

Federal Reserve Policy on Payment System Risk

As amended effective September 23, 2016

INTRODUCTION	3
RISKS IN PAYMENT, CLEARING, SETTLEMENT, AND RECORDING SYSTEMS.....	4
PART I. RISK MANAGEMENT FOR FINANCIAL MARKET INFRASTRUCTURES	6
A. Scope.....	6
B. Policy expectations for certain financial market infrastructures	7
1. Risk management	7
a. Fedwire Services.....	8
b. Designated financial market utilities for which the Board is the Supervisory Agency under Title VIII of the Dodd-Frank Act.....	8
c. Other financial market infrastructures that are subject to the Board’s supervisory authority under the Federal Reserve Act.....	9
d. All other central securities depositories, securities settlement systems, central counterparties, and trade repositories.....	9
e. Other systemically important offshore and cross-border payment systems.....	9
2. Transparency	9
C. General policy expectations for other payment systems within the scope of the policy	10
1. Establishment of a risk-management framework.....	11
a. Identify risks clearly and set sound risk-management objectives	11
b. Establish sound governance arrangements to oversee the risk-management framework.....	12
c. Establish clear and appropriate rules and procedures to carry out the risk-management objectives	12
d. Employ the resources necessary to achieve the system’s risk-management objectives and implement effectively its rules and procedures	12
2. Other considerations for a risk-management framework.....	12
D. Cooperation with other authorities in regulating, supervising, and overseeing financial market infrastructures.....	13
PART II. FEDERAL RESERVE INTRADAY CREDIT POLICIES.....	15
A. Daylight overdraft definition and measurement	15
B. Collateral	19

C. Pricing	19
D. Net debit caps	20
1. Definition	20
2. Cap categories	21
a. Self-assessed	22
b. De minimis	23
c. Exempt-from-filing	24
d. Zero	24
3. Capital measure	24
a. U.S.-chartered institutions	24
b. U.S. branches and agencies of foreign banks	25
E. Maximum daylight overdraft capacity	25
1. General procedure	26
2. Streamlined procedure for certain FBOs	27
F. Special situations	27
1. Edge and agreement corporations	28
2. Bankers' banks	28
3. Limited-purpose trust companies	29
4. Government-sponsored enterprises and international organizations	29
5. Problem institutions	29
G. Monitoring	30
1. Ex post	30
2. Real time	30
3. Multi-District institutions	30
H. Transfer-size limit on book-entry securities	31

APPENDIX – CPSS-IOSCO PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURES	32
--	----

INTRODUCTION

Financial market infrastructures (FMIs) are critical components of the nation’s financial system. FMIs are multilateral systems among participating financial institutions, including the system operator, used for the purposes of clearing, settling, or recording payments, securities, derivatives, or other financial transactions.^{1, 2} FMIs include payment systems, central securities depositories, securities settlement systems, central counterparties, and trade repositories. The safety and efficiency of these systems may affect the safety and soundness of U.S. financial institutions and, in many cases, are vital to the financial stability of the United States. Given the importance of FMIs, the Board of Governors of the Federal Reserve System (Board) has developed this policy to set out the Board’s views, and related standards, regarding the management of risks that FMIs present to the financial system and to the Federal Reserve Banks (Reserve Banks). In adopting this policy, the Board’s objective is to foster the safety and efficiency of payment, clearing, settlement, and recording systems and to promote financial stability, more broadly.

Part I of this policy sets out the Board’s views, and related standards, regarding the management of risks in FMIs, including those operated by the Reserve Banks. In setting out its views, the Board seeks to encourage FMIs and their primary regulators to take the standards in this policy into consideration in the design, operation, monitoring, and assessment of these systems. The Board will be guided by this part, in conjunction with relevant laws, regulations, and other Federal Reserve policies, when exercising its supervisory and regulatory authority over FMIs or their participants, providing accounts and services to FMIs, participating in cooperative oversight and similar arrangements for FMIs with other authorities, or providing intraday credit to eligible Federal Reserve account holders. Designated financial market utilities subject to the Board’s Regulation HH are not subject to the risk-management or transparency expectations set out in this policy.³

Part II of this policy governs the provision of intraday credit or “daylight overdrafts” in accounts at the Reserve Banks and sets out the general methods used by the Reserve Banks to

¹ This definition is based on the definition provided in the Committee on Payment and Settlement Systems (CPSS) and Technical Committee of the International Organization of Securities Commissions (IOSCO) report on *Principles for Financial Market Infrastructures* (PFMI), April 2012, available at <http://www.bis.org/cpmi/publ/d101a.pdf>. (Effective September 2014, the CPSS changed its name to the Committee on Payments and Market Infrastructures.) Further, an FMI generally embodies one or more of the following characteristics: (1) a multilateral arrangement with three or more participants; (2) a set of rules and procedures, common to all participants, that govern the clearing (comparison and/or netting), settlement, or recording of payments, securities, derivatives, or other financial transactions; (3) a common technical infrastructure for conducting the clearing, settlement, or recording process; and (4) a risk-management or capital structure that takes into account the multilateral dependencies inherent in the system.

² The term “financial institution,” as used in this policy, refers to a broad array of organizations that engage in financial activity, including depository institutions, securities dealers, and futures commission merchants.

³ The term “financial market utility” is defined in Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) as “any person that manages or operates a multilateral system for the purpose of transferring, clearing, or settling payments, securities, or other financial transactions among financial institutions or between financial institutions and the person.” Trade repositories, which the Dodd-Frank Act defines as providing “facilities for comparison of data respecting the terms of settlement of securities or futures transactions,” are not included in the term “financial market utility” (12 U.S.C. 5462). Financial market utilities are, therefore, a subset of the broader set of entities defined as FMIs. Under Title VIII, the Financial Stability Oversight Council designates certain financial market utilities as systemically important. The Board’s Regulation HH is discussed in section I.B.1.b below.

control their intraday credit exposures.⁴ Under this part, the Board recognizes that the Federal Reserve has an important role in providing intraday balances and credit to foster the smooth operation of the payment system. The Reserve Banks provide intraday balances by way of supplying temporary, intraday credit to healthy depository institutions, predominantly through collateralized intraday overdrafts.⁵ The Board believes that such a strategy enhances intraday liquidity while controlling risk to the Reserve Banks by providing incentives to collateralize daylight overdrafts. The Board also aims to limit the burden of the policy on healthy depository institutions that use small amounts of intraday credit.

Through this policy, the Board expects financial system participants, including private-sector FMIs and the Reserve Banks, to reduce and control settlement and other systemic risks arising in FMIs, consistent with the smooth operation of the financial system. This policy is also designed to govern the provision of intraday balances and credit while controlling the Reserve Banks' risk by (1) making financial system participants and FMIs aware of the types of basic risks that may arise in the payment, clearing, settlement, or recording process; (2) setting explicit risk-management expectations; (3) promoting appropriate transparency by FMIs to help inform participants and the public; and (4) establishing the policy conditions governing the provision of Federal Reserve intraday credit to eligible account holders. The Board's adoption of this policy in no way diminishes the primary responsibilities of financial system participants to address the risks that may arise through their operation of or participation in FMIs.

RISKS IN PAYMENT, CLEARING, SETTLEMENT, AND RECORDING SYSTEMS

The basic risks in payment, clearing, settlement, and recording systems may include credit risk, liquidity risk, operational risk, and legal risk. In the context of this policy, these risks are defined as follows:⁶

- Credit risk: the risk that a counterparty, whether a participant or other entity, will be unable to meet fully its financial obligations when due, or at any time in the future.
- Liquidity risk: the risk that a counterparty, whether a participant or other entity, will be unable to meet fully its financial obligations when due, although it may be able to do so in the future. An FMI, through its design or operation, may bear or generate liquidity risk in one or more currencies in its payment or settlement process.⁷ In this context, liquidity risk may arise between or among the system operator and the participants in the FMI, the

⁴ To assist depository institutions in implementing part II of this policy, the Board has prepared two documents, the *Overview of the Federal Reserve's Payment System Risk Policy* (Overview) and the *Guide to the Federal Reserve's Payment System Risk Policy* (Guide), which are available at http://www.federalreserve.gov/paymentsystems/psr_relpolicies.htm. The Overview summarizes the Board's policy on the provision of intraday credit, including net debit caps and daylight overdraft fees, and is intended for use by institutions that incur only small amounts of 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.

⁵ The term "depository institution," as used in this policy, refers not only to institutions defined as depository institutions in 12 U.S.C. 461(b)(1)(A), but also to U.S. branches and agencies of foreign banking organizations, Edge and agreement corporations, trust companies, and bankers' banks, unless the context indicates a different reading.

⁶ The definitions of credit risk, liquidity risk, operational risk, and legal risk are consistent with those presented in the PFMI.

⁷ Deliveries of currency are payments, and FMIs that conduct such activity should consider these deliveries to be payments in the management of liquidity risk.

system operator and other entities (such as settlement banks, nostro agents, or liquidity providers), the participants in the FMI and other entities, or two or more participants in the FMI.

- Operational risk: the risk that deficiencies in information systems or internal processes, human errors, management failures, or disruptions from external events will result in the reduction, deterioration, or breakdown of services provided by the FMI.⁸
- Legal risk: the risk of loss from the unexpected or uncertain application of a law or regulation.

These risks also arise between financial institutions as they clear, settle, and record payments and other financial transactions and must be managed by institutions, both individually and collectively.⁹

Further, FMIs may increase, shift, concentrate, or otherwise transform risks in unanticipated ways. FMIs, for example, may pose systemic risk to the financial system because the inability of one or more of its participants to perform as expected may cause other participants to be unable to meet their obligations when due. The failure of one or more of an FMI's participants to settle their payments or other financial transactions as expected, in turn, could create credit or liquidity problems for participants and their customers, the system operator, other financial institutions, and the financial markets the FMI serves. Thus, such a failure might lead ultimately to a disruption in the financial markets more broadly and undermine public confidence in the nation's financial system.

Mitigating the risks that arise in FMIs is especially important because of the interdependencies such systems inherently create among financial institutions. In many cases, interdependencies are a normal part of an FMI's structure or operations. Although they can facilitate the safety and efficiency of the FMI's payment, clearing, settlement, or recording processes, interdependencies can also present an important source or transmission channel of systemic risk. Disruptions can originate from any of the interdependent entities, including the system operator, the participants in the FMI, and other systems, and can spread quickly and widely across markets if the risks that arise among these parties are not adequately measured, monitored, and managed. For example, interdependencies often create complex and time-sensitive transaction and payment flows that, in combination with an FMI's design, can lead to significant demands for intraday credit or liquidity, on either a regular or an extraordinary basis.

The Board recognizes that the Reserve Banks, as settlement institutions, have an important role in providing intraday balances and credit to foster the smooth operation and timely completion of money settlement processes among financial institutions and between financial institutions and FMIs. To the extent that the Reserve Banks are the source of intraday credit, they may face a risk of loss if such intraday credit is not repaid as planned. In addition,

⁸ Operational risk also includes physical threats, such as natural disasters and terrorist attacks, and information security threats, such as cyberattacks. Further, deficiencies in information systems or internal processes include errors or delays in processing, system outages, insufficient capacity, fraud, data loss, and leakage.

⁹ Several existing regulatory and bank supervision guidelines and policies also are directed at financial institutions' management of the risks posed by interbank payment and settlement activity. For example, the Board's Regulation F (12 CFR Part 206) directs insured depository institutions to establish policies and procedures to avoid excessive exposures to any other depository institution, including exposures that may be generated through the clearing and settlement of payments.

measures taken by Reserve Banks to limit their intraday credit exposures may shift some or all of the associated risks to financial institutions and FMIs.

In addition, mitigating the risks that arise in certain FMIs is critical to the areas of monetary policy and banking supervision. The effective implementation of monetary policy, for example, depends on both the orderly settlement of open market operations and the efficient movement of funds throughout the financial system via the financial markets and the FMIs that support those markets. Likewise, supervisory objectives regarding the safety and soundness of financial institutions must take into account the risks FMIs, both in the United States and abroad, pose to financial institutions that participate directly or indirectly in, or provide settlement, custody, or credit services to, such systems.

PART I. RISK MANAGEMENT FOR FINANCIAL MARKET INFRASTRUCTURES

This part sets out the Board’s views, and related standards, regarding the management of risks in FMIs, including those operated by the Reserve Banks. The Board will be guided by this part, in conjunction with relevant laws, regulations, and other Federal Reserve policies, when exercising its authority in (1) supervising the Reserve Banks under the Federal Reserve Act; (2) supervising state member banks, Edge and agreement corporations, and bank holding companies, including the exercise of authority under the Bank Service Company Act, where applicable; (3) carrying out certain of its responsibilities under Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act); (4) setting or reviewing the terms and conditions for the use of Reserve Bank accounts and services; and (5) developing and applying policies for the provision of intraday liquidity to eligible Reserve Bank account holders. This part will also guide the Board, as appropriate, in its interactions and cooperative efforts with other domestic and foreign authorities that have responsibilities for regulating, supervising, or overseeing FMIs within the scope of this part. The Board’s adoption of this policy is not intended to exert or create supervisory or regulatory authority over any particular class of institutions or arrangements where the Board does not have such authority.

A. Scope

FMIs within the scope of part I include public- and private-sector payment systems that expect to settle a daily aggregate gross value of U.S. dollar-denominated transactions exceeding \$5 billion on any day during the next 12 months.^{10, 11} FMIs within the scope of this part also include central securities depositories, securities settlement systems, central counterparties, and trade repositories irrespective of the value or nature of the transactions processed by the system.¹² These FMIs may be organized, located, or operated within the United States (domestic

¹⁰ A “payment system” is a set of instruments, procedures, and rules for the transfer of funds between or among participants. Payment systems include, but are not limited to, large-value funds transfer systems, automated clearinghouse systems, check clearinghouses, and credit and debit card settlement systems. The scope of this policy also includes payment-versus-payment settlement systems for foreign exchange transactions.

¹¹ In determining whether it is included in the scope of this policy, a payment system should look at its projected “next” twelve-month period. “Aggregate gross value of U.S. dollar-denominated transactions” refers to the total dollar value of individual U.S. dollar transactions settled in the payment system, which also represents the sum of total U.S. dollar debits (or credits) to all participants before or in absence of any netting of transactions.

¹² A “central securities depository” is an entity that provides securities accounts and central safekeeping services. A “securities settlement system” is an entity that enables securities to be transferred and settled by book entry and allows transfers of securities free of or against payment. A “central counterparty” is an entity that interposes itself

systems), outside the United States (offshore systems), or both (cross-border systems) and may involve currencies other than the U.S. dollar (non-U.S. dollar systems and multi-currency systems).¹³ The scope of the policy also includes any payment system based or operated in the United States that engages in the settlement of non-U.S. dollar transactions if that payment system would be otherwise subject to the policy.¹⁴

Part I does not apply to market infrastructures such as trading exchanges, trade-execution facilities, or multilateral trade-compression systems. This part is also not intended to apply to bilateral payment, clearing, or settlement relationships, where an FMI is not involved, between financial institutions and their customers, such as traditional correspondent banking and government securities clearing services. The Board believes that these market infrastructures and relationships do not constitute FMIs for purposes of this policy and that risk-management issues associated with these market infrastructures and relationships are more appropriately addressed through other relevant supervisory and regulatory processes.

B. Policy expectations for certain financial market infrastructures

This section sets out the Board's views, and related standards, with respect to risk-management and transparency for the subset of FMIs described below in section B.1, including the Reserve Banks' Fedwire Funds Service and Fedwire Securities Service (collectively, Fedwire Services). The Board believes these FMIs should have comprehensive risk management as well as a high degree of transparency.

1. Risk management

Authorities, including central banks, have promoted sound risk-management practices by developing internationally accepted minimum standards that promote the safety and efficiency of FMIs. Specifically, the Committee on Payment and Settlement Systems (CPSS) and Technical Committee of the International Organization of Securities Commissions (IOSCO) report on *Principles for Financial Market Infrastructures* (PFMI) establishes minimum standards for payment systems that are systemically important, central securities depositories, securities settlement systems, central counterparties, and trade repositories for addressing areas such as legal risk, governance, credit and liquidity risks, general business risk, operational risk, and other types of risk.¹⁵ The PFMI reflects broad market input and has been widely recognized, supported, and endorsed by U.S. authorities, including the Federal Reserve, U.S. Securities and Exchange Commission (SEC), and U.S. Commodity Futures Trading Commission (CFTC). These standards are also part of the Financial Stability Board's (FSB's) Key Standards for Sound Financial Systems.¹⁶

between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer. A "trade repository" is an entity that maintains a centralized electronic record of transaction data. These definitions are based on those in the PFMI.

¹³ Non-U.S. dollar systems may be of interest to the Board if they are used by U.S. financial institutions or may have the ability to affect financial stability, more broadly.

¹⁴ The daily gross value threshold will be calculated on a U.S. dollar equivalent basis.

¹⁵ In addition to these risk-management standards, the PFMI sets out responsibilities for authorities for FMIs, including central banks, in order to provide for effective regulation, supervision, and oversight of FMIs.

¹⁶ The FSB's Key Standards for Sound Financial Systems are available at http://www.financialstabilityboard.org/cos/key_standards.htm. The FSB is an international forum that was

The Board believes that the implementation of the PFMI by the FMIs within the scope of this section will help promote their safety and efficiency in the financial system and foster greater financial stability in the domestic and global economy. Accordingly, the Board has incorporated into the PSR policy principles 1 through 24 from the PFMI, as set forth in the appendix.¹⁷ In applying part I of this policy, the Board will be guided by the key considerations and explanatory notes from the PFMI as well as its interpretation of the corresponding provisions of Regulation HH.¹⁸

a. Fedwire Services

The Board recognizes the critical role the Reserve Banks' Fedwire Services play in the financial system and requires them to meet or exceed the standards set forth in the appendix to this policy, consistent with the guidance on central bank-operated systems provided in the PFMI and with the requirements in the Monetary Control Act.¹⁹

b. Designated financial market utilities for which the Board is the Supervisory Agency under Title VIII of the Dodd-Frank Act

The Board's Regulation HH imposes risk-management standards applicable to a designated financial market utility for which the Board is the Supervisory Agency.²⁰ The risk-management standards in Regulation HH are based on the PFMI. As required under Title VIII of the Dodd-Frank Act, the risk-management standards seek to promote robust risk management, promote safety and soundness, reduce systemic risks, and support the stability of the broader financial system. Designated financial market utilities for which the Board is the Supervisory Agency are required to comply with the risk-management standards in Regulation HH and are not subject to the standards in the appendix.

established to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies. The FSB includes the U.S. Department of the Treasury, the Board, and the SEC.

¹⁷ The Board's Regulation HH contains risk-management standards that are based on the PFMI for certain designated financial market utilities. Regulation HH (12 CFR Part 234) is available at <http://www.federalreserve.gov/bankinforeg/reglisting.htm#HH>.

¹⁸ The Board will also look to the CPSS-IOSCO *Principles for Financial Market Infrastructures: Disclosure Framework and Assessment Methodology*, which is available at <http://www.bis.org/cpmi/publ/d106.pdf>, and other related documents.

¹⁹ Certain standards may require flexibility in the way they are applied to central bank-operated systems because of central banks' unique role in the financial markets and their public responsibilities. These principles include principle 2 on governance, principle 3 on the framework for the comprehensive management of risks, principle 4 on credit risk, principle 5 on collateral, principle 7 on liquidity risk, principle 13 on participant-default rules and procedures, principle 15 on general business risk, and principle 18 on access and participation requirements. For instance, the Reserve Banks should refer to part II of this policy for managing their credit risk arising from the provision of intraday credit to users of the Fedwire Services.

²⁰ The term "Supervisory Agency" is defined in Title VIII as the "Federal agency that has primary jurisdiction over a designated financial market utility under Federal banking, securities, or commodity futures laws" (12 U.S.C. 5462(8)). Under Title VIII, the Board must prescribe risk-management standards for designated financial market utilities for which the Board or another Federal banking agency is the appropriate Supervisory Agency (12 U.S.C. 5464(a)). There are currently no designated financial market utilities for which another federal banking agency is the Supervisory Agency.

c. Other financial market infrastructures that are subject to the Board’s supervisory authority under the Federal Reserve Act

The Board expects all other FMIs that are subject to its supervisory authority under the Federal Reserve Act, including FMIs that are members of the Federal Reserve System, to meet or exceed the risk-management standards in the appendix.

d. All other central securities depositories, securities settlement systems, central counterparties, and trade repositories

The Board encourages all other central securities depositories, securities settlement systems, central counterparties, and trade repositories, whether they are located within or outside the United States, to meet or exceed the risk-management standards in the appendix to this policy. Where the Board does not have authority over a central securities depository, securities settlement system, central counterparty, or trade repository, the Board will be guided by this policy in its cooperative efforts with other FMI authorities.

e. Other systemically important offshore and cross-border payment systems

The Board encourages systemically important offshore and cross-border payment systems that are not included in any of the categories above to meet or exceed the risk-management standards in the appendix to this policy.²¹ The Board will be guided by this policy in its cooperative efforts with other payment system authorities.

2. Transparency

Transparency helps ensure that relevant information is provided to an FMI’s participants, authorities, and the public to inform sound decisionmaking, improve risk management, enable market discipline, and foster confidence in markets more broadly. In particular, public disclosures play a critical role in allowing current and prospective participants, as well as other stakeholders, to understand an FMI’s operations and the risks associated with using its services and to manage more effectively their risks with respect to the FMI. The Board believes that FMIs are well-positioned to provide the information necessary to support greater market transparency and to maintain financial stability.

The Board expects an FMI that is subject to its supervisory authority, but not subject to Regulation HH, to disclose to its participants information about the risks and costs that they incur by participating in the FMI, consistent with the requirements in principle 23 in the appendix.²² At a minimum, the FMI should disclose to its participants overviews of the FMI’s system design and operations, rules and key procedures, key highlights of business continuity arrangements, fees and other material costs, aggregate transaction volumes and values, levels of financial resources that can be used to cover participant defaults, and other information that would facilitate its participants’ understanding of the FMI and its operations and their evaluation of the risks associated with using that FMI.

In addition, the Board expects such an FMI to complete the disclosure framework set forth in the CPSS-IOSCO *Principles for Financial Market Infrastructures: Disclosure*

²¹ These systems may be used by U.S. financial institutions, clear or settle U.S. dollars, or have the ability to affect financial stability, more broadly.

²² The Board’s Regulation HH imposes an equivalent public disclosure requirement.

Framework and Assessment Methodology (“disclosure framework” and “assessment methodology”).²³ The disclosure framework establishes the international baseline set of information that all FMIs are expected to disclose publicly and review regularly.²⁴ An FMI is encouraged to use the guiding questions in the assessment methodology to guide the content and level of detail in their disclosures. The Board expects each FMI to make its disclosure readily available to the public, such as by posting it on the FMI’s public website, to achieve maximum transparency.

To ensure each FMI’s accountability for the accuracy and completeness of its disclosure, the Board expects the FMI’s senior management and board of directors to review and approve each disclosure upon completion. Further, in order for an FMI’s disclosure to reflect its current rules, procedures, and operations, the Board expects the FMI to update the relevant parts of its disclosure following changes to the FMI or the environment in which it operates, which would significantly change the accuracy of the statements in its disclosure. At a minimum, the FMI is expected to review and update as warranted its disclosure every two years.

As part of its ongoing oversight of FMIs, the Board will review public disclosures by FMIs subject to its supervisory authority to ensure that the Board’s policy objectives and expectations are being met.²⁵ Where necessary, the Board will provide feedback to the FMIs regarding the content of these disclosures and their effectiveness in achieving the policy objectives discussed above.²⁶ The Board acknowledges that FMIs vary in terms of the scope of instruments they settle and markets they serve. It also recognizes that FMIs may operate under different legal and regulatory constraints, charters, and corporate structures. The Board will consider these factors when reviewing the disclosures and in evaluating how an FMI addresses a particular standard. Where the Board does not have statutory or exclusive authority over an FMI, it will be guided by this policy in cooperative efforts with other domestic or foreign authorities to promote comprehensive disclosures by FMIs as a means to achieve greater safety and efficiency in the financial system.

C. General policy expectations for other payment systems within the scope of the policy

The Board encourages payment systems within the scope of this policy, but that are not included in any of the categories in section B above, to implement a general risk-management framework appropriate for the risks the payment system poses to the system operator, system participants, and other relevant parties as well as the financial system more broadly.

²³ See CPSS-IOSCO, *Principles for Financial Market Infrastructures: Disclosure Framework and Assessment Methodology*, December 2012, available at <http://www.bis.org/cpmi/publ/d106.pdf>.

²⁴ Although the Board expects disclosures to be robust, it does not expect FMIs to disclose to the public sensitive information that could expose system vulnerabilities or otherwise put the FMI at risk (for example, specific business continuity plans).

²⁵ Any review of a disclosure by the Board should not be viewed as an approval or guarantee of the accuracy of an FMI’s disclosure. Without the express approval of the Board, an FMI may not state that its disclosure has been reviewed, endorsed, approved, or otherwise not objected to by the Board.

²⁶ If the Board materially disagrees with the content of an FMI’s disclosure, it will communicate its concerns to the FMI’s senior management and possibly to its board of directors, as appropriate. The Board may also discuss its concerns with other relevant authorities, as appropriate.

1. Establishment of a risk-management framework

A risk-management framework is the set of objectives, policies, arrangements, procedures, and resources that a system employs to limit and manage risk. Although there are a number of ways to structure a sound risk-management framework, all frameworks should

- a. identify risks clearly and set sound risk-management objectives;
- b. establish sound governance arrangements to oversee the risk-management framework;
- c. establish clear and appropriate rules and procedures to carry out the risk-management objectives; and
- d. employ the resources necessary to achieve the system's risk-management objectives and implement effectively its rules and procedures.

a. Identify risks clearly and set sound risk-management objectives

The first element of a sound risk-management framework is the clear identification of all risks that have the potential to arise in or result from the system's settlement process and the development of clear and transparent objectives regarding the system's tolerance for and management of such risks. System operators should identify the forms of risk present in their system's settlement process as well as the parties posing and bearing each risk. In particular, system operators should identify the risks posed to and borne by them, the system participants, and other key parties such as a system's settlement banks, custody banks, and third-party service providers. System operators should also analyze whether risks might be imposed on other external parties and the financial system more broadly.

In addition, system operators should analyze how risk is transformed or concentrated by the settlement process. System operators should also consider the possibility that attempts to limit one type of risk could lead to an increase in another type of risk. Moreover, system operators should be aware of risks that might be unique to certain instruments, participants, or market practices. Where payment systems have inter-relationships with or dependencies on other FMIs, system operators should also analyze whether and to what extent any cross-system risks exist and who bears them.

Using their clear identification of risks, system operators should establish the risk tolerance of the system, including the levels of risk exposure that are acceptable to the system operator, system participants, and other relevant parties. System operators should then set risk-management objectives that clearly allocate acceptable risks among the relevant parties and set out strategies to manage this risk. Risk-management objectives should be consistent with the objectives of this policy, the system's business purposes, and the type of payment instruments and markets for which the system clears and settles. Risk-management objectives should also be communicated to and understood by both the system operator's staff and system participants.

System operators should reevaluate their risks in conjunction with any major changes in the settlement process or operations, the transactions settled, the system's rules or procedures, or the relevant legal and market environments. System operators should review the risk-management objectives regularly to ensure that they are appropriate for the risks posed by the system, continue to be aligned with the system's purposes, remain consistent with this policy, and are being effectively adhered to by the system operator and participants.

b. Establish sound governance arrangements to oversee the risk-management framework

Systems should have sound governance arrangements to implement and oversee their risk-management frameworks. The responsibility for sound governance rests with a system operator's board of directors or similar body and with the system operator's senior management. Governance structures and processes should be transparent; enable the establishment of clear risk-management objectives; set and enforce clear lines of responsibility and accountability for achieving these objectives; ensure that there is appropriate oversight of the risk-management process; and enable the effective use of information reported by the system operator's management, internal auditors, and external auditors to monitor the performance of the risk-management process.²⁷ Individuals responsible for governance should be qualified for their positions, understand their responsibilities, and understand their system's risk-management framework. Governance arrangements should also ensure that risk-management information is shared in forms, and at times, that allow individuals responsible for governance to fulfill their duties effectively.

c. Establish clear and appropriate rules and procedures to carry out the risk-management objectives

Systems should have rules and procedures that are appropriate and sufficient to carry out the system's risk-management objectives and that are consistent with its legal framework. Such rules and procedures should specify the respective responsibilities of the system operator, system participants, and other relevant parties. Rules and procedures should establish the key features of a system's settlement and risk-management design and specify clear and transparent crisis management procedures and settlement failure procedures, if applicable.²⁸

d. Employ the resources necessary to achieve the system's risk-management objectives and implement effectively its rules and procedures

System operators should ensure that the appropriate resources and processes are in place to allow the system to achieve its risk-management objectives and implement effectively its rules and procedures. In particular, the system operator's staff should have the appropriate skills, information, and tools to apply the system's rules and procedures and achieve the system's risk-management objectives. System operators should also ensure that their facilities and contingency arrangements, including any information system resources, are sufficient to meet their risk-management objectives.

2. Other considerations for a risk-management framework

Payment systems differ widely in form, function, scale, and scope of activities, and these characteristics result in differing combinations and levels of risks. Thus, the exact features of a system's risk-management framework should be tailored to the risks of that system. The specific

²⁷ The risk-management and internal audit functions should also be independent of those responsible for day-to-day functions.

²⁸ Examples of key features that might be specified in a system's rules and procedures are controls to limit participant-based risks, such as membership criteria based on participants' financial and operational health; limits on credit exposures; and the procedures and resources to liquidate collateral. Other examples of key features might be business continuity requirements and loss-allocation procedures.

features of a risk-management framework may entail tradeoffs between efficiency and risk reduction, and payment systems will need to consider these tradeoffs when designing appropriate rules and procedures. In considering such tradeoffs, however, it is critically important that system operators take into account the costs and risks that may be imposed on all relevant parties, including parties with no direct role in the system. Furthermore, in light of rapidly evolving technologies and risk-management practices, the Board encourages all system operators to consider making risk-management improvements when cost-effective.

The Board may seek to understand how a system achieves the four elements of a sound risk-management framework set out above. In this context, the Board may seek to obtain information from system operators regarding their risk-management framework, risk-management objectives, rules and procedures, significant legal analyses, general risk analyses, analyses of the credit and liquidity effects of settlement disruptions, business continuity plans, crisis management procedures, and other relevant documentation.²⁹ The Board also may seek to obtain data or statistics on system activity on an ad hoc or ongoing basis. All information provided to the Federal Reserve for the purposes of this policy will be handled in accordance with all applicable Federal Reserve policies on information security, confidentiality, and conflicts of interest.

D. Cooperation with other authorities in regulating, supervising, and overseeing financial market infrastructures

When the Board does not have statutory or exclusive authority over an FMI covered by this policy, this section will guide the Board, as appropriate, in its interactions with other domestic and foreign authorities to promote effective risk management in and transparency by FMIs. For example, the Federal Reserve may have an interest in the safety and efficiency of FMIs outside the United States that are subject to regulation, supervision, or oversight by another authority but that provide services to financial institutions supervised by the Board or conduct activity that involves the U.S. dollar.³⁰ In its interactions with other domestic and foreign authorities, the Board will encourage these authorities to adopt and to apply the internationally accepted principles set forth in the appendix when evaluating the risks posed by and to FMIs and individual system participants that these authorities regulate, supervise, or oversee.

In working with other authorities, the Board will seek to establish arrangements for effective and practical cooperation that promote sound risk-management outcomes. The Board believes that cooperative arrangements among relevant authorities can be an effective mechanism for, among other things, (1) sharing relevant information concerning the policies, procedures, and operations of an FMI; (2) sharing supervisory views regarding an FMI; (3) discussing and promoting the application of robust risk-management standards; and (4) serving as a forum for effective communication, coordination, and consultation during normal circumstances, as well as periods of market stress.

²⁹ To facilitate analysis of settlement disruptions, 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. Such simulations may need to include, if appropriate, the effects of changes in market prices, volatilities, or other factors.

³⁰ An FMI may be subject to supervision or oversight by the Board and other authorities, as a result of its legal framework, operating structure (for example, multi-currency or cross-border systems), or participant base. In such cases, the Board will be sensitive to the potential for duplicative or conflicting requirements, oversight gaps, or unnecessary costs and burdens imposed on the FMI.

When establishing such cooperative arrangements, the Board will be guided, as appropriate, by international principles on cooperative arrangements for the regulation, supervision, and oversight of FMIs. In particular, responsibility E in the PFMI addresses domestic and international cooperation among central banks, market regulators, and other relevant authorities and provides guidance to these entities for supporting each other in fulfilling their respective mandates with respect to FMIs. The CPSS report on *Central Bank Oversight of Payment and Settlement Systems* also provides important guidance on international cooperation among central banks.³¹ The Board believes this international guidance provides important frameworks for cooperating and coordinating with other authorities to address risks in domestic, cross-border, multi-currency, and, where appropriate, offshore FMIs.

³¹ See *Central Bank Oversight of Payment and Settlement Systems*, part B on “Principles for international cooperative oversight,” May 2005, available at <http://www.bis.org/cpmi/publ/d68.pdf>.

PART II. FEDERAL RESERVE INTRADAY CREDIT POLICIES

This part outlines the methods used to provide intraday credit to ensure the smooth functioning of payment and settlement systems, while controlling credit risk to the Reserve Banks associated with such intraday credit. These methods include voluntary collateralization of intraday credit, a limit on total daylight overdrafts in institutions' Federal Reserve accounts, and a fee for uncollateralized daylight overdrafts. This part also provides a fee waiver to limit the impact of collateralization on depository institutions that use relatively small amounts of intraday credit.

To assist institutions in implementing this part of the policy, the Federal Reserve has prepared two documents: the *Overview of the Federal Reserve's Payment System Risk Policy on Intraday Credit* (Overview) and the *Guide to the Federal Reserve's Payment System Risk Policy on Intraday Credit* (Guide).³² The Overview summarizes the Board's policy on the provision of intraday credit, including net debit caps, daylight overdraft fees, and the fee waiver. This document is intended for use by institutions that incur only small amounts of 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.

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 overdrafts³³

Opening balance (previous day's closing balance)

Post throughout business day:

- +/- Fedwire funds transfers³⁴
- +/- Fedwire book-entry securities transfers
- +/- National Settlement Service entries.

³² Available at http://www.federalreserve.gov/paymentsystems/psr_relpolicies.htm.

³³ 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).

³⁴ Funds transfers that the Reserve Banks function for certain international organizations using internal systems other than payment processing systems such as Fedwire will be posted throughout the business day for purposes of measuring daylight overdrafts.

- + 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 States³⁵
- + 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.³⁶

Post at 8:30 a.m. eastern time:

- +/- Term deposit maturities and accrued interest
- +/- Government and commercial ACH transactions, including return items³⁷
- +/- Commercial check transactions, including returned checks³⁸
- + Treasury checks, postal money orders, local Federal Reserve Bank checks, and savings bond redemptions in separately sorted deposits; these items must be deposited by the latest applicable deposit deadline preceding the posting time
- + Advance-notice Treasury investments

³⁵ The GSEs include Federal National Mortgage Association (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 completed privatization at the end of 2004. The Reserve Banks no longer act as fiscal agents for new issues of Sallie Mae securities, and Sallie Mae is not considered a GSE.

The term “interest and redemption payments” refers to payments of principal, interest, and redemption on securities maintained on the Fedwire Securities Service.

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.

³⁶ 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.

³⁷ 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 a.m. 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>.

The federal government will not participate in the same-day ACH service upon initial implementation in September 2016. ACH forward transactions originated or received by the federal government will not be eligible for same-day settlement and will settle on the next business day, or on a future date as indicated by the effective settlement date.

³⁸ For the three commercial check transaction posting times, the Reserve Banks will post credits and debits to institutions' accounts for checks deposited and presented, respectively, at least 30 minutes before the posting time.

- Penalty assessments for tax payments from the Treasury Investment Program (TIP).³⁹

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
- + Credit corrections amounting to \$1 million or more⁴⁰
- + Credit adjustments amounting to \$1 million or more⁴¹
- 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

Post at 8:30 a.m., 1:00 p.m., and 6:30 p.m. eastern time:

- Main account Treasury withdrawals from TIP.⁴²

Post by 9:15 a.m. eastern time:

- + U.S. Treasury and government agency Fedwire book-entry interest and redemption payments⁴³
- + Electronic payments for U.S. Treasury and government agency matured coupons and definitive securities.⁴⁴

Post Beginning at 9:15 a.m. eastern time:

- Original issues of Treasury securities.⁴⁵

³⁹ 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.

⁴⁰ Corrections are account entries made to correct discrepancies detected by a Reserve Bank during the initial processing of checks.

⁴¹ Adjustments are account entries made to correct discrepancies detected by an institution after entries have posted to Federal Reserve accounts.

⁴² 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.

⁴³ 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.

⁴⁴ 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.

⁴⁵ 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.

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 and hourly thereafter:

- + Currency and coin deposits

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:

- +/- Commercial check transactions, including returned checks
- +/- FedACH SameDay Service transactions, including return items
- + Same-day Treasury investments.

Post at 5:00 p.m. eastern time:

- +/- FedACH SameDay Service transactions, including return items⁴⁶
- + Treasury checks, postal money orders, and savings bond redemptions in separately sorted deposits; these items must be deposited by the latest applicable deposit deadline preceding the posting time
- + Local Federal Reserve Bank checks; these items must be presented before 3:00 p.m. eastern time

Post at 5:30 p.m. eastern time:

- +/- FedACH SameDay Service return transactions
- +/- Commercial check transactions, including returned checks

Post at 6:30 p.m. eastern time:⁴⁷

- + Penalty Abatements from TIP.

Post after the close of Fedwire Funds Service:

- +/- All other transactions. These transactions include the following: currency and coin shipments; noncash collection; term-deposit settlements; Federal Reserve Bank checks presented after 3:00 p.m. eastern time but before 3:00 p.m. local time; foreign check transactions; small-dollar credit corrections and adjustments; term deposit settlements; and all debit corrections and

⁴⁶ Paper returns, FedLine Web returns, paper notifications of change (NOCs), and FedLine Web NOCs will only post at 8:30 a.m. and 5:00 p.m., depending on when the item is received by the Reserve Banks.

⁴⁷ 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.

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. Collateral

To help meet institutions' demand for intraday balances while mitigating Reserve Bank credit risk, the Board sets forth this policy whereby the Reserve Banks supply intraday balances and credit predominantly through explicitly collateralized daylight overdrafts to healthy depository institutions.⁴⁸ This policy offers pricing incentives to encourage greater collateralization (see section II.C.). To avoid disrupting the operation of the payment system and increasing the cost burden on a large number of institutions using small amounts of daylight overdrafts, the use of collateral is generally voluntary.⁴⁹

Collateral eligibility and margins remain the same for PSR policy purposes as for the discount window.⁵⁰ Unencumbered collateral can be used to collateralize daylight overdrafts.⁵¹ In-transit securities are eligible collateral to pledge for PSR purposes at Reserve Banks' discretion.⁵² All collateral must be acceptable to the Reserve Banks.

C. Pricing

Under the voluntary collateralization regime, the fee for collateralized overdrafts is zero, while the fee for uncollateralized overdrafts is 50 basis points. The two-tiered fee for collateralized and uncollateralized overdrafts is intended to provide a strong incentive for a depository institution to pledge collateral to its Reserve Bank to reduce or eliminate the institution's uncollateralized daylight overdrafts and associated charges for its use of intraday credit.

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 uncollateralized daylight overdraft charges during the period.

Daylight overdraft fees for uncollateralized overdrafts (or the uncollateralized portion of a partially collateralized overdraft) are calculated using an annual rate of 50 basis points, quoted

⁴⁸ Collateral is also used to manage risk posed by daylight overdrafts of problem institutions (institutions in a weak or deteriorating financial condition), entities not eligible for Federal Reserve intraday credit (see section II.F.), and institutions that have obtained maximum daylight overdraft capacity (see section II.E.).

⁴⁹ The Reserve Banks may require collateral in certain circumstances, such as when institutions breach their net debit caps.

⁵⁰ See <http://www.frbdiscountwindow.org/> for information on the discount window and PSR collateral acceptance policy and collateral margins.

⁵¹ Under some circumstances, rules for determining whether collateral is available may differ for PSR and discount window purposes.

⁵² In-transit securities are book-entry securities transferred over the Fedwire Securities Service that have been purchased by a depository institution but not yet paid for or owned by the institution's customers.

on the basis of a 24-hour day and a 360-day year. To obtain the effective annual rate for the standard Fedwire operating day, the 50-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 44.79 basis points (50 basis points multiplied by 21.5/24).⁵³ The effective daily rate is calculated by dividing the effective annual rate by 360.⁵⁴ An institution's daily daylight overdraft charge is equal to the effective daily rate multiplied by the institution's average daily uncollateralized daylight overdraft.

An institution's average daily uncollateralized daylight overdraft is calculated by dividing the sum of its negative uncollateralized 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. A negative uncollateralized Federal Reserve account balance is calculated by subtracting the unencumbered, net lendable value of collateral pledged from the total negative Federal Reserve account balance at the end of each minute. Each positive end-of-minute balance in an institution's Federal Reserve account is set to equal zero. Fully collateralized end-of-minute negative balances are similarly set to zero.

The daylight overdraft charge is reduced by a fee waiver of \$150, which is primarily intended to minimize the burden of the PSR policy on institutions that use small amounts of intraday credit. The waiver is subtracted from gross fees in a two-week reserve-maintenance period.⁵⁵

Certain institutions are subject to a penalty fee and modified daylight overdraft fee calculation as described in section II.F. The fee waiver is not available to these institutions.⁵⁶

D. Net debit caps

1. Definition

In accord with sound risk-management practices, to limit the amount of intraday credit that a Reserve Bank extends to an individual institution and the associated risk, each institution incurring daylight overdrafts in its Federal Reserve account must adopt a net debit cap, that is, a ceiling on the total daylight overdraft position that it can incur during any given day. 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. Granting a net debit cap, or any extension of intraday credit, to an institution is at the discretion of the Reserve Bank.

⁵³ 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.

⁵⁴ Under the current 21.5-hour Fedwire operating day, the effective daily daylight-overdraft rate is truncated to 0.0000124.

⁵⁵ The waiver shall not result in refunds or credits to an institution and cannot be carried to another reserve maintenance period.

⁵⁶ The fee waiver is not available to Edge and agreement corporations, bankers' banks that have not waived their exemption from reserve requirements, limited-purpose trust companies, and government-sponsored enterprises and international organizations. These types of institutions do not have regular access to the discount window and, therefore, are expected not to incur daylight overdrafts in their Federal Reserve accounts.

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:

$$\text{net debit cap} = \text{cap multiple} \times \text{capital measure}$$

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

Net Debit Cap Multiples	
<u>Cap category</u>	<u>Cap multiple</u>
High	2.25
Above average	1.875
Average	1.125
De minimis	0.4
Exempt-from-filing ⁵⁷	\$10 million or 0.20
Zero	0

The cap is applied to the total of collateralized and uncollateralized daylight overdrafts.⁵⁸ For the treatment of overdrafts that exceed the cap, see section II.G.

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 further limit or prohibit an institution’s use of Federal Reserve intraday credit if (1) the institution’s supervisor determines that the institution is unsafe or unsound; (2) the institution does not qualify for a positive net debit cap (see section II.D.2.); or (3) the Reserve Bank determines that the institution poses excessive risk.

While capital measures differ, the net debit cap provisions of this policy apply similarly to foreign banking organizations (FBOs) as to U.S. institutions. Consistent with practices for U.S.-chartered depository 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.

⁵⁷ The net debit cap for the exempt-from-filing category is equal to the lesser of \$10 million or 0.20 multiplied by the capital measure.

⁵⁸ Collateral will not increase the net debit cap limit. Institutions seeking capacity that exceeds the net debit cap need to apply for the maximum daylight overdraft capacity (see section II. E).

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, customer credit policies and controls, and operating controls and contingency procedures.⁵⁹ The assessment of creditworthiness is based on the institution's supervisory rating and Prompt Corrective Action (PCA) designation.⁶⁰ 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 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 the 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.⁶¹

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

⁵⁹ 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.

⁶⁰ 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).

⁶¹ An FBO should undergo the same self-assessment process as a U.S.-chartered institution 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.

discussion at the appropriate board of directors meeting concerning the institution's adoption of a cap category.⁶²

As part of its normal examination, the institution's examiners may review the contents of the self-assessment file.⁶³ 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. If an examiner has concerns, the Reserve Bank would 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 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 net debit cap during a two-week reserve-maintenance period and will decide if additional action should be taken (see section II.G.).

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 intraday credit up to the de minimis level. The Reserve Banks will review the status of any institution with a de minimis net debit cap that exceeds its net debit cap during a two-week reserve-maintenance period and will decide if additional action should be taken (see section II.G.).

⁶² 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.

⁶³ 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.

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 whether the exemption should be maintained, the institution should be required to file for a cap, or counseling should be performed (see section II.G.). The Reserve Bank will assign the exempt-from-filing net debit cap.

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 intraday credit. 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 II.F.). 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.⁶⁴ U.S. capital equivalency is equal to the following

- 35 percent of capital for FBOs that are financial holding companies (FHCs)⁶⁵
- 25 percent of capital for FBOs that are not FHCs and have a strength of support assessment ranking (SOSA) of 1⁶⁶
- 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

An FBO that is a FHC or has a SOSA rating of 1 may be eligible for a streamlined procedure (see section II.E.) for obtaining additional collateralized intraday credit under the maximum daylight overdraft capacity provision.

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.

E. Maximum daylight overdraft 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.⁶⁷ This policy is intended to provide extra

⁶⁴ 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.

⁶⁵ 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)).

⁶⁶ 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.

⁶⁷ 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.

All collateral must be acceptable to the Reserve Banks. The Reserve Banks may accept securities in transit on the Fedwire Securities Service as collateral to support the maximum daylight overdraft capacity level. Collateral

liquidity through the pledge of collateral to the few institutions that might otherwise be constrained from participating in risk-reducing payment system initiatives.⁶⁸ The Board believes that providing extra liquidity to these few institutions should help reduce liquidity-related market disruptions.

1. General procedure

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. The Reserve Bank 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:

$$\begin{aligned} \text{maximum daylight overdraft capacity} = \\ \text{net debit cap} + \\ \text{collateralized capacity}^{69} \end{aligned}$$

The Reserve Banks will review the status of any institution that exceeds its maximum daylight overdraft capacity 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 II.G.).

Institutions with exempt-from-filing and de minimis net debit caps may not obtain additional daylight overdraft capacity by pledging additional 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 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.

eligibility and margins are the same for PSR policy purposes as for the discount window. See <http://www.frbdiscowindow.org/> for information.

⁶⁸ 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, Nov. 2, 1994).

⁶⁹ 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 net debit cap.

2. Streamlined procedure for certain FBOs

An FBO that is a FHC or has a SOSA rating of 1 and has a self-assessed net debit cap may request from its Reserve Bank a streamlined procedure to obtain a maximum daylight overdraft capacity. These FBOs are not required to provide documentation of the business need or obtain the board of directors' resolution for collateralized capacity in an amount that exceeds its current net debit cap (which is based on up to 35 percent worldwide capital times its cap multiple), as long as the requested total capacity is 100 percent or less of worldwide capital times a self-assessed cap multiple.⁷⁰ In order to ensure that intraday liquidity risk is managed appropriately and that the FBO will be able to repay daylight overdrafts, eligible FBOs under the streamlined procedure will be subject to initial and periodic reviews of liquidity plans that are analogous to the liquidity reviews undergone by U.S. institutions.⁷¹ If an eligible FBO requests capacity in excess of 100 percent of worldwide capital times the self-assessed cap multiple, it would be subject to the general procedure.

F. 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. 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 payment system, including risk to the Federal Reserve, with that of minimizing the adverse effects on the payment 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 (50 basis points) plus

⁷⁰ For example, a financial holding company is eligible for uncollateralized capacity of 35 percent of worldwide capital times the cap multiple. The streamlined max cap procedure would provide such an institution with additional collateralized capacity of 65 percent of worldwide capital times the cap multiple.

⁷¹ The liquidity reviews will be conducted by the administrative Reserve Bank, in consultation with each FBO's home country supervisor.

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 360.⁷² The daylight-overdraft penalty rate applies to the institution's daily average 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 this section.

Institutions that are subject to the daylight-overdraft penalty fee are not eligible for the \$150 fee waiver and are subject to a minimum fee of \$25 on any daylight overdrafts incurred in their Federal Reserve accounts. While such institutions may be required to post collateral, they are not eligible for the zero fee associated with collateralized daylight overdrafts.

1. Edge and agreement corporations⁷³

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 FBOs are treated in the same manner as their domestically owned counterparts.

2. Bankers' banks⁷⁴

Bankers' banks are exempt from reserve requirements and do not have regular access to the discount window. 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 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

⁷² Under the current 21.5-hour Fedwire operating day, the effective daily daylight-overdraft penalty rate is truncated to 0.0000373.

⁷³ 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)).

⁷⁴ For the purposes of this policy, 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)).

reserves as 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 that are eligible to incur daylight overdrafts. 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 companies⁷⁵

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 organizations⁷⁶

The Reserve Banks act as fiscal agents for certain GSEs and international organizations in accordance with federal statutes. These institutions, however, 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.

⁷⁵ For the purposes of this policy, 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)).

⁷⁶ The GSEs include Federal National Mortgage Association (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 completed privatization at the end of 2004. The Reserve Banks no longer act as fiscal agents for new issues of Sallie Mae securities, and Sallie Mae is not considered a GSE.

G. 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. Overdrafts above the cap for institutions with de minimis, self-assessed, and max caps may be treated differently, depending on whether the overdraft is collateralized.⁷⁷ If the overdraft is fully collateralized, the Reserve Bank may choose not to contact the institution for up to two incidents per two consecutive two-week reserve-maintenance periods (the total of four weeks).

Each Reserve Bank retains the right to protect its risk exposure from individual institutions by unilaterally reducing net debit caps, imposing (additional) collateralization or balance requirements, rejecting or delaying certain transactions as described below, or, in extreme cases, taking the institution offline or prohibiting it from using Fedwire.

2. Real time

A Reserve Bank will 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 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 (additional) collateral.⁷⁸

3. Multi-District institutions

An institution maintaining merger-transition accounts or an Edge or agreement corporation that accesses Fedwire through master accounts in more than one Federal Reserve District is expected to manage its accounts so that the total daylight overdraft position across all accounts does not exceed the institution's net debit cap. One Reserve Bank will act as the administrative Reserve Bank and will have overall risk-management responsibilities for an institution maintaining master 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.

U.S. branches and agencies of the same foreign bank (also referred to as an FBO family) are assigned one net debit cap per FBO family. FBO families that access Fedwire through master accounts in more than one Federal Reserve District are expected to manage their accounts so that the daylight overdraft position in each account does not exceed the capacity allocated to that account from the FBO family's net debit cap. The administrative Reserve Bank generally is

⁷⁷ For monitoring exempt institutions, overdrafts above the exempt cap limit, regardless of whether such overdrafts are collateralized or uncollateralized, should occur no more than twice in two consecutive two-week reserve-maintenance periods (the total of four weeks).

⁷⁸ Institutions that are monitored in real time must fund the total amount of their ACH credit originations through the Reserve Banks in order for the transactions to be processed by the Federal Reserve, even if those transactions are processed one or two days before settlement.

the Reserve Bank that exercises the Federal Reserve's oversight responsibilities under the International Banking Act.⁷⁹ 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 recommend that these agencies and branches not be permitted to incur overdrafts in Federal Reserve accounts. Alternatively, the administrative Reserve Bank, after similar consultation, may recommend that all or part of the foreign family's net debit cap be allocated 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 this policy.⁸⁰

H. 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).

⁷⁹ 12 U.S.C. 3101–3108.

⁸⁰ 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 for administering this policy regarding 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.

APPENDIX – CPSS-IOSCO PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURES

Principle 1: Legal basis

An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.

Principle 2: Governance

An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

Principle 3: Framework for the comprehensive management of risks

An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.

Principle 4: Credit risk

An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a central counterparty that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the central counterparty in extreme but plausible market conditions. All other central counterparties should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the central counterparty in extreme but plausible market conditions.

Principle 5: Collateral

An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.

Principle 6: Margin

A central counterparty should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.

Principle 7: Liquidity risk

An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited

to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.

Principle 8: Settlement finality

An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.

Principle 9: Money settlements

An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimize and strictly control the credit and liquidity risk arising from the use of commercial bank money.

Principle 10: Physical deliveries

An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

Principle 11: Central securities depositories

A central securities depository should have appropriate rules and procedures to help ensure the integrity of securities issues and minimize and manage the risks associated with the safekeeping and transfer of securities. A central securities depository should maintain securities in an immobilized or dematerialized form for their transfer by book entry.

Principle 12: Exchange-of-value settlement systems

If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

Principle 13: Participant-default rules and procedures

An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

Principle 14: Segregation and portability

A central counterparty should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the central counterparty with respect to those positions.

Principle 15: General business risk

An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialize. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Principle 16: Custody and investment risks

An FMI should safeguard its own and its participants' assets and minimize the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.

Principle 17: Operational risk

An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.

Principle 18: Access and participation requirements

An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

Principle 19: Tiered participation arrangements

An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.

Principle 20: FMI links

An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.

Principle 21: Efficiency and effectiveness

An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.

Principle 22: Communication procedures and standards

An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.

Principle 23: Disclosure of rules, key procedures, and market data

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.

Principle 24: Disclosure of market data by trade repositories

A trade repository should provide timely and accurate data to relevant authorities and the public in line with their respective needs.