

I. Introduction

- Digitalization of the economy and society is rapidly proceeding. Cashless payments are becoming more prevalent.
- The announcement of a global stablecoin project in 2019 triggered many jurisdictions to consider the possibility of introducing retail CBDC. Major jurisdictions have not made a decision to issue CBDC, and their researches and studies are underway.
- At this panel, CBDC is envisaged to be a digital form of currency that users would pay with their smartphone apps and/or cards. CBDC would be widely available for day-to-day payments just like cash. Anyone would be able to use anytime and anywhere. CBDC is credit-risk free and its payment will have finality.
- CBDC needs to bring benefits to users as a digital means of payment. It needs to be designed so as to co-exist and complement with other private payment services. Challenges associated with cross-border payments need to be taken into account. Public concerns regarding privacy and access to cash should be addressed if CBDC were to be introduced.
- This report does not prejudge whether or not to introduce CBDC in Japan. Its aim is to summarize the deliberation by the Expert Panel regarding “Design Outline of CBDC,” which clearly identifies the basic considerations on main issues and its possible options for CBDC introduction.

II. Developments in Japan and abroad

Cash usage and other payment services in Japan / Situations in other jurisdictions / BOJ’s experiments

III. Key Considerations for the Design Outline of CBDC

**See following pages for details.*

- People’s life style, daily transactions and means of payments vary in each jurisdiction. Goals and motivations for CBDC are also different in each jurisdiction. Broader perspectives need to be considered in order to meet user demands in Japan.
- CBDC should be designed as a currency for the digital economy. Anyone can safely and securely pay with CBDC anytime and anywhere. This Expert Panel lays out the basic considerations and possible options for the following issues.
 - (1) Relationship between BOJ and intermediaries - *How to provide a payment means with better user experience*
 - (2) Relationship between CBDC and other payment services - *How to improve the stability/efficiency of the overall payment systems*
 - (3) Security & user data - *How to make the infrastructure always available & how to address public concerns about privacy*
 - (4) Other issues (*legal consideration / cost / cross-border payment*)

IV. Conclusion

- The Panel asks MOF to coordinate with relevant ministries and BOJ for articulating the Design Outline of CBDC. The Panel expects the Design Outline to be elaborated with further assessment of the development of digital technology and progress in other jurisdictions. It is Panel’s view that this preparation will help Japan introduce CBDC in the future without delay if the decision were made after discussions among the Japanese public.
- The Panel considers it essential to clearly explain the rationale behind CBDC to the public. It is particularly important to answer questions such as how CBDC could address social challenges and how privacy would be protected. Discussions among a wide range of stakeholders, including related private entities, will be important.

(1) Relationship between BOJ and intermediaries

- A “two-tiered model” in which intermediaries stand between BOJ and users would be appropriate.

【Role of BOJ】

- As the CBDC issuer, BOJ would manage arrangements including a ledger to ensure the accuracy and verification of recording. BOJ would also play as a “catalyst” for developments of private payment services.
- Technical aspects need further exploration (*e.g., possible introduction of token-based CBDC or DLT.*)

【Role of intermediaries】

- Intermediaries would provide the following basic payment services;
 - issuance and redemption vis-à-vis BOJ
 - services regarding distribution vis-à-vis users (*e.g., opening/closing accounts, customer management, providing interfaces, operations for payout/transfer/acceptance*)Intermediaries would provide services in accordance with their judgment and capacities.
- Other private entities may provide “add-on services” (*e.g., accounting service for households, conditional payments*) for promoting private-sector innovation while keeping level playing field among intermediaries and those entities.

【Scope & Regulation for intermediaries】

- Scope of intermediaries should be specified as their tasks are further clarified. Commercial banks and other payment service providers are likely to play intermediary roles.
- Regulations should be considered in connection with the elaboration of the design of CBDC.

(2) Relationship between CBDC and other payment services

- Payment services should play their respective roles, while interacting with each other, to provide a variety of options for users to improve usability and to maintain overall stability and efficiency in payment systems.

【vis-à-vis cash】

- Government and BOJ will maintain their commitment to supplying cash as long as there is demand from the public.
- In principle, CBDC and cash will complement each other. To be specific;
 - there is no strong reason for offline functions to be introduced at the outset considering risks of double spending and counterfeiting;
 - discussion on AML/CFT and anonymity should take into account the possibility that CBDC might create frequent and large payment flows for users;
 - remuneration on CBDC is unlikely to be adopted for the time being as it could undermine the convertibility with cash at par.

【vis-à-vis bank deposit】

- If rapid and/or consistent outflow from bank deposit to CBDC takes place, it could be likely to generate a negative impact on the financial system and economy; as such, safeguard measures should be introduced.
 - Holding limit could directly cap a shift from bank deposit to CBDC. Therefore, it would be the main option to limit the shift. Fees on the holdings might not work as intended in times of financial stress.
 - It should be considered how a holding limit works effectively when users are allowed to have multiple accounts. Auto-swing of excess CBDC to a bank account may also be an option.

【vis-à-vis other payment services】

- CBDC supports other payment services as a common infrastructure and thereby brings more competitions and network effects.
- Authorities should have sufficient communication with related private parties as CBDC could have an impact on their business models.

(3) Security & user data

【Ensuring security】

- CBDC should always be available as a means of payment. All appropriate and effective measures for cybersecurity/information security should be in place. It is important to take additional measures in accordance with the technological progress.
- To address security incidents, it is important not only to take *ex ante* measures to prevent security incidents but also to adopt *ex post* recovery measures once they materialize.

【Handling user & transaction data】

- CBDC design shall put priority on privacy protection. Balances need to be taken into consideration between (i) privacy protection and (ii) usability of data and public policy requirements.
 - Intermediaries should handle their data in compliance with related law and regulations regarding personal info protection.
 - BOJ should minimize the scope of data it handles. CBDC should be designed for BOJ to have as minimum data as possible. If it obtained /held data, measures such as anonymization should be used. Data should be deleted when it is no longer needed.
 - Government could receive data for the public policy requirements such as AML/CFT, as is the case under the current frameworks. Purpose and scope of data should be identified in advance.
- To prevent illicit activities, CBDC users need to be subject to identity verification process similar to the existing payment services. Other considerations are;
 - the extent of KYC procedures might be based on the level of transaction limits, while considering the international trend;
 - CBDC access by non-residents would encounter the difficulty of identity verification, and they could easily use other payment services in Japan. The primary scope of users, for the time being, would be residents in Japan, and access by non-residents remains to be considered going forward.

(4) Other issues

【Legal consideration】

- Cash is stipulated as legal tender under the BOJ Act and the Currency Act. CBDC would also be legal tender as it should be accepted by a wide range of users as a means of payment. It is also necessary to consider how to establish an appropriate environment conducive to universal access.
- CBDC would have a broader influence on existing legal framework, including regulation of intermediaries as well as private and criminal laws. MOF in coordination with relevant ministries should make further assessments.

【Cost】

- Following further elaboration for more detailed design of CBDC and discussions among the Japanese public, a decision would be made whether or not to issue CBDC. When making such a decision, the overview of costs should be presented.
- In addition to the overview, the way in which it is allocated should be assessed, taking into account that (i) beneficiaries may bear its costs and (ii) public sector may bear costs for providing public infrastructure.

【Cross-border payment】

- Achieving faster, cheaper and more transparent cross-border payments is a global challenge.
- First and foremost, international cooperation through technology standardization is the key to ensure interoperability among CBDCs in different jurisdictions.
- Interoperability among CBDCs or among other payment systems alone does not entirely solve this challenge. Harmonization among regulations and practices in each jurisdiction is also a key for addressing this global challenge.