

FEDERAL RESERVE SYSTEM
[Docket No. R-0866]
Federal Reserve Bank Services

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Notice.

SUMMARY: The Board has decided to not implement an earlier opening time for the Fedwire securities transfer service at this time due to the anticipated cost and technical hurdles identified by various industry participants and concerns expressed by the Treasury. These concerns may decline in the future as participants improve their internal operating environments (e.g., by implementing real-time and straight-through processing and better contingency availability) and gain experience with expanded Fedwire funds transfer operating hours. The Board will monitor developments associated with expanded Fedwire funds transfer hours as well as developments in U.S. government securities settlement practices and, if market demand for transferring government securities earlier in the day increases or the related cost or operational burden declines materially, the Board, in consultation with the Treasury, will reconsider the desirability of opening the Fedwire securities transfer service earlier in the day.

The Board also has approved the introduction of an optional automatic reversal feature for institutions that access the National Book-Entry System via a Fedline connection. The Board believes that the availability of automated receiver control features in the National Book-Entry System would provide these participants with additional flexibility to manage the receipt of misdirected or incorrect securities transfers and any associated debits to their account holding reserve or clearing balances. This feature likely will be made available to Fedline participants during 2000. Once an implementation schedule is finalized, the Reserve Banks will notify depository institutions regarding the specific date that the receiver control feature will be available to Fedline participants.

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SUPPLEMENTARY INFORMATION:

I. Background

In February 1994, the Board announced approval of an expansion of the operating hours for the Fedwire on-line funds transfer service to 18 hours a day, from 12:30 a.m. to 6:30 p.m. Eastern Time, beginning in 1997 (59 FR 8981, February 24, 1994; 60 FR 110, January 3, 1995).^{1,2} In that announcement, the Board concluded that expanded Fedwire funds transfer operating hours could be a useful component of private-sector initiatives to reduce settlement risk in the foreign exchange markets and would eliminate an operational barrier to potentially important innovation in privately provided payment and settlement services.

Following its action on expanding Fedwire funds transfer operating hours, the Board requested comment in January 1995 on: (1) the potential benefits, costs, and market implications of opening the on-line Fedwire securities transfer service earlier in the day on a voluntary basis; (2) new service capabilities that would allow depository institutions to control their use of intraday credit during expanded and/or core business hours; and (3) a proposal to establish a firm closing time for the Fedwire securities transfer service (60 FR 123, January 3, 1995). Effective January 2, 1996, the Board adopted a firm closing time for the Fedwire securities transfer service of 3:15 p.m. for transfer originations and 3:30 p.m. for reversals (60 FR 42410, August 15, 1995).

The Board received 36 responses to the request for comment. About 60 percent of the commenters were commercial banks or bank holding companies, including banks that provide government securities clearing and settlement services to dealers and other firms. The number of commenters by type of organization were as follows:

Commercial Banking Organizations ³	21
Credit Unions	2
Broker/Dealers	2

¹ All times are Eastern Time unless otherwise noted.

² These operating hours became effective on December 8, 1997. (61 FR 5433, November 6, 1996).

³ Banks, bank holding companies, and operating subsidiaries of banks or bank holding companies.

Clearing House Associations	2
Clearing Organizations	1
Trade Associations	3
Federal Home Loan Banks	2
Federal Reserve Banks	2
State Governments	<u>1</u>
Total public comments	36

II. Earlier Opening of the Fedwire Securities Transfer Service

A. Potential Costs

Twenty-three commenters discussed the potential costs associated with earlier operating hours. Seventeen commenters indicated that the potential costs would outweigh the potential benefits; however, three of these commenters indicated that costs would exceed benefits only in the short term. Five other commenters, including the New York Clearing House (NYCH), indicated that the long-term benefits to the payments system outweigh the expense of implementing and maintaining expanded hours of operation for the Fedwire securities transfer service.

The Public Securities Association (PSA), NYCH, Chemical Bank, and other commenters indicated that the amount of change and associated expense that may be required to participate during earlier operating hours would be significant.⁴ In particular, a number of active government securities market participants argued that the efficiencies envisioned by the Board would not offset the substantial operating and systems costs (including daylight overdraft charges) that would be incurred by participants if the operating hours were to be expanded. The NYCH also indicated that some costs associated with earlier hours would be difficult to measure. For example, most of the transfers processed via the Fedwire securities transfer system are done in support of domestic dealer activity. The NYCH expressed concern that expanding the hours for these dealer operations would most likely either spread over 15 hours what is now done in 7 hours or allow trading to increase in velocity; in its opinion, neither result would be beneficial.

Chemical Bank, Chemical Securities, Inc. (CSI), First Chicago Corporation (First Chicago), and others indicated that, in order to have the capability to participate during substantially longer Fedwire securities transfer operating hours, they would need to make significant capital investments to re-engineer dealer clearance systems, reduce the length of overnight batch processing cycles, and/or redesign systems from a batch to a real-time environment.^{5, 6} Commenters' cost estimates for such system changes ranged from \$750,000 to \$2 million. In addition, some commenters indicated that ongoing operating expenses would increase as a result of expanded operating hours.

Commenters indicated that expansion of Fedwire securities transfer operating hours would also require changes to systems other than a participant's securities clearance system. Specifically, PSA indicated that organizations such as the Government Securities Clearing Corporation (GSCC) and Depository Trust Company (DTC) would have to upgrade their systems so that all necessary data could be received and/or transmitted within a compressed cycle. PSA and CSI indicated that information important to the settlement process that is received from the GSCC, pricing services, and rating services, for example, typically is not available to market participants until after 12:30 a.m.⁷ In addition, PSA noted that dealers also use the current overnight batch processing cycle to perform risk measurement and analysis for over-the-counter derivatives and other transactions. PSA indicated that there is a chance that this risk management process would be compromised by attempting to shorten the current batch processing cycle in order to

⁴ The comments were received prior to Chemical Bank's merger with Chase Manhattan Bank, N.A. and prior to PSA's formal name change to the Bond Market Association.

⁵ Chemical Bank indicated that its dealer clearance system operates from 5:00 a.m. to 10:00 p.m. each day to handle customers' transaction loading before the start of the day, reconciliation, collateralizations (tri-party repo transactions), and report generation. In addition, there is an overnight processing cycle (five hours), which involves the creation of end-of-day database back-ups, generation of reports on microfiche, acquiring and loading security price information for next-day transactions, and preparing the databases to be in a start position for the next business day.

⁶ The comments were received prior to First Chicago's merger with NBD Bancorp.

⁷ In March 1997, GSCC announced its long-range plans for achieving the industry objectives of straight-through processing and point-of-trade guarantee. GSCC is considering important processing changes, including the move to real-time processing, which would reduce the amount of batch processing that occurs overnight.

participate in an earlier opening of Fedwire. Commenters also indicated that personnel costs would be affected by earlier hours. The NYCH, Chemical Bank and others indicated that additional staffing would be required to manage the systems, deal with credit issues, manage compliance, and handle exception processing during earlier hours.

Finally, potential increases in securities-related daylight overdraft charges were a common concern. Chemical Bank observed that the earlier opening time would extend the period during which Chemical could incur daylight overdrafts. Aubrey Lanston, a securities broker/dealer, expressed concern that costs, particularly daylight overdraft charges, resulting from an earlier opening time would increase substantially at a time when the industry is trying to contain and reduce its expenses. Some commenters and Treasury officials expressed concern that any increased costs would be passed on to Treasury in the form of lower prices for Treasury securities, thus increasing borrowing costs.

B. Attempts to Reduce Potential Burden of a Substantially Earlier Opening Time

To mitigate the potential burden of earlier operating hours for participants, the Board requested comment on the feasibility of making participation voluntary during the early hours. Commenters indicated that participation in expanded Fedwire securities transfer hours must be voluntary because of (1) the significant costs many market participants would have to incur to develop the capability to participate during substantially longer operating hours, and (2) the risk that receipt of Fedwire delivery-versus-payment (DVP) securities transfers may trigger overdrafts in receiving banks' accounts, which would require all participants to monitor their accounts during the off-hours even if they do not have a business need to participate in the securities transfer service during these hours. Commenters, however, had differing views regarding the design of a mechanism to ensure voluntary participation. Some commenters also believed that competitive pressures would compel firms to participate in expanded hours despite the lack of demonstrated business demand.

One approach the Board considered to mitigate the potential burden of earlier operating hours for participants was to make participation voluntary during the early hours by requiring institutions to affirmatively "opt-in" to send and receive DVP transfers during this period. Twenty-seven commenters agreed that participants should have the ability to "opt-in" to the earlier operating hours if they are adopted. The commenters, however, had differing views on the design of an "opt-in" capability. Nineteen commenters believed that this ability should be available at the securities account level, rather than at the participant (depository institution) level.⁸ Many commenters, including Northern Trust Company and Trust Company Bank, observed that banks have dramatically different levels of securities transfer activity among their various Fedwire securities accounts. For example, while there may be a need to transfer securities against payment for investment purposes during earlier operating hours, there may be no similar need with respect to customer securities held for safekeeping.

While most commenters preferred establishing the opt-in feature at the securities account level, several active market participants suggested that opt-in should be permitted at the clearance customer level (e.g., individual dealer level). Chemical Bank indicated that it would otherwise have to enhance its dealer clearance system to exclude selectively those customers that choose not to send/receive DVP transfers during earlier hours, which would result in additional expense for the bank.

In response to industry concerns about technical complexity and increased cost associated with expanded operating hours, the Board considered expanding the operating hours in the near term to permit free deliveries only beginning at 12:30 a.m., with a longer lead time to enable participants to make necessary changes for DVP transfers. The receipt of "free" Fedwire securities transfers (e.g., non-DVP transfers) does not raise the same concerns as receipt of DVP transfers because free transfers do not involve a debit to the receiver's funds account at the Reserve Bank and, therefore, cannot trigger or increase an overdraft in the receiving bank's account. While many participants may not have a business need to engage in DVP transfers before the current 8:30 a.m. opening of business, the Boston Clearing House and others indicated that some participants may have a business need prior to 8:30 a.m. to reposition securities collateral among their own securities accounts or to deliver securities as collateral to another participant without engaging in a DVP transfer. Some major market participants, however, expressed concern about the technical complexities of segregating free versus DVP transfers within their securities clearance systems. That is, they indicated it would be at least as difficult to program systems to permit processing of free transfers only during earlier hours as it would to make the necessary changes to enable full participation (e.g., free and DVP transfers) beginning

⁸ A securities account is an account at a Reserve Bank containing book-entry securities held for a participant. A participant may use different securities accounts (e.g., trust, investment, and dealer) to segregate securities held for different purposes.

at 12:30 a.m. Therefore, the Board concluded that it would not be useful to expand the securities transfer operating hours for free transfers only.

Some commenters also indicated that they would require substantial lead time (e.g., at least eighteen months) to streamline their back-office processing systems to enable them to participate in a significantly longer Fedwire securities transfer operating day. Several commenters suggested that the expansion of operating hours should be phased in over time, but recommended different implementation periods.

C. Potential Benefits of Earlier Operating Hours

In its January 1995 notice, the Board described several potential benefits or market responses to earlier Fedwire securities transfer operating hours: (1) access to funding and collateral to support other market activities during earlier hours; (2) shorter times between trade and settlement for cross-border transactions involving U.S. government securities; and (3) availability of an important risk management tool to the financial markets during periods of financial stress. Eighteen of twenty-six commenters that discussed the potential benefits agreed that an earlier Fedwire securities transfer opening time would yield these benefits. Several commenters, however, argued that such benefits may only be realized in the long term or would only accrue to a limited number of participants. Eight commenters did not believe earlier Fedwire securities transfer operating hours would result in the benefits noted by the Board.

The NYCH observed that earlier book-entry hours may enable banks and other financial firms to move securities during non-traditional hours to obtain the liquidity necessary to support the settlement of financial transactions, especially those related to foreign exchange transactions. For example, efforts are currently underway by a private-sector group of U.S. and foreign banks to establish a continuous link settlement system that will reduce foreign exchange settlement risk for banks. Such a mechanism may require significant amounts of dollar liquidity in "off-hours." Bank of America noted that given such initiatives, it is inevitable that payment systems, including the Fedwire securities transfer service, will be required to open earlier. In addition, to the extent that a complementary interrelationship exists between funds transfers that are made over the Fedwire funds transfer service and repo transactions that settle over the Fedwire securities transfer service, some banks (including those represented by the NYCH) believe that the ability to move both funds and securities during the same time period would result in more efficient overall liquidity management and more efficient markets. Therefore, increasing the overlap in operating hours for the Fedwire securities transfer service and the Fedwire funds transfer service may create a more efficient overall mechanism for those market participants that use Fedwire-eligible securities as a liquidity vehicle. Some commenters, however, indicated they were skeptical about the ability to obtain liquidity during off-hours from securities transfers. These commenters stressed the fact that most U.S. government securities are already pledged under a repurchase agreement for the purpose of overnight funding, and unwinding these overnight transactions to obtain early-hours liquidity would require changes in current market practices and impose significant costs on overnight borrowers, primarily dealers.

The Board of Trade Clearing Corporation (BOTCC) observed that in order to secure, reduce, or hedge various financial risks adequately, banks and other firms increasingly require the support of systems that move collateral on a final basis as close as possible to the time that an exposure is created. Bank of America, First Chicago, and the NYCH each indicated that earlier Fedwire securities transfer hours would give market participants the ability to move on a more timely basis U.S. government securities as collateral for a variety of secured transactions in domestic and international markets, thus permitting a more efficient use of collateral. Early opening of the Fedwire securities transfer service along with the Fedwire funds transfer service, therefore, may provide the opportunity for members to obtain funds or credit from their banks and for the clearinghouses' settlement banks to obtain those funds from their members at an earlier hour.

U.S. government securities also serve as a source of collateral in an international or global payment operations context. For example, Bank of America indicated that for U.S. banks participating in foreign payment and settlement systems, earlier book-entry hours would allow the pledging of U.S. government securities within the foreign country's working day and would not limit U.S. banks to pledging only foreign securities. This may become particularly important if U.S. Treasury securities become eligible to secure intraday credit extensions on European payment systems. The NYCH added that parties would be able to shift collateral to cover settlements in several systems or provide collateral to secure foreign borrowings, thus avoiding the excessive cost of maintaining separate or "sterile" pools of collateral for each local market or clearing arrangement. U.S. government securities are also a growing aspect of the international securities depositories -- Euroclear and Cedel. Both of these systems operate during the

European business day, and the ability to move U.S. government securities into and out of these systems throughout their business day may allow participants to use their collateral resources more efficiently. In addition, evolving multilateral netting arrangements for foreign exchange transactions are designed to operate on a 24-hour basis and rely on collateral (including U.S. Treasury securities) as a critical component of the risk management process.

An earlier opening of the Fedwire securities transfer service also may provide opportunities for internationally active market participants to better control settlement risks associated with U.S. government securities transactions executed off-shore by shortening the settlement window.⁹ In particular, by opening the Fedwire securities transfer service at 12:30 a.m., market participants in London and Tokyo would have greater opportunities to settle transactions during their local business day. The PSA, however, expressed concern that while an earlier opening would trim a few hours off of the settlement cycle, banks and dealers would incur substantial costs for daylight overdrafts and system upgrades in order to participate during the earlier hours.

The liquidity and risk management benefits of earlier book-entry hours may be particularly important in times of market stress, when obtaining liquidity, hedging exposures, and moving collateral may be critical to containing counterparty and systemic risks. In this regard, the BOTCC commented that the routine availability of the Fedwire securities transfer system during earlier hours would encourage participants to establish operational procedures and systems to support the earlier operating hours; in turn, this would help ensure the reliability of the service during times of market stress.

D. Outlook for Earlier Operating Hours

Although the Board believes that an earlier opening time for the Fedwire securities transfer service could result in long-term benefits, it recognizes that many Fedwire participants are faced with other important technological initiatives, including year-2000 compliance and preparations for straight-through processing. The Board also recognizes that many market participants would require considerable lead time and could incur substantial costs to upgrade their systems and clearing processes to accommodate a significantly earlier opening time.¹⁰ These changes are likely to be substantially more complex than the changes required to participate in earlier Fedwire funds transfer operating hours. In particular, these changes would likely involve adjustments in market funding and trading practices as well as the operations of GSCC and the clearing banks. The Board will monitor developments associated with expanded Fedwire funds transfer hours as well as developments in U.S. government securities settlement practices, and, if market demand for transferring government securities earlier in the day increases or the related cost or operational burden declines materially, the Board will seek additional public comment and reconsider the desirability of opening the securities transfer service significantly earlier in the day. Even if strong market demand develops, however, it is unlikely that the Federal Reserve, in consultation with the Treasury, would open the securities transfer service significantly earlier before the year 2002 due to the lead time identified by market participants that would be required and the resources currently being devoted to year-2000 compliance efforts. In the meantime, the Board encourages market participants to focus on streamlining their end-of-day processing to position their organizations for potential expanded hours in the future as well as to obtain other operational benefits, including enhanced contingency capabilities.

III. Receiver Control Features

In its January 1995 notice, the Board discussed and requested comment on several possible new receiver control features for low to medium volume on-line participants that could be incorporated into the Federal Reserve's centralized securities transfer application known as the National Book-Entry System (NBES).¹¹ In general, receiver

⁹ For a fuller description of off-shore trading in U.S. Treasury securities, see Michael J. Fleming, "The Round-the-Clock Market for U.S. Treasury Securities," Federal Reserve Bank of New York Economic Policy Review, July 1997.

¹⁰ The Board believes that, at least initially, only a small number of Fedwire securities transfer service participants, which may represent a large proportion of total volume, would likely have a business need to participate during these expanded hours. First Chicago and the NYCH suggested that the overall population of potential users of DVP transfers during earlier hours is likely to be less than 25 banks nationwide.

¹¹ Currently, the NBES provides a limited matching feature that compares incoming transfers with pre-entered receipt instructions. When activated, this feature identifies incoming transfers as "matched" or "not matched," notifies the receiving participant accordingly, and, if so instructed by the participant, re-delivers (or turns around) "matched" securities automatically to another participant. Fedline participants can activate this feature as needed.

controls would involve the comparison of incoming securities transfers against receipt instructions that are input by the receiving bank into the NBES. Based on this comparison, the NBES could be designed to take one of the following actions: (1) notify the receiving bank that an incoming transfer does not match its receipt instructions; (2) automatically reverse the unmatched transfer from the receiving bank's account to the sending bank's account; or (3) automatically reject the unmatched transfer prior to receipt by the receiving bank. Comments were requested on each of these potential receiver control features.

Eighteen comments were received on the receiver control feature. In general, smaller banks supported receiver controls as a means to prevent the delivery of misdirected and/or incorrect DVP transfers, and, thus, control better their use of securities-related intraday credit. Larger banks expressed concern that if the receiving participant failed to input receipt instructions in a timely or correct manner, transfers would be inappropriately returned to the sender, delaying the settlement of legitimate transfers or leading to the potential abuse of receiver control tools.

The Board believes that receiver controls limited to participants that have Fedline connections to Fedwire would be a desirable feature for the Fedwire securities transfer service and would be unlikely to result in the difficulties expressed by some commenters.^{12,13} Fedline participants send and receive relatively small numbers of Fedwire securities transfers and use very limited amounts of Federal Reserve intraday credit, thus the likelihood of any systemic or gridlock effects from the use of the feature would be low.¹⁴ In addition, restricting its use to Fedline participants would address the concerns of certain commenters that the use of an automatic reversal feature by large-volume computer-interface participants could result in the delay of transfers and potential gridlock. The use of the automatic reversal feature also may be limited by the Federal Reserve, at any time, in the unlikely event that any adverse market consequences result from its use.

Because the feature is intended to enable low to medium volume on-line participants to manage better their receipt of unanticipated, misdirected, or incorrect DVP securities transfers and the related debits to their reserve or clearing balances, the Board acknowledges that the timing of some securities transfers for certain participants may be affected by the use of an automated reversal feature. The Board, however, believes that instances of such delays will be limited, isolated, and have no systemic effects on securities settlements.

To the extent that any isolated abuses of the receiver control feature occur, the Board believes that such abuses can and should be resolved between the parties to the transfer. If necessary, this bilateral resolution process might be facilitated by the development of industry guidelines or standards regarding the use of receiver controls by the receiver and the "good delivery" of securities by the sender. The Board encourages the development of such industry guidelines. Participants may also wish to establish an industry-sanctioned process to mediate and resolve any perceived abuses. To the extent any abusive practices with regard to receiver controls might be widespread or, at an individual Fedwire participant level, long standing, and a Reserve Bank is made aware of the pattern of abuse or mismanagement of the receiver control feature, the Reserve Bank may counsel the participant(s). If identified abuses continue following counseling by the Reserve Bank, it may in its sole discretion limit or prohibit continued use of the receiver control feature by that participant(s).

The Board, therefore, has authorized the Reserve Banks to proceed with the design and implementation of an automated receiver control feature for institutions that access NBES via Fedline. Consistent with the Federal Reserve's long-term strategy to expand the use of electronic connections in the Fedwire services, the Board believes that the availability of automated receiver control tools in the NBES will encourage institutions that currently

¹² Fedline is the Federal Reserve's proprietary communications software used by depository institutions with a PC-based electronic connection to the Federal Reserve. Depository institutions may also connect electronically to Fedwire through a computer-interface connection, which links the depository institution's mainframe computer to the Federal Reserve's mainframe computer.

¹³ Small volume, off-line Fedwire participants are required to provide receipt instructions for any anticipated incoming securities transfers. (A participant is considered "off-line" if it does not have an electronic connection to the NBES; instead, such participants provide instructions to the Reserve Banks via telephone or in writing.) If such instructions are not provided or the instructions do not match the incoming securities transfer, the NBES will automatically reverse the transfer to the sender. Large-volume computer-interface Fedwire participants generally have the capability in their internal securities transfer systems to flag unmatched transfers or to automatically reverse unmatched transfers; therefore, they do not need to rely on similar features built into the NBES application.

¹⁴ The use of similar receiver control features by the Depository Trust Company (DTC) and many banks with computer-interface Fedwire connections, for instance, has not resulted in significant operating problems or settlement delays.

communicate transfer instructions to the Reserve Banks via telephone or in writing to migrate toward an electronic connection.

The Reserve Banks plan to make the receiver control feature for Fedline participants available for use in 2000. Once an implementation schedule is finalized, the Reserve Banks will notify depository institutions regarding the specific date that the receiver control feature will be available to Fedline participants.

IV. Competitive Impact Analysis

The Board has established procedures for assessing the competitive impact of rule or policy changes that have a substantial impact on payment system participants.¹⁵ Under these procedures, the Board will assess whether a change would have a direct and material adverse effect on the ability of other service providers to compete effectively with the Federal Reserve in providing similar services due to differing legal powers or constraints, or due to a dominant market position of the Federal Reserve deriving from such differences. If no reasonable modifications would mitigate the adverse competitive effects, the Board will determine whether the anticipated benefits are significant enough to proceed with the change despite the adverse effects.

Other providers of securities transfer services do not provide services that are directly comparable to the Fedwire book-entry securities transfer service because only the Federal Reserve Banks can provide final delivery-versus-payment of securities settled in central bank money. There are other private-sector systems, however, such as the Government Securities Clearing Corporation, the Depository Trust Company, and the Participants Trust Company, that facilitate the clearance and settlement of market trades of U.S. Treasury and/or agency securities. Other U.S. government securities transactions may be cleared and settled on the books of depository institutions to the extent that counterparties are customers of the same depository institution.

The Board does not believe that the implementation of receiver control features on the Fedwire securities transfer system would have a direct and material adverse effect on the ability of other service providers to offer similar services. First, these private-sector service providers could provide (and some do provide) receiver control features to their participants. Second, the Fedwire securities transfer service does not compete directly with these service providers, since it either transfers securities not eligible for these other service providers or provides a complementary settlement service. Finally, given the Federal Reserve Banks' provision of intraday credit as a part of the securities settlement process, an automated reversal feature would likely provide some added flexibility and benefit to certain Fedwire participants in managing their receipt of securities transfers.

By order of the Board of Governors of the Federal Reserve System, April 8, 1998.

William W. Wiles,
Secretary of the Board.

¹⁵ These procedures are described in the Board's policy statement "The Federal Reserve in the Payments System," as revised in March 1990 (55 FR 11648, March 29, 1990).