Key matters in examining Liquidity Risk Management at Large Complex Financial Groups

(1) Governance of liquidity risk management

Senior management of a large complex financial group (hereinafter referred to as "a financial group") should ensure the following points in order to maintain effective governance of liquidity risk management:

- (a) A liquidity risk management framework appropriate for the business profile of the financial group is maintained;
- (b) Leveraging the lessons learned through studying cases with liquidity pressure in both Japan and overseas, the financial group has been developing the liquidity risk management in consideration of possible factors which may bring about vulnerabilities in liquidity risk management (e.g. reliance on short-term sources of funds and parental loans) so that materialization of liquidity risk is prevented;
- (c) Adequate consideration is made for ensuring a proper balance between consistency in liquidity risk management at the group-wide level and appropriate differentiation in liquidity risk management at the level of individual entities (i.e. subsidiaries and/or branches) and/or type-of-business level so that entity and/or type-of-business level liquidity risk management is appropriate for the business profile at the level which may differ among entities and/or types of business;
- (d) Liquidity risk appetite in normal conditions is articulated in advance with proper consideration of latent liquidity risk. In addition, an adequate framework is maintained so that a financial group is operated in accordance with the articulated liquidity risk appetite; and
- (e) A plan-do-check-act (PDCA) cycle is established in order to enhance the liquidity risk management framework in light of the results of self-assessments of relevant departments and internal audit reviews.

To ensure achievement of the above points, examination should be conducted by focusing on the items set out below. However, when examining the essential functions of the risk limit established in connection with liquidity risk management, supervisors should keep in mind that the risk limit may be used for different purposes, thus it is important to understand the specific purposes of the risk limit set by the financial group under examination.

For example, exceeding the risk limit would have different implications in the following two cases: (i) the risk limit is used to prohibit risk taking beyond such threshold, and is thus

set at a level somewhat higher than normal utilization; and (ii) the risk limit is set around the normal utilization level, assuming the occasional breach which will trigger reporting to relevant parties and promote discussion on, or lead to a common understanding as to business conditions. Examination of the functions of the risk limit should be conducted carefully, by taking into account the difference as described above. The matters to be focused on during the examination are as follows:

- Roles and responsibilities of bodies, such as the board of directors and related divisions including the finance and risk management divisions, are articulated in the liquidity risk management;
- (ii) Systematic establishment and maintenance of policies and procedures for liquidity risk management in major entities is ensured in accordance with their business profiles. In addition, systematic establishment and maintenance of group-wide rules of liquidity risk management is ensured in light of the nature of key businesses of the group, along with the clarification on the roles and cooperation of headquarters and entities so that consistency among the group-wide level and the headquarters and major-entities level is maintained in their rules;
- (iii) Regular review on the structure of delegated and/or shared authority, coordination within the group and consistency among the internal rules noted in (ii) above is made. In addition, revision of internal rules and reinforcement of the liquidity risk management framework is made based on the results of such review;
- (iv) Review of the appropriateness of regular and ad-hoc liquidity risk reports is made at least annually;
- (v) An adequate framework that ensures the operation of each business is established in accordance with the liquidity risk appetite at least quarterly, through analysis of the status of business operations, estimated future cash flow, and other relevant matters;
- (vi) An examination process is established to review the liquidity risk management framework, annually and as needed, including liquidity risk limits, stress scenarios and stress testing;
- (vii) A PDCA cycle is established to facilitate ceaseless improvements to the liquidity risk management framework, including the examination process noted in (vi) above. The PDCA cycle is implemented with appropriate consideration on liquidity regulations such as the Basel III Liquidity Coverage Ratio (LCR), and the results of comparisons with international research and guidance such as the Basel Committee on Banking Supervision's "Principles for Sound Liquidity Risk Management and Supervision" published in September 2008; and

- (viii) Self-assessment of liquidity risk management divisions and internal audit are performed at an appropriate frequency and an appropriate manner from the viewpoint of effective operation of the PDCA cycle. The status of improvements to the liquidity risk management framework is checked by executive officers in charge based on the result of the self-assessment and internal audit.
- (2) Setting and complying with the liquidity risk appetite

In setting and complying with the liquidity risk appetite at a financial group, it is important to (1) establish a business management structure to ensure that the business profile is in accordance with the liquidity risk appetite which is determined through an integrated approach on a group-wide basis; and (2) conduct a periodic review regarding the liquidity risk appetite based on analysis of the liquidity risk embedded in each business. Therefore, examination should be conducted by focusing on the items set out below:

- A liquidity risk appetite is articulated for major divisions of financial groups, such as entities and business units, based on an analysis of commonalities/differences in the liquidity risk embedded in each business;
- (ii) The divisional liquidity risk appetite articulated in (i), for major dimensions such as entities and business units, is consistent with the group-wide liquidity risk appetite; and
- (iii) Review of the liquidity risk appetite is conducted at least annually, in light of multi-faceted analysis (e.g. stress testing) on size and profile of the financial group and liquidity risk embedded in each business.
- (3) Comprehensive measurement of liquidity risk

In measuring liquidity risk at a financial group, it is important to capture potential liquidity risk comprehensively by projecting cash flows in times of stress and other methods. To ensure this point, examination should be conducted by focusing on items set out below:

- Systems and processes are established to be capable of delivering time sensitive information, such as cash flow projections and the rate of utilization of the liquidity risk limit;
- Projection of the cash flow is updated daily for a period within 30 days, and at least monthly for a period of more than 30 days; and
- (iii) Cash flow is projected based on analysis of the following:
 - (a) Latent factors (i.e. future refinancing needs, change in behavior of customers) associated with projecting cash flow for the duration of the relevant exposures;

- (b) Reasonableness of the forecasts in relation to assets, liabilities and off-balance sheet exposures. In particular, the conservativeness of the forecasts based on the factors, such as market liquidity categorized by assets and currencies, and business profiles; and
- (c) Validity of cash flow mismatches between outflow and inflow calculated on both a point-in-time basis and a cumulative basis.
- (4) Utilization of liquidity stress testing results

At a financial group, it is important to implement liquidity stress testing in a timely manner by reflecting not only the viewpoint of regulatory compliance such as Basel III LCR, but also the senior management's awareness and business profile. Additionally, the results of such stress testing should facilitate the senior management's decision-making. To ensure this point, examination should be conducted by focusing on the items set out below:

- Stress tests on the adequacy of the excess liquidity buffer are performed by the group on a whole and individual-entity basis at an appropriate frequency, and any liquidity issues are examined using the results of such stress tests;
- (ii) A framework to ascertain the appropriateness of liquidity stress testing scenarios, such as institution-specific and market-wide stress for managerial purposes, is established based on the results of comparison with international research and guidance, such as the Basel Committee on Banking Supervision's "Principles for Sound Liquidity Risk Management and Supervision" published in September 2008; and
- (iii) An analysis is conducted on gaps between the results of liquidity stress testing for regulatory compliance purposes, such as the Basel III LCR requirements, and those for managerial purposes. In addition, an implementation framework for liquidity risk management is considered by taking into account the two different testing approaches above, and liquidity risk management policies and methodologies for addressing the difference between the regulatory stress testing and managerial stress testing are articulated in internal rules.
- (5) Holdings of sufficient excess liquidity buffer

To enable the excess liquidity buffer to sufficiently cover potential liquidity outflow under liquidity stress conditions at a financial group, it is important to make sure that the financial instruments comprising the excess liquid asset portfolio are feasibly converted into cash under liquidity stress conditions. To ensure this point, examination should be conducted by focusing on the item set out below:

- An implementation process is articulated for cash conversion of the excess liquidity buffer through an analysis of feasibility (authority for cash conversion, capacity to convert) on both a group-wide basis and individual-entity basis.
- (6) Collateral management by classification

In considering actions to address the cases where liquidity pressure materializes at a financial group, it is necessary to capture the value of the excess liquidity buffer in a timely manner. Specifically, the value of the excess liquidity buffer should be captured at an appropriate time based on the frequency of change in the amount of excess liquidity buffer due to collateral movements and other factors. To ensure this point, examination should be conducted by focusing on the item set out below:

- (i) A framework is established to distinguish collateralized assets from uncollateralized ones and monitor the amount of excess liquidity buffer at least weekly as well as potential restrictions on the transfer of such assets, based on major classifications such as by the entities, countries and currencies.
- (7) Management methodology for liquidity risk

In establishing methodologies for liquidity risk management at a financial group, it is important to develop a framework that will facilitate an effective liquidity risk control, such as measures upon breach of a liquidity risk limit, with appropriate consideration of the size and profile of its business. To ensure this point, examination should be conducted by focusing on the items set out below:

- Targets of liquidity risk management are set appropriately and communicated throughout relevant departments in light of the following points;
 - (a) Comprehensiveness of fund management (i.e. whether the entire secured/unsecured borrowings are managed or not);
 - (b) Respective roles and responsibilities shared between onshore and offshore, between main office/headquarters and overseas operations, and other relevant units; and
 - (c) Currencies subject to currency basis management.
- (ii) A management framework is established for managing the excess liquidity buffer based on business units, entities, and other relevant classifications, in addition to

the framework of the group as a whole;

- (iii) A framework is in place to manage the adequacy of the excess liquidity buffer held by overseas subsidiaries and subsidiaries operating different types of business in light of legal/regulatory and supervisory restrictions, and other relevant factors;
- (iv) The scope, management methodology, durable period (period during which liquidity is expected to be resilient under a stress event such as a foreign exchange market failure) of the targets of liquidity risk management, and the degree of reliance on investments using the home currency resources for funding foreign currencies are consistent with the liquidity risk appetite by currency; and
- (v) A management framework is established for liquidity risk management to analyze the potential need to fund currencies held in relatively small amounts. In addition the framework is maintained so that a financial group will be able to take actions such as establishing liquidity risk limits on those currencies in a manner consistent with the results of the analysis.
- (8) Establishment of a structure to incentivize reduction of liquidity risk in each business unit

For enabling liquidity risk management to function effectively at a financial group, it is important to build a structure where each business unit is incentivized to reduce liquidity risk. To ensure this point, examination should be conducted by focusing on the items set out below:

- (i) In the process to establish a structure that will incentivize business units to voluntarily contribute to maintaining the group-wide liquidity risk at an appropriate level by recognizing the increase in liquidity risk as costs when evaluating the performance of such business units (fund transfer pricing or FTP), consideration is given to the ways for maintaining consistency with the profile of each business and the liquidity risk appetite in relation to the purposes of adopting such methodologies to give incentives; and
- (ii) A process is in place for reviewing the liquidity risk profile in the new product approval process.
- (9) Development and implementation of plans for funding and investing in view of liquidity risk

In developing plans for funding and investing with appropriate consideration of liquidity risk, and in operating businesses in line with such plans at a financial group, it is important

to set out a specific assessment standard and evaluate the existing conditions at an appropriate time. To ensure this point, examination should be conducted by focusing on the items set out below:

However, when examining the functions of risk limits in liquidity risk management, it should be kept in mind that the risk limit has various functions, and thus it is important for supervisors to take into account the specific purposes of each risk limit set by a financial group.

- (i) A methodology is established for investing in assets (e.g. trading assets, internal/external loans, assets for long-term holding, Bank of Japan current deposit account) in accordance with the liquidity risk appetite;
- (ii) An adequate framework is in place to share an awareness of the current conditions and future direction of liquidity risk in an appropriate manner between the senior management and the supervisory authority by establishing liquidity risk limits systematically, and aligning such risk limits with the liquidity risk appetite set by considering the following points; and
 - (a) Concentration risk associated with funding sources by financial instruments, funding providers, by sector/category of funding providers, by secured/unsecured lending;
 - (b) Concentration risk associated with the amount of redemption of debt by tenor; and
 - (c) Liquidity risk associated with off-balance transactions and other exposures that may increase the necessary liquidity under liquidity stress conditions.
- (iii) An adequate infrastructure is established to capture changes in financing activities. In addition, such changes are analyzed to identify potential causes, including the market environment and business incentives.
- (10) Contingency funding plan (CFP)
 - (i) At a financial group, its CFP is developed based on discussion and analysis on the following points:
 - (a) Identification of stress events that may have a material impact on the liquidity of the group as a whole and each entity;
 - (b) Evaluation of the impact of identified stress events on the liquidity of the group as a whole and each entity;
 - (c) Identification of triggering conditions that will execute a CFP, including a

breach of the acceptable level of liquidity risk;

- (d) Identification of available fund providers under the conditions specified in (c) above, and calculation of the amount of available funds and liquidity needed;
- (e) Identification of alternative funding providers under specified stress events;
- (f) Leveraging the information acquired through liquidity stress tests for both regulatory and managerial purposes;
- (g) Consistency between the CFP trigger conditions and established Early Warning Indicators; and
- (h) Ensuring the feasibility of the CFP execution plan, of internal and external communication management (e.g. relevant authority, key funds providers), and of liquidity risk management in accordance with the seriousness of liquidity pressure.
- (ii) A process is in place to examine and review the following CFP-related issues at least annually:
 - (a) Articulation of the policies and action plans to address liquidity stress;
 - (b) Articulation of the roles and responsibilities in executing a plan to address liquidity stress;
 - (c) Articulation of the decision-making process under the stressed event; and
 - (d) Development of a framework to improve the effectiveness of the CFP through a PDCA cycle such as training for executing CFP.
- (11) Liquidity risk management in light of the perspective of ensuring the resilience of the financial system
 - (i) A liquidity risk appetite and liquidity risk management framework at a financial group is appropriate for ensuring the stability of the entire financial system; for example, critical functions in the financial system such as settlement of funds and securities are maintained under the stressed environment.