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Report to the Chairman, Committee on Energy and Commerce, House of Representatives

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SECURITIES INDUSTRY

SEC Leadership Needed to Further Automate Securities Transfers

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Information Management and
Technology Division

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The Honorable John D. Dingell
Chairman, Committee on Energy and
Commerce
House of Representatives

Dear Mr. Chairman:

The physical movement of certificates to transfer the ownership of securities has come under close scrutiny since the October 1987 market crash because it adds time, risk, and cost to settlement.[1] In this process buyers and sellers complete their market transactions by exchanging funds for securities. Industry officials studying market reforms have determined that reducing physical transfers would help shorten the time needed to settle trades and make settlement safer and more efficient.

This report provides information on the status of efforts in the United States to reduce physical transfers of securities certificates by using computer technology to transfer ownership—commonly referred to as automated book-entry transfer. It also recommends that the Chairman of the Securities and Exchange Commission (SEC) take action to decrease market reliance on such transfers. As agreed with your office, the report also provides the results of our review of (1) actions taken by other countries to use automation to reduce physical transfers or eliminate the use of certificates, and (2) benefits attained and obstacles overcome in other countries by automating securities transfers. Details of our objectives, scope, and methodology are contained in appendix I.

Results in Brief

Until steps are taken in U.S. securities markets to reduce the reliance on physical certificates, the inefficiencies and risks associated with using certificates to settle trades will remain. For example, the SEC—the primary regulator of the U.S. securities markets—reported in 1990 that $2.6 billion in certificates was lost or stolen. Furthermore, such physical certificate transfers remain an obstacle to shortening U.S. settlement time from 5 business days to the worldwide 3-day standard recommended by the Group of Thirty.[2] Inaction by our securities markets and

[1]The term securities encompasses a broad range of financial instruments, including stocks; stock options; mutual funds; and corporate, U.S. government, and municipal bonds. For purposes of this report, securities refers to stocks and corporate and municipal bonds.

[2]The Group of Thirty is an independent, nonpartisan, non-profit organization established in 1978. The group's members are from the United States and other countries' financial services industries.

regulator to reduce settlement time and risk could hamper the strength of our markets in the future as foreign markets move to offer more efficient settlement services to international investors.

Although U.S. markets have made much progress in reducing physical certificate transfers for large traders and institutions, such transfers are still relied on to settle many small or retail investor trades in the United States. Furthermore, the prospects for automating these transfers are uncertain in that SEC and the securities industry have not reached consensus on how to resolve this problem. A primary obstacle is the potentially adverse effect such a change would have on retail investors, who request and receive certificates in settling their transactions. Additionally, concerns about legal obstacles need to be resolved before physical certificates are eliminated. Foreign markets of differing sizes and with regulators who have varying levels of authority have confronted and overcome similar obstacles to automating securities transfers. Officials of these markets believe that automating transfers contributes to shorter settlement time, lower settlement cost and risk, greater account accuracy, and increased processing capability.

Background

In the United States, the physical movement of securities certificates to transfer ownership generally involves (1) a seller's sending certificates through a broker to a depository, (2) a depository's forwarding the certificates to a transfer agent who issues new certificates and sends them back to the depository, and (3) the depository's sending the new certificates through a broker to a buyer. In 1990 The Depository Trust Company—the nation's largest depository—physically moved over 27 million certificates, valued at approximately $946 billion, for trade settlement and custody purposes.[3] During the same period, it made over 72 million automated book-entry transfers, valued at about $8.8 trillion, for large traders and institutions. As of December 31, 1990, it held securities valued at about $4.1 trillion. In the United States, settlements involve both physical and automated book-entry transfers of securities and are typically completed 5 business days after trade date. In general, retail customers who opt not to obtain physical certificates have their records of ownership maintained with trading and brokerage firms.

[3]In addition to The Depository Trust Company, other U.S. depositories include the Midwest Securities Trust Company and the Philadelphia Depository Trust Company.

In 1973 the U.S. securities industry started creating depositories to reduce the flow of physical certificates at settlement by having certificates controlled in a central location and providing automated book-entry as an alternative to physical transfers for institutions and trading firms. Depositories also enable trading firms to record, in a central location, their securities holdings of retail customers who keep records of ownership at the firms, rather than obtaining certificates.

Since the October 1987 market crash, SEC and several international market organizations have studied and support replacing physical certificate transfers with automated book-entry transfers. For example, to reduce risks and standardize the settlement process worldwide, the Group of Thirty recommended in 1989 that countries use automated book-entry transfers and reduce their settlement times to 3 business days. In addition, the Group of Thirty's U.S. Working Committee determined that the increased use of automated book-entry transfers would contribute to shortening the settlement period in the United States from 5 to 3 business days.

Automating securities transfers can be accomplished through two alternative processes: immobilization or dematerialization. Immobilization generally involves using central depositories to safekeep certificates and transfer ownership via automated book-entry systems, although the manner in which this process can be implemented varies. Dematerialization goes one step further, eliminating certificates altogether.

The Securities Exchange Act of 1934 (15 U.S.C. 78a-78ll) provides SEC with broad authority and responsibility to oversee the securities transfer process in the United States. Specifically, the act directs SEC to facilitate prompt and accurate transfers of securities ownership to protect investors and persons handling transactions on behalf of investors. SEC issues rules and regulations and prescribes standards and procedures to implement this directive.

More Progress Needed to Reduce Reliance on Physical Transfers

According to SEC, the physical movement of securities certificates to transfer ownership is inefficient and poses risks to investors. Specifically, it requires market participants to expend more time and funds than transferring the ownership of securities in a depository book-entry system would require. Recently, a large national brokerage firm started charging a fee to investors who request certificates. In addition, certificates pose risks to investors in that they can be lost, stolen, or counterfeited. In this regard, SEC reported in 1990 that $2.6 billion in certificates was lost or stolen, requiring investors to obtain replacement certificates. In February 1988, the Commission recommended that the U.S. securities industry explore ways to increase the number of certificates immobilized in depositories in order to (1) reduce physical transfers and the negative consequences associated with them and (2) facilitate the processing of unusually large transfer volumes. However, SEC sees itself playing a limited role in assisting industry action to explore and develop ways to increase automated transfers because it believes such initiatives should be guided by the markets.

The securities industry has made much progress in automating securities transfers in that institutional trades are now generally settled via depository book-entry systems. However, progress in the retail sector has not been as great. Although the number of retail investors requesting certificates appears to be declining, many trades are still settled using physical transfers of ownership. The U.S. Working Committee has begun to address reducing these remaining physical transfers in its attempts to reduce settlement from 5 to 3 business days. However, the Committee has not reached consensus on how to implement such a change.

Committee members—including officials of SEC's Division of Market Regulation—generally attribute the lack of consensus to retail investor concerns. Some Committee members, recognizing the important role retail investors play in U.S. markets, believe that reducing physical transfers would alienate retail investors who prefer to hold physical certificates, unless the industry preserves the right of investors to obtain and use such certificates. According to SEC Market Regulation officials who serve on the Committee, SEC is relying on the industry to reach consensus or develop a solution to the current impasse, rather than the Commission initiating action to bring about resolution.

SEC Market Regulation officials said that fully automating securities transfers also involves legal obstacles. For example, many state corporate laws authorize shareholders to obtain, on demand, negotiable certificates as records of their ownership interests in corporations. One state still requires insurance companies to maintain custody of securities certificates, evidencing such investments, within state boundaries.

Consequently, the securities markets still rely on the movement of physical certificates to settle transactions, and associated risks and inefficiencies remain. This reliance on certificates could impede U.S. market efforts to reduce settlement time to 3 business days. Shortening settlement time and eliminating risk could enhance the strength of U.S. markets as international trading increases and foreign markets move to develop more efficient services for investors. Large trading firms and institutions, in making investment decisions, prefer quick settlement as a means to minimize risk. As a result, markets that settle transactions in the most timely manner could have an advantage attracting investors when all other investment conditions are similar or equal.

The U.S Working Committee is considering two proposals—one developed by the Working Committee with assistance from the Securities Transfer Association[4] and the other formulated by the Midwest Securities Trust Company—to increase the extent of certificate immobilization in the United States. The Working Committee proposal would increase immobilization by having transfer agents keep electronic records of securities ownership for any investor. The Midwest Securities Trust Company proposal provides for the holding of account assets at the depository rather than at trading and brokerage firms. Both proposals would allow investors to receive certificates if requested. The Committee is currently seeking comments on and studying the feasibility of the proposals. After analyzing the responses, it plans to share this information with SEC. In addition, the Steering Committee that guides Working Committee activity established a task force in the second half of 1991 to revisit the key issues associated with shortening settlement time, identify practical solutions, and develop an implementation schedule. The task force plans to report on these topics in the first quarter of 1992.

Other Nations Are Automating Securities Transfers

Officials of nine foreign securities markets that are converting or have converted to automated transfer systems discussed specific benefits of making such a change. These benefits include (1) shorter settlement time and reduced risk, (2) lower cost, (3) greater account accuracy and security, and (4) increased processing capacity. In automating the transfer process, these countries confronted and resolved investor concerns and legal obstacles. While most of these markets are smaller than U.S. markets and have less retail investor participation, their experiences provide important information for U.S. market officials considering such a change.

[4]The Securities Transfer Association is an organization that represents over 500 agents who, on behalf of publicly-held corporations, maintain shareholder ownership records and facilitate the change of securities ownership.

These foreign markets have automated or plan to automate the securities transfer process by immobilizing or dematerializing securities certificates. Table 1 shows for each of the nine markets, the settlement transfer approach adopted and its status—implemented or planned. For those markets planning to immobilize or dematerialize, the table also shows when implementation is planned to be completed.

Table 1: Status of Market Immobilization and Dematerialization

	Settlement Approach		
Market	**Immobilization**	**Dematerialization**	**Status**
Australia		X	Planned—1994
Denmark		X	Implemented
France		X	Implemented
Germany	X		Implemented
Japan	X		Planned—1992[a]
Norway		X	Implemented
Singapore	X		Planned—1993[a]
Taiwan	X		Implemented
United Kingdom		X	Planned—1993

[a]Japan and Singapore began partial implementation in October 1991 and February 1987, respectively.

Foreign Markets Benefit From Automating Transfers

Foreign market officials believe that automating the securities transfer process contributes to shortening settlement time. All nine markets are, or plan to be, at or within the 3-day settlement goal recommended by the Group of Thirty. For example, to help reach this goal, Australia, Singapore, and the United Kingdom are developing automated securities transfer systems. Shortening settlement times, according to foreign regulators and market participants, lowers risk to the industry and enhances market liquidity and attractiveness to investors.

Reliance on greater automation has reduced settlement costs, according to market officials. Expenses of brokerage firms and banks, along with settlement fees of central depositories, have been reduced in Denmark, France, Norway, and Taiwan. However, market officials in these countries said such savings were not necessarily passed on to investors. In many of these countries, brokerage firms and banks were also able to reduce settlement staff costs. For example, officials from a Norwegian bank said that from 1983 to 1990, they were able to reduce settlement staff by approximately 82 percent, despite an increase in trading volume.

Market officials consider automated systems to be more secure and accurate, while enhancing the markets' capabilities to settle high-trading volumes. They said that their systems have strict internal controls that, for example, restrict access to data and computer facilities and provide for back-up systems and contingency plans. For example, officials in Denmark said that the security and accuracy of their system can be demonstrated by the fact that no claims have been paid by the depository for errors or fraud in over 8 years of operation. The introduction of automated settlement has also, we were told, greatly enhanced the ability to handle current securities volumes and anticipated increases.

Legal and Investor Concerns Addressed by Foreign Markets

Prior to initiating automated settlement, market and government participants first agreed on the need and direction for change, and then used education campaigns and incentives to allay public concerns about making the change to book-entry transfers. In Denmark, France, Japan, Norway, and the United Kingdom, brokerage firms, regulators, exchange officials, and banks participated in committees designed to plan and implement settlement reform. In several of the countries we visited, government agencies played an active role in mediating, offering incentives, and drafting or reviewing necessary legislation. Concerning the latter point, officials in Australia, Singapore, and the United Kingdom stated that necessary legal changes should be made before the system is designed. For example, United Kingdom officials noted that their financial markets regulator—the Department of Trade and Industry—had to develop regulations revising the securities ownership and transfer process before automated transfers could be used.

Officials emphasized the need to mitigate the public's concerns about system operation, privacy, and security to effect settlement reform. For example, in Denmark, France, and Taiwan, multimedia campaigns were undertaken to educate investors about the benefits and operation of the new automated settlement systems. In Australia, Japan, Norway, and Singapore, financial advisers, investors, and issuers were educated through seminars, brochures, and mailings. Furthermore, tax incentives and subsidized fee structures have been or will be used to encourage retail participation in France and Norway. Although settlements in Germany and Taiwan are effected via book-entry, physical certificates are still available to investors. Obtaining physical certificates will be an option under the planned systems in Australia, Japan, and Singapore.

Conclusions

Foreign markets are committed to automating securities transfers to improve the efficiency and safety of their settlement processes. However, while U.S. markets have made progress in automating securities transfers, industry officials have not reached consensus on a plan to reduce market reliance on the physical movement of certificates. While SEC has recommended that the securities markets further automate transfers and has identified legal obstacles that need to be resolved in order for this to happen, the Commission has not taken action to resolve the industry's current impasse. Continued progress in automating U.S. securities transfers may be hindered unless actions are taken to help the Working Committee reach consensus on addressing retail investors' concerns and to resolve concerns about the legal obstacles inhibiting automated transfers.

Inaction by our nation's securities markets and regulator could impede U.S. market effort to reduce settlement time and risk. This could hamper the strength of our markets in the future as foreign markets offer more efficient services to international investors.

Recommendation to the Chairman, Securities and Exchange Commission

To further strengthen the efficiency and safety of the U.S. financial market settlement processes, we recommend that the Chairman, SEC, take action to decrease market reliance on physical transfers of securities. Such action should include setting a timetable to (1) focus U.S. Working Committee efforts on developing and implementing a strategy for further automating securities transfers, (2) address committee concerns associated with retail investors, and (3) resolve concerns about legal obstacles that currently impair the automation of securities transfers.

Agency Comments

Senior officials of SEC's Division of Market Regulation provided oral comments on a draft of this report and generally agreed with its conclusions and recommendations. We incorporated their comments in the report as appropriate.

Additionally, we confirmed with senior U.S. and foreign market officials the accuracy and completeness of report information on the securities transfer practices in the United States and the nine foreign markets in our review. We did not, however, ask them to formally review and comment on the entire report. Instead, specific information reported was reviewed and verified by the market officials; where appropriate, we revised the report to include their comments.

In conducting our foreign market work, we relied primarily on testimonial and documentary evidence provided, and did not independently verify this evidence. Except for this limitation, we performed our work in accordance with generally accepted government auditing standards.

We are providing copies of this report to other members of the Congress, executive branch agencies, and the public. We will also make copies available to others upon request. This work was performed under the direction of Howard G. Rhile, Director, General Government Information Systems, who can be reached at (202)275-3455. Other major contributors are listed in appendix II.

Sincerely yours,

Ralph V. Carlone

Ralph V. Carlone
Assistant Comptroller General

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Abbreviations

GAO	General Accounting Office
IMTEC	Information Management and Technology Division
SEC	Securities and Exchange Commission

Objectives, Scope, and Methodology

This review was initiated to determine how the U.S. securities industry is progressing in decreasing the movement of securities certificates at settlement and how foreign markets are addressing this issue. Specifically, our objectives were to (1) determine the status of efforts in the United States to use computer technology to reduce physical transfers of securities certificates, (2) identify actions taken by other countries to reduce manual transfers or eliminate physical certificates, and (3) identify the benefits attained and obstacles overcome by these countries in automating securities transfers.

To determine the status of activity in the United States to reduce physical transfers, we obtained documentation and met with senior officials of major brokerage firms, custodial banks, and securities-processing organizations—such as The Depository Trust Company and National Securities Clearing Corporation—that are involved in the securities settlement process. These officials provided information on the securities-transfer process and how trades are settled via automated book-entry systems and physical transfers of certificates. In addition, we documented recent industry action aimed at reducing physical transfers by interviewing senior officials of the U.S. Working Committee, which is involved in reforming the U.S. settlement process, and the Midwest Securities Trust Company and the Securities Transfer Association regarding their proposals to decrease the use of certificates. These officials provided information on the status of their settlement reform activities and proposals, along with their views on eliminating physical securities transfers. We also obtained the views of SEC officials on the issue of automating securities transfers, because the Commission is the primary regulator of the securities markets and has coordinated its activity with the U.S. Working Committee in addressing settlement reform issues. In this regard, we met with the responsible officials of SEC's Division of Market Regulation and discussed what the Commission has done in this area, and obtained their views on how the industry is progressing.

To document actions taken by other countries to reduce or eliminate physical transfers, we visited nine foreign markets in Europe and Asia that are converting or have converted to automated securities transfer systems. The markets visited are in Australia, Denmark, France, Germany, Japan, Norway, Singapore, Taiwan, and the United Kingdom. While visiting these markets, we collected information and met with officials from clearing and depository organizations, exchanges, banks, brokerage firms, regulatory agencies, and central banking authorities that are involved in the securities-settlement process. These officials provided documentation and information on how the securities-transfer process works in their countries and how automated systems are or will be used in this process. In addition, we obtained information from these officials on the benefits attained and obstacles overcome by their countries in automating securities transfers.

In discussing these issues with officials of foreign markets, we relied primarily on testimonial and documentary evidence provided, and did not independently verify this evidence. However, to ensure that the specific information we reported was accurate and complete, we asked foreign market officials to review and confirm it. Except for this limitation, we conducted our work in accordance with generally accepted government auditing standards. This work was performed from March through October 1991.

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