The Bank of Japan
Policy on Oversight of
Financial Market Infrastructures

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Bank of Japan

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Contents

I. Introduction

The Bank of Japan, as is the case with other central banks, oversees financial market infrastructures (FMIs), so as to ensure the safety and efficiency of the overall FMI in Japan.

The term FMI refers to payment systems, central securities depositories (CSDs), securities settlement systems, central counterparties (CCPs) and trade repositories (TRs).[1] With the involvement of large numbers of participants and by centralizing the clearing, settlement, and recording of various financial transactions, FMIs strengthen the markets they serve and play a critical role in fostering financial stability.

Central bank oversight[2] of FMIs is defined as the central bank's activities to monitor the design, risk management, and operations of FMIs; to assess them against established safety and efficiency objectives; and to induce changes where necessary.[3] In their oversight of FMIs, central banks seek to establish a common understanding with FMI operators and other stakeholders on ways to maintain and improve the safety and efficiency of FMIs, and support their efforts for improvements. Through these activities, central banks aim to ensure the safety and efficiency not only in individual FMIs but also in the overall FMI in their respective economies.

In September 2002, the Bank published "Role of the Bank of Japan in Payment and Settlement Systems," which explained the Bank's basic oversight policy and the outline of oversight activities. Following the publication of the paper, a number of improvements were made in Japan's payment and settlement systems, including the establishment of new securities clearing and settlement systems, the dematerialization of major types of securities, and the expanded use of delivery versus payment (DVP) in securities settlement. Interdependencies among payment and settlement systems have increased both in Japan and abroad. Furthermore, following the experiences of the

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[1] For a definition of FMIs, see CPSS-IOSCO "Principles for Financial Market Infrastructures" (April 2012). For further details of the Principles, see footnote 5 and the related text in this policy statement. While the term "FMI" may be used to refer to both individual infrastructures and an economy's overall financial market infrastructure, in this paper, it generally refers to individual infrastructures. Since CSDs and securities settlement systems are operated as a single FMI in many countries including Japan, the term "securities settlement system" used in this paper includes CSD functions. Also, unless otherwise specified, payment systems, CSDs, securities settlement systems, and CCPs are collectively referred to as "payment and settlement systems."

[2] Among central banks and other FMI stakeholders, central bank activities of monitoring, assessing, and inducing changes to FMIs are usually referred to as "oversight." While the term "oversight" may also be used to refer to supervisory activities by FMI's supervisors, this policy statement focuses on "oversight" by central banks.

[3] CPSS "Central bank oversight of payment and settlement systems" (May 2005).

bankruptcy of Lehman Brothers Holdings in September 2008, good progress was made in various efforts to improve the safety of payment and settlement systems both in Japan and abroad. The government has also worked to enhance the legal framework for payment and settlements.

Taking into account such changes surrounding FMIs and the Bank's oversight activities since 2002, with an aim to better clarify the Bank's oversight objectives and policy, in May 2010, the Bank updated the relevant parts of the 2002 paper and released "Policy on Oversight of Payment and Settlement Systems" and "Policy on Oversight of Offshore Yen Payment Systems."

In April 2012, the Committee on Payment and Settlement Systems (CPSS)[4] and the International Organization of Securities Commissions (IOSCO) published "Principles for financial market infrastructures,"[5] after conducting a comprehensive review of the three existing sets of standards for payment and settlement systems.[6] The Principles expect central banks, supervisors, and other relevant authorities (collectively "relevant authorities") to adopt the Principles.[7] In line with this development, the Bank has decided to adopt the Principles and update its policy as "The Bank of Japan Policy on Oversight of Financial Market Infrastructures," which will be in effect from April 2013.

Ensuring the safety and efficiency of FMIs contributes to the stability of the overall financial system in Japan. It also promotes the use of individual FMIs and brings further benefits to its operators and participants. The Bank expects that the relevant stakeholders will gain a better understanding of the Bank's oversight activities through implementation of this policy. The Bank continues to make further efforts to ensure the safety and efficiency of FMIs in Japan in cooperation with domestic and foreign stakeholders, including the operators and participants of FMIs as well as relevant authorities.

[4] At the CPSS, member central banks monitor and analyze developments in payment and settlement systems and formulate international standards to be used in their oversight activities. The Bank as a member of CPSS is actively involved in the Committee's activities.
[5] Available at the BIS website (http://www.bis.org/publ/cpss101a.pdf).
[6] CPSS "Core principles for systemically important payment systems" (January 2001), CPSS-IOSCO "Recommendations for securities settlement systems" (November 2001), and CPSS-IOSCO "Recommendations for central counterparties" (November 2004).
[7] See Responsibility D of the "Principles for financial market infrastructures."

II. Financial Market Infrastructures (FMIs)

A. FMIs

FMI is defined as a multilateral infrastructure among participating institutions, including the operator of the infrastructure, used for the purposes of clearing, settling, or recording payments, securities, derivatives, or other financial transactions.[8] FMIs typically establish a set of common rules and procedures for all participants, a technical infrastructure, and a specialized risk-management framework appropriate to the risks they incur.

FMIs can in general be divided into four types of infrastructures: payment systems, securities settlement systems, CCPs, and TRs. A "payment system" is an arrangement for processing the transfer of funds, while a "securities settlement system" is an arrangement for custody and delivery of securities. A CCP is an arrangement for processing the clearing of obligations resulting from financial transactions, such as securities and derivatives transactions. A CCP replaces an obligation between two clearing members with a pair of obligations between the central counterparty and a clearing member.[9] A "trade repository" is an arrangement for processing the collection, storage, and dissemination of transaction data, such as those for OTC derivatives transactions.

As stated above, with the involvement of large numbers of participants and by centralizing the clearing, settlement, and recording of various financial transactions, FMIs strengthen the markets they serve and play a critical role in fostering financial stability.[10]

B. FMIs and Systemic Risk[11]

Systemic risk is the risk that the failure of a financial institution or the disruption in a financial market or an FMI will cause subsequent disruptions in other financial institutions, financial markets, or the financial system at large. A disruption can spread through various channels. For example, if one financial institution fails to settle its payment obligations, this could result in subsequent failures in FMIs or among other

[8] See paragraph 1.8 of the "Principles for financial market infrastructures."
[9] In addition, a CCP also settles the accepted obligations with the clearing members. In many cases, the number of obligations is reduced prior to settlement by netting of obligations.
[10] See paragraph 1.1 of the "Principles for financial market infrastructures."
[11] The description of systemic risk in this paper mainly focuses on risk associated with payment and settlement systems. TRs could also have an impact on other FMIs in the event of disruption to their services, for example through system linkages with CCPs and its participants (see section IV. A).

financial institutions. Furthermore, financial difficulties in one bank could trigger a situation in which a large number of depositors rush to their banks to withdraw deposits or investors cease to place their money in other marketable assets from a fear that their banks might also become insolvent. Ultimately, the unwillingness of market participants to engage in new transactions could lead to the drying up of market liquidity and the impairment of market functioning, possibly resulting in disruption in the overall financial and capital markets. With respect to oversight of FMIs, the most critical requirement is to prevent a chain of failures that could take place in the settlement of payment obligations.

When one party fails to make payments when due, this raises the risk that its counterparties, who will be making onward payments to other counterparties with the money received from the failing party, could also fail to make payments. FMIs process a large number of settlement instructions involving many participants. Therefore if one participant in a system fails to settle its payment obligations, it could lead to a chain of settlement failures involving other participants. Also if the smooth operation of an FMI is interrupted by computer malfunctions, settlement will be disrupted for all FMI participants. This could possibly have a negative impact on the settlements of other market participants or FMIs.

In this policy statement, as described above, "systemic risk" is defined as "the risk that a failure to settle by one financial institution or malfunctions in an FMI could cause subsequent settlement failures by other financial institutions or FMI participants."

C. Ensuring the Safety and Efficiency of FMIs

Should systemic disruptions or a chain of settlement failures occur, the overall financial system is quite likely to undergo immediate deterioration because the major players in funds transfers are in many cases financial institutions. This could have a negative impact on the payments of customer individuals and corporations, and eventually lead to disruption in the overall economy.

For this reason, it is important that individual FMIs ensure safety in their design, operations, and systems development, so as to avoid becoming the source of a negative impact on the overall financial system or economy.

It is also essential that FMIs ensure efficiency together with safety. If it is inconvenient to use an FMI or the cost of using the FMI is too high, the use of the infrastructure will decrease, possibly resulting in inefficiencies in economic activities.

III. Central Bank's Role in FMIs and Oversight

A. Provider of Settlement Assets and Operator of Payment and Settlement Systems

A central bank issues banknotes and provides current deposits to financial institutions. "Central bank money," which comprises banknotes and deposit money, is the settlement asset with the highest liquidity and lowest credit risk provided by a neutral institution. Most central banks operate payment systems that process the transfer of central bank deposit money.[12] In addition, several central banks also operate securities settlement systems for government bonds and other securities.

On the other hand, there are FMIs operated by the private sector, including payment systems, securities settlement systems for corporate bonds, equities, and other securities, as well as CCPs for various types of financial products. Private-sector FMIs have been making considerable efforts over the years to ensure safety and efficiency of their own infrastructures.

In this way, the central bank and private-sector FMIs complement each other to form the FMI of an economy. As for payment systems, settlement takes place at different tiers of institutions using different types of monies. Individuals and corporations settle their obligations either face-to-face using banknotes or using deposit money at commercial banks, while commercial banks and FMIs settle their obligations at the central bank using central bank deposit money. Banknotes and central bank deposit money are used as the fundamental means to complete the discharge of obligations ("ultimate settlement"[13]), thereby supporting the safety and efficiency of the national settlement arrangements.

B. What Is Central Bank Oversight?

In addition to providing settlement assets and operating payment and settlement systems, central banks oversee FMIs.[14]

Central bank oversight is a central bank function whereby the objectives of safety and efficiency are promoted by monitoring existing and planned FMIs, assessing them against these objectives and, where necessary, inducing changes. In their oversight of

[12] Some central banks are not pure operators of payment systems. But even in such cases, central banks are closely involved in the design and operations of the payment systems using central bank deposit money as settlement assets.
[13] Final settlement in central bank money.
[14] Methodologies for oversight differ from central bank to central bank depending on various factors such as the institutional framework of the financial system and central bank.

FMIs, central banks seek to establish a common understanding with FMI operators and other stakeholders and support the FMIs' efforts to improve their functions. By doing so, central banks aim to ensure safety and efficiency not only in individual FMIs but also in the overall FMI in their respective economies.

C. Why Do Central Banks Conduct Oversight?

1. Prevention of systemic risk

A central bank provides the means for "ultimate settlement" and plays a role in ensuring safety and efficiency in the overall FMI. It is therefore crucial for central banks to prevent systemic risk.

As stated earlier, if one participant in an FMI fails to settle its payment obligations and that results in subsequent settlement failures, namely if a systemic disruption occurs, the overall financial system is quite likely to undergo immediate deterioration.

However, it may be possible to prevent systemic disruption in the event of failure to settle by an FMI participant if the counterparty is able to perform onward settlement on time using its own liquidity or the liquidity obtained from external sources, or if the FMI itself is equipped with mechanisms to prevent the "knock-on" effects of a participant's failure to settle. Such risk management mechanisms include the development of contingency liquidity arrangements and loss sharing arrangements,[15] for example. Given that deficient risk management mechanisms within FMIs could lead to systemic disruptions, central banks oversee FMIs to ensure the safety of the infrastructures.

2. Linkages with the private-sector FMIs

Many private-sector FMIs are closely linked with the central bank systems both physically, through the interconnection of computer systems, and operationally. In such cases, the safety and efficiency of private-sector FMIs could have a direct impact on the safety and efficiency of the central bank systems. For this reason, central banks oversee the private-sector FMIs that are closely linked with their own systems.

[15] "Contingency liquidity arrangements" is a mechanism activated in the event of failure-to-settle by a system participant in which the system operator obtains funds, either by borrowing from banks or through liquidation of collateral securities, and makes payments instead of the participant in default, thereby preventing the chain of settlement failures among other participants. "Loss-sharing arrangements" is a mechanism to prevent the default of a system operator in the event of participants' failure-to-settle by covering the loss suffered by the system operator with the collateral pledged in advance by the failing participants or through contributions from other participants.

3. Ensuring the underpinning of smooth implementation of monetary policy

The effects of a central bank's monetary policy are transmitted to the overall economy via financial market transactions and via settlements conducted by financial institutions and FMIs. Safe and efficient FMIs prevent situations where settlement risks and costs have disruptive impacts on market rates, and support the proper functioning of the signaling effects of market rates. In this way, the maintenance of safe and efficient payment and settlement through central bank oversight is fundamental to the smooth implementation of monetary policy.

D. The Bank's Role in FMIs and Oversight

The Bank, as is the case with other central banks, oversees FMIs in addition to providing settlement assets and operating payment and settlement systems.

The Bank provides central bank money by issuing banknotes and by providing financial institutions with deposit money in its current accounts. The Bank also provides payment and settlement systems for transferring deposit money and JGBs across its books, and operates the Bank of Japan Financial Network System (BOJ-NET), a computer network system for smooth processing of funds and JGBs settlement. Many private-sector payment systems, securities settlement systems, and CCPs have access to BOJ-NET and use the Bank's deposit money for "ultimate settlement" of payments among its participants. Among these systems, securities settlement systems and CCPs for securities have established a mechanism for linking the delivery of securities in their systems with the transfer of funds in BOJ-NET to ensure that delivery occurs if and only if payment occurs (i.e. DVP), and have in this way increased the safety of settlement in their systems.

The Bank's oversight is conducted to pursue the Bank's objective to "ensure smooth settlement of funds among banks and other financial institutions" (Article 1, Paragraph 2 of the Bank of Japan Act). The Bank's oversight plays an important function in reducing systemic risk and in ensuring the safety and efficiency of payment and settlement systems operated by the Bank.

The Bank's oversight also plays an important role in pursuing the Bank's other objective "to carry out currency and monetary control" (Article 1, Paragraph 1 of the Bank of Japan Act). The Bank's oversight, by ensuring smooth settlement of funds and securities, provides a foundation for the effective implementation of monetary policy.

IV. Scope of Oversight

A. Scope

The Bank's oversight focuses on the following types of FMIs:

1. Payment systems
2. Securities settlement systems
3. Central counterparties (CCPs)
4. Trade repositories (TRs)

As stated earlier, payment systems potentially pose systemic risk triggered by a failure to settle by one of its participants. The Bank oversees payment systems as ensuring their safety and efficiency is important to the stability of the financial system and the overall economy.

The Bank also oversees securities settlement systems and CCPs on the grounds that these systems also have the potential to pose systemic risk similar to that in payment systems. If a participant fails to settle its obligation in these systems, it could have a negative impact on other participants or counterparties to a trade. In addition, these systems are closely interrelated with payment systems, as their arrangements are used not only to transfer and/or clear securities and other financial products, but also include related rules and contracts for the transfer of funds that are provided against securities and other financial products.[16] While payment arrangements are needed to increase the safety and efficiency of those systems, such arrangements give rise to systemic risk whereby disruptions in a securities settlement system or a CCP can cause subsequent failures to settle in interrelated payment systems.

The Bank also oversees TRs based on the thinking that the stable operation of TRs is important in order to ensure the safety and efficiency of the overall FMI.[17,18] TRs centrally collect, store, and disseminate records of transaction data. TRs have recently

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[16] There are two types of interrelation between a payment system and a securities settlement system, and between a payment system and a CCP: (i) the securities settlement system or the CCP provides cash accounts or computer systems to transfer funds corresponding to settlement of securities and other financial products; and (ii) the securities settlement system or the CCP uses other payment systems or financial institutions to transfer funds.

[17] Although not included in the scope of the "Principles for financial market infrastructures," there are many other types of infrastructures that support the process from trade execution to settlement. Because some of these infrastructures, such as trade matching systems and network service providers, could have a significant impact on FMIs, central banks around the world closely monitor developments in these infrastructures and pay special attention to ensure that they take appropriate actions to address any problems.

[18] See paragraphs 1.14 and 2.9 of the "Principles for financial market infrastructures."

grown in importance, particularly as a channel for reporting data to relevant authorities for the purpose of enhancing the transparency of the OTC derivatives market. In addition to the principals to a trade and relevant authorities, the data stored in a TR may be used by a wider range of entities including FMIs. Where a TR forms part of the system linkages among CCPs and their participants, disruption in a TR's services could have an impact on such entities.

Some settlement services provided by individual financial institutions have similar functions as FMIs. The services of the correspondent bank or the clearing bank, which provide accounts for customers and settle their transactions by transferring funds or securities across those accounts, are typical examples. These services differ from an FMI, which processes transactions based on common agreements among all participants and the operator of the system, as these services are based on bilateral agreements between individual customers and the service provider. Depending on the content of the agreements or the value of settlement, however, it is sometimes necessary for the Bank to monitor the settlement services provided by individual financial institutions, including risk management measures, from the same perspective as FMIs. Although the Bank's oversight does not directly focus on settlement services provided by individual financial institutions, the Bank does examine their services and provides advice through on-site examination and off-site monitoring if necessary with an aim to maintain the sound business operations of these financial institutions.

B. Foreign Currency FMIs Located in Japan

The scope of the Bank's oversight described in section A above also includes domestically located FMIs that settle foreign currency-denominated transactions. This is because a disruption occurring in the foreign currency FMIs in Japan could have an unexpected impact on related foreign exchange transactions. As a result, the disruption of these FMIs may have a negative impact on the yen funding of domestic financial institutions participating in these infrastructures and eventually may give rise to systemic risk in overall yen settlement. Moreover, it may also have a negative impact on the FMIs of the country where the foreign currency used in the infrastructure is issued. For this reason, the Bank oversees foreign currency FMIs located in Japan, and cooperates with relevant authorities when necessary (see section VI).

V. Oversight Activities

A. Oversight Process

Oversight is carried out in three phases, namely (i) monitoring the performance and characteristics of FMIs ("monitoring"), (ii) assessing the FMIs against safety and efficiency objectives ("assessment"), and (iii) inducing changes for improvements where necessary ("inducing changes").

1. Monitoring

The foundation of oversight is to understand the performance and characteristics of the FMIs subject to oversight. To do so, the Bank analyzes and monitors the design, risk management, operations, and other aspects of the FMI based on various sources including information disclosed by the FMI in line with internationally accepted standards ("international standards") and related guidelines, other publicly available information, information reported by the FMI, as well as regular and ad-hoc dialogues with the FMI operators.

2. Assessment

Based on the information and the results of analysis obtained from the monitoring of respective FMIs, the Bank determines the systemic importance of individual FMIs, as well as the degree of relevance with one of the Bank's objectives, that is, to "ensure smooth settlement of funds among banks and other financial institutions."

For systemically important FMIs that are highly relevant to the Bank's objective, the Bank uses international standards as the benchmark for oversight, evaluates whether the FMI meets the requirements set out in the international standards, and makes its own assessment of the FMI.[19]

The international standards and related guidelines which are used in the Bank's oversight currently comprise the followings:

- CPSS-IOSCO "Principles for financial market infrastructures" (April 2012)[20]

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[19] For FMIs with significant systemic importance, or those that have sophisticated risk management methods, the Bank may expect a higher level of risk management than those set out in the international standards, in line with the characteristics of and the level of risks within the system. In addition, for FMIs that are not determined to be systemically important, where necessary and in line with the characteristics of their services, the Bank may assess the FMI and induce change by applying the international standards in part or based on less stringent requirements.

[20] See Annex I. Since the marketwide recommendations from existing standards for securities

- CPSS-IOSCO "Principles for financial market infrastructures: Disclosure framework and assessment methodology" (December 2012)

3. Inducing changes

When issues requiring improvement in FMI design, risk management, and operations are identified as a result of assessment, the Bank confirms whether the FMI operators and participants have previously identified these issues and made efforts to address them. If they have not identified the issues, or if they have been discussing how to address the issues without taking any concrete action, the Bank conveys the issues and encourages them to take action.[21]

The Bank believes it is important to have regular dialogues with the FMI operators and participants with respect to the issues for improvement and possible solutions that have a significant bearing on the design and operations of FMIs. Through these intensive dialogues, the Bank seeks to establish a common understanding with FMIs on these issues and solutions, and encourages them to take actions that will contribute to the safety and efficiency of FMIs, making use of the expertise gained from international discussions on FMIs.

In conducting oversight, the Bank is guided by the responsibilities of authorities set out in the international standards. The Bank will also take into account the administrative burdens borne by the FMI operators and participants.

The Bank utilizes information obtained from the Bank's provision of current accounts and other business operations in its oversight of FMIs. The Bank also utilizes the information obtained from on-site examination in its oversight. In order to perform the Bank's business properly, the Bank conducts on-site examination of the FMIs that hold current accounts with the Bank where necessary.

B. Oversight based on Systemic Importance

In its oversight of individual FMIs, the Bank determines the types of risk that require the closest attention and the intensity of oversight activities based on the characteristics and size of risks posed by the respective FMI.

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settlement systems, "Recommendations for securities settlement systems (RSSS)," remain in effect, the Bank also uses these recommendations for its oversight.

[21] For payment systems that could have significant impact on the Bank's payment system, the Bank is consulted or approves the changes to settlement mechanism or risk management, if necessary.

The international standards encourage relevant authorities to cooperate and coordinate with each other and to determine the systemic importance of individual FMIs.[22] Specifically, while the systemic importance of payment systems is determined individually, all securities settlement systems, CCPs, and TRs are presumed systemically important, and determination is made on whether to treat a particular FMI as an exception.[23] These determinations are made based on the combination of the following factors:

1. Value and number of transactions processed
2. Number and types of FMI participants (e.g. shares of transactions settled by financial institutions)
3. Markets served (e.g. importance of markets served by the FMI)
4. Market share (e.g. market share of transactions settled through the FMI)
5. Interdependencies with other FMIs (e.g. extent of linkages with the other FMIs, and commonality of the FMI participants)
6. Availability of alternative FMIs or payment instruments

In its oversight activities, the Bank places particular focus on systemically important FMIs that could potentially have a significant impact on one of the Bank's objective, which is to "ensure smooth settlement of funds among banks and other financial institutions." In determining such an FMI, an important aspect is the degree of relevance of the FMI to "smooth settlement of funds" in light of the FMI's services, value of transactions processed, number of participants, and other characteristics. For such FMIs, in order to ensure their safety and efficiency, the Bank conducts a full range of oversight by monitoring the FMI, assessing them against international standards and, where necessary, inducing changes. For other FMIs, the Bank conducts oversight mainly by monitoring the FMIs in order to gain an overview of the overall FMI in Japan.

The Bank assesses payment and settlement systems operated by the Bank against the international standards with the same rigor as other systemically important FMIs and, where necessary, takes action to remedy any deficiencies.[24]

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[22] See Responsibility E of the "Principles for financial market infrastructures."

[23] See paragraph 1.20 of the "Principles for financial market infrastructures."

[24] In the "Principles for financial market infrastructures," central banks are expected to "apply, to the extent applicable, the same international standards to their own systems with the same rigor as other overseen systems"(see paragraph 4.4.4) as well as to "avoid using its oversight authority to disadvantage private-sector FMIs relative to an FMI the central bank owns and operates" (see paragraph 3.2.7).

C. Oversight Perspectives

The "Principles for financial market infrastructures" identifies the following key seven risks faced by FMIs and sets expectations for their management: systemic risk, legal risk, credit risk, liquidity risk, general business risk, custody and investment risks, and operational risk (see Annex II for a description of each type of risk). In every phase of its oversight activities, the Bank focuses on these risks posed by FMIs, and based on the characteristics of each FMI, monitors, analyzes, and assesses the risks and risk management arrangements in the FMI and induces changes where necessary.

D. Cooperation with Relevant Authorities

In accordance with the international standards, the Bank oversees FMIs in cooperation with domestic and foreign authorities that regulate, supervise, or oversee FMIs. For domestic FMIs, the Financial Services Agency (FSA) supervises FMIs based on the Financial Instruments and Exchange Act, the Book-entry Transfer Act, and the Payment Services Act. The Bank cooperates and coordinates with the FSA by exchanging information and views as necessary (see section VI on cooperation with foreign authorities).[25]

VI. Oversight of Offshore Yen FMIs

A. International Cooperation

In recent years, with the globalization of financial markets, the importance of FMIs that provide services to multiple jurisdictions, markets, and currencies has been increasing and the level of interconnectedness among FMIs has been rising. There has been an emergence of FMIs for yen payments or yen-denominated financial products that are operated by entities located outside Japan ("offshore yen FMIs"), which are mainly used for trades executed in offshore markets or on a cross-border basis. The settlement processes in those infrastructures usually involve a transfer of yen funds using payment systems in Japan or across accounts held with financial institutions in Japan. Also, where an offshore yen FMI has links to domestic FMIs through accounts or other services, or where domestic financial institutions participate in such infrastructure, a disruption at an offshore yen FMI could have a negative impact on the operations of

[25] The Financial Instruments and Exchange Act (Article 156-20-23) and the Payment Services Act (Article 86) stipulate that the FSA may request the Bank's opinion when taking administrative measures against financial instruments clearing organizations and payment clearing institutions.

domestic FMIs or on the funding of domestic financial institutions. As such, depending on the size and characteristics of the infrastructure, offshore yen FMI could have a significant negative impact on the safety and efficiency of payment arrangements in Japan. Therefore, in principle, the scope of the Bank's oversight covers offshore yen FMIs.

At the same time, oversight of offshore yen FMIs entails issues that do not arise in the oversight of domestic infrastructures. These include the issue of jurisdictional authority, as well as difficulties in obtaining information due to time differences and/or geographical distance between the Bank and the FMI operator. With this in mind, the international standards encourage the relevant authorities, which include authorities of the jurisdiction in which the operator of the infrastructure is located or whose currencies are processed in the infrastructure, to cooperate with each other on a cross-border basis in order to fulfill their respective mandates. A core element of oversight and supervision of cross-border or multicurrency FMIs is to develop cooperative arrangements involving the relevant authorities.

In practice, for some offshore yen FMIs, such arrangements for international cooperative oversight have been developed among relevant authorities, including the Bank.[26]

B. Oversight based on Impact on Domestic Payment Arrangements

The intensity of the Bank's oversight of offshore yen FMIs is commensurate with the importance of the infrastructure to domestic payment arrangements. Specifically, the Bank places particular focus on FMIs that potentially have a significant impact on domestic payment arrangements should the infrastructures fail to perform as expected. Whether an offshore yen FMI will potentially have a significant impact is determined based on a combination of factors, taking into account the factors used in determining systemically important FMIs (see section V.B.). These include (i) the value and volume of yen payment transactions or yen-denominated financial products processed

[26] The Bank participates in the international cooperative oversight of CLS, a cross-border payment mechanism for settling foreign exchange transactions for major currencies, and SwapClear, a clearing service for OTC interest rate swaps provided by LCH.Clearnet Ltd (LCH SwapClear). The Bank also takes part in the international cooperative oversight of SWIFT. SWIFT provides messaging services globally to financial institutions and other entities for financial transactions including customer payments. While SWIFT is not an FMI under the definition in the international standards, a problem in the operation or other aspects of SWIFT could have a significant impact globally. As such, central banks of the major economies have developed a cooperative oversight arrangement for SWIFT.

by the FMI, (ii) the degree of participation of domestic financial institutions, and (iii) the extent of interdependency between the offshore yen FMI and domestic FMIs, including links through accounts or other services.[27]

For offshore yen payment systems that potentially have a significant adverse impact on domestic payment arrangements,[28] the Bank has established and has participated in international cooperative oversight arrangements with relevant authorities, including the authorities where the FMI operator is located. In principle, internationally recognized standards are used to assess the system against the objectives of safety and efficiency.[29] Where the Bank identifies a need for enhancement in the design, operations, risk management, or other aspects of the payment processes in the FMI, the Bank will work with the relevant authorities to induce necessary changes in the system.[30]

Recent years have also seen a development of international cooperative oversight arrangements for multicurrency OTC derivatives CCPs and TRs, as mandatory clearing and other requirements are being introduced to meet the commitments of the G20 Leaders at the Pittsburgh 2009 Summit. The Bank takes part in an arrangement for a CCP as the central bank of issue of the major currencies cleared by the CCP.[31] The Bank will continue to seek, as necessary, to establish cooperative arrangements for FMIs that clear, settle, or record yen-denominated financial products and could potentially have a significant impact on domestic payment arrangements.

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[27] For offshore yen payment systems, the Bank will consider, as a benchmark, whether the system has processed yen payment transactions exceeding 500 billion yen on an average day during the past twelve months to determine its impact on domestic payment arrangements. A number of other central banks also have quantitative benchmarks for the purpose of practical application of their policies. For example, the Federal Reserve applies its policy on payment system risk to systems that "expect to settle a daily aggregate gross value of U.S. dollar-denominated transactions exceeding 5 billion dollars on any day during the next 12 months" ("Federal Reserve Policy on Payment System Risk"). The Eurosystem requires infrastructures that settle euro-denominated payment transactions to be incorporated and operated in the euro area in principle, but does not apply this requirement to "off-shore payment systems that settle less than 5 billion euro per day, or that account for less than 0.2% of the total daily average value of payment transactions processed by euro area interbank funds transfer systems which provide for final settlement in central bank money (whichever of the two amounts is higher)" ("Eurosystem Oversight Policy Framework").

[28] Currently, CLS falls under this category.

[29] For offshore yen FMIs that have a particularly large impact on domestic payment arrangements, or those that have sophisticated risk management methods, the Bank may expect a higher level of risk management than those set out in the international standards, in line with the characteristics of and the level of risks within the system and by engaging in dialogue with relevant authorities and the operator of the FMI.

[30] At the same time, in line with the international standards, there may be cases where the Bank will decide to take action at its discretion, apart from the cooperative oversight process, in order to ensure the safety and efficiency of domestic yen payment arrangements.

[31] Currently, the Bank participates in the cooperative oversight arrangement for LCH SwapClear.

For offshore yen FMIs that do not necessarily have a significant impact on domestic payment arrangements, the Bank will first confirm whether the FMI is subject to appropriate oversight by the relevant authorities including the central bank where the FMI operator is located. As deemed necessary and commensurate with the size and other features of the FMI, the Bank will then seek to obtain information from relevant authorities on the design, operations, risk management, and other aspects of the FMI in order to monitor, on an ongoing basis, developments in and characteristics of the FMI in light of the Bank's safety and efficiency objectives. Where necessary, the Bank will exchange views with relevant authorities based on the information gathered.

The Bank will continue to be guided by the international standards and based on those standards, will oversee offshore yen FMIs appropriately, in close cooperation with the relevant authorities. Similarly, the Bank will cooperate with relevant authorities when conducting oversight of foreign currency FMIs located in Japan (see section IV. B).

At the same time, the Bank encourages relevant authorities of offshore yen FMIs to also adopt the international standards.[32] For example, the Bank encourages relevant authorities that have identified the actual or proposed operation of an offshore yen FMI to immediately inform the Bank, and to coordinate with the Bank in sharing information on and, where necessary, developing a cooperative arrangement for the FMI.

VII. Publication of Oversight Activities

Based on its oversight activities, the Bank will regularly publish a document describing the assessment of the state of Japan's overall FMI, the type and nature of the risks that would require particular focus, the challenges in managing such risks, as well as the challenges faced by individual FMIs that could have significant relevance to the overall FMI.[33] The Bank also plans to provide, from time-to-time, information contributing to the safety and efficiency of FMIs, including developments in overseas FMIs and trends in discussions of risk management issues.[34]

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[32] The international standards state that, when assessing an FMI's payment and settlement arrangements and its related liquidity risk-management procedures in any currency for which the FMI's settlements are systemically important against the standards, the relevant authorities where the FMI operator is located should consider the views of the central banks of issue.

[33] While some central banks publish their assessments of individual FMI compliance with international standards, the Bank does not intend to publish the results of the assessment of individual private-sector FMIs at this stage.

[34] The Bank has been publishing the "Payment and Settlement Systems Report" since March 2006, in which it explains the trends in and challenges to FMIs in Japan as well as international discussions

Apart from the Bank's publication of its oversight activities, the Bank expects the operators of systemically important FMIs to review their compliance against the international standards, to disclose information based on the standards, and to conduct and publish self-assessments as necessary. The disclosure of relevant information and publication of self-assessment results based on the international standards is expected to help strengthen the market's confidence in the FMIs by enhancing transparency. Increased confidence in the FMIs facilitates the use of the infrastructures and eventually brings further benefits to the FMI operators and participants. Enhanced transparency also helps create a common understanding of risks among the stakeholders, which is expected to create synergy in efforts aimed at enhancing the risk management measures used by these FMIs.[35] The Bank will cooperate with the private-sector FMIs to make sure that self-assessment is conducted based on a common understanding and interpretation of the international standards.

VIII. Closing Remarks

The scope and methodologies for oversight of FMIs change from time to time, in response to the evolution and structural changes in FMIs, developments in financial markets, and advances in risk management measures. The Bank seeks to reinforce the effectiveness of oversight by supporting the FMI operators and participants to gain a deeper understanding of oversight and by maintaining cooperative relations with them. In doing so, the Bank takes into account studies on developments in clearing and settlement arrangements and services, international discussions concerning FMIs, and the analyses and studies of advanced risk management measures. At the same time, the Bank seeks to strengthen the efforts to increase the safety and efficiency of the means of payment it provides and the FMIs it operates. Through these activities, the Bank will make continued efforts to ensure the safety and efficiency of the overall FMI in Japan in cooperation with domestic and foreign stakeholders, including the FMI operators, participants, and relevant authorities.

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surrounding FMIs.

[35] The Bank has assessed its payment system and JGB settlement system against international standards and published the assessment results. For the details of current assessments by the Bank, see "Self-Assessment of Compliance with the Core Principles for Systemically Important Payment Systems: The BOJ-NET Funds Transfer System" (July 2003) and "Assessment of the Settlement System for Japanese Government Securities against the Recommendations for Securities Settlement Systems" (November 2007).

Annex I

Overview of the 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 CCP 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 CCP in extreme but plausible market conditions. All other CCPs 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 CCP 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 CCP 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 minimise 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 CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised 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 CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP 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 materialise. 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 minimise 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 fulfillment 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 TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.

Selected RSSS market wide recommendations

The following six marketwide recommendations from the existing standards for securities settlement systems, "Recommendations for securities settlement systems," remain in effect (see Annex C of the ""Principles for Financial Market Infrastructure").

Recommendation 2: Trade confirmation
Confirmation of trades between direct market participants should occur as soon as possible after trade execution, but no later than trade date (T+0). Where confirmation of trades by indirect market participants (such as institutional investors) is required, it should occur as soon as possible after trade execution, preferably on T+0, but no later than T+1.

Recommendation 3: Settlement cycles
Rolling settlement should be adopted in all securities markets. Final settlement should occur no later than T+3. The benefits and costs of a settlement cycle shorter than T+3 should be evaluated.

Recommendation 4: Central counterparties (CCPs)
The benefits and costs of a CCP should be evaluated. Where such a mechanism is introduced, the CCP should rigorously control the risks it assumes.

Recommendation 5: Securities lending
Securities lending and borrowing (or repurchase agreements and other economically equivalent transactions) should be encouraged as a method for expediting the settlement of securities transactions. Barriers that inhibit the practice of lending securities for this purpose should be removed.

Recommendation 6: Central securities depositories (CSDs)
Securities should be immobilised or dematerialised and transferred by book entry in CSDs to the greatest extent possible.

Recommendation 12: Protection of customers' securities
Entities holding securities in custody should employ accounting practices and safekeeping procedures that fully protect customers' securities. It is essential that customers' securities be protected against the claims of a custodian's creditors.

Annex II

Overview of key risks in financial market infrastructures

(Excerpt from the "Principles for financial market infrastructures")

1. Systemic risk

Safe and efficient FMIs mitigate systemic risk. FMIs may themselves face systemic risk, however, because the inability of one or more participants to perform as expected could cause other participants to be unable to meet their obligations when due. In such circumstances, a variety of "knock-on" effects are possible, and an FMI's inability to complete settlement could have significant adverse effects on the markets it serves and the broader economy. These adverse effects, for example, could arise from unwinding or reversing payments or deliveries; delaying the settlement or close out of guaranteed transactions; or immediately liquidating collateral, margin, or other assets at fire sale prices. If an FMI were to take such steps, its participants could suddenly be faced with significant and unexpected credit and liquidity exposures that might be extremely difficult to manage at the time. This, in turn, might lead to further disruptions in the financial system and undermine public confidence in the safety, soundness, and reliability of the financial infrastructure.

More broadly, FMIs may be linked to or dependent upon one another, may have common participants, and may serve interconnected institutions and markets. Complex interdependencies may be a normal part of an FMI's structure or operations. In many cases, interdependencies have facilitated significant improvements in the safety and efficiency of FMIs' activities and processes. Interdependencies, however, can also present an important source of systemic risk. For example, these interdependencies raise the potential for disruptions to spread quickly and widely across markets. If an FMI depends on the smooth functioning of one or more FMIs for its payment, clearing, settlement, and recording processes, a disruption in one FMI can disrupt other FMIs simultaneously. These interdependencies, consequently, can transmit disruptions beyond a specific FMI and its participants and affect the broader economy.

2. Legal risk

For the purposes of this report, legal risk is the risk of the unexpected application of a law or regulation, usually resulting in a loss. Legal risk can also arise if the application of relevant laws and regulations is uncertain. For example, legal risk encompasses the risk that a counterparty faces from an unexpected application of a law that renders contracts illegal or unenforceable. Legal risk also includes the risk of loss resulting from a delay in the recovery of financial assets or a freezing of positions resulting from a legal procedure. In cross-border as well as some national contexts, different bodies of law can apply to a single transaction, activity, or participant. In such instances, an FMI and its participants may face losses resulting from the unexpected application of a law, or the application of a law different from that specified in a contract, by a court in a relevant jurisdiction.

3. Credit risk

FMIs and their participants may face various types of credit risk, which is 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. FMIs and their participants may face replacement-cost risk (often associated with pre-settlement risk) and principal risk (often associated with settlement risk). Replacement-cost risk is the risk of loss of unrealised gains on unsettled transactions with a counterparty (for example, the unsettled transactions of a CCP). The resulting exposure is the cost of replacing the original transaction at current market prices. Principal risk is the risk that a counterparty will lose the full value involved in a transaction, for example, the risk that a seller of a financial asset will irrevocably deliver the asset but not receive payment. Credit risk can also arise from other sources, such as the failure of settlement banks, custodians, or linked FMIs to meet their financial obligations.

4. Liquidity risk

FMIs and their participants may face liquidity risk, which is the risk that a counterparty, whether a participant or other entity, will have insufficient funds to meet its financial obligations as and when expected, although it may be able to do so in the future. Liquidity risk includes the risk that a seller of an asset will not receive payment when due, and the seller may have to borrow or liquidate assets to complete other payments. It also includes the risk that a buyer of an asset will not receive delivery when due, and the buyer may have to borrow the asset in order to complete its own delivery obligation. Thus, both parties to a financial transaction are potentially exposed to liquidity risk on the settlement date. Liquidity problems have the potential to create systemic problems, particularly if they occur when markets are closed or illiquid or when asset prices are changing rapidly, or if they create concerns about solvency. Liquidity risk can also arise from other sources, such as the failure or the inability of settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs to perform as expected.

5. General business risk

In addition, FMIs face general business risks, which are the risks related to the administration and operation of an FMI as a business enterprise, excluding those related to the default of a participant or another entity, such as a settlement bank, global custodian, or another FMI. General business risk refers to any potential impairment of the financial condition (as a business concern) of an FMI due to declines in its revenues or growth in its expenses, resulting in expenses exceeding revenues and a loss that must be charged against capital. Such impairment may be a result of adverse reputational effects, poor execution of business strategy, ineffective response to competition, losses in other business lines of the FMI or its parent, or other business factors. Business-related losses also may arise from risks covered by other principles, for example, legal or operational risk. A failure to manage general business risk could result in a disruption of an FMI's business operations.

6. Custody and investment risks

FMIs may also face custody and investment risks on the assets that they own and those they hold on behalf of their participants. Custody risk is the risk of loss on assets held in custody in the event of a custodian's (or sub-custodian's) insolvency, negligence, fraud, poor administration, or inadequate recordkeeping. Investment risk is the risk of loss faced by an FMI when it invests its own or its participants' resources, such as collateral. These risks can be relevant not only to the costs of holding and investing resources but also to the safety and reliability of an FMI's risk-management systems. The failure of an FMI to properly safeguard its assets could result in credit, liquidity, and reputational problems for the FMI itself.

7. Operational risk

All FMIs face operational risk, which is 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 an FMI. These operational failures may lead to consequent delays, losses, liquidity problems, and in some cases systemic risks. Operational deficiencies also can reduce the effectiveness of measures that FMIs may take to manage risk, for example, by impairing their ability to complete settlement, or by hampering their ability to monitor and manage their credit exposures. In the case of TRs, operational deficiencies could limit the usefulness of the transaction data maintained by a TR. Possible operational failures include errors or delays in processing, system outages, insufficient capacity, fraud, and data loss and leakage. Operational risk can stem from both internal and external sources. For example, participants can generate operational risk for FMIs and other participants, which could result in liquidity or operational problems within the broader financial system.