



February 10, 2021

WHAT YOU NEED TO KNOW ABOUT The Digital Dollar

PRO POINTS

- **The Federal Reserve is considering whether to launch its own virtual currency, which would operate much more like physical cash than current forms of electronic money.**
- **Countries around the world are exploring the same question.** Brazil has decided to offer a central bank digital currency, though it's not expected to fully launch until next year. The U.S. is one of the first nations after China to begin developing the relevant technology in-house; others like Sweden have outsourced that work.
- **Deeply complicated policy questions about privacy, anti-money laundering, financial stability and financial access make this a bold and daunting research project.**

HOW WE GOT HERE

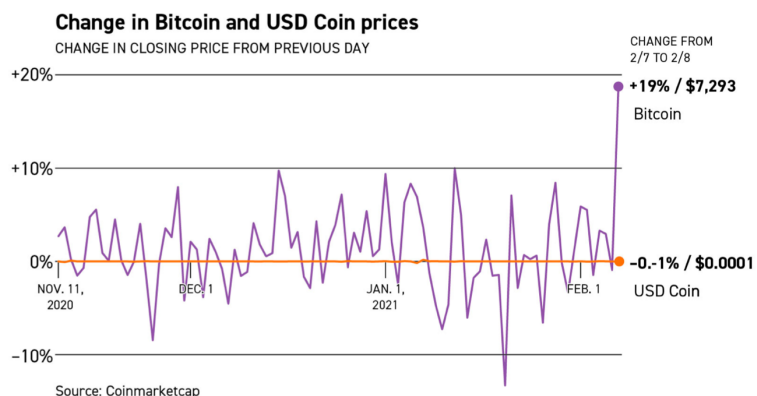
The development of Bitcoin in 2009 and its subsequent popularity spurred the creation of an entire ecosystem of cryptocurrencies that are controlled not by governments but by private actors. That includes a class of virtual currencies known as stablecoins, which unlike Bitcoin, are tied to an underlying government-issued "fiat" currency.

Central banks around the world have begun exploring the idea of issuing their own digital currencies — a fiat version of a cryptocurrency — including China, which has gotten as far as testing the technology with consumers. The U.S. jumped into the fray last August, announcing that the Boston Fed regional bank and researchers at the Massachusetts Institute of Technology would collaborate on building a hypothetical platform to determine if a Fed-backed digital currency would work in practice.

One external development motivating the Fed was a Facebook-led effort, launched in 2019, to build a global digital currency network tied to the so-called Libra coin, which would be backed by a basket of existing fiat currencies. That effort has since transmuted into a narrower vision (and the Libra Association is now called the Diem Association), but the scope of the original project demonstrated how the private sector could, in theory, create a massive currency system outside government control. That could pose broader dangers for the primacy of the U.S. dollar.

Stablecoins are less volatile than other cryptocurrencies

A U.S. central bank digital currency would likely resemble a stablecoin — a cryptocurrency structured to not have volatile price swings. Over the past three months, USD Coin, a stablecoin backed by the U.S. dollar, has consistently been equal to about \$1. On the other hand, Bitcoin has hit a low of about \$15,000 and a high just over \$46,000 in the same time period.





More concretely, a central bank digital currency would be a way of making cash truly digital. Money is moved around electronically all the time, but bank deposits aren't the same as physical money. Instead, the depositor is giving money to the bank that the bank can then lend out elsewhere. The bank has an obligation to pay back the depositor if the depositor wants to withdraw the money. But the bank only has physical cash backing up a fraction of its deposits — a central feature of money creation.

A central bank digital currency would operate instead more like physical cash. A person or a business would have digital dollars in a “wallet,” and they could transfer them directly to someone else without needing to use a payment card or a bank account. Even if the wallet were operated by a bank, the bank wouldn't be able to lend out the cash. While deposits are a liability for a bank, physical dollars are backed directly by the Fed.

Proponents say a digital dollar could have important benefits, such as for lower-income people hurt by overdraft fees. “In jurisdictions where access to cash is in decline, there is a danger that households and businesses will no longer have access to risk-free central bank money,” according to a paper from the Bank for International Settlements, drafted by seven central banks including the Fed.

But the creation of such a digital currency could also pose deep competitive threats to banks and, critics argue, decrease the amount of productive lending that occurs. “A central bank should have robust means to mitigate any risks to financial stability before any [central bank digital currency] is issued,” the BIS paper said.

WHAT'S NEXT

Before the Fed makes an ultimate decision on whether to build a digital currency, there are a slew of policy questions about what that currency would look like. How would people get access to their digital dollars? How much information would the Fed see about individual transactions? Would the Fed pay interest on these digital dollars as another policy tool? Who would host the wallets: Banks? Any firm that meets certain standards? The Fed itself? These are serious questions that could stand in the way of the Fed following through on a digital currency.

The central bank is in the earliest stages of thinking about these types of questions. The Boston Fed and MIT's Digital Currency Initiative are hoping to finish the first stage of their research by July, when they will publish an open source license for the most basic piece of infrastructure, which involves minting and moving digital dollars. For now, that infrastructure will be highly flexible, allowing the public and other countries to build off it and improve upon it, according to the Boston Fed.

The whole collaboration has been divided into work phases that will take two to three years. Part of this early stage is testing how to move, settle and clear transactions at high speed, while also having data replicated in multiple locations in case there's a problem with the records at one location. In the meantime, the Fed continues to build the necessary infrastructure for faster payments, dubbed FedNow, which would compete with a nascent system built by big banks; both projects would allow paychecks and rent payments to clear within seconds rather than days. Since rapid transactions are among the biggest draws of a digital dollar, these parallel efforts are part of the larger picture of how the U.S. will ultimately update its aging payments system.

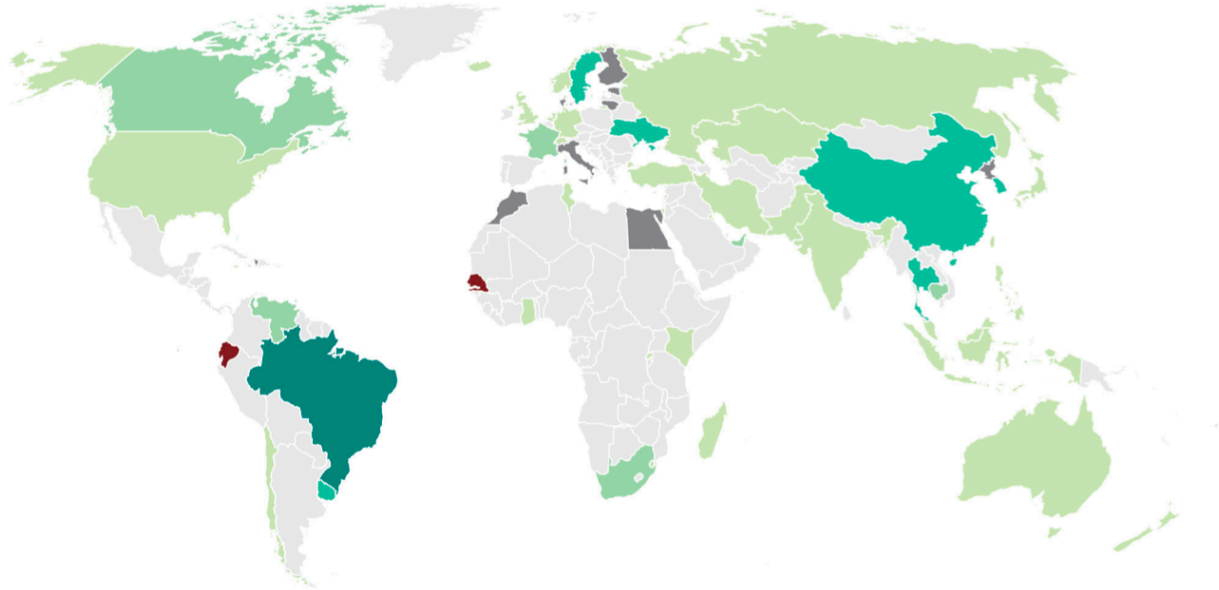


Central bank digital currencies by stage of development

IN DEVELOPMENT OR USE

NOT IN DEVELOPMENT OR USE

■ Research
 ■ Development
 ■ Pilot
 ■ Launched
 ■ Cancelled
 ■ Inactive
 ■ N/A



LAUNCHED

Brazil*

PILOT

Antigua and Barbuda
 The Bahamas
 China
 Dominica
 Grenada
 Hong Kong
 Singapore
 South Korea
 St. Lucia
 St. Vincent and the Grenadines

PILOT

St. Kitts and Nevis
 Sweden
 Thailand
 Ukraine
 Uruguay
DEVELOPMENT
 Cambodia
 Canada
 France
 Marshall Islands
 South Africa
 United Arab Emirates
 Venezuela

RESEARCH

Australia
 Bahrain
 Chile
 Euro Area
 Germany
 Ghana
 Iceland
 India
 Indonesia
 Iran
 Israel
 Jamaica
 Japan

RESEARCH

Kazakhstan
 Kenya
 Kuwait
 Lebanon
 Madagascar
 Malaysia
 Mauritius
 Netherlands
 New Zealand
 Norway
 Pakistan
 Palestine
 Philippines

RESEARCH

Russia
 Rwanda
 Swaziland
 Switzerland
 Taiwan
 Tunisia
 Turkey
 United Kingdom
 United States
CANCELLED
 Ecuador
 Senegal

INACTIVE

Curacao and Sint Maarten
 Denmark
 Egypt
 Estonia
 Finland
 Haiti
 Italy
 Lithuania
 Morocco
 North Korea
 Trinidad and Tobago

*Brazil launched a real-time payments platform in 2020. It is expected to begin circulating a digital real in 2022.

Source: The Atlantic Council GeoEconomics Program and Belfer Center for Science and International Affairs



POWER PLAYERS

- **Jim Cunha**, senior vice president at the Boston Fed: Cunha is spearheading the team at the U.S. central bank that is researching whether a central bank digital currency could work in the U.S. and how.
- **Neha Narula**: As director of the Digital Currency Initiative at the MIT Media Lab, Narula is in charge of the group working with the Fed on exploring digital currency and blockchain technology.
- **Sen. Pat Toomey of Pennsylvania**: The top Republican on the Banking Committee has said there should be hearings on this and other payments matters. “We should try to seek a consensus on what’s the optimal outcome, where people have more convenience, lower-cost transactions, faster transactions, and we still maintain our status as the world’s reserve currency, and we maintain our ability to control monetary policy,” he told POLITICO.
- **The Bank for International Settlements**: The global forum for central banks will continue to be a hub for research and collaboration on central bank digital currencies among its members.