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Bank of Japan

## **Envisioning the Future of Payments**

*Opening Remarks at the Fourth 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 very much for attending the fourth meeting of the Liaison and Coordination Committee on Central Bank Digital Currency (CBDC) today.

Having started its CBDC experiments in April 2021, the Bank of Japan has proceeded to Proof of Concept Phase 2 at the beginning of this fiscal year to investigate additional functions of CBDC.

I would like to take this opportunity to express my gratitude to the members of this Committee. Through this Committee, we have exchanged views regarding the Bank's CBDC experiments and institutional arrangements, successfully releasing the Interim Report this May.

The next steps in our experiments and institutional arrangements will take into account the results and findings of Phase 2. As we move forward in our efforts, we would very much like to ask for your continued support and further collaboration.

Our coordination with you and continued dialogue with colleagues at overseas central banks over the past two plus years have shed light on some crucial points. Progress suggests that the path is being paved for discussions surrounding CBDCs going forward.

The first point is that exploring CBDCs is a process of considering the future landscape of the overall payment and settlement system. At the first meeting of this Committee, I addressed the question of whether the issuance of CBDCs would be necessary in Japan, where people are able to use cash safely and most people hold bank accounts. Indeed, there are no urgent needs or potential use cases at present to introduce CBDCs. This trend is not unique to Japan, but rather, shared by many jurisdictions.

Needless to say, while the future is unknown and not easy to catch a glimpse of, the discussion at hand is not focused on the far distant future. Let us recall how smartphones, social media, e-commerce and other digital services have entered our lives, transforming our lifestyles over the past ten to 15 years. Considering the magnitude of their impact and the sheer speed of change, discussing the roles of payments and money in the not-so-distant future would be essential. The question of whether or not to issue a CBDC is one way of interpreting this.

Features of a potential CBDC are clear-cut: it is a safe payment instrument that can be used anywhere, as is the case with paper money or coins. With digitalization progressing, how should we incorporate these characteristics of CBDCs as a public good -- namely, general acceptability, interoperability, safety, and settlement finality of transactions -- into payment systems? The question itself is quite straightforward.

Second, envisioning such a future of payments requires collaboration with all of you in the private sector. This seemingly simple question I just mentioned ties in directly with that of how we should change payments businesses when many players are conducting their own businesses. If we were to make a fresh start and revisit this question from square one, the answer would come down to introducing some kind of digital central bank liability into the payments landscape, regardless of what we name it.

Our choice of payment instruments we use on a daily basis has path dependence. In the eyes of the individual payer, payment is most often a routine act and the individual is thus inclined to adhere to her or his usual method, even when an array of choices is available. Imagine, for example, the various payments that occur in your daily lives: paying with cash at the local fish shop, paying with a QR code at the convenience store, paying by credit card at your go-to restaurant, and paying via bank transfer for your child's monthly prep school fee.

Globally, payment and settlement systems for each jurisdiction have developed with a view to serving the needs of their own people. In the same spirit, Japan has brought some innovations into practice ahead of other countries, led by the private sector. Specifically, the Zengin System, which began operations in 1973, and the participants' systems in conjunction with it, were indeed cutting edge at the time. While it is sometimes pointed out that Japan is lagging behind in terms of transitioning to a cashless economy, it is safe to say that our systems of bank account transfers and electronic funds transfers are quite convenient.

In terms of cashless payments, payment service providers, including banks and nonbanks, are competing fiercely to provide their cashless payment services at merchants and other stores. Meanwhile, efforts to improve interoperability have made progress, as seen, for example, in

the expanded eligibility of the Zengin System and the introduction of Cotra (small value funds transfer services) for person-to-person payments across platforms.

In discussing the possible introduction of CBDCs -- a new method of payment -- it goes without saying that complementing and coexisting with the current payment and settlement system is a prerequisite. There is thus a need to determine the roles of CBDCs alongside other forms of money already existing in the current system -- in other words, a need to ensure "horizontal coexistence." In addition, the Bank has clarified from early on its stance to adopt, if it were to introduce CBDCs, an indirect issuance model, where the CBDCs would be issued through intermediaries. Various forms of coexistence are also possible in terms of "vertical coexistence," in other words, how entities will share roles within a CBDC ecosystem. In light of the current landscape of Japan's payment and settlement system, the following is basically expected. A CBDC ecosystem would develop horizontally to cover the types of payments that cash currently does. It would also develop vertically to have open interfaces with end users provided by the private sector such that they would be as widely accessible as possible. While we have yet to delve further into this issue, it would be under these conditions that a central bank, as the issuer of CBDCs, would provide a public good available for simple transactions in a non-competitive area, the underlying infrastructure. Conversely, even if we were to consider a payment and settlement system without CBDCs, issues would remain, namely, how to secure a digital payment instrument that is safe and can be used anywhere, and what role the central bank would fulfill in this case. Let me stress that the real issue here is not an either-or choice of whether a CBDC exists or not, but rather how to design Japan's overall payment and settlement system.

Third, the time is right to consider the future of payments in a digital society. Cash still prevails as the key payment instrument for frequent and low-value retail payments in Japan. In light of its safety and capacity to be used anywhere, cash is a highly efficient means of payment, and the Bank will stay committed to supplying it as long as there is public demand. At the same time, a heavy burden is borne particularly among financial institutions, distributors, and retailers, which underpin the cash function as the basis payment infrastructure. Financial institutions, faced with the need to cut back on the costs associated with cash circulation, have been setting out measures such as reducing the number of branches

and ATMs and charging transaction fees. Such trends are accelerating.

In some countries, the use of cash has been trending down rapidly. Among these are cases where the increase in oligopolistic and monopolistic activities of private businesses in the retail payments markets has been pointed out as a cause for concern.

While path dependence of payment choices exists, this by no means guarantees that the same instrument, including cash, will always be selected. There are times when a drastic change in routine becomes possible, particularly when technology and lifestyles are affected dramatically in the event of rapid digitalization. Once a method of payment proliferates, it naturally emerges as the new norm, a new routine.

Japan has not yet entered this phase. Put differently, we ought to discuss the future of payment and settlement systems, now more than ever. It is a fitting time to deliberate over the nature of payment and settlement systems, as we find ourselves at a critical juncture -- before cash actually falls out of use, and before we start running out of realistic options as our path gets narrowed down.

Fourth, international perspectives play a key role in the exploration of CBDCs, while at the same time there is sufficient room for domestic considerations of each jurisdiction to be reflected in the new potential payments landscape. Considering that advanced economies are making steady progress with their respective CBDC projects, let me reiterate that there is a reasonable possibility for CBDCs to provide a means of payment and settlement and for such systems to become global standards.

Of course, this is not to say that we should simply follow in the footsteps of other jurisdictions. Ultimately, the adoption of CBDCs in Japan should be considered for the purpose of enhancing the safety and efficiency of Japan's payment and settlement system. While globalization will have profound effects on the payment services of each jurisdiction, the payment and settlement systems themselves need not be identical to one another.

The general expectation shared among advanced economies through ongoing discussions is

that CBDCs in each jurisdiction would initially be designed for domestic users, with their respective needs being reflected. That said, use cases for CBDCs could be relatively clear in cross-border contexts, and we need to bear in mind this possibility from the outset in exploring the domestic system. The group of seven central banks including the Bank of Japan, together with the Bank for International Settlements, will continue to work closely and collaboratively on this front as well.

Fifth, the scope of our explorations most likely covers not only the future of payment and settlement systems but also a broader context of innovation. In our future society, the seamless flow of money and of goods and services is expected to be facilitated even further. With such a trend in sight, a major challenge to be addressed is how to provide society with programmable payment services, characterized by conditioned and self-triggered transactions. In that sense, it is worth noting that CBDCs -- in addition to being safe and usable anywhere, as I mentioned earlier -- present a "clean slate," which is one of the advantages of CBDCs often raised in international discussions and other contexts.

Moreover, even if programmability were not to be implemented in a single step, we continue to face the issue of how to deal with the increasing operational burden on the system with more digitalized retail payments and reduced use of cash. There is no denying that under the existing payment system, the lead time and costs for incorporating new functions to meet user needs, while maintaining the high stability of the system, have been growing over time. Before long, a realistic option for incorporating such needs would be to build a brand new system while improving and complementing the existing one.

Having CBDCs in place at such a crossroads would widen our options. CBDCs, issued as a public good, would provide a common platform on which private businesses would enjoy network effects and compete on enhancing services to meet a wide range of users' needs. This would help shape a new payment infrastructure, together with the existing system, which would support innovation.

Whether or not a CBDC should be issued would be a judgment by the people. This judgment will significantly alter business practices in the private sector, which will in turn shape the

overall landscape of the payment and settlement system, affecting the investment behavior of private firms. Considering the lead time for investment, the day will come when a decision needs to be made, while being mindful of global trends. The Bank will proceed with its technical experiments to test the feasibility of CBDCs and explorations into institutional arrangements so as to support such decision making. In putting our efforts into practice -- as I mentioned earlier -- your insights and cooperation will prove all the more invaluable as we enter a new phase.

Thank you for your attention.