must be taken into consideration in the capital determination, both for their own inherent risks and the chance that they will move onto the institution's balance sheet.⁷² Once an institution's overall risk exposure is calculated, the institution sets aside a statutorily imposed amount of capital for these total "risk-weighted" assets and activities.⁷³

As financial assets and activities have become more complex, risk assessment of them and the resulting capital determination have evolved as well. Under the current regulatory scheme for large financial institutions that are engaged in private financial activities, the institutions themselves

67. See 12 U.S.C. § 1843(l)(1) (2008).

68. This perspective is apparent in the structure of Gramm-Leach-Bliley. The basic conditions for a firm to become a financial holding company are that its banks are "well capitalized" and "well managed." See 12 U.S.C. § 1843(l)(1).

69. See *infra* for more discussion on the normative perspective in finance today.

70. See, e.g., 12 C.F.R. § 3.6(b) (2008) (leverage ratio for national banks); 12 C.F.R. pt. 225, App. D (2008), available at <http://www.fdic.gov/regulations/laws/rules/6000-2200.html#6000appendixd> (last visited Nov. 10, 2008) (leverage ratio for holding companies).

71. See, e.g., 12 C.F.R. § 3.6(a) (2008) (risk-based capital ratio).

72. See, e.g., 12 C.F.R. pt. 225, App. A, Sec. III (2008), available at <http://www.fdic.gov/regulations/la-ws/rules/6000-1900.html#6000appendixa> (last visited Nov. 10, 2008).

73. This is the well-known risk-based capital model promulgated by the Basel Committee on Banking Supervision and adopted by participatory countries. This model is known generally as Basel I. For the Federal Reserve's version, see 12 C.F.R. pt. 225, Apps. A, E & G.

develop the models to assess asset risks, including counterparty risks.⁷⁴ In other words, financial regulators increasingly leave it to the institutions themselves to establish the models for determining the risk of assets and thus the necessary amount of capital. Once again, the regulators recognize that they do not have the resources to design risk models for use by the institutions.

Therefore, bringing private financial activities within the sphere of financial regulation does not necessarily mean that there is strong governmental oversight of the activities or that the government establishes standards for them. Certainly, regulators will become more familiar with activities conducted within a regulated institution, or a part thereof, and can insist upon certain practices with respect to them. But, except in a crisis, financial authorities defer to the regulated institutions as to the conduct of the activities and, significantly, to the risk assessment of the activities, and thus to the adequacy of the financial institutions' capital. In a financial crisis, such as the current one, regulators may be more active in discussing these valuation and risk assessment issues in detail, and even requiring that institutions enhance their capital position.⁷⁵ However, if an institution's own practices and models are seriously inadequate, it is likely that this will become apparent too late to prevent significant damage to, and even failure of, the regulated firm.⁷⁶

IV. RISK MANAGEMENT AND THE MARKET MODEL

Current circumstances have presented a test for such a regulatory approach that relies greatly on risk management models. The collapse of the credit markets was triggered by losses in asset-backed securities, including those backed by subprime mortgages.⁷⁷ During a sustained period of very

74. This remark greatly simplifies things. Under the revised Basel capital framework, known as Basel II, a financial institution must take account of its credit risk, market risk, and operational risk in determining its appropriate capital. While guidance has been given as to market risk (12 C.F.R. pt. 225, App. E), the Federal Reserve and the other banking regulators have just adopted guidelines as to credit and operational risks. See Risk-Based Capital Standards, Advanced Capital Adequacy Framework—Basel II. 72 Fed. Reg. 69,288 (Dec. 7, 2007). All these frameworks rely heavily on an institution's own assessment of its risks.

75. This essay was completed before the financial crisis became acute following the summer. Obviously, in a significant crisis like the present one, regulators will do everything possible to help financial institutions improve their capital position so that they, and our economic system, can survive. See, e.g., *Treasury Announces TARP Capital Purchase Program Description*, U.S. Treasury HP-1207 at 30, (Oct. 14, 2008), available at <http://www.ustreas.gov/press/releases/hp1207.htm> (last visited Nov. 9, 2008).

76. See *infra* Part IV. Clearly, the demise of Bear Stearns was partly due to its own private financial activities (e.g., hedge fund activity).

77. Subprime mortgages were initially and chiefly, but not exclusively, the cause of the collapse. See generally Dr. Faten Sabry & Dr. Thomas Schopflocher, *The Subprime Meltdown: A Primer*, Part I of a NERA Insight Series (June 21, 2007), available at http://www.nera.com/image/SEC_SubprimeSeries_Part1_June2007_FINAL.pdf. However, economists who compare the current crisis to other post-World War II financial crises believe that it has all the characteristics

low interest rates, credit was extended widely to real estate buyers (even to those with low incomes and little savings) and the debt was packaged and resold as differing kinds of securities to investors looking for higher returns on debt investments.⁷⁸ Unfortunately, it was done without a complete appreciation for the risk of nonpayment by the buyers and with a resulting mispricing of the asset-backed securities.⁷⁹ The default rates and plummeting real estate values caused a broad reevaluation and repricing of the securities backed by those mortgages.⁸⁰ As a result, investors became suspicious that other asset-backed securities were not appropriately priced and the onslaught of selling led to falling prices for those securities.⁸¹ This resulted in a general loss of liquidity for many of these and other financial assets and a freezing-up of the market for issuance of similar securities.⁸² For example, the market for existing leveraged-buyout (LBO) securities, which are debt that fund company acquisitions by LBO firms, all but disappeared, and banks, unwilling to make any new LBO loans, attempted to extricate themselves from their prior commitments to fund buyouts.⁸³ With falling prices in financial assets, financial institutions became concerned about their own weakened capital position and about the solvency of their counterparties.⁸⁴ They were reluctant to engage in

of a serious, but typical, financial crisis: a run-up in asset and equity prices due to capital inflows, slowing economic growth, an increase in public debt, and a large current account deficit. See Carmen M. Reinhart & Kenneth S. Rogoff, *Is the 2007 U.S. Sub-Prime Financial Crisis So Different? An International Historical Comparison* (Nat'l Bureau of Econ. Research, Working Paper No. 13,761, 2008).

78. See generally Sabry & Schopflocher, *supra* note 77.

79. Many of the buyers made little or no down payments and were unable to afford the mortgage payments. They depended on the homes increasing in value in order to make the home purchase a worthwhile one. See generally JOINT ECON. COMM., *THE U.S. HOUSING BUBBLE AND THE GLOBAL FINANCIAL CRISIS: HOUSING AND HOUSING-RELATED FINANCE* (2008).

80. In effect, the situation was complicated. There were securities backed by subprime mortgages, often with the structured vehicle that held the mortgages issuing different classes or "tranches" of securities. In addition, there were other vehicles that held these asset-back securities and/or derivatives (e.g., credit default swaps based on these securities) and that issued their own tranches of securities (known as collateralized debt obligations). See generally Sabry & Schopflocher, *supra* note 77.

81. See generally Richard J. Caballero & Arvind Krishnamurthy, *Musical chairs: a comment on the credit crisis*, 11 FIN. STABILITY REV. 9, 10 (2008).

82. See generally *id.*

83. The most well-known dispute involved the acquisition of Clear Channel by private equity groups Bain Capital and Thomas H. Lee where the banks who had made the commitment to fund the acquisition refused to honor their commitment. See *Clear Channel Commc'ns, Inc. v. Citigroup Global Mkts, Inc.*, 541 F. Supp.2d 874 (W.D. Tex. 2008). The dispute was settled, with the banks receiving a more favorable interest rate. See Peter Lattman & Sarah McBride, *Clear Channel Suitors, Banks Reach Deal*, WALL ST. J., May 14, 2008, at C3.

84. Problems came to financial institutions because they had to "mark to market" their own securities positions, as well as clients' securities collateral. However, when many kinds of securities, which were traded privately among institutions, essentially stopped trading, it became difficult for the institutions to give an accurate assessment of their own financial position. See generally TECHNICAL COMM. OF THE INT'L ORG. OF SEC. COMM'NS, FINAL REPORT OF THE TASK FORCE ON THE SUBPRIME CRISIS 16-19 (2008).

transactions with, and particularly to extend credit to, other firms because they were unsure about the exposure of these firms to the troubled securities.⁸⁵ Indeed, these circumstances satisfied many of the conditions for the classic definition of a financial “shock” with systemic consequences, as opposed to a financial disturbance.⁸⁶

Problems from the credit crisis first surfaced in financial conglomerates⁸⁷ due to their own involvement in private financial activities, including in-house hedge funds, proprietary investments in asset-backed securities, and closely related special purpose entities organized to invest in assets.⁸⁸ As a result, those institutions took enormous write-downs in their positions in asset-backed and other securities and had to raise capital in order to maintain adequate capital ratios and to safeguard their very solvency.⁸⁹ Bear Stearns did not survive the crisis on account of its activities and investments in subprime assets and merged with J.P. Morgan, another financial conglomerate.⁹⁰

85. See, e.g., Deborah Solomon, *U.S. to Buy Stakes in Nation's Largest Banks*, WALL ST. J., Oct. 14, 2008, at A1 (listing the institutions: Goldman Sachs, Morgan Stanley, J.P. Morgan, Bank of America, Merrill Lynch (soon to be acquired by the preceding), Citigroup, Wells Fargo, Bank of New York, State Street, with an estimated investment of a total of \$130 billion by the Treasury).

86. A shock, as opposed to a disturbance, would have (i) enhanced credit risk, particularly counterparty credit risk, (ii) loss of market liquidity, (iii) rapid changes and losses of value of financial instruments, particularly complex financial instruments, (iv) doubt about the accuracy of financial models, (v) inability of models to deal with “tail” risks, (vi) problems in settlement, and (vii) illiquidity of many complex instruments. These circumstances all seem present today. However, other “shock” characteristics have not occurred, or not completely occurred: (viii) costs of appropriate risk management, (ix) difficulty of restructuring when creditors cannot be located easily, and (x) questions about the ability of regulators to work together. See COUNTERPARTY RISK MGMT. POLICY GROUP, TOWARD GREATER FINANCIAL STABILITY: A PRIVATE SECTOR PERSPECTIVE 7–10 (2005). For a detailed discussion of the crisis and the risks facing the global financial system, see BANK FOR INT’L SETTLEMENTS, 78TH ANNUAL REPORT: 1 APR. 2007–31 MAR. 2008, at 137–49 (2008).

87. These include the former largest, full service investment banks, which were Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch, and Morgan Stanley, and financial holding companies. See Rachelle Younglai, *SEC Finds Voice with Investment Bank Plan*, BASELINE.COM, July 28, 2008. As is now well known, as a result of the crisis, none of these investment banks any longer exists as they formerly did. Two (Bear Stearns and Merrill) were sold to financial holding companies; one (Lehman) went bankrupt; and two (Goldman and Morgan Stanley) themselves became financial holding companies.

88. See, e.g., Gregory Zuckerman & Jenny Strasburg, *Banks Fumble at Operating Hedge Funds*, WALL ST. J., May 31, 2008, at B1 (describing problems of financial conglomerates’ involvement in hedge funds); David Enrich, *Citigroup Hedge-Fund Loss Weighs on Three Banks*, WALL ST. J., May 20, 2008, at C1.

89. See, e.g., David Enrich, et al., *Citigroup, Merrill Seek More Foreign Capital*, WALL ST. J., Jan. 11, 2008, at A1.

90. The Wall Street Journal published an interesting series of articles on Bear Stearns’ demise. See Kate Kelly, *Lost Opportunities Haunt Final Days of Bear Stearns*, WALL ST. J., May 27, 2008, at A1; Kate Kelly, *Fear, Rumors Touched Off Fatal Run on Bear Stearns*, WALL ST. J., May 28, 2008, at A1; Kate Kelly, *Bear Stearns Neared Collapse Twice in Frenzied Last Days*, WALL ST. J., May 29, 2008, at A1. See also *SEC v. Cioffi: SEC Charges Two Former Bear Stearns Hedge Fund Portfolio Managers with Securities Fraud*, Exchange Act Release No. 20,625 (June

This outcome suggests that, among other things, the risk management models of financial conglomerates did not accurately assess the risks of the securities and suffered from a fundamental failure: underestimation of the risks that an unlikely, but disastrous, event might occur and that a liquidity crisis would be widespread and affect all assets equally.⁹¹ Moreover, the risk models of the financial institutions were not the only faulty ones, for the risk assessment of the securities by the “valuation” professionals, the rating agencies, was similarly flawed.⁹² As in the corporate financial scandals that occurred earlier in this century, the rating agencies failed to do their job of properly assessing the risk of securities, although this time it involved evaluating the risks of the subprime asset-backed securities.⁹³

So far, it is not entirely clear how the crisis has affected private financial firms. The crisis could be viewed as demonstrating another example of an over-emphasis on financial regulation, since the most publicized adversely affected institutions are regulated financial groups. Yet it is difficult to know exactly the condition of unregulated financial institutions, such as hedge fund advisers and the private equity firms that have not gone public. Nevertheless, private equity firms have clearly experienced problems with some of their funds, and there have been hedge fund failures.⁹⁴ A lack of publicity and the structure of private financial firms make it difficult to know exactly what problems they are experiencing, if any. A hedge fund adviser can restrict withdrawals from funds, or, if a fund’s investments are particularly troubled, the adviser can

19, 2008), available at <http://www.sec.gov/litigation/litreleases/2008/lr20625.htm> (explaining civil action against managers of Bear Sterns’ own hedge funds that collapsed on account of their subprime investments). Again, neither Lehman nor Merrill survived as stand-alone firms. See Carrick Mollenkamp, Suzanne Craig, Serena Ng & Aaron Lucchetti, *Lehman Files for Bankruptcy, Merrill Sold, AIG Seeks Cash*, WALL ST. J., Sept. 16, 2008, available at http://online.wsj.com/public/article_print/SB122145492097035549.html (last visited Nov. 10, 2008).

91. These are referred to as a “fat tail” problem (i.e., that the risk of unlikely events is greater than it seems) and the co-variance problem (that assets begin to move together in price). See Barry Eichengreen, *Ten questions about the subprime crisis*, 11 FIN. STABILITY REV. 19, 21 (2008).

92. See STAFF OF THE SEC’S OFFICE OF COMPLIANCE INSPECTIONS AND EXAMINATIONS, SUMMARY REPORT OF ISSUES IDENTIFIED IN THE COMMISSION STAFF’S EXAMINATIONS OF SELECT CREDIT RATING AGENCIES (2008) (for the problems in credit agencies with respect to securities backed by subprime loans). The SEC in fact has proposed rule changes as to how credit agencies rate structured products. See also Proposed Rules for Nationally Recognized Statistical Rating Organizations, Exchange Act Release No. 57,967, 73 Fed. Reg. 36,212, 36,235 (June 25, 2008).

93. See, e.g., Peter R. Fisher, *What happened to risk dispersion?*, 11 FIN. STABILITY REV. 29, 35 (2008).

94. See, e.g., Carrick Mollenkamp & Serena Ng, *Hedge Funds Squeezed As Lenders Get Tougher*, WALL ST. J., Mar. 7, 2008, at A1 (describing problems in Carlyle Group fund); Cassell Bryan-Low, Carrick Mollenkamp & Gregory Zuckerman, *Peloton Flew High, Fell Fast*, WALL ST. J., May 12, 2008, at C1 (describing the rapid demise of hedge fund Peloton Partners LLP).

distribute the funds' investments, rather than cash, to the investors.⁹⁵ By remaining private, they are somewhat more protected from the kind of market rumors that can lead to a "run on the bank" similar to the case of Bear Stearns and Lehman Brothers.⁹⁶ If funds are highly leveraged, as seems to be the case, there should be more fund failures as funds are forced to sell assets to meet margin calls.⁹⁷ But this action occurs if a prime broker determines that the fund's collateral is inadequate and if the regulated firm were to do this, it might have to mark down its own positions in similar collateral.⁹⁸

Serious problems may still emerge for private market participants, which will in turn lead to even more difficulties for regulated financial institutions. After all, many private market firms, as well as regulated firms, engaged in risky investment strategies at a time of great liquidity, market stability, and low interest rates, and this disguised the fact that their returns resulted from favorable circumstances, not from their investment acumen.⁹⁹ In the parlance of the trade, few of them have outperformed the market by producing "alpha."¹⁰⁰ Although the regulated participants, through their investment in or imitation of private firms, have suffered significant losses, there is no reason to think that private market participants are in a much better position. They all use similar risk models and also rely upon the rating agencies for evaluations of their investments.

We can only hope now that the current circumstances do not end up being a complete financial collapse, as opposed to the serious financial

95. See, e.g., Susan Pulliam, *Locked In: When Hedge Funds Bar the Door*, WALL ST. J., July 2, 2008, at A1 (describing how hedge funds can put up "gates" to restrict investors' withdrawals from a fund).

96. Landon Thomas, Jr., *JPMorgan and Fed. Move to Bail Out Bear Stearns*, N.Y. TIMES, Mar. 14, 2008, available at <http://www.nytimes.com/2008/03/14/business/14cnd-bear.html> (last visited Sept. 24, 2008).

97. Pulliam, *supra* note 95, at A1; see also *Mortgage-bond Fund Sells Assets After Margin Calls*, USA TODAY, Mar. 7, 2008, available at http://www.usatoday.com/money/markets/2008-03-07-carlyle-fund-selloff_N.htm.

98. Moreover, the Federal Reserve's response to the crisis has been to flood the market with liquidity, which helps all financial participants, including hedge funds, remain afloat. See ADRIAN BLUNDELL-WIGNALL, ORG. FOR ECON. CO-OPERATION AND DEV., *THE SUBPRIME CRISIS: SIZE, DELEVERAGING AND SOME POLICY OPTIONS* 19–20 (2008) (discussing, among other things, threats posed by failure of hedge funds to prime broker-dealers and the manner in which the injection of liquidity helps prevent this failure). For an excellent discussion of the Federal Reserve's conventional and unconventional efforts to address the crisis, see generally Stephen G. Cecchetti, *Crisis and Responses: The Federal Reserve and the Financial Crisis of 2007–2008* (Nat'l Bureau of Econ. Research Working Paper No. 14,134, 2008) (noting in particular how the Federal Reserve has increased the kind of collateral (including asset-backed securities) that it will take for its loans and other operations).

99. See, e.g., Rajan, *supra* note 47, at 141–42.

100. In finance, "beta" refers to the market return that is correlated with market risks. An investment manager should not be rewarded for obtaining a beta return, but only for adding to it, which is alpha. See *id.* at 139–41 (speculating on the real reasons for the above average performance of many hedge funds).

shock that we are experiencing. A serious shock leads to an enormous political reaction to finance, as retail investors demand reform of the financial system.¹⁰¹ Even if the financial system is stabilized,¹⁰² the dominant perspective regarding financial regulation—that there is too much regulation and not enough deference given to market solutions—is likely to ring hollow.¹⁰³ The problems with regulated financial conglomerates and private financial firms have less to do with regulatory, as opposed to a market, failure. As explained above, they arise from the failure of risk models that have been developed by market participants, not imposed by regulators. In other words, the current crisis raises questions about the deference to such market participants.

V. THE RISK MANAGEMENT SOLUTION

One pragmatic solution to the problems raised in the current financial crisis is to enhance the risk models and the role of risk management in private financial firms and in regulated firms, with respect to the latter's comparable activities and their dealings with private firms. This response would be similar to the reaction of financial regulators when it was revealed that financial firms had participated in the corporate scandals of Enron, Worldcom and others, either by setting up special purpose entities used by companies to engage in fraud or, without inquiring into their true financial position, by helping the companies raise capital. In those instances, regulators encouraged financial institutions to set up a firm-wide transaction and relationship committee that would evaluate risks, including legal and reputation risks, arising from transactions and relationships with clients, and to improve legal compliance by enhancing the role of a chief compliance officer.¹⁰⁴ On the basis of the new crisis, financial regulators should tell regulated financial firms that they must improve their risk models, institute a firm-wide senior-level risk management committee, and appoint a chief risk management officer or officers, who will have a special role in a firm's risk management.

Indeed, there have been reports that large financial institutions have enhanced their risk management. For example, Citigroup now has multiple risk managers whom the CEO regularly consults.¹⁰⁵ More significantly,

101. *See id.* at 142.

102. *See* Jia Lynn Yang, *How bad is the mortgage crisis going to get?*, available at http://money.cnn.com/2008/03/14/news/economy/krugman_subprime.fortune/ (last visited Sept. 24, 2008).

103. This perspective is already making its way into the financial press. *See also* Jon Hilsenrath, *Markets Police Themselves Poorly, but Regulation Has Its Flaws*, WALL ST. J., July 21, 2008, at A2 (describing increasing disenchantment with market regulation of finance).

104. *See generally* James A. Fanto, *Subtle Hazards Revisited: The Corruption of a Financial Holding Company by a Corporate Client's Inner Circle*, 70 BROOK. L. REV. 7 (2004).

105. *See* David Enrich, *Citigroup Installs New Risk Managers*, WALL ST. J., Feb. 28, 2008, at C3.

financial regulators are pushing for an improvement in risk management in regulated institutions. As a result of the crisis, the Federal Reserve, the SEC, and several major foreign financial regulators conducted a review of risk management practices through the end of 2007 at major international financial institutions under their jurisdiction.¹⁰⁶ The review revealed that, despite past regulatory guidance on this subject, many major financial institutions failed to provide an adequate governance structure for dealing with risk.¹⁰⁷ In particular, the report found that, in the institutions, there was rarely a high-level committee taking a firm-wide perspective on the current risks facing the institution.¹⁰⁸ Without this kind of committee, management of the firms could not see the magnitude of risks, share information about them among its business lines,¹⁰⁹ and take coordinated action to address them.¹¹⁰ Moreover, the report found that risk models used in firms were often flawed because they were based on inappropriate assumptions (e.g., ratings used for structured finance products were the same as those used for standard corporate securities) and incomplete data (e.g., historical data was only for periods of low volatility), and that stress testing of the models did not anticipate possible scenarios (e.g., co-movement of assets prices at a time of near total loss of liquidity).¹¹¹ They also found that risk management at troubled firms was not imaginative and dynamic enough to address fast changing situations, and that it was often pushed into the background and even ridiculed by traders and bankers, who wanted to complete transactions.¹¹²

Clearly, the same pressure for enhanced risk management is being placed upon the private financial firms. As has already been mentioned, the President's Working Group received two reports on best practices for hedge funds and for investors in these funds.¹¹³ Both of the reports recommended

106. See SENIOR SUPERVISORS GROUP, OBSERVATIONS ON RISK MANAGEMENT PRACTICES DURING THE RECENT MARKET TURBULENCE (Mar. 6, 2008) [hereinafter SENIOR SUPERVISORS GROUP].

107. See *id.*

108. See *id.* at 3, 7–9.

109. For example, brokers in a firm's trading division would neglect to tell investment bankers in corporate finance about the shrinking market for certain kinds of securities. Therefore, the bankers would keep structuring deals to sell the securities, which would mean that the financial institution itself might end up holding a large portion of the securities that it could not sell. This apparently occurred during the subprime crisis because so many financial institutions were left holding large positions in subprime-backed securities.

110. See SENIOR SUPERVISORS GROUP, *supra* note 106.

111. See *id.* at 3–5, 14–17.

112. See also Randall S. Kroszner, Governor, Bd. of Governors of the Fed. Reserve Sys., The Importance of Fundamentals in Risk Management, Speech at the American Bankers Association Spring Summit Meeting, (Mar. 11, 2008), available at <http://www.federalreserve.gov/newsevents/speech/kroszner20080311a.htm>; Paul L. Lee, *Risk Management and Corporate Governance: Mind the Gap*, 90 BNA BANK. RE. 878 (May 5, 2008) (discussing history of emphasis upon risk management oversight by bank regulators).

113. See ASSET MANAGERS' COMMITTEE REPORT, *supra* note 37.

strengthening risk management with respect to operations of and investments in these funds.¹¹⁴ The report from hedge fund advisers insisted that an adviser have in place procedures and policies (including having a chief risk officer and other specialized personnel) for accurately measuring the various risks of a fund (liquidity, leverage, market, counterparty credit, and operational) so that it can accurately disclose the fund's risk profile and adequately deal with them.¹¹⁵ Money managers are urged to improve their risk management with respect to the risks of investing in hedge funds, the evaluation of a hedge fund's own risk management, and understanding of a fund's liquidity, leverage, operations and business risks, and compliance.¹¹⁶

Certainly, it is important for both regulated and unregulated financial firms to enhance their risk management. Yet the fundamental problem may not be with the risk models themselves, or the risk managers. Even though financial professionals can make mistakes, use flawed assumptions, or lack the best organizational structure for raising risk concerns, all of which need to be addressed and improved, the real problem may be that there are serious obstacles to installing or following proper risk management in a financial firm.

These obstacles may include the compensation structure, related employment practices, and ultimately the ideology prevalent in financial firms. For its participants, Wall Street has become a place of short-term rewards and compensation for short-term results, such as bonuses based upon fees for completing transactions and for the performance of a trading desk.¹¹⁷ Private financial firms are no different, although private equity firms may have a longer-term horizon, given how the firms structure their management and performance fees.¹¹⁸ It is not an exaggeration to say that financial professionals have a basic goal of obtaining as much compensation as possible and then, if necessary, moving on, even if it means switching from firm to firm and from regulated to unregulated firm, and back again. Moreover, financial firms have reinforced this conduct because they use an extreme version of the standard short-term cost/benefit approach in dealing with their employees: "either produce or get out." Even the financial regulators that issued the report on risk management, discussed

114. *See id.*; *see also* REPORT OF THE INVESTORS' COMMITTEE TO THE PRESIDENT'S WORKING GROUP ON FINANCIAL MARKETS, BEST PRACTICES FOR HEDGE FUND INVESTORS (2008), available at <http://www.ustreas.gov/press/releases/hp927.htm> [hereinafter INVESTORS' COMMITTEE REPORT].

115. *See* ASSET MANAGERS' COMMITTEE REPORT, *supra* note 37, at 22–32; INVESTORS' COMMITTEE REPORT, *supra* note 114.

116. *See* ASSET MANAGERS' COMMITTEE REPORT, *supra* note 37, at 22–36.

117. *See* Dennis K. Berman, *Grim Reaper of Jobs Stalks Street*, WALL ST. J., Mar. 11, 2008, at C1 (discussing these practices).

118. Generally, private equity firms will receive their compensation when a particular fund is liquidated after its investments in underlying companies have been sold. Hedge funds receive both fees for assets under management and performance fees. *See* ASSET MANAGERS' COMMITTEE REPORT, *supra* note 37, at 9–10 (on hedge fund fees).

above, observed that the current financial crisis was partly due to the short-term compensation structure common at Wall Street firms and to its resulting focus upon making deals and acquiring market share regardless of the risks involved.¹¹⁹

In these circumstances, with these compensation and structural pressures, risk managers have difficulties in finding ways reasonably to decrease risk, even if they use adequate risk models. Risk managers can use their models to emphasize that catastrophic risks are greater than what people believe (the “fat tail” of risk). However, bankers and traders, concerned about their bonuses, and management, concerned about firm profitability and share price, will argue that the model exaggerates the risks and that someone emphasizing the fat tail is being unduly pessimistic at the expense of business.¹²⁰ Financial professionals also suffer from the typical human focus upon the present and tendency to use an overly optimistic discount rate when evaluating bad future outcomes.¹²¹

More importantly, if there is no crisis present or on the horizon, risk managers have little to appeal to when dealing with bankers, traders, and executives in financial firms. They cannot appeal to the long-term stability of the firm because few executives and employees will have a sufficiently long-term horizon and senior executives are also unlikely to worry, given the rich benefits accorded to them. Appealing to the long-term financial stability of the economy and the country will also fail, because it will conflict with the concept of pursuit of *individual* wealth that is thought to insulate individuals from any macroeconomic disaster. In any event, such concerns are too abstract to be taken into consideration in the dominant cost/benefit calculus. Furthermore, there is nothing to ensure that the risk

119. See SENIOR SUPERVISORS GROUP, *supra* note 106, at 7; see also Randall S. Kroszner, Improving Risk Management in Light of Recent Market Events, Speech at the Global Association for Risk Management Professionals Annual Risk Convention (Feb. 5, 2008), available at <http://www.federalreserve.gov/newsevents/speech/kroszner20080225a.htm> (“Clearly, it is up to financial institutions themselves—not bank supervisors—to decide how compensation should be structured, but managers and boards of directors should understand the consequences of providing too many short-term and one-sided incentives. They would benefit from thinking about compensation on more of a risk-adjusted basis. Accordingly, I encourage institutions to think about ways to alter existing compensation schemes to include some types of deferred compensation, since the risks of certain investments or trades may not manifest themselves in the near term. Thus, it makes sense to try to match the tenor of compensation with the tenor of the risk profile and thus explicitly to take into account the longer-run performance of the portfolio or division in which the employee operates. This type of compensation arrangement is already in use at many nonfinancial firms.”). See also FINAL REPORT OF THE INSTITUTE FOR INTERNATIONAL FINANCE COMMITTEE ON MARKET BEST PRACTICES: PRINCIPLES OF CONDUCT AND BEST PRACTICES RECOMMENDATIONS, at 49–51 (July 2008) (concluding that compensation practices in the financial sector were a factor in the financial crisis and that they must change to reflect long-term results, but providing vague guidance on how this would come about).

120. One remembers that, not so long ago during the dot.com bubble, entrepreneurs, investment bankers, and stock analysts asserted that there was a new era of finance without the risks of traditional business cycles.

121. See, e.g., HERSH SHEFRIN, BEHAVIORAL CORPORATE FINANCE 6–7 (2007).

managers will themselves be properly trained and motivated to raise long-term concerns.

The standard compensation response, which would be to link compensation in financial services to long-term performance of transactions and investments by the individual banker or trader,¹²² is unlikely to work. It is not clear how deferred compensation would be structured in many situations, such as prime brokerage, and what length of time would qualify as “long term.” Moreover, it is doubtful that the compensation of many financial professionals can be tied to the long-term performance of the firm when firms want the flexibility to end employment relationships without paying prohibitively for the privilege. In addition, aligning the interests of agents and the firm does not adequately address the macroeconomic harms from financial activities, such as systemic risk, since they do not likely even figure in the financial firm’s calculus in the first place.

Reform that would properly train risk management professionals and allow them to function properly within financial firms would have to be fundamental, altering the way firms conduct business and financial professionals think and conduct themselves, and therefore, it would be a long-term project. A proper discussion of it is beyond the scope of this essay.¹²³ Suffice it to say, finance professionals are familiar with the standard economic model of the self-interested economic actor, in which individuals are presumed to act on their own behalf in the pursuit of wealth.¹²⁴ The model is an overwhelming characteristic of the financial industry because finance professionals shape their views and conduct upon it (and assume that others do the same), and the result is that alternative perspectives are otherwise crowded out.¹²⁵ These other perspectives are clearly subordinate even if they would actually help counter the self-interest focus that leads to the kind of destructive consequences that we see now in the subprime mortgage crisis. Naturally, changing the basic ideology of finance professionals will not occur overnight.

VI. CONCLUSION: THE NECESSITY OF ACTIVE REGULATORY OVERSIGHT

In the short term, therefore, it is necessary for both regulated and unregulated private financial firms to enhance their risk management. Due to the shock that these firms have experienced from the current financial crisis, they are already actively engaged in this task, and there will be little

122. See generally Michael C. Jensen, *Foundations of Organizational Strategy*, (Harvard Univ. Press 1998) available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=244154 (on compensation systems).

123. I have undertaken some analysis of this issue in my essay, James Fanto, *The Continuing Need for Broker-Dealer Professionalism in IPOs*, 2 ENTREPRENEURIAL L.J. 679 (2008).

124. *Id.*

125. *Id.*

objection to a regulatory mandate on this subject. Yet improvements in risk management should not be left to the firms, with financial regulators playing the role of a sideline observer.

This does not mean that regulators need be responsible for designing risk management models, for this has been outside their expertise for some time. However, they can be more insistent that regulated firms establish firm-wide risk management committees and that the committees have real power in the firm, including with respect to any transactions with the private financial firms.¹²⁶ After all, the regulators have examination and visitorial powers,¹²⁷ which means that they can check on the day-to-day functioning of the committees and the risk management process. Indeed, the largest firms are in constant communication with regulators, and risk management should be an important part of this regular dialogue.

Monitoring the risk management process will be most important when the current crisis ends and optimism returns to the financial markets, for that will be the time when firms are most ready to downplay risks. Moreover, examiners and senior regulators must be more skeptical of the risk models that the institutions use. One need not be an expert on risks to question the assumptions of a risk model and to criticize an institution's overly optimistic view of the risks facing it.

Financial regulators should be up to the task, despite ongoing skepticism about the motivation of personnel, who generally come from the private sector and expect eventually to return to it. As much as financial regulators will be sympathetic to the industry that they regulate, their mission is to be concerned about and to promote the long-term health of the financial industry and thus of the U.S. economy—a focus now absent from financial firms—not the short-term profitability of a particular financial institution. With this mission, which the best financial firms must surely acknowledge, regulators can insist that the firms take into account the risks facing them. In turn, they can insist that firms select appropriate discount rates for the pricing of these risks, as opposed to the unduly optimistic ones that are often used in financial institutions during boom periods. In sum, regulators have to counter the tendency of financial institutions to focus on the short term and try themselves not to be swept up into the enthusiasm over asset pricing bubbles.

The underlying point of this essay's review of risk management, occasioned by an examination of the private financial firms and their relationships with (including absorption by) regulated financial firms, is simple. It is dangerous for financial regulation and thus for the financial sector to be overly confident in the benefits of the market model, of which

126. As for the regulators' relationship with the latter, this indirect regulation, coupled with the "best practices" approach, remains their only source of influence, in the absence of legislation.

127. 12 U.S.C. § 1844 (2008).

the private financial firm is a paradigm, and to be equally overly dismissive of regulation. If anything, risk management involving private financial firms, whether outside or inside regulated financial firms, has been a case study in this danger, rather than an example of the obvious supremacy of the market model. This review suggests that, for the stability of the financial system, it is time to reestablish the balance between financial markets and regulation on strong enough grounds so that they endure when the good times in finance return.