

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Explorations in Economic Research, Volume 2, number 3
(Regional Stock Exchanges in a Central Market System)

Volume Author/Editor: NBER

Volume Publisher: NBER

Volume URL: <http://www.nber.org/books/conf75-1>

Publication Date: 1975

Chapter Title: Development of a National System for Clearing
and Settling Securities Transactions

Chapter Author: Eli Weinberg, Joseph F. Neil Jr., Joseph P. Coriacci

Chapter URL: <http://www.nber.org/chapters/c9225>

Chapter pages in book: (p. 353 - 377)

Development of a National System for Clearing And Settling Securities Transactions

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JOSEPH P. CORIACI, DAVID RUBIN**

ELI WEINBERG, chairman: Mr. Weinberg is a senior vice president of White, Weld and Company, Inc. Prior to joining the firm, in 1974, he spent fifteen years with Coopers and Lybrand, Certified Public Accountants. From 1970 to 1974 he was national director of Coopers and Lybrand's securities industry practice. Mr. Weinberg is a member of the Securities and Exchange Commission's special committee on the establishment of a national clearing system, and the SEC's committee on uniform broker-dealer reporting. He is also a member of the Joint Banking and Brokerage Committee on Lost and Stolen Certificates, and is a director of the Securities Industry Automation Corporation (SIAC).

JOSEPH F. NEIL JR.: Mr. Neil is currently a vice president of Merrill Lynch, Pierce, Fenner, and Smith, Inc. He has been in the securities business since 1954 and joined Merrill Lynch in 1970. He is a member of the SEC advisory committee on uniform financial reporting, vice chairman of the National Securities Processing Committee, and a member of the operations advisory committee of the New York Stock Exchange. Mr. Neil is a graduate of the Harvard Business School and Northwestern University, and is a certified public accountant.

JOSEPH P. CORIACI: A graduate of the Northwestern University School of Business and the School for Bank Administration, Mr. Coriaci is presently responsible for the overall operations of Continental Illinois National Bank and Trust Company's commercial department. He joined Continental Bank in 1952 and has served it in varied administrative and

management positions. He also serves as secretary of the National Coordinating Group for Comprehensive Securities Depositories and as chairman of its working committee. He is a member of the Chicago Comprehensive Securities Depository Committee and its working committee, and represents his bank on the Chicago Clearing House bank payment systems committee.

DAVID RUBIN: As vice president of the Midwest Stock Exchange, Mr. Rubin is responsible for all exchange operations including trading, clearing, depository, data processing, and communications. Before joining the Midwest, in 1968, he was with Arthur Young and Company as a staff accountant and later as a member of the consulting staff. Mr. Rubin graduated from Harvard College and received an M.B.A. from the University of Michigan Graduate School of Business.

WEINBERG: I would like to set the tone for this session by taking note of the attendance this morning. I want to assure you, I do not take it as a personal matter. But I was very surprised yesterday at the number of times the problems of a national clearing and settlement system were alluded to as problems related to the establishment of a national trading system. I think clearing is an important problem; I think the problem has to be solved. I also believe, though, the problem got some overexposure at yesterday's session, and this morning's attendance, sparse as it is, is a more realistic evaluation of a clearing system's place in the scheme of things.

Yesterday we heard a surprising number of references to the limitations placed on the free flow of trading orders caused by the absence of a national clearing and settlement system. This is surprising, because it has been my experience that very few trading decisions of the securities industry have been influenced by operational considerations. Clearly, where operational problems have occurred, brokerage firms have been quick to respond by improving systems and, if necessary, even reducing selling activities. A good current example of what I am referring to is the activity on the Chicago Board Options Exchange. If one had to choose the most advantageous location to settle option trades, it is not likely that New York-based brokerage firms would have chosen Chicago. Nonetheless, Chicago is where the action is, and therefore Chicago is where the trades are settled. Because profits in the option business are adequate, and the CBOE has developed an efficient and certificateless system for settling their trades, broker-dealers all over the country have brought their business to that city. It will be interesting to see the impact on this business when the American Stock Exchange and other exchanges begin trading options and

providing local settlement. Thanks to the important prodding of the Securities and Exchange Commission, all exchange-traded options will use a common, national settlement system.

The high volume of activity on the CBOE has begun to create some operational problems, mostly though because of errors in reporting trades from the floor. This is despite the fact that the CBOE system uses a locked-in system of trade reporting, that is, only one side of the trade is reported, eliminating the cumbersome comparison procedure common to stock trading. When the American Exchange begins trading options, assuming the trading capabilities of Amex specialists are equal to those of Chicago traders, and I have no reason to expect otherwise, I believe the New York-based brokerage firms will prefer to trade in New York for a variety of economic reasons. Sending orders to the Amex via the existing wire system is cheaper than sending them to Chicago. Correcting errors is easier if all parties are located in the same city. The manpower required to operate the settlement system within a brokerage firm is easier to supervise and train when it is part of a centralized processing plant. Finally, encouraging trading on the Amex will improve the value of exchange seats, and some firms have a substantial investment in them.

I would expect, then, the existence of a national settlement system for options would eliminate any economic incentive to trade options outside of a broker's home-office city. This assumes, of course, that the options markets are noncompetitive initially, that is, they each trade a different slate or package of options. The more important question, from the viewpoint of this meeting, is what happens when we have competing markets in the same option, and it is offered at a better price in Chicago than in New York? There will be almost no economic or operational consideration which will discourage the trade from taking place in Chicago. I expect a fair dispersion of option trading, if we get competing markets, because we will have in place a national settlement system.

The point of this long discussion is that where there is an economic benefit, such as more business, trading will move to that area even without a uniform settlement system. The existence, or absence, of a national clearing and settlement system is a relatively small part of the trading decision of where to execute a particular trade. A national settlement system is important to the overall economics of the brokerage business, but seldom important enough to influence specific trades. The best example of this, perhaps, is the fact that most of the institutional business that we are talking about today is really not settled on any system at all, but rather is settled on a very costly and cumbersome direct, one-for-one basis with the institutions or their custodian agent.

The question we are going to try and deal with today is, What is the impact on a central market system of the presence or absence of a national clearing

and settlement system to settle securities trades? A central market system is likely to increase the dispersion of trading around the country, and to increase trading outside of exchanges. Brokers probably will be dealing with a larger population of other brokers than they do today. We anticipate potentially increased costs of settlement, caused by settlements dispersed more widely over the country with higher interest costs and greater transportation costs. There will be a need for specialized national personnel who are familiar with local clearing systems, and there is a question of the role of depositories in all of this. I would say the major issues are these: the role of depositories, How will they develop? How will they overlap? the role of banks in clearing systems, How will they deal with the broker? And finally, there are questions about the present clearing system and its relationship to the changes suggested by proposed legislation in Washington. These are the issues that we hope to cover during our presentation.

NEIL: A national clearing system has two things going for it. It has the pressure that the SEC and the Congress are bringing toward the formation of a central market system; the opportunity of member firms, broker-dealers across the country, to save a considerable amount of money through lower clearance fees, lower employees' salaries, uniform systems, lower interest costs, and so forth. It is this additional pressure which, I believe, has brought about the progress we have seen to date. We have made a lot of progress, but in ways that we did not foresee.

Let me give you a little history. It dates back to 1967 through 1969 and the holocaust that this industry went through at that time. Increased volume swamped an industry which was not equipped physically to handle this level of activity. Fails reached \$4 billion at that point. Right here I will have to stop and go through some definitions to be sure that we are all talking in the same terms.

Fails (fails to receive and fails to deliver): this is the failure to receive securities or the failure to deliver securities. If we had continuous net settlement—the kind of system we are talking about—and all these items netted out, the fails would have been zero, because one man's fail to receive would be another man's fail to deliver. If a party who sells stock fails to deliver, it results in the other party's failing to receive.

There have been various methods over the past in settling trades. Let me first talk about broker-to-broker settlement, which was prevalent in the over-the-counter market until the advent of the National Clearing Corporation. When broker A dealt with broker B, the trade was settled by broker A actually delivering the security to broker B. In the over-the-counter market in those high-volume days of the late 1960s, it was physically impossible for the movement of securities to keep pace with actual trading activity. One can trade a hundred-share piece of securities from broker A, to broker B, to broker C, to broker D, etc., just about as fast as I can tell it. But the actual physical

delivery against payment that had to follow this resulted in an unresolved backlog of fails.

All the exchanges have had clearing systems for some time. Let me define the differences between some of them. The New York Stock Exchange and the American Stock Exchange have historically used what is called the daily balance order system; that is, all purchases of a stock by a broker are netted against all sales of that same stock, on that same day; the net amount is considered to be the amount to be delivered or received. For example, if my firm were to buy ten different round lots of stock X, and sell nine other pieces of stock X, for nine other customers, we might have dealt with nineteen different brokers in the over-the-counter market. It would mean we would have to receive ten different pieces, from ten different brokers, and deliver out nine different pieces to nine other brokers. Under the daily balance order, since we sold ten and bought nine, we would be requested to deliver only the difference of a hundred shares. For example, we may be told by the clearing house that we must deliver those hundred shares to, let us say, Bache and Company. Now, we may or may not have traded with Bache; they may or may not have been one of the nineteen brokers with whom we dealt. Nevertheless, we are assigned that broker. We must deliver to him. When that is cleaned up, that fail is extinguished. If we fail to deliver on settlement date, the trade remains outstanding and becomes older and older (as would, of course, each one of the individual nineteen fails in the foregoing OTC example). What happened in 1969 was that as fails became older, they became less reliable. When the broker finally did get the security and attempted to make delivery, the broker on the other side of the trade no longer acknowledged the trade and refused to accept delivery or payment.

The continuous net settlement (CNS) system, which was pioneered, I believe, by the Pacific Stock Exchange, takes the daily balance order system one step further. Instead of saying, "Merrill Lynch, you owe Bache," it says, "Merrill Lynch, you owe the clearing corporation a hundred shares." The next day, if instead of selling on balance, we turn out to buy on balance, then the two days net out. In effect, all these fails, all these individual trades, have balanced out, and no physical activity has been necessary. We have merely had to settle the money. A more important addition or value of the CNS system is the fact that we no longer are looking to another broker. We no longer are at risk regarding that broker's financial capability to meet the trade, to fulfill his responsibilities. We now look to a clearing corporation with whom we all have established clearing deposits to insure against loss. Furthermore, each one of these outstanding positions is marked to the market each day; if market action requires an additional deposit by our firm, or if, on the other hand, we receive back monies, our outstanding balance at the close of business each

day equals the market value of the open securities positions. We have practically eliminated the risk of market action, and, of course, we have eliminated the risk of dealing with another broker.

That is the basic idea behind clearing systems. The National Clearing Corporation was formed and based its clearing system on the continuous net settlement method. (Net-by-net settlement is really a synonym for that type of settlement.) The Securities Industry Association formed a committee in 1973 to try to make some sense out of the chaos of clearing. We asked ourselves why any firm who is a member of more than one stock exchange and a member of the NASD as well must deal with up to eight different clearing houses. Why must we deal at eight different locations? Why must we have eight different systems? Can't we put all this together? We find ourselves settling with the Pacific Stock Clearing Corporation in the same stocks that we are settling with the New York Stock Exchange. We find ourselves failing to receive from the Pacific Clearing Corporation, and yet failing to deliver the same stock to some broker in New York. Why not put all these together, and avail ourselves to a further degree of this netting process?

As a result of the committee's work, we came up with a proposal which laid out what broker-dealers felt were seven criteria for a national clearing system. Shortly thereafter the New York Stock Exchange concluded that their daily balance order system was outmoded. They got on the bandwagon, albeit somewhat belatedly, and have started to implement a CNS system. It is now in the pilot stage, and we have that to look forward to in New York.

Also, as a result of the SIA seven-point program, the various exchanges and NASD signed a memorandum of understanding in which they appointed a National Securities Processing Committee to formulate a proposal for a national clearing and settlement system. As a result, we have a twenty-two-man committee under the chairmanship of Robert M. Gardiner of Reynolds Securities, Inc., with representatives of the eight clearing houses of the seven exchanges and the NASD; Jack Weeden, a member of the third market; and John Knapp of the Securities Corporation of Iowa, a member of a regional stock exchange (the Midwest) as well as the NASD. We have three regional firms: H. O. Peet & Company and Leith and Company in Boston and Sutro here in California. The remaining firms are national firms of various types of business, either wire houses or investment banking houses.

The committee has agreed upon criteria which I will briefly review. Although there are twenty-two different points, I will hit only the six which I think are pertinent to our discussion today: (1) It must be a continuous net settlement system. (2) A communications network is needed to tie the various facilities together. (3) Each broker must have the capability of

having one position per security, regardless of where traded; in other words, each broker will be able to net all his trades in General Motors into one accumulative position. (4) Positions will be marked to market daily. (5) All net money balances may be settled at one location, and securities may be deposited at various locations throughout the country for immediate credit without any discrimination in regard to geography. (6) Free securities may be withdrawn at various locations. The goal of this was to permit a firm that happened to be based on the West Coast and yet was a member of the New York and American and NCC to be able to clear all its trades in Los Angeles through facilities located there.

This summarizes our goals and gives you an idea of the kind of system we are looking for.

CORIAI: Although much of what we already have heard and will hear deals with the specifics of the securities marketplace, settlement, etc., we should bring into focus a vital issue which has been talked about for several years and has prompted significant resource and dollar allocations, as well as legislative interest and concern. That is "securities immobilization."

As Joe mentioned, most of us are familiar with the so-called securities crunch of the late 1960s. Brokers during that era were having an extremely difficult time settling securities transactions, moving securities, and overall, meeting the requirements of their contracts on a timely basis. Compounding this problem, we banks were experiencing major problems in the area of stock transfers. Since that time, millions of dollars have been spent on studies to solve the so-called paper problem. Many of the recommendations made included the substitution of some form of computer-generated or machine readable document, such as the tab card, MICR (magnetic ink character recognition) encoded forms, or others, for the traditional stock certificate. It did not take long for most of us to realize that substituting another document for a stock certificate would not solve our problem. It appeared then, and now, that the near-term solution to the securities-handling problem can best be achieved through so-called securities immobilization.

In addition to the efforts of private interest groups to solve the problem, both houses of Congress have proposed legislation relative to securities handling. Two of the current bills pending, which we already have heard mentioned, are S. 2058 and H.R. 5050. I am going to quote from both bills, and the language in both is identical. This language has not been contested in any of the testimony, other than by the American Banknote Company. I think the language is very significant for what we are doing: "The Securities and Exchange Commission shall, on or before December 31, 1976, take such steps as are within its power to bring about elimination of the stock certificate as a means of settlement, among brokers or dealers,

of transactions consummated on national securities exchanges, or by means of the mails, or other means or instrumentalities of interstate commerce."

As just indicated, there is legislation being proposed which requires that a significant level of securities immobilization be achieved as early as year-end 1976. With or without direct legislation, this task cannot be accomplished overnight. In fact, all of us who have had exposure to the securities environment know the difficulty of immobilization—a situation compounded by the so-called ma-and-pa-held securities. However, the key is to immobilize those securities that are heavily traded and generally owned by pension trusts, insurance companies, etc. Those shares represent most of the trading activity, and as a result, present most of our processing problems.

The legislation is the result of subcommittee studies conducted by Representative John E. Moss and Senator Harrison A. Williams Jr. Congress is attempting to legislate controls to prevent recurrence of the problems of the late sixties. Early legislative proposals intended to achieve the elimination of the stock certificate were for a federally chartered depository system. The term "securities depository" means any person who acts as a custodian of securities in connection with a system that permits securities so held to be transferred, loaned, or pledged without physical delivery of securities certificates or that otherwise permits or facilitates the settlement of securities transactions or the hypothecation or lending of securities without physical delivery of securities certificates.

During the period of the late sixties, the CCS (Central Certificate Service) depository concept began to evolve on the East Coast. Also during the same period, BASIC, the Banking and Securities Industry Committee, was formed in New York to study the entire securities movement situation.

In an effort to solve this problem in the context of existing and feasible systems, securities industry representatives came up with the idea that regional depositories, along the lines of New York's CCS, would better serve the industry's needs. As a result, and with the encouragement of Congress, the National Coordinating Group for Comprehensive Securities Depositories (NCG) was formed in late 1971 with a dual purpose: first, to assist in the development of regional depositories throughout the country; and second, to establish interface guidelines for those regional depositories.

In forming the group, emphasis was given to nationwide representation from both the banking and securities industries. The group recommended a nationwide system of interrelated regional depositories, independently operated by the private sector, to minimize the movement of physical securities. This approach was recommended, rather than a federally chartered depository system, because, first, a series of regional depositories could be brought into being more quickly than could a single national

depository and, second, a regional approach could be expected to be more responsive to local needs and capabilities.

If I may for a moment, I would like to bring you up to date on the status and impact, thus far, of the three major securities depositories which are in existence. The Depository Trust Company in New York, formerly known as Central Certificate Service, has been in existence since the late sixties and has on deposit in excess of \$65 billion in securities. Statistics prove that their impact on securities immobilization has been a reduction of 30 to 35 percent of physical securities movement between New York brokers and transfer agents. Although the heaviest participation has been on the part of the brokerage community, banks and other financial institutions also are beginning to participate actively. In fact, of the 275 full participants, 25 are banks. Experts estimate that the immobilization figure, in the next three to five years, will approximate 60 to 70 percent. If this 60 to 70 percent level is reached nationally, we will have accomplished a major portion of the objective, and we can then take appropriate action to capture a segment of the remaining 30 to 40 percent. The Midwest Securities Trust Company (MSTC) has a total membership of 303 participants. There are 31 million plus shares on deposit, representing over 2,300 issues. The market value is in excess of \$519 million. Pacific Securities Depository (PSD) has 30 participants at this point in time. There have been some changes in the rules, and Bob Ackerman may want to allude to those later regarding the way they are going to expand companies' participation. PSD has on deposit over 57 million shares, representing 6,800 plus issues, with a value in excess of \$520 million.

Significant statistics? Yes. Significant accomplishment over a relatively short period of time? Yes. A more significant aspect of this entire effort is the progress being made in the development of an interface between the Midwest Securities Trust Company and the Depository Trust Company. Implementation plans are being worked out to include the Pacific Securities Depository. "Standard fund settlement" or "value dated settlement" will become a reality some time in 1975. FINS, or the financial industry numbering system, also will become a reality in 1975. Bonds in the depository already are a reality in Depository Trust of New York. Automated netting of transactions within the depository is also already a reality. I could go on and on with the major accomplishments and projected projects intended further to immobilize securities, but that is not necessary. The main message is that we are no longer in the "blue sky" stage in this area.

RUBIN: Joe Neil mentioned one term that is used in the computer industry. There is another word that also is used often. Joe Coriaci used it, and I'm going to make more use of it. It is the word "interface." Initially I found the word somewhat abhorrent, but I have since found that it is a good

shorthand word; and since everyone seems to know what it means, at least in the computer and operations end, I've gradually grown to accept it.

We at the Midwest are looking forward to a central market system. We believe that one of its cornerstones must be a national clearing and a national depository system. Both Joes have given you some definitions of what that clearing system and depository system are. Let me try to tell you what I think the specific advantages are of such national systems. There are two key benefits for the firms. One is that brokerage firms will be able to trade in the competing markets, whether they be exchanges or over the counter, with less concern about the cost of settling and clearing that trade. Hence they can truly act in the interests of their customers, as an agent for their customers. Until now, that has been very, very difficult to do because there are such differences and such problems in clearing. We have seen on the Midwest that people are reluctant to split an order, one exchange versus another, because of the various clearing problems involved. Once we can build some kind of national clearing depository system, those kinds of problems begin to go away. Second, and maybe even more important, those national systems are going to lower the broker's costs of clearing. If you compare banks' costs of clearing checks with the costs of clearing securities, the differences are staggering. Banks can clear checks for pennies; brokers clear securities for dollars. We must begin developing national systems which automate the clearing of securities so that we can get clearance costs down, maybe not as low as the banks, but certainly a lot closer to bank costs. A national system would reduce the actual mechanical costs of clearing and save the brokerage firms interest and a considerable amount of clerical costs.

Most of the work of developing a national system—other than that done by the SEC and Justice Department—has been done by the National Securities Processing Committee. Throughout its work, arguments have raged in that committee. We've wrestled with the question of what the system should look like, what its basic characteristics are to be. We've wrestled with the question of how many organizations there ought to be and who should control those organizations. And finally, we've wrestled with the question of pricing: How do you charge for the services of a national system?

Let me go back to the first one: What should it look like? What should its characteristics be? Joe Neil mentioned that the National Securities Processing Committee has identified twenty-two criteria that any settlement system or systems should meet. A couple of key criteria bear special note. There should be a single settling figure for each security regardless of where that security was traded. There should be a single settling money amount that the firm is dealing with. A firm should be able to choose from among different cities as to where settlement will occur. The settlement system should be independent of any one particular depository.

There are three systems today which come close to satisfying those twenty-two criteria: the system used by the National Clearing Corporation (NCC) of the NASD in New York, which is used to clear over-the-counter securities; the system being installed by Stock Clearing Corporation, subsidiary of the NYSE in New York, which is in its pilot phase right now; and the Midwest Stock Transfer (MST) System, which is being run by the Midwest Stock Exchange, and which the Boston Stock Exchange has just decided to use.

One of the problems the National Securities Processing Committee has had is deciding whether there should be one system or multiple systems. One reason this has been difficult is that we have to deal with a moving target. Whenever we talk to the people who run these systems, we have been told not to look at their system as it exists today but to evaluate it as it will exist six months from now, because of all the planned improvements. I'm convinced that six months from now, when we go back and look, the systems will be in the next mode of change, and we will be asked to evaluate the system not as it then appears but as it will be six months further into the future. Additionally, the National Securities Processing Committee (NSPC) just hasn't had the resources to get into a detailed evaluation of competing clearing systems. The committee is composed of people from the brokerage industry, and they just haven't had the time to get into an in-depth analysis of software, hardware, and system features that would be required to select a single system.

It has also been a political hot potato trying to determine which of the three systems is best. You can appreciate some of this problem by looking at what is going on in New York, just trying to get the New York community to decide between the stock-clearing system and the NCC system.

If you are able to select one system, should you do so or opt for competing systems? Before we get into that question let me back up and say one other thing on the question of how many different systems there ought to be. One of the problems that we have dealt with is that the New York Stock Exchange, very early in the game, separated the depository (DTC, Depository Trust Company) from the clearing system. That set a pattern throughout the rest of the country that we in Chicago and the Pacific Stock Exchange have had to follow. That decision by the New York Stock Exchange was a bad one. In designing a system to handle national clearing you should have the system handle both the settlement and safekeeping (depository) functions. This allows participants to deal with a single entity and a single set of reports. In Chicago, the MST System was designed that way. However, because of NYSE's early lead, we too separated settlement from safekeeping. Two corporations were formed, one to handle settlement, the other to handle safekeeping. Walls have been erected to physically separate the two corporations. Forms have had to be

redesigned. It's absurd. In the long run the two entities should be joined so that a participant is able to deal with a single entity in each city for both functions.

Let's return to the question of one clearing (settlement) system versus multiple interfaced systems. I believe it is wrong to go to one clearing system. There have been a great many needed and innovative features that have resulted from the competition between the clearing corporations. I don't think a netting system such as that developed by the Pacific Stock Exchange would have been introduced had the New York Stock Exchange run a single monolithic national clearing system. Also, in my view, there would never have been a direct mail clearing service. The competing clearing systems have provided pressure to lower clearing costs. There is no question that there are cost differences between the various clearing systems, and I think that is good. Competition between clearing entities enables a brokerage firm to decide with which entity he wants to deal, based on cost and on performance.

The cost of developing an interfaced system will be less than the cost of developing a single national clearing system, because the interfaced system will utilize existing clearing facilities in assembling the national system. The National Securities Processing Committee also has wrestled with the question of how many clearing entities there should be and who should control them. Again, as long as there are multiple autonomous entities, there is competition and the benefits that competition brings. But there should be some sort of superbody that sits over these entities to set minimum interface and performance standards which all of the clearing entities must satisfy. It would be better to have those standards set by an industry body instead of the SEC. There is disagreement within the NSPC on whether or not that body should also be responsible for the operations of any one or all of the entities. In my view it would be a mistake for the superbody also to be responsible for operating one or more of the included entities, because the body then could no longer be neutral in dealing with all the other clearing entities.

The last area I mentioned where conflict rages within the NSPC is on the question of pricing. Should there be standard prices between these entities? I feel that it is wrong to set standard prices. Price competition between the competing entities is good. Any sort of standard pricing will raise the prices of the lowest-cost clearing system to subsidize the costs of the higher-priced systems. Since I believe that Midwest has the lowest-cost clearing system, I am especially opposed to doing anything like that.

Where are we today in all of this? The problem of being able to choose any one single clearing system, *the* national system, is apparent. Witness the problems in New York City, where we have not even been able to choose one system from the two that exist there. I ask, When you can't decide between the two systems there, how are you going to decide

among the many other systems being run outside New York? A good deal of the argument about whether to have one or multiple entities or organizations has pretty well been decided. Both the SEC and the Justice Department have come down on the industry and the National Securities Processing Committee and said that unless a solid economic case for having one entity or one system can be developed, there ought to be multiple systems and multiple entities. Even if there were short-run cost benefits to be had from maintaining a single system, these benefits may be outweighed by the long-range consequences of eliminating competition under a single monolithic entity. Hence, I think at this point we are resolved to develop some sort of competing but interfaced systems, at least for the interim.

The development of the interface has been a long hard fight, and it has not been over technological problems. For the last couple of years, technologically, it has been possible to develop interfaces. Whether between depositories or clearing corporations, the long delays in building interfaces that we have had are largely political in nature and revolve around trying to make the various organizations work together and cut through the self-interests that are involved. Today there are interfaces working, and they are beginning to bring cost savings to the industry. There exists an effective interface between Midwest Securities Trust Company and Depository Trust Company. However, that didn't finally happen until we had a showdown at the SEC with the Depository Trust Company. It required the government to step in and insist that there would be more than one depository in this country and that DTC was not going to be given a monopoly. DTC would have to work with depositories elsewhere in the country. Now that PSD, Pacific Securities Depository, has received trust company status, both we and DTC are working on interfaces with them as well.

On the settlement as opposed to the depository side, there also are a number of interfaces already in place. We have one with the PBW Exchange that has been working since last March. Trades on PBW can be sent to us for settlement for firms that want it, and trades on Midwest can be sent to PBW for settlement for firms that want it there. We have a similar interface with the Detroit Stock Exchange. Both Weeden and Merrill Lynch have DSE trades sent to the Midwest Securities Trust System for settlement. We do the settlement for the Cincinnati Stock Exchange. All trades there are sent into us, and they're netted down into a single settling position. I would expect that once the Boston Stock Exchange brings up their system we also will have a very effective interface there because we're using basically the same systems. We are in the process of talking with PSE about an interface, and I would guess that on the clearing side it should be ready not much later than January. At this point we and PSE have a pilot interface with Stock Clearing Corporation.

Again, the interface problems have been more political than technologi-

cal. It has been through the efforts of the National Securities Processing Committee that we have been able to resolve many of the political problems and get the interface moving. Progress still may not be what we would like, but we are now moving and I'm hopeful that by the time the composite tape is running, we will have a good, solid basis for national clearing and national depository systems.

WEINBERG: That was a fine description of where we have been going and the progress that has been made to date. I would like to insert, for the record, and for the information of our participants, some information concerning the costs of different clearing systems. Drawing on my accounting background, I would like to attest to the fact that David is right. If you measure the clearing costs of the different systems, the Midwest Stock Exchange system in fact does turn out to have the lowest unit cost. It may be interesting for you to know the range of clearing costs. These only relate to per trade costs, charges made by the clearing corporation. In fact, it is quite difficult to really measure the total unit costs for clearing; but just to show you the range, our analysis at White, Weld confirmed that the lowest charges are offered by the Midwest Stock Exchange, and that comes out to about \$1.28 per trade. Clearing charges at other exchanges range up to about \$2.79 per trade. It is difficult, as I say, to project these costs. I would rather not identify all the other exchanges we compared, but I will say that New York is near the low side; they are not expensive. Clearing charges and related depository charges for a firm like White, Weld, which I suspect is fairly typical, represent about 5 percent of operations costs. That is excluding interest charges. So it is a significant item in our budget. The comparison of clearing costs was made by taking the total activity for a typical month at White, Weld and making the assumption that we would pass all of it through one of the clearing systems; then we projected the total monthly costs for comparative purposes. Using the New York cost as our base, we found the Midwest system to be about 30 percent lower than we now pay in New York. I do not give that number to denigrate the New York system, but to indicate that if we could settle as easily through the Midwest as through New York, which we cannot do today, there is no question in my mind but that the business decision would be to clear through the Midwest system. A good part of the cost that I am referring to is really the depository cost. In New York, depository fees are high relative to clearing charges. In the Midwest, they are relatively low. So if you put together clearing and depository fees and compare New York to Midwest, you find the Midwest to be about a third lower.

The other item that might be of some interest is to compare the NCC system with the New York system. The NCC comes out slightly higher than New York, but again you have to look a little beyond that. The actual clearing charges for NCC are somewhat higher, but the problem of

interfacing the NCC system with depository trust is very expensive today and almost doubles the cost. That shows how critical is the need for NCC to work out a better interface with a depository system to be even closely competitive.

So much for the numbers. A second kind of thought I would like to leave is how relevant all of this is for the future? We are now seeing the fruition of efforts that were started three, four, and five years ago. Obviously, during this time the industry itself has changed and is continuing to change. Therefore, it is important that we give some thought to potential problems of the future, and what are most likely to be the solutions that are appropriate for the future. If we continue to see activity concentrated in fewer brokerage firms, a stratification of perhaps twenty brokerage firms doing 50 or 60 percent of the business, and if eighteen of those twenty firms are located in New York City, and if we have depository systems which effectively eliminate the movement of securities, I think you may find a new kind of settlement system. This in a sense might be an old kind of a settlement system. I would expect that large brokerage firms like Merrill Lynch would arrange to deal directly with other firms, like Bache, for those trades which take place off the exchange, or even on the exchange, if they could get permission to do that. It seems to me it would clearly be cheaper for those firms to deal directly with each other to settle a major portion of their trades. They could then use the clearing system they belong to to settle their trades with the other 85 percent of the brokers spread around the country.

I believe that the actual evolution of this is beginning; some firms already have begun to move in that direction. An example of that is Bradford Trust and their relationship with NCC. I think it was purely fortuitous that NCC was looking for a facility manager at the time Bradford was there. I believe you will see companies like Bradford actually going out and developing their own private clearing and communications systems and beginning to compete with the national systems. I do not think that is an undesirable development. They can be compatible with clearing systems, and I think it is a new kind of development that we will see again.

NEIL: Dave has summarized our position quite well. There are one or two points that I wanted to make, though, that I think were originally a very great part of the deliberations of the National Securities Processing Committee. I am sorry that Don Baker is not here today because it really gets into the antitrust and competition question. I never fully understood the Justice Department's feeling in this regard, nor can I agree completely with Dave Rubin's position. I remember talking with Lee Pickard about the national clearing system and likening it to the telephone situation in this country. American Telephone Long Lines Company provides the communications link for all the telephone companies, be it Southern Bell or

Southwest or what have you. Each one of these independent telephone companies uses its own kind of equipment and provides its own services, but the guts of the system consists of the communications link provided by Bell Long Lines. We must look upon clearing and settlement not as a tool or a weapon of the various marketplaces, but rather as merely a necessary service. We must have clearing in order to do our business, but let's do it as simply and as efficiently as possible. An early battle cry was, Let's take the competition out of clearing; let's take clearing out of the marketplace; let's just do it efficiently and uniformly. We were dissuaded from that view right from the outset by two very powerful arguments: (1) SEC chairman Ray Garrett Jr. stated in a letter to the New York Stock Exchange, I believe, that competition between clearing systems should be continued because of the innovative techniques that would be derived. I certainly understand and go along with that, as did the Justice Department. (2) At our first meeting in Philadelphia, the regional exchanges came through, loud and clear, that their own membership wanted them to continue in existence, to continue to perform specific services, unique services in many instances. (I was amazed by the number of different services they perform.) As a result, the committee, almost from the outset, agreed that we were no longer talking about a national securities processing entity, but rather a national securities processing system. And what is evolving is a system of linked regional clearing systems. I must compliment the regional exchanges for their innovativeness, for the drive, and for the accomplishments that they have made in less than a year. I would say that within another year a broker will be able to clear all his listed transactions here in California, regardless of where traded.

We have the remaining problem of NCC, which I would like to talk about just briefly. I think we are near achieving a national system of linked clearing organizations. Whether this is as efficient as one entity would be, I am not sure. Originally, we talked about competition. Well, what sort of competition is it for Sutro in Los Angeles? They are located in Los Angeles, they have the opportunity to clear in New York if they wish, but that means having an office in New York. There is competition then between New York and the Pacific for their business. But if they want to clear in Los Angeles, and if they are located only in Los Angeles, and if they have no other offices, there really is no other place to go but Pacific. I do not know whether that is competition or not. Nevertheless, I think we are making great progress as far as achieving the netting of transactions in different markets. That is where the big money savings are and the big advantages for the firms.

The one remaining point that I would like to make, and I think this will wrap up my comments, is what remains to be done in New York. Dave Rubin and I disagreed earlier on the role of the National Securities

Processing Committee, but I think that he should know that I am moving in his direction, very rapidly, and perhaps am already there. I think many of the committee have come to the conclusion that the committee itself could evolve into a national clearing standards board which sets criteria, but would never operate a system or any one element in the system. What is happening now is that we are expanding and building a series of stronger regional clearing facilities. In New York, if you look at that as another region, you have SIAC doing the combined clearing of New York and American, and also we have NCC handling OTC trades. Again, that is not competition because they handle different securities. Any member firm must deal with both of these entities. Again, is that competition? I do not really think it is. The New York Stock Exchange has indicated that it will shortly start to clear over-the-counter securities, and this poses many political problems. What does this do with NCC? NCC is unique, in a sense, in that it is the only *national* clearing organization because it does have regional outposts throughout the country, in something like eight to ten major cities. NCC is a national system. If NCC and the New York clearing were to merge, then does that make New York a national clearing system? And couldn't that put this combination into the backyards of each region? Will that preclude those two from ever merging? I really do not know.

OPEN DISCUSSION

Other participants, in order of initial comment:

- Donald E. Weeden
Weeden and Company, Inc.
- William H. Painter
University of Illinois
- Elkins Wetherill
PBW Stock Exchange
- James E. Dowd
Boston Stock Exchange
- Morris Mendelson
University of Pennsylvania
- Philip A. Loomis Jr.
Securities and Exchange Commission

WEEDEN: If the industry is moving toward a national clearing system and a national market system, are there not problems in placing the control

of that national clearing system in the hands of SIAC, which is under the control of New York and oriented toward New York? Wouldn't their economic orientation be toward trying to maintain all the clearing which is connected with execution in New York? Is there not a sufficient conflict of interest there, and if you do not think there is, how would you go about making absolutely sure that it does not exist, or if it does exist, that it is not misused?

NEIL: The original concept of the National Securities Processing Committee, or perhaps I should say the SIA committee, which contains broker-dealers only, was that this national clearing entity should be owned and controlled by the broker-dealers themselves, not owned and controlled by or through any exchange. As we have gone the route we are going, obviously that is not the way it is going to be, or not the way it appears to be outside New York. As far as the combination of the New York facilities is concerned, both the New York and American exchanges are committed to forming a joint clearing corporation. They now have separate clearing corporations, although the clearing operation itself is done jointly through SIAC. They have agreed, in principle, to form a joint clearing corporation which would be controlled by a user board. This was the purpose of getting or proposing this sort of control—to take the control away from the exchanges. Now, part of the problem, I gather, is that a clearing corporation must be under the SEC and, therefore, must be a creature or a subsidiary of a registered national exchange or of the NASD; broker-dealers cannot own it directly. Having a user board was a way of getting around the ownership question. I think that is the best I can do to answer your question.

WEEDEN: We have taken one step in that direction with the Composite Tape Association, and here we have supposedly a user board. Unfortunately, though, that user board ends up being dominated again by those economic interests that are oriented toward New York; so we really do not have an effective national orientation in the Composite Tape Association. In fact, there are very prejudicial veto powers allowed to the New York and to Amex. I wonder whether or not you think that is the standard for any kind of "user" organization that would handle the national clearing system.

NEIL: I really cannot answer that. I do not know what the answer will be. I would hope that we would be able to have a user-controlled board with freedom to act in the best interest of the broker-dealer community. It is one of the things we have been working on for a year. It is still quite illusive, but hope springs eternal.

WEINBERG: As you may know, I am a director of the SIAC organization, and I find that to be one of the greater frustrations in my career. Directors are fairly ineffective in controlling organizations such as SIAC. There are

other organizations like it that have a quasi-monopoly position. Directors are part-time people; they spend relatively insufficient time, with no staff support, effectively to monitor operations in the organizations. Even if we could set up a user board, I am somewhat skeptical as to how much effective control they would have. I acknowledge, and I think it is clear, that the exchanges have very strong control. It is a difficult issue, and many other industries have that kind of problem. It may well be that that is why we come back to this kind of competition. The thing I find missing on the director's side is a benchmark—any benchmark—to measure how well the organization is doing, how well its costs measure up to what they might have been some other way. I can get involved in policy questions, where they are going; but after that is resolved, it is the cost factor that remains with us. I am not a captive of that organization. I am, however, very much a slave to its costs. It is a difficult problem.

PAINTER: One of the more difficult problems, as this whole system has been developing, has been the role of the banks. Under what type of regulations should the banks be if they are to be part of the clearance and settlement system, depository system, with regard to any national scheme? I just wondered if any one of the panelists wanted to make a comment at this time as to what direction they think this might go; whether the Senate approach might be the more appropriate one, having the banks under their respective regulatory agencies, or possibly another approach, where the SEC would be given overall regulatory authority with respect to the banks as transfer agents and as registrars.

CORIACI: We have testified a number of times on these issues. I think the National Coordinating Group, along with a number of other organizations, has supported S. 2058. This gives the rule-making and enforcing authority to the bank regulatory agency, working with and in consort with the SEC and representatives of the SEC. As you know, the various depositories all are trust companies. That gives them two capabilities, one as a custodian within the legal ramifications of the uniform code as it applies in different states, and two, as a trust company; in the latter guise they automatically are supervised by banking authorities. The question became, How many federal authorities do you need to supervise your activity? The feeling is that we are accustomed to being supervised by banking authorities. The trust companies are familiar with banking supervision. Let the federal agency, the banking authority, continue to supervise the depository at least, and work in conjunction with the SEC. The element we are dealing with, however, is a security, and the security itself, the brokers, and the corporations that issue and list the security are all governed by the SEC. I do not see how we can operate exclusively of each other. I think we have to work together, but the primary enforcer, we felt, should be the bank regulatory agencies.

PAINTER: These different federal regulatory agencies who are supervising the banks and other components of the clearing system, will they be able to interface with one another as governmental agencies, the same way the clearing components say they are beginning to interface with one another?

CORIACI: Interestingly enough, we have been doing that for years. As you know, we have been safekeeping. Banks have been depositories. We have correspondent banks that buy and sell securities and house them in the principal cities, in New York, California, and Chicago. Our bank, for example, has over three hundred banks keeping their securities on deposit with us only because we are in a major center and they are not. It makes delivery and settlement much easier and much more timely for them. We have been under federal regulation, being a national bank; and from time to time we have responded to inquiry and questions from the SEC. We have not had any problems thus far working with both agencies.

PAINTER: You can interface with both agencies. Do you assume then that the agencies will be able to interface with one another?

CORIACI: Assumption is a big word—and the second part . . .

NEIL: I think it depends on who is the willing and who is the unwilling interfacier.

WETHERILL: I am interested, from a practical point of view, in this question of user control. We are about to enter with Amex and the Chicago Board Options Exchange (CBOE) into one-third ownership of the National Options Clearing Facility, under terms that provide for user control of the clearing facility. The ownership is in the hands of the exchanges, yet the revenues will be distributed to the users, not to the owners. This is a troublesome position for us because we have always set up our clearing corporations to provide revenues to operate the exchange, and I have always budgeted the exchange itself simply to break even. Moving into the CBOE experiment will be very different for us. If the national clearing system, which the committee is now working on, ends up being the same way, it may be quite difficult for some of the exchanges to find a source of revenue. They will have to raise transfer or facilities charges or something of that sort.

NEIL: Yes, I think that problem is particularly evident in New York. The Stock Clearing Corporation charges member broker-dealers a fee considerably in excess of the charge that SIAC levies against it for actual processing. There has been a flow of considerable amounts of revenues to the exchange. I think that is the basic reason we are evolving the way we are. As far as New York is concerned, however, in the merger of the clearing corporations for the two exchanges—and, it is hoped, at some point for NCC as well—this question has to be addressed. The answer, presumably, must be that New York will reduce its clearing fees and increase its

exchange fees. Presumably, it will not be too difficult to come out the same on the bottom line.

DOWD: I would like to ask Dave [Rubin] or Joe [Coriaci] whether it is contemplated, or has any action materialized, relative to the ownership of depositories in Chicago or in New York? I know there has been talk, on and off, as to the ownership of the Midwest depository. At least from the talking stages, it was contemplated that there would be co-ownership of Depository Trust in New York. Can you bring us up to date on what that status is?

CORIACI: The situation we run into with these facilities is that banks or trust companies end up being owned by other banks, which in many states is not legally permissible. This exists in the Midwest; it is much the same in New York, and probably on the West Coast. Counsel very early in the game indicated that a majority of the states would have to pass changes in the Uniform Commercial Code to permit banks to purchase segments of or shares in a depository. I do not know what "a majority of states" means. Counsel has not been able to define whether that means twenty states, thirty states, forty states. The last I heard, the uniform code had been changed in about forty states.

I think a significant question is, What does ownership buy for you? Originally, when we looked at ownership in Chicago, we were looking for some segment of control to protect our fiduciary deposits. We have been able to work very closely with the Midwest people. I do not know how long the situation will continue to exist, but we do have a board of directors consisting 50 percent of banks and 50 percent of brokerage and exchange community. That is without any ownership outside the exchange. I do not think that condition would continue when, at some point in time, shares are sold. I think that will be a significant point of interest. The issue of how ownership will take place has not been formally dealt with. There has been a lot of conversation. Whether it will be similar to the plan defined in New York, which would be based on participation, or whether it would be outright purchase, has not been decided.

MENDELSON: Let me make an observation. There is a basic incompatibility in the present structure. One of the targets you have mentioned is an ability by a firm to make all its settlements with only one clearing organization. As long as you have varying systems differentiated according to the type of security they process—like the National Clearing Corporation, any of the regionals, and SIAC—a firm that does both a listed business and an over-the-counter business will be forced to deal with two or more clearing systems. It seems to me, in consequence, that the situation calls logically for the elimination of clearing systems that handle only the securities of the market center with which they are associated.

Having made that observation, let me direct a couple of questions to

Dave Rubin. When you contemplate omnibus accounts to facilitate the interface, do you envision daily settlement between systems or do you contemplate that the Midwest Clearing System would settle less frequently with SIAC, NCC, or other clearing entities?

Let me also direct a question to Mr. Weinberg. When you conceive of private, commercial clearing corporations like Bradford, do you foresee interfaces between them and regional clearing corporations? What kind of arrangements can be worked out? Presumably a firm, whether a broker-dealer, a bank, or whatever, will decide which clearing organization in the system he wants to affiliate with. Let's try you first, Dave.

RUBIN: I've almost forgotten the question. Our idea is that there would be one settling figure between the clearing corporations and there would be no security movement. To the extent there had to be security movement, it would take place within the depository, and there would be no movement unless one depository needed it.

MENDELSON: You mean there would be no movement between depositories?

RUBIN: That is correct. Each depository, in effect, would have an account with the other depository, so that there would not have to be any physical movement of the certificates to settle balances between depositories.

MENDELSON: You would not only have omnibus accounts between the clearing corporations but also between the depositories?

RUBIN: Exactly.

WEINBERG: Would there be a daily money settlement?

RUBIN: Yes.

WEINBERG: When we get what would seem to be a retrogression, when we get to the development of a number of private clearing systems, how will they interface with each other? I expect that they would be members of the clearing systems. What I am really saying is that we have tended to take an overly simple view of what we are trying to do. If I look at it from the broker's point of view, the amount of activity we are now talking about probably represents half of my activities, in terms of manpower. The other half, and half is a very rough measure, is all the work I now do to make physical deliveries directly to banks and other institutions. On any given day, I probably deliver to twenty, thirty, or forty different institutions. I am really running a clearing system with those separate institutions. These complex arrangements are already in existence, and they seem to work fairly well.

MENDELSON: Let me ask my last question. What is being done by depositories to facilitate communication between issuing corporations and stockholders, as the depository system expands to hold more and more of the certificates?

RUBIN: What we have espoused, and I think DTC now also does, is to push securities back out of the depository to the transfer agent and work through either a transfer agent custodian or transfer agent depository. This would allow them to do the record keeping, so you look right through the depository. The depository, in effect, becomes a shell. It is not really sitting on a great vault of securities. It is receiving them in, to the extent that they are moving, and passing them back to the transfer agents where the records are kept.

MENDELSON: Does the transfer agent know who owns them beyond the depository?

RUBIN: I think we are taking steps to make sure that they do know who the owner is.

WEINBERG: These private systems will facilitate that kind of development. Commissioner Loomis, would you like to comment?

LOOMIS: I was just going to get to that issue, because I have not heard it mentioned before, even when talking about DTC, Midwest, and Pacific Coast trust companies. No one mentioned the transfer agent depository. I was going to ask any member of the panel to indicate whether they see any future for it; and also whether it is not somewhat inefficient to have something like DTC, at least in the long run, interposed into the middle of the system, when, as Mr. Rubin has said, the transfer agent depository is the final operating entity in the process.

WEINBERG: I think the two big unresolved questions are the role of the banks in the clearing and settlement system, and the relationship between clearing and settlement systems and depository systems. I certainly think there is an overlap between their functions, and in fact they may be completely redundant.

RUBIN: We really see that as the direction it should go, and believe it so strongly that we, Boston, and PBW have an equity interest in Bradford's TAD Depository Corporation, which I think is the first of the entities that are trying to take the certificates back to the transfer agent.

CORIACI: I would like to make two comments. First, as we have testified a couple of times before Congressman Moss, it is not our intent, in the Midwest, to build a huge vault. It is our intent to immobilize the certificate. You do not do that by taking them out of the community and putting them in a basement somewhere. We have been piloting, along with some others in the Midwest and the First National Bank of Boston, in the transfer agency custodian concept. Congressman Moss may allude to that later today. We believe this is the direction to go. We think that with both H.R. 5050 and S. 2058 directing the eventual elimination of the stock certificate, these things all will come to pass, probably within the next two, three, or four years as the systems develop.

There are several reasons why banks will desire to participate in a

depository system, aside from the fact that legislative pressures will encourage them to do so. First of all there are simple bottom line interests. In addition, there are questions of control, timeliness, and speed of settling transactions that should be considered. Clerical staff costs are high, as are the costs of messengers, guards, and insurance; storage facilities are available, but they too are expensive to maintain. Paper handling and the fails that occur as a result of paper movement are now expensive and will become increasingly burdensome as we move toward a more fully computerized environment in the future.

I would like to comment on Mr. Mendelson's question, that the corporation is or may be one more step removed by a custodian from the actual owner of the certificate or the security. In most cases, those securities were already in the name of a nominee or a broker, and whether you have Cede and Company, or Cray and Company, or whatever the nominee might be, the issuer still is removed from the stockholder through that nominee or through that brokerage firm. That condition does not change. I do not know whether the transfer agent will be able to bring them any closer than they have been up to now.

LOOMIS: This is a rather elementary question I wanted to ask Mr. Neil, to get the full dimensions of the problem. He described, at the outset, a situation where his firm had sold ten pieces of X for ten separate customers, and bought nine pieces for nine other customers, and ended up owing one piece, or a hundred shares, to the clearance and settlement system; only that hundred shares passed through and into the system we are talking about. The question is, Does he have an in-house problem in that his firm has somehow to provide certificates to the nine people who bought, and arrange the converse cash movements?

NEIL: This is a continuing problem because of the cost of receiving, delivering, and insuring that you get the stock. I think the whole thrust of a national clearing system tied in with depositories is to give assurances to the public that they can leave their securities, with safety, in the hands of brokers and dealers. Actually, the certificates will be held physically in depositories. The difficulties of the past have been associated with the volume of physical movement. If we can eliminate that or reduce it to a minimum, I think we can overcome those problems. In addition, SIPC [Securities Investor Protection Corporation] insurance provides a further safeguard for customers. If and when unbundled rates appear, I can see separate charges for the transfer and shipment of securities to customers, which should further reduce requests by customers for the physical delivery of certificates.

WEEDEN: One of the revenue sources on Wall Street today is the lending of securities. I wonder, as you move toward a national clearing

system and a national depository system, does that eliminate the opportunities of lending securities for the individual brokerage firms?

NEIL: I really cannot respond very quickly to that. Certainly the one reason for lending securities now is to get physical possession of the piece of paper so that the buyer can make redelivery. If we do not need that, conceivably the lending can be done within the depository system itself.

WEINBERG: I would elaborate a little on that, Joe. Two major reasons come to mind for our lending and borrowing of securities. One is to make up deliveries due to difficulty in getting the other side of a trade to come through. That is what Joe was alluding to. That is likely to disappear as the systems become more efficient. The other reason is legitimate short selling, and we have a need to cover that sale and make delivery.

WEEDEN: You are setting up a system that is going to make more efficient deliveries between people who are members of the industry. There still is going to be delivery outside the industry, probably to the institutions who are going to keep control of their own securities. If they come into the depository system also, then you might eliminate that entirely.

NEIL: I would just like to comment on that. We have ignored the role of the institutions in this discussion, and I think that is a mistake. This thing really will not work to the extent it can work unless institutions are an integral part. They do not yet accept depositories as proper housing for their securities. Once that happens, then we really will have the millennium. Everything else, the back office that I know with hundreds of people, will evaporate into a few people who check daily computer runs of positions; the accuracy and the control will be fantastic. I look forward to that day. But this is one area that at the moment is out of our hands. Perhaps this gets into the question you raised about the role of banks. Institutions cannot leave their securities with broker-dealers; they must leave them with banks. This is an area where I think we need some help.

WEEDEN: That raises another question. Are the banks interested in cooperating, because as I understand it, the custodian business is one of their large revenue sources.