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Bank of Japan

The Future of Payment and Settlement Systems With or Without Central Bank Digital Currency

*Opening Remarks at the Second Meeting of the Liaison and
Coordination Committee on Central Bank Digital Currency*

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(English translation based on the Japanese original)

Thank you for joining the second meeting of the Liaison and Coordination Committee on Central Bank Digital Currency (CBDC) today.

More than six months have passed since the first meeting of this Committee in March 2021. During this time, the Bank has initiated an experiment for a general purpose CBDC, which is currently progressing on schedule.

There have also been various developments in other jurisdictions. The European Central Bank announced that it will launch the investigation phase of the digital euro project to last for about two years and decide whether or not to start developing a digital euro, once the investigation phase has ended. The U.S. Federal Reserve System is expected to issue a public consultation paper on CBDC shortly and strengthen dialogue with relevant entities. Seven central banks, including the Bank of Japan, together with the Bank for International Settlements, recently published a series of reports on common issues related to CBDC. The group has agreed to continue its work on CBDC, and the Bank of Japan will continue to closely coordinate with the central bank group. Meanwhile, China is also conducting large-scale pilot testing on CBDC, and a number of countries with relatively small economies have actually started issuing CBDC.

In my remarks at the last meeting, I commented that, "given the current factors at play, including technology and developments at home and abroad, there is a reasonable possibility for CBDC to provide a means of payments and settlements and for such systems to become global standards." The developments abroad during the past six months underline such a possibility. We must acknowledge the fact that CBDC is becoming one realistic option in many jurisdictions. Of course, the issuance of CBDC is not a goal of discussion in itself. The goal is to design "payment and settlement systems suitable for the digital society," in which CBDC will only serve as a tool.

Today, I would like to try a thought experiment that may help us think more specifically about the future landscape of payment and settlement systems. That is, what would happen if the Bank continued to provide only the same public good as it does today (i.e., cash and current account deposits) while the digitization of the economy and society progresses?

It is not likely that we will face an immediate problem. The demand for cash continues to grow in Japan and is not expected to fall significantly in the near future. At the same time, as there are various costs associated with the physical handling of cash, there is always a possibility that cash will be replaced by digital payment methods in a short timeframe, as was the case with Sweden and China. A move to digital payments, by itself, is not a negative development, as it will enhance convenience. However, if cash becomes less accepted at stores and restaurants, users might be practically forced to register to use certain payment instruments. Furthermore, as such instruments are private sector liabilities, there would be a need for an arrangement to ensure safety. The extensive arguments surrounding global stablecoins is still fresh in our memory, and in China, a 100 percent reserve is required for private sector payment service providers.

There is also the issue of interoperability. In Japan, while a number of payment service providers compete in the area of cashless payment services, there is limited interoperability between these services, preventing a full exploitation of economics of scale and network effects. We frequently ask whether a certain payment method is accepted at a store. Payment service providers have incentives to lock in customers in order to expand their business base. This means the momentum for enhancing interoperability is sluggish in nature. In the longer term, as a result of competition, consolidation to a small number of service providers may occur. Some service providers may be able to provide payment services at low cost by utilizing customer data and by cross-selling these data. Such a state, however, may come at the cost of giving away your personal data and may also result in barriers for new market entry.

Moreover, if CBDC prevails in other countries, issues may arise as to whether provision of financial services in Japan may be adversely affected or whether interoperability with foreign CBDC can be ensured without issuing our own CBDC. Apart from these issues, various challenges that are unpredictable at this stage may also arise, as payments are likely to become more digital.

"Payment and settlement systems in which CBDC is available" is a clear grand design that

can serve as a solution to address these issues. In other words, it would be more convenient and secure if payment instruments issued by central banks with a 100 percent safety and acceptance, like cash, can be used in payment service platforms operated by private entities. It is possible to differentiate the provision of payment instruments and the provision of payment services, and such differentiation highlights an important aspect in addressing various issues in and around the payment and settlement systems. For example, using CBDC as a payment instrument, which is neutral with respect to data use, would ensure competition among payment service providers with interoperable systems and allow consumers to choose any payment services as well as any of its associated ecosystem services they like from the available options. While pursuing a scale advantage gained by customer lock-in and consolidation is reasonable, payment instruments available to all users are needed as public goods.

If central banks are to decide to issue CBDC, they need to acknowledge the role of public goods and ensure coexistence with private sector payment services.

There are two types of "coexistence": "horizontal coexistence" and "vertical coexistence." "Horizontal coexistence" means that a CBDC system coexists along with various private sector payment networks. The extreme case of "horizontal coexistence" is one in which CBDC is offered as a marginal instrument to those who cannot or do not want to use private sector payment systems. From the perspective of "financial inclusion," CBDC, for example, can be considered as a safety net for those that are unbanked or in geographically remote locations where the cost of delivering private sector payment services is not affordable.

As such cases are extremely marginal in Japan and many advanced economies, there is less motivation to bear the huge cost of building a CBDC system simply to achieve this objective. Rather, the need for CBDC should be considered in a context where CBDC is newly provided as one of the payment instruments available to the general public. In such a case, the "vertical coexistence," meaning how various entities share roles within a CBDC ecosystem, would become important, in addition to the "horizontal coexistence."

To achieve vertical coexistence, a relatively simple CBDC design is desirable for the private

sector to use it as an ingredient. For example, private entities could develop services that allow customers to use both CBDC and private sector payment instruments within a single wallet or to incorporate additional overlay services using CBDC. As we have various options, I hope that we can work together in drawing an overall picture of the payment and settlement systems in which CBDC is available.

At the same time, we should bear in mind that CBDC is not the only solution to the issues I have touched upon today. There are various alternatives available for addressing these issues, for example, by ensuring safety of payment businesses with regulation, supervision, and oversight or by enhancing interoperability between payment systems through cooperation among payment services providers. Implementing technologies that significantly reduce the time required to process the entire payment transaction from initiation to settlement may be another possible solution. As adoption of CBDC could incur costs for both central banks and private intermediaries, both parties might come to conclude, after careful consideration, that they would be better off with a different approach other than CBDC. Even such a conclusion may be a constructive step toward determining what future payment and settlement systems should look like in the digital society.

There is no change in the Bank's stance that it "currently has no plan to issue CBDC." However, while "issuing CBDC" is a big decision, "not issuing CBDC" is also a big decision, as a move to seriously explore the potential for CBDC issuance is under way around the globe. If CBDC is not to be issued, we need to consider how to build payment and settlement systems suitable for a society that is becoming increasingly digital. In either case, maintaining the status quo is not an option.

Today, we would like to share with you a progress update on our experiment to seek your views. We believe that this will serve as valuable input for our ensuing explorations.

Thank you for your attention.