

COMMENTS

INTERNATIONAL SECURITIES TRADING: THE UNITED STATES AND GREAT BRITAIN DEVELOP CLEARING AND SETTLEMENT PROCEDURES FOR A NEW AGE

INTRODUCTION

Trading in international securities¹ is an increasingly attractive way to diversify investments. Investors can choose from a wide range of equity and debt instruments, without limiting themselves to U.S. securities.² This provides the investor with greater flexibility to take advantage of healthier economies, minimize exposure to short-term erratic behavior on one nation's stock or bond market, and protect assets from temporary weakness of the U.S. dollar.³ The volume of trading in international securities is expanding at a rapid pace. Worldwide investment in international equities increased from \$750 billion in 1986 to \$1.3 trillion in 1987.⁴ Investment in Eurobonds is also skyrocketing, reaching over \$3 trillion in 1987.⁵

Both U.S. and foreign investors are participating in the expanding international securities market. In the first half of 1986,

1. International securities can be classified into two types of transactions. The first involves a domestic investor who buys or sells securities on a foreign stock market through an integrated multinational market network. The second type involves foreign securities bought and sold on the U.S. stock market, and U.S. securities traded on a foreign stock market. Division of Market Regulation, Securities & Exchange Commission, *International Trading and Global Securities Markets*, in BROKER-DEALER INSTITUTE 1987 123, 130-31 (1987).

2. For example, an investor may be interested in foreign government securities, or foreign stocks and bonds issued by corporations like British Petroleum, Bass Ltd., Guinness, L'Oréal, Credit Suisse, BMW, Nippon Steel, or Toshiba.

3. Jakira, *Diversify Your Investments Internationally*, 71 A.B.A. J., Sept. 1985, at 120. These are factors to consider in choosing the securities market with the best growth in the type of investment the investor seeks.

4. Telephone interview with David Strongin, Director of International Finance, Securities Industry Association, New York City (July 19, 1988). This is a significant increase over the \$400 billion traded in 1985.

5. *Id.* Mr. Strongin noted it is difficult to obtain accurate figures for international bond trading because it is such a huge market, but provided this estimate.

U.S. investors purchased \$45.5 billion worth of foreign stocks.⁶ Foreign purchases of U.S. stocks are increasing at a rate of approximately \$39 billion a year.⁷ The high point occurred in the first half of 1986, when foreigners purchased \$131.4 billion in U.S. equities.⁸ As the international trading volume increases, new demands are created for more efficient markets, telecommunications, and regulations. One area of particular concern is clearing and settlement procedures.

Clearing and settlement occurs after a trade is completed between brokers. It involves comparing the terms of each side of a trade, procuring payment, and delivering the security.⁹ Poor clearing and settlement systems increase financial risk for investors, who may not receive acknowledgment for a trade if there is an error, or who may incur expenses if payment or delivery of the security is delayed.¹⁰ In international trading, problems in clearing and settlement arise due to conflicting national requirements and standards, and difficulties in enforcing rules.¹¹

It is estimated that up to half of the trades in some international

6. Ketchum, *Internationalization of the Securities Markets*, in *INTERNATIONAL SECURITIES MARKETS* 9, 13 (1987).

7. Bock, *Learning to Love Stocks and Bonds*, *TIME*, Sept. 14, 1987, at 56.

8. Ketchum, *supra* note 6.

9. Bernard, *Case Studies in Cross-Border Clearing and Settlement*, in *BROKER-DEALER INSTITUTE 1986: NEW PRODUCTS, 24-HOUR TRADING, FINANCIAL STRUCTURES, MARKET INFORMATION* 114, 115 (1986). Essentially, an investor will contact her broker to conduct a trade. The broker will execute the trade through a stock exchange, and the information will be forwarded to a clearing agency. The clearing agency compares the quantity, price, method of payment, restrictions, and other terms submitted by the brokers on each side of the trade. The trade is "cleared" if the terms match. The clearing agency then acts as a middleman between the brokers to settle the trade. Payment is transmitted by the purchasing broker to the clearing agency, which forwards payment to the seller. The selling broker transfers title to the security to the clearing agent, and it is then delivered to the purchasing investor.

10. The Group of Thirty, *Clearance and Settlement Issues in the Global Securities Markets*, Symposium Background Paper 2 (Mar. 9, 1988) (copies available at the office of the Cal. W. Int'l L. Journal). The Group of Thirty is a non-profit organization composed of members from four groups: international bankers; businessmen; academics; and government officials. The purpose of the group is to promote understanding of international economic and financial issues.

11. Hunter, *The Status and Evolution of 24 Hour Trading: A Trader's View of International Transactions, Clearance, and Settlement*, 4 *B.U. INT'L L.J.* 15, 21 (1986). National requirements may differ regarding the time limit for clearing a trade, or the regulation of the clearing agency. Standards vary on the method of clearing and the degree of computerization available. Enforcing securities regulations against a foreign investor, broker, or corporation creates many jurisdictional problems, which are beyond the scope of this article. For information on enforcement of regulations see Haseltine, *International Regulation of the Securities Markets: Interaction Between the United States and Foreign Laws*, 36 *INT'L & COMP. L.Q.* 307 (1987); Moesle, *The Basic Structure of United States Securities Law Enforcement in International Cases*, 16 *CAL. W. INT'L L.J.* 1 (1986).

equity markets fail to settle on time.¹² Inefficient clearing and settlement procedures present a major obstacle to the smooth and efficient trading of securities around the world.¹³ Two primary solutions offered to integrate clearing and settlement procedures are: 1) the creation of an international organization for clearing and settlement; and 2) the development of clearing and settlement linkages, arranged between individual nations.¹⁴

Creation of an international organization to clear and settle trades is considered impractical at this time, and is not widely supported.¹⁵ This is because the systems used in many countries are poorly developed, and creating a uniform system all countries could adopt would be too difficult. At the present time, experts feel the first step should be to develop international linkages.¹⁶

The reluctance to create an international organization is unfounded. In the world investment market, greater access to a variety of exchanges provides better opportunities for the investor. The goal should be to facilitate trading in as many countries as possible. To do this, an international convention on clearing and settlement procedures should be developed, outlining a uniform system to be adopted by the less developed markets. In this way, integration of the world securities markets will occur faster, and both issuing firms and investors will benefit.

This Comment explores the functions of the clearing and settlement system, focusing on a U.S.-British clearing link¹⁷ to illustrate

12. The Group of Thirty, *supra* note 10, at 2.

13. Poor Stock Settlement Systems Seen Hampering International Stock Trading, 19 Sec. Reg. & L. Rep. (BNA) no. 8, at 248 (Feb. 20, 1987). This is a report of a discussion of internationalization issues with the Securities & Exchange Commission.

14. Regulators at International Meeting Disagree on Securitization of Debt, 19 Sec. Reg. & L. Rep. (BNA) no. 37, at 1398 (Sept. 18, 1987). This is a special report of an international meeting of securities regulators from 31 countries. The purpose of the meeting was to focus on five issues: modification and simplification of the prospectus; conversion of foreign debt into securities; cooperation in surveillance and enforcement matters; development of and access to markets; and clearing and settlement problems. For another viewpoint on developing efficient international clearing systems, see The Group of Thirty, *supra* note 10, at 5.

15. Poor Stock Settlement Systems Seen Hampering International Stock Trading, *supra* note 13. The Group of Thirty, however, does recognize the possibility of an international agency to settle international trades in the future. The Group of Thirty, *supra* note 10, at 5. It notes the following issues must be resolved in setting up an international agency: whether ownership will be public or private; what the government's role will be; how national laws will be applied; and how taxes will be determined. *Id.*

16. Regulators at International Meeting Disagree on Securitization of Debt, *supra* note 14.

17. A clearing link is an agreement set up between two foreign clearing agencies, for the purpose of establishing a unified system to clear and settle trades conducted on each other's stock exchanges. The Group of Thirty, *supra* note 10, at 5.

how uniform clearing procedures can be adopted to create an international system. The goal is to analyze how the clearing and settlement link between the United States and Great Britain accommodates the differences between the two systems, providing a working example of procedures that can be used world-wide. Part I explores the background of the present day clearing system in the United States. Part II discusses the clearing procedures in use today and the development of the uncertificated book-entry system. Part III presents an overview of securities trading and clearing in Great Britain. Part IV focuses on the U.S.-Great Britain clearing link and how it functions to increase efficiency and accuracy in clearing and settlement. The Comment concludes with observations on how the U.S.-Great Britain agreement provides a model for future development of an international clearing system.

I. BACKGROUND: CREATION OF A NATIONAL MARKET SYSTEM

The Securities Exchange Act of 1934 defines a clearing agency as an intermediary that arranges payments and deliveries for securities transactions, or provides facilities for the comparison of data in the terms of a trade.¹⁸ This definition encompasses entities such as depositories.¹⁹ Clearing agencies are self-regulatory agencies,²⁰ and are required to register with the Securities Exchange Commission (SEC) to operate.²¹

Clearing corporations, like the National Securities Clearing Corporation (NSCC) in New York, usually act to reduce the number of securities transaction settlements, thereby lowering the costs of trading.²² Depositories, such as Depository Trust Company (DTC),

18. 15 U.S.C. § 78c(a)(23)(A) (1983).

The term "clearing agency" means any person who acts as an intermediary in making payments or deliveries or both in connection with transactions in securities or who provides facilities for comparison of data respecting the terms of settlement of securities transactions, to reduce the number of settlements of securities transactions, or for the allocation of securities settlement responsibilities. Such term also means any person, such as a securities depository, who (i) acts as a custodian of securities in connection with a system for the central handling of securities whereby all securities of a particular class or series of any issuer deposited within the system are treated as fungible and may be transferred, loaned, or pledged by bookkeeping entry without physical delivery of securities certificates, or (ii) otherwise permits or facilitates the settlement of securities transactions or the hypothecation or lending of securities without physical delivery of securities certificates.

19. A depository is a company that stores securities for safekeeping and convenience. See 15 U.S.C. § 78c(a)(23)(A) (1983).

20. 15 U.S.C. § 78c(a)(26) (1983).

21. 15 U.S.C. § 78q-1(b) (1983).

22. See Letter from Amy Natterson Kroll, Securities & Exchange Commission, to

act as central securities custodians, holding securities on deposit in a fungible bulk,²³ and using book-entry systems to keep an account balance of transfers, pledges, and loans of securities.²⁴

A broker becomes a member of a clearing agency to gain access to services for comparison, clearance, and settlement.²⁵ The broker forwards information on all trades to the clearing agency and the agency compares the terms of each purchase and sale.²⁶ The clearing agency sorts the trades by broker, matches the purchase and sale slips, and then advises the broker of his obligations under the compared trade.²⁷

Clearing and settlement procedures have traditionally been hampered by the need to physically deliver a security each time it is traded.²⁸ In the United States, settlement is required five business days after the trade.²⁹ This creates a tremendous demand on brokers to compare, clear, and settle their trades rapidly.³⁰

Physical delivery of securities was required until the early 1960s.³¹ A clearing agency would prepare a balance order for each broker by calculating the net trades in each security at the end of the day, thereby requiring only one payment or delivery per security.³² The broker would deliver the securities in envelopes by an

Thomas Russo (Apr. 16, 1985). The method used to reduce transaction settlements is known as continuous net settlement. *See infra* notes 48-54 and accompanying text.

23. 15 U.S.C. § 78c(a)(23)(A) (1983). Securities are fungible because any unit or part can be exchanged or substituted for another equivalent unit or part.

24. *See* Letter from Amy Natterson Kroll, *supra* note 22.

25. The clearing agency acts as a middleman, providing specialized services to the broker, so she can concentrate on conducting trades. *See* 15 U.S.C. § 78c(a)(23)(A) (1983).

26. Guttman & Lemke, *The Transfer of Securities in Organized Markets: A Comparative Study of Clearing Agencies in the United States of America, Britain, and Canada*, 19 OSGOODE HALL L.J. 400, 412 (1981).

27. *Id.*

28. *Bradford Nat'l Clearing Corp. v. SEC*, 590 F.2d 1085, 1091 (D.C. Cir. 1978). In this case, Bradford challenged SEC approval of NSCC registration as a clearing agency, on the grounds it would create unfair competition due to the size of NSCC. In the opinion, the court provides relevant information on the functions of a clearing agency.

Ownership of a security has always been symbolized by a certificate describing the type and amount of investment, and delineating the owner's rights and obligations. Each time a trade is concluded, ownership of the certificate needs to be transferred. A combination of slow mailing and delivery systems, along with the sheer volume of paperwork to be processed, created problems in keeping abreast of increases in trading.

29. *Id.*

30. *Id.* Prior to the computer age, brokers prepared written documents describing each trade, and the documents were exchanged for comparison and clearance. Once clearance was completed, the physical security would be exchanged within the five day period. A large staff and a high level of organization was necessary to process the paperwork within the short turnaround period.

31. Guttman & Lemke, *supra* note 26, at 410.

32. *Stock Clearing Corp. v. Weis Securities, Inc.*, 542 F.2d 840, 841 (2d Cir. 1976). In this case the plaintiff sought reclamation of securities delivered to a broker who subse-

appointed time on settlement day, five business days after the trade.³³ The receiving member would then check the envelopes and make payment to the clearing agency a few hours later.³⁴

This envelope settlement system was cumbersome and backward in a new age of improving computer technology and increasing transactions. In the late 1960s trading expanded so quickly that brokerage houses could not transfer the certificates fast enough to keep pace with the trading volume.³⁵ The resulting “paper crunch crisis” forced over 100 brokers to close down or merge because they could not handle the increased volume.³⁶

In response to the paper crisis, Congress developed the National Market System (NMS).³⁷ Enacted in 1975, the system encourages

quently declared bankruptcy. It also discusses the daily procedures followed in clearing trades.

33. *Id.*

34. *Id.*

35. Coogan, *Security Interests in Investment Securities Under Revised Article 8 of the Uniform Commercial Code*, 92 HARV. L. REV. 1013, 1017 (1979). The broker was responsible for communicating with the investor, contacting his associate at the appropriate stock exchange, and drawing up a form detailing the terms of the trade. Then the broker forwarded the form to a clearing agency, and sent payment or the certificates to the clearing agency after the trade was cleared. When the trading volume increased it was difficult to complete all these steps on time.

36. L. LOSS, *FUNDAMENTALS OF SECURITIES REGULATION* 625 (1988).

37. 15 U.S.C. § 78k-1(a)(1)-(2) (1983).

(a) Congressional Findings; facilitating establishment of national market system for securities; designation of qualified securities.

(1) The Congress finds that—

(A) The securities markets are an important national asset which must be preserved and strengthened.

(B) New data processing and communications techniques create the opportunity for more efficient and effective market operations.

(C) It is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to assure—

(i) economically efficient execution of securities transactions;

(ii) fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets;

(iii) the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities;

(iv) the practicability of brokers executing investors orders in the best market; and

(v) an opportunity, consistent with the provisions of clauses (i) and (iv) of this subparagraph, for investors' orders to be executed without the participation of a dealer.

(D) The linking of all markets for qualified securities through communication and data processing facilities will foster efficiency, enhance competition, increase the information available to brokers, dealers, and investors, facilitate the offsetting of investors' orders, and contribute to best execution of such orders.

(2) The Commission is directed, therefore, having due regard for the public interest, the protection of investors, and the maintenance of fair and orderly markets, to use its authority under this title to facilitate the establishment of a national market system for securities . . . in accordance with the findings and to carry out the objectives set forth in paragraph (1) of this subsection.

development of one unified system to link brokers with exchanges, to process information, and to facilitate trading.³⁸ It calls on market participants to take advantage of improved telecommunications and technology to achieve a national system. The NMS also seeks to ensure cooperation between clearing agencies.³⁹

II. CLEARING PROCEDURES TODAY

In enacting the National Market System (NMS), Congress gave the SEC authority to end the physical movement of securities certificates.⁴⁰ The goal was to decrease the cost of transactions and to improve efficiency. A book-entry system is used to accomplish this goal in two ways.⁴¹ First, the book-entry system eliminates the frenzied paper-passing required by delivery of certificates, and immobilizes them in a depository. Second, the system is designed to eliminate certificates altogether, thereby using only the book-entry system to transfer ownership of securities. This uncertificated system is still being developed. Both procedures facilitate clearing because manual paperwork is reduced and computers quickly record transactions.

A. Book-entry Settlement

Traditionally, ownership of a security was symbolized by a certificate. The certificate was turned over to a buyer to transfer ownership. In 1962 the Uniform Commercial Code (UCC) was amended to allow development of systems to transfer securities without physical movement of the certificates.⁴² This resulted in what is com-

38. Guttman & Lemke, *supra* note 26, at 411.

39. *Id.*

40. 15 U.S.C. § 78q-1(e) (1983).

(e) Physical movement of securities certificates. The Commission shall use its authority under this title to end the physical movement of securities certificates in connection with the settlement among brokers and dealers of transactions in securities consummated by means of the mails or any means or instrumentalities of interstate commerce.

41. Book-entry systems are defined *infra* note 43.

42. U.C.C. § 8-320(1) (1978).

(1) In addition to other methods, a transfer, pledge, or release of a security or any interest therein may be effected by the making of appropriate entries on the books of a clearing corporation reducing the account of the transferor, pledgor, or pledgee and increasing the account of the transferee, pledgee, or pledgor by the amount of the obligation or the number of shares or rights transferred, pledged, or released, if the security is shown on the account of a transferor, pledgor, or pledgee on the books of the clearing corporation; is subject to the control of the clearing corporation; and

(a) if certificated,

monly known as a “book-entry” system of settlement.⁴³ Consequently, the NMS encourages widespread application of book-entry systems to speed up trade processing.

In order to execute a book-entry transfer of a certificated security, three conditions must exist: 1) the security must appear on the books of the clearing corporation as held for the account of the transferor; 2) the security must be subject to the control of the clearing corporation; and 3) the security must be in the custody of the clearing corporation and either a) in bearer form or indorsed in blank, or b) registered in the name of the clearing corporation.⁴⁴

In essence, the UCC allows a registered clearing corporation to act as the bailee for the transferor in a securities trade, and as the bailor for the transferee when the instructions from the transferor are received.⁴⁵ The share certificates are deposited with the clearing agency, and transfers are executed by reducing the account of the transferor and increasing the account of the transferee, while the shares remain in a vault.⁴⁶ UCC section 8-320 does not eliminate certificates, but merely immobilizes them so that no physical delivery is required.⁴⁷

Today, a “continuous net settlement” (CNS) system is used to settle trades.⁴⁸ In CNS, the clearing corporation acts as a middleman between two member participants. The obligation to pay for or deliver the traded securities is owed directly to the clearing

(i) is in the custody of the clearing corporation, other clearing corporation, a custodian bank, or a nominee of any of them; and

(ii) is in bearer form or indorsed in blank by an appropriate person or registered in the name of the clearing corporation, a custodian bank, or a nominee of any of them; or

(b) if uncertificated, is registered in the name of the clearing corporation, another clearing corporation, a custodian bank, or a nominee of any of them.

43. Coogan, *supra* note 35, at 1017-18. The “book-entry” system transfers ownership of securities by increasing and decreasing the number of shares an investor owns on paper. The physical certificates never change hands, but remain in a depository for safekeeping.

44. U.C.C. § 8-320(1)(a) (1978). The security must be in a form that allows the clearing corporation to transfer registration of the security to a purchaser.

45. Coogan, *supra* note 35, at 1018. Under the UCC, a clearing corporation becomes a bailee by acknowledging possession of goods and agreeing to deliver them. Due to the clearing corporation’s middleman capacity, it also acts as a bailor when it delivers goods to the transferee.

46. *Id.* This is accomplished by the double-entry accounting system. The balance of shares remains the same throughout the transaction, and the certificates do not leave the clearing corporation. Rather, the corporation debits the account of the transferor of the securities, thereby reducing the shares she has on deposit. To offset this debit, the corporation credits the account of the transferee to reflect her increased ownership of shares.

47. *Id.* U.C.C. § 8-320 also provides for transfer of uncertificated securities. *See infra* notes 62-71 and accompanying text.

48. Guttman & Lemke, *supra* note 26, at 413. CNS is combined with the book-entry transfer procedure as part of a two-step process.

agency.⁴⁹ The agency is responsible for disbursing the payment or the securities to the members.⁵⁰ CNS allows the clearing agency to net the broker's purchase and sale positions on a continuous basis.⁵¹ On the settlement date the broker has an obligation to pay or receive one netted amount for each security.⁵² Delivery takes place by bookkeeping entries, while the certificates remain in a depository.⁵³

The continuous net settlement system, coupled with the book-entry transfer procedure, is a remarkable improvement over the antiquated envelope delivery system. CNS is much faster, and the cost of transferring securities is reduced. The National Securities Clearing Corporation (NSCC) reported that the average cost of processing a transaction through CNS fell from about 80 cents in 1977 to about 40 cents in 1986.⁵⁴

Two major corporations using book-entry systems in the United States are NSCC and the Depository Trust Company (DTC). NSCC members are primarily brokerage firms trading for a wide variety of investors. DTC, on the other hand, specializes in services for institutional trading conducted by investment managers.⁵⁵ Today, NSCC controls the majority of the clearing market.⁵⁶

NSCC provides international clearing services through its subsidiary, International Securities Clearing Corporation (ISCC).⁵⁷ Pres-

49. *Id.*

50. *Id.*

51. *Id.* at 412. Each time a broker trades a particular security, the quantity of that security the broker is holding is adjusted. In this way, after every transaction the broker knows his net holdings, or position, in that security.

52. *Id.* In other words, suppose Broker *A* buys 30 shares of *X* stock, then buys 20 shares of *X* stock, sells 50 shares of *X* stock, and later buys 5 shares of *X*, all on the same transaction date. At the end of the day, his net transaction in *X* stock will be a purchase of 5 shares. Five days later, on settlement date, Broker *A* will pay the clearing corporation for 5 shares of stock, rather than paying for 55 shares, and receiving payment for the 50 shares he sold.

In practice, the net amounts due for each security are then netted so the broker makes a single settlement for all securities traded with the clearing corporation. In our example, if Broker *A* owes \$1000 for the five shares of *X* stock, and is entitled to receive \$800 for the net sale of *Y* stock, then Broker *A* will make one net payment of \$200 to the clearing corporation.

53. *Bradford Nat'l Clearing Corp. v. SEC*, 590 F.2d 1085, 1091 (D.C. Cir. 1978). Delivery under the book-entry transfer has the same effect as delivery of a certificate in bearer form or endorsed in blank, showing the number of shares transferred.

54. NATIONAL SECURITIES CLEARING CORP., 1986 ANNUAL REPORT 5.

55. Depository Trust Company, *The Institutional Delivery System and Institutional Securities Transactions* 4-5. Institutional trades include trades for mutual funds accounts, bank trust departments, insurance groups, and investment counseling firms.

56. L. LOSS, *supra* note 36, at 626-27 n.34. NSCC was able to consolidate a major portion of the clearing market because it took over the clients formerly handled by the New York Stock Exchange, the American Stock Exchange and the National Association of Securities Dealers.

57. NATIONAL SECURITIES CLEARING CORP., 1986 ANNUAL REPORT 13.

ently, ISCC operates a clearing link for trades conducted on the London Stock Exchange (LSE).⁵⁸ The London link facilitates trading by providing access to British clearing and settlement services for U.S. brokers.⁵⁹

Institutional investors, such as insurance companies and mutual funds managers, use DTC to clear trades. DTC provides clearing services for trading within the United States and Canada through its Institutional Delivery (ID) system.⁶⁰ In order to improve service to its institutional customers, DTC is examining the application of the ID system to trading in foreign markets.⁶¹

DTC, NSCC, and ISCC are three agencies that provide access to a book-entry system to immobilize securities. The system streamlines the clearing and settlement process by using computers to calculate net sales and purchases and transfer interests in securities. The book-entry system is readily adaptable to account for transactions with foreign stock exchanges.

B. Uncertificated Securities

Electronic transfer of securities ownership by book-entry can be made even more efficient and cost effective by eliminating physical certificates altogether. The existence of certificates impedes the development of more efficient clearing methods, even though physical transfer of the certificate is not required.⁶² In response to the objectives of the National Market System, article 8 of the UCC was revised in 1978 and now allows the development of uncertificated securities.⁶³ The UCC acknowledges that a security interest in an

58. Division of Market Regulation, Securities & Exchange Commission, *supra* note 1, at 148. The London Stock Exchange merged with the International Securities Regulatory Organization in 1986, and is known today as the International Stock Exchange. For purposes of clarity, however, this comment will refer to it as the London Stock Exchange.

59. The ISCC-LSE clearing link is discussed in Part IV, *infra*.

60. Depository Trust Company, *supra* note 55, at 3. The ID system coordinates trade confirmation, delivery, and payment procedures for the brokers and institutions who participate in the system.

61. Depository Trust Company, Memorandum re: Use of Institutional Delivery System to Confirm/Affirm Institutional Trades in Foreign Securities (July 7, 1987). The memorandum points out that current procedures for clearance and settlement of foreign institutional trades are costly, and can reach several hundred dollars per trade. The costs derive from delays in processing, due to the various layers of intermediaries involved in delivery and receipt of funds and securities.

62. Coogan, *supra* note 35, at 1017. Efficiency is deterred by the costs of issuing, handling, and transferring the certificates.

63. *Id.* at 1013. Uncertificated securities are securities issued without physical certificates. Ownership is manifested by a book-entry notation on the books of the clearing corporation or depository. See U.C.C. § 8-102(1)(b) (1978).

uncertificated security can be transferred by a book-entry, reducing the account of the transferor, and increasing the account of the transferee.⁶⁴

Global certificates are one method of issuing uncertificated securities. In a global certificate offering, only one certificate is printed and issued.⁶⁵ The certificate is safeguarded by a depository which conducts all transfer functions for the life of the security.⁶⁶ Global certificates significantly increase efficiency because issuing and transfer costs are minimal, and the elimination of certificate handling reduces secondary market processing costs.⁶⁷

Uncertificated securities are not yet in wide use.⁶⁸ Issuers are reluctant to issue uncertificated securities for several reasons. One reason is that issuers fear there would be too many difficulties communicating with shareholders.⁶⁹ A second problem is that state securities regulations restrict the use of depositories by insurance companies, thereby preventing insurance companies from buying uncertificated securities.⁷⁰ Furthermore, it would not be feasible to require conversion of the millions of physical certificates currently held by investors throughout the world.⁷¹ Until uncertificated securities become widespread, clearing agencies will continue to hold certificates in depositories. On an international level, the book-entry system is an effective clearing method, allowing immobilization of securities in depositories.⁷²

The book-entry system has recently been extended for use in a

64. U.C.C. § 8-108 (1978).

65. Securities Certificate Immobilization, Global Certificates Urged by Ketchum, 17 Sec. Reg. & L. Rep. (BNA) no. 23 at 1002 (June 7, 1985).

66. *Id.*

67. *Id.* Secondary market costs involve gathering the certificates, forwarding them to the purchasing broker, and keeping records of the location and ownership of the certificates. *Id.* It is estimated that the cost of conducting a \$100 million deal can be reduced from \$237,000 if certificates are used, to zero if the book-entry system is used. Cane, *On-Line Services Chart Route to Global Market*, Financial Times (London), Mar. 25, 1988.

68. 1986 SEC, ANN. REP. 32. The first uncertificated issue occurred in October, 1986, when Ford Motor Credit Corporation issued \$200 million of three-year corporate debt notes in global certificate form.

69. 17 Sec. Reg. & L. Rep. (BNA), *supra* note 65. Issuers feel it would be too difficult to identify and contact the shareholders.

70. *Id.* This creates a problem because the insurance industry is a major participant in the securities market.

71. *Id.*

72. Ketchum, Kibler, & Marcus, *Cash Management Practices*, in BROKER-DEALER INSTITUTE 1986: NEW PRODUCTS, 24-HOUR TRADING, FINANCIAL STRUCTURES, MARKET INFORMATION 512-15 (1986). Book-entry systems of settlement are in use between the Amsterdam Stock Exchange and DTC; Canadian Depository for Securities Limited & NSCC; Vancouver Stock Exchange Services Corporation & Midwest Clearing Corporation; and LSE & ISCC.

clearing link between the U.S. and British markets. Its operations are successful because the London Stock Exchange already had an efficient clearing and settlement procedure in place, and it was readily adaptable to the U.S. system.

III. CLEARANCE AND SETTLEMENT IN GREAT BRITAIN

The British securities market has recently undergone significant changes.⁷³ In 1986, the London Stock Exchange (LSE) changed its operating rules to improve the efficiency of the British market and enhance reciprocity of trading with other nations.⁷⁴ Basically, the British system was deregulated, and brokers were given more flexibility to participate in the market.⁷⁵ The new rules alter the procedure for trading securities, and their effects will be examined in order to explain how the British securities market operates.

In an effort to increase British competition on the world market, clearing and settlement procedures have also undergone recent changes. A computerized system known as TALISMAN⁷⁶ was introduced in April 1979.⁷⁷ TALISMAN is a market intermediary providing centralized settlement services for the LSE.⁷⁸ The system provides a highly accurate method of settlement, allowing the British to compete on the world market.

A. "Big Bang Day"

Traditionally, the British securities market was operated by two types of traders: brokers and jobbers.⁷⁹ A broker bought and sold

73. For a history of the London Stock Exchange see generally D. COBBETT, *TALES OF THE OLD STOCK EXCHANGE BEFORE THE BIG BANG* (1986); W.A. THOMAS, *THE BIG BANG* (1986); C. CHAPMAN, *HOW THE NEW STOCK EXCHANGE WORKS* (1986).

74. C. CHAPMAN, *supra* note 73, at 9. The factors leading to the rule changes are complicated. The Exchange was losing business because institutional investors began to dominate the market. In order to avoid the fixed commission fees, the institutions traded between themselves and on foreign markets. *Id.* at 39. In addition, the dealers, known as jobbers (*see infra* note 82), had difficulty obtaining the capital necessary to complete trades for the institutions. W.A. THOMAS, *supra* note 73, at 24-26. In 1979 the Director General of Fair Trading brought an action against the Stock Exchange for restrictive practices violations. *Id.* at 1. The government offered to drop the suit as long as the Exchange amended its rules. The Exchange agreed, and the resulting upheaval in the market system became known as the "Big Bang." *Id.* See also D. COBBETT, *supra* note 73, at 110-13.

75. See *infra* notes 79-89 and accompanying text.

76. C. CHAPMAN, *supra* note 73, at 49. TALISMAN stands for: Transfer, Accounting, Lodgement for, Investors, Stock, MANagement for brokers/jobbers.

77. Marketing and Liaison, London Stock Exchange, An Overview of Checking and TALISMAN (1985).

78. *Id.*

79. W.A. THOMAS, *supra* note 73, at 2.

securities on behalf of a client.⁸⁰ Brokers were paid fixed commission rates, which discouraged competition and guaranteed the rate of income for the firm.⁸¹ A jobber was a market maker, or dealer.⁸² The jobber acted as a principal, buying and selling securities for his own account, and providing continuous two-way prices for the brokers who contacted him for quotes.⁸³

This two-tiered system of trading proved to be detrimental to the efficiency of the market.⁸⁴ The LSE, reacting to national pressure, revised the rules regarding brokers and jobbers in 1986.⁸⁵

On October 27, 1986, known as "Big Bang" day in Britain, the securities markets were officially deregulated by the LSE.⁸⁶ The traditional separation between brokers and jobbers was dropped,⁸⁷ and the system of fixed commission rates for brokers was abandoned.⁸⁸ Thus, each member of the Exchange can now trade directly on the Exchange and deal directly with the public.⁸⁹

The British government also created a new licensing system for

80. *Id.* at 2-7. A broker dealt directly with the public, and carried out the transactions requested by individual and institutional investors. When a broker received an order for a trade, he would check the prices quoted by the various jobbers, and negotiate a trade at the best price. *Id.* at 24.

81. *Id.*

82. *Id.* A jobber operated from the Stock Exchange floor, and communicated directly with brokers. The Stock Exchange rules forbid contact between jobbers and the public. *Id.* A jobber earned a living on the spread between the buy and sell prices of the securities he traded. P. STONHAM, *MAJOR STOCK MARKETS OF EUROPE* 219 (1982).

83. W.A. THOMAS, *supra* note 73, at 24. The jobber registered as a dealer in certain securities, and provided continuous buy and sell prices in those securities. The jobber would quote both a buy and sell price to a broker who was interested in trading. Once a broker found a favorable price, he would conclude a verbal agreement with the jobber. *Id.* at 23-24. See also C. CHAPMAN, *supra* note 73, at 37-38. The agreement was binding on both parties, in compliance with the Stock Exchange motto: "My word is my bond." C. CHAPMAN, *supra* note 73, at 27.

84. C. CHAPMAN, *supra* note 73, at 9-10. The system mandated the use of a middleman, the broker, to conduct every trade. This created increased costs because fixed commission rates were imposed on every trade, and the procedure was time-consuming.

85. W.A. THOMAS, *supra* note 73, at 1. The Stock Exchange reacted to pressure from the Director General of Fair Trading. See *supra* note 74.

86. Grass, *Internationalization of the Securities Trading Markets*, 9 HOUS. J. INT'L L. 17, 25 (1986).

87. W.A. THOMAS, *supra* note 73, at 102-03. Now each broker can be a market maker. The broker has direct access to the Stock Exchange via a computerized system of quotations known as SEAO. C. CHAPMAN, *supra* note 73, at 42-43. Modeled after the NASDAQ system in the United States, SEAO (Stock Exchange Automated Quotations System) allows the brokers to conduct trading from a computer screen, rather than going to the floor of the Exchange. *Id.*

88. Grass, *supra* note 86. The Stock Exchange used fixed commission rates in order to discourage competition between brokers, and to maintain a division between broking and jobbing firms. The elimination of the differences between brokers and jobbers does away with the need for fixed rates, since each market participant can also act as a market maker.

89. *Id.* Members can now act as brokers only, dealing with the public and contacting a market maker to conduct a trade, or act as brokers and market makers at the same time.

investment businesses known as the Financial Services Act of 1986.⁹⁰ The Financial Services Act creates a new system of “self-regulation within a statutory framework.”⁹¹ The Secretary of State created the Securities and Investment Board (SIB), which has the specific duty of granting authorization to carry on investment activities.⁹² The SIB has the authority to regulate new developments on the Stock Exchange, in the same way the SEC has authority to regulate brokers, exchanges, and clearing agencies.⁹³

B. TALISMAN

The British securities market is also developing new clearing and settlement procedures. Formerly, settlement was accomplished between the broker and jobber involved in the trade, creating a staggering flow of paper.⁹⁴ Today the LSE has initiated a new computerized system.

Currently, brokers submit the information from their trades to the LSE, which operates special computer systems to clear and settle the trades.⁹⁵ Once a trade is concluded, the two parties independently input the trade details into the LSE’s Central Checking System, which acts as a comparison system.⁹⁶ Eligible securities are forwarded to the TALISMAN system for settlement.⁹⁷

90. C. CHAPMAN, *supra* note 73, at 153. The Financial Services Act requires all investment businesses to obtain a license to operate.

91. Bernard, *The U.K. Financial Services Act, 1986: A New Regulatory Framework*, 21 INT’L LAW. 343, 344 (1987) (quoting FINANCIAL SERVICES IN THE UNITED KINGDOM: A NEW FRAMEWORK FOR INVESTOR PROTECTION, Jan. 1985, CMND. No. 9432, ch. 5, at 13). The bill gives power to the Secretary of State to authorize persons and entities to carry on investment activities. To accomplish this, the Secretary has the authority to create self-regulatory bodies to oversee various functions of the securities market. The London Stock Exchange is one of the self-regulatory agencies.

92. *Id.* at 345. The SIB is a private limited company, funded by taxes levied on the financial services industry.

93. Bernard, *supra* note 91. The Stock Exchange is a private self-regulatory organization, and was pressured to submit to oversight by the SIB.

94. Marketing and Liaison, London Stock Exchange, *supra* note 77. The paper flow stemmed from a system of settlement similar to the envelope system used in the United States. See *supra* notes 31-36 and accompanying text. In Britain, the system was known as “ticket passing.” See also C. CHAPMAN, *supra* note 73, at 47-48. By 1980 up to a half million tickets, or transfer forms, were circulated at the end of each account period, and weeks would pass before a buyer received evidence of her purchase. *Id.* at 49.

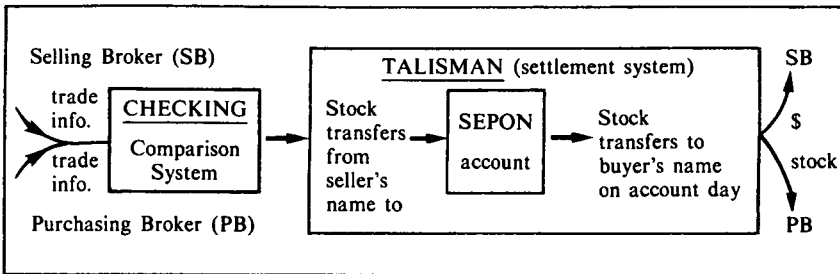
95. Marketing and Liaison, London Stock Exchange, *supra* note 77. The computer systems are known as the Central Checking System and TALISMAN.

96. *Id.* The Checking System functions to clear the trade. This is done in two stages: validation and matching. In the validation stage, each side of the trade is verified to ensure all the necessary information has been submitted. It then proceeds to matching, where the two sides are compared, to ensure the elements of the trade correspond to one another.

97. *Id.* TALISMAN is available to settle trades in British and Irish securities, and foreign-registered equities.

TALISMAN is the computerized settlement system operated by the LSE.⁹⁸ TALISMAN acts as an interface between the two parties to a trade, so that all communications regarding the trade are made directly to TALISMAN.⁹⁹

The TALISMAN system uses an LSE nominee company¹⁰⁰ named SEPON Ltd. to settle trades.¹⁰¹ Stock is held in the custody of SEPON on behalf of the traders.¹⁰² During settlement, shares will be registered into, and transferred out of the SEPON account.¹⁰³ The transfer from SEPON to the purchasing broker occurs on account day.¹⁰⁴ The following diagram summarizes the steps in a trade:



Settlement in Britain is done on a fortnightly calendar.¹⁰⁵ The LSE year is divided into twenty-four account periods.¹⁰⁶ Twenty account periods last for two weeks, and the remaining four accounts are three weeks in length.¹⁰⁷ Trading occurs during the account pe-

98. *Id.*

99. *Id.* This reduces the work for the brokers and jobbers, who formerly had to settle trades between themselves.

100. C. CHAPMAN, *supra* note 73, at 49. A nominee company holds securities in trust on behalf of the underlying owners.

101. Marketing and Liaison, London Stock Exchange, *supra* note 77. SEPON stands for Stock Exchange POol Nominee.

102. *Id.* SEPON maintains one account for each TALISMAN-eligible security. A record is kept of each market maker's interest in the stock account. In other words, SEPON will have one account for shares of Guinness, and the record will reflect the number of shares of Guinness each broker holds at any one time.

103. *Id.* An investor who sells a security transfers her ownership into the SEPON account, which then transfers ownership to the purchasing broker. See also C. CHAPMAN, *supra* note 73, at 49.

104. Marketing and Liaison, London Stock Exchange, *supra* note 77. Account day is the day settlement is due.

105. G. WARFIELD, HOW TO BUY FOREIGN STOCKS AND BONDS 91-92 (1985). Settlement of stocks and corporate bonds occurs every two weeks, at the end of the account period. Gilts, or government bonds, are settled the next day, and are not handled by TALISMAN.

106. Marketing and Liaison, London Stock Exchange, *supra* note 77. An account period is a two week trading period.

107. *Id.* These accounts are identified by letters of the alphabet. *Id.* The three week account periods occur when there are bank holidays, such as at the beginning of the year. G.

riod, and settlement terms are negotiated during the third week.¹⁰⁸ If the trade is to be settled, this occurs on Account Day, usually Monday of the fourth week.¹⁰⁹

The LSE allows a rollover of the settlement date if necessary, which delays delivery and decreases the liquidity of the market.¹¹⁰ Essentially, an investor can buy an option¹¹¹ at the end of the account period to continue the trade for two more weeks.¹¹² An investor with good credit can speculate on the market without cash, merely by buying an option and paying a rollover premium.¹¹³

To summarize, the British clearance and settlement system is controlled by the LSE. A broker forwards information on a trade to the Checking system, where it is compared. The trade then proceeds to TALISMAN where a SEPON account is used to transfer securities from seller to buyer. Settlement takes place on the second Monday after the account period has closed. TALISMAN retains the physical securities, acting as a depository to immobilize certificates.¹¹⁴

The British TALISMAN system uses principles of book-entry movement similar to the U.S. clearance procedures.¹¹⁵ This provides a

WARFIELD, *supra* note 105, at 91.

108. Marketing and Liaison, London Stock Exchange, *supra* note 77. This third week is known as "pre-settlement week". It gives each dealer a minimum of five days to settle trades, depending on when in the account period the trade took place.

109. *Id.* Example of account period settlement schedule:

<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>	<u>Week 4</u>
—Account Period A—		Pre-settlement Account A	Monday: Settlement of Account A
—Account Period B—			

If a broker conducts a trade during account A, it must be settled by Monday of the fourth week. This gives the broker a minimum of five days, during pre-settlement week, to clear and settle the trades from account period A. *See also* G. WARFIELD, *supra* note 105, at 91.

110. Hunter, *supra* note 11, at 22. This rollover, or extension of the payment date, is known as a contango. G. WARFIELD, *supra* note 105, at 101.

111. An option is a right to purchase or sell a security at a specified price within a specific time period. BLACK'S LAW DICTIONARY 986 (5th ed. 1979).

112. Hunter, *supra* note 11, at 22. This allows the investor to delay settlement for an additional two weeks. *See also* P. STONHAM, *supra* note 82, at 218.

113. Hunter, *supra* note 11, at 22.

114. International Securities Clearing Corp., The Clearing Linkage Between International Securities Clearing Corp. and the London Stock Exchange 4 (1987).

115. Marketing and Liaison, London Stock Exchange, *supra* note 77. Although the book-entry system is used within TALISMAN, every movement of securities must still be registered, and stamp duty collected on it. *Id.* The LSE is developing TAURUS (Transfer and Automated Registration of Uncertificated Stock), a book-entry system, to hold and transfer

basis for adopting a joint program to clear trades conducted on British and U.S. markets. Uniform international clearance procedures can reduce costs, time, and risks inherent in international trading.

IV. DEVELOPING A CLEARING LINK BETWEEN THE UNITED STATES AND GREAT BRITAIN

A major problem in any securities transaction is financial risk. The potential for loss is amplified in international trading because of additional risks such as currency fluctuations,¹¹⁶ credit risk,¹¹⁷ government instability,¹¹⁸ varying standards in securities regulation,¹¹⁹ and jurisdiction over the transaction should any problems arise.¹²⁰ Clearing linkages between U.S. and foreign agencies are helping to reduce these risks by providing a reliable, safe, and efficient method to conclude each trade.

To date, most links have been established by the foreign firm or clearing agency becoming a member of a U.S. clearing corporation.¹²¹ One such agreement exists between the LSE and the International Securities Clearing Corporation (ISCC).¹²² To establish the link, the procedures of each system are adapted to clear international securities trades.

stock electronically into and out of SEFON. International Stock Exchange, TAURUS and Registrars: An Outline of the Service (1987).

116. Bernard, *International Linkages Between Securities Markets: "A Ring of Dinosaurs Joining Hands and Dancing Together"?*, 1987 COLUM. BUS. L. REV. 303, 326 (1987). Fluctuations in exchange rates can affect the value of a security denominated in a foreign currency. In addition, settlement may be more difficult because each side is trading in a different currency.

117. *Id.* at 325. Credit risk is amplified because foreign laws on bankruptcy and insolvency vary. The investor may not be protected if the other party to a transaction goes bankrupt.

118. *Id.* Government instability will usually decrease the value of securities.

119. *Id.* at 326. Regulatory differences create inconsistent requirements for transactions, and varying degrees of security for the investor. For example, an investor may not be protected from fraud.

120. *Id.* at 325. When the issuer is foreign, but the investor is American, there will be a conflict over which forum governs enforcement of the trade.

121. Ketchum, *The Role of the Securities and Exchange Commission in Regulating International Securities Trading: Looking to the Future*, 4 B.U. INT'L L.J. 33, 37 (1986). For example, the Canadian Depository for Security, Ltd. is a member of NSCC, and Midwest Clearing Corporation.

122. International Securities Clearing Corp., *supra* note 114. A second link exists between LSE and Midwest Clearing Corporation (MCC) in Chicago. MCC settles trades, and uses Midwest Securities Trust Company as a depository. International Stock Exchange, International Settlement Links: United Kingdom-United States 3.

A. Traditional Linkages

The United States has a complex system of securities regulation. This creates a problem in international clearance because the U.S. clearing agency must balance its desire for efficiency, versus its need to monitor the conduct and procedures of the foreign clearing corporation.¹²³

To set up a clearing link, the SEC issues a no-action letter allowing the foreign clearing agency to establish a computerized link with a U.S. clearing agency.¹²⁴ This permits the foreign agency to clear trades in U.S. securities without registering as a clearing agency with the SEC.¹²⁵

Traditionally, clearing linkages have only operated one-way: a foreign clearing agency becomes a member of a U.S. clearing agency, and the trades are cleared and settled in the United States.¹²⁶ This reduces investor risk because the United States has more control over the foreign clearing facility.¹²⁷

International Securities Clearing Corporation (ISCC) has taken steps to establish foreign clearing links.¹²⁸ ISCC works on behalf of NSCC members to obtain access to foreign clearing and settlement services.¹²⁹ ISCC has applied to the SEC to register as a clearing agency and is now operating under temporary approval.¹³⁰ At present, the SEC is issuing no-action letters to grant approval for operations initiated by ISCC.¹³¹

ISCC began foreign operations in 1986, forming its first link with the LSE and the TALISMAN system.¹³² The link provides ISCC and LSE with access to each other's systems for comparison, settlement, and depository services.¹³³

123. Ketchum, *supra* note 121.

124. Ketchum, *supra* note 6, at 23.

125. *Id.*

126. Ketchum, *supra* note 121.

127. *Id.* The U.S. clearing agency examines the capitalization and capabilities of the foreign clearing agency to ensure the safety of the investors.

128. NATIONAL SECURITIES CLEARING CORP., 1986 ANNUAL REPORT 13.

129. *Id.* ISCC's main purpose is to obtain better service for its members, not to provide clearing services for foreign traders. ISCC will provide access to U.S. clearing services when negotiating with foreign agencies to obtain services for their U.S. customers.

130. Division of Market Regulation, Securities & Exchange Commission, *supra* note 1, at 194.

131. *Id.* at 195.

132. NATIONAL SECURITIES CLEARING CORP., *supra* note 128.

133. International Securities Clearing Corp., *supra* note 114.

B. Iscc/Lse Clearing Link

The ISCC/LSE link is a reciprocal system: LSE member firms trading in U.S. securities have access to ISCC services through LSE accounts at ISCC; and ISCC members have access to the TALISMAN service to clear transactions in British securities.¹³⁴ For example, a U.S. broker who conducts a trade on the LSE will provide ISCC with the data pertaining to the terms of the trade, and ISCC will transmit the information for clearance and settlement to the LSE.¹³⁵ This is a much simpler system for the brokers. Prior to the link, the brokers had to telex their agent banks in London with the details of a trade, and allow the bank to handle settlement.¹³⁶ To accommodate the British link, the Federal Reserve Board has adjusted its five-day settlement requirement by allowing a seven day mechanical delay exception for trades subject to the British two-week settlement cycle.¹³⁷ This alteration of settlement requirements is one example of the cooperation needed to create a successful clearing link.

The ISCC/LSE link provides courier service for the transfer of documents, depositories in each country, and a data link for comparison and reporting of transactions.¹³⁸ All British securities processed through the TALISMAN system are eligible for the service.¹³⁹

Eastbound service from the United States to Great Britain is already in operation.¹⁴⁰ On the day a trade is executed by a U.S. broker on the LSE, the broker forwards a record of the trade to the ISCC.¹⁴¹ ISCC then transmits the data to the LSE on the same day.¹⁴² The data is matched and compared in the British Checking system with information provided by the LSE member conducting the trade.¹⁴³ The results are transmitted to ISCC and are received by the opening of the next day's trading.¹⁴⁴

134. *Id.*

135. *Id.*

136. National Securities Clearing Corp., Participant Report 6 (Sept. 1987).

137. Division of Market Regulation, Securities & Exchange Commission, *supra* note 1, at 198 n.145.

138. International Securities Clearing Corp., *supra* note 114.

139. *Id.* at 3.

140. Eastbound service involves settling trades by U.S. brokers in British securities, utilizing the TALISMAN system. *Id.*

141. *Id.* The broker must be a member of ISCC in order to use the service.

142. *Id.* at 2.

143. *Id.*

144. *Id.* Any discrepancies or errors in the bargain must be worked out between the participants, and the data resubmitted. All amendments to the terms of the trade must be submitted prior to settlement day.

On settlement day, TALISMAN credits the stock to the ISCC account with the LSE if the trade is a purchase.¹⁴⁵ The certificates are retained in the custody of the LSE for safekeeping.¹⁴⁶ If the ISCC member is selling, the stock is transferred out of the ISCC account, and into an LSE SEPON account.¹⁴⁷

Next, TALISMAN calculates a net settlement cash position, and the data is transmitted to ISCC.¹⁴⁸ Settlement is completed the same morning in London.¹⁴⁹ ISCC maintains accounts in London in pounds and dollars, allowing one debit or credit to settle the entire account.¹⁵⁰

Westbound service¹⁵¹ for British brokers trading eligible securities will soon be operational.¹⁵² Currently, each LSE member maintains a separate account with ISCC.¹⁵³ Omnibus accounts, held in the name of several market participants, will eventually be available for brokers who do not anticipate sufficient trading to maintain an independent account.¹⁵⁴

When a British broker trades U.S. securities for her own account, the trade information is submitted to LSE, which forwards it to ISCC.¹⁵⁵ The trade is settled through NSCC's continuous net settlement service. If the broker is trading on behalf of an institution, and the institution is a member of Depository Trust Company (DTC), then ISCC will forward the trade data to DTC.¹⁵⁶ DTC will settle the trade through its Institutional Delivery system.¹⁵⁷

ISCC will use NSCC to settle trades for British brokers trading in U.S. dollars by continuous net settlement within five days of the trade.¹⁵⁸ Transactions in U.S. securities denominated in pounds can

145. *Id.* at 3.

146. *Id.*

147. *Id.*

148. *Id.* The total transactions in each security during an account period are netted on settlement day. The net transaction amounts are separated into British pound trades, and U.S. dollar trades.

149. *Id.*

150. *Id.* Transactions settling in pounds are segregated from those settling in dollars.

151. Westbound service allows British brokers to settle trades in U.S. securities through ISCC. The service is expected to begin operation in late 1988. *Id.*

152. National Securities Clearing Corp., Participant Report 5 (June 1987).

153. International Securities Clearing Corp., *supra* note 114, at 5.

154. *Id.* This provides firms who do not do a large volume of international trading with access to the clearing link. By joining an omnibus account with other firms, they are able to share the expense of the clearing service.

155. *Id.*

156. *Id.*

157. *Id.* Transactions cleared through DTC's ID system will still be netted by ISCC, to provide one net payment or receivable.

158. *Id.*

be compared, but settlement must be done on a trade by trade basis between the brokers.¹⁵⁹ Future development will enable U.S. clearing agencies to clear trades in foreign currencies by continuous net settlement.¹⁶⁰

British participants will be able to safeguard their securities at Depository Trust Company, through an account sponsored by ISCC.¹⁶¹ This facilitates the use of book-entry delivery of certificates and improves trading efficiency.

C. Future Developments

The U.S.-Great Britain link is one example of how international cooperation can create uniform clearing and settlement procedures to facilitate trading. It is successful because both countries had efficient clearing procedures in operation before they attempted to link the systems. Book-entry systems of settlement and depositories to immobilize securities are essential to arranging a link, because they eliminate an enormous amount of paperwork. Furthermore, ISCC and LSE are willing to guarantee the source and settlement of each trade, thereby reducing credit risks.¹⁶²

The establishment of similar links is supported by the international community.¹⁶³ In July 1986, the International Organization of Securities Commissions (IOSC) formed a standing committee to promote efficient clearing and settlement procedures worldwide.¹⁶⁴ Other links that are in operation or are currently being developed

159. *Id.* NSCC can not settle trades in foreign currencies. Therefore, settlement occurs outside NSCC, between the brokers.

160. *Id.* at 8. This would allow participants who do not maintain U.S. dollar accounts to settle their trades in the currency they were conducted in, thereby avoiding conflicts with exchange rate fluctuations. In other words, if a British broker conducts a trade on the U.S. market, and the trade is concluded in British pounds, the broker would normally have to arrange for payment in U.S. dollars to the U.S. broker. This is because U.S. agencies are not permitted to maintain domestic accounts in foreign currencies. In the future, it is anticipated that U.S. agencies will be able to open accounts in British pounds in the U.S., allowing a British broker to pay for a trade in British pounds, and eliminating the need to buy U.S. dollars to pay for a trade.

161. *Id.* at 6.

162. Bernard, *supra* note 9, at 123. If a dispute arises regarding a trade, liability is settled between ISCC and LSE. LSE guarantees the validity of trade information processed through its Central Checking and TALISMAN systems. Likewise, ISCC guarantees trades cleared through the CNS system. The broker who provided the incorrect data, or broke regulatory rules, indemnifies the clearing agency. The percentage of failure of trades is negligible, and few problems actually arise.

163. 19 Sec. Reg. & L. Rep. (BNA) no. 8, *supra* note 13.

164. Conference Creates Panel to Promote Securities Law Enforcement Worldwide, 18 Sec. Reg. & L. Rep. (BNA) no. 29, at 1049 (July 18, 1986). IOSC was formed in 1975, and its membership includes over 58 countries. An annual meeting is held to discuss recent developments and areas of future cooperation.

include: Cedel;¹⁶⁵ Euroclear;¹⁶⁶ Nscc and the Canadian Depository Service;¹⁶⁷ Vancouver Stock Exchange and Midwest Clearing Corporation (Mcc);¹⁶⁸ Mcc and the London Stock Exchange;¹⁶⁹ and Options Clearing Corporation and International Commodities Clearing House Limited.¹⁷⁰

At present, however, rules and regulations in most countries are so diverse that establishing an international system would require enormous change in current procedures.¹⁷¹ Many exchanges are not well regulated, exposing investors to too many risks.

The global community should begin now to plan an international organization to clear all securities trades. This will create a more efficient market and minimize the risks in international trading. A master computer system can be devised which is compatible with existing clearance systems, and brokers can transmit the trade information via national agencies to the international system. Clearance will be available for all securities represented by the participating members. Settlement will occur in the foreign currency the trade was conducted in. Strategic depositories will maintain certificates. Eventually their function will be minimized by global certificates and uncertificated securities. The international organization will be funded by service fees paid by the brokers on each trade that is processed. This type of international clearing organization will provide less developed countries greater opportunities to get involved in the international financial market.

Once the procedures are operational, the key to further internationalization of clearing systems will be the improvement of com-

165. Division of Market Regulation, Securities & Exchange Commission, *supra* note 1, at 138-40. Cedel stands for Centrale de Livraison de Valeurs Mobilières, and was formed in 1970 in Luxembourg. It uses a book-entry system to clear trades in Eurobonds.

166. *Id.* Euroclear was formed in Brussels, Belgium in 1968. Euroclear also uses book-entry procedures to settle Eurobond trades.

167. Ketchum, *supra* note 6, at 23. Cds is now a member of Nscc. The link processes transactions between Canadian and U.S. brokers in the over the counter market, and transactions conducted on the AMEX-Toronto Stock Exchange market linkage.

168. *Id.* Mcc operates in Chicago, and is similar to Nscc. The link processes over the counter trades.

169. *Id.* at 24. This link clears trades by British brokers in U.S. equities.

170. *Id.* This link involves trades in foreign currency options between the Philadelphia Stock Exchange and the LSE. The trades will be cleared and settled by the OCC, a U.S. agency. ICCH will become a member of OCC, allowing it to clear trades conducted by British brokers.

171. The Group of Thirty, *supra* note 10, at 3. For example, settlement cycles vary in length, making it more difficult to coordinate a consistent time frame for settlement. In Hong Kong equity shares settle the next day; in Japan settlement occurs three days after the trade; in Italy settlement is at the end of the month; and in Australia and New Zealand the settlement date is at the seller's option.

munications equipment and technology to keep pace with the increase in international securities trading. Increased volume is already creating a demand for improved communications systems. Since Britain's "Big Bang" in October 1986, trading volume on the LSE has increased from 50,000 transactions a day to over four times that amount.¹⁷² This calls for increased computerization of clearing and settlement procedures, faster communication between computer systems, and improved accuracy in maintaining depository accounts.

CONCLUSION

Clearing and settlement is essential to every securities transaction. Once a trade is concluded, the resulting terms of the bargain are forwarded to a clearing corporation. There, the terms are compared in the clearing stage. Settlement involves the exchange of money and securities. The clearing corporation usually provides a depository service to safeguard the certificates.

The United States and Great Britain have created a model system for foreign clearing services through the ISCC-TALISMAN link. This link is the most sophisticated manner of settlement yet developed because it allows all members direct access to the clearing procedures available in the participating foreign country. The U.S.-British system demonstrates how domestic clearing procedures can be coordinated to develop a uniform international program to facilitate clearing and settlement.

The greatest deterrent to an international clearing system is the persistent use of physical delivery of securities. Computers have brought securities trading into a new age, and countries must implement book-entry and depository systems before they can take advantage of the services a centralized clearing link can provide.

*Rita Ann Coyne**

172. 19 Sec. Reg. & L. Rep. (BNA) no. 8, *supra* note 13.

* This Comment is dedicated to my grandfather, Dr. Felix Rotoli, and my great-aunt, Anna Rotoli, in thanks for their inspiration and encouragement.

