

Transfer, Pledge, Clearance and Settlement in the Japanese and United States Government Securities Markets

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Recent years have witnessed enormous efforts to enhance automation and reduce operational risks in securities markets. This article examines and compares the applicable law and operational aspects of securities transfer, pledge, clearance, and settlement in the Japanese and United States securities markets—in particular the Japanese Government Bond and United States Treasury securities markets. It also addresses the credit risks posed by financial intermediary control of securities. The article concludes that many aspects of law and operations, in both the United States and Japan, could benefit from reforms. Reform and harmonization of domestic laws and operations also would benefit continuing efforts to coordinate and link the world's major securities markets.

I. Introduction

Much has been discussed and written about the pursuit of a “certificateless society” where the movement of paper securities would be eliminated or substantially reduced. Developments in the law and market practices in many countries have made the certificateless society a reality only in some markets and then only for some securities. Much of the energy devoted to pondering the demise of paper has addressed legal doctrine in an effort to provide “rules” for transfer and pledge of paperless securities that would replicate, incorporate or supplant the familiar rules that apply to paper securities.

Much of this article is based on a research undertaken while the author was a Visiting Scholar at the Institute for Monetary and Economic Studies, the Bank of Japan, from September through December, 1988. The discussion of the Japanese Government Bond market and Japanese law is based substantially on interviews, informal translations, and correspondence with Japanese experts. The author is particularly indebted to Yoshiharu Oritani, Chief of Research Division II, Institute for Monetary and Economic Studies, and the staff of the Bank of Japan, for their explanations of many aspects of Japanese Government Bond market transactions. The author is also indebted to Professor Atsushi Kinami, Faculty of Law, Kyoto University, whose patience in instructing the author in Japanese civil law has been exceeded only by the wisdom of his advice and assistance. All errors that remain are the author's. An expanded version of this article, co-authored by Professor Kinami and the author, will be published in the United States as Mooney & Kinami, *Transfer, Pledge, Clearance and Settlement in the Japanese and United States Government Securities Markets*, 12 U. Pa. J. Int'l Bus. L. (forthcoming 1991).

Until recently the search for a certificateless society has featured too little effort in three areas of inquiry. First, what benefits are to be achieved, and for whom, by eliminating or reducing the movement of paper? Second, to what extent do the perceived problems result not from the existence or non-existence of paper securities or defects in the legal regime but from the need for improvements in the process of clearing and settling securities trades¹ among active market participants? Third, what are the legal implications of securities market practices that inevitably involve the role of intermediaries (usually securities firms or banks) that control fungible bulks of securities for their customers (and, sometimes, creditors)? These intermediaries act for traders and investors as brokers and dealers in the secondary securities markets as well as custodians and depositories that insulate the beneficial owner from the issuer.

This article attempts to provide some tentative answers to these three questions. The emphasis here is on property rights and credit issues rather than on techniques of regulating and supervising the market participants *per se*. One goal of the article is to provide a useful checklist of issues and questions that might be addressed by those who would seek to modify the legal regimes applicable to the Japanese, United States, or other markets. When the basic issues, such as the structure of clearing and settlement mechanisms, the resolution of competing claims to securities controlled in fungible bulk by intermediaries, and the allocation of risks of intermediary insolvency or failure to settle trades, are considered and resolved, then the design, drafting and technique of concrete legal doctrine necessary to implement the scheme can be considered.

In another article² I have suggested a richer contemplation of fungible bulks of securities that are in some fashion controlled by an intermediary for the benefit of its customer or secured creditor. The rights of customers in such securities are *sui generis* indeed. However those rights may be characterized under applicable law, the relationship between the intermediary and its customer is inherently similar to that of a debtor and its creditor. In many respects the relationship resembles the debtor-creditor paradigm more than that of bailee and owner-bailor of tangible property. It is interesting that the financial world and the various legal regimes have come to grips with the notion that "money" usually does not represent a claim against any government, central bank or other bank note issuer. Rather, it consists largely of unsecured claims by creditors (account holders) against debtors (banks). As money is moved these claims are moved and the identities of the debtors and creditors change. In the securities world, however, both the market participants and the legal regimes generally fail to distinguish so sharply

¹Clearance and settlement are the processes that occur after securities trades are made in the market. "Clearance" involves comparing, matching, and confirming trades so that each party is assured that the trades have been made according to the mutually agreed upon terms. "Settlement" consists of the payment of funds by buyers of securities and the transfer of ownership of securities by the sellers. See generally *infra* Parts IV. A., B.

²Mooney, *Beyond Negotiability: A New Model for Transfer and Pledge of Interests in Securities Controlled by Intermediaries*, 12 Cardozo L. Rev. 305 (1990) [hereinafter, Mooney, *Beyond Negotiability*].

claims against an issuer of a security (the “property rights”) by an owner and claims against securities intermediaries who control securities for the benefit of their customers. The quest for a certificateless society may be aided by developing a legal regime that draws more heavily from lessons in the context of money and bank deposits than upon analogues based on the bailment and deposit of commingled tangible property.

This article does not provide specific solutions for all of the existing puzzles in the legal regimes concerning securities transactions. The breadth and depth of the subject is too immense. Nor does it provide definitive proposals for the systemic or operational aspects of the securities markets, such as clearance and settlement. The principal methodology of the article involves comparisons of the Japanese Government Bond (JGB) and the United States Treasury security markets and the Japanese and United States legal regimes as they relate to transfer, pledge, clearance and settlement.³ For present purposes it is not so important to explicate why the existing legal regimes might differ or to detail all of the doctrinal differences.⁴ The comparison will demonstrate that there exists a strikingly similar, common core of issues and alternatives with which market participants, regulators and future sculptors of the legal regimes must grapple. The evidence suggests that the same common core may be found in other active securities markets.

Reflection on the common core of issues and alternatives also suggests useful insights that may impact beyond the domestic markets and legal systems of the United States and Japan. Recent years have seen an increasing “internationalization” of the securities markets. It is important that participants in the financial centers around the world seek common solutions and approaches to deal with securities transfers, pledges, clearance, and settlement in their domestic markets and laws and in the manner of connecting participants in the various different markets.

II. Japanese Government Bonds and United States Treasury Securities —An Overview of the Markets

A. The Japanese Government Bond Market⁵

1. Market transactions

Although JGBs are traded on the Tokyo and other stock exchanges, the vast majority of the trading occurs in the “over-the-counter” market among about thirty securities

³In this article general references to “United States” law refer to applicable federal or state law, as the case may be.

⁴Although the results reached in various circumstances by applying the legal rules in Japan and the United States to transfer and pledge of negotiable paper securities do not differ substantially, the conceptual underpinnings and terminology involved are more dissimilar. Not surprisingly the different origins of the two legal regimes—Japan’s civil law tradition largely drawn from German law and the common law tradition of the United States largely drawn from the law of England—account for such differences.

⁵The discussion in Part II.A. is based largely on interviews with experts in Tokyo, some of whom are staff of

firms and banks. At any given time, most of the trading is for the so-called "benchmark" 10-year bond issue. The "benchmark" issue changes from time to time.⁶

Much of the over-the-counter trading in JGBs is done through the *Nihon Sogo Shoken*—The Japan Bond Trading Company, often called the "Broker's Broker" (the BB). The remainder consists of direct trades between buyers and sellers. The BB maintains a real time "screen" that displays to the participants current, outstanding bids and offers. Bids are made and offers accepted by telephone to the BB and, almost instantly, the bids and offers (and acceptances of offers) are reflected by the screen. All trades with the BB are on an "undisclosed" basis—the BB becomes a party to each trade (a buyer from the initial seller and a seller to the ultimate buyer) but does not disclose the identity of its contra parties.

Although the BB actually becomes an obligated party in each trade, the credit and other risks associated with possible BB fails to settle (*i.e.*, failure to pay for securities to be bought or transfer securities to be sold) generally are considered minuscule. The BB is owned primarily by the "Big Four" securities houses. Presumably, that connection is thought sufficient to ensure the competence, integrity and liquidity necessary to avoid fails by the BB were one of its sellers or buyers to fail to make a payment or transfer securities to the BB. Fails to deliver or pay by the BB's customers (now there are more than 300) have not been a problem. Because the BB runs a strictly matched book (it buys from one party only when there is a sale to another party at the same price), there is little perceived risk that BB would fail to pay or deliver.

2. Clearance and settlement

Whether securities are traded on exchanges or over the counter, arrangements must be made for buyers to pay for securities bought and for sellers to transfer ownership of

the BOJ, during September through December, 1988, and August, 1990. However, *the BOJ has not approved the substance of this discussion and none of the descriptions, suggestions or alternatives discussed in this article necessarily reflect the views of the Bank of Japan.*

⁶As for the reasons for the benchmark phenomenon and the corresponding illiquidity of the other issues, it has been explained that:

This market distortion, a result of too rapid an expansion of the market, is transitional in nature. It is believed to be only a matter of time before concentrations in certain bonds disappear for the following reasons.

First, the introduction of short-term government bonds has increased the varieties of bonds and maturities available for trading....

Second, a bond futures market was established at the Tokyo Stock Exchange in October 1985 to enable bond dealers to hedge risks of fluctuations in long-term bond prices.

Senbo, *Public Bond Markets*, pt. 1, 9-10, in *Japan's Financial Markets* (FAIR Fact Series 1987). Perhaps, at the present time, the active traders have a relatively finite appetite for trading. Because they also require a highly liquid market (in order to reduce risks of market fluctuations in connection with short-term holdings), the trading is essentially limited to the benchmark bond. In other words, if the finite volume of trading volume were spread over all issues and maturities, the desired liquidity might not exist.

the securities sold. The arrangements might call for each trader to meet face-to-face with each other trading partner so that the securities involved in each trade can be physically delivered to the buyer against simultaneous payment by the buyer in currency or check. But, for active securities market traders who agree to may trades every business day, the difficulties in such a settlement structure are obvious. The development of systems for clearing (comparing, matching, and confirming trades) and settling (transferring interests in securities and paying for securities) securities trades reflects attempts to replicate, in some fashion, the certainty and safety of the simple face-to-face paradigm while avoiding its inefficiency and impracticability.

a. BOJ securities accounts

There are two different JGB “book-entry” transfer systems operated by the Bank of Japan (BOJ). One is the registration system and the other is the book-entry system.

(1) Registration system

JGBs can be put into the registration system when first issued. A physical (certificated) JGB also may be surrendered to the BOJ by the holder and thereby put into the registration system. The physical bond is then destroyed and the holder becomes the registered owner on the books of the BOJ. Any owner of a JGB may become a registered owner; participation in the registration system is not limited to financial institutions.

The registration system is administered by the BOJ as an agent of the Japanese government pursuant to the Law on Government Bonds.⁷ Registration, in Japan, is a different concept than in the United States. In Japan, the certificated bonds are surrendered when they are registered and, if a registered owner desires a piece of paper once again, a request for a certificate will be honored.⁸ Unlike the United States practice, the Japanese system does not combine registration with the holding of a piece of paper by the owner—the certificated JGBs are *bearer* bonds.⁹

Transfer in the registration system involves the registered owner signing a written request for transfer (RFT). The RFT is delivered to the transferee and the transferee must sign it as well. The RFT is then delivered to the BOJ and (assuming the transferor is indeed the registered owner of sufficient securities in the BOJ registration system) the BOJ makes entries on its books reflecting the transferee as the new registered owner.¹⁰ Recently, the BOJ has implemented a system (“BOJ-NET”) for communicating requests for transfer to the BOJ by electronic messaging.

⁷Law on Government Bonds, Law No. 34 of 1906 [hereinafter Law on Government Bonds], arts. 1 & 2.

⁸*See id.*, art. 2(2).

⁹*Id.*, art. 2(1).

¹⁰The registration system also can be used to effect a pledge. A special transfer form is signed by the pledgor and the pledgee and, like the RFTs, it is submitted to the BOJ. The pledgor remains the registered owner of the pledged bonds, but the quantity pledged may not be transferred except with the consent of the pledgee. Such a pledge will be effective against the transferee’s creditors or trustee in bankruptcy.

(2) Book-entry system

The book-entry system is open to financial institutions such as banks, securities firms, insurance firms, the BB, certain clearing organizations, and also to quasi-governmental entities such as the Trust Fund Bureau of the Ministry of Finance. The book-entry system was created and is operated by the BOJ itself, not as an agent of the Japanese government. The rules of the BOJ book-entry system are grounded in the legal concept of co-ownership of property deposited with a depository or other third party. The starting place is the deposit of certificated bonds with the BOJ by a system participant.¹¹ In the book-entry system, while most of the deposited bonds of a certain issue are registered in the name of the BOJ in the *registration system*, the rest of the deposited bonds of the same issue are held physically by the BOJ in certificated form. All transfers in the book-entry system are originated by the instruction to the BOJ by the transferor which requests the transfer of a certain amount of the bonds of one issue, and the BOJ processes the instruction by transferring the certificated bonds of the issue it physically holds. In legal construction, the BOJ will repeat the transfer until the transferred amount of the bonds satisfy the amount the transferor requested to transfer.¹² As a matter of actual practice, however, the transferor's account is debited and the transferee's account is credited. The transfer requires only the instruction to the BOJ by the transferor. The BOJ-NET system also can be used to communicate transfer instructions by participants in the book-entry system.

The BOJ book-entry system requires that customers of a securities firm or bank participant formally agree to the rules of the book-entry system at the time they arrange with the participant for their securities to be subject to that system. The system does not extend beyond the "first tier" below the system participant (*i.e.*, the participant's customer).¹³ If that customer is itself a securities firm or bank that controls securities for others, special arrangements must be made for a lower tier customer's securities to be subject to the system.

At one time the book-entry system was available only for tax-exempt bonds. As a result of expanding eligibility to cover JGBs generally, use of the book-entry system now has increased. The book-entry system also is used to effect pledges of JGBs by market participants to the securities finance companies.¹⁴ Both the registration system and the book-entry system are used for securities transfers in connection with the active trading in

¹¹The participants may maintain two types of accounts with the BOJ—their own proprietary account and a custodial account.

¹²The BOJ repetitively uses this method to process all transfer instructions.

¹³The BOJ can examine the books of the system's participants and, thereby, discover the extent to which a participant controls securities for customers. But the BOJ has no direct relationship with a participant's customers and assumes no obligations directly to the customers.

¹⁴Securities finance companies specialize in financing securities. There are now three securities finance companies—the Japan Securities Finance Company, the Osaka Securities Finance Company, and the Chubu Securities Finance Company. See Y. Suzuki, ed., *The Japanese Financial System* 256-60 (1987).

JGBs.¹⁵

b. Securities settlement dates

There are specified settlement dates for JGB transactions—in principle, six settlement dates each month. In actual practice, the BOJ publishes and makes public an annual calendar that lists each settlement date and the corresponding trading dates for which settlement will be made on each settlement date.¹⁶

Until recent years, settlement of almost all large transactions took place only two times per month. In July, 1986, the system was changed to provide three settlement dates per month. In August, 1987, it was changed again to the current six settlement dates. The change to six settlement dates was not a result of any new law. Instead, it was made as a result of informal encouragement to the securities industry.

c. Clearance and settlement operations

(1) Trade tickets, confirmations, comparisons and scheduling

When a trade is made (with the BB or otherwise), each party prepares a ticket reflecting the details of the trade. Each ticket is sent to the “back office” of each firm where it is “cleaned up” and (usually) the data is input to a computer. “Confirmations” of the trade are generated. A confirmation is sent to the contra party to the trade (and, if the trader is itself acting on behalf of a customer, a confirmation also will be sent to its customer). Internally, a confirmation goes to the firm’s accounting department and another goes to its settlement department. On or shortly after the trade date, confirmation of the details of the trade is made by telephone (or by electronic messaging) with the firm’s contra party (and with its customer, when applicable). This process is the “comparison” of the trade between the two parties. At the same time, the settlement of the trade is “scheduled” between the two parties to the trade. Although the settlement date

¹⁵See Senbo, *Public Bond Markets*, pt. 1, 8-9, in *Japan’s Financial Markets* (FAIR Fact Series 1987):

The Central Depository System [*i.e.*, the book-entry system]... has eliminated the necessity for bond certificate delivery, simplified transaction procedures, reduced paper work and freed bond dealers from certificate safekeeping. It has produced a great improvement in administrative efficiency of government bond circulation.

Presently as much as one-fourth of outstanding government bonds are on deposit under the book-entry system.

By 1990 approximately 40% of the JGBs were in the book-entry system and the number of actual securities transfers in the book-entry system exceeded the corresponding number for the registration system. For example, in July, 1990, out of 43, 723 transfers, there were 19,828 transfers (45%) in the registration system and 23,895 transfers (55%) in the book-entry system. One reason for the continued use of the registration system for settlement in the over-the-counter market may relate to taxes. It is widely believed that a material portion of bonds in the registration system are registered to financial institution nominees because financial institution registered owners are not subjected to withholding taxes on interest paid. In the book-entry system withholdings from interest payments to the beneficial owners are enforced.

¹⁶For example, according to the 1990 calendar, the settlement date for trades made on September 27-28 and October 1-3 is November 15, and the settlement date for trades made on October 4-9 is November 22.

will normally be known or assumed in a regular trade, it is necessary to agree as to the timing (during the day on the settlement date) and the nature of the payment (*i.e.*, BOJ check, clearinghouse funds, or BOJ-NET).¹⁷

(2) Requests for transfer

When BOJ-NET is not used and settlement is in the registration system, the seller delivers an RFT to the buyer before the applicable settlement date. The form must be completed and signed on behalf of the seller with an authorized signature. The RFT instructs the BOJ to change the registered ownership (*i.e.*, transfer) the securities to the buyer on the BOJ's registration books. The buyer also must sign and complete the RFT.¹⁸ The buyer then delivers the RFT to the BOJ before the settlement date.¹⁹ When BOJ-NET is not used and settlement is in the book-entry system, before the applicable settlement date the seller-participant gives a written instruction to the BOJ instructing it to transfer securities to the buyer-participant in the book-entry system. That instruction needs to be signed only by the seller.

Requests for transfer and instructions transmitted through BOJ-NET now are used instead of paper-based communications in the vast majority of transactions.²⁰

(3) Securities transfers at BOJ

Before the settlement date the BOJ verifies that paper RFTs and book-entry transfer instructions bear authorized signatures and are otherwise in proper form. The BOJ also determines that there are sufficient securities (of the issue being transferred) registered in the name of the seller or credited to the seller in the book-entry system, as may be applicable. Were a seller the owner of an insufficient amount of securities to cover the transfers to be made, the BOJ would not execute the transfer.²¹ In the rare case where

¹⁷Payment settlement is discussed *infra* Part II. A. 2. d.

¹⁸The buyer's signature is required by the Law on Government Bonds. Law on Government Bonds, art. 2 (2).

¹⁹Assume that Buyer-1 resells the securities to Buyer-2 on a trade date that has the same settlement date as the one for Buyer-1's initial purchase from the seller. Buyer-1 would then complete (as buyer) the original RFT in its own name and generate a new, additional RFT, sign it as seller and deliver it to Buyer-2. This also can be the case when, for example, a securities firm buys the securities for its customer. The customer may end up being the transferee-registered owner on the settlement date.

²⁰Of the 43,723 transfers made during July, 1990, 87.6% were made electronically through BOJ-NET. BOJ-NET transfers accounted for 82% of the registration system transfers and 92.2% of the book-entry system transfers.

²¹Assume that a seller delivers 50 RFTs to the BOJ covering an aggregate amount of securities of the benchmark bond in the amount of ¥1 million, to be settled in the registration system. Also assume that the seller is the registered owner of only ¥990,000 of the bonds. What would happen? Would all of the transfers fail? Would the BOJ determine, or ask the seller to determine, which RFTs should not be honored? Because no problems along these lines have occurred, there is no experience on which answers to these questions can be based and there are no formal rules to deal with the issues raised. As a practical matter, the BOJ would request the seller to deliver to the BOJ RFTs transferring securities to the seller so as to cover the shortfall. The BOJ gives a seller credit (in determining that the seller is the owner of sufficient securities to cover its RFTs as seller) for RFTs transferring securities to the seller that have been delivered to the BOJ for the same settlement date.

this might happen,²² the market participants expect that the BOJ would notify the interested parties (the buyer and the seller) of the problem.²³ The BOJ tabulates the various transfers and, on the settlement date, effects the various transfers. As the BOJ receives paper RFTs and transfer instructions during the days prior to a settlement date, the information is input to the BOJ's computer in "batches." BOJ-NET instructions go directly into the computer system. A preliminary process occurs on the day before the settlement date in order to ascertain that no transferor is going to be short. On the settlement date, processing begins at about 15:30. A report is generated and, on the day after the settlement date, the BOJ sends to each party a confirmation of the various transfers of bonds to and from the party.²⁴ The BOJ believes that the transfers made in the settlement process are effective when the final process *begins* (at about 15:30).²⁵

(4) "Netting" between trading partners

As described above, securities settlement in the over-the-counter market for JGBs is achieved on a transaction by transaction basis. However, parties that have multiple transactions with each other (which is fairly common) sometimes may net both money and securities settlements on a bilateral basis. This *ad hoc* netting reduces the number and amounts of payments and securities transfers. A technique called "bundling" may be more common than netting. When a seller makes many sales to the same buyer of a particular JGB issue for settlement on the same settlement date, the aggregate amount of the JGBs may be "bundled" by the seller and reflected by only one RFT or transfer instruction.

d. *Payment settlements*

Settlement of the payments side of securities transactions usually is made by a check drawn on a BOJ account or by a funds transfer in the BOJ-NET system. The payment settlements are not connected with the settlements of securities transactions themselves (*i.e.*, transfers of securities on the registration books of the BOJ or in the book-entry system), although the payment settlements occur on the same dates as the securities settlements. The payment settlements normally are made *before* the corresponding securities are delivered. BOJ check clearing takes place at 15:00.²⁶ Moreover, as a practical

²²The BOJ estimates that the incidence of a transferor being short the securities to be transferred is about 1:1,000.

²³The failing seller could cover the fail by quickly purchasing securities pursuant to early settlement arrangements so that it could deliver RFTs or instructions transferring additional securities *to* it so as to make up the shortfall.

²⁴"Netting" does not occur in the process. For example, if an RFT reflects a transfer in the registration system from A to B of ¥1 million of an issue of bonds, and another RFT reflects a transfer from B to A of ¥500,000 of the same issue of bonds, the BOJ registration books will reflect both transfers.

²⁵There are several technical and operational differences between settlement in the registration system and settlement in the book-entry system, but those differences are not material for purposes of this discussion.

²⁶Note that the BOJ will not honor a check unless there are sufficient funds in the drawer's account. In securities transactions there is no extension of credit analogous to that extended by the Federal Reserve Banks

and logistical matter, the delivery of BOJ checks from buyers to sellers must occur during the morning of a settlement date. BOJ-NET funds transfers are effective when executed on a "real-time" basis.

B. The United States Treasury Security Market

1. Market transactions

The market for United States Treasury securities, like that for JGBs, is an over-the-counter market.²⁷ New issues are auctioned to a group of "primary dealers."²⁸ These primary dealers, as well as secondary dealers, use inter-dealer brokers to arrange many of the trades among themselves.²⁹ Like the BB in the JGB market, these brokers normally operate a matched book and, unlike the dealers, generally do not take securities positions for their own accounts.³⁰

Treasury securities are virtually all uncertificated (book-entry).³¹ The transfer and pledge of interests in book-entry Treasury securities are governed by the Book-Entry Treasury Regulations.³² Book-entry Treasury securities are subject to a "tiered" system

(through daylight overdrafts) in the United States, discussed next. Payments settlements for securities transactions also are made by clearinghouse funds transfers in some cases.

²⁷For a description of the market for United States Treasury securities, see General Accounting Office, *U.S. Treasury Securities, The Market's Structure, Risks, and Regulation* (1986) [hereinafter, *GAO Report*]. See also Association of Reserve City Bankers, *Report of the Working Group of the Association of Reserve City Bankers on Book-Entry Daylight Overdrafts* (1986) [hereinafter, *Reserve City Bankers Report*]. The United States government securities market is unquestionably the largest and most important securities market in the world. In addition to providing initial long-term financing for the United States government, the market permits refinancing of that debt, it is an important means for the United States Federal Reserve System to implement monetary policy, and it provides short-term financing for day-to-day financial management.

²⁸M. Stigum, *After The Trade: Dealer and Clearing Bank Operations in Money Market and Government Securities* 49-51, 70-71 (1988) [hereinafter, Stigum, *Trade*].

²⁹*Id.* at 65-74.

³⁰*Id.* at 66-68.

³¹As of December 31, 1985, 97% of the outstanding principal amount of marketable United States Treasury securities were in book-entry form. See *Regulations Governing Book-Entry Treasury Bonds, Notes, and Bills, Summary of Department of Treasury*, 51 Fed. Reg. 8846 (1986) (proposed) [hereinafter, March TRADES Summary]. Since 1978 Treasury bills have been issued only in book-entry form, and since July 1, 1986 all Treasury securities have been issued only in book-entry form. *Id.*

³²31 C.F.R. §§306.115-306.122 (1990) [hereinafter, Book-Entry Treasury Regulations]. The Book-Entry Treasury Regulations cover book-entry Treasury bonds, notes, certificates of indebtedness, and bills issued under the Second Liberty Bond Act, as amended. 31 C.F.R. §306.115 (d) (1990) (defining "Book-entry Treasury security"). Substantially similar regulations dealing with book-entry Treasury bills are found at 31 C.F.R. §§350.2-350.6 (1990). See 31 C.F.R. §350.1 (1990) (defining ["Treasury bill"]). Various United States federal agencies also have adopted substantially similar regulations for their book-entry securities. On March 14, 1986, the Department of Treasury published proposed new rules, called the Treasury/Reserve Automated Debt Entry System (TRADES), to deal with transfers and pledges of Treasury Securities within the commercial book-entry system. 51 Fed. Reg. 8846 (1986) (to be codified at 31 C.F.R. pt. 357) (proposed March 14, 1986) [hereinafter, March Proposed TRADES Regulations]. After consideration of numerous comments, a substan-

of ownership and transfer under the Book-Entry Treasury Regulations.³³ Only a “depository institution” (DI) can attain a status equivalent to that of a registered owner on the books of a Federal Reserve Bank.³⁴ Consequently, an active trader of book-entry Treasury securities, that is not itself a DI, can obtain an interest in securities *only* through an account with an intermediary (either a DI or another downstream intermediary)³⁵ and only DIs can maintain securities accounts on the books of the Fed.³⁶

2. Clearance and settlement

a. Clearing banks and Fedwire

Because only DIs can maintain securities accounts with the Fed, clearance and settlement in the book-entry Treasury securities market³⁷ necessarily involves the participation of DIs. Most trades are cleared and settled for the principal government securities dealers and brokers by only three banks, known in this context as “clearing banks.”³⁸ Book-entry Treasury securities are transferred against payment on a real-time, continual

tially revised version of proposed TRADES Regulations was published on November 28, 1986. 51 Fed. Reg. 43,027 (1986) (to be codified at 31 C.F.R. pt. 357) (proposed November 25, 1986) [hereinafter, Proposed TRADES Regulations]. Final regulations have not been issued.

³³See 31 C.F.R. §§306.115-306.122; 350.2-350.6 (1990). The Department of Treasury has described the system as follows:

Assume that an individual (“Individual Investor”) has invested in a Treasury 5-year note through a local government securities dealer (“Local Dealer”). Local Dealer will be maintaining one or more Treasury 5-year notes of the same issue through another book-entry custodian such as a larger government securities dealer (“National Dealer”). National Dealer would, most likely, be maintaining the 5-year notes through a bank (“Clearing Bank”). Clearing Bank would be maintaining the 5-year notes directly in an account at a Federal Reserve Bank.... Each of the book-entry custodians will record on its books securities maintained for the account of the book-entry custodian below it in the chain, and local dealer will record on its books the interest of Individual Investor.

March TRADES Summary, *supra* note 31, at 8846.

³⁴Treasury regulations applicable to book-entry Treasury securities, as written, contemplate that only a “member bank” (defined as a member of a Federal Reserve Bank) can maintain a book-entry securities account with a Federal Reserve Bank. See 31 C.F.R. §§306.115 (g), -.117 (a). However, those privileges have been extended by the various Federal Reserve Banks to all depository institutions. Telephone Interview with Stephen Smith, Federal Reserve Bank of New York (October 11, 1989); see 12 U.S.C. §461 (b)(1)(A) (defining “depository institution” essentially as an entity eligible to apply for federal deposit insurance).

³⁵Investors who do not require the flexibility of intermediary control (e.g., individuals who desire to hold securities for long periods) have the option of establishing a book-entry security account directly with the Department of Treasury. See 31 C.F.R. §§357.20-.32 (1990) (regulations dealing with the TREASURY DIRECT system).

³⁶In this article the Federal Reserve Banks are referred to as the Fed.

³⁷The market for Treasury securities is an over-the-counter market. See generally GAO Report, *supra* note 27, at 18-32.

³⁸Before the combination of The Bank of New York and Irving Trust Company there were four principal clearing banks: Manufacturers Hanover Trust Company, The Bank of New York, Irving Trust Company, and Security Pacific National Bank. See Stigum, *Trade*, *supra* note 28, at 122-24. One clearing banker estimated that the top 3 clearing banks clear securities trades of more than \$300 billion per day on average. *Id.*, at 124-25.

basis throughout each business day in the Fedwire system.³⁹ A participating DI can transfer securities electronically on Fedwire to another DI and simultaneously receive payment from the transferee DI.⁴⁰

Transfers of book-entry Treasury securities against payment in the Fedwire system regularly give rise to enormous extensions of intra-day credit, in the form of overdrafts, by the clearing banks to the brokers and dealers. For example, when a dealer's clearing bank receives securities against payment, the dealer typically does not have in its funds account with the clearing bank sufficient funds to repay the clearing bank. The clearing bank's payments thereby create overdrafts in the dealer's account. During the day the Fed, in turn, extends corresponding overdraft credit to the clearing banks.⁴¹ A clearing bank looks to securities received and allocated to the dealer's "clearing account" as collateral for this daylight overdraft credit.⁴² Before the end of the day the dealers expect to receive funds, mostly from instructing the clearing bank to transfer securities over

³⁹Fedwire is a computerized communications system operated by the Federal Reserve System for the transfer of funds and book-entry Treasury and Federal agency securities among participating DIs. See Federal Reserve System Regulation J, 12 C.F.R. Part 210, Subpart B (1988) (wire transfers of funds); Federal Reserve Bank of New York Operating Circulars Nos. 21 (Book-Entry Securities) (Rev. 1977); No. 21A (On-Line Transactions in Book-Entry Securities) (Rev. 1988). Other Federal Reserve Banks have operating circulars that are substantially the same as Operating Circulars 21 and 21A. For a description of the Fedwire system, see Stigum, *Trade*, *supra* note 28, at 105-20.

⁴⁰Fedwire permits a participating DI to transfer securities to another participating DI against payment. Federal Reserve Bank of New York Operating Circular 21A, para. 7. Although such transfers are final, it necessarily follows that the recipient could simply reverse the transaction by sending the securities back to the transferor against payment. Fedwire also accommodates so-called "free transfers," not made against payment, as well as "funds only" transfers not involving securities. See Stigum, *Trade*, *supra* note 28, at 105-08.

⁴¹The dollar amounts involved are staggering. In 1988 the average *daily* peak overdrafts (based on two week averages) with the Fed attributable to receipt of book-entry securities against payment, for all DIs, were almost \$60 billion. Board of Governors of the Federal Reserve System, *Recommendations of the Payments System Policy Committee* 18, 35 (1989) [hereinafter, *Policy Committee Recommendations*]. Presumably, most of these overdrafts were incurred by the most active clearing banks. See *Reserve City Bankers Report*, *supra* note 27, at 20-21 (estimating that more than 75% of average daily book-entry overdrafts were attributable to the five largest clearing banks). Officials in the Federal Reserve System have expressed much concern about the amount of these (as well as non-book-entry securities related) daylight overdrafts. See Board of Governors of the Federal Reserve System, *Modifications to the Payments System Risk Reduction Program; Book-entry Securities Transfers*, Docket No. R-0669, 55 Fed. Reg. 22,087 (May 31, 1990) (adopting proposal that DI's funds and book-entry overdrafts be combined for purposes of compliance with net debit cap, adopting modified proposal for collateralization of certain overdrafts, and adopting procedures for collateralization; see also Board of Governors of the Federal Reserve System, Controlling Risk in the Payments System, *Report of the Task Force on Controlling Payments System Risk to the Payments System Policy Committee of the Federal Reserve System* 9 (1988) [hereinafter, *Payments Task Force Report*]; Board of Governors of the Federal Reserve System, *A Strategic Plan For Managing Risk in the Payments System, Report of the Large-Dollar Payments System Advisory Group to the Payments System Policy Committee of the Federal Reserve System* (1988).

⁴²Clearing banks normally obtain a security interest in all securities in a dealer-customer's "clearing account"—i.e., securities *not* allocated to an account maintained with the clearing bank for fully paid-for securities of the dealer's customers. See Stigum, *Trade*, *supra* note 28, at 177-79.

Fedwire against payment, to cover their overdrafts. Many of these transfers against payment involve so-called repurchase agreements (repos).⁴³

b. Netting and GSCC

In part motivated by the Fed's concerns about huge daylight overdrafts, the Government Securities Clearing Corporation (GSCC)⁴⁴ has developed a system to introduce the benefits of "multilateral netting" among principal government securities market participants.⁴⁵ Trade data of members participating in the GSCC netting system is compared and netted for each trade date, resulting in each member having a net long position (the member is entitled to receive securities from GSCC) or net short position (the member is obligated to transfer securities to GSCC) in each securities issue in which it has traded. Securities are transferred against payment over Fedwire by a participating member to GSCC and instantaneously retransferred to another member against payment over Fedwire, in each case using the services of GSCC's clearing banks. By reducing the aggregate volume of transfers against payment over Fedwire, this netting scheme reduces daylight overdrafts.

C. Observations

The foregoing descriptions of the Japanese and United States government bond markets illustrate several typical features of securities markets. For example, the process

⁴³Repos are an important means for dealers to obtain overnight financing necessary to cover daylight overdrafts. See Stigum, *The Repo and Reverse Markets* 25-26, 57 (1989). In a repo, a seller of a security (a funds borrower) transfers the security to a buyer (a funds lender) under an arrangement whereby the securities seller agrees to repurchase the security on a specified date (often the next day) at a specified price, and the securities buyer agrees to resell the security back to the seller. From the perspective of the buyer, the transaction is a reverse repurchase agreement (reverse repo). Repos serve the function of secured borrowings and loans, although they are denominated as sales and resales. The economics of the transaction are such that when the seller (funds borrower) pays the repurchase price (*i.e.* repays the loan), the buyer (funds lender) receives a profit (a return on the money loaned). *Id.*, at 5-6. The legal characterization of repos under United States law—as true sales and resales or as disguised secured loans—is not clear. See Mooney, *Beyond Negotiability*, *supra* note 2, at n. 122. In Japan there is also a market for financing bonds through repurchase agreements, called *gensaki*. See Japan Securities Research Institute, *Securities Market in Japan 1990* 99-101, 149, 187 (1990) [hereinafter, *Securities Market 1990*]. However, because a transfer tax applies to *gensaki*, financing costs are higher and in a very short term financing (*i.e.*, overnight) could be prohibitive. See *id.* at 100.

⁴⁴GSCC originally was formed as a subsidiary of National Securities Clearing Corporation (NSCC) and now is owned primarily by its participants. See J. Ingber, *Overview of the Government Securities Clearing Corporation* 4 (January 1991) (unpublished manuscript). Operating in tandem with The Depository Trust Company (DTC), the world's largest securities depository, NSCC is the principal clearing agency for corporate securities in the United States. See generally *infra* note 130 and accompanying text.

⁴⁵In 1988 GSCC began operation of automated comparisons of government securities trades and in 1989 it began implementation of a netting scheme. See Self Regulatory Organization; Order Approving Proposed Rule Changes by the Government Securities Clearing Corporation Regarding its Proposed Netting System, Exchange Act Release No.27,006, 54 Fed. Reg. 29,798 (July 14, 1989); National Securities Clearing Corporation, *1989 Annual Report* 10 (1990) [hereinafter, *NSCC 1989 Report*].

of clearance and settlement necessarily involves credit risk. During the period between a trade and settlement each party is at risk that the other party may default. And, when transfers are not connected to payment, as in the JGB settlement system, there is a risk that a party will pay and not receive a transfer or that a party will transfer securities and not be paid. The discussion also indicates that substantial efficiencies in the clearance and settlement process can be achieved through the reduction of paper movement through increased automation. Before considering, in Part IV, various alternatives for further improvements in each of these markets, Part III next explores some of the issues arising out of the role of financial intermediaries in the transfer and pledge of interests in securities.

III. Transfer and Pledge of Interests in Fungible Bulks of Securities Controlled by Intermediaries: Intermediary Risk, Investor and Creditor Protection, Priorities and Conflicting Claims

A persistent feature of many securities markets is the propensity for investors to allow professional intermediaries, such as securities firms and banks, to control securities that the investors claim to own beneficially. Even for many individual and less active investors, the convenience of maintaining an account with a securities firm is important. Depending on the market, the structure for clearing and settlement, and the nature of the market participant, however, this propensity may reflect more than mere convenience. It may be essential.⁴⁶

In these intermediary arrangements the securities tend to be controlled by the intermediaries in a "fungible bulk." The intermediary itself may be a "customer" of an upstream intermediary such as another securities firm or securities depository. Or it may hold physical securities in "street name."⁴⁷ Indeed, if the securities were not a part of a fungible bulk, much of the convenience of intermediary control would evaporate.

When an intermediary becomes insolvent and the securities that it controls are not sufficient to cover all of the claims of its customers and creditors, various priority disputes among competing claimants to a finite pool of securities may arise. In some fashion, the applicable legal regime must sort out these conflicting claims and distribute the assets of the firm to some or all of the claimants. How the law deals with this situation can affect

⁴⁶For example, because non-DI dealers in United States government securities lack access to the Fedwire, they must use a depository institution intermediary for access. *See supra* text at notes 37-40. Similarly, active investors in other markets may not have access to depositories or other clearing and settlement systems in which only securities firms and banks are eligible to participate. Still other investors, and even some securities firms, do not wish to create an internal "back office" to administer the clearing and settling of trades; they seek another securities firm or custodian to serve this purpose.

⁴⁷"Street name" refers to the practice whereby securities intermediaries hold securities (including customer securities) registered to them in their own names or the names of their nominees.

the efficiency of the market involved. For example, if, under applicable law, a customer of the intermediary is likely not have its claim to securities satisfied in full, customers would be less likely to choose a weak intermediary to act for them. And, if intermediaries were generally perceived to be weak, customers generally might be reluctant to allow intermediaries to control their securities and the efficiencies of the intermediary phenomenon, and the market, could suffer. In the case of a risk averse secured lender (or repo or *gensaki* participant), even the mild uncertainty of its entitlement to a first priority claim would cause those parties to abstain from the transaction or, more likely, require that another, more satisfactory, intermediary be selected to control the securities.

Consider the following example.⁴⁸

EXAMPLE 1

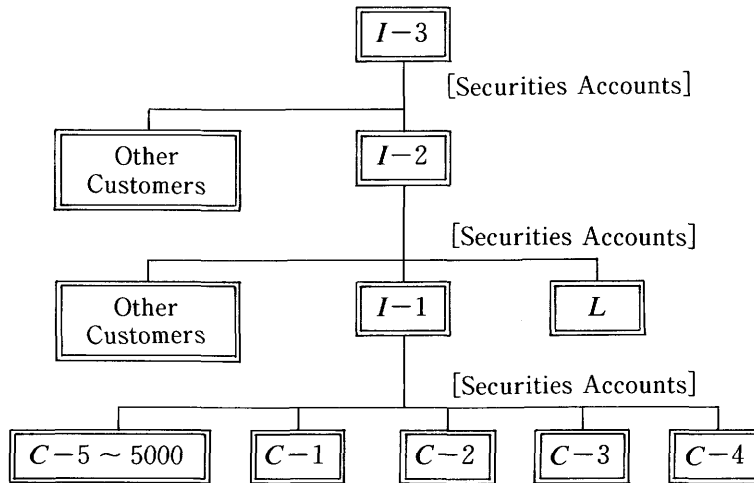
Certain investors (C-1, C-2, C-3, and C-4) buy and sell securities through a securities firm intermediary, I-1. (I-1 might be a local or regional securities firm.) Because these customers are active traders, they allow I-1 to control their securities in order to facilitate rapid resale and secured margin credit extended to them by I-1 from time to time. I-1 has many other customers (C-5 to C-5,000).

I-1 does not physically possess, nor is it the registered owner of, any of the securities it controls for its customers. Rather, I-1 maintains a securities account with (*i.e.*, is itself a customer of) another securities firm intermediary, I-2. (I-2 might be a national securities firm or a larger regional securities firm.) I-2 also does not possess, and is not the registered owner of, any of the securities it controls for I-1 (or for any of I-2's other customers). Instead, I-2 maintains a securities account with yet another intermediary, I-3. (I-3 might be a clearing corporation depository or a national securities firm.) On the books of the various securities issuers I-3 is the registered owner of, and (in the case of certificated securities) is in physical possession of, all securities that I-3 controls for its customers. (Alternatively, if I-3 is a national securities firm, possession and registered ownership of the securities might be lodged with another intermediary, I-4, a clearing corporation depository.)

In order to finance its operations, I-1 obtains a loan from a bank lender, L. Collateral for this loan consists of securities issued by A Co. I-1 "pledges" these A Co. securities to L by causing I-2 to debit I-1's securities account and credit L's securities account on I-2's books.

Needing additional credit, I-1 obtains another secured loan, this time from I-2, and pledges securities issued by B Co. by instructing I-2 to debit I-1's securities account and to credit a special pledge account in I-1's name on the books of I-2.

⁴⁸The example is necessarily complex but not unrealistic in the United States securities markets. Tiers of intermediaries in Japan are not likely to occur as frequently as in the United States and are likely to involve fewer intermediaries. The consideration of transfer and pledge in *Beyond Negotiability* centered around an essentially identical example. See Mooney, *Beyond Negotiability*, *supra* note 2, at 307-10.



I-1 becomes insolvent. *C-1* (whose claims otherwise would not be satisfied) claims the *A Co.* securities and the *B Co.* securities that are pledged to *L* and *I-2*, respectively. *L* and *I-2*, of course, also claim these securities as secured creditors. The shortfalls in *A Co.* and *B Co.* securities (and the other shortfalls mentioned below) may have resulted from misbehavior by *I-1* or inadvertence.

C-2 and *C-3* each claim securities issued by *C Co.* The *C Co.* securities credited to *I-1* in its account with *I-2* are of a quantity that is sufficient to satisfy either *C-2*'s claim or *C-3*'s claim, but the quantity is insufficient to satisfy both of their claims.

C-4 claims securities issued by *D Co.* *I-1* controls *D Co.* securities in its account with *I-2* in the exact quantity necessary to satisfy fully *C-4*'s claim.

I-1's other customers (*C-5* to *C-5000*) claim securities of issues not claimed by *C-1*, *C-2*, *C-3*, or *C-4*. However, these customer claims reflect a similar pattern. In some cases *I-1* controls sufficient securities to cover customer claims to securities of the issue involved. In other cases there is a shortfall.

The above diagram illustrates the relationships involved in Example 1.

Example 1 illustrates two kinds of competing claims. The first class consists of claims against the insolvent intermediary by customers and creditors (here, *C-1*, *C-2*, and *C-3*) that share a common intermediary, the failed firm (here, *I-1*), and who assert their claims as a result of the agreement of *that intermediary*, reflected by book-entries on its books or otherwise, to control securities for the customers and creditors. These customers and creditors will be referred to as claiming on the "*same tier*." The competing claims of *C-1* and *L* and *C-1* and *I-2* exemplify the second kind of competing claims—"different tier" claims. Although *C-1* claims the same securities claimed by *L* and *I-2*, respectively, and

the claims of all three parties arose from transactions with *I-1*, the failed firm, *I-2* and *L* do not claim through *I-1*. Example 1 provides the context for the following discussions of same-tier and different-tier claims under United States and Japanese law.⁴⁹

There are means of addressing intermediary risk other than rules that sort out the property claims. One is to employ prophylactic regulatory and supervisory controls that make it unlikely that there will be insufficient securities on hand if an intermediary fails and likely that any shortfall that does occur will not be material.⁵⁰ But once an intermediary insolvency is hypothesized, it is likely that something has gone wrong (especially if the intermediary is a securities firm that trades for its own account).⁵¹ Protection for customers (analogous to deposit insurance) provided by the Securities Investor Protection Corporation (SIPC) pursuant to the Securities Investor Protection Act (SIPA)⁵² addresses the problem in the United States for eligible customers of registered broker-dealers.⁵³

Another approach to intermediary risk is to ensure that intermediaries do not fail. Certainly this has been the result, as an empirical matter, in Japan.⁵⁴ Direct regulation

⁴⁹The discussion of United States law in remainder of this part draws heavily on Mooney, *Beyond Negotiability*, *supra* note 2, parts II, III, and IV.

⁵⁰Securities firms in the United States are subject to rules of the Securities and Exchange Commission (S.E.C.) dealing with the control and, in some cases, "segregation" of customer securities. See SEC Rule 15c3-3, 17 C.F.R. §240.15c3-3 (1990). Banks in the United States are subject to less elaborate rules, but nevertheless are expected to maintain sufficient securities to cover all customer claims. See Mooney, *Beyond Negotiability*, *supra* note 2, at n. 62. Securities firms and banks operating in Japan also are expected to maintain sufficient securities to cover customer claims. See Securities and Exchange Law, Law No.25 of 1948, art. 51 (A securities firm must obtain its customer's written consent before pledging the customer's securities, and a pledge of its customer's securities may not secure an amount that exceeds the debt owed by the customer); Ministry of Finance Ordinance, November 5, 1965, General Standards on the Soundness of Securities Firms and Related Matters, §2 (4) (monies deposited shall be held separate from other assets), §2 (5) (securities deposited shall be in an adequate quantity and be held securely and in a safe location). In response to these regulations, the Securities Industry Association of Japan has promulgated, as a part of its rules on fair trading practices, detailed self-regulatory rules on the reception of deposited securities.

⁵¹Shortfalls in customer securities have been the norm in cases of securities firm insolvencies in the United States, but shortfalls have been rare or nonexistent in the case of bank insolvencies. There were no customer losses involved in the liquidation of Drexel, Burnham, Lambert, Inc. following the 1989 bankruptcy filing by its parent corporation. The most serious shortfalls, involving massive customer losses, have arisen as a result of the insolvencies of several then-unregulated government securities dealers. See generally Mooney, *Beyond Negotiability*, *supra* note 2, at n. 65.

⁵²Securities Investor Protection Act of 1970, 15 U.S.C. §§78aaa-78lll (1982).

⁵³When SIPA applies, customers are entitled to advances from the SIPC fund of up to \$500,000, but advances on account of claims for cash are limited to \$100,000. Many securities firms in the United States provide additional privately issued insurance covering customer claims, often in the amount of \$2,500,000 and sometimes as high as \$10,000,000.

⁵⁴There have been very few examples of financially distressed securities firms or banks in Japan during the postwar era. In 1961 Shimane Securities Co. became subject to a bankruptcy proceeding. In 1967 and 1968 two securities firms—Yamaichi and Oi—were rescued through emergency lending by the BOJ. A small, local securities firm located in Kyoto, Takagi-Tei Securities Co., failed in 1980. No banks have been liquidated in a bankruptcy proceeding, but the financial distress of Taiko Sogo Bank, in 1977, and Heiwa Sogo Bank, in 1986-87, resulted in BOJ supervision and lending, in the former case, and a merger, in the latter case.

and supervision of intermediaries, such as banks and securities firms, is directed to this end. Obviously, that approach is not a complete response to the problem in the United States, where intermediaries do fail. There is evidence that the risks of financial institution failure are receiving serious attention in Japan, as well.⁵⁵

The following discussion deals primarily with property law and insolvency law principles. But the evaluation of these principles must take into account the special nature of regulated, supervised financial intermediaries.

A. Competing Claims and Priorities on the Same Tier

United States and Japanese law each provides a property law construct that enables a purchaser of securities, such as C-2 or C-3 in Example 1, from or through an intermediary, such as I-1, to acquire a property interest in the securities. A property interest can be acquired without an actual physical delivery to, or registration in the name of, the purchaser, and even though the securities are a part of a fungible bulk controlled by the intermediary.⁵⁶ The following discussion suggests that both legal regimes harbor substantial complexity in their application and interpretation and some substantive rules of questionable wisdom.

The discussions of same-tier claims, in this part, and different-tier claims, in Part III. B., under Japanese property and bankruptcy law apply only to *certificated securities*. They do *not* apply to uncertificated JGBs in the registration system. Unlike certificated securities (treated as movables⁵⁷), uncertificated JGBs in the registration system are claims against the Japanese government that can be assigned only by transfers effected on

⁵⁵In the ongoing process of reforming the Japanese financial system the risks involved in various activities of financial institutions are being taken seriously. See *Shōken Torihiki Shingikai Kihon Mondai Denkyūkai Daini-Bukai Hōkoku* (Report of the Second Subcommittee of the Committee on Basic Issues of the Securities Transactions Council) 10-11 (June 15, 1990) (discussing the need to prevent market disturbances that could result from failure of financial intermediaries and the need to ensure financial strength of intermediaries); *Kinyū Seido Chōsakai Daini Iinkai Dainiji Chūkan Hōkoku* (Second Interim Report of the Second Committee of the Financial System Research Council) 18-23 (discussing the increasing importance of risk management for banks and the need to address risks involved in expanding the scope of permissible bank activities) (June 26, 1990).

⁵⁶In the United States transfer and pledge of interests in securities (other than those subject to federal regulations such as the Book-Entry Treasury Regulations) are governed by Article 8 of the Uniform Commercial Code, which in some version has been adopted in all of the states. The American Law Institute, Nat'l Conference of Comm'rs on Uniform State Laws, Uniform Commercial Code: Official Text 1989 With Comments (11th ed. West 1989) [hereinafter, U.C.C.]. See U.C.C. §8-313 (1)(d)(ii) & (iii); *Minpō* (Civil Code), Law No.89 of 1896 and Law No.9 of 1898 [hereinafter, *Minpō*], arts. 86 (2), 86 (3), 176, 178, 181-84, 244-45, 344, 352; see also Book-Entry Treasury Regulations, 31 C.F.R. §306.118 (1990). The following discussion of United States law focuses primarily on U.C.C. Article 8. Except as otherwise noted, the discussion also generally applies to transactions in United States book-entry Treasury securities governed by the Book-Entry Treasury Regulations.

⁵⁷See *infra* note 61 and accompanying text.

the registration system books of the BOJ.⁵⁸

1. Time when transfers are effective

The time when a transfer of a property interest in securities becomes effective can be important.⁵⁹ U.C.C. Article 8 conditions effectiveness of a transfer upon an objective communication by the intermediary to the purchaser concerning the transfer.⁶⁰ It is not clear whether the Japanese Civil Code (*Minpō*) imposes a similar requirement for a transfer and delivery of movables (including securities).⁶¹ Although the point is arguable,

⁵⁸As a general matter, for an assignment of a claim to be effective against an obligor or a third person, the obligor must consent to the assignment or the obligor must be given notice of the assignment. *Minpō* art. 467 (1). The notice or consent must be in writing in order to be effective against third parties other than the obligor. *Minpō* art. 467 (2). But the Law on Government Bonds, not *Minpō* art. 467, applies to registered JGBs. Under the Law on Government Bonds, a claim to registered JGBs must be registered in order to be effective. Law on Government Bonds art. 3. Consequently, if a customer of a financial intermediary claims beneficial ownership of JGBs that are registered in the name of the financial intermediary, for purposes of Japanese property and bankruptcy law the customer has only an unsecured claim against the intermediary, not a property interest in the registered JGBs. Inasmuch as JGBs in the BOJ book-entry system are deemed to be certificated, however, arguably they would be treated as movables instead of uncertificated claims.

⁵⁹Whether a transfer of a property interest in securities that is good against third persons (which normally requires a delivery) has occurred prior to the time an intermediary becomes a bankrupt will determine whether the property interest of a customer of the intermediary will be honored under Japanese law. *See infra* notes 100-01. In the United States the enforceability of a security interest of a secured creditor of a securities firm, who allows the firm to control the securities collateral, will turn on whether an effective transfer occurs prior to the filing date of an insolvency proceeding. *See infra* notes 105-06 and accompanying text. The time of transfer also will affect priorities among different-tier claimants in some circumstances. *See infra* note 110 and accompanying text.

⁶⁰U.C.C. §8-313 (1) (d) provides that a transfer occurs “at the time a financial intermediary...sends a confirmation” to the purchaser “and also by book entry or otherwise identifies” the securities “as belonging to the purchaser.” U.C.C. §8-313 (1) (d) (*emphasis added*).

⁶¹The certificated securities under discussion are, except for stock certificates, usually issued in bearer form. Certificated securities that are “obligations payable to bearer” are movables. *Minpō* art. 86 (3). Transfers of these securities are governed by a set of rules applicable to movables generally. Interests in movables normally can be transferred by the mere agreement of the parties. *See Minpō* art. 176 (“The creation and transfer of real rights take effect by a mere declaration of intention by the parties.”). Such a transfer is not effective against third persons “until the moveable has been delivered.” *Minpō* art. 178. However, if these securities are classified as valuable instruments (*yuka-shoken*), both agreement and delivery are necessary to effectuate a transfer—even as between the parties. Bearer JGBs and corporate bonds are examples of *yuka-shoken*. For this conception of *yuka-shoken* see *Shōhō* (Commercial Code), Law No. 8 of 1899 [hereinafter, *Shōhō*] art. 519. Although stock certificates usually are issued in registered, not bearer, form, nevertheless both agreement and delivery are necessary (and sufficient) to transfer stock certificates. *See Shōhō* art. 205 (1) (delivery necessary for transferring stock certificates). It follows that stock certificates and *yuka-shoken* are transferred by the same methods. Note that a delivery of the stock certificates also is necessary for an effective pledge of corporate shares and, therefore, stock certificates and *yuka-shoken* also are pledged by the same method. *Shōhō* art. 207 (1). Thus, in addition to the concept of *yuka-shoken* in *Shōhō* art. 519, it is customary in Japanese legal literature to include stock-certificates in the expanded usage of the term *yuka-shoken*. *See generally infra* notes 79-80 (discussing pledge of movables and, therefore, *yuka-shoken*). *Minpō* arts. 182-84 provide four methods of delivery. For a discussion of the transfer of ownership under the *Minpō* see 4 *Doing Business in Japan*, pt. IV,

it is doubtful that it does.⁶² There are strong arguments in favor of abandoning such requirements and substituting a more flexible requirement that the intermediary need only objectively indicate that a transfer has occurred. Under that standard, either entries in the books of an intermediary⁶³ or a communication to another person that a transfer has occurred,⁶⁴ whichever came first, could result in an effective transfer. So long as there exists tangible evidence of the intention to transfer, the intentions of the parties should be honored as against third persons.

2. *Transfer of non-existent or insufficient quantity of securities*

Assume that I-1 took all steps necessary for a transfer of an interest in a fungible bulk of C Co. securities to C-2 or C-3 except that at the times of the putative transfers I-1 itself did not own or control any C Co. securities. As a general matter, under both U.C.C. Article 8 and the *Minpō* there could be no effective transfer.⁶⁵ That result is

§§1.01-.08, 2.01-.03, 3.01-.08 (Z. Kitagawa ed. 1990) [hereinafter, *Doing Business*]. Where securities are possessed through a representative, delivery will be made under *Minpō* art. 183 "[w]hen the representative has declared his intention that...[the securities] shall thereafter be held on behalf of" the transferee. When an intermediary is transferring to its customer securities held by the intermediary in its inventory, delivery will be made pursuant to art. 183 if the intermediary has agreed to hold the securities thereafter for the customer. If the intermediary is acting as a broker or commercial agent (*toiya*), it acquires rights in its own name. See *Shōhō* art. 552. Then, in cases where the intermediary has agreed to hold the securities for its customer, it transfers rights to its customer pursuant to *Minpō* art. 183.

⁶²Would internal book entries made by an intermediary constitute an adequate declaration of intention for the purpose of *Minpō* article 183? Article 183 could be interpreted so as to require some communication by the representative (intermediary) to a person other than itself; in that case, an intermediary's internal act such as marking its books and records would not suffice. The better view, however, is that an intermediary's objective manifestation, such as a book-entry, even if not communicated to anyone else, would be a sufficient declaration. Whether a representative sells securities to its customer or buys (as *toiya*) securities for its customer, the declaration would be implicit.

⁶³Book entries alone, without confirmations or other communications, are sufficient to constitute a transfer when the intermediary is a clearing corporation. U.C.C. §§8-313 (1)(g), -320(1). Pursuant to the Law Concerning Deposit and Transfer of Stock Certificates and Similar Certificates, Law No.30 of 1984 [hereinafter, Securities Depository Act], book entries on the books of the Japan Securities Depository Center (JASDEC) alone will be adequate to effect deliveries. Securities Depository Act, art. 27 (2). See generally *Securities Market 1990*, *supra* note 43, at 131-35; *infra* note 135. Similarly, the Proposed TRADES Regulations also would provide that an intermediary's book entries alone would be sufficient to effect a transfer, without the necessity of a confirmation. See Proposed TRADES Regulations §357.12 (a)(3).

⁶⁴The "confirmations" normally sent by intermediaries to customers and contra-parties in the equity markets would not, however, meet this test. They normally only confirm *trade* data, pending settlement, and do not confirm that a purchase or transfer actually has been consummated. But if an intermediary actually acknowledges that a transfer has occurred, perhaps its failure to mark its books ought not to prevent the transfer from being effective. Clearly, such an acknowledgement would satisfy *Minpō* article 183. The acknowledgement method of transfer was eliminated from U.C.C. Article 8 in the 1978 version, except when the person in control of securities is not a financial intermediary. See U.C.C. §§8-313 (1) (e), (1) (f). It also is not a specified means of transfer in the Proposed TRADES Regulations. See Proposed TRADES Regulations §357.12 (a).

⁶⁵U.C.C. §§ 8-313 (1) (d) (ii) and (iii) speak to the transfer of "a quantity of securities that constitute or are a

consistent with traditional property law concepts in the United States and Japan (one cannot transfer what one does not own and one cannot deliver something that one does not possess).⁶⁶ Now assume that *I-1*, at the time of the putative transfer to *C-3*, owned *some C Co. securities* (comprising a fungible bulk) sufficient to cover the earlier-in-time claim of *C-2* or the putative claim of *C-3* but not a sufficient quantity to cover both *C-2*'s claim and *C-3*'s putative claim. Would the putative transfer to *C-3* be effective? It is possible that a transfer would occur under U.C.C. Article 8. *C-2* and *C-3* each would own "a proportionate property interest in the fungible bulk."⁶⁷ Yet a court might conclude that *C-3* did not receive a transfer of a property interest under U.C.C. Article 8. In the absence of outright fraud, it might be shown convincingly that the honest *I-1* had no intention or desire to transfer securities it did not own or to dilute the interest of *C-2*.⁶⁸

Japanese law provides a similar proportionate property interest formulation,⁶⁹ but under the facts of Example 1 and assuming insufficient *C Co. securities* at the time of the putative transfer to *C-3*, *C-2* and *C-3* would not share a proportionate property interest in the fungible bulk. It is clear under Japanese law that *I-1* could not have delivered the *C Co. securities* to *C-3* unless *I-1* itself had possession of the *C Co. securities* to be delivered.⁷⁰ Because, in Example 1, *I-1* continues to possess the securities (albeit as *C-2*'s

part of a fungible bulk" of securities that are in the intermediary's possession, or (if uncertificated) registered in its name, or shown on its account with another intermediary. §8-313 (1) (d) (ii) & (iii). *Minpō* article 183, similarly, addresses only property possessed by a representative either directly (*i.e.*, by actual physical possession) or indirectly (*i.e.*, through a representative). *Minpō* art. 183. If *I-1* does not have direct or indirect possession of the securities, *I-1* has no possession to part with and to transfer to *C-2* or *C-3*. The Proposed TRADES Regulations are to the same effect but even more to the point. Proposed TRADES Regulations §357.12 (c) (transfer by book entry on the books of an intermediary is effective only if the securities are all or a part of the same issue of securities that are maintained in the intermediary's account with a Federal Reserve Bank or with another intermediary).

⁶⁶Possession, in this context, includes possession through a representative. Exceptions to these principles work in favor of certain good faith purchasers. See *infra* notes 73, 117.

⁶⁷U.C.C. §8-313 (2) (second sentence) ("If a security...is a part of a fungible bulk, as in the circumstances specified in paragraphs (d) (ii) and (d) (iii) of subsection (1), the purchaser is the owner of a proportionate property interest in the fungible bulk.").

⁶⁸The shortfall could result from a mistake or an unexpected development, such as a failed trade or the failure of a secured lender to release the securities held as collateral. A court might refuse to award *C-3* with a property right in securities already on hand, to the detriment of existing customers, such as *C-2*, when that was not *I-1*'s intention. This approach could yield bizarre results. The entire transfer could be nullified even though the securities on hand were only one dollar or one hundred yen short.

⁶⁹See *Minpō* arts. 244-45 (when movables are "mixed together so as to be no longer distinguishable from each other," then "the owners of the...[mixed property] shall own the...[mixed property] jointly in proportion to the value of the [property] at the time" it was mixed together). Application of this principle requires proof that property actually has been mixed together. Although the *Minpō* does not address that point clearly, the Securities Depository Act specifically provides for the creation of a fungible bulk and joint ownership by the JASDEC participants and their customers. See Securities Depository Act, arts. 16 (4), 23-25.

⁷⁰See *supra* text at note 66. If, for example, an intermediary acts as a broker to purchase securities in the market for its customer, and the securities are never delivered to the intermediary, the intermediary does not receive possession and, therefore, cannot deliver the securities to its customer. (This assumes, of course, that the intermediary does not possess other securities of the same issue that could be delivered to the customer.)

representative⁷¹) that previously were delivered to C-2, I-1 *could* deliver the C Co. securities to C-3 pursuant to *Minpō* article 183.⁷² But even if such a delivery were made, this delivery to C-3 would not be sufficient to give C-3 the status of a good faith purchaser that would take free of C-2's interest.⁷³ Inasmuch as C-3 cannot achieve the benefits of as bona fide purchaser treatment and C-2 continues to own a proportionate property interest in C Co. securities,⁷⁴ it follows that C-2's interest in the C Co. securities is senior to the putative interest of C-3.

It seems unwise to treat a putative transferee like C-3, who has paid its intermediary for securities, as an unsecured creditor.⁷⁵ C-3 has cast its lot with I-1, as has C-2, the pre-existing customer. They have common interests, have behaved similarly, have taken the same risks, and are victims of a common disaster—I-1's failure. That C-2 and C-3 might be victims of a shortfall is largely fortuitous. As a practical matter, none of I-1's customers would have any way to ascertain, either at the time of transfer or thereafter, that I-1 actually owned a fungible bulk sufficient to satisfy their claims. They must rely on the ultimate financial strength and integrity of their intermediary and regulation and supervision designed to prevent such shortfalls.⁷⁶

⁷¹Having delivered the C Co. securities to C-2 pursuant to *Minpō* art. 183, I-1 continues to hold the securities as C-2's representative.

⁷²For C-3 to receive a delivery, it would be necessary for I-1 to declare to C-2 that I-1 intended to hold on behalf of C-3 instead of C-2. See *Minpō* arts. 183, 204 (1) (possession held through representative is lost if representative declares to principal an intention to hold on behalf of a third person). Such a declaration would be implicit from I-1's delivery to C-3 and, although wrongful as to C-2, could occur through inadvertence.

⁷³In general, a purchaser can take securities free of pre-existing adverse claims, such as the interest of C-2, if the purchaser receives possession of the securities and is not acting in bad faith or with gross negligence. Law on Cheques, Law No.57 of 1933, art. 21; *Shōhō* arts. 229, 519 (Article 21 of the Law on Cheques applies to "share certificates" and "valuable instruments."). However, a delivery pursuant to *Minpō* art. 183 does not satisfy the "receiving possession" requirement of art. 21 of the Law on Cheques.

⁷⁴Were C-2 the only claimant to a quantity of C Co. securities controlled by I-1, C-2's "proportion" of the fungible bulk might be 100 percent.

⁷⁵Presumably C-3 would have paid for the C Co. securities and would be entitled to a claim for the money paid or a damage claim. If no payment had been made, then the harshness of the "no transfer" result essentially would be eliminated. Because C-3 was not a good faith purchaser that purchased the securities free of C-2's interest, C-2, not C-3, could redeem the securities in I-1's bankruptcy proceeding under Japanese law. See Judgment of July 11, 1968, *Saikosai* (Supreme Court), 22 *Minshu* 1462 (customer of securities firm in possession of stock certificates purchased for, and specifically identified for, customer who had paid for securities could redeem certificates in securities firm's bankruptcy proceeding, even though the necessary formalities for transferring the certificates had not been followed). Under the facts of that case the customer, in effect, was able to prove its beneficial ownership and the court reached an equitable result. As discussed below, in the case of an insolvency proceeding of the intermediary in the United States, the putative transferee that had paid for the securities would receive additional protection notwithstanding the absence of a transfer under otherwise applicable state or federal law. See *infra* Part III.A.4. Note that in Japan there is no statutory scheme comparable to SIPA for the protection of smaller customer claims.

⁷⁶A critique of the disparate treatment afforded to similarly situated claimants under the U.C.C. Article 8 property law construct is developed in Mooney, *Beyond Negotiability*, *supra* note 2, at 333-38, 349-51. There

3. Intermediary as pledgor

An intermediary may wish to transfer an interest in securities to a lender as collateral for a loan (or to a transferee in a repo/gensaki transaction). A transfer of an interest in a fungible bulk of securities pursuant to U.C.C. section 8-313 (1) (d) (ii) or (iii) can create a perfected security interest in favor of a transferee secured party (pledgee).⁷⁷ Such a transfer should be effective to create and perfect a security interest in the United States even if the intermediary who controls the securities is itself the debtor-transferor, but that conclusion is not free of doubt.⁷⁸ A pledge of an interest in a fungible bulk of securities

are other instances of potentially disparate treatment that are not discussed here. For example, if I-1 controlled securities through several upper-tier intermediaries (*i.e.*, I-2, I-2', I-2'', etc.) and also had physical possession of some securities, and if each account and the physically possessed securities were viewed as a separate fungible bulk, I-1 could identify customer claims to specific fungible bulks. Arguably, customers claiming the same securities issue would receive disparate treatment if some of the fungible bulks were sufficient and others had shortfalls. *But see* Mooney, *Beyond Negotiability*, *supra* at 335-36 (rejecting that analysis as inconsistent with market regulation and practice and arguing that the fungible bulks should be treated as one). Under Japanese law it is possible for there to occur a gap between the time that a customer surrenders its securities to an intermediary and the time that those securities actually become a part of a fungible bulk. A customer who surrenders certificates that have not yet been delivered to an upper-tier depository may not have an interest in the fungible bulk at the depository or in a fungible bulk of securities physically possessed by the intermediary. Unless the customer's actual certificates could be traced and located, the customer might be left with only an unsecured claim. A contract among all customers and the intermediary whereby all customers would share a proportionate interest in all fungible bulks could solve the problem. Moreover, this problem now is addressed by the Securities Depository Act. *See* Securities Depository Act, arts. 16 (4) (when an entry is made by a depository participant on its customer books, the securities reflected by the entry are deemed to be deposited with the depository (JASDEC) at the time the entry is made); 24 (customer is presumed to have proportionate property interest in deposited securities in accordance with entry on customer account book maintained by intermediary), 27 (person named on customer account book and participant account book (maintained by depository) deemed to be possessor of the quantities of securities described for that person's account).

⁷⁷*See* Mooney, *Beyond Negotiability*, *supra* note 2, at 340-42. The methods of transfer specified in U.C.C. §8-313 (1) apply to the "[t]ransfer of a security or a limited interest (including a security interest) therein." U.C.C. §8-313 (1). A security interest in a security is enforceable only if it has been transferred to the secured party (or its designee) pursuant to U.C.C. §8-313 (1). U.C.C. §8-321 (1). If the transfer is made "pursuant to agreement by a transferor who has rights in the security to a transferee who has given value," it is a "perfected security interest." U.C.C. §8-321 (2). Certain subsections of U.C.C. §8-313 (1) apply *only* to the transfer of a security interest. U.C.C. §8-313 (1) (h) (time of written notice by secured party, after debtor has signed a security agreement describing collateral, given to debtor's financial intermediary or third party in possession of, or who is registered owner or pledgee of, security), (1) (i) (if debtor has signed a written security agreement describing the collateral, time that new value is given by secured party), (1) (j) (if secured party is financial intermediary to whom security has already been transferred, time debtor signs security agreement describing collateral and secured party gives value). Transfer pursuant to section 8-313 (1) (i) provides only temporary perfection. U.C.C. §8-321 (2) ("security interest...transferred solely under paragraph (i) of Section 8-313 (1) becomes unperfected after 21 days unless, within that time, the requirements for transfer under any other provision of Section 8-313(1) are satisfied.")

⁷⁸In general, a debtor cannot serve as an agent or bailee of a secured party for purposes of delivery and possession of collateral for perfection purposes. *See* U.C.C. §9-305, Comment 2 ("[I]t is of course clear, however, that the debtor or a person controlled by him cannot qualify as...an agent for the secured party.")

controlled by an intermediary also can be effected under Japanese law.⁷⁹ If the intermediary that continues to control the securities is the debtor-transferor, however, a traditional “pledge” would not be effective.⁸⁰ But another, non-statutory, security device, *jōto tanpo*, would give effect to the debtor-transferor’s transfer of a security interest notwithstanding its continued control of the securities.⁸¹

There is little reason to deny effectiveness to a security interest created by a financial intermediary, as debtor-transferor, on its own books.⁸² Concerns about misleading appearances and fraud, even if valid concerning security interests (including *jōto tanpo*)

With certain exceptions, a security interest in a security remains “subject to the provisions of Article 9.” U.C.C. §8-321 (3). But the unambiguous language of U.C.C. §8-321 (1) and (2) also makes it clear that (subject to the requirements of an agreement, debtor’s rights in the collateral and value) transfer of a security interest in a security under U.C.C. §8-313 (1) is sufficient for the attachment and perfection of a security interest. U.C.C. §8-313 (1) (d) makes no distinction between transfers of entire interests (ownership) and limited interests (such as security interests). A financial intermediary that is a transferor acts in two capacities—as transferor and as the transferee’s financial intermediary. See U.C.C. §8-313 (3) (defining “financial intermediary” as a “... person... who maintains security accounts for its customers *and is acting in that capacity*”) (emphasis added). New York has amended its version of §8-313 to provide even more clearly that a financial intermediary can be a transferor of a security interest on its own books. N.Y. U.C.C. §8-313 (1) (d), (4) (McKinney Supp. 1989).

⁷⁹“A pledge shall become effective upon the delivery to the obligee of the thing pledged.” *Minpō* art. 344. Thus, *Minpō* articles 182 (2) and 184, dealing with delivery when a representative is involved in the possession of movables, and articles 244 and 245, dealing with proportionate, joint ownership when property is mixed together, could apply in the case of a pledge. In Example 1, when I-1 pledges securities to I-2, I-2 receives a delivery under *Minpō* art. 182 (2). “Where the assignee [here, I-2] or his representative actually holds a thing, the assignment of the possessory right may be effected by a mere declaration of intention by the parties [here, I-1 and I-2].” *Minpō* art. 182 (2). Assuming that I-2 could prove I-1’s declaration of intention that I-2 possess the securities for itself as a pledgee, then I-2 would so possess the securities notwithstanding the title of the account. L would receive a delivery under *Minpō* art. 184. “If, where a thing is possessed through a representative [here, I-2], the principal [here, I-1] directs the representative [I-2] to hold the thing thereafter on behalf of a third person [here, L] and the third person [L] gives his consent thereto, such third person [L] shall acquire the possessory right.” *Minpō* art. 184.

⁸⁰*Minpō* art. 345 (“A pledgee cannot let the pledger hold possession of the thing pledged on his behalf.”). For example, if C-1 in Example 1 were a transferee of securities as collateral for a loan made by C-1 to I-1, instead of a transferee of an ownership interest, a delivery under *Minpō* art. 183 would be insufficient to create a pledge because I-1 would remain in possession of the securities.

⁸¹*Jōto tanpo* (translated “title transfer security”) is a judicially recognized, chattel mortgage-like security device that is effective against a debtor and its creditors, including a trustee in bankruptcy, but generally not against good faith purchasers. See Judgment of July 8, 1912, *Daishin'in* (Great Court of Judicature), 18 *Daihan Minroku* 691 (*jōto tanpo* security device is not void as a collusive transaction under *Minpō* art. 94); Judgment of November 2, 1914, *Daishin'in* (Great Court of Judicature), 20 *Daihan Minroku* 865 (*jōto tanpo* is not void as an evasion of *Minpō* art. 345 prohibition against non-possessory pledges); Judgment of July 9, 1919, *Daishin'in* (Great Court of Judicature), 25 *Daihan Minroku* 1373 (*jōto tanpo* is not void under *Minpō* art. 349 as agreement that pledgee can satisfy its claim or dispose of property otherwise than as provided by law); see generally 4 *Doing Business*, *supra* note 61, at pt. V, §5.01-.05.

⁸²In the United States repo parties that are to receive transfers of securities commonly have left the securities in the control of the financial intermediary transferors. Because of the uncertainty under United States law as to whether a repo transaction involves a true sale and resale or a secured transaction, achieving perfection for the

in other contexts, seem unwarranted when the debtor that remains in control of the collateral is a professional securities intermediary. Just as such intermediaries generally are known to be in control of customers' securities, in a world where these security interests are given effect intermediaries would be known to be in control of securities subject to security interests.⁸³ If these security interests were not given effect, a secured lender could insist that the securities be put in control of another intermediary.⁸⁴ The effects of "moving" the collateral on the customers and other creditors of the debtor intermediary are likely to be neutral, at best, and probably detrimental. The securities would then be subject to the senior claim of the secured party and, to the extent of the secured debt, unavailable to the customers and other creditors. If the securities had remained in the debtor intermediary's control, the customers and other creditors would not have been the worse for it. Moreover, "moving" the securities results in transaction costs.⁸⁵ These costs may increase the cost of borrowing for the intermediary. Invalidating these security interests seems inefficient because it would provide no perceptible benefits and it would increase the costs to all concerned.

4. *Claims and distributions in insolvency proceedings*

In both the United States and Japan the characteristics of the property interest obtained by a transferee of an interest in a fungible bulk of securities controlled by an intermediary become relevant primarily when the intermediary becomes subject to an insolvency proceeding or when prospective parties to a transaction or a relationship contemplate, *ex ante*, such a proceeding. So long as the intermediary remains viable, the intermediary's warranty and other obligations normally ensure that the transferee receives the benefits of the securities transferred.⁸⁶ If an intermediary cannot honor those

security interest (if so characterized) is desirable for these parties. *See supra* note 43. In Japan securities transferred to parties advancing funds in *gensaki* transactions also often leave the transferor in possession and control of the securities. The appropriate treatment of *gensaki* under Japanese law, either as a true sale and resale or a secured loan, also is not clear. If *gensaki* are treated as true sales and resales in Japan, in the true sale phase the securities can be delivered under *Minpō* art. 183 and in the resale phase they can be delivered under art. 182 (2). Actual, physical delivery is not necessarily involved. And if *gensaki* are treated as *jōto tanpo*, it likewise would not be necessary for the transferee to take physical possession of the securities as the securities can be delivered under art. 183.

⁸³Given the difficulties of anyone ascertaining the current status of securities controlled by an intermediary in a fungible bulk of securities and the various claims that exist with respect to such securities, it is hard to see how anyone could be misled by appearances.

⁸⁴It is assumed here that the lender and its new intermediary could cut off any existing claims to the securities by customers of the debtor intermediary and protect the pledge in a way that it achieve priority over creditors of the debtor intermediary.

⁸⁵Custody or safekeeping fees might be charged by the new intermediary and the debtor intermediary will incur costs of handling the transaction. If United States treasury securities are involved, charges will be made by the debtor intermediary's clearing bank. In a very short term loan or repo/*gensaki* transaction, these costs may not offset any savings that result from lower interest costs to take account for lessening the lender's credit risks.

⁸⁶Intermediary and transferor warranties are discussed *infra* text at notes 121-24.

obligations, actual enforcement of the transferee's property rights against the intermediary outside of an insolvency proceeding is extremely unlikely.⁸⁷ If the intermediary can perform its obligations the transferee is protected. If the intermediary cannot perform, then a transferee normally will recover from the intermediary only what it is entitled to receive in the intermediary's insolvency proceeding.⁸⁸

a. Ownership claims of customers

If United States property law (*i.e.*, U.C.C. Article 8) were to control in I-1's insolvency proceeding (returning to Example 1), I-1's customers claiming any particular issue of securities would receive the benefit of a proportionate interest in the fungible bulk of securities of that issue controlled by I-1.⁸⁹ SIPA and Chapter 7, Subchapter III, of the Bankruptcy Code⁹⁰ impose a very different result when the intermediary is a securities firm.⁹¹ Under both SIPA and Subchapter III, claims of investors (including the investors, of most interest here, whose claims either exceed or are not eligible for SIPC coverage) are subject to a risk sharing distributional formula that differs from the U.C.C. Article 8 proportionate property interest formula. Instead of sharing a proportionate interest in the fungible bulk of securities of the issue claimed, divided among all claimants with claims to that issue, claimants that qualify for "customer"⁹² status share ratably,

⁸⁷Securities intermediaries are supervised and regulated. Consequently, it is unlikely that a customer or secured creditor could attempt judicial enforcement of undisputed claims (as opposed to enforcement when there is a dispute as to the claimant's rights) before the intermediary were subjected to insolvency proceedings or replaced with another intermediary.

⁸⁸In some cases the transferee also may have a conversion claim against a third party. *See infra* note 110. Part III.B., *infra*, considers some different-tier priority conflicts that are not resolved by distributional rules applicable in insolvency proceedings.

⁸⁹In the context of Example 1, C-2 and C-3 would share the C Co. securities *pro rata* and C-4's claim to D Co. securities would be fully satisfied.

⁹⁰*See* 11 U.S.C. §§101-1330 (1988) [hereinafter, Bankruptcy Code]; 11 U.S.C. §741-52 (1988) [hereinafter, Subchapter III].

⁹¹SIPA applies to SIPC members, which consist of all registered brokers or dealers under the Securities and Exchange Act of 1934 (with certain exceptions not relevant here). SIPA §3 (a) (2) (A). The stockbroker liquidation provisions of Subchapter III apply only to stockbrokers, and a stockbroker cannot be a debtor under any other chapter. Bankruptcy Code §§101 (48) (defining "stockbroker"); 103 (c); 109. When a proceeding is commenced under SIPA all proceedings in a case under the Bankruptcy Code are stayed. Bankruptcy Code §742.

⁹²"Customer" is defined in SIPA, in pertinent part, as:

any person (including any person with whom the debtor deals as principal or agent) who has a claim on account of securities received, acquired, or held by the debtor in the ordinary course of its business as a broker or dealer from or for the securities accounts of such person for safekeeping, with a view to sale, to cover consummated sales, pursuant to purchases, as collateral security, or for purposes of effecting transfer. The term "customer" includes any person who has a claim against the debtor arising out of sales or conversions of such securities, and any person who has deposited cash with the debtor for the purpose of purchasing securities...

according to their respective “net equities,”⁹³ in the entire pool of “customer property.”⁹⁴ Applying this distributional rule to Example 1, the value of all of the securities available to I-1 of the issues claimed by I-1’s customers would be shared by all of I-1’s customers.

The SIPA/Subchapter III risk sharing distributional rule derived from section 60e of the Bankruptcy Act, which was added by the Chandler Act of 1938.⁹⁵ Section 60e responded to widespread dissatisfaction with the essentially fortuitous and arbitrary results imposed on stockbroker customers under applicable state law and the Bankruptcy Act.⁹⁶ Section 60e differed in detail from SIPA and Subchapter III, and it failed to resolve satisfactorily certain matters of its scope and application. But the essence of the distributional rule of section 60e—that all customers share ratably in all customer securities—has

SIPA §16 (2). The Subchapter III definition of “customer” is, for present purposes, substantially the same. Bankruptcy Code §741 (2).

⁹³A customer’s “net equity” is essentially the value of securities or cash claimed by the customer, as of the date the proceeding commenced, less claims of the debtor intermediary against the customer (such as remaining outstanding obligations for securities purchased on “margin”). SIPA §16 (11); Bankruptcy Code §741 (6). Because customer status is given to those who have advanced cash to the debtor for the purchase of securities, a customer may have a net equity claim, and thereby share in customer property, even though the customer has no property interest at all under applicable state law. See SIPA §16 (2), (11); Bankruptcy Code §741 (2), (6).

⁹⁴SIPA §8 (c) (1); Bankruptcy Code §752 (a). Under both SIPA and Subchapter III, “customer property” includes virtually all securities available to the estate of the type that are subject to (and to the extent of) customer claims. SIPA §16 (4); Bankruptcy Code §741 (4). The principal exception is for property that is a “customer name security.” *Id.* A “customer name security” is a specific security held by the intermediary that is registered, or is in the process of registration, in the name of a customer and that is not in negotiable form. SIPA §16(3); Bankruptcy Code §741 (3).

⁹⁵Bankruptcy Act of 1898, §60e, Amendments (Chandler Act), Pub. L. No.75-696, 52 Stat. 840, 870 (1938), 11 U.S.C. §96e (1970) (repealed). SIPA and §60e coexisted from 1970, when SIPA was enacted, until 1978 when SIPA was amended and Subchapter III, modeled on the amended SIPA, was enacted as a part of the Bankruptcy Code. Compare Securities Investor Protection Act of 1970, Pub. L. 91-598, 84 Stat. 1636 (1970) with Securities Investor Protection Act Amendments of 1978, Pub. L. 95-283, 92 Stat. 249 (1978) and The Bankruptcy Reform Act of 1978, Pub. L. 95-598, 92 Stat. 2682 (1978).

⁹⁶Under earlier law a distinction was drawn between cash customers and those who bought on margin, with the latter being treated less favorably, and customers who could not trace their securities were given general creditor status. See Gilchrist, *Stockbrokers’ Bankruptcies: Problems Created by the Chandler Act*, 24 Minn. L. Rev. 52, 53-57 (1939). Commenting on the (then-proposed but unenacted) Chandler Act, James McLaughlin noted:

If one approaches the problem from the point of view of customers, it is indisputable that the different degrees in which different customers trust the broker run through such a wide range that many possible distinctions might logically be taken. At the same time it is abundantly clear that the existing law turns upon refinements utterly unintelligible to the business man and involves elements of chance more appropriate to a beano party than to the administration of justice. If the problem be approached from the point of view of ease and economy of administration, the solution of the Chandler Bill warrants a high rating. McLaughlin, *Aspects of the Chandler Bill to Amend the Bankruptcy Act*, 4 U. Chi. L. Rev. 368, 397-98 (1937). As originally enacted, SIPA made a distinction between cash and margin customers. 15 U.S.C. §78fff (c) (2) (A) (ii), (iii) (repealed). The 1978 amendments to SIPA, as well as Subchapter III, eliminated that distinction. SIPA §§8 (c) (1); 16 (2), (ii); Bankruptcy Code §741 (2).

been preserved and refined by SIPA and Subchapter III.⁹⁷ In the case of bank insolvencies, in general the applicable state law priorities (*i.e.*, the proportional property interest formulation applied on a securities issue by securities issue basis) would control.⁹⁸

In Japan, securities firms and banks are subject to the same bankruptcy law applicable to other firms and individuals—the *Hasan Hō* (Bankruptcy Law).⁹⁹ There are no special provisions in the *Hasan Hō* applicable to securities firms or banks that control securities for their customers, in fungible bulk or otherwise. The rights of claimants to securities would turn on the existence of non-bankruptcy law property rights that are enforceable against third persons. As in the United States, property of others held by a bankrupt generally is awarded to the beneficial owner, and is not generally available for distributions to creditors.¹⁰⁰ A securities customer of a bankrupt securities firm or bank could attempt to recover the securities it claims, but to do so it would be required to prove that the bankrupt possessed securities it claimed and that the securities actually belonged to the customer.¹⁰¹ In the absence of Japanese precedents in point, it is not clear that a customer claiming securities held in a fungible bulk could make the necessary proof. If the customer could not meet its proof requirement it would be treated as an unsecured creditor.¹⁰² The more likely result is that a customer claiming an interest in a particular securities issue, and whose interests were reflected by the books of the bankrupt intermediary, would be entitled to share in the fungible bulk of securities of that

⁹⁷For a discussion of the merits of the SIPA/Subchapter III risk sharing approach for customer claims, see Mooney, *Beyond Negotiability*, *supra* note 2, part III, arguing that (i) a hypothetical *ex ante* bargain among the customers well might include a risk sharing arrangement similar to the SIPA and Subchapter III distributional formula because that formula furnishes customers with a *higher likelihood* of a *lower potential loss*, (ii) the risk sharing approach makes it less likely that a customer would sustain a severe loss, (iii) such a hypothetical “customers’ bargain” would reflect the same normative principle that underlies the basic distributional formula for unsecured creditors in bankruptcy (pro rata sharing among claimants that are similarly situated), and (iv) the seniority afforded to customers (as measured by customer property) over general creditors reflects, in turn, the principle that only the debtor’s property will be available for distribution to its creditors.

⁹⁸Neither SIPA nor Subchapter III apply to commercial banks. See generally Mooney, *Beyond Negotiability*, *supra* note 2, at 360-61.

⁹⁹*Hasan Hō* (Bankruptcy Law), Law No.71 of 1922 [hereinafter, *Hasan Hō*].

¹⁰⁰See *Hasan Hō* art. 87 (“The adjudication of bankruptcy shall not affect the right to redeem from the bankrupt estate properties not belonging to the bankrupt”); Judgment of July 11, 1968, *Saikosai* (Supreme Court), 22 *Minshu* 1462; see generally 7 *Doing Business*, *supra* note, pt. XIV, at §7.05 [1]. Secured creditors also are entitled to recover their collateral. *Hasan Hō* art. 92. See *infra* text at notes 107-09.

¹⁰¹See *id.*

¹⁰²The customer’s claim could be for breach of contract. Presumably, the customer could prove from its own records that it advanced funds to the bankrupt as the purchase price of the securities or that it delivered securities to the bankrupt. Alternatively, the customer might claim for breach of a seller’s warranty. See *infra* text at notes 121-24. If the intermediary had sold a customer’s securities to a good faith purchaser who cut off the customer’s rights, the customer also could have a claim based on tort.

issue controlled by the intermediary.¹⁰³ This conclusion assumes, of course, that the customer actually has a property interest in the fungible bulk of securities and is not merely an unsecured creditor.¹⁰⁴

b. Claims of secured creditors

As a general matter, a creditor of a securities firm who claims a security interest in securities is not a “customer” under SIPA or Subchapter III and is treated like secured creditors generally under the Bankruptcy Code.¹⁰⁵ Even if a secured creditor of the insolvent intermediary has allowed that intermediary to control the securities that comprise the collateral, it is unlikely that the secured creditor will receive “customer” treatment.¹⁰⁶ Because such a secured creditor would not be a “customer,” the secured creditor would not share in the pool of customer property.

Under Japanese law a pledgee that has received a delivery of securities collateral may enforce its rights against that collateral in the bankruptcy of the pledgor.¹⁰⁷ A secured creditor who has left the debtor-intermediary in control of the securities and who is claiming through *jōto tanpo* has the same rights.¹⁰⁸ As with ownership claimants, a *jōto*

¹⁰³Were there a shortfall of securities in the bankrupt’s possession of the issue claimed, under *Minpō* articles 244 and 245 the customer could redeem only its proportionate interest in the fungible bulk of securities of that issue. And, even if the bankrupt’s books and records reflected the customer’s interest in securities of that issue, it is possible that the customer never had an ownership interest in any securities and that its claim would, therefore, fail. See *supra* text at notes 65, 69-74.

¹⁰⁴For example, in cases where a putative transferee does not cut off earlier rights in the fungible bulk and the fungible bulk is insufficient to cover both existing claims and that of the putative transferee, the putative transferee may not receive *any* interest in the fungible bulk. See *supra* text at notes 65, 69-74. If the transferee does receive a property interest, however, a subsequent shortfall in the fungible bulk would invoke proportionate sharing.

¹⁰⁵A secured party that receives physical delivery of collateral or to whom the collateral is transferred through another, third party, intermediary, is not a “customer” because it has no “claim on account of securities received, acquired, or held by the debtor.” SIPA §16 (2); Bankruptcy Code §741 (2).

¹⁰⁶See Mooney, *Beyond Negotiability*, *supra* note 2, at n. 201. But awarding the secured creditor with the benefit of securities that otherwise would be included in the customer property may give its security interest a priority that would not be achieved outside of an insolvency proceeding. Subordinating the secured creditor’s claim to those of the customers also could have a distributional effect equally inconsistent with otherwise applicable law. If the risk sharing distributional formula is normatively superior, arguably treatment of such secured creditors as customers might produce the most desirable result. Yet that approach could undermine the purpose and utility of secured credit. And, by enlarging the aggregate amount of claims to customer property, increased demands could be placed on the SIPC fund in cases where securities of the issues claimed by secured creditors were scarce. Suffice it to note that the subject of same-tier priority conflicts and distributional considerations as among securities customers and secured creditors warrants further practical and theoretical exploration.

¹⁰⁷*Hasan Hō* art. 92 (right of separation for “persons who possess the...right of pledge”).

¹⁰⁸See generally 7 *Doing Business*, *supra* note 61, part XIV, §7.05 [2]. Although the theory and structure of *jōto tanpo* is that of a transfer of title, the courts generally afford the *jōto tanpo* secured party the rights of a secured claimant rather than the broader reclamation rights of an owner. *Id.*

tanpo claimant to an interest in a fungible bulk would share in the fungible bulk of the particular issue claimed.¹⁰⁹

c. *Observations*

The foregoing discussion indicates that the treatment of claimants (as owners and as secured creditors) under Japanese law and United States law is quite similar. It suggests that Japanese law reformers might seriously consider adopting a risk sharing formulation for customer claims, similar to the SIPA/Subchapter III approach. It also suggest that clarification is in order for United States law concerning treatment of secured creditors of securities intermediaries who leave the debtor-intermediaries in control of the collateral—perhaps *jōto tanpo*-like treatment. Implicit in each of these alternatives is the assumption that the prospects for insolvency of securities intermediaries will be taken seriously.

Once a pool of property available for distribution to claimants against an insolvent securities intermediary is determined, and the distributional rule is specified, there is little that property law can do to increase the size of the pool. But property law rules can be used to increase the recoveries of claimants to securities that are also claimed by owners and creditors who do *not* claim an interest in a fungible bulk through the insolvent intermediary—claimants on different tiers. In that context, addressed next, property law can interfere with the interests of market participants who did not intend or desire to cast their common lot with the insolvent intermediary.

B. Competing Claims and Priorities on Different Tiers—Bona Fide Purchase, First-in-Time, Last-in-Time

Returning to Example 1, if U.C.C. Articles 8 and 9 are applied to the *C*-1 versus *I*-2 and *C*-1 versus *L* priority contests, *I*-2 and *L* would always prevail if they acquired their interests prior to the time that *C*-1 acquired its interests in the securities involved.¹¹⁰ This is so because *C*-1 could not be a bona fide purchaser of the securities and, in the case of

¹⁰⁹See *supra* note 103. If *C*-2, in Example 1, were an ownership claimant and if *C*-3 were a *jōto tanpo* secured claimant, they would share proportionately in the fungible bulk of *C* Co. securities if there were a shortfall. This assumes that both *C*-2 and *C*-3 actually received an interest in the fungible bulk concerned. See *supra* notes 65, 69-74. That would be the case if, for example, when the transfers and deliveries were made to *C*-2 and *C*-3 there were sufficient *C* Co. securities controlled by their intermediary, *I*-1, so as to satisfy both claims, and the shortfall arose subsequently (such as by a transfer and delivery from *I*-1 to a good faith purchaser). See *supra* note 73.

¹¹⁰The analysis and explanation of United States law in this part is derived from Mooney, *Beyond Negotiability*, *supra* note 2, part IV. The SIPA/Subchapter III risk sharing distributional rule would not solve the different-tier priority contests involved in Example 1. This is so because the securities subjected to perfected security interests in favor of *I*-2 and *L* would not be included in customer property. Yet *C*-1 would retain its right to sue *I*-2 or *L* for conversion to the extent that *C*-1 could successfully claim a senior interest. See *id.* at n. 212.

securities earlier transferred to *L* and no longer identified to *C*'s account with *I-2*, *C-1* probably would not receive a transfer of any property interest.¹¹¹ If, on the other hand, *C-1*'s interest arose earlier in time than the interests of *I-2* and *L*, *C-1* would achieve priority because neither *I-2* nor *L*, as transferees of interests in a fungible bulk other than through a clearing corporation, would achieve bona fide purchaser status.¹¹²

The emphasis on timing, whether first-in-time or last-in-time, is questionable considering that *C-1* has little or no way to control or find out about the transactions with *I-2* and *L*, either *ex ante* or *ex post*. The same can be said for *I-2* and *L* with respect to *I-1*'s transactions with *C-1*. The principal control available to these parties lies in their respective selections of intermediaries. Yet, as shown above, *C-1* may sometimes prevail even though its intermediary, *I-1*, has failed and *I-2* and *L* sometimes will lose even though their intermediaries have not failed.

The discussion of Example 1 indicates that the existing United States legal regime is subject to another, more basic, defect as it relates to conflicting claims on different tiers—its application is confusing, awkward, and unprincipled. The property interest construct is ill-suited to the resolution of conflicting claims in this context. With limited exceptions, it fails to deal expressly with the unique circumstances involved when securities are a part of fungible bulks reflected by the books of intermediaries. It abandons priority conflicts to the first-in-time principle where bona fide purchaser status is not achieved. Moreover, before appropriate resolutions of priority contests can be teased out it is necessary first to ascertain that two competing claimants are asserting rights in the *same securities*. But Article 8, the existing book-entry Treasury Regulations, and the proposed TRADES regulations provide no guidance as to how this can be accomplished when the securities are a part of a fungible bulks.

Under Japanese law, it appears that *C-1*'s claim to the securities would not prevail over the claim of either *L* or *I-2* (assuming *L* and *I-2* acted in good faith and without gross negligence¹¹³), whether *C-1*'s purchase occurred before or after the pledges to *I-2* and *L*. *I-1* is in possession of *C-1*'s securities only as *C-1*'s representative.¹¹⁴ In pledging securities to *L* and *I-2*, *I-1* delivers the securities to *L* pursuant to *Minpō* article 184 and to *I-2* pursuant to *Minpō* article 182(2).¹¹⁵ If the pledges were given to *L* and *I-2* before the putative transfer to *C-1*, *C-1* could not obtain possession because *I-1* already would have

¹¹¹See *supra* note 65.

¹¹²See Mooney, *Beyond Negotiability*, *supra* note 2, at 366-71.

¹¹³See *supra* note 73.

¹¹⁴The delivery to *C-1* would result from *I-1*'s declaration pursuant to *Minpō* article 183, whether the possessory rights in the securities involved were acquired by *I-1* acting as *C-1*'s agent (broker) or whether possessory rights in the securities involved were already held by *I-1* in its own inventory. See *supra* note 61.

¹¹⁵These methods of delivery are sufficient to create a pledge under *Minpō* art. 344 and, because they are sufficient to transfer an ownership interest, they also would be sufficient to create a *jōto tanpo*. See *supra* notes 108-09 and accompanying text.

parted with its possession, and thus C-1 would receive no effective transfer; if the pledges were given to L and I-2 after the transfer to C-1, C-1's possession theretofore held through I-1 as C-1's representative would be lost when I-1 transferred possession in order to grant pledges to I-2 and L.¹¹⁶ Assuming that L and I-2 acted in good faith and without gross negligence (e.g., in the regular course and without knowledge that the securities were claimed by C-1), L and I-2 would be good faith purchasers who would take free of C-1's earlier-in-time interest.¹¹⁷

These results (although not the basis for the results) under Japanese law are strikingly similar to the expected results under an "upper-tier priority" (UTP) priority rule for resolving different-tier priority contests, under United States law, that I have proposed elsewhere.¹¹⁸ UTP would offer an understandable and easily applied doctrinal basis and theoretical justification for resolving different-tier priority contests involving transfers of interests in fungible bulks of securities controlled by intermediaries.¹¹⁹

The cornerstone of UTP is one overriding principle: The transferee of an interest in a fungible bulk of securities controlled by its intermediary can look only to its intermediary for the benefits of the securities transferred. Stated otherwise, claimants on a higher tier always will prevail over claimants on a lower tier.¹²⁰ UTP does not reject the notion that a transferee claiming through a lower-tier intermediary receives a property interest. Instead, it deals with how interests in securities are to be divided and prioritized in the event the lower-tier intermediary fails. The property available to satisfy the claims of lower-tier intermediary transferees would be limited to the securities that have not been transferred by the lower-tier intermediary on a higher tier and that are not otherwise subject to competing claims on higher tiers. Application of UTP to Example 1 would resolve the priority disputes in favor of I-2 and L in every instance.

¹¹⁶I-2 has possession for itself after a delivery pursuant to *Minpō* art. 182 (2), and for L after a delivery pursuant to art. 184, but after those deliveries I-2 would not have possession as I-1's representative. Possession through a representative is effective only if the representative has possession. See *Minpō* art. 204. By instructing and permitting I-2 to hold possession on behalf of L and I-2 as pledgees, I-1 would lose its possessory rights. See *Minpō* art. 204 (1) (i) (possession held through representative is lost when principal [here, I-1] abandons intention to allow representative to hold on principal's behalf). When I-1 loses possession, C also loses possession. See *Minpō* art. 204 (1) (iii) (possession held through representative is lost when representative loses custody).

¹¹⁷Deliveries under *Minpō* arts. 182 (2) and 184, unlike those effected under art. 183, can qualify the transferee for good faith purchaser protection under art. 21 of the Law on Cheques. See *supra* notes 73, 79. The results would be the same even if the security interests were *jōto tanpō*. Deliveries under arts. 182 (2) and 184 are sufficient both to create a *jōto tanpō* interest and to give such transferees (I-2 and L) good faith purchaser protection.

¹¹⁸See Mooney, *Beyond Negotiability*, *supra* note 2, part V.

¹¹⁹UTP is justified on the basis of economic efficiency analysis, analogies to other U.C.C. doctrine, and the arbitrary and fortuitous results under existing law.

¹²⁰An exception would be made for "non-innocent" upper-tier claimants, such as those who receive a transfer with knowledge that it is in violation of the rights of the transferor's customers.

Finally, UTP contemplates the adoption of a corollary rule: An intermediary on whose books an interest in a fungible bulk of securities is transferred would, as a matter of law, warrant that the transferee will receive (and will continue to receive) the benefits of the interest being transferred. If the transferee can look only to its intermediary for satisfaction, it follows that the intermediary ought to warrant the quality of the interest to be received by the transferee. For the most part U.C.C. Article 8 conforms to this standard by imposing warranties on transferors to and brokers for purchasers for value, but some troubling potential gaps exist.¹²¹ Similarly, Japanese law obligates a seller to see that a buyer receives the benefits of the property interest that the seller has agreed to sell.¹²² In some cases a representative controlling securities for a customer could not easily be characterized as a seller,¹²³ but the *Minpō* provisions on sales nevertheless might be applied in appropriate non-sale transactions.¹²⁴

IV. Market Reform: Issues and Alternatives

This part explores a variety of issues and alternatives that warrant consideration by those who would seek to improve systems for securities market clearance and settlement and by future reformers of the United States and Japanese legal regimes affecting the transfer and pledge of securities. Although the focus here is on the JGB and United States Treasury securities markets, and to some extent the Japanese and United States equity markets, the discussion suggests that many of the troublesome problems arise in securities markets generally—whether trading is over-the-counter or on exchanges, whether for equities or bonds, and whether in the Japanese, United States, or other markets.

A. Eliminating or Reducing Paper Movements and the Role of Paper Securities

A legal regime and market structure that embrace paperless securities as the norm can provide obvious benefits. The movement of physical certificates among traders and investors in an active market results in costs of transportation, safekeeping, monitoring,

¹²¹Warranties are made by transferors and brokers under §8-306 in favor of purchasers for value, but it is not clear that the intermediary is a transferor or broker in all intermediary book-entry transfers or that all such transferees will be purchasers for value. See Mooney, *Beyond Negotiability*, *supra* note 2, at 405-10.

¹²²See *Minpō* arts. 561-64.

¹²³In Example 1 when I-1 gave a security interest to L it would be difficult to characterize I-2 (L's intermediary) as a seller to L. However, even in the absence of a statutory warranty of good title, I-2 could have similar obligations to L created by contract. It would seem appropriate to construe most intermediary-customer relationships to include such a contractual warranty.

¹²⁴See *Minpō* art. 559 ("The provisions of this Section [3, Sale] shall apply *mutatis mutandis* to contracts for value other than sales; however, this shall not apply when the nature of such contracts does not so admit.").

and inspection. Costs also result from delays inherent in the practice of delivery of physical certificates and the resulting failures to make timely deliveries. Finally, the potential for loss, theft, destruction and forgery of negotiable certificates imposes additional costs and risks.¹²⁵

Potential benefits notwithstanding, eliminating or substantially reducing the role of paper securities will not *necessarily* reduce the volume of paper *movement*. The JGB registration system is illustrative.¹²⁶ Among the active market participants, that system has substantially eliminated the movement of physical bonds. Indeed, bonds put into the system are destroyed and the BOJ's registration books provide the record of ownership. Much of the wholesale market activity involves trades that result in registration of bonds in the name of the transferee on a settlement date. But, except for transfers effected through BOJ-NET, for each transfer in the registration system there must be an RFT completed and signed by both the transferor and transferee, the form must be physically delivered to the BOJ, and the data must be input on the BOJ's computer system. Before implementation of BOJ-NET for securities transfers, market transactions in the paperless bonds in the registration system actually involved as much, perhaps even more, paper movement than a system dependent on the physical movement of paper securities.¹²⁷

Reducing paper movement depends not only on whether securities themselves are paperless but on whether paper can be eliminated from the process generally—such as in *communicating* transfer instructions to an issuer or registrar like the BOJ. For example, under U.C.C. Article 8 an instruction need not be in writing; it may be “in any form” that the issuer and the transferor agree upon in writing.¹²⁸ The development and introduction of systems of electronic communications and information storage will not always require changes in law, but they necessarily require cooperation, investment, and behavioral changes on the part of market professionals.

Although the elimination of paper securities does not necessarily reduce inefficiencies resulting from paper movement, substantial reductions in those inefficiencies may be

¹²⁵It was the threat of loss of insurance coverage by securities firms in the late 1960s, resulting from some large securities thefts, that inspired the rapid development of the book-entry system for United States Treasury securities. See Stigum, *Trade*, *supra* note 28, at 86-88.

¹²⁶See generally *supra* Part II.A.2.

¹²⁷When BOJ-NET is not used, the JGB book-entry system also involves the movement of paper instructions to the BOJ as the means of initiating a transfer or pledge of bonds, but the instructions need be signed only by the transferor of bonds.

¹²⁸U.C.C. §8-308 (5)(b) & Comment 3 (“Allowing nonwritten forms of instructions will permit the development and employment of means of transmitting instructions electronically.”). Communications from the issuer to a registered owner or pledgee also must occur *after* a transfer. See U.C.C. §8-408 (requiring issuers to send written statements following a transfer or pledge or a release of a pledge to the transferee and pledgee (“initial transaction statements,” defined in U.C.C. §8-408 (4)) and certain periodic written statements at least annually). Surprisingly, Article 8 contains no provision for these post-transfer statements to be communicated in a form other than a writing. The BOJ registration and book-entry systems also involve post-transfer statements to registered owners and pledgees.

achieved, nonetheless, *without* the use of paperless securities. The United States experience provides some useful illustrations. The inefficiencies of moving paper (securities certificates and otherwise) resulted in a now-legendary “paperwork crunch” in the United States markets during the late 1960s. Indeed, the inability of the securities firms’ “back offices” to manage the paper flow even caused several of those firms to fail. These events marked the real beginning of the search for the “certificateless society” in the United States.¹²⁹ The response of the market participants, with only slight assistance from changes in law, was to develop a sophisticated depository system and clearance and settlement system, mainly involving The Depository Trust Company (DTC) and the National Securities Clearing Corporation (NSCC).¹³⁰ The serious paperwork problems essentially were solved, within a few years, without changes in the law designed to facilitate truly uncertificated securities. By the time the revised U.C.C. Article 8’s legal

¹²⁹A considerable volume of commentary was addressed to prospects for a “certificateless society” during the 1970s. See, e.g., Aronstein, *A Certificateless Article 8? We Can Have It Both Ways*, 31 Bus. Law. 727 (1976); Aronstein, *The Decline and Fall of the Stock Certificate in America*, 1 Comp. L. & Sec. Reg. 273 (1978); Guttman, *Toward the Uncertificated Security: A Congressional Lead for States to Follow*, 37 Wash. & Lee L. Rev. 717 (1980); Mulhern, *First Steps Toward a Certificateless Society Under Existing Law: One Practitioner’s Experience*, 26 Bus. Law. 617 (1971); Smith, *A Piece of Paper Revisited*, 26 Bus. Law. 1769 (1971); Smith, *A Piece of Paper*, 25 Bus. Law. 923 (1970); Steadman, *The Lender in the Certificateless Society*, 26 Bus. Law. 623 (1971); Werner, *The Certificateless Society: Why and When?*, 26 Bus. Law. 605 (1971).

¹³⁰For a general discussion of clearance and settlement in the DTC-NSCC system, see Stigum, *Trade*, *supra* note 28, at 245-57; R. Woldow, *Overview of the Role of the National Securities Clearing Corporation in Equities Trading* (1990) (unpublished manuscript) [hereinafter, Woldow, *Overview*]. For a brief description of NSCC’s “continuous net settlement” (CNS) system and the securities-holding practices of institutional investors in the United States markets, see Mooney, *Beyond Negotiability*, *supra* note 2, at 318-20 (footnotes omitted):

Only trades in securities eligible for deposit with DTC can be cleared and settled in the CNS system, and on the settlement date [the fifth business day following the trade date] all of the securities to be delivered must be on deposit with DTC. Prior to the settlement date the trades among all of the participants are compared (matched) and netted with respect to each securities issue, with each participant becoming obligated to transfer or entitled to receive only a net quantity of securities that takes into account all of that participant’s trades in that security issue. Also prior to the settlement date, NSCC becomes obligated to transfer and entitled to receive these netted amounts to or from each participant. On the payments side, all amounts to be paid and received by each broker-dealer participant also are netted, and NSCC becomes obligated to pay and entitled to receive payment to or from each participant. Each participant becomes obligated to pay or entitled to receive from NSCC only a single sum on account of all of its trades for all issues to be settled on that date. In sum, on each settlement date, each NSCC participant pays to or receives one sum of money from NSCC and each NSCC participant transfers to or receives from NSCC, by book entry on the books of DTC, a single quantity of each security issue involved.

Most large institutional investors employ a DTC participant custodian bank. Most of these investors allow their custodian banks to leave their securities in the custodian banks’ accounts with DTC, registered in the name of DTC’s nominee, although in theory the investors could request their DTC member-intermediary to withdraw and hold them or request that certificates be issued in the investors’ own names. Thus, these market participants normally have no direct relationship with the issuers of securities of which they claim to be the beneficial owners. DTC participants expect DTC’s nominee to become the registered owner of securities, and non-participant investors, in turn, look to the DTC members or other intermediaries.

regime for uncertificated securities was officially promulgated in 1978, the paperwork problems that give rise to the project had by and large gone away.¹³¹

The depository system has been recognized and used in Japan as well. The Japan Securities Clearing Corporation (JSCC), a wholly owned subsidiary of the Tokyo Stock Exchange (TSE), serves as a depository and also provides clearance and settlement services for TSE trades.¹³² However, the more limited success of JSCC, when compared with the DTC-NSCC experience, demonstrates that the immobilization of paper securities in a depository is less than a complete response to problems associated with paper movement. The limitation of JSCC settlements to TSE trades, the exclusion of certain important market professionals (such as banks) from participation, and the extensive paper movements¹³³ have limited its efficacy. Changes contemplated in the now-operational Japan Securities Depository Center (JASDEC) system¹³⁴ will solve or reduce some of those deficiencies.¹³⁵ The differing degrees of success of securities depositories in the United States and Japan indicate that a clearing and settlement system must address significant issues other than the reduction of paper movements.

Another example from United States experience indicates that concerned legal experts may have overemphasized the importance of the elimination of paper movement, including the elimination of paper securities, and underemphasized other issues. The Fedwire system for United States book-entry Treasury securities and sophisticated, com-

¹³¹See Committee on Stock Certificates, Section of Corporation, Banking and Business Law, American Bar Association, *Report of the Committee on Stock Certificates* 37-43 (1975); Aronstein, Haydock & Scott, *Article 8 Is Ready*, 93 Harv. L. Rev. 889, 890-91 (1980).

¹³²*Securities Market 1990*, *supra* note 43, at 131-32; T. Shimizu, *Settlement System of Tokyo Stock Exchange* 1-5 (Oct. 5, 1988) (unpublished manuscript).

¹³³See *Securities Market 1990*, *supra* note 43, at 132; see also T. Shimizu, *Settlement System of Tokyo Stock Exchange*, *supra* note 132, at 6:

But the most serious problem of all is that prior to each [issuer's] record date, JSCC has to return all the share certificates it has been keeping in its central custody in order for those securities to be registered in the name of the current beneficial owners. After the record date is past, they are brought into the JSCC vault again. It is such a burdensome business to remove shares every time there is a record date and then afterward for JSCC to accept them back.

¹³⁴See *supra* note 63.

¹³⁵For descriptions of the structure and operations of JASDEC, see generally Japan Securities Depository Center, *Custody and Book-entry Delivery of Securities* (1989); *Securities Market 1990*, *supra* note 43, at 132-35. JASDEC will function as a securities depository (under the Securities Depository Act) on whose books transfers of interests in securities will be effected. Its participants are not limited to members of the TSE, as with JSCC, but include all securities firms that are members of any of the Japanese stock exchanges, banks, and certain other market participants. Likewise, securities settlements for all of the stock exchanges will be effected by book-entry transfers on JASDEC's books. However, JASDEC will not perform the full range of securities and payment clearance and settlement functions, which will be left to clearing agencies such as JSCC. After several years of development, JASDEC is now in full-scale pilot operation and expects to be fully operational for the TSE before the end of 1991 and for the other exchanges before the end of 1992. Interview with Akinori Ito, Senior Managing Director, and Shin Akamine, Senior Manager, JASDEC, August 29, 1990.

puterized communications and information storage capabilities of the market participants, have substantially resolved, for that market, the inefficiencies inherent in the movement of physical securities and in paper communications. Yet serious problems associated with transfer, pledge, clearance and settlement remain in the United States government securities market.¹³⁶ In part because of the underinclusion of market participants at the Fed level (only DIIs can have securities accounts with the Fed) and the real-time Fedwire transfers of securities against payment, the system must cope with truly massive extensions of intra-day credit and intermediary risk.¹³⁷ Current proposals to revise the Treasury's book-entry regulations were motivated largely by these concerns.¹³⁸ Again, resolution of the paperwork problems has not been a complete response. The most that can be said is that the United States book-entry system has alleviated some of the costs and risks of paper movement.

In sum: The elimination of paper securities does not necessarily reduce paper movement. The elimination or reduction of paper movement can be achieved without the elimination of paper securities. And the elimination of paper securities and reduction of other paper movements does not, alone, resolve either persistent problems in the clearing and settlement process or the existence of intermediary risk. The elimination of paper securities and other paper movements is a small act in a much larger drama.

B. Clearance and Settlement Reforms

The importance of reforms to the securities market clearance and settlement systems has been recognized increasingly in recent years. In 1989 the Group of Thirty (G-30) issued a report (G-30 Report) containing nine recommendations for improvements to the world's clearance and settlement systems and calling for implementation of the recommendations by 1992.¹³⁹ The following discussion considers some of the G-30 Report's

¹³⁶See *supra* Part II.B.2.

¹³⁷See *supra* notes 41-43 and accompanying text.

¹³⁸See *supra* note 41. For a brief discussion of the proposed TRADES regulations for book-entry Treasury securities, see Mooney, *Beyond Negotiability*, *supra* note 2, at 349, 371-73.

¹³⁹Group of Thirty, *Report, Clearance and Settlement Systems in the World's Securities Markets* (1989) [hereinafter, *G-30 Report*].

The subject of this Report...cannot claim to be immediately glamorous or eye-catching. Indeed it has too commonly been thought of as a matter only for the technical experts in back offices. Experience has shown how mistaken, and indeed dangerous, such an attitude is. For the subject is concerned with the core processes which underlie the working of securities markets and determine their effectiveness or otherwise. *Id.* at i. The Group of Thirty is a "private sector group concerned with the working of the International Financial System." *Id.* See also Federation Internationale Des Bourses de Valeurs, *Improving International Settlement* (1989) (report concerning clearance and settlement in the world's securities markets); Office of Technology Assessment, *Study of International Clearing and Settlement* (1989) (same); International Organization of Securities Commissions, *Report of the Technical Committee of IOSCO on Clearing and Settlement* (1990) (same).

recommendations as they might apply or be applied to the United States and Japanese securities markets.¹⁴⁰

1. *Central depository*

The G-30 Report calls for each country to establish a central depository in which there is widespread participation.¹⁴¹ The report recognizes that a central depository is the safest and most efficient means of reducing paper movements by permitting transfers to be effected by book entry on a depository's books.¹⁴² It also recognizes that the efficiencies of a depository system could be enhanced by the "dematerialisation" of securities (i.e., the use of paperless, uncertificated securities), but it acknowledges that the principal benefits can be achieved by the depository's "immobilisation" of securities certificates.¹⁴³

¹⁴⁰Five of the nine recommendations—Recommendations 1, 2, 6, 8, and 9—are not considered here in detail. Those recommendations are as follows:

Recommendation 1:

By 1990, all comparisons of trades between direct market participants (i.e., brokers, broker/dealers and other exchange members) should be accomplished by T+1 [the day following the trade date].

....

Recommendation 2:

Indirect market participants (such as institutional investors, or any trading counterparties which are not broker/dealers) should, by 1992, be members of a trade comparison system which achieves positive affirmation of trade details.

....

Recommendation 6:

Payments associated with the settlement of securities transactions and the servicing of securities portfolios should be made consistent across all instruments by adopting the "same day" funds convention.

....

Recommendation 8:

Securities lending and borrowing should be encouraged as a method of expediting the settlement of securities transactions. Existing regulatory and taxation barriers that inhibit the practice of lending securities should be removed by 1990.

....

Recommendation 9:

Each country should adopt the standard for securities messages developed by the International Organisation for Standardisation [ISO Standard 7775]. In particular, countries should adopt the ISIN numbering system for securities issues as defined in ISO Standard 6166, at least for cross border transactions. The standards should be universally applied by 1992.

G-30 Report, supra note 139, at 3, 5, 13, 16, 18.

¹⁴¹*G-30 Report, supra* note 139, at 7-8 ("Recommendation 3: Each country should have an effective and fully developed central securities depository, organised and managed to encourage the broadest possible industry participation (directly and indirectly), in place by 1992.").

¹⁴²*Id.* at 7.

¹⁴³*Id.* at 7-8, 55-56. Although the revised U.C.C. Article 8, which creates a legal regime for uncertificated securities, has been widely enacted in the United States, uncertificated securities remain the exception in the markets. As discussed above, even the widespread adoption and use of truly uncertificated securities would not be a sufficient means of resolving the inefficiencies of paper movements. *See supra* text at notes 126-28. Even if all of the securities traded in the United States markets were uncertificated, it is likely that there would be no

The United States markets for securities other than book-entry government securities clearly comply with the third recommendation; the non-JGB Japanese markets are, at least, well on the road toward compliance.¹⁴⁴ However, neither the Japanese nor United States government securities markets feature any significant use of a central depository. Nevertheless, the centralized book-entry transfer systems represented by Fedwire and the JGB registration and book-entry systems achieve the principal benefits of a central depository.¹⁴⁵

2. *Netting*

The G-30 Report appeals to each country to study and to seriously consider whether it should establish a trade netting system.¹⁴⁶ The report refers to “[b]ilateral netting wherein all trades in the same security between the same counterparties are netted to one final delivery . . .”¹⁴⁷ It also refers to two forms of multilateral netting. First, there is “[m]ultilateral netting where all trades in the same security are netted to a final long or short position for each participant” and where “the counterparty may be changed from the original broker.”¹⁴⁸ Second, there is multilateral netting with “[c]ontinuous net settlement, where all trades in a particular security plus failed trades are continuously netted to a final long or short positions. In this type of netting the counterparty to the trade is the clearing corporation.”¹⁴⁹

Pending settlement, each party to each trade is exposed to the risk (settlement risk) that its counterparty will not pay for securities or perform its obligation to transfer

fundamental change in the way the market participants behave—instead of DTC having custody of securities, DTC would be the registered owner of the uncertificated securities on the books of the various issuers. The active market participants do not desire to have separate, independent relationships with the securities issuers. They prefer to capture the efficiencies inherent in the process of clearing and settling their trades with each other through a common system. Thus, the important potential efficiencies of the depository system arise from factors other than the mere elimination of paper securities deliveries. They are driven by the need for the important market participants to have an exclusive and efficient means of rapidly transacting business with each other.

¹⁴⁴See *supra* note 135.

¹⁴⁵The close connection of the central banks (the BOJ and the Fed) with the systems for book-entry transfers undoubtedly reflect historical and political considerations and the special circumstances involved with government obligations.

¹⁴⁶*G-30 Report*, *supra* note 139, at 9 (“Recommendation 4: Each country should study its market volumes and participation to determine whether a trade netting system would be beneficial in terms of reducing risk and promoting efficiency. If a netting system would be appropriate, it should be implemented by 1992.”).

¹⁴⁷*Id.*

¹⁴⁸This form of multilateral netting is similar to that employed in the GSCC scheme in the United States. See *supra* Part II.B.2.b.

¹⁴⁹This is the structure of the multilateral netting scheme employed in the DTC-NSCC CNS scheme. See *supra* note 130.

securities, as the case may be.¹⁵⁰ By reducing the aggregate number and amount of securities transfers and payments that are to be made at the time of settlement, a netting scheme can reduce this settlement risk in the clearance and settlement process.¹⁵¹ In the event of a participant insolvency, for example, the number and amount of affected transfers would be reduced.¹⁵²

Multilateral netting systems are in place for much of the United States market.¹⁵³ In Japan, the JSCC clearance and settlement system also employs a multilateral netting scheme.¹⁵⁴ Settlement for JGB's, however, proceeds on a trade-by-trade basis. While bilateral netting for the JGB settlement system seems feasible,¹⁵⁵ the imposition of multilateral netting could be problematic. Multilateral netting envisions that prior to the time of settlement a party (a "clearing agency") would become obliged to pay for all securities to be transferred by the various market participants, and would be required to transfer all securities to be paid for by the various market participants. The clearing agency would "come between" the parties to each trade.¹⁵⁶ In the normal case, when none of the parties fails to settle as required, the clearing agency would receive securities from net transferors and transfer them to net transferees. Similarly, it would receive payments from net payors and transfer the payments to net payees. If one or more parties failed to pay or transfer securities, however, the clearing agency presumably would be

¹⁵⁰The settlement risk can arise out of credit risk, *i.e.* that the counterparty cannot pay or deliver as a result of insolvency. It also can arise out of liquidity risk, *i.e.*, that the counterparty, while not insolvent, does not have the cash to be paid or the securities to be delivered at the time of settlement.

¹⁵¹See *G-30 Report*, *supra* note 139, at 9, 36-43; see also Bank for International Settlements, *Report on Netting Schemes* 6 (1989). Although this BIS Report deals only with netting systems in the payments system, not with netting of obligations to transfer securities, the risk reduction point is the same.

¹⁵²This assumes, of course, that at some point in time the netting would constitute a *novation* and the netted obligation would, as a legal matter, replace the earlier trade-by-trade obligations. In the case of routine failures to deliver securities, however, under NSCC's "continuous net settlement system" delivery obligations (but not payment obligations) are continually deferred to the next settlement date (by netting with deliveries to be made on that settlement date) and "marked to market" so as to adjust for price changes. See Stigum, *Trade*, *supra* note, at 252. In theory, however, the potential for "systemic risk" exists were a large default to result in a chain reaction of defaults by other participants. See, *e.g.*, *Payments Task Force Report*, *supra* note 41, at 9.

¹⁵³See *supra* notes 148-49.

¹⁵⁴T. Shimizu, *Settlement System of Tokyo Stock Exchange*, *supra* note 132, at 2; interview with Hiroyasu Ichimoto, Clearing Administration Department, Tokyo Stock Exchange (December 14, 1988).

¹⁵⁵The netting of compared trades on a bilateral basis could be effected outside the BOJ system, thereby reducing the size and number of trades submitted for settlement in the registration and book-entry systems. Or, the bilateral netting could be effected by the BOJ.

¹⁵⁶The clearing agency would become obligated to make net payments and transfers. In the DTC-NSCC settlement system, it is NSCC that is put between the parties for settlement purposes. See *supra* note 130. Similarly, the Tokyo Stock Exchange assumes those obligations of its members for the net payments and net transfers of securities at each settlement. Interview with Hiroyasu Ichimoto, Clearing Administration Department, Tokyo Stock Exchange (December 14, 1988); see also Business Regulations of the Tokyo Stock Exchange, Rules 49, 50, 58 (1986).

obliged, nevertheless, to pay or transfer to the net obligees.¹⁵⁷ Thus, in order to be assured of settlement, absolute (or nearly absolute) assurance that the clearing agency could perform would be required.

One approach to ensuring clearing agency performance would be for the market participants themselves to share, based on some equitable formula, the settlement obligation of a defaulting participant.¹⁵⁸ If a participant failed to pay or to transfer securities, or both, then the other participants would be obliged to fund the clearing agency so that it could make payment or acquire the securities to be transferred. Obviously, the utility of this approach would depend on the ability of the various participants to perform their obligations.¹⁵⁹

Suffice it to note that whether to impose a netting scheme and the most appropriate type of netting scheme for the JGB market are issues that warrant serious consideration.¹⁶⁰

3. *Delivery versus payment*

A "delivery versus payment" (DVP) environment contemplates a simultaneous exchange of securities for value, thereby eliminating the risks of effective transfers of securities followed by payment defaults and payments followed by failures to transfer securities. The G-30 Report recommends that DVP be the method for settling all secur-

¹⁵⁷"Routine" fails to transfer, not involving insolvency or payment defaults, could be resolved by deferring the settlement date and making appropriate economic adjustments, as in the DTC-NSCC CNS system. See *supra* note 130.

¹⁵⁸The formula could take account of factors such as the size of a participant (measured by capital or assets, for example) and its volume of JGB market activity within a specified recent period.

¹⁵⁹Those obligations might be secured with deposits or securities, again according to a formula. This is the approach taken in the DTC-NSCC settlement system. NSCC maintains a fund of participant deposits designed to ensure that settlement will take place even in the face of a participant's default. See Stigum, *Trade*, *supra* note 28, at 253; Woldow, *Overview*, *supra* note 130, at 19-20. Were the participants' fund insufficient to cover losses sustained as a result of a participant default, the participants are subject to *pro rata* assessments to make up the difference. See Woldow, *Overview*, *supra*; NSCC 1989 Report, *supra* note 45, at 19. The Tokyo Stock Exchange system provides for a similar arrangement. Interview with Hiroyasu Ichimoto, Clearing Administration Department, Tokyo Stock Exchange, December 14, 1988.

¹⁶⁰The G-30 Report recognizes that whether to impose a netting scheme and the optimal structure of a netting scheme should be considered on a market-by-market basis.

Netting arrangements... contain difficult legal and credit problems which result from the contingent liabilities in the eventuality of a default by a clearing member. Netting, therefore, needs to be evaluated against the laws and regulations of each particular jurisdiction.

We recommend that each market determine whether a netting system would benefit its market participants.... Trade for trade... is the most fundamental type of system used, and may be appropriate for certain markets. An evaluation should be completed by end 1989 and should be done in the context of projected volumes. The assessment should take into account both the pattern and volume of trades and the number of participants trading in major groups of securities.

G-30 Report, *supra* note 139, at 10.

ities transactions.¹⁶¹

The Fedwire system for transferor-initiated transfers of book-entry Treasury securities against payment is a striking example of a DVP system. Yet that system has spawned enormous daylight overdrafts resulting, eventually, in the introduction of the GSCC netting scheme. Moreover, direct participation in the system is limited to DIs.¹⁶² The DTC-NSCC CNS system is not, strictly speaking, a DVP system,¹⁶³ although payments are connected to transfers by virtue of novation netting resulting in NSCC becoming obligated for netted transfer and payment obligations and becoming entitled to receive netted transfers and payments.¹⁶⁴ Payments and securities transfers are similarly connected in the JSCC system.¹⁶⁵ A DVP scheme is used by institutional investors in the United States pursuant to DTC's Institutional Delivery (ID) system.¹⁶⁶

Securities settlements and payments settlements are not connected in the JGB system for clearance and settlement.¹⁶⁷ Nevertheless, failures to pay or transfer have been virtually unknown in that market, probably due to the close supervision and high expectations of the Ministry of Finance and the BOJ.

4. "Rolling settlement" systems, delay between trade date and settlement date, and the $T + 3$ proposal

Just as novation netting can reduce the aggregate value of outstanding obligations to transfer and pay, shortening the time between the date of a trade and the date of settlement can reduce the aggregate outstanding unperformed obligations.¹⁶⁸ For this reason, the G-30 Report urges adoption of "rolling settlement" systems, wherein settlements take place on each business day and settlements will occur no later than the third

¹⁶¹*Id.* at 11 ("Recommendation 5: Delivery versus payment (DVP) should be employed as the method for settling all securities transactions. A DVP system should be in place by 1992.").

¹⁶²See *supra* notes 34-36 and accompanying text. In addition, the transferee-payor DI is in a position to reverse the transaction by simply sending the securities back, also against payment. See *supra* note 40.

¹⁶³Transfers, on the books of DTC, of net amounts of securities to be transferred to and by NSCC on a settlement date begin during the night before the settlement date and continue throughout the day, although payments are not made to and by NSCC until the end of the day on settlement date. See Woldow, *Overview*, *supra* note 130, at 13-15.

¹⁶⁴See *supra* note 130.

¹⁶⁵See *supra* note 156.

¹⁶⁶In this system the institutional investor is connected to the automated communications process for clearing and comparing trades. For a brief description of the ID system, see The Depository Trust Company, *Annual Report 1989* 30-31 (1990); Stigum, *Trade*, *supra* note 28, at 254-55.

¹⁶⁷See *supra* Part II.A.2.d.

¹⁶⁸See Madhavan, Mendelson & Peake, *Risky Business: The Clearing and Settlement of Financial Transactions*, 3 J. Securities Markets 7 (1989) (shortening time between trade date and settlement date reduces risks for financial intermediaries, including market risk, risks of customer defaults, and risks of intermediary counterparty failure).

business day following the trade ($T + 3$).¹⁶⁹

The JSCC system is a rolling settlement system with settlement on $T + 3$, thereby complying with the G-30 recommendation. The DTC-NSCC system also employs the rolling settlement approach, although settlement takes place on $T + 5$.¹⁷⁰ "Regular" settlement in the United States government securities market occurs on $T + 1$ (and same-day ("cash") settlement sometimes is effected).¹⁷¹ The JGB settlement process is the least consistent with the G-30 recommendation: It is not a rolling system and there are only about six settlement dates each month.¹⁷² Moreover, it is not unusual for settlement to take place as many as ten business days after a trade date ($T + 10$).¹⁷³ The buildup of settlement risk was one of the reasons for increasing the number of settlement dates from two to three and, then, to the current five or six. Compliance with the G-30 Report's recommendation would require even more pervasive reforms.

5. *Supervision and regulation of financial intermediaries*

The possibility that a financial intermediary may become insolvent or illiquid, thereby defaulting on its obligations to pay money or deliver securities, is a common thread running throughout this discussion of securities market clearance and settlement. The discussion illuminates a variety of techniques for reducing this risk or controlling the damage done when and if such defaults materialize.

This article does not dwell on the supervision and regulation of the financial intermediaries that participate in the securities markets, leaving that subject to more general treatments. Nevertheless, the quality of that supervision and regulation is a critical component of the establishment and maintenance of successful systems for clearance and settlement. There exists some inherent tension between the supervisory and regulatory impact on settlement systems and the desire to reduce risks arising out of intermediary control of securities. Although the safety of a system for clearing and settlement may be enhanced when participation in a system is limited to strong financial institutions, that

¹⁶⁹G-30 Report, *supra* note 139, at 14-15 (Recommendation 7: A 'Rolling Settlement' system should be adopted by all markets. Final settlement should occur on $T+3$ by 1992.").

¹⁷⁰The U.S. Working Committee for the Group of Thirty Clearance & Settlement Project [hereinafter, U.S. Working Committee] has recommended that the goal of reaching $T+3$ by 1992 be extended to 1993. U.S. Working Committee, *Implementing the Group of Thirty Recommendations in the United States* III-8 (Nov. 1990). The principal obstacle to implementing $T+3$ as seen by the U.S. Working Group is the perceived need to create an alternative to intermediary control for "retail" customers, such as a system for direct book-entry registration on the books of the issuers. U.S. Working Committee, *Issues Affecting Implementation of The Group of Thirty Recommendations in the United States* 16-17 (Jan. 1991). In a forthcoming article I shall examine and critique proposals for direct registration. Mooney, *Credit, Property, Regulation, and Technology: Clearance and Settlement in the Securities Markets*, 54 J. L. & Contemp. Probs. (forthcoming 1991).

¹⁷¹See Stigum, *Trade*, *supra* note 28, at 125.

¹⁷²See *supra* Part II.A.2.b.

¹⁷³See *supra* note 16.

same selectivity can result in a more pronounced incidence and significance of the intermediary control phenomenon.

C. Transfer, Pledge, and Financial Intermediary Insolvency Proceedings

The discussion in Part III of this article identified a variety of problems in both the United States and Japanese legal regimes dealing with transfer and pledge of securities and the treatment of claims to securities controlled by a financial intermediary subjected to insolvency proceedings. In many respects similar results are reached under similar circumstances when applying United States and Japanese law. But the most striking disparity between the United States and Japanese regimes may be the differences in the degree of detail and specificity with which interests in securities are treated.

In the United States, a substantial portion of an entire article of the Uniform Commercial Code—Article 8—is devoted to issues arising out of transfer and pledge of securities. A specialized statutory insolvency proceeding under SIPA is provided for failed registered broker-dealers in the United States, while the United States Bankruptcy Code contains a separate subchapter for (non-registered) stockbrokers.¹⁷⁴ The United States Bankruptcy Code also contains several specialized provisions dealing with parties to securities transactions.¹⁷⁵ A preliminary report of a committee of the American Bar Association proposes a host of even more detailed and specialized statutory treatment dealing with a variety of issues related to transfer and pledge of securities and financial intermediary insolvency proceedings.¹⁷⁶

Japanese law treats securities as movables to which the transfer and delivery provisions of the *Minpō* apply, and does not distinguish securities from other *yuka-shoken*.¹⁷⁷ Similarly, no special provisions are made for the bankruptcy of securities firms or banks, or for claims to securities, under the *Hasan Hō*. Whether Japanese law should provide additional specialized treatment that takes account of the special circumstances in the securities markets is a question that deserves serious consideration. At a minimum, changes in law that would clearly recognize and give effect to property rights in uncertificated securities controlled by intermediaries would seem to be advisable.¹⁷⁸

¹⁷⁴See *supra* text at notes 90-97.

¹⁷⁵See, e.g., Bankruptcy Code §546 (e), (f) ("margin payments" and "settlement payments" not avoidable by trustee in bankruptcy); 741 (5) (defining "margin payment"); 741(8) (defining "settlement payment").

¹⁷⁶American Bar Association, Section of Business Law, *Interim Report of the Advisory Committee on Settlement of Market Transactions* (Exposure Draft, February 15, 1991).

¹⁷⁷See *supra* note 61.

¹⁷⁸See *supra* notes 57-58 and accompanying text.

D. Effect of Market Reforms on Internationalization of Financial Markets

Reforms to systems for clearance and settlement and to the private law governing transfer and pledge of securities, as well as improvements in financial institution supervision and regulation, are enormously important to the ongoing internationalization of the world's financial markets.¹⁷⁹ Depositories and clearing organizations are emerging as the principal linkages among markets.¹⁸⁰ The harmonization of law and practice in the various domestic regimes could be of great benefit in the cross-border environment.

V. Conclusion

As securities market participants, lawyers, and scholars begin to study more carefully the processes of clearance and settlement in the securities markets (including the potential elimination of paper securities and reduction of paper movements through automation), it is becoming clear that there are necessary and direct connections among the legal regime dealing with property rights (in and out of insolvency proceedings), the rights of creditors, the supervision and regulation of financial intermediaries, and the clearance and settlement systems themselves. These pieces of the puzzle cannot be walled off from one another. The future growth and development of international markets and cross-border linkages among markets may depend on successful efforts to harmonize and make uniform the domestic treatment of these matters in jurisdictions where the principal markets are located. To that end, this article identifies some of the questions that ought to be asked and suggests some of the answers.

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¹⁷⁹See, e.g., *G-30 Report*, *supra* note 139, at (iii):

The world's securities markets are of increasing importance to all who are involved with modern day business, finance, and investing. At the same time, it is clear that the operational characteristics of these markets—particularly the trading, clearing and settlement procedures—are of uneven quality and, not surprisingly, reflect local historic traditions and practices. It is not difficult to conclude that on a global basis this uneven quality and practice inhibits international investment flows while the intersection between local practice and growing volumes and values could, under adverse circumstances, represent a very serious risk to the world's financial network.

¹⁸⁰For example, there are now linkages between JSCC and International Securities Clearing Corporation (ISCC), a wholly owned subsidiary of NSCC. *NSCC 1989 Report*, *supra* note 45, at 9.