Maryland Journal of International Law

Volume 21 | Issue 2 Article 2

Barings Bar None: the Financial Service Agreement of the GATS and Its Potential Impact on Derivatives Trading

Vincent Presti

ARTICLES

BARINGS BAR NONE: THE FINANCIAL SERVICE AGREEMENT OF THE GATS AND ITS POTENTIAL IMPACT ON DERIVATIVES TRADING

VINCENT PRESTI*

TABLE OF CONTENTS

---

* The author is a practicing member of the New York and New Jersey bars: B.A. Johns Hopkins University (1990), Prob. M.Litt., Oriel College, Oxford (1991); J.D. University of Michigan Law School (1997). The support and encouragement of Professors Philip R. Trimble, Jose Alvarez, and William Bogaard warrant a special mention of gratitude.

I. INTRODUCTION

As the need for alternative income sources for international banking

institutions increases with the decline of traditional lending activities,[1] derivative trading has become a significant source of profitable activity.[2] Banks have participated in this highly speculative, risk allocating, endeavor in a search for expanded client bases and financial service products.[3] The recent Barings and Daiwa scandals demonstrate some of the problems associated with volatile financial products. Both external management interaction with local market exchange trading systems and their bureaucracy, compounded by internal management controls that promote profit-seeking activity to the detriment of effective supervisory management control procedures, warrant an international response to regulation in this area.[4]

Recent negotiations on the General Agreement on Trade in Services (GATS) and America's protestations to a multilateral financial service agreement[5] illustrate problems with the existing international framework to develop appropriate derivative regulatory policy. Moreover, any unilateral efforts to regulate the use of derivative products will not only frustrate an international financial service agreement, but will be ineffective to deal with future Barings-type crises.[6] Uniformity in risk valuation and accounting standards,[7] along with an incentive structure that encourages management compliance with "preferred" internal controls,[8] necessitates

---

1. *See* Laurence H. Summers, *G-7 Expects A Global Currency Shift*, INVESTOR'S BUS. DAILY, May 1, 1995, at B1.

2. *See, e.g.*, Joe R. Shuman, *Global Perspectives: The International Competitiveness of U.S. Banks*, 77 J. COM. LENDING 10 (Aug. 1995).

3. *See* Justin Fox, *Basel Committee to Grapple with Market Risk at Meeting*, AM. BANKER, Nov. 27, 1995, at 4.

4. *Id. See also* Peter Neilsen, *Banks Must Set Aside Capital for Market Risk-BIS*, REUTERS, BC CYCLE, Apr. 12, 1995, *available in* NEXIS, World Library, TXTNWS File.

5. *See, e.g., SIA Treasury Committed to Financial Reform, Trade Liberalization, Summer Tells SIA*, BNA BANKING DAILY, Mar. 6, 1996, *available in* LEXIS, Bna Library, BNABD File; *see also Treasury Sees Progress, But Continuing Barriers to U.S. Banking Abroad*, BANKING POL'Y REPORT, Jan. 16, 1995.

6. *See generally* STEPHEN FAY, THE COLLAPSE OF BARINGS (1997) (highlighting the role of local regulatory laxity and poor management supervision in improper trading activity). *See also Derivatives: Regulatory Compatibility Needed in Global Market, Dial Says*, BNA INT'L BUS. & FIN. DAILY, April 14, 1997, *available in* LEXIS, Itrade Library, BNAIBF File (discussing Commodity Futures Trading Commissioner Joseph Dial's concern for unified, minimum regulatory standards to protect the global marketplace).

7. *See generally International Accounting Standards Panel Accelerates Release of Rules*, BNA INT'L BUS. & FIN. DAILY, Apr. 18, 1996, *available in* LEXIS, Itrade Library, BNAIBF File; Alistair Osborne, *Guide draws on horror cases; Coopers & Lybrand offers GARP, a risk-control checklist*, S. CHINA MORNING POST, Apr. 2, 1996, Bus. Sec., at 2 (discussing Generally Accepted Risk Principles (GARP) and its role in risk management of financial derivatives).

8. Brent McClintock, *International Financial Instability and the Financial Deriva-*

the expansion of the GATS to harmonize the regulatory policies of existing international institutions[9] that promulgate standards for international financial market participants.

This article evaluates the role of derivative trading in the Barings Crisis, its potential impact on regulatory developments, and a "potential" international solution. Part II of the article analyzes the role of derivative products in financial transactions and defines their role in the conveyance of market information and the allocation of market risk. Part III outlines the Barings crisis and how exchange rules and management structure and procedure facilitated unauthorized trading activity. Part IV of the article describes the role of derivative products in American banking institutions and the U.S. regulation that governs such transactions. It also details the current regulatory schemes for risk-based capital standards for which the Basle Committee on Banking Supervision and the U.S. Federal Reserve Bank are advocating. Part V describes the evolution of America's current position on the Financial Service Agreement of the GATS and its pejorative impact on supranational banking developments. Finally, Part VI of the article argues that the GATS should be expanded to include a clearinghouse that harmonizes existing settlement systems, such as SWIFT, FEDWIRE, and clearinghouses that affect exchange-traded derivatives. It also analyzes the costs and benefits of a GATS-based clearinghouse and its potential impact on U.S. and international derivative products.

II. THE ROLE OF DERIVATIVE PRODUCTS IN INTERNATIONAL FINANCIAL TRANSACTIONS

Unlike previous legal scholarship[10] about the growth of derivative

---

tives Market, 30 J. ECON. ISSUES 13, 26 (1996) (commenting about the Bank of England's observations on the Barings collapse). *See also* Daniel Dunaief, *Banks' Monitoring of Derivatives Risk Gets Qualified Praise*, AM. BANKER, May 19, 1995, at 20.

9. *See Banking: Commission Proposes Improvements to Supervisory Rules*, RAPID, May 2, 1996, *available in* NEXIS, World Library, ALLWLD File (detailing the European Commission's proposals for derivatives regulations in light of Bank of International Settlements' new proposals).

10. *See generally* Sheila C. Bair, *Lessons from the Barings Collapse*, 64 FORDHAM L. REV. 1 (1995); Henry T.C. Hu, *Hedging Expectations: "Derivative Reality" and the Law and Finance of the Corporate Objective*, 73 TEX. L. REV. 985 (1995) [hereinafter Hu, *Hedging Expectations*]; Bernard J. Karol, *Regulation of Financial Derivatives: An Overview of Derivatives as Risk Management Tools*, 1 STAN. J. L. BUS. & FIN. 195 (1995); Marc Levy, *Japanese and U.S. Financial Derivatives Markets: Recommendations for Loosening Japan's Tightly Regulated Market*, 18 FORDHAM INT'L L.J. 1970 (1995); Thomas C. Singher, *Regulating Derivatives: Does Transnational Regulatory Cooperation Offer A Viable Alternative to Congressional Action?*, 18 FORDHAM INT'L L.J. 1397 (1995);

trading in financial markets, this article will develop a functional definition of a derivative product that can best explain the role of derivatives in the Barings collapse. This definition will explain why Barings, like other financial institutions, utilized derivatives in their financial management and how Barings, unlike other financial institutions, exploited derivatives to expand its international operations.[11]

A. *A Functional Definition for Derivative Instruments in International Transactions*

A derivative is a financial device that permits its holder to transfer risk through alternative timing of financial payments.[12] The financial device usually takes the form of a contractual agreement,[13] privately[14] or publicly traded,[15] between two or more parties that obligates them to exchange specified currency payments.[16] An underlying asset or market in-

---

Henry T.C. Hu, *Misunderstood Derivatives: The Cause of Informational Failure and Promise of Regulatory Incrementalism*, 102 YALE L.J. 1457 (1993) [hereinafter Hu, *Misunderstood Derivatives*].

11. *See infra* notes 137-46 and accompanying discussion.

12. *See, e.g.*, Scott P. Mason, *The Allocation of Risk*, *in* THE GLOBAL FINANCIAL SYSTEM: A FUNCTIONAL PERSPECTIVE 153 (Harvard Business School, Global Financial System Project, ed. 1995).

13. These contracts are categorized into four basic groups:

Forward	A contract obligating one party to buy and the other to sell, a specific asset for a fixed price at a future date.
Futures	A forward contract that is standardized and exchange traded.
Option	A contract between two parties, which gives one party the right, but not the obligation to buy or sell an asset, currency or rate for a specified price.
Swap	An agreement by two parties to exchange a series of cash flows . . . in the future.

KPMG, SOLVING THE MYSTERY OF DERIVATIVES 94 (1994).

14. Individually arranged, non-standardized, forward and option contracts are traded on the Over-the-Counter (OTC) markets. These instruments usually have longer maturities and less liquidity than exchange-traded contracts. *Id.* at 33.

15. Standardized contracts are traded on organized exchanges that operate as clearinghouses for the buyer and seller of such instruments. For example, national exchanges that conduct international transactions include the Chicago Mercantile Exchange (CME), the London International Financial Futures Exchange (LIFFE), and the Singapore International Monetary Exchange (SIMEX). These exchanges help to exploit pricing and valuation inconsistencies with forward contracts caused by interest rates, taxation, and foreign exchange risks. Exchange-traded markets total one half the size of the OTC markets. *Id.* at 33-37.

16. *Id.* at 94 (defining derivative as "a financial instrument that derives its cash flows, and therefore its value, by its value to an underlying instrument, index, or reference").

dicia, like interest rates,[17] foreign exchange rates,[18] or specific market indices,[19] affect the stream of these payments. Investors, with highly specialized financial objectives,[20] and financial institutions, with high credit ratings,[21] comprise the majority of participants in the derivatives market.

The rudimentary components of most derivative products include an exchange market, its client base, and its settlement systems and procedures. Each component attracts investors and serves their financial objectives, as well as contributes to the overall risk associated with such derivative products.

1. Derivatives Markets

The growth of derivative markets can be considered a response to specific transaction-demand. The establishment of the Chicago Board of Trade and the trading of its futures contracts, for example, have been attributed to problems in the early nineteenth century grain market.[22] Similarly, the breakdown of the Bretton Woods Accord and its impact on the stability of foreign exchange rates can be considered an influence on the expansion of the London International Financial Futures Exchange (LIFFE)[23] and the Tokyo International Financial Futures Exchange (TIFFE)[24] and their respective futures contracts.

Such transaction demands can also be attributed to the role of derivative products in finance and industry. For example, the presence of forward contracts in the foreign exchange market represents industry's need

---

17. *Id.* at 95 (describing a forward rate agreement (FRA) as "an agreement to exchange dollar amounts at a specified future date based on the difference between a particular interest rate index and an agreed fixed rate").

18. *Id.* (describing a forward foreign exchange contract as "a contract to pay or receive specific amounts of currency at a future date in exchange for another currency at an agreed-upon exchange rate").

19. *Id.* at 3 (describing Equity Index Futures as contracts that are based on an agreement for a cash settlement between one party and a specified exchange).

20. *See, e.g.*, Singher, *supra* note 10, at 1404, nn.40-46 (discussing the dominant presence of corporations, governmental entities, institutional investors, and financial institutions in the derivatives markets).

21. *See id.* at 1404-05, nn.47-56 (detailing the need for financial intermediaries with substantial capital and credit appraisal experience, excellent credit standing, and investment grade credit ratings).

22. *See* Jerry W. Markham, *"Confederate Bonds," "General Custer," and The Regulation of Derivative Financial Instruments*, 25 SETON HALL L. REV. 1, 6, n.15 (1994) (commenting about supply and demand inefficiencies with Midwestern farm products).

23. *See* KPMG, *supra* note 13, at 36.

24. *Id.* at 37.

to hedge against price fluctuations in international transactions.[25] Derivatives markets assist in the valuation of these contracts through integrating market risk and information on price equilibria.[26]

The characteristics of each market reflect the unique attributes of its traded derivative instruments. For example, the Over-the-Counter (OTC) market and its derivative products are less liquid than exchange markets due to the limited secondary market for such products. OTC products are generally individually arranged contracts, known as non-standardized contracts, and, as such, are left mostly unregulated.[27] Moreover, the composition of markets determines the jurisdictional boundaries of regulations to which they are subject.[28]

Disequilibria between expectations and market performances have created some significant economic losses for traders and clients.[29] The ability to minimize such market risk[30] in a transaction is very difficult to control.[31] Numerous factors, both anticipated and unanticipated,[32] cannot

---

25. *See, e.g.*, Salomon Forex v. Tauber, 795 F. Supp. 768 (E.D. Va. 1992), *aff'd*, 8 F.3d 966 (4th Cir. 1993), *cert. denied*, 511 U.S. 1031 (1994) (illustrating an investor's use of foreign currency exchange contracts, as well as the financial institution's failure to minimize legal risk under the Commodities Exchange Act).

26. *See* Hu, *Misunderstood Derivatives*, *supra* note 10, at 1464-66. *See also* U.S. GENERAL ACCOUNTING OFFICE, FINANCIAL DERIVATIVES: ACTIONS NEEDED TO PROTECT THE FINANCIAL SYSTEM 34 (GAO/GGD - 94-133, May 1994). Future contracts are used primarily in the foreign exchange market for hedging against price fluctuations in international transactions. The valuation of the forward contracts depends upon anticipated market risks and projected price levels. The economics of the forward contract can best explain its risk allocating capacity. For example, if an investor believes the price of a commodity will be X in 90 days and the price is X in 90 days, then he can exercise his option at that time to buy or sell the underlying asset. For an excellent brief summary of the benefits of future contracts, see Levy, *supra* note 10, at 1970, 2000-02 & nn.208-20.

27. *See* KPMG, *supra* note 13, at 33-34.

28. *See, e.g.*, Levy, *supra* note 10, at 2008-10 (discussing exchange market operations in the role of the Securities and Exchange Commission (SEC) regulations over securities-based derivatives and the role of the Commodities and Futures Trading Commission (CFTC) over commodities- and futures-based derivatives).

29. *See* McClintock, *supra* note 8, at 23-29 (outlining the major stories from 1990 through 1995); *see also* Laurie Morse, *Survey of Derivatives*, FIN. TIMES, Nov. 16, 1995, at 2 (discussing high-profile derivatives losses by Barings, Metallgesellschaft, and Orange County).

30. *See, e.g.*, KPMG, *supra* note 13, at 102 (defining market risk as the risk that fluctuations in market prices and conditions can affect the book or market value of financial instruments, commodities, or other assets or liabilities).

31. Control problems arise from the highly leveraged nature of derivative instruments and their vulnerability to small changes in interest rates, equity prices, or exchange rates. *See, e.g.*, McClintock, *supra* note 8, at 24 (citing Merrill Lynch's $377 million loss in mortgage-backed securities market for its failure to hedge against rising interest rates).

32. *See id.* (commenting about a $6.4 billion bet by Showa Shell Seikiyu in the cur-

be entirely controlled without incurring huge transaction costs that can greatly reduce investment returns.[33] Hedging strategies,[34] or combinations thereof,[35] help traders to protect against the net exposures of their portfolios.[36]

The distribution of risk throughout international derivative markets has become a hallmark of most derivative trading.[37] The incentive for participation in international markets also comes from arbitrage[38] opportunities that can be exploited between markets.[39] Rather than assuming all the risk associated with a particular exchange, trading products on numerous exchanges prevents against exposure to systemic risks[40] that may be indigenous to a particular exchange.[41]

Liquidity is a major concern for any international derivative trader.[42]

---

rency futures markets that cost the firm $1.1 billion, caused by the U.S. dollar's unanticipated decline).

33. *See* Hu, *Misunderstood Derivatives, supra* note 10, at 1467 (highlighting the impact of adverse market movements in the swap market and associated avoidance costs).

34. Hedging strategies are defined as "[u]ndertaking transactions or contractual agreements for the purpose of reducing exposure to one or more types of business risk." KPMG, *supra* note 13, at 103.

35. Some variations of hedging strategies include: a "cap," where an option contract can be used to protect against fluctuations in interest rates or some underlying indicies; and a "cylinder," where foreign currency options are simultaneously purchased with different strike prices. *Id.* at 96-97. Another popular hedging strategy, known as the "delta-neutral strategy," requires the purchase of a quantity of options whose changes in valuation mirror the price movements of the underlying instrument. *See, e.g., id.* at 97; *see also* Mason, *supra* note 12, at 162-67 (commenting about the relationship between hedging strategies, investors, and derivatives markets).

36. *Id.*

37. *See* McClintock, *supra* note 8, at 28 (citing the role of derivatives in improving linkages between domestic and international financial markets); *see generally The Limits of Self-Regulation*, FIN. REG. REPORT, Nov. 1995, *available in* LEXIS, Bankg Library, CURNWS File [hereinafter *Limits of Self-Regulation*] (detailing the globalization of the derivatives markets).

38. Arbitrage is defined as "[t]he practice of derivatives traders to execute numerous transactions simultaneously to exploit market inefficiencies and to profit accordingly." KPMG, *supra* note 13, at 103.

39. *See infra* Part III.B.

40. Systemic risk represents the vulnerability of the financial system to shocks. *See, e.g.*, McClintock, *supra* note 8, at 26; *see also* BANK FOR INTERNATIONAL SETTLEMENTS, REPORT OF THE COMMITTEE ON INTERBANK NETTING SCHEMES OF THE GROUP OF TEN COUNTRIES 9 (1990) (defining systemic risk as the susceptiblity of the entire market to the failure of one financial institution and its impact on the market's overall liquidity).

41. These risks can arise from numerous factors. *See, e.g.*, McClintock, *supra* note 8, at 26 (commenting about the domination of certain derivatives markets by few market-makers and its potential impact on systemic risk).

42. *See id.* at 26-27.

The liquidity risk in a derivative product that concerns a trader covers the timing of the sale or the purchase of a product's quantity at a fair price.[43] The faster a derivative can be sold on an exchange, the greater the chance to avoid a loss.[44]

A product's liquidity risk alters three major parameters for derivative markets. First, the innovation of derivative products with faster mark-to-market[45] value characteristics is primarily based on the reduction of market inefficiencies—time lags between the derivative price and its dependence on the underlying asset price.[46] Second, the reliability of a market's pricing and risk management systems correlates with all aspects of derivative trading.[47] Most importantly, transnational linkages between national capital markets and derivative traders affect the potential number of resale derivative buyers and, thus, the liquidity of a market and its derivatives products.[48]

2. Derivatives Players

Major participants in the derivatives markets include financial intermediaries, their clients, and their traders.[49] Each participant has a unique relationship with a derivatives market on which financial products are bought and sold.[50]

Besides providing access to derivatives markets, financial intermediaries are the primary risk-transferring conduit in a derivatives transaction.[51] Financial institutions,[52] especially U.S. banks,[53] comprise

---

43. *See* KPMG, *supra* note 13, at 102.

44. *See, e.g.*, Isaac B. Lustgarten & Junling Ma, *Risk Management Guidelines for Derivatives—Part II*, S&P'S THE REVIEW OF BANKING AND FINANCIAL SERVICE, May 17, 1995, at 96 (commenting about the costs of cash flow mismatches in liquidity funding by banking institutions).

45. The term represents the price adjustment in a derivative instrument (i.e. its position) to reflect current market value, profits, or losses. *See* KPMG, *supra* note 13, at 95.

46. *See generally* THE GLOBECON GROUP, DERIVATIVES ENGINEERING: A GUIDE TO STRUCTURING, PRICING, AND MARKETING DERIVATIVES 56-62 (1995) [hereinafter GLOBECON GROUP].

47. *See id.*

48. *See* McClintock, *supra* note 8, at 28-29.

49. *See* KPMG, *supra* note 13, at 38-39.

50. *See id.*

51. *See* GLOBECON GROUP, *supra* note 46, at 64-66 (discussing role of the intermediary in the transfer of risk among markets and between participants).

52. KPMG, *supra* note 13, at 38.

53. *See* U.S. GENERAL ACCOUNTING OFFICE, FINANCIAL DERIVATIVES: ACTIONS TAKEN OR PROPOSED SINCE MAY 1994 tbl.1.1 (GAO/GGD/AIMD-97-8, Nov. 1, 1996), *available in* LEXIS, Bankng Library, GAOFIN File (valuing 1995 derivatives activity of U.S. commercial banks at $15.8 trillion). *See also* Shuman, *supra* note 2, at 14 (discussing com-

the majority of these intermediaries. The financial gains from derivative transactions, realized from transaction fees[54] and market inefficiencies,[55] encourage these firms' active involvement.

The scope of intermediaries' involvement with derivative products extends from external market activities, such as dealing with clients, to internal market activities, such as trading contracts on organized exchanges. Intermediaries' role in external market activities entails the matching of clients', or end-users', financial objectives with appropriate derivative products,[56] either traded products[57] or custom-tailored contracts.[58] Intermediaries' involvement with internal market activities necessitates the employment of "floor traders" who can instantly execute an intermediary's buy and sell orders.[59] Together, these participants and their activities influence the supply and demand of derivative products.[60]

Clients seek derivative products to accomplish various financial objectives. Derivatives, for example, can provide access to capital markets which, in turn, can reduce funding costs for investment budgeting.[61] Derivative products can also enhance the performance of portfolio managers who can better configure a portfolio composition to specific investment needs.[62] Most commonly, the role of derivative products in a cli-

---

parative advantage of U.S. banks in derivative financial services); Anne Schwimmer, *Glass-Steagall Reform May Open Stormy Derivatives Debate; No "throwing the dice with taxpayers' money,"* INVESTMENT DEALERS' DIG., Mar. 6, 1995, at 9 (commenting about the role of derivatives in banking regulatory reform proposals).

54. *See* Adam R. Waldman, *OTC Derivatives & Systemic Risk: Innovative Finance or the Dance into the Abyss?*, 43 AM. U. L. REV. 1023, 1036 (1994).

55. *See id.* at 1037 (analyzing differences in the bidding and offering prices for financial products and their impact on profitability).

56. *See generally* Joseph S. Rizzello, *The Development and Evolution of Derivative Products, in* THE HANDBOOK OF DERIVATIVES AND SYNTHETICS: INNOVATIONS, TECHNOLOGIES, AND STRATEGIES IN THE GLOBAL MARKETS (Robert A. Klein & Jess Lederman eds. 1994).

57. *Id.*

58. *Id.*

59. THE BANK OF ENGLAND, REPORT OF THE BOARD OF BANKING SUPERVISION INQUIRY INTO THE CIRCUMSTANCES OF THE COLLAPSE OF BARINGS 277 (1995) [hereinafter BARINGS REPORT].

60. An example of this interaction can be observed in the growth of Derivative Product Companies (DPCs). They are "stand alone", triple-A rated subsidiaries of financial services firms who establish them for the purpose of conducting derivative transactions. *See generally* Paul Goris, *Derivative Product Subsidiaries: The Counterparty's View*, 9 J. INT'L BANKING 345 (Sept. 1994).

61. *See generally* Singher, *supra* note 10, at 1406-08. *See also* McClintock, *supra* note 8, at 27 (noting the impact of derivatives on transaction costs).

62. *See* Hu, *Hedging Expectations, supra* note 10, at 1016-17 nn.145-50 (comparing the importance of diversification in modern portfolio theory with hedging strategies for

ent's portfolio involves hedging against and speculating on types of risks.[63]

In addition to market risk, derivative players face credit risk. This risk represents the probability of default for contracting parties[64] and its subsequent impact on the need for replacement contracts.[65] The value of this risk is a function of the replacement costs at different times in the life of a derivative contract.[66] Problems with estimating the value of this risk, as well as its overall impact on a portfolio, may frustrate effective risk-management solutions.[67]

The type of market and its regulation can greatly alter the amount of credit risk in a derivative transaction.[68] Dealers may trade on markets that can allocate this risk to one party, like the options market, where the seller can shift all the risk onto the buyer.[69] Exchange-traded and OTC derivatives also affect the allocation of the risk. Exchange-traded derivatives require that end-users can depend on the dealer and the exchange market to ensure completed performance.[70] OTC derivatives and their non-standardized nature require that end-users depend exclusively on the dealer, or a contract's counterparty, for completed performance.[71] Derivative players will gravitate to those markets that can best minimize the cost of such risks.[72]

---

derivative products).

63. *Id. See also* Mason, *supra* note 12, at 162 (defining *hedging, diversification,* and *insurance* strategies as the major uses for derivative products by end-users) (emphasis added).

64. KPMG, *supra* note 13, at 101.

65. *See, e.g.*, GLOBAL DERIVATIVES STUDY GROUP, DERIVATIVES: PRACTICES AND PRINCIPLES 45-47 (G30 eds., 1993) [hereinafter GLOBAL DERIVATIVES STUDY GROUP] (emphasizing the mutual concerns of OTC-contracts users who cannot rely on dealers or exchange markets for full performance).

66. The current replacement costs (i.e. the cost at the initial time (t=0)), is the present value of the future cash payments that the non-defaulting party would have been entitled to receive and will have to pay out to enter into a substitute contract. The future replacement costs (i.e. the cost at some future time (t=n)), depends on the volatility of the underlying markets and its impact on the derivative's value. *Id.*

67. *See* Osborne, *supra* note 7, at 2 (outlining a new proposal to evaluate risks of counterparties and avoid large losses, such as those incurred by Metallgesellschaft, Orange County, Daiwa, and Barings).

68. *See infra* Part IV.A.

69. *See* GLOBAL DERIVATIVES STUDY GROUP, *supra* note 65, at 48 (describing how the seller of an option contract can avoid credit risks, while the buyer of such a contract cannot escape the risk of the seller's nonperformance).

70. *Id.*

71. *Id.*

72. The larger size of the OTC reflects this sentiment. Since most OTC market participants have established reputations in their market segments and are well-known to

Operational risks also expose all derivative players to the potential economic consequences of management problems, technological limitations, and trading breakdowns.[73] Such risks can arise from human error, that is, a trader may execute the wrong trade, credit or debit the wrong account, or ignore a superior's orders.[74] The management structure of a financial institution that engages in derivative trading can alter this risk. Corporate law[75] and securities law,[76] especially in the U.S., provide incentives for management structures to comply with regulatory authorities and to avoid potential liabilities from non-compliance.[77]

In addition, domestic banking laws that affect derivative dealers and end-users place an additional layer of safety against institutional misuse of financial resources through increased penalties for non-compliance.[78] Such regulations influence the location of investment firms' derivative trading offices, the financial products they offer, and the juridical form of their domestic parent company and their foreign subsidiaries.[79]

The role of lawyers in the development and execution of a derivative contract cannot be underestimated. The legal risk[80] inherent in all de-

---

each other, the OTC market would appear to contain less credit risks than exchange-traded markets. *See infra* notes 360-61 and accompanying text.

73. *See, e.g.*, KPMG, *supra* note 13, at 102 (defining operational risks as the risk that inadequate controls could be susceptible to fraudulent perpetrators, incorrect market valuations, settlement and collection errors, and computer failures).

74. *Id.*

75. *See, e.g., Limits of Self-Regulation, supra* note 37 (discussing the growth of Derivative Product Companies (DPCs) and their role in minimizing products' risks in a self-regulatory environment). One can also conjecture about an alternative impetus for the recent interest in DPCs. Due to the regulatory and legal uncertainties with derivative products, financial firms probably want to limit and to isolate potential liabilities.

76. *See infra* Part IV.A.1.

77. *See generally* DERIVATIVES POLICY GROUP, FRAMEWORK FOR VOLUNTARY OVERSIGHT (1995) (detailing derivatives sales practices, capital standards, and reporting requirements from the Securities and Exchange Commission (SEC) and the Commodities and Futures Trading Commission (CFTC) and their implementation by six major Wall Street firms).

78. *See, e.g.*, Isaac B. Lustgarten & Junling Ma, *Risk Management Guidelines for Derivatives — Part I*, S&P'S THE REVIEW OF BANKING & FINANCIAL SERVICE, April 19, 1995, at 81. *See also Banking: Commission Proposes Improvements to Supervisory Rules*, RAPID, May 2, 1996, *available in* LEXIS, Nexis Library, RAPID File (discussing the Office of the Comptroller of the Currency's Handbook and its Banking Circular No. 277, both of which distinguish between the role of banks as dealers and as end-users in the derivatives market).

79. *Cf.* Richard Lapper, *Survey of Derivatives: Evolution in the Shadow of Disaster*, FIN. TIMES, Nov. 16, 1995, at 1 (describing how international efforts affected all aspects of the transactional development of derivative products).

80. Legal risk is defined as "[t]he risk that a country's legal system will make par-

rivative contracts is a court's unpredictable reaction to the contract, especially when one of its terms violates the law.[81] This potential for voidness creates incentives for traders and end-users to exercise diligence and obtain legal advice.[82]

Dealers also must comply with the regulatory agency that controls the underlying asset in the derivative contract.[83] Such compliance increases the transaction costs associated with transnational derivative trading.[84] The uncertainties about the applicable choice of law provisions also alter transaction costs and trading decisions.[85]

Competition in the international capital markets encourages dealers to manipulate local regulatory agencies through servicing their clients with a wider range of financial products.[86] Financial intermediaries and their traders have an incentive to trade on an exchange where the volume of their transactions can have some impact on the overall valuation of the derivative products.[87] While the benefits of market dominance may be a preferable risk-minimizing management technique, they will probably be too costly to achieve.[88]

3. Basic Settlement Systems and Procedures for Exchange-Traded Derivative Instruments

The standardized features of the futures and options contracts have assisted in the expansion of exchange markets and their infrastructures.[89]

---

ticular derivative contracts unenforceable." KPMG, *supra* note 13, at 102.

81. *See, e.g.*, Hazell v. Hammersmith & Fulham, L.B.C., 2 W.L.R. 372, 373 (1991) (making the council of the London Borough of Hammersmith & Fulham and its commitments on £3 billion of various swap contracts unenforceable and finding such derivative products to be *ultra vires* transactions, outside the permissible commercial activities of a local council).

82. *See* Mark Osa Igiehon, *Barings' Collapse: The Legal Nature of Derivatives Revisited*, 16 COMPANY LAWYER 311-13 (1995).

83. *See infra* Part IV.A.

84. SARKIS J. KHOURY, THE DEREGULATION OF WORLD FINANCIAL MARKETS 54 (1990) (implying that there is a direct relationship between government regulations and transaction costs).

85. *Id.*

86. *See* James Kynge, *Derivatives: Ingenious New Ideas for Futures*, FIN. TIMES, May 9, 1997, at 2 (explaining how regional competition in Asian futures markets affects Singapore's development of new derivatives).

87. *See* McClintock, *supra* note 8, at 28-29.

88. *See generally* GLOBECON GROUP, *supra* note 46, at 13 (showing the financing and risk-management solutions that can be achieved with different variations of derivative products).

89. *See generally* U.S. GENERAL ACCOUNTING OFFICE, FINANCIAL DERIVATIVES: ACTIONS NEEDED TO PROTECT THE FINANCIAL SYSTEM (1994).

Even though these market exchanges specialize in particular derivative products,[90] they employ specific rules and procedures that govern the transactions of their members. Such guidelines preserve the integrity and soundness of the exchanges and their financial products.[91]

Derivative players have access to these exchanges through their clearinghouses, which act as a counterparty to every derivative contract.[92] Specific clearinghouse requirements, especially margin requirements,[93] affect these players and their transactions. For example, the Singapore International Monetary Exchange (SIMEX) imposes transactional limitations on its members based on client-generated trading activity and proprietary-generated trading activity.[94] These rules, as well as formal regulations, have a tremendous impact on the development of financial

---

90. Each exchange is structured around a particular type of financial derivative product. For example, the London Metal Exchange deals exclusively with futures on copper, lead, tin, aluminum, nickel and zinc. *See* KPMG, *supra* note 13, at 36.

91. *See* Philip Coggan, *Survey of Singapore*, FIN. TIMES, Feb. 8, 1996, at 5 (discussing the ability of SIMEX to function during the Barings crisis).

92. *See* Karol, *supra* note 10, at 198-99.

93. A feature of all futures and exchange traded option contracts is the margin requirements that must be posted with the clearinghouse. Initial margin deals with the daily monetary reserves that an exchange's clearinghouse requires until the contracts position is terminated, or in trade parlance, "closed-out." *See* KPMG, *supra* note 13, at 95. Maintenance margin represents the permitted variation from initial margin deposits to some predetermined level before the contract holder will be required to restore the account to its initial margin levels. *Id.* Variation margin, which represents the variation in the mark-to-market value of a financial futures contract, requires a trader to cover downward price movements on daily prices. *Id.* The process of charging futures users for their losses or crediting them for their gains at the end of each trading day is known as the daily settlement. *Id.*

94. SIMEX requires clearing members to differentiate between "house" and "client" accounts. BARINGS REPORT, *supra* note 59, ¶ 3.13. "House" accounts represent margin requirements for the clearing member's own trading accounts. *Id.* "Client" accounts represent the margin requirements for the clearing member's clients. *Id.* The Tokyo International Financial Futures Exchange (TIFFE) utilizes similar margin requirements. *Id.*

The method of crediting and debiting these clearinghouse margin accounts is a function of the accounting scheme, that is, whether there exists commingling between "house" and "client" margin accounts. *Id.* ¶ 3.15. For example, SIMEX uses the Standard Portfolio Analysis of Risk (SPAN) margining system that determines initial margin calls on the aggregate portfolio risk position of an account. *Id.* ¶ 3.12.

More importantly, the concept of "netting" and "non-netting" contributes to the ability of traders to artificially inflate the liquidity of the derivative market through manipulating margin requirements. *Id.* ¶ 3.13. Netting permits clearing house members to use their gains to offset any losses in their accounts. *Id.* Such procedures affect the clearing member's transactional activity and its profitability because they ultimately determine the actual amount of capital that is required to trade and cover positions in futures markets. *See infra* Part IV.B.

products and their associated risks.[95]

In addition, the role of technology in minimizing variations in accounting measures between financial intermediaries and listed-exchanges affects the volume of derivative products that are traded.[96] Accounting measures encompass time variations between the commencement and execution of a trade.[97] The computer programs through which these products are traded have assumed increasing significance as banks, in particular, are accelerating their international payments systems by using the Real Time Gross Settlement System (RTGS).[98] This significance comes from the role of netting arrangements and margin requirements for trading on designated markets.[99]

Competition for the trading business and fiscal revenues, speed of technological changes in exchange infrastructure and product innovation, and variation in management control between national parent corporations and foreign subsidiaries, all have a strong impact on derivative-related risks through creating arbitrage opportunities and enticing "rogue" traders.[100] Settlement systems and the national jurisdictions that govern them reflect an attempt to minimize such derivative-related risks.[101] Such systems greatly modify the inherent risks of highly complex derivative products.[102]

---

95. *See* Karol, *supra* note 10, at 198 (describing how each contract holder bears the credit risk of the exchange's clearinghouse).

96. *See* BARINGS REPORT, *supra* note 59, ¶ 3.10 (contrasting trading methods between the electronic systems of Japanese exchanges with the open-outcry pits of SIMEX).

97. *See* Andre F. Perold, *The Payment System and Derivative Instruments, in* THE GLOBAL FINANCIAL SYSTEM: A FUNCTIONAL PERSPECTIVE 33, 33 (Harvard Business School, Global Financial System Project, ed. 1995) (discussing Herstatt Risk that occurs where there exists an asymmetric payment and delivery procedure because of different operating hours of fund transfer systems in different countries without remedial banking arrangements).

98. *See Banking: More Banks Seek to Speed Up International Payments, BIS Says*, BNA BUS. & FIN. DAILY, April 22, 1997, *available in* LEXIS, Itrade Library, BNAIBF File (commenting on new, faster payments systems, such as RTGS, which are being used to facilitate international transactions). *See also TCAM Targets Securities Lending and Repo*, FIN. TECH. BULLETIN, Oct. 26, 1995, at 4 (citing recent increases in derivative trading as impetus for TCAM Systems to launch new global securities support package).

99. *Id.*

100. *See infra* Part III.B.

101. *See infra* Parts III.B, IV.B, VI.A.

102. *See infra* Part III.B.

III. THE BARINGS CRISIS: MARKET AND MANAGERIAL CIRCUMSTANCES AND THEIR IMPACT ON UNAUTHORIZED TRADING ACTIVITY

The complexity of derivative instruments, their ability to contribute to a firm's capital structure, and their potential to create massive losses can be observed in the collapse of Barings Plc. Management infrastructure, as well as the derivative products and their markets, greatly contributed to this collapse. While these qualities may be unique to the Barings situation, they can probably occur, or already exist, at any major financial institution.[103]

A. *Barings and Its "Old-Boys" Management Style*

The majority of commentary about the Barings Collapse, along with its ambiguities, focuses on the bank's inadequate management structures and reporting requirements between investment banking operations within the Barings Group, which was composed of Barings Plc and its subsidiaries.[104] These inadequacies, in the author's opinion, are an inherent quality of any bureaucracy as venerable as Barings, whose well-established banking presence in London protected its domestic and international financial operations from typical regulatory scrutiny.[105] The so-called management of the Barings operations can be euphemistically categorized as unconventional and unorthodox.[106] Moreover, this management infrastructure passively, or perhaps actively, encouraged the unauthorized trading activities of Nick Leeson, the crisis's central figure, who aggressively contributed to the firm's expansion into Asian securities markets.[107] His

---

103. *See, e.g.*, George Graham, *Banking Regulator Highlights Failings*, FIN. TIMES, Mar. 8, 1996, at 8 (describing the bond trading losses of Japan's Daiwa Bank from its New York trading operations).

104. *See, e.g.*, Comment, *Barings Once More*, 16 COMPANY LAWYER 290 (1995) (contrasting official reports from England's Board of Banking Supervision with Singapore's Companies Act Inspectors on the role of management in unauthorized trading positions).

105. The Baring Brothers financial house dominated British financial history, from financing early Anglo-Saxon wars through maintaining relations with exclusive clients. *See* RON CHERNOW, THE HOUSE OF MORGAN: AN AMERICAN DYNASTY AND THE RISE OF MODERN FINANCE 3-16 (1990). In 1890, the Bank of England even organized international financial interests to create a reserve fund that saved Barings from bankruptcy. *Id.* at 71.

106. Management structure for the Barings Investment Bank was so non-existent that Barings' management did not have any organizational chart or schemata until after the collapse, at which time a chart was then created, but only to assist regulators in their investigation. *See* BARINGS REPORT, *supra* note 59, ¶ 3.10. As a result, most managers did not have any clear responsibilities for specific activities and lacked control over trading activities. *See id.*

107. *See infra* notes 137-50 and accompanying text.

trading activities also facilitated the proposed consolidation of Barings' banking and financial service operations.[108]

Before the 1984 acquisition of Henderson Crosthwaite's stock broker business,[109] Baring Brothers & Co. (BB & Co.) was primarily engaged in corporate finance and debt trading.[110] This acquisition triggered an important modification in Barings Group's[111] corporate structure.[112] For example, the creation of Barings Securities Limited (BSL) was needed to subsume Crostwaite's equity securities business and to exploit Crostwaite's Asian market connections.[113] BSL established a strong presence in the Japanese markets, especially the Japanese warrant market.[114] Even though such activity was profitable, it encouraged overdevelopment and eventually caused BSL to consolidate with BB & Co. for bank reporting purposes.[115]

The formation of Barings Investment Bank in 1993 further modified the Barings management structure and contributed to Barings' ultimate collapse.[116] The focus on profit and expansion in Asian securities markets precluded the development of workable management hierarchy and the allocation of clearly defined managerial responsibilities.[117]

---

108. *See infra* notes 144-50 and accompanying text.

109. Henderson Crosthwaite was a UK-based stockbroker, headed by Mr. Christopher Heath, who eventually assimilated into the Barings Group management structure. *See* BARINGS REPORT, *supra* note 59, ¶ 2.4.

110. *See id.*

111. This term refers to the corporate structures that were closely involved with the collapse. Barings, plc (UK incorporated), the main holding company, that controlled Baring Brothers & Co. (BB & Co.) (UK incorporated and authorized by the Bank of England with its UK operations authorized by the Securities and Futures Authority). *See id.* app. ¶ XIV.2. BB & Co. controlled Barings Securities Ltd. (Cayman Islands incorporated with its head office in UK) which, in turn, controlled Barings Securities Ltd. (London) (UK incorporated), Barings Futures Pte, Ltd. (Singapore) (Singapore incorporated), and Baring Securities Ltd. (Japan) (Cayman Islands incorporated). *Id.* As this overly simplified list of companies suggests, the Barings Group, comprised of over 100 companies, posed many challenges to regulators, inspectors, and commentators.

112. See *id.* ¶ 2.5.

113. *See id.* The Barings Group made Mr. Heath the chairman of Barings Securities Ltd. (BSL). *Id.* ¶ 2.4.

114. *See id.* ¶ 2.8.

115. *See id.* (describing how the BSL growth exhausted regulatory capital allocations for securities operations and required short-term bank borrowing).

116. *See id.* ¶ 2.20. *See also id.* ¶ 2.22 (discussing replacement of top management structure at BSL and the development of a new matrix reporting structure in which "profit responsibility was on a product basis but with local office management having an important role in holding together the office infrastructure (systems, controls, accounting, settlements, and administration)").

117. *See supra* note 106 and accompanying text.

In April 1992, BB & Co. hired a new director, Mr. Ron Baker, whose former position at Bankers Trust made him attractive to Barings' "old-boys club" hierarchy.[118] His arrival also prompted a reallocation of the proprietary equity derivatives business under his guidance.[119] In hindsight, this placement was most unfortunate.[120] As Mr. Baker's comments indicated, he was much too lax in his responsibilities.[121] The Bank of England noted that Baker's managerial designation made him ultimately responsible for the profitability of the equity derivatives business.[122]

Another example where the management ignored sound business judgment was its lack of concern over the expressed skepticism about the arrival of Nick Leeson at Barings Futures (Singapore). As Peter Bax, head of the Singapore Office and eventual regional managing director, articulated,

> My concern is that once again we are in danger of setting up a structure which will subsequently prove disastrous and with which we will succeed in losing either a lot of money or client goodwill or probably both. . . . In my view it is critical that we should keep clear reporting lines and if this office is involved in SIMEX at all then Nick [Leeson] should report to Simon [Jones] and then be ultimately responsible for the operations side.[123]

---

118. *See id.* ¶ 2.42.

119. Three reasons motivated Barings' management decision. Firstly, derivatives did not fit within the culture of securities business and needed to prevent client overlap. Secondly, the Debt Financial Products Group had experience using proprietary derivatives from asset swap activity, which tended to be in OTC derivatives rather than in exchange traded derivatives. Thirdly, Barings perceived Ron Baker as a good motivator of proprietary derivative traders. *See id.* ¶ 2.44

120. Ron Baker's relation to Leeson enabled the unauthorized trades to continue. As Baker himself stated, "There is not doubt in my mind, that my lack of experience in the area was a contributing factor to what has happened here [the collapse]." *See id.* ¶ 2.47.

121. Baker's response to the Bank of England's inquiry will certainly advance this position: "It may well be that I bite off more than I can chew in taking the job that was proposed to me. Perhaps, I was far too cavalier about the way in which it was defined. I was willing to let other people define this thing. I would just take it on and fit . . . ." *See id.* ¶ 2.45.

122. *See id.* ¶ 2.48 (describing Baker's explanations about the profitability of the equity derivatives business without illustrating a sound understanding of the business or the facts).

123. *See id.* ¶ 2.59. Simon Jones was the local chief operating officer to whom Leeson was supposed to report. *See id.* ¶ 2.36. Jones did not consider himself "operationally responsible" for Leeson's day-to-day futures operations. *See id.* ¶ 2.54.

The matrix management system, whereby profit responsibility was allocated by product basis with more liberal participation by local office management on their internal organization, further exacerbated Barings Singapore operation's mismanagement. *See id.*

This memorandum, even with its first-name references to parties, indicated that Barings' management was not completely ignorant of the potential risks associated with this disorganized corporate structure and trading activity.[124] The operations of Barings Securities (Japan) also demonstrates the absence of successful risk control functions.[125]

The evolution of Nick Leeson's involvement within the Barings Group further illustrates the dynamics of Barings' "old-boys club" management style that defied conventional management techniques.[126] As the central figure in the Barings debacle, Leeson's personal history will also reveal the origin of his aggressive trading positions.

Leeson joined BB & Co. in 1989 to work on futures and options settlements, a continuation of his previous role at Morgan Stanley (London) from 1987 to 1989.[127] On May 1, 1991, he became a part of the Business Development Group in London, in charge of special projects and investigations within BB & Co.[128] He was involved with an investigation at Barings Securities Ltd. into the suppression of a late margin report arising from apparent collusion between an employee and a client with an overdrawn account.[129] This familiarity with Barings reporting procedures must have proved very beneficial to Leeson's own trading activity with the Singapore office.[130]

¶¶ 2.22 & 2.39.

> The fact that one individual (Leeson) was permitted to have first line responsibility for both trading and settlements meant that a crucial ingredient in the matrix organization of local integrity was absent in BFS. Therefore, management control was ineffective, in that management believed and relied upon the risk and performance information generated by transactions processed in BFS, apparently without independent investigation . . . .

See id. ¶ 2.40.

124. The "old-boy club" style of management, whereby political considerations outweigh technical expertise, is even present in other areas corporate control. The new head of Group Treasury and Risk, who was appointed in August 1994, claimed concern over the low level of experience among the staff in Barings' treasury and risk functions. Such inexperience contributed to the staff's inability to successfully execute a project about monitoring risk on a global basis, especially the role of margin calls on positions to set appropriate gross limits for the business. *See id.* ¶ 2.69.

125. *See, e.g., id.* ¶ 2.73 (describing how the risk control functions for Barings Japanese operations was rendered ineffective by its reliance on information that was supplied by Barings Singapore operations).

126. *See generally, e.g.*, AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS, AICPA AUDIT AND ACCOUNTING MANUAL (June 1, 1983) (discussing conventional management techniques).

127. *See* BARINGS REPORT, *supra* note 59, ¶ 2.56.

128. *See id.* ¶ 2.57.

129. *Id.*

130. In theory, Barings may have inadvertently commenced its own demise through

Barings' management was acquainted with Leeson's problematic character. In February 1992, Barings submitted an application to Securities and Futures Authority in London to enable Leeson to become a registered representative.[131] The Authority expressed hesitation to grant such registration because of "an undisclosed outstanding County Court Judgment against" Leeson.[132] The application was withdrawn due to Leeson's desire to secure employment in the Singapore office.[133]

At the end of 1992, Leeson took the SIMEX examinations which enabled him to wear a badge on the exchange floor and, upon passing, was able to trade on the floor of the exchange.[134] Subsequently, in early 1993, the London Office, believing the Singapore Office would supervise Leeson, appointed him General Manager of Baring Futures (Singapore) (BFS).[135] Thereafter, he became intertwined with the break-down of the management office structure and blamed for the demise of the Barings Group.

B. *The Role of Derivative Trading in the Expansion and the Collapse of the Barings Group's Structure*

Baring Futures (Singapore), where Nick Leeson conducted his unauthorized trading activity, had significantly contributed to Barings' overall profitability in the years prior to its collapse.[136] The expansion of Barings' overseas trading activities increased its available capital funding.[137]

---

giving Leeson an inside knowledge of how to conduct unauthorized trades outside the control of management supervision.

131. *See* BARINGS REPORT, *supra* note 59, ¶ 2.57.

132. *Id.*

133. *Id.*

134. *Id.* ¶ 2.60.

135. *Id.*

136. *Id.* ¶ 3.54. For 1994, Leeson's trading activity has been estimated to represent £28.5 million of £52.9 million revenue for the Structured Product Group. *Id.* Moreover, Barings remunerated Mr. Leeson's trading activities with numerous bonuses based on his trading performance. *Id.* ¶¶ 2.81-.85. For 1992 and 1993, Leeson received £35,746 and £130,000 respectively. *Id.* ¶ 2.92. His 1994 bonus before he resigned was estimated as £450,000. *Id.*

Moreover, these inflated bonuses helped to reduce "reported profit before tax" by £100,103,000 in 1993 and £102,381,000 in 1994. *Id.* at 141 fig. 8.1. These substantial savings demonstrate, although indirectly, the effect of derivatives on the Barings Group balance sheet. The volume of Barings' futures transactions also enabled the firm to exploit both positive and negative market trends which allowed Barings and its shareholders to benefit from overvaluation of the firm's available funds. *Id.* (illustrating the difference between shareholders' funds without reported derivatives losses and adjusted shareholders' funds with derivatives losses).

137. *Id.* ¶ 2.8 (describing the consolidation of Barings Group activities to avoid reg-

In addition, the capital funding costs for expanding the Barings Group were more than offset by Leeson-generated derivatives profits.[138]

Barings' equity derivative trading activity encompassed both the Over-the-Counter (OTC) proprietary[139] derivatives trading activity in London,[140] and the exchange trading proprietary business in Tokyo and Hong Kong.[141] The proprietary traders of the Tokyo volatility book[142] generated a majority of this revenue.[143] Leeson enhanced these traders' performance through his "switching activities."[144] The "switching" activ-

---

ulatory limitations and meet margin requirements). *See also id.* ¶ 6.65 (noting that manipulation in clients' margin accounts artificially inflated the Barings Securities Ltd. bank account that financed its futures trading).

138. *See id.* ¶ 3.63 (citing comments from a Barings Group financial officer about the January 1995 profits). "Wow! that is impressive . . . . You know if he [Leeson] makes US$10 million doing arbitrage in a week, what is that? About US$1/2 billion a year. That is pretty good doing arbitrage. That guy is a turbo arbitrageur!" *Id.*

Besides the inflated profits, the Barings Group received other benefits. From 1992-94, proprietary trading activities were recorded between the London and Japanese Securities businesses to exploit tax, regulatory, or margining benefits. *Id.* ¶ 5.10.

139. Proprietary trading is a generic term that refers to a financial institution's risk positions in a market and its corresponding accounts as separate from client business. *Id.* ¶ 2.17.

140. This OTC activity was mostly in debt rather than in equity derivatives and was conducted for proprietary purposes. *Id.* ¶ 2.44. Exchange-traded derivatives in London were based on the firm's LIFFE membership for trading interest rate futures and hedging their positions. *Id.*

141. Exchange-traded activities included equity index arbitrage in Tokyo and Hong Kong, comprised mainly of "Osaka Exchange traded equity index options and writing OTC equity swaps and options for clients." *Id.* ¶ 2.46. The Barings division responsible for these trades was the Equity Financial Group, located within Japan, that covered transactions "booked" in Japan and London, but managed in Singapore. *Id.* ¶ 2.47. "Booked" refers to an execution of a trader's buy and sell order. *Id.*

142. *Id.* ¶¶ 3.25-.27(describing how the activity started in 1993 and its profitability from price differences in Nikkei 225 contracts). "Volatility" trading represents the exploitation of mispriced options. *Id.* ¶ 4.59.

143. Sixty-five percent of revenue originated from "switching activity." *Id.* "Switching" was a specialized form of inter-exchange arbitrage over which Leeson had responsibility for intra-day risk limits that were set by Barings' Asset and Liability Committee. *Id.* ¶ 3.26. As in arbitrage, Leeson exploited price differentials through simultaneous purchases of the same futures contracts on different futures exchanges. *Id.* ¶ 3.27. This primarily involved Nikkei 225 contracts between the Osaka and Singapore exchanges in Tokyo traders' proprietary volatility book, conducted on behalf of Baring Securities (Japan) (BSJ) by Baring Futures (Singapore) (BFS). *Id.* Management referred to the "switching" book as "Leeson's business." *Id.* ¶ 2.43.

144. Leeson was considered the best person to take responsibility because of his position on the trading floor and his access to trade information. *Id.* ¶ 3.26. Ultimately, this "switching" activity greatly improved the quality of the futures hedging positions initiated by BSJ traders. *See id.* ¶ 3.27.

ity that Leeson conducted involved inter-exchange arbitrage to improve the futures hedging positions of Barings' Japanese traders.[145]

Leeson commenced switching activities in 1993 with his unauthorized trading activities through three major futures contracts traded on six exchange markets: 1) the Nikkei 225 contract which he traded on the SIMEX in Singapore and the Osaka Security Exchange (OSE) in Japan; 2) the ten-year Japanese government bond contract also traded on the SIMEX in Singapore and the Tokyo Stock Exchange in Japan; and 3) the three-month Euroyen contract, traded on the SIMEX and the TIFFE in Japan.[146] In addition, Leeson wrote options on these underlying contracts to evade internal auditors and government regulators.[147] These options enabled Leeson to allocate the costs of his wagering activity to Barings clients as well as to other Barings' Divisions, such that he could continue to conceal his trading losses.[148]

Variations in the trading systems enabled Leeson to perceive arbitrage opportunities and to exploit their profitability[149] as well as to employ creative financing schemes[150] and evade regulatory agencies.[151] Significant differences between SIMEX, OSE, and TSE included the infrastructure of the settlement systems, the margin requirements for trading members, and the calculation of risk for such requirements.[152]

Members of SIMEX trade contracts in "open-outcry" pits, which is an auction-based system that accelerates the rate of price movements and closings.[153] The Japanese exchanges, on the other hand, use electronic data input systems that minimize the lag from computer data entry by clerks and system updates, and decelerate the rate of closing contract

---

145. *Id.* ¶ 3.27. "Switching" refers to Barings' specialized arbitrage activity that "involved the simultaneous purchase and sale of the same futures contracts on different futures exchanges." *Id.* at 281.

146. *Id.* ¶ 3.7.

147. *See id.* ¶¶ 4.65-.67 (describing Leeson's straddle strategy through which he sold call and put options with the same strike price and profited from the straddle's premium). "Put options are contracts sold for a price (the premium) that gives the holder the right, but not the obligation, to sell to the writer of the contract [Leeson], over a pre-defined time period, a specified quantity of futures contracts at a specified price (the strike price)." *Id.* at 279. Call options represent similar contracts, except the holder has the right, but not the obligation, to buy from the option writer. *Id.*

148. *Id.* ¶¶ 5.44-.45 (noting the contribution of options to Leeson's ability to manipulate journal entries in the trading books for Barings Singapore operations).

149. *Id.* ¶ 3.8 (detailing valuation differences for the same contract between the OSE and SIMEX).

150. *See infra* notes 170-84 and accompanying text.

151. *See infra* notes 185-88 and accompanying text.

152. *See* BARINGS REPORT, *supra* note 59, ¶¶ 3.9-3.12.

153. *See id.* ¶ 3.10.

prices.[154] The slightest variation in time creates a small arbitrage opportunity, that is, a disequilibrium in prices between the two exchanges that can be exploited for significant profit only with a large volume transaction.[155] Thus, the structural inefficiencies of the exchange trading systems created the incentive for Leeson to take a high volume of futures positions and to exploit this profit opportunity.

The exchange systems also employ trading curbs on futures contracts which further exacerbate this price disequilibria.[156] The OSE and TSE both limit the daily overall price movements in futures contracts before trading becomes interrupted.[157] SIMEX, however, does not use a daily limit to monitor price movements.[158] Rather, SIMEX requires an obligatory fifteen-minute pause in trading when there exists a five-percent and ten-percent price move in Nikkei 225 contracts.[159] These distortions in market forces enabled traders, like Leeson, to have further incentives to exploit price disequilibria between these exchanges.

Most importantly, the ability for Leeson to finance his unauthorized trading activity came from variations in margin requirements.[160] The amount of margin required for SIMEX was calculated on the Standard Portfolio Analysis of Risk (SPAN) margining system that calculates initial margin requirements based on the aggregate portfolio risk position of a SIMEX member's account and on the anticipated adverse price movements generated by a statistical model.[161] SIMEX also requires members to maintain separate margin accounts for "client" and "house" positions which are margined on a gross basis.[162] Gross basis requires the value of contracts at time of purchase without deducting for long and short positions for the same contract.[163]

These characteristics offer traders, like Leeson, more opportunity to manipulate account positions and their respective margin requirements because the absence of netting removes the incentive for hedging "cli-

---

154. *Id.*

155. *Id.* ¶ 3.27. *See, e.g.*, J. ORLIN GRABBE, INTERNATIONAL FINANCIAL MARKETS 82 (1986) (analyzing the presence of commercial banks in exploiting arbitrage opportunities for interbank swaps).

156. *See* BARINGS REPORT, *supra* note 59 ¶ 3.11.

157. *Id.*

158. *Id.*

159. *Id.*

160. *Id.* ¶ 3.12. *See also id.* ¶ 5.42 (discussing manipulation of trading positions for house and client accounts for evading margining requirements).

161. *Id.* ¶ 3.12.

162. *Id.* ¶ 3.13.

163. *Id.*

ent" and "house" positions.[164] Perhaps, as illustrated by Leeson's trading activity, gross basis adjustment enhances speculative trading, that is, more traders need to maximize overall cash-flow for their trading positions to preserve such positions and to minimize margin requirements.[165]

Unlike SIMEX, the Japanese use a different method to calculate initial margin requirements. Initial margins for Japanese exchanges are determined by fixed percentages of each contract's value.[166] This calculation makes the margin requirement much more sensitive to market trends.[167]

Within this schemata, Leeson exercised his authority to conduct Barings "switching" business between SIMEX, the Osaka Securities Exchange (OSE) for Nikkei 225, the Tokyo Securities Exchange (TSE) for Japanese government bonds, and the TIFFE for Euroyen contracts.[168] The Barings Group's management, along with the Bank of England, has categorized the majority of Leeson's transactions as unauthorized, that is, he acted completely beyond the scope of his superior officers for approximately three years.[169]

A transaction, known in trade parlance as a "cross trade," enabled Leeson to make unauthorized price adjustments in his switching activities.[170] Usually, an exchange member uses a cross trade to match buy and sell orders for the same contract at the same price for two different customer accounts.[171] Leeson conducted many such trades on the SIMEX exchange[172] between account 88888 and account 92000 (containing arbitrage positions for the Japanese Securities operations in Nikkei and Japanese Government bond contracts), account 98007 (containing arbi-

---

164. *Id.* (describing TIFFE "net basis" margin policy that allows long and short positions for the same contract within different "house" accounts to offset each other).

165. *See, e.g., id.* ¶ 3.15. *See also id.* ¶¶ 14.26-.27 (noting how Leeson's involvement with numerous exchanges and their policy frustrated Barings risk management policy). Risk management refers to the level of credit exposure that a financial firm can effectively manage without jeopardizing its overall operations. *See, e.g., id.* ¶ 14.21. Commingling house and client monies for margin payments undermined such risk management policy because incorrect accounting entries exacerbated miscalculations. *Id.* ¶ 14.22.

166. *Id.* ¶ 3.12.

167. *Id.*

168. *Id.* ¶ 5.9.

169. *Id.* ¶ 4.50. It astonishes this commentator how a single trader in the Barings Singapore operations, from 1992 to 1995, could create a billion dollar loss when he, as well as the Singapore operations, were only authorized to conduct transactions for customers or other Barings companies. *Id.*

170. *Id.* ¶ 5.14.

171. This transaction permits two floor traders from the same firm to transfer positions through an exchange for two accounts of a exchange member. *Id.*

172. *Id.*

trage positions for the London Securities operations in Japanese Government bond contracts), and account 98008 (containing arbitrage positions for the London Securities operations in Euroyen contracts).[173] The fulcrum of Leeson's activity was account 88888,[174] which enabled him to manipulate his trading positions[175] and to shield his losses from detection.[176]

Tracing these account's trading positions and profits, one can quickly discern that Leeson was more of a punter than a financial strategist.[177] Starting on January 1, 1995, Leeson was filling this account with long Nikkei 225 contracts; in other words, he was betting that the index would increase over the long-run.[178] Unfortunately, he was very long and very wrong.[179] The more long positions he maintained to cover his preceding losses, the further downward the index sunk.[180]

On February 23, 1995, account 88888 had a position in long futures that covered 49% of "open" interest in March 1995 contracts and 24% in June 1995 contracts.[181] This sheer volume, compounded by the lack of sound financial analysis, produced the inevitable disaster. Barings could not meet its Yen variation margin for the 23rd of February, nor its increased initial margin, when the Nikkei opened 880 points down on the 27th of February.[182] SIMEX assumed these positions and sent Barings Futures Singapore, Ltd., into receivership.[183]

---

173. *Id.* ¶ 5.15.

174. Since July 8, 1992, Leeson was using this account for unauthorized purposes. *See id.* ¶ 5.3 (quoting a systems consultant in the Singapore office, Dr. Edmund Wong, who received instructions from Leeson to modify software to exclude that account from all major file reports, except the Margin File report).

175. Account 88888 constituted an essential element of Leeson's trading activity: "It appears that after the conclusion of the trade, Leeson would instruct the settlements staff to break down the total number of contracts into several different trades, and to change the trade prices thereon to cause profits to be credited to 'switching' accounts referred to above and losses to be charged to account 88888." *Id.* ¶ 5.17.

176. *Id.* ¶ 4.15 (describing how the account was used to book adjustments and factitious transactions that meant to conceal daily account balances from SIMEX and Barings, as well as the account's monthly ending equity balance).

177. *See, e.g.*, Richard W. Stevenson, *Big Gambles, Lost Bets Sunk a Venerable Firm*, N.Y. TIMES, Mar. 3, 1995, at A1, D15.

178. *See* BARINGS REPORT, *supra* note 59, ¶ 4.18.

179. *See id.* ¶¶ 4.20-.23 (describing impact of Kobe earthquake on Nikkei 225 contracts and Leeson's wrongly anticipated market recovery or desire to capture the market, as well as the presence of increased volatility and its impact on amplifying market movements).

180. *Id.* ¶ 4.24.

181. *Id.* ¶ 4.25.

182. *Id.* ¶ 4.27.

183. *Id.*

The financing of Leeson's trading activity from 1992 through 1995 also increases the mystery why neither financial regulators[184] nor Barings' management[185] discovered these "unauthorized" trades. Leeson's financing strategy affected the entire Barings Group structure and caused the Group's collapse. His funding originated from third-party clients of Barings Securities London and Japanese operations, as well as from Banque National de Paris, the Singapore operation's sole client.[186] The funding from other Barings companies also contributed to this financial interdependence.[187]

Unlike the Bank of England which blamed one individual for the Barings collapse,[188] this author believes that the intended and unintended managerial problems at Barings,[189] as well as the variations in exchange systems and the activities from Leeson's *homo luden* nature, produced the devastating margin call of £827 million. This signalled an abrupt halt in the existence of Baring's banking and financial services.[190]

The Barings Collapse shocked the international financial community. As a result, the international financial community quickly responded with numerous voluntary arrangements between trading exchanges and their systems.[191] Moreover, the Barings Collapse has energized and altered the

---

184. Barings' activities evaded numerous regulators including the Bank of England (the lead regulator of the Barings Group), the Securities and Futures Authority (the regulator of Barings Securities Ltd and Barings Securities (London) Ltd), the SIMEX (the regulator of Barings Securities (Singapore) Ltd), and Japanese Ministry of Finance (the regulator of Barings Securities (Japan) Ltd). *See id.* ¶ 11.1.

The Bank of England partially blames its laxity on the consolidation of Barings' operations and its computer systems' inability to monitor the margin accounts of Barings' clients on an individual basis. *See id.* ¶¶ 11.21-.31. The Bank also acknowledged its ignorance about Barings Securities operations and its jurisdictional uncertainties about the firm's overseas transactions. *Id.* ¶ 11.22.

185. *Cf. id.* ¶¶ 6.22-.35 (describing Barings Investment Bank's ineffective supervision and overall ignorance about the funding for the Singapore trading operations).

186. *Id.* ¶ 6.6.

187. *Id.* (noting how other Barings companies borrowed funds from outside banks or each other to finance Leeson's SIMEX positions). *See also id.* ¶ 6.20, ¶¶ 6.62-.80 (illustrating cumulative funding on company-by-company contribution from 1994 through 1995).

188. *See id.* ¶ 14.1.

189. *See, e.g., Barings Once More, supra* note 104 (citing the skepticism in the Singapore Inspector's report about the ignorance of Barings management to Leeson's activity, due to the firm's ability to uncover account 88888 within hours of Leeson's departure).

190. *See id.*

191. The Windsor Declaration represented a voluntary arrangement between leaders of regulatory bodies from the United States, Great Britain, and fourteen other countries to increase global supervision of large market positions and enhance cooperation between

debate about the role of derivatives in the banking industry and the attendant regulatory modifications therein.[192]

IV. SOME LESSONS FROM CURRENT DERIVATIVE REGULATORY REGIMES AND THEIR ROLE IN FUTURE INTERNATIONAL EFFORTS

The complexity of derivative products necessitates a broad spectra of regulatory guidelines. There exists both governmental regulations, originating in securities,[193] commodities,[194] and banking laws[195] as well as private self-regulating rules, announced by the International Swaps and Derivative Association (ISDA),[196] the Financial Accounting Standards Board (FASB),[197] and voluntary cooperation agreements between trading markets.[198]

In light of the Barings Crisis, three major regulatory areas warrant further analysis. Firstly, the evolution of existing regulation and the history of proposed regulation can demonstrate the major players in this financial product and their impact on national and international governments.[199] Secondly, the procedural operation of derivative instruments and corresponding regulations can illustrate that exchange markets, especially their operation and margin requirements for traded products, should be

---

market regulators and authorities. *Derivative Rules Proposed*, INV. BUS. DAILY, May 18, 1995, at B1 (quoting remarks from the chairman of the U.S. Commodity Futures Trading Commission that the declaration should decrease the market crisis caused by the single failure of a single participant, i.e. the Barings Collapse).

192. *See, e.g.*, Graham, *supra* note 103.

193. *See, e.g.*, Marc A. Horwitz, *Swaps Ahoy! Should Regulators Voyage Into Unknown Waters*, 1 IND. J. GLOBAL LEGAL STUD. 515, 526 (1994) (describing the relationship among derivatives, the Securities Act of 1933 and the Securities Exchange Act of 1934).

194. *See, e.g.*, PHILIP M. JOHNSON & THOMAS L. HAZEN, COMMODITIES REGULATION § 1.31 (2d ed., 1989) (discussing the supervisory role of the Commodity Futures Trading Commission in exchange markets).

195. *See, e.g.*, Charles E. Dropkin et al., *United States, in The Regulations Governing Derivatives: An International Guide, 1992 Int'l Fin. L. Rev. 38, 51-53* (Jan. 1992 Special Supp.) (describing the regulatory paradigm of the Federal Reserve Board and the Office of Comptroller of the Currency in U.S. banks' derivative activities).

196. *See, e.g.*, Aaron Pressman, *Firms Urged to Fully Disclose Derivatives Use*, REUTERS, BC CYCLE, Mar. 7, 1996, *available in* LEXIS, News Library, TXTNWS File (illustrating the function of the International Swaps and Derivatives Association to improve the soundness of derivative products).

197. *See, e.g.*, KPMG, *supra* note 13, at 41-46 (describing how FASB provides criteria for hedging and speculating positions in derivative transactions).

198. *See, e.g., Derivative Rules Proposed, supra* note 191 (describing Windsor Declaration's attempt to improve cooperation and communication among market regulators).

199. *See infra* notes 202-52 and accompanying text.

the focus of regulatory reform.[200] Finally, the role of government in providing incentives for derivative-users to harmonize their trading practices, especially banks' derivative activities, can provide the most robust policy for international regulatory reform.[201]

A. *A Brief Review of the U.S. Derivative Regulatory Regime*

Government agencies have traditionally delineated their regulatory responsibilities based on public policy considerations—the ordinary consumers of financial products and the stability of financial markets.[202] Unlike traditional securities, the nature of derivative products creates significant uncertainty that hampers serious regulatory development. The problem is the "unpublic" nature of these financial products, which are traded by highly sophisticated investors with access to financial institutions and their services.[203] Besides the hedging feature of such products,[204] the ordinary investor has neither the wealth nor the investment need to speculate with such products.[205] As a result, financial institutions, like Barings, and their financially savvy customers dominate derivative markets.[206] This highly selective group of players has numerous interests in limiting government intervention in its trading activity. Competitive forces between derivative market participants can best explain the inertia behind regulatory developments.[207] The existing derivative framework that contains both jurisdictional and legal uncertainties enhances this competitive environment.[208] As previously analyzed, the hallmark of de-

---

200. *See supra* note 198

201. *See infra* notes 237-58 and accompanying text.

202. *See, e.g.*, Ray Garrett, Jr., *New Directions in Professional Responsibility*, 29 BUS. LAW. 7 (March 1974) (describing the policy goals of the 1933 Securities Act as an attempt to "make the world safe for small investors against the depredations of the robber barons, the princes of privilege, the malefactors of great wealth and the just plain bandits of earlier days.").

203. *See User Profile*, DERIVATIVES WK., Dec. 25, 1995, at 5 (profiling derivitive purchasers and giving insight into the process of making derivative purchase decisions).

204. *See* William Glasgall & Greg Burns, *Hedging Commandments: Rules to Live by in A Dangerous Game*, BUS. WK., Oct. 31, 1994, at 98 (describing the success of derivative instruments in hedging against market fluctuations and attracting more investors).

205. *See id.* at 99 (listing the most successful Fortune 100 companies that have used derivatives).

206. *See* George A. Walker, *Centrepoint: Financial Derivatives—Global Regulatory Developments*, 1996 J.B.L. 66, 70 (Jan. 1996) (describing concentration of derivatives markets by United States bank dealers).

207. *CME Rolling Spot Rolls into Exempt Area*, FUTURES INDUSTRY, Nov/Dec 1993, at 15 (commenting about competition between futures exchanges and customized derivative products and its impact on product development).

208. *See, e.g.*, Horwitz, *supra* note 193 (commenting about interpretative variations

rivative trading is the profit generated from the inherent risk contained in the product. The presence of risks, especially legal risks, contributes to the innovation of new financial products.[209]

The existing securities[210] and commodities[211] regulations which have served as the foundation for subsequent regulatory development provide an inadequate basis for derivative market reform. While these laws help to protect financial markets[212] and investors[213] from gross exploitation and unnecessary risks,[214] they cannot be superimposed onto the ultraspeculative market of derivatives. The interplay between securities laws, via the SEC, and the commodities laws, via the CFTC, reveal such inadequacy.[215] The ground-breaking case, *Chicago Mercantile Exch. v. S.E.C.*,[216] helped to establish some jurisdictional boundaries between these agencies' control over derivative products.[217]

Jurisdiction aside, each agency's laws have significant limitations to ensure the financial soundness of derivative instruments.[218] These limitations originate from the heavy regulations that usually apply to the underlying asset or indicia of the derivative instrument rather than to the

---

for securities within court decisions).

209. *See* Dropkin et al, *supra* note 195, at 38 (noting how the exemptions of the Securities Act of 1933 affect the structure of swap transactions).

210. *See, e.g.*, Singher, *supra* note 10 (footnotes omitted) (citing securities laws that affect disclosure procedures for derivative instruments, substantive regulations for financial intermediaries of derivative instruments, and anti-fraud provisions for derivative instruments that are outside of the common law).

211. *See id.* at 1423-27 (footnotes omitted) (detailing the CFTC's regulatory supervision that covers all futures or commodities exchanged-traded derivative contracts in futures and options).

212. *See id.* at 1445 n.378 (discussing how the Securities Exchange Act of 1934 was designed to safeguard markets from fraudulent and manipulative acts).

213. *See generally* THOMAS L. HAZEN, TREATISE ON THE LAW OF SECURITIES REGULATION (2d ed. 1990) (describing the SEC's regulatory activities for preserving investors' access to accurate securities information).

214. *Id.*

215. For example, the SEC has recently issued a consent order to recharacterize a complex derivative transaction as a put option rather than a swap, such that the agency could assert jurisdiction. *See* John C. Coffee, Jr., *Bankers Trust Settlement: Whither the Swaps Market?*, 213 N.Y.L.J. 5 (1995).

216. 883 F.2d 537, 539 (7th Cir. 1989), *cert. denied*, 496 U.S. 936 (1990).

217. *Id.* at 545-46 (expanding the jurisdiction of the CFTC over transactions that could be characterized as a security and a future).

218. *See* Gregory J. Millman, *Derivatives as Dump Trucks: They Are Risky, But They Haul Away the Refuse of Bad Government Policy*, WASH. POST, Dec. 18, 1994, at C2 (commenting about the mobility of financial institutions and the role of derivatives in internationalizing and evading domestic regulators).

derivative itself.[219]

1. Some Lessons from the SEC

Derivatives, unlike securities, serve an entirely different economic function in a transaction.[220] Therefore, any attempt to squeeze derivative products under the SEC regulatory framework will not be effectual. First, derivatives have a much smaller investor clientele that utilizes such products for non-traditional business purposes.[221] Second, derivative products are developed to modify existing assets, like securities, that do not satisfy an end-user's financial objectives.[222] Third, the business of derivatives transactions requires ever-changing levels of specialization that hampers the SEC's ability to provide substantive regulatory oversight for participating financial intermediaries.[223]

Fourthly, financial intermediaries, like the former Barings Group, that deal in derivative products create their own markets for particular products or, at least, have a strong presence in a particular derivative product.[224] Fifthly, SEC disclosure requirements, correlating to derivative risks and related information asymmetries, are simply too difficult to implement with any degree of certainty.[225] Most importantly, the majority of SEC regulations, developed in response to a systemic break-down of the securities markets in the 1930s, do not apply to the resilient derivative

---

219. *See* JOHNSON & HAZEN, *supra* note 194, § 1.31.

220. The business and economics of securities differ from derivative transactions that serve highly specialized investment purposes. For example, securities are generally issued to garner equity investment and usually purchased to pursue a gain. Derivatives could serve infinite financial objectives. *See generally* KPMG, *supra* note 13.

221. *See, e.g.*, GLOBAL DERIVATIVES STUDY GROUP, *supra* note 65, at 38 (discussing the dominant presence of large corporations in the derivatives market). *See also* Hu, *Misunderstood Derivatives*, *supra* note 10, at 1464-65 (highlighting sophistication and financial resources as hallmark of OTC market participants and products).

222. *See* Hu, *Hedging Expectations*, *supra* note 10, at 996 (commenting about the uses of "structured" products by financial engineers in nontraditional securities issuances). Structured products are specially designed securities with custom-tailored formulas for interest or principal payment streams. *Id.* at 997 n.46.

223. *See* Dropkin et al., *supra* note 195, at 38 (describing the development of derivative products to evade SEC scrutiny). *See also* GLOBECON GROUP, *supra* note 46, at 314-20 (explaining the concept of "regulation lag" on the quickly increasing derivative markets).

224. *See, e.g.*, William Glasgall & Bill Javetski, *Swap Fever: Big Money, Big Risks*, BUS. WK., June 1, 1992, at 102, 103 (commenting about the relationship between high credit-rated banking institutions and traders with particular derivative products and markets).

225. *See* Singher, *supra* note 10, at 1421 n.203 (citing aspects of the mandatory disclosure requirements that are inadequate for certain derivative products).

markets of the 1990s.[226]

2. Some Lessons from the CFTC

Commodities laws provide similar piecemeal regulatory remedies that exacerbate the inadequacy of securities laws. The limited commodities and futures transactions that are within the CFTC authority can be considered too narrow to provide a regulatory foundation for derivative transactions.[227] As with the SEC, the CFTC was established to regulate the trading of commodities and related contracts, not to regulate the extended financial services and attendant risks of derivative products.[228]

Recent modifications to the CFTC's regulatory authority have helped to remedy jurisdictional ambiguities between the SEC and the CFTC.[229] These modifications[230] have primarily enabled the agency to monitor the innovation of swap products.[231]

The benefactors of the CFTC's discretionary powers can support some speculation about the financial lobbying interests behind the Treasury Amendment[232] to the Commodity Exchange Act.[233] International fi-

---

226. *See* Garrett, *supra* note 202, at 8 (commenting about how the regulatory system has preserved the securities markets from the abuses of the 1930s and their impact on the overall economy).

227. *See, e.g.*, Singher, *supra* note 10, at 1423-24 (footnotes omitted) (citing reasons for the enactment of the Commodities and Exchange Act and the creation of the CFTC, particularly the Federal Government's supervision of agricultural commodities and commodity futures and options contracts respectively).

228. *Id.*

229. *See* Levy, *supra* note 10, at 2009-11 (footnotes omitted) (explaining how the Futures Trading Practices Act of 1992 (FTPA) and the SEC/CFTC Jurisdictional Accord define the regulatory functions of each agency). The SEC/CFTC Accord allocated jurisdiction between these agencies through placing options on securities or securities indicies outside CFTC's jurisdictional reach. *Id.* (citing 7 U.S.C. § 2(a)(i) (1988 & Supp. V 1993)). The FTPA permits the CFTC to exempt certain futures contracts from regulatory oversight. *Id.* (citing 7 U.S.C. § 6(c)(5)(B) (1988 & Supp. V. 1993)).

230. The Treasury Amendment of the Commodity Exchange Act achieved these modifications. 7 U.S.C. § 2 (1988 & Supp. V 1993). This amendment affects security rights, resales of installment loan contracts, repurchase options, government securities, or mortgages and mortgage purchase commitments, unless such transactions involve the sale thereof for future delivery conducted on a board of trade. 7 U.S.C. § 2(a)(1)(A)(ii) (1988 & Supp. 1993). *See also* Singher, *supra* note 10, at 1425-28, nn.229-31 (citing the CFTC's swap exemptions and explaining their requirements).

231. *See, e.g.*, Daniel P. Cunningham et al., *An Introduction to OTC Derivatives, in* SWAPS AND OTHER DERIVATIVES IN 1994, at 164 (PLI Corp. Law & Practice Course Handbook Series No. B4-7062, 1994) (describing the attractiveness of overseas swap markets before the CFTC's exemptions of swap agreements).

232. 7 U.S.C. § 1 (1988 & Supp. 1993).

233. For example, the eligibility requirements for swap exemptions affect a particu-

nancial players, for example, who wished to avoid conflict with foreign regulators, might have sought the non-U.S. currency exemptions.[234] These exemptions also encourage more innovations in non-U.S. currency products that may help dealers and end-users evade CFTC regulations and corresponding transaction costs.[235]

The impact of these exemptions indicates that the financial lobbying interests have no common uniform legislative goal. Otherwise, special exemptions would not be needed to satisfy particular interests in particular markets.[236]

3. Some Lessons from U.S. Bank Regulation

Derivative regulations also attach from the financial institutions that use them. The large presence of commercial banks in the derivative markets[237] enables U.S. banking regulators to increase their oversight of de-

---

lar class of product users who must have had some involvement in the legislative process. Some eligibility requirements for a swap transaction to fit within the CFTC exemption include

(a) The swap agreement is entered into solely between eligible swap participants at the time such persons enter into the swap agreement;
(b) The swap agreement is not part of a fungible class of agreements that are standardized as to their material economic terms;
(c) The creditworthiness of any party having an actual or potential obligation under the swap agreement would be a material consideration in entering into or determining the terms of the swap agreement, including pricing, cost, or credit enhancement terms of the swap agreement; and
(d) The swap agreement is not entered into and traded on or through a multilateral transaction execution facility.

17 C.F.R. § 35.2 (1997).

234. *Id.*

235. *Id.*

236. *See, e.g.*, Futures Trading Practices Act of 1992, Pub. L. No. 102-546, 106 Stat. 3590 (1992) (detailing Congressional attention on hybrids, swaps, forwards, and bank accounts and the role of CFTC exemptions on these instruments).

237. Based on notional principal amounts, the top ten U.S. commercial banks that deal in derivative products are:

Bank	Total Derivatives (U.S. $ in millions)
Chemical Bank	3,185,185
Citicorp NA	2,608,869
Morgan Guaranty TC	2,426,414
Bankers TC	2,114,580
Chase Manhattan BK NA	1,369,821
Bank of America NT & SA	1,312,890
First Nat. Bank of Chicago	624,401
Nationsbank of North Carolina NA	505,306
Republic Bank of New York	235,994

rivative transactions. These regulators include the Federal Reserve Board (FRB),[238] the Office of the Comptroller of Currency (OCC),[239] and, indirectly, the Federal Deposit Insurance Corporation (FDIC).[240] Such regulators justify their presence in this market through the need to monitor the risk levels of derivative products in banking operations.[241]

These three regulatory bodies greatly contributed to the presence of American banks in the derivative market for three reasons. First, bank regulatory oversight fostered investor confidence in the institutions that deal with such risky products.[242] Secondly, such investor confidence enabled these institutions to innovate more risky and complex derivative products.[243] Most importantly, the rate of evolution of these derivative products[244] and their role in U.S. banks' profitability meant that banks

---

Bank of America, ILL.	98,608

Walker, *supra* note 206, at 71 n.23 (citing 1994 reports from U.S. banks).

238. *See, e.g.*, Dropkin et al., *supra* note 195, at 52 (describing approval requirements for banks to enter contracts where there exists no right to purchase the underlying asset).

239. *Id.* (describing OCC oversight of banks' asset/liability management programs and their dealer/broker trading activities.)

240. BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, THE FEDERAL RESERVE SYSTEM: PURPOSES AND FUNCTIONS 150-51 (1939) (commenting about the role of deposit insurance in management operations to maintain adequate capital levels for institutional activities).

241. Banking regulators' efforts are centered around one aspect of the derivative product— risk—and its impact on the capital operations of banks' financial health. *See, e.g.*, GLOBECON GROUP, *supra* note 46, at 315-19 (discussing the role of capital adequacy requirements to cover derivative risks). Derivatives constitute assets that warrant consideration in the calculation of these banks' risks. *See* 12 C.F.R. pt. 325 appendix A (1997) (identifying derivative instruments based on the nature of their credit risks). The OCC, the FRB, and the FDIC continue to monitor the capital adequacy ratios which are meant to safeguard against undercapitalized banks and their impact on systemic risk to the U.S. banking industry. *See, e.g.*, GLOBECON GROUP, *supra* note 46, at 319 (commenting about the increased systemic risks from derivative transactions, the interdependence of global financial markets, and their impact on U.S. bank regulators).

For an excellent technical discussion about capital adequacy guidelines on an agency-by-agency basis, see Singher, *supra* note 10, at 1428-31 nn.255-65 (discussing OCC oversight of banks' investment portfolios, valuation calculations, and its impact on the liquidity of the American Banking System; and the FDIC's administration of deposit insurance that instills depositor confidence and provides funding for deposit-oriented banks and their derivative operations).

242. *See, e.g.*, GLOBECON GROUP, *supra* note 46, at 316 (discussing the role of banking institutions in minimizing the credit risks with counterparties).

243. *Id.*

244. *See, e.g., id.* at 55-56 (explaining the three year life cycle of certain swap products that included introduction, growth, maturity, and decline).

could commandeer regulatory developments.[245] The prominence of American banks in the trading of derivative products supports this hypothesis.[246]

Banks have entered the derivatives business to exploit new revenue sources as their traditional lending activities have turned less profitable.[247] The off-balance sheet nature of derivative products might explain why banks originally explored this market.[248] The high-credit rating of banking institutions have also helped to attract investors into the OTC derivatives market and create a sense of stability, knowing that a counterparty's obligation would be satisfied.[249] Most importantly, the competition between banking and financial institutions influenced commercial banks to expand their services through derivative products.[250] Without a doubt, de-

---

245. *See id.* at 314-15 (discussing the concept of "regulation lag"). The rapid development of new derivative products and its impact on regulatory efforts to gain a significant supervisory position of the derivative markets is known as regulation lag. *Id.*

246. *See* Walker, *supra* note 206, at 70-72.

247. The 1980s contained a major evolution in the function and purpose of the American Banking system. Two major events badly hurt the profitability of American banks and contributed to their low rankings against other international financial institutions. *See, e.g.*, Shuman, *supra* note 2, at 10 (discussing the low rankings of U.S. banking institutions in 1992). First, Third World countries defaulted on their debt obligations which, in turn, required restructuring of international revenue sources. *See* ITZHAK SWARY & BARRY TOPF, GLOBAL FINANCIAL DEREGULATION: COMMERCIAL BANKING AT THE CROSSROADS 3 (1994). More importantly, the FRB's monetary policy that pursued a zero-inflation strategy reduced the profitability of banks' lending activities. *Id.* The incentive and talent to exploit alternative revenue sources compelled banks to offer other financial service products, especially derivatives. *See generally* Shuman, *supra* note 2.

248. *See* GLOBECON GROUP, *supra* note 46, at 316 (describing how a swap is a synthetic off-balance sheet products that essentially represents a loan to a counterparty that would normally be included on a bank's balance sheet). "Off-balance sheet" refers to a bank's risk exposure on particular items that are not included in the calculations for a bank's capital adequacy ratios. *See generally* Frederick M. Struble & Norah Barger, *International Capital Standards for Banking Institutions, in* REGULATION OF FOREIGN BANKS: U.S. AND INTERNATIONAL 4-1 (Michael Gruson & Ralph Reisner eds., 2d ed. 1995). The OCC, along with other domestic and international regulators, aggressively monitors such products. *See id.* at 4-4 (explaining the international risk-based capital framework and its impact on 1994 capital adequacy guidelines that were issued by the Board of Governors of the Federal Reserve System). *See generally* OFFICE OF THE COMPTROLLER OF THE CURRENCY, RISK MANAGEMENT OF FINANCIAL DERIVATIVES (1994) (outlining the OCC's role in regulation).

249. *See supra* notes 242-46 and accompanying text.

250. *See* Shuman, *supra* note 2, at 12 (discussing the impact of the Glass-Steagall Act on the international activities of U.S. commercial banks). The Glass-Steagall Act generally separates commercial banking (i.e. lending and deposits) from securities underwriting (i.e. dealing in corporate debt or equity). *Id. See also* Schwimmer, *supra* note 53, at 9 (commenting about U.S. banks' derivative activities and their impact on legislative at-

rivative products have contributed to the recent profitability of American banks throughout the 1990s.

The conflict between the financial objectives of derivative market participants and the policy constraints on U.S. bank regulators illustrates some problems with future regulatory developments. For example, because the Federal Reserve monitors the financial integrity of banking activity, its valuation of these products' risks and benefits greatly varies from the banks that use them.[251] The Federal Reserve's recent pre-commitment approach acknowledges this conflict, allowing banks more freedom to calculate risk and to operate accordingly.[252]

4. U.S. Regulatory Lessons Revisited

The unifying theme amongst these compartmentalized and fragmented regulatory agencies is their need for information about the financial products and the agency's basis for assessing their risks.[253] The importance of acquiring such information can be observed in the voluntary agreements and regulations that affect derivative transactions.[254] The

---

tempts to reform the Glass-Steagall Act).

The competitive influences from mutual funds, mortgage banks, and finance companies also affect the search for alternative, regulatory-friendly financial instruments. *See, e.g.*, Shuman, *supra* note 2, at 13.

251. *See, e.g*, Lustgarten & Ma, *supra* note 44, at 102 (citing the Federal Reserve Trading Manual and its value-at-risk approach to calculate market risk levels in banking activities). The value-at-risk approach uses a pricing model to examine potential changes in market positions of an institution or its portfolio. *Id.* The Federal Reserve permits the use of other risk measures that are similarly accurate and rigorous. *Id.* at 103.

252. *See* Fox, *supra* note 3 (explaining the Federal Reserve's pre-commitment approach). This approach permits banks to use their own calculations to determine appropriate capital levels for their trading positions. *Id.* If a bank's trading activity produces more losses than its capital levels can sustain, then the bank will face penalties. *Id.*

253. *See, e.g., Washington Update, Wallman Announces SEC Derivatives and Market Risk Proposal,* J. ACCT., Dec. 1995, at 15 [hereinafter *Washington Update*] (explaining the quantitative and qualitative risk disclosure requirements for proposed amendments to SEC regulation about derivatives and related financial products).

Quantitative requirements include the presentation of material exposure to market risks through tabular presentation of future cash flows, results of sensitivity and shock analysis with certain financial variables, and value-at-risk exposure from normal market movements. *Id.*

Qualitative requirements include a company's discussion of primary risk exposures, management objectives and strategies for managing risk, and a contextual basis to understand these requirements. *Id.*

254. *See, e.g., Global Regulation Gathers Pace,* FIN. REG. REPORT, May 1995, at 1 (commenting about the joint guidelines, issued by the Basle Committee and the International Organization of Securities Commissions (IOSCO), about the information parameters needed to evaluate derivative risks in banking and securities institutions' operations).

ISDA and similar non-governmental associations have encouraged information-sharing agreements between exchanges on which derivatives are traded.[255] They also encouraged compliance with standardized accounting procedures[256] to minimize miscalculations and misleading information.[257] The problem with these associations and their policies is their members' self-serving interests.[258]

5. Some Lessons from Leeson

The Barings Crisis demonstrated the effectiveness of the existing regulatory framework and strengthened international cooperative ef-

---

255. *See, e.g.*, Laurie Morse, *Survey of Derivatives*, FIN. TIMES, Nov. 16, 1995, at 2 (describing the Unified Clearing Group and its information-sharing agreement between the clearing division of 19 U.S. securities and futures exchanges).

256. The Financial Accounting Standards Board (FASB) promulgates accounting standards that relate the intended use of a derivative instrument with the economics of a transaction. *See* KPMG, *supra* note 13, at 41-50 (explaining variations in Financial Accounting Standards (FAS) for hedge accounting, such as FAS 52 and its application to forward-based foreign exchange contracts and FAS 80 and its application to non-currency futures and forward contracts). *See also Washington Update, supra* note 253 (quoting the SEC Commissioner about the role of FASB in derivative regulations, especially FASB Statement No. 119 and its impact on disclosing information about derivative activities, even off-balance sheet instruments).

Accounting standards also affect international organizations and their adoption of disclosure standards for derivative risk. *See, e.g*, Mario Monti, Regional Financial Areas: The EU Experience and Future Prospects, Speech from the *IOSCO Conference*, July 13, 1995, *available in* LEXIS, Europe Library, RAPID file (commenting about a potential adoption of international accounting standards between IOSCO and IASC (International Accountings Standards Committee)). Besides improving reliance on risk calculations, harmonized accounting standards would help to remove many anomalies from international financial transactions. *See, e.g.*, Marcel Michelson, *Regulators Spotlight Barings, Accounting Standards*, REUTERS, BC CYCLE, July 7, 1995, *available in* LEXIS, World Library, TXTNWS File (illustrating problematic transnational accounting standards that made Diamler-Benz AG report a loss under American standards and a profit under German rules).

257. *See* KPMG, *supra* note 13, at 68-71 (detailing Statement of Financial Accounting Standards No. 119 and its role in disclosing information about derivative instruments' market risks and their impact on a firm's risk management strategy).

258. *See* Floyd Norris, *Progress Seen in Accounting Board Dispute But SEC Chairman Doesn't Give Details*, N.Y. TIMES, June 28, 1996, at D3 (noting the concern of the SEC chairman about the selection process for the FASB). The interest groups that are most effected by FASB rules play a major role in selecting FASB members. *Id.*

Similar self-serving interest group pressure is present in derivative organizations. For example, the role of derivatives dealers in preparing voluntary conduct guidelines, known as Principles and Practices for Wholesale Financial Transactions, has received much criticism for its dealer-oriented biases. *See* Morse, *supra* note 255.

forts.[259] Voluntary agreements, in particular, were the hallmark of such efforts.[260] These agreements re-enforced the resilience of derivative markets and their ability to handle such large losses.[261] Because each group of derivatives players perceived a different threat from the Barings Crisis[262] and sought to remedy it accordingly,[263] no major international regulatory policies were implemented. The only consensus amongst these groups was the desire to form a united front and to keep government regulators out of the markets.[264]

This cacophony of financial interests can further explain the limited development of U.S. regulation in the derivative market.[265] Two justifications can be offered for such legislative inaction. Firstly, the financial interests behind derivative products and their lobbying presence probably could not have formed a unified strategy to support a singular legislative proposal.[266] Secondly, the agencies that enforced the existing regulations and their jurisdictional divisions probably would have been skeptical of new legislation reallocating powers.[267] In this author's opinion, legislative inaction will continue until derivative participants can identify mutually exclusive interests that can be addressed by regulation.[268]

---

259. *See supra* notes 177-90 and accompanying text.

260. *See supra* notes 191-92 and accompanying text.

261. *See, e.g.*, Coggan, *supra* note 91, at 5 (describing how SIMEX managed to settle Barings accounts and to commence trading shortly after the bank's collapse).

262. *See supra* notes 149-76 and accompanying text.

263. *See, e.g.*, Lapper, *supra* note 79, at 1 (discussing recent trends in swap transactions and the shift from high margin to low margin transactions to reduce risk exposure).

264. *See, e.g., Barings Shows Need for Derivative Self-Regulation,* REUTERS, BC CYCLE, Sept. 19, 1995, *available in* LEXIS, World Library, TXTNWS File (describing the expert consensus that the best form of regulation is self-regulation).

265. *See, e.g., Futures Marts Launch Lobbying Efforts to Fight Backlash Against Derivatives,* WALL ST. LETTER, Oct. 2, 1995, at 1 (explaining how the futures exchanges, like CBOT and CME, have used lobbying efforts to educate state legislators about their products). The potential loss of investment activity from public pension funds and municipalities have concerned these futures exchanges about state legislators' attempts to restrict such derivative use. *Id.*

266. *See, e.g., Derivatives Back on the Table for Congress Next Year,* WALL ST. LETTER, Sept. 18, 1995, at 2 (stating that the ISDA did not support "derivative-specific legislation," such as the bills introduced by the Chairman of the House Banking Committee, Jim Leach (R-IA), and Ed Markey (D-MA), because the ISDA believed existing derivatives regulation was sufficient).

267. *See supra* notes 200-52 and accompanying text.

268. The current regulatory policies have attracted investors into the derivatives markets through their ability to instill investor confidence and to enable firms to develop more complex derivative contracts. *See* GLOBECON GROUP, *supra* note 46, at 316-25 (explaining the impact of regulations on U.S. banks and their role as intermediaries for derivative products).

B. *The Significance of Clearinghouse Operations and Procedures in the Development of Derivative Regulation*

As discussed in Part III, the rules of derivative exchanges greatly contributed to the unauthorized trading activity of Nick Leeson.[269] The margin requirements, time-delays, and other basic differences between SIMEX and OSE played a major role in the Barings Crisis.[270] The clearinghouse mechanisms, more than the actual derivative products themselves, create the biggest threat to derivative transactions. Regulatory efforts cannot discount the need for increased harmonization in clearinghouse operations, especially with regard to the rules and procedures for derivative trading.[271]

A clearinghouse for derivative products that are standardized and traded on organized exchanges, compared to OTC derivative products that are non-standardized and traded between individual parties, is an important component of the transaction.[272] The clearinghouse's function as a counterparty to all derivative transactions justifies this importance.[273] All exchange-traded derivative purchasers (i.e. contract holders) bear the credit risk of and receive the security from initial and variation margin contributions from each exchange member.[274]

An exchange's clearinghouse also helps to reduce transaction costs for derivatives market participants. Harmonized collection procedures for margin requirements, instantaneous compilation of price movements, and heightened scrutiny of derivative traders through membership requirements, reduce such transaction costs.[275] Most importantly, the clearinghouse continues to ensure that the derivative contract's financial obligations are satisfied by the appropriate parties through clearinghouse

---

269. *See supra* notes 149-76 and accompanying text.

270. *See id.*

271. *See Safety and Soundness Issues Related to Bank Derivatives Activities—Part III: Hearing Before the Committee on Banking, Finance and Urban Affairs*, 103rd Congress 50-52 (1993) (Minority Report) (commenting about the role of clearinghouses in the development of derivatives regulations).

272. *See* Karol, *supra* note 10, at 198 (explaining how an exchanged-traded contract holder bears the credit risk of the exchange's clearinghouse and benefits from its financial strength).

273. *Id.*

274. *Id. See also* Coggan, *supra* note 91, at 5 (noting SIMEX's financial ability to weather Barings outstanding market positions and its impact on investor confidence in Singapore's financial markets).

275. *See generally* Dwight B. Crane et al., THE GLOBAL FINANCIAL SYSTEM: A FUNCTIONAL PERSPECTIVE (Harvard Business School, Global Financial System Project, ed. 1995).

rules.[276]

Clearinghouses, such as FEDWIRE,[277] CHIPs,[278] and SWIFT,[279] were essential in the expansion of international financial services.[280] These international clearinghouses ensured the rapidity and the precision of transactions that enabled almost any financial objective to be accomplished across boarders and time zones.[281] They have also helped to implement important procedural operations to overcome market inefficiencies from trading in numerous time zones.[282] Transnational transactions greatly depend on clearinghouses to develop innovative services and to exploit investment opportunities across boarders.[283] Banks, along with other financial institutions, have greatly benefited from the expanded markets that clearinghouses enabled them to access.[284] Moreover, governments have increased their supervision of these institution's financial transactions through clearinghouse operations.[285]

---

276. *Id.*

277. FEDWIRE is a payment system that is operated and guaranteed by the Federal Reserve Board (FRB). *See* ANTHONY SAUNDERS & INGO WALTER, UNIVERSAL BANKING IN THE UNITED STATES: WHAT COULD WE GAIN? WHAT COULD WE LOSE? 211-12 (1994). The FRB's guarantee facilitates access to FEDWIRE-transferred funds, even before settlement occurs between the banking institutions. *Id.*

278. CHIPS is the Clearing House Interbank Payments System, a private payments network, that operates between 140 domestic and foreign banks. *Id.*

279. SWIFT is the Society for Worldwide Interbank Financial Telecommunication, a Belgian non-profit cooperative, that connects banks throughout the world and enables them to conduct international financial transactions. J. ORLIN GRABBE, INTERNATIONAL FINANCIAL MARKETS 60 (1986).

280. *See, e.g.*, Perold, *supra* note 97, at 33-41 (describing how these payment systems, their guarantees, and their technology contributed to the expansion of international banking operations throughout the 1980s).

281. *Id.*

282. Herstatt risk, originating from asymmetric payment and delivery procedures across different time zones, was a major concern in international transactions that clearinghouses helped to eliminate through providing performance guarantees. *See id.* at 38.

283. *See* SAUNDERS & WALTER, *supra* note 277, at 38-44 (discussing the importance of technology and information access in the geographical diversity of U.S. banking activities, especially the volume of foreign exchange transactions and swaps that contributed to U.S. banking profitability).

284. *Id.*

285. *See, e.g.*, Coggan, *supra* note 91, at 5 (discussing the role of the Singapore Government in providing support for SIMEX and its ability to meet margin payments to some members).

Clearinghouses have proved so successful in reducing derivatives-related risks that a joint statement between America's Securities and Exchange Commission and Commodity Futures Trading Commission, and Britain's Securities Investment Board advocates multilateral clearing agreements as part of regulatory developments. *See* Singher, *supra* note 10, at 1468 n.517 (citing the joint statement's observations about clearinghouses and the

Risk and pricing calculations for derivative products have consistently plagued the market.[286] Clearinghouses and their function on the exchanges where such products are traded could overcome previous calculation problems for numerous reasons. Firstly, clearinghouses are at the best point in the derivative transaction to determine a derivative's price as well as the value of its risks.[287] Secondly, clearinghouses have a proven success-record in the previous expansion of other financial services, especially those services connecting with banking activities.[288] Finally, banking regulators, both domestic and foreign, have had tremendous success at limiting systemic risk in the banking system through promulgating clearinghouse regulations.[289]

Even though one can only conjecture about the role of clearinghouses in the development of derivative regulation, one cannot underestimate their importance. Future developments in the regulation of exchange clearinghouses would help to cover traded, standardized derivative contracts. These derivative products, unlike OTC contracts, were recently involved in highly-publicized losses.[290]

Applying new regulations to the clearinghouse operations of derivative regulations, the government might accomplish greater harmonization amongst computer trading systems, posting techniques, and risk valuation formulas. Part VI further develops the type of clearinghouse-oriented derivative regulation which would best serve international financial and government interests.

C. *The Potential of International Regulatory Efforts to Preserve the Stability of Global Finance*

The Basle Committee on Banking Supervision (Basle Committee), under the control of the Bank for International Settlement (BIS), has

---

regulator's desire to use similar clearing arrangements in the OTC market as well).

286. *See supra* notes 160-69 and accompanying text.

287. *See supra* notes 283-85 and accompanying text.

288. *See supra* notes 277-82 and accompanying text.

289. *See* Walker, *supra* note 206, at 83-84 (citing the Lamfalussy Report on Interbank Netting Schemes by the Basle Committee in July 1994).

> [It was accepted that arrangements for interbank payment orders and forward-value contractual commitments, such as foreign exchange contracts and swaps, could improve the efficiency and stability of interbank settlements by reducing costs as well as credit and liquidity risks.]

Id. at 84.

290. *See, e.g.*, McClintock, *supra* note 8, at 25 (cataloging derivative losses from Metallgesellschaft ($2.1 Billion), Orange County ($2.1 Billion), and Barings ($1.6 Billion)).

greatly contributed to the stability of global financial markets.[291] The BIS is considered to be the international central bank because it is the most powerful international institution that can unite the industrial nations' central banks behind an international banking policy.[292] With its previous successes, the BIS must be considered as a potential source of derivative regulation.[293] The current proposal by the Basle Committee about reporting requirements for derivatives represents its latest effort to create a regulatory solution.[294]

The Basle Committee Report on Derivative Trading[295] can be regarded as another effort to maintain the stability of global financial markets.[296] The gravamen of this proposal is the Committee's goal to control risk through promulgating uniform capital adequacy ratios.[297] The committee also embraced the principle that international banking activities should be subject to "prudential supervision with less operational intervention."[298]

Regulatory considerations focused on the role of derivatives in international banking operations. Firstly, proposed regulations acknowledged the increased risk of insolvency that such products add to the system.[299] Secondly, international proposals hoped to preserve the autonomy of na-

---

291. RAJ K. BHALA, FOREIGN BANK REGULATION AFTER BCCI 207-19 (1994) (explaining major accomplishments and their impact on international financial transactions).

292. *Id.*

293. *See generally* BASLE COMMITTEE ON BANKING SUPERVISION, FRAMEWORK FOR SUPERVISORY INFORMATION ABOUT THE DERIVATIVES ACTIVITIES OF BANKS AND SECURITIES FIRMS (1995).

294. *Id.*

295. The Basle Committee on Banking Supervision represents a committee of banking supervisors that conducts studies and promotes convergence of regulatory practices. *See* Timothy Haosen Wan, *Comparative Approaches to Regulatory "Safety and Soundness," in* INTERNATIONAL BANKING REGULATION AND SUPERVISION: CHANGE AND TRANSFORMATION IN THE 1990S 261, 263-67 (J.J. Norton et al. eds., 1994).

296. *Id.*

297. *See* Fox, *supra* note 3 (explaining the Committee's proposal for determining the required capital levels for their trading risks). Under the proposal, banks could use either their own internal market risk models or a standardized regulatory formula. *Id.* If banks use their own formulas, then domestic banking regulators are urged to multiply that figure by a factor of three to compensate for underestimations. *Id.* Based on this proposal, the final capital requirement would be the higher figure between the standardized figure and the modified bank figure. *Id.*

298. *See* BASLE COMMITTEE ON BANKING SUPERVISION, PRUDENTIAL SUPERVISION OF BANKS' DERIVATIVES ACTIVITIES, Part IV (Dec. 1994).

299. *See* Walker, *supra* note 206, at 77-78 (noting how the compilation and dissemination of statistics on derivative trading could assist monitoring and reduce market risks) (citing BIS, *Issues of Measurement Related to Market Size and Micro Prudential Risks in Derivatives Markets*, "The Brockmeijer Report," Feb. 1995).

tional banking policies from excessive derivative speculation.[300] Thirdly, regulatory reforms identified the conflict of interest problems between the production, the sale, and the usage of derivative services and their impact on potential trading abuses.[301] Finally, government incentives have recognized that the concentration of derivative transactions in a few financial houses, especially American banks, creates competitive problems, such as barriers to entry.[302]

The Basle Committee's major focus, like American regulatory efforts,[303] is on capital adequacy guidelines which require uniform risk-measuring efforts.[304] The notional value of derivative products, along with their appropriate quantity of risk, warrants an international effort.[305] The Basle Committee has already established a risk-based framework that is used to assess capital in relation to credit risk.[306] Such a framework can be considered a major incentive for the creation and expansion of global financial products and services throughout the 1980s, as well as the source of stability for continuing international banking business. This uniformity has also helped to minimize transaction costs because risks could be better evaluated and financial services could be purchased in an open-market, financially sound atmosphere.[307]

The relationship between international banking and derivative trading has contributed to current debate on how to treat derivative risks on banks' balance sheets. As illustrated in the Barings Crisis, there exists a strong need for harmonization and standardization in the calculation of

---

300. *See id.* at 73-75 (discussing the impact of derivatives growth on undermining traditional monetary policies through increased international interbank linkages) (citing BIS, *Recent Developments in International Interbank Relations*, "The Promisel Report," Oct. 1992).

301. *See id.* at 84 (explaining the committee's finding about comprehensive internal controls and audit procedures for effective risk management strategies by a firm's board of directors and senior management) (citing Basle Committee, *Strengthening Banks' Management of Derivatives Activity, July 1994*).

302. *See* Shuman, *supra* note 2, at 11 (describing the financial engineering prowess of U.S. banks and its impact on creating worldwide demand for their services). *But see* GLOBAL DERIVATIVES STUDY GROUP, *supra* note 65, at 53-55 (explaining why there exists no positive correlation between size of and risk in derivative markets).

303. *See infra* notes 312-14 and accompanying text.

304. *See infra* notes 309-15 and accompanying text.

305. *See* Walker, *supra* note 206, at 70 (quoting value of derivative market at $15.3 Trillion) (citing Comptroller of the Currency, Fact Sheet, News Release, Mar. 31, 1995).

306. *See, e.g.* Walker, *supra* note 206, at 82 (discussing the Basle Committee's Capital Accord (1988) that established a risk-based capital framework to handle off-balance sheet exposures) (citing Basle Committee, *1988 Capital Accord* (July 1988)).

307. *See infra* notes 320-22 and accompanying text.

such risk.[308] This harmonization would greatly assist domestic and foreign bank regulators in their supervision of derivatives markets.

Currently, the debate on harmonizing market-risk capital rules is centered around the role of banks in valuing the risk from their derivative-related activities. The Basle Committee's current proposal attempts to reconcile the tension between a standardized regulatory formula and banks' internal formulas for the calculation of risk. The Basle Committee advocates that banks can either use a standardized risk formula in the calculation of derivative risk or the bank can employ its own risk formula.[309] However, if a bank opts for its own formula, then that value must be multiplied by a factor of three to minimize potential exploitation of banks' own beneficial miscalculations.[310] The European Capital Adequacy Directive closely resembles the standardized component of the Basle Committee proposal.[311]

The FRB also has developed its own proposal for banks' calculation of risk value, known as the pre-commitment approach.[312] This approach allows banks to set aside their own reserve amounts for derivative trading activities and, if trading losses should exceed that limit, then banks would have to face appropriate penalties.[313] The policy rationale behind this approach is to give firms more incentives to strengthen risk-management systems and to increase management oversights of their trading books.[314]

Another point of disagreement between the Basle Committee and the FRB concerning derivative trading is the treatment of netting in the calculation of banks' capital adequacy ratios.[315] The process encourages more creative financing because numerous transactions can be conglomerated and used to reduce risk values.[316] The Basle Committee wants

---

308. *See supra* notes 137-69 and accompanying text.

309. *See supra* note 297.

310. *Id.*

311. *See EU Proposes Changes to Derivatives Risk Coverage*, REUTERS, BC CYCLE, May 2, 1996, *available in* LEXIS, World Library, ALLWLD File (quoting an EU official about the Solvency Ratio Directive that the proposal is the same as the Basle Regulations). *See also* Fox, *supra* note 3 (explaining how the EU Capital Adequacy Directive precludes the Basle Committee from considering the Fed's Pre-Commitment Approach).

312. *See supra* notes 303-04 and accompanying text.

313. *See* Fox, *supra* note 3, at 4.

314. *See id.*

315. *See id.* Netting is the process which reduces "exposure between two counterparties by canceling out transactions with off-setting cash-flows, then calculating the mark-to-market replacement cost of the resulting exposure." GLOBECON GROUP, *supra* note 46, at 319.

316. *See* GLOBECON GROUP, *supra* note 46, at 319 (explaining how the measurement of risk can either overstate or understate the notional amount of a transaction).

greater control over all conformity measures and discourages netting arrangements.[317] The FRB, on the other hand, permits U.S. banks to net derivative exposures.[318] This divergence reflects each institution's ideology about the degree of regulation that should be present in banks' derivative transactions.

D. *Why International Derivative Reform Cannot Occur from within the Existing International Regulatory Schemata*

The tensions between the Basle Committee proposal and the FRB's pre-commitment approach represent the divergence of financial interests that are currently served by derivative regulatory inaction. The Basle Committee has embraced the European Directive and, thus, will become more involved in banks' derivative transactions. The FRB, on the other hand, wants banks to continue their success with derivative products and to police their own derivative transactions.

Neither European financial firms nor banks have had success in the derivative markets to the extent of their American counterparts.[319] Basle's adoption of the European Directive can be seen as an attack on America's comparative advantage in derivative financial services. The Basle Committee's Market-Risk Capital Rules only apply to 25 major U.S. banks that face major compliance costs and some smaller financial institutions that are minimally affected.[320] More importantly, the European Capital Adequacy Directive precludes the Basle Committee from considering the FRB's pre-commitment approach.[321]

As the most prominent international banking regulator, the Basle Committee cannot be fully entrusted to manage derivative policy. Its relationship with the European Community and America's comparative advantage mean that another, non-partisan international regulatory agency must evolve.[322] Any institutions, like the Basle Committee and the BIS, that deal with the substantive elements of financial transactions, especially derivatives, will be vulnerable to political and economic interests. Any new international effort will need to concentrate on the procedural

---

317. *See* Hu, *Misunderstood Derivatives*, *supra* note 10, at 1458 & 1513 n.11 (discussing the general approach of the Basle Committee in regulating derivatives).

318. *See, e.g.*, 12 U.S.C. §§ 4401-4407 (West Supp. 1997). These sections ensure that bilateral netting arrangements will be accepted between clients. *Id.*

319. *See supra* note 237 and accompanying text.

320. *See* Fox, *supra* note 3.

321. *Id.*

322. *See id.* (discussing the voting composition of the Basle Committee with one vote for American regulators and seven votes for the European Community).

and mechanical aspects of the derivative market.[323] These areas will be less vulnerable to special interest manipulation and provide a means to collect transactional information about risks and values that can help domestic and international banking regulators.[324]

V. U.S. INVOLVEMENT IN THE FINANCIAL SERVICE AGREEMENT OF THE GATS AND ITS POTENTIAL IMPACT ON SUPRANATIONAL BANKING AND DERIVATIVE REGULATORY DEVELOPMENTS

Recent Congressional debates on U.S. banking reform,[325] as well as corresponding derivative legislation proposals,[326] warrant more attention on the Financial Service Agreement of the GATS.[327] In the absence of such attention, America might be precluded from important contributions to the new supranational regulatory order in financial services.[328] More importantly, the only existing international banking institution with similar influence, the Basle Committee on Banking Supervision, cannot form an international consensus on the regulation of derivative transactions.[329]

America's current opposition to the Financial Service Agreement of the GATS,[330] its domestic regulatory barriers to universal banking,[331] and

---

323. *See supra* notes 308-13 and accompanying text.

324. *See, e.g.*, Hu, *Misunderstood Derivatives, supra* note 10, at 1508 (analyzing the need for openness and universalism in derivatives market to garner information about valuations, pricing models, and risk levels).

325. *See, e.g.*, Richard W. Stevenson, *Banks' Access to Wall Street May Widen — Fed Proposes New Rules To Weaken 'Firewalls'*, N.Y. TIMES, Aug. 1, 1996, at D1 (describing recent modifications to banks' securities-generated income activities); *Roukema Highlights U.S. Thrift Charter, Reg Relief*, REUTERS, BC CYCLE, Feb. 7, 1996, *available in* LEXIS, Bankg Library, CURNWS File (commenting about chairwoman of a House Banking subcommittee that has undertaken efforts to accelerate banking regulatory reforms). *See also* Lawrence H. Summers, *Protecting Our Nation's Finances*, remarks before the *Securities Industry Association* (Mar. 5, 1996), *reprinted in* FDCH FED. DEP'T AND AGENCY DOCUMENTS, Mar. 5, 1996, *available in* LEXIS, News Library, CURNWS File.

326. *See, e.g., Derivatives Back on The Table for Congress Next Year*, WALL ST. LETTER, Sept. 18, 1995, at 2.

327. *See* Summers, *supra* note 325 (commenting about liberalization in financial services through the GATS and its impact on America's competitive position in this industry).

328. *Id.*

329. *See supra* notes 308-18 and accompanying text.

330. *See Hearing on International Trade: Implementation Issues Concerning the WTO: Hearing Before the Subcommittee on Trade, House Ways and Means Committee* (1996), *reprinted in* FEDERAL DOCUMENT CLEARING HOUSE CONGRESSIONAL TESTIMONY, March 13, 1996, *available in* NEXIS, News Library, CURNWS File (statement of JayEtta Z. Hecker) [hereinafter Hecker Testimony] (describing the U.S. commitments to the WTO not to discriminate against existing foreign financial service providers operating in the

its preferences for bilateral financial service agreements,[332] have important consequences for the future development of international derivative regulations. These consequences include many aspects of domestic and international banking operations.[333] Firstly, the creation of supranational

---

U.S.) However, the U.S. refrained from guaranteeing to foreign financial services providers complete market access and national treatment by taking a "most-favored-nation exemption." *Id.*

> Specifically, the U.S. commitment did not include guarantees about the future for new foreign firms or already established firms wishing to expand services in the U.S. market. Despite consistent U.S. warnings, the decision to take the exemption surprised many other countries and made them concerned about the overall U.S. commitment to [the] WTO. The U.S. exemption in financial services was taken because U.S. negotiators, in consultation with the private sector, concluded that other countries' offers to open their markets to U.S. financial services firms, especially those of certain developing countries, were insufficient to justify broader U.S. commitments (with no most-favored-nation exemption).

Id. Most-favored-nation trading policy represents a domestic country's obligation to treat a foreign country's or its citizen's economic activities "at least as favorably as it treats the activities of any other country." JOHN H. JACKSON, THE WORLD TRADING SYSTEM 136 (1989).

331. *See, e.g.*, Sarah A. Wagman, *Laws Separating Commercial Banking and Securities Activities as an Impediment to Free Trade in Financial Services: A Comparative Study of Competitiveness in the International Market for Financial Services*, 15 MICH. J. INT'L L. 999, 1023-25 (1994) (discussing the U.S. separation of securities and banking activities and its impact on international trade in financial services).

332. *See* Summers, *supra* note 325 (describing U.S. Treasury support for bilateral financial service agreements while referring to the success of the U.S.-Japan Agreement that already enabled two U.S. firms to commence management of Japanese public pension funds). Bilateral efforts also enhance U.S. diplomatic policies. *Id.* (describing America's role in urging Hungry, Korea, and Poland to seek OECD membership). The Organization for Economic Cooperation and Development (OECD) constitutes another international arrangement between 24 countries. *See* JOHN H. JACKSON ET AL., LEGAL PROBLEMS OF INTERNATIONAL ECONOMIC RELATIONS 275 (3d ed. 1995). Among other activities, it "adopts codes or guidelines applicable to capital movements and multinational enterprises." *Id.*

333. *See, e.g.*, BHALA, *supra* note 291, at 91 (describing how the Foreign Bank Supervision Enhancement Act of 1991 and its manipulation of deposit insurance created another non-tariff barrier). 12 U.S.C. § 3104(c)(1)(A)-(B) requires that foreign banks that maintain retail deposit accounts with less than one hundred thousand dollars must have deposit insurance which, in turn, means that foreign banks must establish a U.S. subsidiary for this purpose. *Id.* The choice of corporate form (i.e. branch verses subsidiary) places an extra burden on foreign banks who must spend more money for establishing and operating a separately capitalized organization. *Id.* at 94. The non-tariff barriers arise because

> [t]he loan capacity of a subsidiary is always less than that of a branch because this capacity is based on the capital of the lending organization. With a branch, the organization is the entire foreign bank, whereas with a subsidiary it is the subsidiary standing alone. . . . Similarly, a branch can engage in a larger vol-

banking policies through multilateral negotiations will, at the least, indirectly affect America's bilaterally negotiated financial service agreements.[334] Secondly, the interdependence of global financial markets, compounded by their susceptibility to domination from "market-makers," greatly weakens the significance of bilateral policies.[335] Thirdly, America's "most-favored nation" exemption in the Financial Service Agreement greatly hampers the harmonization of accounting standards for capital market risks that banks use on their balance sheet calculations.[336] Fourthly, the multilateral negotiation's attention to providing inter-territorial services might contribute to the development of incentives to increase managerial supervision of derivative transactions and to reduce systemic risks in global markets.[337]

A. *The U.S. Preference for Bilateral Financial Service Agreements*

America's previous dealings in financial service agreements have fostered its skepticism about national treatment principles, which are the exception and not the rule in international financial service arrangements.[338]

The major bilateral achievements in U.S. trade policies have contributed to America's marginalized participation[339] in the Financial Service Agreement of the GATS. These developments encompass the North American Free Trade Agreement (NAFTA) and its positive contribution to U.S. financial institutions, especially banks, competing in Mexican and Canadian markets.[340] NAFTA has also reciprocally expanded access to

---

> ume of trading operations than a subsidiary because of the difference in capital. This is important in the markets for foreign exchange, derivative products, and interbank lending . . . .

Id. at 95. *See also Treasury Sees Progress, But Continuing Barriers To U.S. Banking Abroad*, BANK POL'Y REPORT, Jan. 16, 1995, at 7, *available in* LEXIS, News Library, BNKPOL File [hereinafter *Treasury Sees Progress*] (listing countries that *de jure* or *de facto* discourage branches, including Colombia, Hungary, Indonesia, Poland, Russia, and South Africa).

334. *See infra* notes 339-47 and accompanying text.

335. *See infra* notes 360-66 and accompanying text.

336. *See infra* notes 367-77 and accompanying text.

337. *See infra* notes 378-80 and accompanying text.

338. *See generally Treasury Sees Progress, supra* note 333, at 7.

339. *See, e.g., Malaysia to Open Up Finance Sector Under WTO Deal*, REUTERS, ASIA-PACIFIC BUS. REP., Aug. 14. 1995, *available in* LEXIS, News Library, REUAPB File (noting how the European Union salvaged the Financial Service Agreement).

340. *See id.* (describing how U.S. financial firms can establish subsidiaries in Mexico and Canada). *See also* Karen MacAllister, *NAFTA: How the Banks in the United States and Mexico Will Respond*, 17 HOUS. J. INT'L L. 273, 292-94 (1994).

the American banking market on a scheduled basis.[341] Moreover, there exists a close connection between monitoring domestic regulatory developments and modifying the agreement.[342] The structure of the Financial Services Agreement in NAFTA demonstrates America's willingness to participate in mutually beneficial trade arrangements that provide sufficient opportunities for American financial firms.[343]

The U.S. Treasury Department also has been successful in negotiations with specific Asian countries.[344] The Department's one-to-one talks have greatly improved the competitive positions of American banks in Japan,[345] China,[346] and Taiwan.[347]

Significant strides have also been achieved through the GATS-based negotiation process. While Argentina,[348] Australia,[349] India,[350] and the Philippines[351] have given some important concessions in financial and

---

341. *See* NAFTA, Art. 1404(1), Cross-Border Trade, *in* LEGAL PROBLEMS OF INT'L ECON. RELATIONS, 1995 DOC. SUPP. (Jacksons, Davey, & Sykes eds., 1995), at 628 (referring to restrictions on cross-border trading activities in Section B of each Party's Schedule to Annex VII).

342. *See, e.g., id.* at 627 (quoting NAFTA Art. 1403(3), Establishment of Financial Institutions). NAFTA Article 1403(3) provides as follows:

> Subject to Annex 1403.3, at such time as the United States permits commercial banks of another Party located in its territory to expand through subsidiaries or direct branches into substantially all of the United States market, the Parties shall review and assess market access provided by each Party in relation to the principles in paragraphs 1 and 2 [of NAFTA Article 1403] with a view to adopting arrangements permitting investors of another Party to choose the juridical form of establishment of commercial banks.

Id.

343. *See* Shuman, *supra* note 2, at 10-24 (describing America's willingness to participate in negotiations, like NAFTA, that foster competition around price and quality of financial services rather than legal constraints).

344. *See, e.g., id.* (noting the rise in U.S. banks' net income in Asian markets from $381 million in 1987 to $1.6 billion in 1993).

345. *See, e.g.*, Summers, *supra* note 325 (discussing initial success of the U.S.-Japan Agreement on Financial Services).

346. *See* Shuman, *supra* note 2, at 10-24 (noting how American negotiators are using China's application to the WTO to garner financial service concessions, especially underwriting and trading of local currency-denominated securities).

347. *See generally* Hsu Li-The, *Taiwan: The ROC's Development Strategy at the Turn of the Century*, BUS. TAIWAN, Mar. 11, 1996, *available in* LEXIS, World Library, ALLWLD File.

348. *See, e.g., Treasury Sees Progress, supra* note 333 (commenting about the elimination of legal impediments for foreign financial firms' market access and operations).

349. *See id.* (commenting about the wholesale banks' business that allows the branches of foreign banks).

350. *See id.* (offering some liberalization for foreign bank branches).

351. *See id.* (commenting about the modifications in establishing foreign bank oper-

banking services, there still exists some major hurdles. Such hurdles include Brazil's constitutional prohibition on new foreign banks and its freeze on foreign ownership of existing banks.[352] Brazil, for example, would have to alter its constitution to accommodate any level of national treatment that would be acceptable to the U.S.[353] Some countries still impose a formal moratorium on new domestic (on-shore) banking licenses that affect both domestic and foreign banks.[354]

Variations in negotiation procedures and participants cannot be downplayed in the success of these negotiations.[355] Because financial services are so diverse and present many problems for the formation of consensus,[356] they probably need an alternative schemata through which negotiations can take place. Congressional control of the trade process, the President's ideological leanings, and coordination of policy objectives between domestic financial regulators support this hypothesis.[357]

Differences between multilateral and bilateral negotiations have a tremendous import to the development of an international derivative regulatory policy. As illustrated by the Basle Committee, the central banks have made important contributions to the internationalization of banking services, especially the stability of international financial markets.[358] The current GATS-based multilateral approach will modify the role of central bankers in the further development of the Financial Service Agreement.[359]

---

ations and in allowing universal banking).

352. *See id.*

353. *See id.* (discussing Brazil's constitutional prohibition on the entry of new foreign banks and foreign ownership of existing institutions). *See also* Summers, *supra* note 325 (noting the Brazilian President's decree that allows foreign participation in Brazil's financial institutions on a case-by-case basis).

354. *See, e.g., Treasury Sees Progress*, *supra* note 333 (noting that Chile, the Czech Republic, Malaysia, Singapore, and Thailand still impose such a moratorium).

355. *See generally* Philip R. Trimble, *Arms Control and International Negotiation Theory*, 25 STAN. J. INT'L L. 543, 549-65 (1989) (explaining different international negotiation process). *See also* JACKSON ET AL., *supra* note 332, at 149-50 (discussing the role of the executive branch and its agencies, as well as congressional agencies and committees, in the negotiating process).

356. *See, e.g.*, Hecker Testimony, *supra* note 330 (describing the role of U.S. private sector officials in the Financial Service Agreement's negotiations for evaluating market access and equal treatment proposals).

357. *See generally* I.M. DESTLER, AMERICAN TRADE POLITICS (3d ed., 1995).

358. *See supra* notes 291-300 and accompanying text.

359. *See* BHALA, *supra* note 291, at 261-63 (discussing the role of bank regulators in the GATS framework for comparing regulatory inadequacies between countries).

B. *A Multilateral Financial Service Agreement Can Mitigate the Influence of Wealthy Interests on Financial Markets*

The presence of powerful monied interests in global financial markets can seriously undermine the enforceability of any financially-oriented service agreement.[360] The absence of a multilateral effort increases the probability of such unenforceability. As with the GATT, the participation of all WTO members in the Financial Service Agreement of the GATS could safeguard international competitive pressures that can prevent market domination by highly-capitalized players.[361]

The overall improvement in economic welfare from the GATT[362] cannot compare to the potential economic gains from the international trade of financial services.[363] Even though American firms can be considered the market leaders in the development of financial services marketing, their leadership position cannot adequately explain America's opposition to multilateral negotiations.[364] America's behavior might be best explained as the consequence of political and socioeconomic constraints.

The political constraint involves the influence of the European Community on the Basle Committee. As the previous part of this article detailed, U.S. regulators have little influence on the Basle Committee's proposals for capital market risk modeling.[365] America's refusal to fully participate in the Financial Service Agreement may be construed as diplomatic posturing while other international institutions are negotiating

---

360. *See, e.g.*, Christian Tyler, *Private View: The Man Who Broke the Bank of England*, FIN. TIMES (London), Jan. 2, 1993, at 16 (describing how the speculation by George Soros on foreign currency markets undermined the European Exchange Rate Mechanism).

361. *See, e.g.*, Tim Colebatch, *Australia: No Need to Reach Out for That Blunt Instrument — Economic Policy*, THE AGE (Melbourne), June 29, 1994 (commenting about the presence of 10 Soros fund managers on the "Financial World" top 100 rich list, the vastness of their capital resources, the impact of their speculation on Australian economic policy, and Professor Tobin's proposal for an international tax on foreign exchange transactions).

362. *See* JACKSON ET AL., *supra* note 332, at 6.

363. *See, e.g.*, Mary Foster, *GATT and Foreign Banking as a Trade in Service, in* INTERNATIONAL BANKING OPERATIONS AND PRACTICES: CURRENT DEVELOPMENTS 25 (1995) (commenting about the volume of international transactions in banking activity). UNCTAD reports that trade in financial services is growing twice as quickly as trade in goods. *Id. See also* Kenneth Silverstein, *GATS Battle Tests Barriers to Global Financial Competition*, CORP. CASHFLOW MAG., Aug. 1995, at 37 (describing how financial services accounted for more than $450 billion or 7% of U.S. gross domestic product in 1994).

364. *See WTO Proceeds with Interim Agreement After U.S. Withdraws*, FIN. REG. REP., July 1995 (discussing the combination of U.S. domestic interests and policy objectives in limiting U.S. commitments to the Financial Service Agreement).

365. *See infra* notes 309-11 and accompanying text.

new standards and policies that affect financial services. European support for the GATS and its need for American cooperation bolster this contention.

One can assume that domestic and foreign financial institutions already operating within the U.S. have probably lobbied against the creation of a financial service agreement. As also detailed in Part IV, financial service interests have yet to form a consensus on regulatory reform.[366] The uncertain impact that an international agreement would have on transactions costs and compliance expenditures probably mobilizes anti-GATS sentiments and accompanying lobbying efforts.

C. *America's Refusal to Extend MFN Treatment for the Financial Service Agreement Will Hamper Its Participation in the Development of New Accounting Standards*

The future liberalization of securities and banking services underscores the need for harmonized accounting standards between issuers and intermediaries of financial services.[367] Without an international agreement, domestic regulators[368] and private agencies[369] will continue to add noise to financial indicators. These indicators cover the basic components of a firm's balance sheet and the information disseminated via rating agencies.

The information asymmetries between large and small players can be greatly eliminated with an international agreement. Private accounting agreements, like the FASB, have already be shown to be ineffectual in the face of a Barings-type crisis.[370] Financial service organizations are already subject to a gamut of these accounting treatments which are used in the calculation of risk, capital adequacy, and overall financial soundness.[371] Sophisticated market participants have the resources to decipher their differences and, perhaps, even exploit their variations.[372]

---

366. *See supra* notes 319-24 and accompanying text.

367. *See, e.g., International Accounting Standards Panel Accelerates Release of Rules*, BNA INT'L BUS. & FIN. DAILY, April 18, 1996, *available in* LEXIS, Intlaw Library, BNAIBF File (describing the efforts of the Internal Accounting Standards Committee (IASC) to produce a set of accounting rules for cross-border stock offerings).

368. *See, e.g., id.* (also describing the pressure from the SEC and the New York Stock Exchange to accelerate IASC schedule, especially rules on financial instruments and investments).

369. *See, e.g., Some Rating Agencies Give Higher Grades*, WALL ST. J., May 15, 1996, at C17 (commenting about a New York Federal Reserve Bank study about variations between rating agencies).

370. *See supra* notes 256-58 and accompanying text.

371. *Id.*

372. *See* Gary L. Gastineau & Louis I. Margolis, *The Future of Equity Derivatives: What Lies Ahead?*, FIN. ANALYST J., Nov/Dec 1994 (discussing market making positions

Internationalization of global equity markets also warrants a multilateral agreement that encourages the harmonization of accounting standards.[373] Foreign firms are increasingly looking to foreign investors for new capital resources.[374] Variations in accounting standards between domestic and foreign countries for issuers of these securities can lead to some bizarre results.[375] Moreover, the selection of rule-makers of accounting standards and their political obligations could marginalize the importance of international influences on accounting standards and procedures.[376]

An international agreement that can greatly assist the harmonization of accounting standards will benefit the overall world economy. The trade in derivative financial products will be a major recipient of such improvements. The enhanced stability from uniform accounting standards for derivatives will increase the liquidity of these products and will strengthen their markets. Most importantly, a sound and safe expansion of the derivatives market might encourage smaller investor participation and wider applications of such financial products.[377]

D. *Why Current Policies Toward Increased Management Participation in Policing the Risks of Their Firm's Financial Products Necessitate a Multilateral Agreement*

The role of management in derivatives crises has attracted much attention.[378] Many proposals for derivative regulation, as well as banking

---

and how larger participants trade more aggressively than smaller investors).

373. *See International Accounting Standards Panel Accelerates Release of Rules*, *supra* note 367.

374. *See, e.g.*, Peter Gumbel & Greg Steinmetz, *German Firms Shift to More-Open Accounting*, WALL ST. J., Mar. 15, 1995, at 1 (explaining how German corporations are adopting international accounting standards to attract international investors).

375. *See* Michelson, *supra* note 256 (describing Diamler-Benz American loss and German profit figures).

376. *See, e.g.*, Norris, *supra* note 258 (describing selection process for FASB).

377. *See, e.g.*, Danielle Bochove, *Greatest Derivatives Threat Is Customer Ignorance*, REUTERS, BC CYCLE, Oct. 18, 1995 (copy on file with author) (citing the need for customers to understand the derivatives-related risks and their clearinghouse arrangements).

378. *See, e.g.*, *FIA Task Force Releases Financial Integrity Recommendations*, BNA INT'L BUS. & FIN. DAILY, June 20, 1995, *available in* LEXIS, Itrade Library, BNAIBF File. Amongst the Futures Industry Association's recommendations for the financial integrity of global futures markets, the task force discovered that the agreements between brokers/dealers and their customers should clearly delineate rights and obligations. *Id.* Moreover, firms should be more diligent in collecting customer margin requirements and in assessing the risks of market exchanges and their products. *Id.*

reform, utilize the role of management supervision in preventing transactional abuses and operational inefficiencies.[379] Such new policies have encouraged the development of less government-intrusive and more market-oriented regulations.[380]

Even though the U.S. has embraced similar policies with the FRB's pre-commitment approach for banks' derivative activities, American refusal to participate in multilateral negotiations will hamper its contributions to further development of such policies. The liberalization of financial services and its impact on domestic regulatory policies warrant a multilateral effort to ensure the free-flow of ideas and information about policy alternatives as well as the free-flow of financial services and products.

The impact of the GATS on banking and related financial services will greatly limit systemic risks in global markets. Product information will travel more quickly across borders and between institutions. Increased competition between financial service providers will also serve to enhance the soundness of firms and their services, as consumers will have greater access to choice in the marketplace.

Another potential consequence of a multilateral financial service agreement will be the commercialization of the derivative products market. Perhaps, the increased competition between international banks might influence innovations in the derivative market, such as offering speculative products for use amongst regular banking customers.

VI. A GATS-BASED CLEARINGHOUSE FOR DERIVATIVE TRANSACTIONS

The potential gains and losses from derivative products, as well as the attendant risks to global finance markets, warrant special consideration in the negotiation for the financial service agreement of the GATS. This consideration includes building upon the consensus about the need for some form of international derivative regulations. As mentioned throughout this article, several factors, including conflicting financial interests, the complexity of financial products, and international competi-

---

379. *See, e.g.*, Simon Louisson, *NZ Central Bank to Use Disclosure to Monitor Banks*, REUTERS, BC CYCLE, May 21, 1996, *available in* LEXIS, Bankg Library, CURNWS File (referring to Barings rogue trader, Leeson, as an impetus for New Zealand's deregulated banking program). The hallmark of this program is its dependence on public disclosure statements that increase incentives for bank directors, who are legally responsible for their contents, to monitor and to manage their risks more prudently. *Id.*

380. *See id.* (noting how U.S. regulatory compliance costs comprise approximately 14% of their non-interest cost). *See also Survey, A Novel Bank Statement*, THE ECONOMIST, Apr. 27, 1996, at S31 (commenting about New Zealand's program and its impact on competition between banks for customers/depositors).

tive pressures, preclude the development of substantive-related derivative regulations. A possible procedural regulatory solution that utilizes the lessons from the Barings Crisis is the creation of a subsidiary body by the GATT Council of Trade. Such a body, envisaged as a GATS-based clearinghouse, could provide an alternative international payment system through which derivative transactions could be cleared and conducted in every major exchange market.[381]

A. *Clearinghouses and Their Current Function in International Transactions*

A clearinghouse is the focal point of all major international payment systems because it is the system's component that settles all transactions.[382] The success of clearinghouses has been firmly established in the banking community as payment orders, generated by either checks or electronic funds media, are sent around the world.[383] A major contribution of a clearinghouse is the stability and reduction in risks that it provides to any financial transaction.[384]

Financial intermediaries use clearinghouses to conduct many interterritorial transactions, such as settling accounts on exchange markets, or other similar types of business dealings.[385] Banks, for example, greatly depend on a clearinghouse in both domestic and international operations.[386] Clearinghouses, such as CHIPS or FEDWIRE, also decrease the risks of default by the contracting parties.[387]

All major exchanges employ some form of a clearinghouse to settle accounts.[388] The successful operation of such clearinghouse mechanisms

---

381. *See* James T. Moser, *What is Multilateral Clearing and Who Cares?*, CHIC. FED. LETTER, Nov. 1994, at 1-3. "Clearing is the back-office processing of traded contracts. It involves determining the amounts due between counterparties and, through cash transfers, settling these amounts." *Id.*

382. *See generally* ERNEST T. PATRIKIS ET AL., WIRE TRANSFER: A GUIDE TO U.S. AND INTERNATIONAL LAWS GOVERNING FUNDS TRANSFER (1993).

383. *See, e.g., id.*, at 238 (evaluating a UNCITRAL Working Group's effort on harmonizing credit transfers through a model law that mirrors Art. 4A of the Uniform Commercial Code).

384. *See, e.g., Exchanges Must Examine Clearinghouse Risk, Says Moody's*, WALL ST. LETTER, June 26, 1995, at 8 (commenting about how competition between clearinghouses for business from futures and options exchanges affect their guarantees on trades). Clearinghouses with sufficient risk management policies could either prevent or encourage a Barings-type disaster. *Id.*

385. *See id.*

386. *See* PATRIKIS ET AL., *supra* note 382, at 238-40.

387. *See supra* note 385 and accompanying text.

388. *See, e.g., Exchanges Must Examine Clearinghouse Risk, Says Moody's, supra*

involve many agreements between private associations[389] as well as some government supervision.[390] Moreover, the significance of clearinghouses to derivative transactions has been fully revealed by the Barings Crisis.[391] Regardless of how and when the Financial Service Agreement is implemented by all contracting parties of the GATS, it will most likely affect the operations and functions of clearinghouses and their functions in global payment systems.

The existing GATS treaty has empowered the Council of Trade to "establish subsidiary bodies as it considers appropriate for effective discharge of its functions."[392] Thus, the creation of a clearinghouse within the GATS is not outside the legal boundaries of the treaty.[393] This clearinghouse should have the capacity to handle both exchange-traded and OTC derivative products.[394] Derivatives dealers and end-users can influence their national governments through this multilateral effort and can collectively develop an appropriate clearing system.[395]

Derivatives, unlike other financial services, represent a new service technology that is outside the purview of existing domestic and interna-

---

note 384, at 8 (noting that the Board of Trade Clearing Corporation is the Chicago Board of Trade's clearing arm).

389. *See, e.g., Futures Marts, Clearing Entities Sign Memorandum of Understanding*, BNA INT'L BUS. & FIN. DAILY, Mar. 19, 1996, *available in* LEXIS, Itrade Library, BNAIBF File [hereinafter *Futures Marts*] (discussing information-sharing agreement between 45 futures exchanges and clearing entities to prevent another Barings crisis).

390. *See* Coggan, *supra* note 91, at 5.

391. *See supra* Part IV.B.

392. *See* GATS, Art. XXIV(1), Council for Trade in Services, *in* LEGAL PROBLEMS OF INT'L ECON. RELATIONS, 1995 DOC. SUPP. (Jackson, Davey, & Sykes eds., 1995), at 321 [hereinafter 1995 DOC. SUPP.]. GATS Article XXIV(1) states as follows:

> The Council for Trade in Services shall carry out such functions as may be assigned to it to facilitate the operation of this Agreement and further its objectives. The Council *may establish such subsidiary bodies as it considers appropriate for the effective discharge of its functions.*

Id. (emphasis added). The Council for Trade in Services represents a component of the World Trade Organization's governing structure. *See* JACKSON ET AL., *supra* note 332, at 304.

393. *See* 1995 DOC. SUPP., at 321; *see also* JACKSON ET AL., *supra* note 332, at 304.

394. *See, e.g.*, Vera Young, *Margin Financing in SIB's Crosshairs After Sumitomo Scandal*, DERIVATIVES WK., July 29, 1996, at 1 (discussing the role of OTC derivatives in the Sumitomo copper trading debacle through converting OTC positions into exchange-traded contracts). *See also* Moser, *supra* note 382, at 2 (noting CBOT's development of the Hybrid Instruments Trading System (HITS) that will offer multilateral clearing facilities to OTC swap contracts).

395. The GATS-based clearinghouse constitutes a policy idea that is designed to stimulate debate on international derivatives regulation. Its structure, along with its rules, procedures, and technical operations, are well-beyond the scope of this article.

tional regulatory agencies. These products' infinite permutations require some supervision from international agencies.[396] A GATS-based clearinghouse will provide a means to collect and monitor information about product risks and valuations. This information might lead to greater certainty about the "true" risk such products pose to the global economy.

Moreover, an uniform mechanism, such as a GATS-based clearinghouse, will decrease transaction costs in derivative transactions. The economies of scale from a single clearing mechanism will produce savings and encourage further innovations in product developments. Moreover, more countries and their financial service consumers will have improved access to derivatives markets for speculative or hedging purposes.[397] This access can be crucial to Third World nations whose need for new capital resources might be handled through increased access to global financial markets.[398] A fully-developed GATS-based clearinghouse has the potential to achieve such benefits.

As compared with previous efforts in banking and securities, the scale of this multilateral proposal for the derivatives market could increase capital mobility and remove uncertainty about complex products.[399] The international effort beyond such a modified clearing system could produce infinite benefits. All financial intermediaries, regardless of their home country's level of development, would have access to the same technology and software upon which the GATS clearing facility would operate. Uniform technologies would further contribute to the benefits from the economies of scale. Also, the international cooperation

---

396. *See, e.g.*, Gastineau & Margolis, *supra* note 372, at 9-11 (commenting how regulation delays future derivative developments through promoting higher cost, lower volume products). For example, if the SEC prohibited stock index futures, then derivative participants would have developed similar products with a regulatory-evasive structure. *Id.* (conjecturing about an alternative S&P 500 futures contract that would have been traded in London or other foreign market).

397. *See, e.g.*, Anne Schwimmer, *World Bank Leads Effort for Swaps Clearinghouse — Proposes Pilot Program with Major Dealers*, INVESTMENT DEALER'S DIG., Dec. 20, 1993, at 5 (describing World Bank's support for an international swaps clearinghouse to increase Third World country access to financial markets).

398. *Id. See also Venezuelan Brokerage Calls For Creating of Clearinghouse*, DERIVATIVES WK., June 17, 1996, at 4 (discussing Venezuelan efforts to overcome liquidity problems and information deficiencies through creating a clearinghouse for futures contracts). Venzeualan brokers and bankers realize that their local financial markets cannot successfully compete for international capital without providing derivative products. *Id.*

399. *See* Moser, *supra* note 381, at 2-3 (illustrating the benefits of multilateral clearinghouses through their centralized, information-gathering functions). The clearinghouse provides fully-estimated potential default values that enable accurate calculations about derivative-related risks.

within the GATS might encourage greater liberalization of trade in financial services.

B. *The Mitigation of Potential Opposition to the GATS-Based Clearinghouse Through A Gradual Implementation Procedure*

Every major financial exchange either has its own clearing procedures or has developed cooperative agreements with similar systems.[400] Those functioning clearing systems over which private associations and government regulations have established managerial autonomy will strongly oppose such an international effort. The reduction in autonomy for such organizations can be overcome with the gradual integration of a GATS-based clearinghouse into derivative markets. While the short-term costs of maintaining a dual system, consisting of existing exchange clearing mechanisms and a GATS-based mechanism, may appear prohibitive, the long-term benefits warrant such increased costs.

Financial intermediaries should have the option to handle derivative transactions in either payment system. The short-term adjustment costs will be ultimately passed to the financial consumer who can then alter short-term trading strategies accordingly.

The creation of a permanent dispute resolution panel within the WTO demonstrates the organization's capacity to resolve conflicts between national economic policies with international trade obligations.[401] A new clearing facility can serve similar supranational policy functions and can liberalize the trade in derivative services and products.

In addition, a GATS-based clearinghouse can further develop new derivative policies, such as the participation of financial firms' management in reducing systemic risks in derivative markets. For example, the clearinghouse might reward members who diligently police their derivative operations with reduced margin requirements or similar economic incentives. National governments might also be enticed to grant tax incentives or other economic inducements to firms that use the GATS-based system.

---

400. *See, e.g., Futures Marts, supra* note 389 (listing major derivative exchanges and their clearing facilities).

401. *Hearing on The World Trade Organization and U.S. Sovereignty, Hearing Before the Senate Foreign Relations Comm.*, (1994) (statement of John H. Jackson, Hessel E. Yotema Professor of Law, University of Michigan), *reprinted in* FEDERAL DOCUMENT CLEARING HOUSE CONGRESSIONAL TESTIMONY, June 14, 1994, *available in* LEXIS, News Library, ARCNWS File.

As the GATT has been able to deal with all areas that affect the free trade of goods, the GATS, through originating a clearinghouse and accompanying rules and procedures, can deal with international derivative transactions that affect all aspects of global finance. A GATS-based clearinghouse represents a notion from which further debate on international derivative regulations can further evolve.

VII. CONCLUSION

International derivative transactions represent convoluted profit opportunities for highly specialized and capitalized investors. The confusion about their role in financial transactions has been carefully nurtured by all market participants who play this "zero-sum game." Unlike other financial services that increase overall wealth, derivatives, in any form, shift wealth between market participants. These shifts occur primarily between wealthy individuals, financial firms, and governments. The multi-trillion dollar nature of these activities indicate the success of the status quo and the opposition to meaningful market reforms.

This article's analysis has focused on the influence of derivative players on international regulatory reforms in light of the recent highly-publicized scandals. The existing institutions, both government and private, as well as their policies, will not produce far-reaching reforms for the derivative markets. The complexity of derivatives, compounded by non-uniform financial interests, contribute to the ineffectiveness of government regulation to prevent similar Barings-type crises. Thus, regulatory reform should focus on the least market-intrusive component of derivative products, that is, their settlement operations.

The potential benefits from harmonizing the operational procedures for derivative products should lead to greater market access for ordinary investors and developing countries. Standardized futures contracts, for example, significantly expanded the volume of exchange-traded products. Similarly, standardized operational guidelines should expand and, perhaps, commercialize derivative markets. Without more user-friendly guidelines on an international level, derivative products will not become mainstream financial products. Instead, they will continue to benefit a fortunate few.