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Central Bank Digital Currency

The Risks and the Myths

By Nicholas Anthony and Norbert Michel

Central bank digital currencies (CBDCs) have the potential to radically transform the American financial system—ultimately usurping the private sector and endangering Americans' core freedoms. Although CBDCs have gained the attention of politicians, central bankers, and the tech industry, this experiment should be left on the drawing board. This paper provides a summary of why Congress should explicitly prohibit the Federal Reserve and the Department of the Treasury from issuing a CBDC.

WHAT IS A CBDC?

A CBDC is a digital national currency.[1] In the case of the United States, a CBDC would be a digital form of the U.S. dollar. Like paper dollars, a CBDC would be a liability of the Federal Reserve. But unlike paper dollars, a CBDC would offer neither the privacy protections nor the finality that cash provides. In fact, it's precisely this digital liability—a sort of digital tether between citizens and the central bank—that makes CBDCs distinctly different from the digital dollars that millions of Americans already use (e.g., credit cards, debit cards, prepaid cards, and payment applications).

Currently, when consumers deposit money into their bank accounts, the deposits are liabilities of the banks. In other words, a bank owes a customer the money deposited in that customer's account and is responsible for transferring it. In the case of a CBDC, however, the money would be a liability of the central bank. That is, the government (in the case of the United States, the Federal Reserve[2]) would have the direct responsibility to hold, transfer, or otherwise remit those funds to the owner. This feature creates a direct link between citizens and the central bank—a radical departure from the existing American system in which private financial institutions provide banking services to retail consumers.[3]


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PURPORTED BENEFITS AND SERIOUS RISKS

Proponents claim that a U.S. CBDC would promote financial inclusion, spur faster payments, protect the U.S. dollar's status as the world's reserve currency, and make it easier to implement monetary and fiscal policy. Yet, even supporters acknowledge that a CBDC poses serious risks, such as threats to financial privacy and financial freedom, as well as to the banking system. In fact, public comment letters already demonstrate high levels of opposition to a U.S. CBDC primarily because of these risks.[4] As this brief demonstrates, a CBDC would not provide any unique benefits to Americans compared to existing technologies, and its risks outweigh the purported benefits.

Financial Inclusion

Proponents claim that CBDCs would improve financial inclusion by providing a new source of financial services for Americans without banking services, but most Americans already have access to the financial system. For instance, the latest Federal Deposit Insurance Corporation data show that more than 95 percent of American households have either a checking or savings account. Moreover, CBDCs do nothing to address the privacy and trust concerns that Americans cite as reasons for not wanting a bank account.[5] While some proponents argue that CBDCs would provide a payment option with zero credit and liquidity risk, those arguments miss that these zero risk features are not technology dependent. Rather, they are wholly due to government guarantees—guarantees that could be added to any payment option.

Faster Payments

Proponents claim that a CBDC could offer faster payments options. However, a CBDC provides no unique benefit compared to the existing developments in the private sector, including private fintech-based solutions such as stablecoins and private innovations such as the Real-Time Payments (RTP) Network. Incidentally, the RTP Network has yet to reach its full potential largely because the Federal Reserve (the Fed) decided to launch its own instant settlement network, FedNow. While proponents may claim otherwise, government officials in the United States and abroad have acknowledged that CBDCs offer no unique settlement advantages relative to existing alternatives, many of which already offer instant or nearly instant settlement speeds.[6]

World Reserve Currency

Proponents claim that a CBDC would preserve the dollar's status as the world's reserve currency, but the dollar's renowned status is owed to the strength of the American economy and its legal protections for private citizens relative to most other countries.[7] The U.S. dollar is in no danger of losing its status simply because the Fed does not have a CBDC, especially if the countries launching CBDCs offer few of the economic and legal protections integral to the U.S. system. For example, China's CBDC (the e-CNY) is unlikely to attract global demand considering the Chinese government's long history of violating property rights, financial privacy, and other human rights.[8]

Monetary and Fiscal Policy

Proponents argue that a CBDC would allow the government to fine-tune the economy with monetary and fiscal policy. Supposedly, a CBDC would provide such an opportunity by allowing the federal government to transfer money into and out of individuals' accounts. The Fed could, for instance, impose penalty fees when people do not spend enough of their existing balances or transfer more funds to people when it desires to boost spending. Regardless of whether such policy actions could succeed in meeting macroeconomic goals, using a CBDC in this manner would require a ban on all private monetary alternatives, including cash, such that Americans must directly depend on the federal government to receive (and maintain) their funds.

Financial Privacy

Americans have a right to privacy that is protected by the Constitution, but laws designed to counter terrorism, deter money laundering, and collect taxes provide the government with the ability to conduct large-scale surveillance of citizens' financial information without so much as a warrant.[9] A CBDC could easily remove what little protections remain because it would give the federal government complete visibility into every financial transaction by establishing a direct link to each citizens' financial transactions.[10] If the federal government maintains the existing laws that require financial institutions to gather customers' personal information and police private transactions, there is no reason to believe that a CBDC will operate without such controls, especially given that a CBDC directly connects people to the central bank.

Financial Freedom

The threat to freedom that a CBDC might pose is closely related to its threat to privacy. With so much data in hand and consumers directly connected to the central bank, a CBDC would provide countless opportunities for the government to control citizens' financial transactions.[11] Such control could come in the form of prohibiting and limiting purchases, spurring and curbing purchases, or freezing and seizing funds. The possibilities for the programmability of a CBDC are virtually limitless. In the case of government-mandated lockdowns during a pandemic, for instance, a CBDC could be programmed to only exchange with "essential" businesses or alert the authorities when citizens incur travel expenses. The potential for abuse of power, such as freezing the financial accounts of peaceful political protesters, is also virtually limitless.[12] For years, governments have used the financial system to control citizens.[13] Introducing a CBDC would make that control both easier and faster to achieve.

Free Markets

There is also a risk that a CBDC could undermine the very foundation of financial markets. Federal Reserve vice chair Lael Brainard explained in a speech:

> If a successful central bank digital currency were to become widely used, it could become a substitute for retail banking deposits. This could restrict banks' ability to make loans for productive economic activities and have broader macroeconomic consequences. Moreover, the parallel coexistence of central bank digital currency with retail banking deposits could raise the risk of runs on the banking system in times of stress and so have adverse implications for financial stability.[14]

It is, therefore, hardly surprising that major banking and credit union associations are publicly opposed to CBDCs.[15] There is also no doubt that CBDCs undermine the efficacy of private cryptocurrencies (including stablecoins), a new source of competition to the legacy payments system.[16] Globally, nations' actions have demonstrated that each wants a CBDC specifically to bolster its monopoly over its national currency. For instance, China banned cryptocurrencies just as its CBDC was launched; India announced its plans for a CBDC while simultaneously calling for a ban on cryptocurrency; and Nigeria prohibited banks from cryptocurrency transactions just as it launched its CBDC. It is already clear that CBDCs threaten these markets.

Cybersecurity

Another concern with a CBDC is the central storage of financial information. Federal Reserve vice chair Lael Brainard, for example, has warned that "putting a central bank currency in digital form could make it a very attractive target for cyberattacks by giving threat actors a prominent platform on which to focus their efforts."[17] As recent history has shown, the federal government is not immune from hacks or data breaches: the Fed had more than 50 cyber breaches between 2011 and 2015.[18] The Fed even fell victim to a successful hack when $101 million was stolen in a cyberattack via the Bank of Bangladesh.[19] While the private sector is not immune from cyberattacks, a breach at a private financial institution would only affect a fraction of citizens whereas a breach of a single federal database could jeopardize all citizens' private information.[20]

RECOMMENDATIONS FOR CONGRESS

To prevent the risks to financial privacy, financial freedom, free markets, and cybersecurity that a CBDC would pose, Congress should explicitly prohibit the Federal Reserve and Treasury Department from issuing a CBDC in any form. To do so, Congress should amend Section 13 of the Federal Reserve Act and U.S.C. § 3105, Title 31.[21] Likewise, Congress should more explicitly limit the capabilities and payments through the Treasury's Direct Express cards with respect to CBDCs.[22]

To prevent the Fed from further encroaching on the private sector, Congress should also amend the 1980 Depository Institutions Deregulation and Monetary Control Act to strengthen the existing requirement for the Fed to recover its costs when exploring new initiatives. To do so, Congress could strike U.S.C. § 248a(c)(3) and replace it by adding an explicit cost recovery period, such as five years.

Finally, Congress should also require that the Fed's compliance with the Depository Institutions Deregulation and Monetary Control Act's cost recovery provisions are subject to regular audits by third parties.[23]

CONCLUSION

A CBDC poses substantial risks to financial privacy, financial freedom, free markets, and cybersecurity. Yet the purported benefits fail to stand up to scrutiny. There is no reason for the U.S. government to issue a CBDC when the costs are so high and the benefits so low.

NOTES

1. For a complete analysis of the possible costs and benefits of a central bank digital currency (CBDC), see Nicholas Anthony and Norbert Michel, "Central Bank Digital Currency: Assessing the Risks and Dispelling the Myths," Cato Institute Working Paper no. 70, November 18, 2022; and Nicholas Anthony, "The Biden-Cryptocurrency Reports: Part 5, The Future of Money and Payments," *Cato at Liberty* (blog), Cato Institute, September 20, 2022.

2. Although it is not a central bank, the Department of the Treasury could also issue a CBDC. In such a case, the same distinction of government liability applies to the digital national currency (i.e., the CBDC). That is, the government would have the direct responsibility for holding and transferring funds.

3. Some CBDC proponents promote an "intermediated CBDC," where private financial institutions would "service" the account. Ostensibly, this arrangement could prevent the federal government from directly controlling a database of citizens' commercial transactions, but most of the policy implications are the same for intermediated and nonintermediated retail CBDCs. In both cases, the liability remains with the federal government.

4. Nicholas Anthony, "Update: Two Thirds of Commenters Concerned about CBDC," *Cato at Liberty* (blog), Cato Institute, July 27, 2022.

5. Federal Deposit Insurance Corporation (FDIC), "FDIC National Survey of Unbanked Households," October 2022.

6. Philip Lowe, "Payments: The Future?," Reserve Bank of Australia, December 9, 2021; and Michelle Bowman, "Technology, Innovation, and Financial Services," Board of Governors of the Federal Reserve System, August 17, 2022.

7. For instance, Federal Reserve Governor Christopher Waller recently acknowledged that the "underlying reasons for why the dollar is the dominant currency have little to do with technology." Christopher Waller, "The U.S. Dollar and Central Bank Digital Currencies," Board of Governors of the Federal Reserve System, October 14, 2022.

8. As James Dorn notes, "The dollar has earned its status as a safe-haven currency because it is backed by trust in U.S. institutions that safeguard basic freedoms and private property rights. China lacks those institutions and trust." James Dorn, "China's Digital Yuan: A Threat to Freedom," *Cato at Liberty* (blog), Cato Institute, August 25, 2021; and Dean Cheng, Norbert Michel, and Klon Kitchen, "China's Cryptocurrency Plans Are about Power, Not Innovation," Heritage Foundation, November 22, 2019.

9. Norbert J. Michel and Jennifer J. Schulp, "Revising the Bank Secrecy Act to Protect Privacy and Deter Criminals," Cato Institute Policy Analysis no. 932, July 26, 2022; and Nicholas Anthony, "The Right to Financial Privacy," Cato Institute Working Paper no. 69, October 14, 2022.

10. For instance, Marta Belcher, president and board chair of the Filecoin Foundation, described it saying that CBDCs "give the government the ability to have absolute visibility into financial transactions." "Financial Privacy in a Digital Era," live online policy forum, Cato Institute, April 21, 2022.

11. Norbert Michel, "Central Bank Digital Currencies Are about Control—They Should Be Stopped," *Forbes*, April 12, 2022.

12. Sam Benstead, "Freedom or Slavery: the 'Britcoin'

Conundrum," *Daily Telegraph*, August 14, 2021.

13. Alan Zibel and Brent Kendall, "Probe Turns Up Heat on Banks," *Wall Street Journal*, August 7, 2013; Howard Anglin, "In Our Cashless Society, We Need to Take Digital Jail Seriously," *The Hub*, February 22, 2022; Andrey Sergeenkov, "China Crypto Bans: A Complete History," *CoinDesk*, September 29, 2021; and Nicholas Anthony, "India Seeks to Criminalize Cryptocurrencies," *Foundation for Economic Education*, March, 26, 2021.

14. Lael Brainard, "Cryptocurrencies, Digital Currencies, and Distributed Ledger Technologies: What Are We Learning?," Board of Governors of the Federal Reserve System, May 15, 2018.

15. Gregory Baer, "Central Bank Digital Currencies: Costs, Benefits and Major Implications for the U.S. Economic System," Bank Policy Institute, April 7, 2021; Gregory Baer and Paige Pidano Paridon, "The Waning Case for a Dollar CBDC," Bank Policy Institute, February 18, 2022; Nicholas Anthony, "Update: Two Thirds of Commenters Concerned about CBDC," *Cato at Liberty* (blog), Cato Institute, July 27, 2022.

16. If there are any doubts, one need only look to how the conversation changed once Meta (previously known as Facebook) announced Diem (previously known as Libra). Norbert Michel, "Facebook's Zuckerberg Should Stand Firm on Libra," *Forbes*, October 21, 2019; and Norbert Michel, "The Fed Does Not Need Fedcoin to Protect Consumers," *Forbes*, February 10, 2020.

17. Lael Brainard, "Cryptocurrencies, Digital Currencies, and Distributed Ledger Technologies: What Are We Learning?," Board of Governors of the Federal Reserve System, May 15, 2018.

18. Jason Lange and Dustin Volz, "Exclusive: Fed Records Show Dozens of Cybersecurity Breaches," Reuters, June 1, 2016; Nathan Lynch and Brett Wolf, "U.S. FinCEN Leaks to Have 'Chilling Effect' on Fight against Financial Crime, Say AML Experts," Thomson Reuters, September 18, 2020.

19. Krishna N. Das and Jonathan Spicer, "How the New York Fed Fumbled Over the Bangladesh Bank Cyber-Heist," Reuters, July 21, 2016.

20. For example, Bank of America has approximately 67 million customers. "Bank of America Clients' 1 Billion Digital Logins in July Mark the Highest Month Ever," news release, Bank of America, August 25, 2022.

21. For explicit examples of legislative language, based partly on recently proposed legislation, see Nicholas Anthony and Norbert Michel, "Central Bank Digital Currency: Assessing the Risks and Dispelling the Myths," Cato Institute Working Paper no. 70, November 18, 2022.

22. "Direct Express," Bureau of the Fiscal Service, last modified August 25, 2022.

23. The Federal Reserve's ability to ignore costs and crowd out the private sector came up during the initial announcement of FedNow. George Selgin, "Facilitating Faster Payments," testimony to the Committee on Banking, Housing, and Urban Affairs, Cato Institute, September 25, 2019.

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