Federal Reserve Policy Statement on Payments System Risk

As amended effective September 22, 2004

INTRODUCTION

The Federal Reserve Board has developed this policy to address the risks that payment systems present to the Federal Reserve Banks (Reserve Banks), to the banking system, and to other sectors of the economy. This policy is directed primarily at risks on large-dollar payment systems, including Federal Reserve and private-sector systems. Risk can arise from transactions on the Federal Reserve's real-time gross settlement system (Fedwire), from transactions processed in other Federal Reserve payment systems (for example, the automated clearinghouse (ACH) system), and from transactions on private large-dollar systems.

The Reserve Banks face direct risk of loss should institutions be unable to settle their intraday or "daylight" overdrafts in their Federal Reserve accounts before the end of the day.[1] Moreover, systemic risk may occur if an institution participating in a private large-dollar payment system were unable to settle its net debit position. If this were to occur, the institution's creditors in that system might then be unable to settle their obligations in that system or other systems. Serious repercussions could spread to other participants in the private system, to other institutions not participating in the system, and to the nonfinancial economy generally. A Reserve Bank could be exposed to an indirect risk if the Federal Reserve's policies did not address this systemic risk. Finally, institutions create risk by permitting their customers, including other depository institutions, to incur daylight overdrafts in the institutions' accounts in anticipation of receiving covering funds before the end of the day.

[1] In this policy statement, the term "institution" will be used to refer to institutions defined as "depository institutions" in 12 U.S.C. 461(b)(1)(A), U.S. branches and agencies of foreign banking organizations, Edge and agreement corporations, bankers' banks, limited-purpose trust companies, government-sponsored enterprises, and international organizations, unless the context indicates a different reading.

The Board is aware that large-dollar systems are an integral part of clearing and settlement systems and that it is vital to keep the payments mechanism operating without significant disruption. Recognizing the importance of avoiding such disruptions, the Board continues to seek to reduce the risks of settlement failures that could cause these disruptions. The Board is also aware that some intraday credit may be necessary to keep the payments mechanism running smoothly and efficiently. The reduction and control of intraday credit risks, although essential, must be accomplished in a manner that will minimize disruptions to the payments mechanism. The Board expects to reduce and control risks without unduly disrupting the smooth operation of the payments mechanism by establishing guidelines for use by institutions and relying largely on the efforts of individual institutions to identify, control, and reduce their own exposures.

The Board expects institutions to manage their Federal Reserve accounts effectively and use Federal Reserve daylight credit efficiently and appropriately, in accordance with this policy. Although some intraday credit may be necessary, the Board expects that, as a result of its policies, relatively few institutions will consistently rely on significant amounts of intraday credit supplied by the Federal Reserve to conduct their business. The Board will continue to monitor the effect of its policies on the payments system.

The general methods used to control intraday credit exposures are explained in the policies below. These methods include limits on daylight overdrafts in institutions' accounts at Reserve Banks; collateralization, in certain situations, of daylight overdrafts at the Federal Reserve; limits on the maximum level of credit exposure that can be produced by each participant on private large-dollar systems; availability of backup facilities capable of completing daily processing requirements for private large-dollar systems; and credit and liquidity safeguards for private delivery-against-payment systems. To assist institutions in implementing the Board's policies, the Federal Reserve has prepared two documents, the "Overview of the Federal Reserve's Payments System Risk Policy" (Overview) and the "Guide to the Federal Reserve's Payments System Risk Policy" (Guide), which are available online at http://www.federalreserve.gov/PaymentSystems/PSR. The Overview summarizes the Board's policy on payments system risk, including net debit caps and daylight overdraft fees and is intended for use by institutions that incur only small and infrequent daylight overdrafts. The Guide explains in detail how these policies apply to different institutions and includes procedures for completing a self-assessment and filing a cap resolution, as well as information on other aspects of the policy.

I. FEDERAL RESERVE DAYLIGHT CREDIT POLICIES

A. Daylight Overdraft Definition and Measurement

A daylight overdraft occurs when an institution's Federal Reserve account is in a negative position during the business day. The Reserve Banks use an ex post system to measure daylight overdrafts in institutions' Federal Reserve accounts. Under this ex post measurement system, certain transactions, including Fedwire funds transfers, book-entry securities transfers, and net settlement transactions, are posted as they are processed during the business day. Other transactions, including ACH and check transactions, are posted to institutions' accounts according to a defined schedule. The following table presents the schedule used by the Federal Reserve for posting transactions to institutions' accounts for purposes of measuring daylight overdrafts.

Procedures for Measuring Daylight Overdrafts[2]

Opening Balance (Previous Day's Closing Balance)

Post Throughout Business Day:

+/- Fedwire funds transfers

+/- Fedwire book-entry securities transfers

+/- National Settlement Service entries.

Post Throughout Business Day (Beginning July 20, 2006):

\+ Fedwire book-entry interest and redemption payments on securities that are not obligations of, or fully guaranteed as to principal and interest by, the United States[3,4,5]

\+ Electronic payments for matured coupons and definitive securities that are not obligations of, or fully guaranteed as to principal and interest by, the United States.[6]

Post at 8:30 a.m. Eastern Time:

+/- Government and commercial ACH credit transactions[7]

\+ Treasury Electronic Federal Tax Payment System (EFTPS) investments from ACH credit transactions

\+ Advance-notice Treasury investments

\+ Treasury checks, postal money orders, local Federal Reserve Bank checks, and EZ-Clear savings bond redemptions in separately sorted deposits; these items must be deposited by 12:01 a.m. local time or the local deposit deadline, whichever is later

\- Penalty assessments for tax payments from the Treasury Investment Program (TIP).[8]

Post at 8:30 a.m. Eastern Time and Hourly, on the Half-Hour, Thereafter:

+/- Main account administrative investment or withdrawal from TIP

+/- Special Direct Investment (SDI) administrative investment or withdrawal from TIP

\+ 31 CFR Part 202 account deposits from TIP

\- Uninvested paper tax (PATAX) deposits from TIP

\- Main account balance limit withdrawals from TIP

\- Collateral deficiency withdrawals from TIP

\- 31 CFR Part 202 deficiency withdrawals from TIP.

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[2] This schedule of posting rules does not affect the overdraft restrictions and overdraft-measurement provisions for nonbank banks established by the Competitive Equality Banking Act of 1987 and the Board's Regulation Y (12 CFR § 225.52).

[3] The Reserve Banks act as fiscal agents for certain entities, such as government-sponsored enterprises (GSEs) and international organizations, whose securities are Fedwire-eligible but are not obligations of, or fully guaranteed as to principal and interest by, the United States. The GSEs include Fannie Mae, the Federal Home Loan Mortgage Corporation (Freddie Mac), entities of the Federal Home Loan Bank System (FHLBS), the Farm Credit System, the Federal Agricultural Mortgage Corporation (Farmer Mac), the Student Loan Marketing Association (Sallie Mae), the Financing Corporation, and the Resolution Funding Corporation. The international organizations include the World Bank, the Inter-American Development Bank, the Asian Development Bank, and the African Development Bank. The Student Loan Marketing Association Reorganization Act of 1996 requires Sallie Mae to be completely privatized by 2008; however, Sallie Mae plans to complete privatization by September 2006. Upon privatization, the Reserve Banks will no longer act as fiscal agents for new issues of Sallie Mae securities, and the new Sallie Mae will not be considered a GSE.

[4] The term "interest and redemption payments" refers to payments of principal, interest, and redemption on securities maintained on the Fedwire Securities Service.

[5] The Reserve Banks will post these transactions, as directed by the issuer, provided that the issuer's Federal Reserve account contains funds equal to or in excess of the amount of the interest and redemption payments to be made. In the normal course, if a Reserve Bank does not receive funding from an issuer for the issuer's interest and redemption payments by the established cut-off hour of 4:00 p.m. Eastern Time on the Fedwire Securities Service, the issuer's payments will not be processed on that day.

[6] Electronic payments for credits on these securities will post according to the posting rules for the mechanism through which they are processed, as outlined in this policy. However, the majority of these payments are made by check and will be posted according to the established check posting rules as set forth in this policy.

[7] Institutions that are monitored in real time must fund the total amount of their commercial ACH credit originations in order for the transactions to be processed. If the Federal Reserve receives commercial ACH credit transactions from institutions monitored in real time after the scheduled close of the Fedwire Funds Service, these transactions will be processed at 12:30 am the next business day, or by the ACH deposit deadline, whichever is earlier. The Account Balance Monitoring System provides intraday account information to the Reserve Banks and institutions and is used primarily to give authorized Reserve Bank personnel a mechanism to control and monitor account activity for selected institutions. For more information on ACH transaction processing, refer to the ACH Settlement Day Finality Guide available through the Federal Reserve Financial Services website at http://www.frbservices.org.

[8] The Reserve Banks will identify and notify institutions with Treasury-authorized penalties on Thursdays. In the event that Thursday is a holiday, the Reserve Banks will identify and notify institutions with Treasury-authorized penalties on the following business day. Penalties will then be posted on the business day following notification.

Post at 8:30 a.m., 1:00 p.m., and 6:30 p.m. Eastern Time:

- \- Main account Treasury withdrawals from TIP.[9]

Post by 9:15 a.m. Eastern Time:

- \+ U.S. Treasury and government agency Fedwire book-entry interest and redemption payments[10]
- \+ Electronic payments for U.S. Treasury and government agency matured coupons and definitive securities.[11]

Post by 9:15 a.m. Eastern Time (Until July 20, 2006):

- \+ Fedwire book-entry interest and redemption payments on securities that are not obligations of, or fully guaranteed as to principal and interest by, the United States[12]
- \+ Electronic payments for matured coupons and definitive securities that are not obligations of, or fully guaranteed as to principal and interest by, the United States.[13]

Post Beginning at 9:15 a.m. Eastern Time:

- \- Original issues of Treasury securities.[14]

Post at 9:30 a.m. Eastern Time and Hourly, on the Half-Hour, Thereafter:

- \+ Federal Reserve Electronic Tax Application (FR-ETA) value Fedwire investments from TIP.

Post at 11:00 a.m. Eastern Time:

- +/- ACH debit transactions
- \+ EFTPS investments from ACH debit transactions.

Post at 11:00 a.m. Eastern Time and Hourly Thereafter:

- +/- Commercial check transactions, including returned checks[15,16]
- +/- Check corrections amounting to $1 million or more
- \+ Currency and coin deposits
- \+ Credit adjustments amounting to $1 million or more.

Post at 12:30 p.m. Eastern Time and Hourly, on the Half-Hour, Thereafter:

- \+ Dynamic investments from TIP.

Post by 1:00 p.m. Eastern Time:

- \+ Same-day Treasury investments.

Post at 1:00 p.m. Local Time and Hourly Thereafter:

- \- Electronic check presentments.[17]

[9] On rare occasions, the Treasury may announce withdrawals in advance that are based on institutions' closing balances on the withdrawal date. The Federal Reserve will post these withdrawals after the close of Fedwire.

[10] For purposes of this policy, government agencies are those entities (other than the U.S. Treasury) for which the Reserve Banks act as fiscal agents and whose securities are obligations of, or fully guaranteed as to principal and interest by, the United States.

[11] Electronic payments for credits on these securities will post by 9:15 a.m. Eastern Time; however, the majority of these payments are made by check and will be posted according to the established check posting rules as set forth in this policy.

[12] See footnote 3.

[13] See footnote 11.

[14] Original issues of government agency, government-sponsored enterprise, or international organization securities are delivered as book-entry securities transfers and will be posted when the securities are delivered to the purchasing institutions.

[15] This does not include electronic check presentments, which are posted at 1:00 pm local time and hourly thereafter. Paper check presentments are posted on the hour at least one hour after presentment. Paper checks presented before 10:01 a.m. Eastern Time will be posted at 11:00 a.m. Eastern Time. Presentment times will be based on surveys of endpoints' scheduled courier deliveries and so will occur at the same time each day for a particular institution.

[16] Institutions must choose one of two check-credit posting options: (1) all credits posted at a single, float-weighted posting time, or (2) fractional credits posted throughout the day. The first option allows an institution to receive all of its check credits at a single time for each type of cash letter. This time may not necessarily fall on the clock hour. The second option lets the institution receive a portion of its available check credits on the clock hours between 11 a.m. and 6 p.m. Eastern Time. The option selected applies to all check deposits posted to an institution's account. Reserve Banks will calculate crediting fractions and float-weighted posting times for each time zone based on surveys. Credits for mixed cash letters and other Fed cash letters are posted using the crediting fractions or the float-weighted posting times for the time zone of the Reserve Bank servicing the depositing institution. For separately sorted deposits, credits are posted using the posting times for the time zone of the Reserve Bank servicing the payor institution.

[17] The Federal Reserve Banks will post debits to institutions' accounts for electronic check presentments made before 12:00 p.m. local time at 1:00 p.m. local time. The Reserve Banks will post presentments made after 12:00 p.m. local time on the next clock hour that is at least one hour after presentment takes place but no later than 3:00 p.m. local time.

Post at 5:00 p.m. Eastern Time:

+ Treasury checks, postal money orders, and EZ-Clear savings bond redemptions in separately sorted deposits; these items must be deposited by 4:00 p.m. Eastern Time

+ Local Federal Reserve Bank checks; these items must be presented before 3:00 p.m. Eastern Time

+/- Same-day ACH transactions; these transactions include ACH return items, check-truncation items, and flexible settlement items.

Post at 6:30 p.m. Eastern Time:[18]

+ Penalty Abatements from TIP.

Post After the Close of Fedwire Funds Service:

+/- All other transactions. These transactions include the following: local Federal Reserve Bank checks presented after 3:00 p.m. Eastern Time but before 3:00 p.m. local time; noncash collection; currency and coin shipments; small-dollar credit adjustments; and all debit adjustments. Discount-window loans and repayments are normally posted after the close of Fedwire as well; however, in unusual circumstances a discount window loan may be posted earlier in the day with repayment 24 hours later, or a loan may be repaid before it would otherwise become due.

Equals:

Closing Balance.

B. Pricing

Reserve Banks charge institutions for daylight overdrafts incurred in their Federal Reserve accounts. For each two-week reserve-maintenance period, the Reserve Banks calculate and assess daylight overdraft fees, which are equal to the sum of any daily daylight overdraft charges during the period.

Daylight overdraft fees are calculated using an annual rate of 36 basis points, quoted on the basis of a 24-hour day. To obtain the effective annual rate for the standard Fedwire operating day, the 36-basis-point annual rate is multiplied by the fraction of a 24-hour day during which Fedwire is scheduled to operate. For example, under a 21.5-hour scheduled Fedwire operating day, the effective annual rate used to calculate daylight overdraft fees equals 32.25 basis points (36 basis points multiplied by 21.5/24).[19] The effective daily rate is calculated by dividing the effective annual rate by 360.[20] An institution's daily daylight overdraft charge is equal to the effective daily rate multiplied by the institution's average daily daylight overdraft minus a deductible valued at the deductible's effective daily rate.

An institution's average daily daylight overdraft is calculated by dividing the sum of its negative Federal Reserve account balances at the end of each minute of the scheduled Fedwire operating day by the total number of minutes in the scheduled Fedwire operating day. In this calculation, each positive end-of-minute balance in an institution's Federal Reserve account is set to equal zero.

The daily daylight overdraft charge is reduced by a deductible, valued at the effective daily rate for a 10-hour operating day. The deductible equals 10 percent of a capital measure (see section I.C.3., "Capital measure"). Because the effective daily rate applicable to the deductible is kept constant at the 10-hour-operating-day rate, any changes to the scheduled Fedwire operating day should not significantly affect the value of the deductible.[21] Reserve Banks will waive fees of $25 or less in any two-week reserve-maintenance period. Certain institutions are subject to a penalty fee and modified daylight overdraft fee calculation as described in section I.E.

[18] The Federal Reserve Banks will process and post Treasury-authorized penalty abatements on Thursdays. In the event that Thursday is a holiday, the Federal Reserve Banks will process and post Treasury-authorized penalty abatements on the following business day.

[19] A change in the length of the scheduled Fedwire operating day should not significantly change the amount of fees charged because the effective daily rate is applied to average daylight overdrafts, whose calculation would also reflect the change in the operating day.

[20] Under the current 21.5-hour Fedwire operating day, the effective daily daylight-overdraft rate is truncated to 0.0000089.

[21] Under the current 21.5-hour Fedwire operating day, the effective daily deductible rate is rounded to 0.0000042.

C. Net Debit Caps

1. Definition

To limit the aggregate amount of daylight credit that the Reserve Banks extend, each institution incurring daylight overdrafts in its Federal Reserve account must adopt a net debit cap, that is, a ceiling on the uncollateralized daylight overdraft position that it can incur during a given interval. If an institution's daylight overdrafts generally do not exceed the lesser of $10 million or 20 percent of its capital measure, the institution may qualify for the exempt-from-filing cap. An institution must be financially healthy and have regular access to the discount window in order to adopt a net debit cap greater than zero or qualify for the filing exemption.

An institution's cap category and capital measure determine the size of its net debit cap. More specifically, the net debit cap is calculated as an institution's cap multiple times its capital measure:

net debit cap =

cap multiple x capital measure

Cap categories (see section I.C.2., "Cap categories") and their associated cap levels, set as multiples of capital measure, are listed below:

Net Debit Cap Multiples

Cap category	*Single day*	*Two-week average*
High	2.25	1.50
Above average	1.875	1.125
Average	1.125	0.75
De minimis	0.40	0.40
Exempt-from-filing[22]	$10 million or 0.20	$10 million or 0.20
Zero	0.0	0.0

An institution is expected to avoid incurring daylight overdrafts whose daily maximum level, averaged over a two-week period, would exceed its two-week average cap, and, on any day, would exceed its single-day cap.[23] The two-week average cap provides flexibility, in recognition that fluctuations in payments can occur from day to day. The purpose of the higher single-day cap is to limit excessive daylight overdrafts on any day and to ensure that institutions develop internal controls that focus on their exposures each day, as well as over time.

The Board's policy on net debit caps is based on a specific set of guidelines and some degree of examiner oversight. Under the Board's policy, a Reserve Bank may limit or prohibit an institution's use of Federal Reserve intraday credit if (1) the institution's use of daylight credit is deemed by the institution's supervisor to be unsafe or unsound; (2) the institution does not qualify for a positive net debit cap (see section I.C.2., "Cap categories"); or (3) the institution poses excessive risk to a Reserve Bank by incurring chronic overdrafts in excess of what the Reserve Bank determines is prudent.

While capital measures differ, the net debit cap provisions of this policy apply to foreign banking organizations (FBOs) to the same extent that they apply to U.S. institutions. The Reserve Banks will advise home-country supervisors of the daylight overdraft capacity of U.S. branches and agencies of FBOs under their jurisdiction, as well as of other pertinent information related to the FBOs' caps. The Reserve Banks will also provide information on the daylight overdrafts in the Federal Reserve accounts of FBOs' U.S. branches and agencies in response to requests from home-country supervisors.

2. Cap Categories

The policy defines the following six cap categories, described in more detail below: high, above average, average, de minimis, exempt-from-filing, and zero. The high, above average, and average cap categories are referred to as "self-assessed" caps.

a. Self-assessed. In order to establish a net debit cap category of high, above average, or average, an institution must perform a self-assessment of its own creditworthiness, intraday funds management and control,

[22] The net debit cap for the exempt-from-filing category is equal to the lesser of $10 million or 0.20 multiplied by a capital measure.

[23] The two-week period is the two-week reserve-maintenance period. The number of days used in calculating the average daylight overdraft over this period is the number of business days the institution's Reserve Bank is open during the reserve-maintenance period.

customer credit policies and controls, and operating controls and contingency procedures.[24] The assessment of creditworthiness is based on the institution's supervisory rating and Prompt Corrective Action (PCA) designation.[25] An institution may perform a full assessment of its creditworthiness in certain limited circumstances, for example, if its condition has changed significantly since its last examination or if it possesses additional substantive information regarding its financial condition. An institution performing a self-assessment must also evaluate its intraday funds-management procedures and its procedures for evaluating the financial condition of and establishing intraday credit limits for its customers. Finally, the institution must evaluate its operating controls and contingency procedures to determine if they are sufficient to prevent losses due to fraud or system failures. The "Guide to the Federal Reserve's Payments System Risk Policy" includes a detailed explanation of the self-assessment process.

Each institution's board of directors must review that institution's self-assessment and recommended cap category. The process of self-assessment, with board-of-directors review, should be conducted at least once in each twelve-month period. A cap determination may be reviewed and approved by the board of directors of a holding company parent of an institution, provided that (1) the self-assessment is performed by each entity incurring daylight overdrafts, (2) the entity's cap is based on the measure of the entity's own capital, and (3) each entity maintains for its primary supervisor's review its own file with supporting documents for its self-assessment and a record of the parent's board-of-directors review.[26]

In applying these guidelines, each institution should maintain a file for examiner review that includes (1) worksheets and supporting analysis used in its self-assessment of its own cap category, (2) copies of senior-management reports to the board of directors of the institution or its parent (as appropriate) regarding that self-assessment, and (3) copies of the minutes of the discussion at the appropriate board-of-directors meeting concerning the institution's adoption of a cap category.[27]

As part of its normal examination, the institution's examiners may review the contents of the self-assessment file.[28] The objective of this review is to ensure that the institution has applied the guidelines appropriately and diligently, that the underlying analysis and method were reasonable, and that the resultant self-assessment was generally consistent with the examination findings. Examiner comments, if any, should be forwarded to the board of directors of the institution. The examiner, however, generally would not require a modification of the self-assessed cap category, but rather would inform the appropriate Reserve Bank of any concerns. The Reserve Bank would then decide whether to modify the cap category. For example, if the institution's level of daylight overdrafts constitutes an unsafe or unsound banking practice, the

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[24] This assessment should be done on an individual-institution basis, treating as separate entities each commercial bank, each Edge corporation (and its branches), each thrift institution, and so on. An exception is made in the case of U.S. branches and agencies of FBOs. Because these entities have no existence separate from the FBO, all the U.S. offices of FBOs (excluding U.S.-chartered bank subsidiaries and U.S.-chartered Edge subsidiaries) should be treated as a consolidated family relying on the FBO's capital.

[25] An insured depository institution is (1) "well capitalized" if it significantly exceeds the required minimum level for each relevant capital measure, (2) "adequately capitalized" if it meets the required minimum level for each relevant capital measure, (3) "undercapitalized" if it fails to meet the required minimum level for any relevant capital measure, (4) "significantly undercapitalized" if it is significantly below the required minimum level for any relevant capital measure, or (5) "critically undercapitalized" if it fails to meet any leverage limit (the ratio of tangible equity to total assets) specified by the appropriate Federal banking agency, in consultation with the FDIC, or any other relevant capital measure established by the agency to determine when an institution is critically undercapitalized (12 U.S.C. 1831o).

[26] An FBO should undergo the same self-assessment process as a domestic bank in determining a net debit cap for its U.S. branches and agencies. Many FBOs, however, do not have the same management structure as U.S. institutions, and adjustments should be made as appropriate. If an FBO's board of directors has a more limited role to play in the bank's management than a U.S. board has, the self-assessment and cap category should be reviewed by senior management at the FBO's head office that exercises authority over the FBO equivalent to the authority exercised by a board of directors over a U.S. institution. In cases in which the board of directors exercises authority equivalent to that of a U.S. board, cap determination should be made by the board of directors.

[27] In addition, for FBOs, the file that is made available for examiner review by the U.S. offices of an FBO should contain the report on the self-assessment that the management of U.S. operations made to the FBO's senior management and a record of the appropriate senior management's response or the minutes of the meeting of the FBO's board of directors or other appropriate management group, at which the self-assessment was discussed.

[28] Between examinations, examiners or Reserve Bank staff may contact an institution about its cap if there is other relevant information, such as statistical or supervisory reports, that suggests there may have been a change in the institution's financial condition.

Reserve Bank would likely assign the institution a zero net debit cap and impose additional risk controls.

The contents of the self-assessment file will be considered confidential by the institution’s examiner. Similarly, the Federal Reserve and the institution’s examiner will hold the actual cap level selected by the institution confidential. Net debit cap information should not be shared with outside parties or mentioned in any public documents; however, net debit cap information will be shared with the home-country supervisor of U.S. branches and agencies of foreign banks.

The Reserve Banks will review the status of any institution with a self-assessed net debit cap that exceeds its cap during a two-week reserve-maintenance period and will decide if the cap should be maintained or if additional action should be taken (see section I.F., “Monitoring”).

b. De minimis. Many institutions incur relatively small overdrafts and thus pose little risk to the Federal Reserve. To ease the burden on these small overdrafters of engaging in the self-assessment process and to ease the burden on the Federal Reserve of administering caps, the Board allows institutions that meet reasonable safety and soundness standards to incur de minimis amounts of daylight overdrafts without performing a self-assessment. An institution may incur daylight overdrafts of up to 40 percent of its capital measure if the institution submits a board-of-directors resolution.

An institution with a de minimis cap must submit to its Reserve Bank at least once in each 12-month period a copy of its board-of-directors resolution (or a resolution by its holding company’s board) approving the institution’s use of daylight credit up to the de minimis level. The Reserve Banks will review the status of a de minimis cap institution that exceeds its cap during a two-week reserve-maintenance period and will decide if the de minimis cap should be maintained or if the institution will be required to perform a self-assessment for a higher cap.

c. Exempt-from-filing. Institutions that only rarely incur daylight overdrafts in their Federal Reserve accounts that exceed the lesser of $10 million or 20 percent of their capital measure are excused from performing self-assessments and filing board-of-directors resolutions with their Reserve Banks. This dual test of dollar amount and percent of capital measure is designed to limit the filing exemption to institutions that create only low-dollar risks to the Reserve Banks and that incur small overdrafts relative to their capital measure.

The Reserve Banks will review the status of an exempt institution that incurs overdrafts in its Federal Reserve account in excess of $10 million or 20 percent of its capital measure on more than two days in any two consecutive two-week reserve-maintenance periods. The Reserve Bank will decide if the exemption should be maintained or if the institution will be required to file for a cap. Granting of the exempt-from-filing net debit cap is at the discretion of the Reserve Bank.

d. Zero. Some financially healthy institutions that could obtain positive net debit caps choose to have zero caps. Often these institutions have very conservative internal policies regarding the use of Federal Reserve daylight credit or simply do not want to incur daylight overdrafts and any associated daylight overdraft fees. If an institution that has adopted a zero cap incurs a daylight overdraft, the Reserve Bank counsels the institution and may monitor the institution’s activity in real time and reject or delay certain transactions that would cause an overdraft. If the institution qualifies for a positive cap, the Reserve Bank may suggest that the institution adopt an exempt-from-filing cap or file for a higher cap if the institution believes that it will continue to incur daylight overdrafts.

In addition, a Reserve Bank may assign an institution a zero net debit cap. Institutions that may pose special risks to the Reserve Banks, such as those without regular access to the discount window, those incurring daylight overdrafts in violation of this policy, or those in weak financial condition, are generally assigned a zero cap (see section I.E.5., “Problem institutions”). Recently-chartered institutions may also be assigned a zero net debit cap.

3. Capital measure

As described above, an institution’s cap category and capital measure determine the size of its net debit cap. The capital measure used in calculating an institution’s net debit cap depends upon its chartering authority and home-country supervisor.

a. U.S.-chartered institutions. For institutions chartered in the United States, net debit caps are multiples of "qualifying" or similar capital measures that consist of those capital instruments that can be used to satisfy risk-based capital standards, as set forth in the capital adequacy guidelines of the federal financial regulatory agencies. All of the federal financial regulatory agencies collect, as part of their required reports, data on the amount of capital that can be used for risk-based purposes – "risk-based" capital for commercial banks, savings banks, and savings associations and total regulatory reserves for credit unions. Other U.S.-chartered entities that incur daylight overdrafts in their Federal Reserve accounts should provide similar data to their Reserve Banks.

b. U.S. branches and agencies of foreign banks.

For U.S. branches and agencies of foreign banks, net debit caps on daylight overdrafts in Federal Reserve accounts are calculated by applying the cap multiples for each cap category to the FBO's U.S. capital equivalency measure.[29] U.S. capital equivalency is equal to the following:

- 35 percent of capital for FBOs that are financial holding companies (FHCs)[30]

- 25 percent of capital for FBOs that are not FHCs and have a strength of support assessment ranking (SOSA) of 1[31]

- 10 percent of capital for FBOs that are not FHCs and are ranked a SOSA 2

- 5 percent of "net due to related depository institutions" for FBOs that are not FHCs and are ranked a SOSA 3.

Granting a net debit cap, or any extension of intraday credit, to an institution is at the discretion of the Reserve Bank. In the event a Reserve Bank grants a net debit cap or extends intraday credit to a financially healthy SOSA 3-ranked FBO, the Reserve Bank may require such credit to be fully collateralized, given the heightened supervisory concerns with SOSA 3-ranked FBOs.

D. Collateralized Capacity

The Board recognizes that while net debit caps provide sufficient liquidity to most institutions, some institutions may still experience liquidity pressures. The Board believes it is important to provide an environment in which payment systems may function effectively and efficiently and to remove barriers, as appropriate, to foster risk-reducing payment system initiatives. Consequently, certain institutions with self-assessed net debit caps may pledge collateral to their administrative Reserve Banks to secure daylight overdraft capacity in excess of their net debit caps, subject to Reserve Bank approval.[32,33] This policy is intended to provide extra liquidity through the pledge of collateral to the few institutions that might otherwise be constrained from participating in risk-reducing payment system initiatives.[34] The Board believes that requiring collateral allows the Federal Reserve to protect the public sector from additional

[29] The term "U.S. capital equivalency" is used in this context to refer to the particular capital measure used to calculate net debit caps and does not necessarily represent an appropriate capital measure for supervisory or other purposes.

[30] The Gramm-Leach-Bliley Act defines a financial holding company as a bank holding company that meets certain eligibility requirements. In order for a bank holding company to become a financial holding company and be eligible to engage in the new activities authorized under the Gramm-Leach-Bliley Act, the Act requires that all depository institutions controlled by the bank holding company be well capitalized and well managed (12 U.S.C. 1841(p)). With regard to a foreign bank that operates a branch or agency or owns or controls a commercial lending company in the United States, the Act requires the Board to apply comparable capital and management standards that give due regard to the principle of national treatment and equality of competitive opportunity (12 U.S.C. 1843(l)).

[31] The SOSA ranking is composed of four factors, including the FBO's financial condition and prospects, the system of supervision in the FBO's home country, the record of the home country's government in support of the banking system or other sources of support for the FBO; and transfer risk concerns. Transfer risk relates to the FBO's ability to access and transmit U.S. dollars, which is an essential factor in determining whether an FBO can support its U.S. operations. The SOSA ranking is based on a scale of 1 through 3, with 1 representing the lowest level of supervisory concern.

[32] The administrative Reserve Bank is responsible for the administration of Federal Reserve credit, reserves, and risk management policies for a given institution or other legal entity.

[33] Institutions have some flexibility as to the specific types of collateral they may pledge to the Reserve Banks; however, all collateral must be acceptable to the Reserve Banks. The Reserve Banks may accept securities in transit on the Fedwire book-entry securities system as collateral to support the maximum daylight overdraft capacity level. Securities in transit refer to book-entry securities transferred over the Fedwire Securities Service that have been purchased by an institution but not yet paid for and owned by the institution's customers.

[34] Institutions may consider applying for a maximum daylight overdraft capacity level for daylight overdrafts resulting from Fedwire funds transfers, Fedwire book-entry securities transfers, National Settlement Service entries, and ACH credit originations. Institutions incurring daylight overdrafts as a result of other payment activity may be eligible for administrative counseling flexibility (59 FR 54915-18, November 2, 1994).

credit risk. Additionally, providing extra liquidity to these few institutions should help prevent liquidity-related market disruptions.

An institution with a self-assessed net debit cap that wishes to expand its daylight overdraft capacity by pledging collateral should consult with its administrative Reserve Bank. Institutions that request daylight overdraft capacity beyond the net debit cap must have already explored other alternatives to address their increased liquidity needs.[35] The Reserve Banks will work with an institution that requests additional daylight overdraft capacity to determine the appropriate maximum daylight overdraft capacity level. In considering the institution's request, the Reserve Bank will evaluate the institution's rationale for requesting additional daylight overdraft capacity as well as its financial and supervisory information. The financial and supervisory information considered may include, but is not limited to, capital and liquidity ratios, the composition of balance sheet assets, CAMELS or other supervisory ratings and assessments, and SOSA rankings (for U.S. branches and agencies of foreign banks). An institution approved for a maximum daylight overdraft capacity level must submit at least once in each twelve-month period a board-of-directors resolution indicating its board's approval of that level.

If the Reserve Bank approves an institution's request, the Reserve Bank approves a maximum daylight overdraft capacity level. The maximum daylight overdraft capacity is defined as follows:

maximum daylight overdraft capacity =

single-day net debit cap +

collateralized capacity[36]

An institution that has a self-assessed net debit cap and that has also been approved for a maximum daylight overdraft capacity level has a two-week average limit equal to its two-week average net debit cap plus its collateralized capacity, averaged over a two-week reserve-maintenance period. The single-day limit is equal to an institution's single-day net debit cap plus its collateralized capacity. The institution should avoid incurring daylight overdrafts whose daily maximum level, averaged over a two-week period, would exceed its two-week average limit, and, on any day, would exceed its single-day limit. The Reserve Banks will review the status of any institution that exceeds its single-day or two-week limit during a two-week reserve-maintenance period and will decide if the maximum daylight overdraft capacity should be maintained or if additional action should be taken (see section I.F., "Monitoring").

Institutions with exempt-from-filing and de minimis net debit caps may not obtain additional daylight overdraft capacity by pledging collateral without first obtaining a self-assessed net debit cap. Likewise, institutions that have voluntarily adopted zero net debit caps may not obtain additional daylight overdraft capacity by pledging collateral without first obtaining a self-assessed net debit cap. Institutions that have been assigned a zero net debit cap by their administrative Reserve Bank are not eligible to apply for any daylight overdraft capacity.

E. Special Situations

Under the Board's policy, certain institutions warrant special treatment primarily because of their charter types. As mentioned previously, an institution must have regular access to the discount window and be in sound financial condition in order to adopt a net debit cap greater than zero. Institutions that do not have regular access to the discount window include Edge and agreement corporations, bankers' banks that are not subject to reserve requirements, limited-purpose trust companies, government-sponsored enterprises (GSEs), and certain international organizations.[37] Institutions that have been assigned a zero cap by their Reserve Banks are also subject to special considerations under this policy based on the risks they pose. In developing its policy for these institutions, the Board has sought to balance the goal of reducing and managing risk in the payments system, including risk to the

[35] Some potential alternatives available to an institution to address increased intraday credit needs include shifting funding patterns, delaying the origination of funds transfers, or transferring some payments processing business to a correspondent bank.

[36] Collateralized capacity, on any given day, equals the amount of collateral pledged to the Reserve Bank, not to exceed the difference between the institution's maximum daylight overdraft capacity level and its single-day net debit cap.

[37] See footnote 3.

Federal Reserve, with that of minimizing the adverse effects on the payments operations of these institutions.

Regular access to the Federal Reserve discount window generally is available to institutions that are subject to reserve requirements. If an institution that is not subject to reserve requirements and thus does not have regular discount-window access were to incur a daylight overdraft, the Federal Reserve might end up extending overnight credit to that institution if the daylight overdraft were not covered by the end of the business day. Such a credit extension would be contrary to the quid pro quo of reserves for regular discount-window access as reflected in the Federal Reserve Act and in Board regulations. Thus, institutions that do not have regular access to the discount window should not incur daylight overdrafts in their Federal Reserve accounts.

Certain institutions are subject to a daylight-overdraft penalty fee levied against the average daily daylight overdraft incurred by the institution. These include Edge and agreement corporations, bankers' banks that are not subject to reserve requirements, and limited-purpose trust companies. The annual rate used to determine the daylight-overdraft penalty fee is equal to the annual rate applicable to the daylight overdrafts of other institutions (36 basis points) plus 100 basis points multiplied by the fraction of a 24-hour day during which Fedwire is scheduled to operate (currently 21.5/24). The daily daylight-overdraft penalty rate is calculated by dividing the annual penalty rate by 360.[38] The daylight-overdraft penalty rate applies to the institution's average daily daylight overdraft in its Federal Reserve account. The daylight-overdraft penalty rate is charged in lieu of, not in addition to, the rate used to calculate daylight overdraft fees for institutions described in section I.B. Institutions that are subject to the daylight-overdraft penalty fee do not benefit from a deductible and are subject to a minimum fee of $25 on any daylight overdrafts incurred in their Federal Reserve accounts.[39]

1. Edge and agreement corporations[40]

Edge and agreement corporations should refrain from incurring daylight overdrafts in their Federal Reserve accounts. In the event that any daylight overdrafts occur, the Edge or agreement corporation must post collateral to cover the overdrafts. In addition to posting collateral, the Edge or agreement corporation would be subject to the daylight-overdraft penalty rate levied against the average daily daylight overdrafts incurred by the institution, as described above.

This policy reflects the Board's concerns that these institutions lack regular access to the discount window and that the parent company may be unable or unwilling to cover its subsidiary's overdraft on a timely basis. The Board notes that the parent of an Edge or agreement corporation could fund its subsidiary during the day over Fedwire or the parent could substitute itself for its subsidiary on private systems. Such an approach by the parent could both reduce systemic risk exposure and permit the Edge or agreement corporation to continue to service its customers. Edge and agreement corporation subsidiaries of foreign banking organizations are treated in the same manner as their domestically owned counterparts.

2. Bankers' banks[41]

Bankers' banks are exempt from reserve requirements and do not have regular access to the discount window. They do, however, have access to Federal Reserve payment services. Bankers' banks should refrain from incurring daylight overdrafts and must post collateral to cover any overdrafts they do incur. In addition to posting collateral, a bankers' bank would be

[38] Under the current 21.5-hour Fedwire operating day, the effective daily daylight-overdraft penalty rate is truncated to 0.0000338.

[39] While daylight overdraft fees are calculated differently for these institutions than for institutions that have regular access to the discount window, overnight overdrafts at Edge and agreement corporations, bankers' banks that are not subject to reserve requirements, limited-purpose trust companies, GSEs, and international organizations are priced the same as overnight overdrafts at institutions that have regular access to the discount window.

[40] These institutions are organized under section 25A of the Federal Reserve Act (12 U.S.C. 611–631) or have an agreement or undertaking with the Board under section 25 of the Federal Reserve Act (12 U.S.C. 601–604(a)).

[41] For the purposes of this policy statement, a bankers' bank is a depository institution that is not required to maintain reserves under the Board's Regulation D (12 CFR 204) because it is organized solely to do business with other financial institutions, is owned primarily by the financial institutions with which it does business, and does not do business with the general public. Such bankers' banks also generally are not eligible for Federal Reserve Bank credit under the Board's Regulation A (12 CFR § 201.2(c)(2)).

subject to the daylight-overdraft penalty fee levied against the average daily daylight overdrafts incurred by the institution, as described above.

The Board's policy for bankers' banks reflects the Reserve Banks' need to protect themselves from potential losses resulting from daylight overdrafts incurred by bankers' banks. The policy also considers the fact that some bankers' banks do not incur the costs of maintaining reserves as do some other institutions and do not have regular access to the discount window.

Bankers' banks may voluntarily waive their exemption from reserve requirements, thus gaining access to the discount window. Such bankers' banks are free to establish net debit caps and would be subject to the same policy as other institutions. The policy set out in this section applies only to those bankers' banks that have not waived their exemption from reserve requirements.

3. Limited-purpose trust companies[42]

The Federal Reserve Act permits the Board to grant Federal Reserve membership to limited-purpose trust companies subject to conditions the Board may prescribe pursuant to the Act. As a general matter, member limited-purpose trust companies do not accept reservable deposits and do not have regular discount-window access. Limited-purpose trust companies should refrain from incurring daylight overdrafts and must post collateral to cover any overdrafts they do incur. In addition to posting collateral, limited-purpose trust companies would be subject to the same daylight-overdraft penalty rate as other institutions that do not have regular access to the discount window.

4. Government-sponsored enterprises and international organizations (Beginning July 20, 2006)

The Reserve Banks act as fiscal agents for certain GSEs and international organizations in accordance with federal statutes. These institutions generally have Federal Reserve accounts and issue securities over the Fedwire Securities Service. The securities of these institutions are not obligations of, or fully guaranteed as to principal and interest by, the United States. Furthermore, these institutions are not subject to reserve requirements and do not have regular access to the discount window. GSEs and international organizations should refrain from incurring daylight overdrafts and must post collateral to cover any daylight overdrafts they do incur. In addition to posting collateral, these institutions would be subject to the same daylight-overdraft penalty rate as other institutions that do not have regular access to the discount window.

5. Problem institutions

For institutions that are in weak financial condition, the Reserve Banks will impose a zero cap. The Reserve Bank will also monitor the institution's activity in real time and reject or delay certain transactions that would create an overdraft. Problem institutions should refrain from incurring daylight overdrafts and must post collateral to cover any daylight overdrafts they do incur.

F. Monitoring

1. Ex Post

Under the Federal Reserve's ex post monitoring procedures, an institution with a daylight overdraft in excess of its maximum daylight overdraft capacity or net debit cap may be contacted by its Reserve Bank. The Reserve Bank may counsel the institution, discussing ways to reduce its excessive use of intraday credit. Each Reserve Bank retains the right to protect its risk exposure from individual institutions by unilaterally reducing net debit caps, imposing collateralization or clearing-balance requirements, rejecting or delaying certain transactions as described below, or, in extreme cases, taking the institution off line or prohibiting it from using Fedwire.

2. Real Time

A Reserve Bank will, through the Account Balance Monitoring System, apply real-time monitoring to an individual institution's position when the Reserve Bank believes that it faces excessive risk exposure, for example, from problem banks or institutions with chronic overdrafts in excess of what the Reserve Bank determines is prudent. In such a case, the Reserve Bank will control its risk

[42] For the purposes of this policy statement, a limited-purpose trust company is a trust company that is a member of the Federal Reserve System but that does not meet the definition of "depository institution" in section 19(b)(1)(A) of the Federal Reserve Act (12 U.S.C. 461(b)(1)(A)).

exposure by monitoring the institution's position in real-time, rejecting or delaying certain transactions that would exceed the institution's maximum daylight overdraft capacity or net debit cap, and taking other prudential actions, including requiring collateral.[43]

3. Multi-district Institutions

Institutions, such as those maintaining merger-transition accounts and U.S. branches and agencies of a foreign bank, that access Fedwire through accounts in more than one Federal Reserve District are expected to manage their accounts so that the total daylight overdraft position across all accounts does not exceed their net debit caps. One Reserve Bank will act as the administrative Reserve Bank and will have overall risk-management responsibilities for institutions maintaining accounts in more than one Federal Reserve District. For domestic institutions that have branches in multiple Federal Reserve Districts, the administrative Reserve Bank generally will be the Reserve Bank where the head office of the bank is located.

In the case of families of U.S. branches and agencies of the same foreign banking organization, the administrative Reserve Bank generally is the Reserve Bank that exercises the Federal Reserve's oversight responsibilities under the International Banking Act.[44] The administrative Reserve Bank, in consultation with the management of the foreign bank's U.S. operations and with Reserve Banks in whose territory other U.S. agencies or branches of the same foreign bank are located, may determine that these agencies and branches will not be permitted to incur overdrafts in Federal Reserve accounts. Alternatively, the administrative Reserve Bank, after similar consultation, may allocate all or part of the foreign family's net debit cap to the Federal Reserve accounts of agencies or branches that are located outside of the administrative Reserve Bank's District; in this case, the Reserve Bank in whose Districts those agencies or branches are located will be responsible for administering all or part of the collateral requirement.[45]

G. Transfer-Size Limit on Book-Entry Securities

Secondary-market book-entry securities transfers on Fedwire are limited to a transfer size of $50 million par value. This limit is intended to encourage partial deliveries of large trades in order to reduce position building by dealers, a major cause of book-entry securities overdrafts before the introduction of the transfer-size limit and daylight overdraft fees. This limitation does not apply to either of the following:

a. Original issue deliveries of book-entry securities from a Reserve Bank to an institution

b. Transactions sent to or by a Reserve Bank in its capacity as fiscal agent of the United States, government agencies, or international organizations.

Thus, requests to strip or reconstitute Treasury securities or to convert bearer or registered securities to or from book-entry form are exempt from this limitation. Also exempt are pledges of securities to a Reserve Bank as principal (for example, discount-window collateral) or as agent (for example, Treasury Tax and Loan collateral).

II. POLICIES FOR PRIVATE-SECTOR SYSTEMS

A. Privately Operated Multilateral Settlement Systems

Introduction

Multilateral settlement systems, such as clearinghouses and similar arrangements, may produce important efficiencies in the clearance and settlement of payments and financial contracts. Participants in such systems, typically depository institutions, exchange payments for their own account or the accounts of their customers in a coordinated fashion and

[43] Institutions that are monitored in real time must fund the total amount of their ACH credit originations in order for the transactions to be processed by the Federal Reserve, even if those transactions are processed one or two days before settlement.

[44] 12 U.S.C. 3101–3108.

[45] As in the case of Edge and agreement corporations and their branches, with the approval of the designated administrative Reserve Bank, a second Reserve Bank may assume the responsibility of managing and monitoring the net debit cap of particular foreign branch and agency families. This would often be the case when the payments activity and national administrative office of the foreign branch and agency family is located in one District, while the oversight responsibility under the International Banking Act is in another District. If a second Reserve Bank assumes management responsibility, monitoring data will be forwarded to the designated administrator for use in the supervisory process.

settle the resulting obligations on a multilateral, often net, basis.

A variety of credit, liquidity, and other risks can arise in the clearing and settlement process that institutions must manage in the normal course of business, regardless of the method of clearing and settlement. Existing supervisory standards are generally directed at ensuring that institutions establish appropriate policies and procedures to manage such risks. For example, Federal Reserve Regulation F directs insured depository institutions to establish policies and procedures to avoid excessive exposures to any other depository institutions, including exposures that may be generated through the clearing and settlement of payments.[46]

However, the use of multilateral settlement systems introduces the risk that a failure of one participant in the system to settle its obligations when due could have credit or liquidity effects on participants that have not dealt with the defaulting participant. Multilateral settlement may, in some cases, also have the effect of altering the underlying bilateral relationships that arise between institutions during the clearing and settlement process. As a result, the incentives for, or ability of, institutions to manage and limit the risk exposures to other institutions, as required under Regulation F, may be reduced. In addition, in some cases, there may be no timely or feasible alternative to settlement through the multilateral system in the event that the system fails to complete settlement, due, for example, to a participant default. These factors may create added risks to participants in certain multilateral settlement systems relative to other settlement methods. As a result, a number of multilateral settlement systems and their participants have implemented a variety of risk-management measures to control these risks.

Clearinghouses also may generate systemic risks that could threaten the financial markets or the economy more broadly. The failure of a system to complete settlement as and when expected could generate unexpected credit losses or liquidity shortfalls that participants in the system are not able to absorb. Thus, the inability of one participant to meet its obligations within the system when due could lead to the illiquidity or failure of other institutions. Further, the disruption of a large number of payments and the resulting uncertainty could lead to broader effects on economic activity. In addition, as the Federal Reserve has established net debit caps and fees for daylight overdrafts, along with other risk-management measures for Federal Reserve payment services, the potential exists for intraday credit risks to be shifted from the Federal Reserve to private, multilateral settlement arrangements, either domestically or in other countries, that have inadequate risk controls.

The Board believes that these concerns warrant the application of a risk-management policy to those multilateral settlement systems that have the potential to raise systemic risks, particularly in cases where risks may not be adequately addressed by existing supervisory guidance on management of exposures to other depository institutions. The Board recognizes that multilateral settlement systems differ widely in terms of form, function, scale, and scope of activities. Thus, risk-management measures may be designed differently for different systems. This policy statement, therefore, is designed to permit market participants to determine the best means of addressing risks, within the guidelines provided. As a general rule, risk-management measures should be commensurate with the nature and magnitude of risks involved.

The Board's adoption of this policy in no way diminishes the primary responsibilities of participants in, and operators of, multilateral settlement systems to address settlement and other risks that may arise in these systems. In addition, the Board encourages all multilateral settlement systems to consider periodically cost-effective risk-management improvements, even if not specifically required under this policy. Insured depository institutions participating in multilateral settlement systems are also expected to limit any significant bilateral credit and liquidity exposures to other institutions as required under Federal Reserve Regulation F.

Scope and Administration of the Policy

This policy statement applies to privately operated multilateral settlement systems or arrangements with three or more participants that settle U.S. dollar payments, including but not limited to systems for the settlement of

[46] See 12 CFR 206.

checks, automated clearing house (ACH) transfers, credit, debit, and other card transactions, large-value interbank transfers, or foreign exchange contracts involving the U.S. dollar where the aggregate gross value of payments is expected to exceed $5 billion on any day during the next 12 months.[47] Further, the policy does not apply to clearing and settlement systems for securities or exchange-traded futures and options, and is not intended to apply to bilateral relationships between financial institutions, such as those involved in traditional correspondent banking. The Board may also apply this policy to any non-U.S. dollar system based, or operated, in the United States that engages in the multilateral settlement of non-dollar payments among financial institutions and that would otherwise be subject to this policy.

The Board expects to be guided by this policy statement in taking action in its supervisory and operational relationships with state member banks, bank holding companies, and clearinghouse arrangements, including, for example, the provision of net settlement services and the implementation of the Bank Service Company Act.[48] Systems subject to this policy may be asked to provide to the Federal Reserve peak and daily average aggregate gross and net settlement data for the most recent 12-month period or calendar year, as well as peak and daily average settlement position data for individual participants.

Risk Factors and Risk-Management Measures

An analysis of settlement risks in any multilateral settlement system should begin with the identification of key risks and exposures. For purposes of this policy, the general categories of settlement risk include credit risk—the risk to participants or to the system that a participant will be unable to meet fully its settlement obligation; liquidity risk—the risk that participants or the system will have insufficient funds available to meet settlement obligations as and when expected; operational risk—the risk that operational factors in the settlement process may cause or exacerbate these credit or liquidity risks or disrupt the settlement of payments; and legal risk—the risk that legal uncertainties in the settlement process may cause or exacerbate these credit and liquidity risks.

Systems subject to the policy that exhibit one or more risk factors should assess whether their policies and procedures adequately address those specific risks, including consideration of the risk-management measures listed below. In general, risk-management controls should be proportional to the nature and magnitude of risks in the particular system. The Board does not expect that all of the specific risk-management measures listed below will be necessary or appropriate for all systems; moreover, there may be other risk-management measures that will address a particular risk factor. Systems that exhibit one or more risk factors may not need to implement any additional risk controls as a result of this assessment if existing risk controls adequately address the particular risk.

If necessary, the Board and its staff will work with systems to determine whether changes in their policies or operations are required and, if so, whether steps proposed by the system would adequately address the risk factor. In some cases, an operational change may mitigate a particular risk factor. In other cases, systems may need to develop or modify written rules, policies, and procedures that specify the rights and obligations of participants, as well as other relevant parties, such as settlement agents for the system, in the event that a settlement cannot be completed as and when expected. Such rules and procedures should be disclosed to all participants and their primary regulatory authorities.

To facilitate the analysis under this policy, systems may need to develop the capability to simulate credit and liquidity effects on participants and on the system resulting from one or more participant defaults, or other possible sources of settlement disruption.[49] Systems may also need to test the operational capability to execute settlement-failure procedures, where these differ from normal

[47] The gross value of payments settled refers to the total dollar value of individual payments or transactions that are settled in the system, which represents the sum of total debits or total credits to all participants *prior to* any netting of settlement obligations. "On-us" transactions that do not require interbank settlement, but may in some cases be processed by the system, may be excluded for purposes of these calculations. Where a system conducts multiple settlements per day, these settlements should be aggregated for purposes of this calculation if they are conducted among the same group of participants subject to the same rules and procedures.

[48] 12 USC 1861–1867.

[49] Such simulations may include, if appropriate, the effects of changes in market prices, volatilities, or other factors.

settlement procedures. Documentation of any significant legal analysis or agreements relevant to risk management may also be appropriate.

(1) ***Credit risk.***

Risk factors. A multilateral settlement system would give rise to credit risk if its rules or practices significantly increase or shift the bilateral obligations or credit exposures between participants in the clearing and settlement process. For example, a clearinghouse operator or agent that provides an implicit or explicit guarantee of settlement could shift bilateral exposures. Such a guarantee might be implemented through the establishment of a central counterparty for all transactions, or through other provisions in the system's rules, such as a guarantee of members' settlement obligations, third-party credit arrangements, or the system's ability to recover settlement-related losses from participants. Additionally, a system may expose participants to credit risk to one another, due for example, to agreements to mutualize any settlement losses.

Risk-management measures. Measures that are commonly used to mitigate credit risk in a multilateral settlement system and provide support for settlement guarantees include monitoring of participants' financial condition; caps or limits on some or all participants' positions in the system; and requirements for collateral, margin, or other security from some or all participants. Systems in which participants have significant bilateral exposures to one another or to the system, such as through loss-sharing agreements, may need to implement mechanisms for participants to control these exposures if they are significant. Use of settlement methods with same-day finality may also shorten the duration of credit-risk exposure in a system.

(2) ***Liquidity risk.***

Risk factors. A multilateral settlement system would give rise to liquidity risk for its participants if a delay, failure, or reversal of settlement would be likely to cause a significant change in settlement amounts to be paid or received by participants on the settlement date. The degree of liquidity risk in a particular system is likely to be greater (1) the larger are gross payment flows relative to netted amounts to be settled; (2) the larger are participants' settlement positions relative to their available funding resources; (3) the later that participants would be notified of a settlement disruption relative to the timing of activity in the money markets and other funding channels, and (4) the greater the likelihood that a settlement failure of the particular system would be accompanied by abnormal market conditions.

Risk-management measures. One approach to mitigating liquidity risk is to implement measures to reduce significantly both the probability and the effect of a settlement disruption. For example, many of the measures described above that are commonly used to mitigate credit risk may reduce the probability and effect of a participant's inability to meet its settlement obligations when due. External liquidity resources available to the system and adequate operational contingency arrangements may also mitigate liquidity risk. Some systems anticipate performing a recast of settlements in the event of a participant default, by recalculating multilateral net settlement obligations among participants. These systems are expected to assess, and where necessary address, the liquidity impact on participants of such a procedure.[50]

[50] For example, in a "recast" of settlements, some or all transactions involving the defaulting participant would be removed from the system's settlement process, to be settled or otherwise resolved outside the system. A revised multilateral settlement with recalculated settlement obligations would then be conducted among the remaining participants. In an "unwind," transactions or settlement obligations to be settled on the day of the default for all participants would be removed from the system.

For example, timely notification of settlement failure before or during the period of active money market trading should permit participants readily to borrow funds to cover any shortfalls due to the recast. Individual participants may also take steps to limit their own liquidity exposures in the system or increase available liquidity resources.

(3) ***Operational risk.***

Risk factors. Operational risks, such as those relating to the reliability and integrity of electronic data processing facilities used in the clearing and settlement process, are addressed in standard supervisory guidance for depository institutions and their service providers. Operational-risk factors for purposes of this policy statement include those that could hinder the timely completion of settlement or the timely resolution of a settlement disruption in a multilateral settlement system. For example, for a system that anticipates recasting settlement obligations in the event of a participant default, operational obstacles could make it difficult or impossible for participants to arrange settlement outside the system on a timely basis in the event of a settlement failure. As a result, those participants expecting to receive funds could face significant liquidity risk. In addition, in some cases, failure to complete settlement on a timely basis could change the rights of participants with respect to the underlying payments, creating potential credit or liquidity risks. For example, institutions that are unable either to return or to settle for checks presented to them on the same day may lose the right to return the checks for insufficient funds.

Further, certain risk-control procedures implemented by a particular system may themselves entail operational risks. The ability of a system to execute a recast of settlements, implement guarantee provisions, or access lines of credit may depend on the operational reliability of the system's facilities.

Risk-management measures. Multilateral settlement systems and their participants typically mitigate the risk of operational failure in their daily processing activities through standard techniques, such as contingency plans, redundant systems, and backup facilities. For purposes of this policy statement, systems should ensure the reliable operational capability to execute procedures used to resolve a participant default or other settlement disruption as well as to implement other risk-management measures.

For example, if a system anticipates recasting settlements by excluding transactions of a defaulting participant, it should ensure that the system can perform any required processing, generate the necessary information, and provide the information to participants in a timely manner. To the extent that payments would be expected to be settled outside the system, procedures should be established to notify participants such that they have adequate time, settlement information, and operational capabilities to complete such settlements before the close of critical funds transfer systems. A system that does not anticipate recasting settlements but plans to settle all positions as and when expected should ensure that operational procedures to implement risk-management measures are in place, such as means of access to lines of credit in a timely manner.

(4) ***Legal risk.***

Risk factors. Legal risk may exist in a multilateral settlement system if there is significant uncertainty regarding the legal status of settlement obligations or of the underlying transactions in the event of a settlement failure. Significant legal uncertainty could exacerbate efforts to achieve an orderly and timely resolution and could expose participants to significant credit and liquidity risks. For example, if the obligations of participants with respect to underlying transactions exchanged in the system have no enforceable legal status in the event of a system settlement failure, the ability of the participants to revert to other methods of settlement on a timely basis may be in doubt. Legal risk would also arise if the legal enforceability of any significant risk-management measures, netting agreements, or related arrangements, is not well supported.

Risk-management measures. Systems should address legal-risk factors, where significant exposures may arise, by ensuring that operating rules or other agreements between participants will be enforceable in the event of a settlement failure. As part of this process, systems may wish to obtain legal opinions as to the enforceability of its rules and agreements under applicable legal regimes. Additionally, when the transactions settled through the system are not otherwise covered by an established body of law, the system should ensure that the rights and obligations of the participants are adequately addressed through the system's rules or participant agreements.

Application of the Lamfalussy Minimum Standards

Certain multilateral settlement systems are also required to meet the Lamfalussy Minimum Standards.[51] These standards were designed to address the main risk factors that may be present in multilateral settlement systems and to provide confidence that such systems can settle all positions as and when expected in the event that a participant cannot meet its settlement obligations, thereby reducing substantially the risk that a default by one participant will cause defaults by others. To determine whether a system is also required to meet the Lamfalussy Minimum Standards, the Board will consider additional factors that include the following: settlement of a high proportion of large-value, interbank or other financial market transactions, such as foreign-exchange transactions; very large liquidity exposures that have potentially systemic consequences, such as by virtue of a high ratio of gross payments to net settlement obligations; or systemic credit exposures relative to participants' financial capacity.

Lamfalussy Minimum Standards for the Design and Operation of Privately Operated Large-Dollar Multilateral Settlement Systems.

1. Multilateral settlement systems should have a well-founded legal basis under all relevant jurisdictions.
2. Multilateral settlement system participants should have a clear understanding of the impact of the particular system on each of the financial risks affected by the netting process.
3. Multilateral settlement systems should have clearly defined procedures for the management of credit risks and liquidity risks which specify the respective responsibilities of the netting provider and the participants. These procedures should also ensure that all parties have both the incentives and the capabilities to manage and contain each of the risks they bear and that limits are placed on the maximum level of credit exposure that can be produced by each participant.
4. Multilateral settlement systems should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single net debit position.
5. Multilateral settlement systems

[51] The *Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries* (Bank for International Settlements, November 1990), known as the Lamfalussy Report, recognized that netting arrangements for interbank payment orders and forward-value contractual commitments, such as foreign-exchange contracts, have the potential to improve the efficiency and the stability of interbank settlements through the reduction of costs along with credit and liquidity risks, provided certain conditions are met. That Report developed and discussed "Minimum Standards for Netting Schemes" (Lamfalussy Minimum Standards) and "Principles for Co-operative Central Bank Oversight" of such arrangements. These standards have been adopted by the central banks of the G-10 and European Union countries. The text included in this policy statement includes editorial modifications to the original standards.

should have objective and publicly disclosed criteria for admission which permit fair and open access.

6. Multilateral settlement systems should ensure the operational reliability of technical systems and the availability of backup facilities capable of completing daily processing requirements.

Risk-management measures. For systems that the Board has determined are required to meet the Lamfalussy Minimum Standards, systems and their participants should consider the following risk-management measures: (1) to the extent that participants have significant credit and liquidity exposures to other participants, establish bilateral net credit limits vis-à-vis each other participant in the system; (2) establish and monitor in real-time system-specific net debit limits for each participant; (3) establish real-time controls to reject or hold any payment or foreign-exchange contract that would cause a participant's position to exceed the relevant bilateral and net debit limits; (4) establish liquidity resources, such as cash, committed lines of credit secured by collateral, or a combination thereof, at least equal to the largest single net debit position; and (5) establish rules and procedures for the sharing of credit losses among the participants in the netting system.[52]

Alternative risk-management measures may provide an equivalent level of assurance that the Lamfalussy Minimum Standards are met, depending on the nature and scope of the system. However, the Board strongly encourages systems to develop real-time risk-management controls where necessary to provide an appropriate level of risk control. The Board may also encourage or require higher risk-management standards, such as the ability to ensure timely multilateral settlement in the event of multiple defaults, of individual systems that present a potentially high degree of systemic risk, by virtue of their high volume of large-value transactions or central role in the operation of the financial markets.

Offshore Systems

The Board has a long-standing concern that steps taken to reduce systemic risk in U.S. large-dollar payments systems may induce the further development of multilateral systems for settling U.S. dollar payments that are operated outside the United States. Such systems, if implemented with inadequate attention to risk management, may increase risks to the international banking and financial system. In addition, offshore arrangements have the potential to operate without sufficient official oversight.

As a result, the Board has determined that offshore, large-dollar multilateral settlement systems and multicurrency clearing and settlement systems should at a minimum be subject to oversight or supervision, as a system, by the Federal Reserve, or by another relevant central bank or supervisory authority. The Board recognizes that central banks have common policy objectives with respect to large-value clearing and settlement arrangements. Accordingly, the Board expects that it will cooperate, as necessary, with other central banks and foreign banking supervisors in the application of the Lamfalussy Minimum Standards to offshore and multicurrency systems. In this regard, the Principles for Co-operative Central Bank Oversight outlined in the Lamfalussy Report provide an important international framework for cooperation.

B. Private Delivery-Against-Payment Securities Systems

Private delivery-against-payment securities systems that settle on a net, same-day basis entail credit and liquidity risks for their participants and for the payments system in general. The Board believes that these systems should include risk-control features if they are to rely on Fedwire for ultimate settlement. The need for such risk controls is becoming increasingly important in view of these

[52] The term "largest single net debit position" means the largest intraday net debit position of any individual participant at any time during the daily operating hours of the netting system.

systems' potential for growth, their high volumes, and the possible future course of the Federal Reserve's payments system risk-reduction program, e.g., pricing intraday Fedwire funds and book-entry overdrafts.

Delivery-against-payment securities systems, as described below, are expected to adopt appropriate liquidity and credit safeguards in order to ensure that settlement occurs in a timely fashion and that the participants do not face excessive intraday risks. In view of the continuing evolution of these systems, the Board has established general guidelines rather than specifying the exact form such safeguards should take. Reversals or "unwinds" of funds and securities transfers, however, are not considered appropriate liquidity control measures.

The policy addresses four issues:

1. liquidity safeguards for ensuring settlement;
2. provisions for reversals;
3. credit safeguards, such as collateral and netting features; and
4. open settlement accounting.

These components, and the scope and regulatory implications of this policy, are described below.

Scope of the Policy

This policy is specifically targeted at large-scale private delivery-against-payment securities systems that settle their obligations on a net, same-day basis over Fedwire, either directly or indirectly. These systems settle securities transactions for their participants by transferring securities and the accompanying payment obligations on the books of a clearing corporation or a depository institution operating the system and arrange for final settlement of the funds positions on a net basis at the end of the processing day. Settlement on a "net basis" means that the funds obligations are netted among all participants, so that a participant can settle obligations to or from many counterparties by making a single transfer to or from the system. "Same-day" settlement means that the appropriate funds and securities transfers are settled on the day that a delivery-against-payment request is entered into the system. "Large-scale" systems are those systems that routinely process a significant number of individual transfers larger than $50,000 or that would permit any one participant to be exposed to a net debit position at the time of settlement in excess of its capital.

This policy applies to systems that function primarily as a means of transferring securities and funds between participants. If a firm or bank is providing clearing services to a customer, and these services focus primarily on the bilateral relation between the clearer and the customer, the firm or bank would not be viewed as a system under this policy. Moreover, at least initially, a system that is an integral component of a full-service bank, such that obligations that settle on an item-by-item basis are the direct obligations of the bank, will not be subject to this policy because of the existing supervisory oversight of a bank's liquidity and credit resources.

This policy applies to systems in the United States that transfer debt and equity securities, including those not eligible for Fedwire. The policy does not apply to systems dealing with other financial instruments, such as futures and options.

This policy is directed at limiting the risks arising out of the intraday credit generated in private delivery-against-payment systems. The policy does not address other potential sources of risk in these systems, such as inadequate management or facilities. The Board expects that these systems will be subject to regulatory oversight because they are typically clearing agencies subject to supervision by the Securities and Exchange Commission, or because they are limited-purpose trust companies subject to state or federal banking supervision, or both. These supervisors have broad responsibility for ensuring the safety and integrity of these systems.

Liquidity Safeguards

Because they give rise to the extension of intraday credit, private delivery-against-payment systems rely on payments by participants with net obligations to the system ("net debtor" participants) in order to make settlement payments to participants with net obligations due from the system ("net creditor" participants). In the absence of appropriate safeguards, the failure by a single participant with a net debit position may delay settlement of the system. The result of a system's failure to settle in a timely manner will be that participants do not receive the transfers of funds and securities that they expected and that they, therefore, may not be able to conclude other transactions outside the system. Because settlement typically occurs at the end of the day, the system and net creditor participants will have relatively little time to react to any failure that may occur.

This policy seeks to ensure that private systems settle in a timely manner, so that participants can rely on the funds or securities obtained as a result of transfers through the system. The importance of ensuring reliable transfers is due in part to the fact that these systems generally allow participants to retransfer funds credits or securities acquired during the day. If, for example, a participant sold securities early in the day and later used his funds credits to purchase other securities, then a failure in the settlement of the earlier transaction could result in a failure of the settlement of the later transaction.

The Board believes that private systems should protect timely settlement by adopting safeguards that are commensurate with the risk of settlement failure. The Board recognizes that a private system relying on intraday credit will not be able to guarantee timely settlement of funds and securities transfers under all conceivable circumstances and, therefore, that such a system cannot make an absolute guarantee of settlement finality. At a minimum, however, a system must have sufficient safeguards so that it will be able to settle on time if any one of its major participants defaults. In addition, the Board strongly encourages systems to adopt settlement safeguards beyond this required minimum.

Liquidity arrangements that will enable a system to make end-of-day settlement payments are crucial settlements safeguards. Liquidity safeguards adopted by private delivery-against-payment systems should include provisions that give the system access to sources of readily available funding that will support timely settlement in case a participant is unable to settle its obligation. Funding sources could, for example, include prearranged lines of credit or a pool of funds contributed by the participants. The system should limit, on an intraday basis, the size of potential net debit positions to ensure that these liquidity sources will be adequate.

Because settlement risks and structure may vary in different systems, the Board does not consider it appropriate to specify the exact structure of acceptable safeguards. One example of an appropriate liquidity safeguard may be a cap on the net debit funds position that may be incurred by an individual participant, which is tied to the liquidity resources available to the system and/or to the participant. If such a cap is used, it may be appropriate for it to be administered in a flexible manner, with due regard for liquidity and credit risks and for the efficient operation of the system.

Reversals

Currently, certain systems permit reversals of transfers of funds and securities to facilitate settlement if a participant defaults. By reversing transactions, the systems try to reduce the obligations of the defaulting participant. However, settlement with reversals will not ease the liquidity problems caused by a default; reversals will simply transfer a liquidity shortfall from the defaulter to another participant and will do so at the end of the day, when it may be difficult to arrange for alternate sources of liquidity. The return of securities, with the resulting reversal of a funds credit, may cause the participant receiving the returned securities to default on its obligations. Thus, settlement using reversals will not achieve this policy’s objective, because participants will not be able to rely on transfers of funds and securities if transfers may be reversed.

Because the Board does not view reversals as a satisfactory liquidity safeguard, the systems covered by this policy should not use reversals as a substitute for liquidity arrangements, such as those discussed above, in order to ensure timely settlement.

Credit Safeguards

As stated above, these systems effectively allow participants to use intraday credit when receiving securities. All participants may be affected by one participant’s failure to repay this credit. The Board, therefore, believes that these systems should adopt clear loss-allocation rules and should minimize credit risks incurred through the system. Methods of reducing credit risk may vary in different systems. Appropriate methods include requiring contributions by all participants to a fund that may be used in the event of a default or requiring the pledging of a sufficient volume of marked-to-market collateral. The loss allocation schedule should not increase risks to the system. In particular, the system should calculate the loss resulting from a default on the basis of the net obligations of the defaulter rather than on the basis of the underlying gross obligations between the defaulter and its counterparties. Thus, the Board would find a loss-allocation scheme to be unacceptable if it reversed all transactions between the defaulter and other participants.

This policy, including the restriction on reversals, is not intended to prevent a system from allocating credit losses to the counterparty of a defaulter based on the business dealings between the counterparty and the defaulter. It may be appropriate and prudent for a system to have rules that would require participants who have dealt with the defaulter to be responsible, after settlement, for the related loss. These arrangements could well include returning securities to the counterparty to help absorb the loss.

Open Settlement Accounting

As delivery-versus-payment systems grow in size and volume, the timely and orderly completion of end-of-day settlements takes on an increased importance for the settlement of other large-dollar payments systems. As a general matter, the Board believes that it will be easier for market participants and supervisors to monitor and protect against settlement risks if current information is readily available. Participants in a delivery-against-payment system should therefore have up-to-date information on their net position and on the settlement progress of the system, and appropriate market supervisors should have ready access to current intraday information on both the system's settlement and participants' positions. For those systems wishing to use Fedwire payments as a means of settlement, the Board encourages the use of Federal Reserve Bank net settlement services rather than individual wire payments that cannot be distinguished from all other Fedwire payments. This policy is in no way intended to broaden access to Federal Reserve services; neither Fedwire nor net settlement services will be available, as a general matter, to nonmember, nondepository institutions.

III. OTHER POLICIES

A. Rollovers and Continuing Contracts

The Board believes that the use of market innovations, such as federal funds or Eurodollar rollovers or continuing contracts, to reduce daylight overdrafts in Federal Reserve accounts and on the New York Clearing House's Clearing House Interbank Payments System (CHIPS) is consistent with the Board's policy concerning daylight overdrafts. The Board urges market participants to consider using such innovations for these and other financial instruments where feasible. In doing so, participants should be mindful that implementing changes of this type may involve incremental costs, at least transitionally, and modified risk positions. Accordingly, participants should evaluate these factors and take them into account when selecting and negotiating with counterparties.

Many overnight interbank federal funds and other similar purchases and sales are negotiated in the morning with the funds being sent over Fedwire in the afternoon. Typically, the previous day's overnight borrowings are returned to the seller in the early morning, thus leaving a midday time gap of three or more hours between the morning repayment and the receipt of that same day's new borrowing. Often these transactions are between the same two banks for the same amount. The funding time gap can contribute to daylight overdrafts for the borrowing institution and create risk to Reserve Banks.

Rollovers are interbank overnight transactions where the principal does not change and is not returned the next day to the seller but, instead, is rolled over for the next overnight period. The overnight interest rate is negotiated daily between buyer and seller. The maturity is one business day, or no maturity is specified, and the arrangement may be cancelled at any time by either party. The Board understands that national bank lending limits would not apply to federal funds transactions that have a maturity of one business day or no stated maturity and require no advance notice for termination. Because the rollover procedure eliminates the daily movement of principal on Fedwire and the corresponding time gap that could otherwise exist between repayment of the previous day's borrowings and receipt of new reborrowing, daylight overdrafts are reduced.

Continuing contracts are similar to rollovers. With a rollover, the size of each day's sale is the same. With a continuing contract, the size of each day's sale can vary, and only the difference in principal from the previous day's borrowing is moved over Fedwire or CHIPS. Such arrangements reduce the size of the daily movement of principal on Fedwire and CHIPS and also eliminate the time gap that could otherwise exist between repayment of the previous day's borrowings and receipt of new reborrowing, thereby reducing daylight overdrafts in Federal Reserve accounts or net debits on CHIPS. When the same maturity conditions apply to a continuing contract as apply to a rollover (one business day or unspecified maturity and cancellation at any time by either party) national bank lending limits do not apply.

Each participant should satisfy itself that it has the flexibility to negotiate amounts, rates, and maturity options before using these practices for federal funds, Eurodollars, or other financial instruments. Either of these practices, rollovers or continuing contracts, can reduce daylight overdrafts or intraday net debits, and their prudential use by the banking industry is consistent with the Federal Reserve's policy of reducing intraday exposures on Fedwire and CHIPS. When borrowing banks reduce their daylight overdrafts by use of these practices, some extra operational costs and risks may be incurred by either party compared to current arrangements in the overnight market. For example, sellers of federal funds and other instruments may have to develop alternative audit-trail procedures and may accept some additional risk of repayment since funds would not be returned each day before they would be relent. In addition, buyers of federal funds and other instruments may experience some extra initial operating costs to set up rollover arrangements between themselves and lending banks and may have to pay a higher rate to induce lenders to commit their funds for a longer time. However, these costs and risks, if any, should be reflected in the rate or rate spread received and paid. Although it is unclear whether rates on daily interbank funds transactions will fall relative to rates paid for rollovers, continuing contracts, or term funds, or whether the reverse will occur, the Board believes that the negotiation of terms relative to the use of these arrangements should be left to the free operation of the private market.

The Board also supports efforts to encourage timely return of overnight federal funds and other borrowings and encourages operational improvements that would consistently allow timely receipt of funds purchased soon after a seller negotiates a sale. Similar arrangements and industry standards were suggested for federal funds by the American Bankers Association in July 1986.