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***Remarks at the Panel Discussion,  
“Central Bank Perspectives on Central Bank  
Digital Currencies”***

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*The views expressed today are my own, not necessarily those of my colleagues on the Federal Reserve Board of Governors or the Federal Open Market Committee.*

Thank you for the opportunity to join you for this important discussion today. The topic of central bank digital currencies is certainly of interest to the Federal Reserve and other nations' central banks around the world. Like others, the Federal Reserve System is considering both the technical and policy issues surrounding all aspects of a central bank digital currency. In my brief remarks today on the panel, I will touch on several of these key considerations.

Thanks in part to the lower cost of information and data processing, brought on by technology advances, payments and payment systems are changing rapidly. In the United States, there has been a growing need to update our payments system to allow for cutting-edge digitized commerce. A major step in that direction came in the form of the 2019 announcement of the largest payments system investment by the Federal Reserve in 40 years – specifically our plans to roll out an instant payment system, FedNow, running 24 hours a day, 365 days a year, and available to banks of any size in the United States.<sup>1</sup>

FedNow is intended to be a fast, seamless, and secure way to transmit funds. The Federal Reserve System is expecting to launch the service in 2023, and I would note that FedNow will provide many of the use cases frequently associated with potential digital currencies, including facilitating digital commerce in dollars. It may, over time, also have the capacity to significantly reduce costs for a variety of transactions, including possibly international transactions. In addition, a faster payments system – combined with a no-cost transaction account at banks – could potentially promote better economic inclusion in the financial system for many citizens.

In addition to the work being done on FedNow, the Federal Reserve Bank of Boston is also engaged in research focused on the technology related to a central bank digital currency. At

the outset, it is important to highlight that this is exploratory work, and any decision to move forward with such a currency would depend on a variety of factors beyond the technological feasibility and implementation.<sup>2</sup> Of course a variety of very difficult policy issues would need to be resolved to appropriately design key features of a central bank digital currency.

A variety of reasons are sometimes offered for deploying a central bank digital currency, including:

- resolving issues with financial inclusion, such as serving the unbanked;
- reducing costly cross-border transactions;
- providing monetary policy with additional flexibility;
- facilitating targeted fiscal transfers; and
- reducing counterparty risk by using legal tender.

Design choices would involve trade-offs, however, including introducing additional complexity that could actually slow the processing of large volumes of transactions. In addition, one must be attuned to the possibility of unintended consequences, including the possibility of rapid movements of funds which could impact financial stability.

In part, of course, it is important to understand what problems a central bank digital currency is being designed to solve, and whether other technologies could more cheaply or efficiently address those problems. Nonetheless, work on understanding the *technical* hurdles to a central bank digital currency can proceed, while these very difficult *policy* issues are considered and navigated.

I am not going to discuss in any detail today the policy issues involved, but I will touch on the work being done by Boston Federal Reserve Bank that is focused on the technology. This work has two major components.

The first component is a joint exploration with MIT's Digital Currency Initiative (DCI) into the use of existing and new technologies to build and test a hypothetical digital currency platform.<sup>3</sup> Dubbed "Project Hamilton," the effort is designed to determine the feasibility of the core processing of a central bank digital currency, while leaving substantial flexibility for the impact of future policy decisions.

A central bank digital currency would need to be able to provide rapid processing of a large number of transactions in geographically dispersed locations. We anticipate that in early third quarter of this year, MIT and the Boston Fed will release a white paper that will document the ability to meet reasonable goals with core processing, and create an open source license for the code. Additional work following the white paper's release will explore how addressing additional requirements including resiliency, privacy, and anti-money laundering features will impact the core processing.

A second component, and area of exploration, will focus on comparing Project Hamilton with some of the private-sector platforms currently being built, and open-source platforms for a possible digital currency. This workstream will examine how each platform performs in similar environments, with a focus on being able to provide a large number of transactions across different locations in a short period of time.

It is important to note that there are many complementary aspects of the Federal Reserve's work on FedNow, and the exploration of a central bank digital currency. Both require

technology experts to study and pursue topics ranging from data architecture, to coding, to effective use of the cloud. It may be, even, that some significant aspects of both systems could be run on the same payments backbone. Certainly there is much to explore, and the eventual payments platform choices are quite uncertain, but this is an exciting area for central banks to continue to explore.

Thank you for having me join you today.

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<sup>1</sup> For more discussion, see Aug. 8, 2019 Federal Register Notice: [Federal Register :: Federal Reserve Actions To Support Interbank Settlement of Faster Payments](#), and subsequent announcement on Aug. 15, 2019: [Federal Reserve Names Ken Montgomery Leader of Newly Announced FedNow Service for Real-Time Gross Settlement of Faster Payments - Federal Reserve Bank of Boston \(bostonfed.org\)](#).

<sup>2</sup> For more context, see Feb. 5, 2020 remarks by Federal Reserve Board of Governors' Lael Brainard: [Speech by Governor Brainard on the digitalization of payments and currency \(federalreserve.gov\)](#)

<sup>3</sup> For more, see: [The Federal Reserve Bank of Boston announces collaboration with MIT to research digital currency - Federal Reserve Bank of Boston \(bostonfed.org\)](#)