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CENTRAL BANK DIGITAL CURRENCIES ANALYSIS AND REVIEW

January 12, 2023

Monthly Analysis and Review of Central Bank Digital Currencies

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This product brings you relevant news and information from our sources, the business press, and leading strategy consultants. This month’s report contains the following topics:

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BRAZIL TARGETS 2024 FOR CBDC

(PYMNTS.com, 12/13/22)

Brazil's central bank hopes to launch a digital currency in 2024.

That's according to Central Bank of Brazil President Roberto Campos Neto, who said Tuesday (Dec. 13), per Reuters, the country's central bank digital currency (CBDC) will debut after a closed pilot with financial institutions (FIs).

In a speech at an event held by the news website Poder 360, Campos Neto said the design of the CBDC would encourage banks to tokenize their assets and lead to greater efficiency.

"If the digital currency is actually a tokenized deposit, it inherits all the regulation that already applies to deposits," he said, according to the report.

He added that the launch should not disturb monetary policy or hurt banks' balance sheets.

Campos Neto said representatives of the International Monetary Fund (IMF) have approached the central bank and said this model seems the easiest to implement and other central banks should consider it, the report stated.

Brazil's central bank had initially planned to test a digital real this year but in June pushed that project back to 2023. Bank officials have said the project is aimed primarily at financial innovation rather than real-time payments.

Fabio Araujo, an economist at the central bank, said in a paper for the Bank for International Settlements (BIS) that Brazil has had a "solution for real-time gross settlement (RTGS) has already been available for 20 years ... [and] an instant payment system — Pix — went live in November 2020 and has been very well received by the public."

The main goal of launching a CBDC in Brazil, he wrote, "is to provide entrepreneurs with a safe and reliable environment to innovate through the use of programmability technologies, such as programable money and smart contracts."

Brazil's test comes as other countries are exploring their own CBDC projects, with mixed results. For example, the U.K. government said earlier this month it will bring forward a CBDC consultation "in the coming weeks."

Despite the enthusiasm of some officials, PYMNTS wrote that a digital pound does not have widespread support in parliament.

In January, the cross-party Lords Economic Affairs Committee issued a report titled "Central bank digital currencies: a solution in search of a problem?" that found there is "no convincing case" for why the U.K. needs a CBDC.

More recently, news reports from India found that bankers in that country have yet to see much benefit from the Bank of India's test of a CBDC.

HOW CRYPTO COULD BE GOOD FOR CBDC AND VICE VERSA: INDUSTRY EXEC EXPLAINS

(CoinTelegraph, 12/23/22)

While some governments continue bashing crypto, some industry executives argue that crypto could be beneficial for CBDCs.

Cryptocurrencies like Bitcoin could potentially find some mutually beneficial interactions with central bank digital currencies (CBDCs), according to one industry executive.

While crypto is often associated with financial freedom, the concept of CBDC is frequently seen as the exact opposite. But this doesn't mean that there cannot be a balance between the two, according to Itai Avneri, chief operating officer and deputy CEO of the crypto trading platform INX.

CBDCs and regulated cryptocurrencies could potentially complement each other in the future as the two types of digital currencies have their own benefits, Avneri said in an interview with CoinTelegraph on Dec. 22.

Comparing CBDCs to regulated primary offerings, Avneri suggested that allowing or enabling crypto funds to participate in such offerings would be beneficial for both sides. That would specifically expose such financial instruments to a wider audience while also giving crypto investors "comfort and confidence to trade in a regulated environment."

"In my vision, the CBDC ecosystem will not be different, but we have a long journey ahead of us till we get there," INX deputy CEO said, adding that balance between CBDCs and crypto would be a "master art."

The exec noted that he is unfamiliar with any current initiative that would allow one to buy a

cryptocurrency like Bitcoin with a CBDC or other potential interactions between CBDCs and crypto.

Avneri also pointed out the importance of combining regulation and decentralization because full decentralization misses out on regulations like Know Your Customer (KYC) controls, which "comes with a price that sometimes is not good for investors." He stated:

"When thinking about working with governments and central banks, I believe customers must be identified as it will serve their interest and will build the needed trust in the ecosystem."

Avneri emphasized that CBDC users still need to be able to interact in a private manner "similar to how they may use physical cash today."

The news comes amid INX entering a partnership with authentication firm SICPA to help governments develop CBDC ecosystems. As previously reported, INX was the first company to conduct a tokenized initial public offering approved by the United States Securities and Exchange Commission in 2021.

INX deputy CEO is not alone in thinking that CBDCs and cryptocurrency technology could be beneficial to each other in the future. Thomas Moser, a governing board member at the Swiss National Bank, believes that centralized financial projects like CBDCs could enable more stability in the development of decentralized finance.

Mikkel Morch, executive director at the digital asset hedge fund ARK36, also believes that CBDCs do not pose any direct threat to cryptocurrencies like Bitcoin. Still, CBDC can bear some risks in relation to stablecoins like Tether (USDT), according to Morch.

INSIDERS SAY CBDC USE IN CHINA ‘HIGHLY INACTIVE’

(PYMNTS.com, 12/29/22)

Consumers in China have shown little enthusiasm for their country’s central bank digital currency (CBDC).

That’s according to a former official from the People’s Bank of China, whose comments were reported Thursday (Dec. 29) by Reuters, which cited state media outlet Caixin. That official, Xie Ping, said he was disappointed with the results of China’s test of its digital yuan and said the program needed to be expanded.

“The cumulative circulation of the digital yuan in the two years of the trial has been only 100 billion yuan (\$14 billion),” Xie told a conference at Tsinghua University, per Reuters. The number indicated that “usage has been low, highly inactive.”

“The results are not ideal,” Xie, a former director-general of research for the Chinese central bank. “What needs to change is the digital yuan acting only as a substitute for cash and only for consumption.”

As PYMNTS reported in October, China is far ahead of other major world economies in launching a CBDC, as its efforts stretch back nearly a decade.

However, its testing and rollout campaign has been slow, partially to give merchants more time to get ready, and to urge consumers to use it rather than more popular digital payment methods AliPay and

WeChat Pay, which make up a bulk of China’s digital payment volume.

China has taken numerous steps to deal with these obstacles, including pressuring merchants to accept the digital yuan and instituting a “scan with one code” law that essentially forced AliPay and WeChat Pay to accept the CBDC and work on a system that makes the digital currency equally accessible to consumers.

The country has also conducted a series of lotteries in which it gave away millions of dollars in digital yuan in small increments to hundreds of thousands of consumers who had to download digital wallets to gain access to the funds or risk losing them within a short time.

China is not the only country struggling to get its CBDC project off the ground. The Bank of England’s digital pound project hasn’t seen much support from the U.K. parliament. The cross-party Lords Economic Affairs Committee called CBDCs “a solution in search of a problem” in a recent report.

And in India, the central bank’s wholesale digital rupee project has local bankers noting a downside to the program: Each trade using the CBDC must be settled individually, while transactions that use the existing interbank network can be taken care of in bulk.

BANK OF CHINA OFFERS CUSTOMERS E-LAISEE TO PROMOTE RETAIL USE OF DIGITAL YUAN IN HONG KONG

(South China Morning Post, 12/12/22)

Bank of China (Hong Kong), one of the three note-issuing banks in the city, has taken the lead to promote the use of digital yuan (e-CNY), offering e-laisee incentives to customers who register to use it.

Customers can use their mobile phone number to set up the BOC e-CNY wallet through the e-CNY (Pilot Version) app during the registration period that runs from Monday until December 29, according to a statement from the bank.

To encourage customers to try the digital currency, BOCHK is offering red packet awards worth 100 e-CNY, which can be used to buy goods at 14 physical shops of supermarket chain U Select across the city. The red packet, commonly known as laisee in Hong Kong, can also be used to shop on e-commerce platform JD.com or at mainland Chinese merchants that accept the digital currency.

“The launch of this e-CNY exclusive experience programme will help prove that e-CNY is technically feasible in Hong Kong,” said Chen Guang, BOCHK’s deputy general manager of the digital currency task force.

Transactions of China’s central bank digital currency totalled 100 billion yuan (US\$14 billion) since the start of the e-CNY initiative in December 2019 to the end of August this year, according to the latest figures released by the People’s Bank of China (PBOC).

Some 5.6 million merchants on the mainland now accept the digital currency. China’s major online platforms, including multipurpose super app WeChat, Alipay, JD.com and on-demand food delivery giant Meituan, have all enabled e-CNY as a payment option.

The Chinese government, however, has not released a timetable for the e-CNY’s full nationwide roll-out.

The Hong Kong Monetary Authority completed a small scale pilot of the e-CNY for retail use earlier this year. The de facto central bank is currently in the midst of a second round of tests, which started in the fourth quarter.

“As trade and retail increasingly moves online, it is natural that the central banks [HKMA and PBOC] promote the e-CNY in Hong Kong,” said Edmund Wong Chun-sek, who represents the accountancy constituency in the city’s legislature. “It will be convenient for tourists to use the digital currency in the city and for Hongkongers to shop online.”

BOCHK said some 200 employees took part in two rounds of technical testing of the e-CNY before rolling it out to its clients.

With the support of the Chinese and Hong Kong regulators, BOCHK has laid the essential foundation, including the topping up of e-CNY wallets with Faster Payment System and the e-CNY merchant-acquiring business for the development of e-CNY, the bank said.

“BOCHK will continue to support the relevant work of e-CNY and explore more application scenarios of the digital currency in Hong Kong, so as to promote the development of the Greater Bay Area and facilitate cross-border financial services,” Chen said.

BANK OF ENGLAND SEEKS APPLICATIONS FOR £200K CBDC WALLET PROTOTYPE

(Finextra, 12/12/22)

The Bank of England is seeking applications for a sample wallet for a Central Bank Digital Currency.

Posted on the UK Government's Digital Marketplace, the central bank is offering a £200,000 contract to successful bidders for the five-month project.

Key deliverables include the development of a mobile wallet app, wallet and merchant website and a back-end server to serve mobile app and website, call the core ledger API and store user data and transaction history.

In terms of functionality, the Wallet should incorporate a signup process, a way to update details, and to display balances, transactions and notifications. Other specifications include the ability to request P2P payments through an account ID or QR code and the means for online business payments.

While the central bank does not intend to build its own wallet, it says the aim of the project is to make the CBDC concept more tangible for stakeholders and to use as a prototype for future user testing.

It will also support the Bank's work towards the BIS Innovation Hub's 'Project Rosalind', by testing integration of a front-end with the Rosalind API. This project is based on a model where CBDC will be issued by a central bank and distributed through user-facing applications provided by payments interface providers (PIPs), mostly from the private sector. For this model to work, an API is needed to act as a platform to connect a central bank core ledger with PIPs.

The BofE team that will be interacting with the wallet project consists of a Principal Architect, a Solution Architect, a Functional Manager, Project Analyst & Technical Writer.

The supplier's team is expected to carry out all the project work but have regular progress and design meetings with the CBDC technology team to monitor and guide the project. The technology team will also be expected to deploy the developed demonstrations on Bank infrastructure.

RESERVE BANK OF INDIA LAUNCHES COUNTRY'S FIRST RETAIL CBDC PILOT

(CoinGeek, 12/4/22)

The Reserve Bank of India (RBI) has kickstarted the first pilot for its central bank digital currency (CBDC), the e-rupee.

The pilot began on December 1, 2022, according to a press statement signed by Yogesh Dayal, chief general manager of the RBI. In October, the central bank hinted that the experiment will launch in December, and the latest release provides clarity to all interested parties.

“The pilot will test the robustness of the entire process of digital rupee creation, distribution, and retail usage in real-time,” RBI’s statement read.

The pilot begins with an initial clutch of four financial institutions, namely the State Bank of India, ICICI Bank, Yes Bank, and IDFC First Bank. After the initial round of experimentation, the RBI confirms that four more banks will join the pilot, including Union Bank of India, Bank of Baroda, HDFC Bank, and Kotak Mahindra Bank.

In terms of technicalities, India’s central bank says a closed user group (CUG) will be deployed consisting of a select number of merchants and customers. It notes that the e-rupee will take the form of a digital token for the purpose of the pilot and will be issued in the same denominations as paper currency in circulation.

Selected users can interact with the e-rupee through a digital wallet provided by the participating banks which is accessible via mobile devices. The central bank says transactions can be

facilitated between individuals or with Person-to-Merchant (P2M) via QR codes provided at locations.

Thirteen cities will be covered during the pilot, but at the start date, only Mumbai, New Delhi, Bengaluru, and Bhubaneswar will be supported, with the rest coming on board subsequently. The RBI confirmed that the CBDC will not bear any interest like cash and can be converted to other forms.

It’s Been a Long Time Coming for India

India has been mulling over CBDCs for over a year to mitigate the increasing “cryptoization” of its economy. After months of consultations with relevant stakeholders, the RBI published a 50-page concept note on CBDC and began the pilot of wholesale CBDC on November 1.

The government defended the launch of the wholesale pilot on the grounds that it would reduce transaction costs while being deployed for the “settlement of secondary market transactions in government securities.”

India’s CBDC may not use distributed ledger technology (DLT) as the government has previously disclosed its preference for centrally-controlled conventional database infrastructure.

“Given the above, DLT at this point in time is not considered suitable technology except in very small jurisdictions, given the probable low volume of data throughput,” said RBI.

KAZAKHSTAN CENTRAL BANK RECOMMENDS A PHASED CBDC ROLLOUT BETWEEN 2023–25

(Cointelegraph, 12/18/22)

Kazakhstan’s central bank recommended making the in-house CBDC available as early as 2023 with a phased expansion of functionality and introduction into commercial operation until the end of 2025.

Kazakhstan, the world’s third-largest Bitcoin mining hub after the United States and China, found feasibility in launching its in-house central bank digital currency (CBDC), a digital tenge. The National Bank of Kazakhstan (NBK) revealed the finding following the completion of the second phase of testing.

In late October, Binance CEO Changpeng “CZ” Zhao announced that Kazakhstan’s CBDC would be integrated with BNB Chain, a blockchain built by the crypto exchange. The country’s primary motivation for conducting studies on CBDC was to test its potential to improve financial inclusion, promote competition and innovation in the payments industry and increase the nation’s global competitiveness.

The pilot research focused on offline payments and programmability recommended the inclusion of market participants and infrastructure players for different scenarios and proposed clarifying language to be used by the country’s regulators. The latest research paper cemented Kazakhstan’s

intent to roll out the digital tenge. A rough translation of the report reads:

“Taking into account the need for technological improvements, infrastructure preparation, development of an operating model and a regulatory framework, it is recommended to ensure a phased implementation over three years.”

Kazakhstan’s central bank recommended making the in-house CBDC available as early as 2023 with a phased expansion of functionality and introduction into commercial operation until the end of 2025.

As many Russians crossed the border into the neighboring borders amid war-related uncertainties, Kazakhstan announced to legalize a mechanism for converting cryptocurrencies to cash.

“We are ready to go further. If this financial instrument shows its further relevance and security, it will certainly receive full legal recognition,” said President Kassym-Jomart Tokayev while speaking at the international forum Digital Bridge 2022.

As Cointelegraph reported, the neighboring country of Georgia has also been moving to introduce new crypto regulations to become a global crypto hub.

NIGERIA LIMITS CASH WITHDRAWALS TO \$45 PER DAY IN CBDC, DIGITAL BANKING PUSH

(Decrypt, 12/7/22)

Nigeria has imposed limits on cash withdrawals in a move to push consumers towards alternatives, including its own Central Bank Digital Currency (CBDC), the eNaira.

In a letter to banks and other financial institutions published on Tuesday, the Central Bank of Nigeria (CBN) applied new limits on over-the-counter withdrawals at just ₦100,000 (\$225) per week for individuals and ₦500,000 (\$1,123) for businesses.

Taking cash out of ATMs will be capped at ₦20,000 (\$45) per day, with only ₦200 (\$0.45) notes and smaller denominations being available from the machines.

Customers will still be able to take out larger sums in some instances but will have to pay processing fees of between 5% and 10%.

The move was justified in the letter as being in line with “the Cashless policy of the CBN.”

The central bank’s director of Banking Supervision Haruna B. Mustafa wrote that customers “should be encouraged to use alternative channels (internet

banking, mobile banking apps, USSD cards/POS, eNaira, etc.) to conduct their banking transactions.”

Slow Start for Nigeria’s eNaira

The eNaira was launched in October last year, but less than 0.5% of Nigerians are thought to be using it.

Compare this to the estimates for the percentage of residents holding or trading cryptocurrencies, which range from 27% to more than 50% despite the country’s ban on crypto.

The CBN has offered various incentives to kickstart the CBDC’s popularity, including a discount scheme for motorized rickshaw taxis for users. In August, the scheme was opened up to people without bank accounts.

When it launched, the eNaira was Africa’s first sovereign digital currency, and its progress has been closely watched for indicators of how other CBDC projects could go. In October this year, the CBN marked the first anniversary of the currency, noting that the launch had “put Nigeria in the global spotlight.”

IMF SET TO COLLABORATE WITH THE PHILIPPINES ON WHOLESALE CBDC PROJECT

(CoinGeek, 12/26/22)

The International Monetary Fund (IMF) has announced a planned collaboration with Bangko Sentral ng Pilipinas (BSP), the Philippines' central bank, to create a central bank digital currency (CBDC).

The IMF said its role will be to advise the country's central bank on the technicalities involved in creating the CBDC. Apart from offering technical help, the IMF noted that it will be involved in training BSP staff on the application of digital versions of the currency.

According to the public disclosure, the IMF's collaboration with the BSP is strictly for developing a wholesale CBDC, a move that the Philippines has been exploring since May. The central bank tilted towards a wholesale CBDC on the grounds that retail CBDCs are considered to have limited appeal given the multiplicity of digital payments in existence in the country.

Both parties confirm that a key reason for their decision to explore wholesale CBDCs is their potential to revolutionize cross-border transactions. The latest research indicated that the Philippines was among the top 5 leading recipients of inbound remittances, which triggered the central bank to explore the offering of a transnational CBDC.

Apart from the use in cross-border transactions, the IMF and the BSP are keen on exploring CBDC usage in the equities market. Both parties believe that a

wholesale CBDC will be key in reducing the resultant counterparty risk and may solve the challenge facing automated intraday liquidity facilities.

Despite the array of benefits that the wholesale CBDC could offer the Philippines, the IMF highlighted potential challenges. The Fund stated that since the Philippines is on the Financial Action Task Force (FATF) list for advanced money laundering, the government will need to implement stiffer anti-money laundering (AML) rules.

"The central bank has also acknowledged the risk of a more significant role by the central bank reducing interbank activity, which might detract from progressing capital market developments in the country," read the report.

Skeptics Won't Touch CBDCs with a Ten-Foot Pole

For all the advantages of CBDCs, skeptics remain wary of digital iterations of legal tender over several perceived flaws. There remains the nagging issue of privacy, with some claiming that CBDCs might become tools of state surveillance over citizens.

Others have opined that CBDCs will lead to a spike in negative interest rates, while others argue that retail CBDCs could affect the cash flow of commercial banks. Economists have reeled out grim predictions following the contagion effect if commercial banks cannot issue customers loans.

THE BANK OF SPAIN EXPLORES COLLABORATIVE PROPOSALS FOR A CBDC

(The Paypers, 12/14/22)

The Bank of Spain has revealed an interest in exploring a collaborative central bank digital currency project with FIs and technology solution providers.

The new programme will focus on a wholesale CBDC, which is an asset that is used for interbank transactions rather than retail or consumer transactions. It's worth noting that the programme has no relation to the work that is currently being carried out by the Eurosystem as part of its research on a retail CBDC, namely the digital euro.

This endeavour is an exclusive initiative of the Banco de España which acknowledges the actual potential of w-CBDCs in accordance with the current state of technology and its expected evolution. According to [bitrates.com](https://www.bitrates.com), the Bank of Spain implied that its CBDC programme will leverage blockchain or similar ledger technology.

As for the project roadmap, it will involve simulating a CBDC, integrating it with the liquidation of assets, and analysing the digital asset's pros and cons in the context of traditional processes, procedures, and infrastructures. Applications for the program will be accepted until 31 January 2023. Organisations that are interested in being part of this programme will need to meet certain minimum requirements and can submit their proposals via Banco de España's Electronic Register.

Following the submission deadline, the Bank of Spain will review and assess applications according to the established criteria. According to [bde.es](https://www.bde.es), the

bank might also hold a series of interviews with shortlisted candidates before arriving at a final decision. A precondition for the final selection might involve executing projects partially or having them combined with one another.

Other CBDC Projects in Spain and around the World

In November 2022, Payment service company Iberpay has joined 29 banks to launch a digital euro proof of concept in relation to the possible issuance of a CBDC. Apart from Iberpay, banks such as BBVA, Sabadell, Santander, ING, and Deutsche Bank took part in the proof-of-concept trials, joined by payment services organisations Bizum and Redsys.

The Spanish banks are analysing how a retail CBDC would be included in the current payment infrastructures, including processors, banks, and offerings such as the local instant payment system Bizum.

In the same month, the Reserve Bank of India (RBI) has started to prepare the rollout of a retail digital rupee pilot following a testing phase of the wholesale usage of its CBDC. India, which is primarily cash-focused, is joining nations such as China in pushing forward with digital versions of their currencies.

Other countries that have developed digital currencies include the Bahamas with its Sand Dollar, as well as Sweden with its E-krona.

SWEDEN CENTRAL BANK PREPARING FOR E-KRONA CBDC

(CryptoSlate, 12/16/22)

Sweden's central bank, Riksbank, is preparing to introduce a possible central bank digital currency (CBDC)—the e-krona—according to a Dec. 15 statement.

Riksbank said that it is “ready to be able to issue an e-krona” if Sweden’s legislature, the Riksdag, chooses to proceed with the asset’s creation. The central bank said it is “therefore working to prepare for an issuable e-krona.”

The central bank noted that an e-krona could complement cash as transactions become increasingly digital. In addition, a CBDC such as the e-krona would reduce reliance on private payment services and match the value of the Swedish krona.

As such, an e-krona would “ensure that we preserve several of the functions of cash in a future where cash is no longer used,” Riksbank explained.

Riksbank added that it has been working with the consulting firm Accenture since 2020 on a pilot project involving an e-krona. The second stage of that pilot concluded this year. The pilot is now in its third stage, which will continue into 2023.

Riksbank said that it is examining ways in which an e-krona can be used on a technical level. Specifically, it considers ways to distribute the CBDC to the public and determine which participants can be involved with the asset.

The bank is also exploring legal matters related to the e-krona, such as data protection, financial secrecy, and asset classification. Furthermore, it has sought input from various sources in 2022 through a dialogue forum and a Request for Information (RFI).

Despite apparent progress on the matter, Riksbank made it clear that Sweden’s legislature, Riksdag, has not yet decided whether to introduce an e-krona.

It noted that the government began investigating whether to issue the CBDC in December 2020. The investigation results have been delayed from Nov. 30, 2022, to Mar. 31, 2023.

Today’s news provides little certainty about Riksbank’s immediate plans, but it strongly suggests that the bank is closer to a working solution than was previously known.

TURKISH CENTRAL BANK RUNS FIRST CBDC TESTS

(CoinDesk, 12/29/22)

The Central Bank of Turkey (CBRT) has conducted the first tests of its Turkish digital lira.

According to a statement released on Thursday, the CBRT successfully carried out the first payment transactions on its central bank digital currency (CBDC) network as part of an initial test phase.

“In the first quarter of 2023, the CBRT will continue its small-scale, closed-loop application pilot tests conducted with technological stakeholders. The test results will be made public in a comprehensive evaluation report,” the bank said in the statement.

In 2023, the Turkish digital lira will move to advanced stages where the central bank will conduct pilot tests with broad participation,

including banks and financial technology companies, the CBRT added.

“Studies on the legal dimension of the digital Turkish lira show that digital identification is of vital importance for the project. Therefore, studies on the technological requirements and the economic and legal framework of the digital Turkish lira will be prioritized throughout 2023,” the bank stated.

In October, the Turkish Presidential Strategy and Budget Directorate presented an annual program for 2023 that included the discussion of a CBDC that would be integrated with digital identity and FAST, a payment system operated by the Turkish central bank.

DIGITAL DOLLAR IS A LONG WAY FROM REALITY, US TREASURY OFFICIAL SAYS

(Bloomberg, 12/21/22)

The Treasury Department's top official for financial markets and stability expressed little urgency over the federal government's need to prepare for the potential launch of a digital US dollar.

Regulators need to examine whether a central bank digital currency—or CBDC—would actually improve the speed or cost of real time interbank payments, which the Federal Reserve is aiming to introduce in 2023, said Nellie Liang, undersecretary for domestic finance at the Treasury.

Asked whether a digital dollar would help defend the primacy of the dollar in international commerce or as a reserve currency, she was even clearer.

"My view is our global leadership doesn't come from our technology," she said in an interview at Bloomberg News's Washington office Monday. "It comes from our governance system, the rules that govern our financial markets, our rule of law and the safety and soundness of our institutions."

No Current Need

If after five or more years many countries have introduced a CBDC, she added, that might become a factor in pushing the US to adopt one. But she emphasized the US government's study of a potential CBDC was mainly to be prepared for a need that didn't currently exist.

In a September report, the Treasury "set out a very deliberate, forward path for considering CBDC so that the Fed would be in a position to issue one if it decided it wanted to," she said.

The Fed in January published a white paper on central bank digital currency, without committing to issuing one. Such a move, it said, would have to be made jointly with Congress and the executive branch.

"The Federal Reserve does not intend to proceed with issuance of a CBDC without clear support from the executive branch and from Congress, ideally in the form of a specific authorizing law," the white paper said.

Views on the Fed's Board of Governors vary. Governor Christopher Waller has emerged as a central bank digital currency skeptic, while Vice Chair Lael Brainard has cast the issue in light of a more efficient payment system that could benefit the under-banked and global economic strategy.

Fed Chair Jerome Powell has shown no urgency to decide the matter soon.

BOSTON FED AND MIT SHUTTER CBDC ‘PROJECT HAMILTON’

(Finextra, 12/23/22)

The Federal Reserve Bank of Boston has released a statement announcing that research into the technical feasibility of a potential digital dollar has concluded.

A joint venture in collaboration with MIT, the initiative known as Project Hamilton, was named after Founding Father Alexander Hamilton and MIT and Apollo Mission computer scientist Margaret Hamilton.

Boston Fed executive vice president Jim Cunha reveals that the now-concluded project was “agnostic” from the start about any future policy decisions regarding new technologies and US currency.

Further, the project focused on better understanding the opportunities and challenges of different technologies that might be used to manage and transfer CBDCs.

In early 2022, Project Hamilton published research on a transaction processor for a theoretical high-performance and resilient CBDC. The processor was developed as open-source research software, called OpenCBDC, and project leaders urged global contributors to continue working on it.

OpenCBDC, a core processing engine for money that focuses on security, performance, scalability, and flexibility, provides a codebase that supports 1.84 million transactions per second and

settlement. This means transactions can be completed in under one second.

Neha Narula, director of MIT’s Digital Currency Initiative says: “The OpenCBDC codebase that resulted from this successful collaboration provides a credible and unbiased resource to evaluate design choices and ensure that a potential future CBDC could serve the public’s interest.”

After the whitepaper and code were released, Project Hamilton researchers added functionality to OpenCBDC such as programmability and audit that may be useful to evaluate a potential CBDC.

The Boston Fed and MIT will release additional findings on Project Hamilton in the coming months, with the view that the initiative provided a strong framework for policy and technology decisions that may come to the fore when establishing a CBDC in the future.

Narula adds: “Our collaboration with central banks such as the Boston Fed is at the heart of DCI’s ongoing mission to serve as a neutral convener of governments, academics, open-source communities, and the private sector. We hope that this collaborative, open-source research effort is a model for researchers from academia and the public sector to build on as we explore the future of money.”

THE FEDERAL RESERVE SHOULD DROP FEDNOW AND ANY PLANS TO LAUNCH A CBDC

(Forbes, 12/15/22)

Just before Thanksgiving, the Fed announced it still plans to launch its new real-time payments system in the middle of 2023. More surprisingly, it also plans to waive the fees to participate in the new system.

One report notes that the Fed plans to launch the new system, known as FedNow, after “years of work on the project.” But it doesn’t mention that for most of those years the Fed claimed it had no interest in launching its own instant payments network. Or that the private sector did most of the work.

Initially, the Fed assured everyone that it wanted private firms to build and run the system. It did so publicly in 2013, 2015, and again in 2017.

Yet, in 2019, *after* the private sector created one, the Fed announced that it would launch its own real-time settlement system.

Given the long-running love-hate relationship between the federal government and the banking sector, it’s difficult to feel sympathy for the banks. Small banks, unsurprisingly, are supporting FedNow. Regardless, the Fed clearly shafted the big banks, and things might not work out as well for the smaller banks as they’re hoping.

Some might be tempted to view the Fed’s latest move as good old-fashioned competition, but nobody can compete with the Fed. It’s the government agency responsible for supplying U.S. dollars. (My colleague George Selgin has multiple Twitter threads on the Fed’s statutory requirements for pricing its services and recovering its costs, and how historically difficult it has been to hold the Fed accountable to those requirements.)

This whole thing is an avoidable mess.

Set aside the below-cost/predatory pricing issue and whether the Fed disingenuously pushed the private sector into creating an instant-payments network. Also ignore whether the Fed truly recovers its costs, *and* whether the Fed itself is to blame for a host of a payments system problems throughout history. The basic question remains: Should the government be running payments systems?

In general, the government should not provide a good or service unless there is some sort of market failure. And there is clearly no market failure in the payments industry.

Payments services are not public goods, and the private sector has regularly provided such services. The Fed does not have to take over the payment system—or even part of it—to implement monetary policy or to regulate financial firms. It has no mandate to provide the technology for people to make commercial transactions, and it could easily change its policies to speed up settlement times on existing systems.

All these reasons have informed Congress’s efforts to limit the Fed’s ability to compete with the private sector, and rightfully so. There is little room for the private sector when a government entity, least of all the Federal Reserve, competes directly for customers. FedNow will surely keep private firms out of the industry.

Moreover, the same negative implications—and some that are worse—apply with central bank digital currencies, or CBDCs. I received some flak for being a scare monger when I said it, but I stand behind my original argument:

“If the tide continues to move in this direction, with central banks providing retail bank accounts to the general public and controlling every aspect of money, there will be little room left for a private banking industry.”

For anyone who thinks this position is extreme, here's a passage from a Roosevelt Institute paper (Central Banking for All: A Public Option for Bank Accounts) by Morgan Ricks, John Crawford, and Lev Menand:

"FedAccounts would offer all the functionality of ordinary bank accounts with the exception of overdraft coverage. They would also have all the special features that banks currently enjoy on their central bank accounts—including unlimited secure balances, instant in-network payments, and a higher interest rate—as well as some additional, complementary features. The FedAccount program would bring genuinely transformational change to the monetary-financial system, in ways both obvious and unexpected. Perhaps most obviously, it would foster financial inclusion."

"FedAccounts, properly structured, would be a money-and payments safety net for such households, lessening their reliance on expensive and subpar alternatives. But FedAccounts would have benefits across the income and wealth spectrum. For small and large businesses as well as individuals, the boost in interest paid on central bank accounts, the immediate clearing of payments, and (for those exceeding the deposit insurance limit) the nondefaultable status of balances would be transformative. Consumers and retailers would also benefit because the Federal Reserve would not charge interchange fees on debit card transactions."

They want the government to pay customers a higher interest rate than private banks and charge little to no fees, resulting in "transformational change to the monetary-financial system." Yet, somehow, CBDCs are supposed to complement private banks?

Many supporters, instead, argue that a CBDC should be considered as a limited public option, perhaps only for the "unbanked or underbanked." These arguments are weak.

For starters, the supposed benefits of a CBDC depend on widespread adoption. Worse, though, is the basic fact that only about 5 percent of U.S. households don't have a bank account. And nearly half of those folks say that they don't have an account because they do not have enough money to meet minimum balance requirements. (For other explanations, see here.) Not having enough money is a broader economic problem, one that creating a "free" public option for banking does almost nothing to solve.

Furthermore, people can still participate in the American economy without a bank account. Check cashing services, prepaid cards, and payment apps such as Venmo are available to anyone who wants them. Of course, CBDC supporters don't like those check cashing services, so they refer to anyone with a bank account who uses them as "underbanked," thus fluffing up the "financial inclusion" problem.

There is also absolutely no doubt where the political pressure will push even a severely limited public option CBDC. The CBDC's availability will inevitably expand to more people and businesses, thus crowding out more and more private firms. Just look at the above passage from the Roosevelt Institute and listen to what most of the CBDC supporters already promote.

Finally, there is the issue of how CBDCs fit into the existing anti-money laundering (AML) framework. Anyone who thinks CBDC users will get a privacy pass compared to bank customers is in for a rude awakening, and there is clearly further potential for abuse of power with CBDCs relative to existing means of payment. (For more on CBDC issues, check out this working paper coauthored with my Cato colleague, Nick Anthony.)

Just like FedNow, CBDCs should be left on the drawing board. Both usurp the private sector. Supporters of both ignore the many harms that the government has already done to financial markets and assume that the government will provide better solutions this time.

If Congress really wants to provide more access to financial markets and ensure more innovation in financial services, members should support more private innovation and competition. At the very least, they should work to lessen government monopoly and regulation while ensuring that the Fed cannot issue a retail CBDC. Then they can start getting the government out of the payments system business.



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