NAFCU
3138 10th Street North
Arlington, VA 22201-2149
703.522.4770 | 800.336.4644
f: 703.524.1082
nafcu@nafcu.org | nafcu.org
National Association of Federally-Insured Credit Unions

May 20, 2022

Ann E. Misback
Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue NW
Washington, DC 20551

Re: Money and Payments: The U.S. Dollar in the Age of Digital Transformation

Dear Ms. Misback:

On behalf of the National Association of Federally-Insured Credit Unions (NAFCU), I am writing in response to the discussion paper issued by the Board of Governors of the Federal Reserve System (Board) requesting public input on a proposed framework for introducing central bank digital currency (CBDC). NAFCU advocates for all federally-insured not-for-profit credit unions that, in turn, serve 130 million consumers with personal and small business financial service products.

In general, NAFCU believes that the hypothesized benefits of a CBDC are difficult to pinpoint given the lack of specific policy direction in the consultative paper. Many of the design features necessary to achieve certain benefits come with serious tradeoffs that could negatively impact credit unions and pose broader financial stability risks. In some cases, those tradeoffs are difficult to anticipate because underlying regulatory policies—such as what balance to strike in terms of protecting consumer privacy, or how to guard against retail deposit substitution—are not yet developed.

NAFCU expects that the net costs of a CBDC will exceed the benefits, and that administration of a CBDC will distract from the Federal Reserve's dual mandate of achieving both stable prices and maximum sustainable employment. Accordingly, the Federal Reserve should not proceed with further development activities. Additionally, the Federal Reserve should not allocate resources towards investigating hypothetical models of CBDC until it has identified clear regulatory parameters, with the input of Congress and key stakeholders, that are the necessary foundation for understanding CBDC design limitations.

General Comments

NAFCU appreciates the Federal Reserve's caution in scrutinizing the purported benefits of CBDC and the rigorous criteria it has established as a bar for next steps.[1] From a methodological standpoint, NAFCU agrees that before the Federal Reserve diverts valuable administrative resources to conduct additional research and development activities related to CBDC, it should be

[1] Federal Reserve, Money and Payments: The U.S. Dollar in the Age of Digital Transformation, 21.

certain that these efforts will "provide benefits to households, businesses, and the overall economy that exceed any costs and risks."[2] As part of this calculus, the Federal Reserve must be able to demonstrate that a CBDC will be superior to alternative methods for promoting financial inclusion, protecting consumer privacy, guarding against criminal activity, and ensuring financial stability.

Based on the information presented in the consultative paper, NAFCU anticipates that the costs and risks associated with introducing a CBDC will outweigh potential benefits.

Although the paper outlines a model for CBDC that would be designed to "complement, rather than replace, current forms of money and methods for providing financial services," the intermediated solution put forward raises numerous concerns for credit unions and the stability of the financial sector as a whole.[3] The proposed model offers few specific safeguards to prevent the effect of retail deposit substitution. Transaction and balance limits are suggested, but no thresholds are identified.

These mitigating designs, while better than nothing, are difficult to evaluate; their efficacy will change depending on numerous, undefined variables such as the CBDC's interest-bearing status, end-user limits on balances, policies for minting or destruction, payment system competition, and recoupment of compliance costs. To illustrate potential costs and tradeoffs, NAFCU's comments below indicate where certain designs would be preferable to others. However, identifying a path of less harm should not be equated to an endorsement. In the aggregate, NAFCU considers even less problematic design choices as still likely to have profound negative implications for credit unions.

Intermediated CBDC is preferrable to disintermediated models for the purpose of avoiding the most acute destabilizing effects on the U.S. financial system. However, leaving aside what appears to be a necessary choice to preserve the credit-forming functions of financial institutions, NAFCU is concerned that the only other tangible benefit of intermediation relates to the government's ability to avoid the compliance costs associated with providing direct banking services.[4]

The use of existing financial sector compliance infrastructure may offer a convenient mechanism for offering general purpose CBDC at minimal cost to the government, but how financial institutions are supposed to benefit from this arrangement remains unclear.

Practical details are omitted regarding how financial institutions would cover the costs associated with verifying CBDC accounts, managing Bank Secrecy Act (BSA) compliance and addressing anti-money laundering (AML) risks, not to mention other consumer compliance obligations related to payments. In general, these are expensive for credit unions to perform. In 2021, NAFCU-surveyed credit unions indicated, on average, that 24 percent of their staff's time was devoted to

[2] *Id*. at 1.
[3] *See id*.
[4] *Id*. at 14. "An intermediated model would facilitate the use of the private sector's existing privacy and identity-management frameworks; leverage the private sector's ability to innovate; and reduce the prospects for destabilizing disruptions to the well-functioning U.S. financial system."

regulatory compliance and seventy-three percent of respondents expected to add staff in the next three years to better manage current and anticipated compliance burdens.[5] Historically, credit unions have increased staff during periods of significant regulatory change, and a majority of credit unions with over $250 million in assets expect to increase FTEs related to BSA/AML compliance in the coming years.[6] The introduction of a CBDC would only add to this pressure and would likely impair credit unions' ability to prioritize member-focused investments.

Estimating the precise magnitude of CBDC-related compliance costs is difficult because the paper does not offer any indication of how privacy interests will be balanced. The degree of anonymity provided to certain CBDC payments and how related policy decisions will change AML compliance or counter terrorist financing (CFT) activities are open-ended questions.[7] As described in greater detail below, proof-of-concept solutions for balancing privacy and transaction auditability are heavily dependent on new technologies and adopting these (assuming they are even effective) will likely come with significant implementation costs, especially for smaller credit unions.

Given the lack of clarity regarding specific parameters and design features, NAFCU does not believe that sufficient evidence exists to justify development of a CBDC, particularly when alternative paths for achieving the same purported benefits already exist. Credit unions are well positioned to improve underserved populations' access to affordable financial products and their efforts do not depend upon the introduction of a CBDC.[8]

CBDC Would Negatively Impact Financial Stability

NAFCU agrees that the Federal Reserve Act does not authorize direct Federal Reserve accounts for individuals. Offering CBDC directly to consumers through government accounts would constitute a radical expansion of the Federal Reserve's mission and involvement in the economy, and NAFCU strongly discourages any model for issuing CBDC that relies upon such an arrangement.

When considering how the American public might react to an erosion of financial system independence and increased government involvement in retail banking functions, the lessons of other countries may be instructive. For example, Swiss voters considered whether to disintermediate the deposit functions of banks under a 2018 proposal that would have essentially

---

[5] NAFCU, Report on Credit Unions, 16 (2021), available at https://www.nafcu.org/sites/default/files/2021%20Fed%20Report_Digital(1).pdf.
[6] *Id*. at 54.
[7] *See id*. at 22.
[8] The NCUA has indicated that 2,627 federally insured credit unions hold a low-income designation. *See* NCUA, Quarterly Credit Union Data Summary 2021 Q4. In 2022, 45 percent of low-income credit unions surveyed by NAFCU said that they had taken advantage of special grants and assistance from the NCUA. See NAFCU, Economic & CU Monitor Survey (April 2022). In 2021, the NCUA awarded $1.5 million in Community Development Revolving Loan Fund grants "to help 105 low-income credit unions expand outreach to underserved communities and improve digital services and security." See NCUA, NCUA Awards Grants to Assist Low-Income Credit Unions (September 2021), available at https://www.ncua.gov/newsroom/press-release/2021/ncua-awards-grants-assist-low-income-credit-unions.

replaced commercial bank deposits with central bank money. The Chairman of the Swiss National Bank, a notable critic of the proposal, observed that displacing commercial bank money with sovereign money would, among other things, "limit liquidity and maturity transformation as banks would no longer be able to create deposits through lending."[9] On June 10, 2018, 75 percent of Swiss voters rejected the proposal.[10]

Although NAFCU understands that the Federal Reserve is not endorsing a disintermediated model, the hazards are worth reiterating, especially given recurring legislative interest in "FedAccounts" and lack of certainty about the overall consequences for fractional reserve banking. Even if an initial variant of a CBDC is carefully tailored to avoid the negative effects of disintermediation, there is no guarantee that future law might seize the infrastructure of a CBDC to facilitate further government entry into banking services. Already this risk is apparent in proposals to support postal banking.

The intermediated model presented in the paper is intended to mitigate the worst competitive effects of government expansion into banking activities but does not alleviate all financial stability risks. While NAFCU appreciates the Federal Reserve's emphasis on identifying a complementary role for CBDC that does not supplant the valuable banking functions provided by credit unions, even an intermediated form of CBDC risks imperiling the fractional reserve banking model, which could greatly impair credit unions' ability to manage liquidity during times of stress or support recovery through lending activity.

As described in the paper, financial institutions such as credit unions would provide end-users with access to CBDC through accounts or digital wallets, and serve as the facilitators of CBDC payments that would settle on the Federal Reserve's balance sheet.[11] However, absent a radical change in law, credit unions would not be able to lend against CBDC, which would remain a liability of the central bank.

Additionally, the paper's mostly conceptual proposal for intermediation leaves many practical questions unanswered. For example, how would the Federal Reserve address the risk of consumers and businesses substituting commercial bank deposits for CBDC during times of stress? The paper acknowledges that an interest-bearing CBDC would function as a "near perfect" substitute for commercial bank money which could "increase bank funding expenses, and reduce credit availability or raise credit costs for households and businesses."[12]

The paper suggests two design features that could mitigate the risk of commercial deposit substitution: limits on end-user CBDC balances and a choice to create a non-interest-bearing CBDC. If there are no end-user limits for CBDC, or if those limits exceed maximum federal

[9] Speech by Thomas Jordan, Chairman of the Banking Board, Swiss National Bank, "How money is created by the central bank and the banking system,"(January 16, 2018), *available at* https://www.bis.org/review/r180118c.pdf.
[10] See Stanislaw Jourdan, "Lessons from the Swiss Referendum on Sovereign Money," Positive Money (July 16, 2018), *available at* https://www.positivemoney.eu/2018/07/lessons-switzerland-referendum-vollgeld-sovereign-money/.
[11] [11] Federal Reserve, Money and Payments: The U.S. Dollar in the Age of Digital Transformation, 13.
[12] Federal Reserve, Money and Payments: The U.S. Dollar in the Age of Digital Transformation, 17.

insurance for bank and credit union deposits, substitution might occur even during relatively stable periods. Furthermore, the federal deposit insurance limit of $250,000 has not been updated in over a decade. In an inflationary environment, the protection afforded by that threshold may continue to decline in real terms, which could also raise the risk of retail deposit substitution. Separate from consideration of a CBDC, if the Federal Reserve is seeking to improve the public's confidence in the safety and soundness of the banking system, it might consider supporting efforts to raise that deposit insurance limit for depository institutions, rather than risk competition with commercial bank money.

Negative Potential Effects for Credit Unions

During periods of crisis, a flight to safety would favor CBDC and credit unions would have limited ability to compete rate-wise against an interest-bearing CBDC. Even a non-interest bearing CBDC could be attractive if consumers or businesses prefer absolute safety or have urgent liquidity needs. Precedent suggests that when these conditions materialize, money will move rapidly to the least risky asset, as it did when Treasury yields spiked in March 2020.[13]

A flight to safety that involves commercial deposit substitution could profoundly alter mechanisms for maturity transformation and make it more difficult for credit unions to recover after periods of crisis.[14] If credit unions were to experience a sharp decline in deposit balances as members shifted their money to CBDC, the negative impact on lending activity could simultaneously constrain efforts to increase rates on insured shares. These effects could impair the important role credit unions have played in their communities as dependable and affordable lenders. For example, during the Great Recession, credit unions were making small business loans at a time when other lenders scaled back similar lending.[15] One study found that credit unions provided 15 percentage points more mortgage credit during the Great Recession than banks did.[16]

Negative Potential Effects for the Federal Reserve and Implementation of Monetary Policy

When outflows from commercial deposit accounts occur during a crisis, the Federal Reserve's management of resulting liquidity stress could coincide with greater balance sheet risk. As the Federal Reserve provides more liquidity to commercial banks as deposits are substituted for CBDC, the Federal Reserve would assume the risks associated with acceptance of new bank collateral. If the demand for liquidity is very great, the Federal Reserve might need to accept less liquid assets or riskier securities.[17]

---

[13] *See* Annette Vissing-Jorgensen, The Treasury Market in Spring 2020 and the Response of the Federal Reserve, NBER Working Paper No. 29128 (August 2021), available at http://www.nber.org/papers/w29128.
[14] *See* J. Fernández-Villaverde, D. Sanches, L. Schilling et al., "Central bank digital currency: Central banking for all?", Review of Economic Dynamics 41, 227, 234 (2021), available at https://economics.smu.edu.sg/sites/economics.smu.edu.sg/files/economics/pdf/Seminar/2022/FERNAN~1.PDF.
[15] See CFPB, Data Point: Small Business Lending and the Great Recession, 30 (January 2020).
[16] Cororaton, Anna, Banking on the Firm Objective (October 1, 2019). https://ssrn.com/abstract=3231614.
[17] *See* BIS, Committee on Payments and Market Infrastructures, "Central Bank Digital Currencies," 14 (March 2018), available at https://www.bis.org/cpmi/publ/d174.pdf.

Consumer Compliance Challenges

The real-time speed of CBDC payments coupled with the functionality to anonymize certain transactions could give rise to unique fraud risks. Financial institution intermediaries such as credit unions would assume these risks if consumer CBDC transactions are subject to the Electronic Fund Transfer Act (EFTA) and Regulation E. The involvement of nonbank intermediaries as facilitators of CBDC payments could also give rise to complex error resolution procedures that resemble the relationship between depository institutions and nonbank P2P services.

CFPB guidance has clarified that institutions covered under Regulation E, such as credit unions, assume Regulation E responsibilities even when a transaction is initiated using a third party's payment service. The CFPB's December 2021 updates to its Regulation E FAQs illustrate how errors occurring on P2P payment networks must be investigated by financial institutions when a linked debit card or account is used (at some point) to pull funds into a P2P wallet.[18] The CFPB has described this situation as a "pass-through" transaction.

The ability to draw a clear link to "pass-through" funds makes it relatively easy to determine whether a financial institution bears at least shared responsibility to investigate unauthorized EFTs that are P2P-related and are contemporaneously funded from a single account or card.[19] However, it remains unclear whether a financial institution bears similar responsibility if some of the funds involved in the unauthorized EFT are non-pass-through funds (i.e., not drawn contemporaneously from a consumer's debit card or financial institution account) and originally acquired through the P2P network itself (e.g., received from other P2P users).

These same considerations could complicate allocation of error resolution responsibilities for CBDC payments, with the added difficulty of the transfer being non-revocable. An additional layer of complexity would be introduced if some CBDC transactions are anonymized, which would frustrate efforts to determine whether an error has occurred, or if the allegedly erroneous transfer may be the result of friendly fraud. For years, friendly fraud has been recognized as a growing concern for both merchants and banks and the availability of CBDC could accelerate growth of this risk for intermediaries.[20]

It is also unclear how credit union intermediaries will recoup the costs of consumer compliance functions. Regulation E compliance is expensive on its own, but implementing BSA/AML oversight, cybersecurity controls, and potentially new technology to accommodate an anonymous

---

[18] *See* CFPB, Electronic Fund Transfers FAQs (updated December 13, 2021), available at https://www.consumerfinance.gov/compliance/compliance-resources/deposit-accounts-resources/electronic-fundtransfers/electronic-fund-transfers-faqs/.

[19] *See id*. As the Bureau notes in its "FAQ - Coverage: Financial Institutions EFTs #4," where "an EFT is initiated through a non-bank P2P payment provider using a consumer's debit card information, the P2P provider and the accountholding financial institution are parties to an agreement to honor each other's debit cards – the debit card network rules – and the service provider provision in 12 CFR 1005.14, discussed in Electronic Fund Transfers Coverage: Financial Institutions Question 1, does not apply [….] [a]ccordingly the account-holding financial institution has full error resolution responsibilities."

[20] Federal Reserve Bank of Atlanta, "Friendly Fraud: Nothing to Smile About (Part 1)" (July 27, 2015) https://www.atlantafed.org/blogs/take-on-payments/2015/07/27/friendly-fraud-nothing-to-smile-about-part-1.

layer of CBDC transactions would overburden credit unions that are already struggling under the weight of excessive regulation.

CBDC Unlikely to Enhance Financial Inclusion

NAFCU supports financial sector innovation that supports financial inclusion; however, the efficacy of CBDC as a tool for achieving inclusion goals is doubtful. The significant investments necessary to bring a CBDC to fruition would be better directed towards grants and special assistance programs for community financial institutions. Programs such as the CDFI Fund or the Community Development Revolving Loan Fund help credit unions invest directly into communities. By contrast, the upfront technology expenditures necessary to operationalize a CBDC would be unlikely to provide the same type of immediate and tangible impact for underserved communities. NAFCU expects that most of the benefits of a CBDC would flow to nonbank financial technology companies seeking to expand payment system operations.

A CBDC could, theoretically, yield greater payments efficiency in a country that currently lacks mature payment systems. However, the United States is not such a country. In this regard, hypothesized improvements to domestic and cross-border payments would likely be marginal, especially when real-time payments can already be made, and the improvements needed to reduce international remittance costs are dependent upon legal harmonization efforts that are not contingent on a CBDC.

The Federal Reserve should also be cautious of interpreting the motivations of other central banks pursuing CBDC projects in a way that assumes intrinsic financial inclusion benefits. A 2020 BIS survey of central banks regarding motivations for issuing a retail CBDC reveals that financial inclusion is a less prominent consideration for advanced economies than it is for emerging markets and developing economies.[21] A separate BIS report collecting responses from different central banks on financial inclusion topics confirms this alignment, as nearly all the respondent institutions represented emerging or developing economies.[22]

In general, for countries that lack mature payment systems, the appeal of CBDC as a financial inclusion tool is understandably greater. However, the United States already possesses a highly developed payments system and the ability to conduct seamless electronic transactions has existed for decades. Accordingly, NAFCU does not believe that the Federal Reserve should simply adopt the motivations of other central banks, who might anticipate relatively greater benefits associated with adoption of CBDC, whether because of the unique circumstances of their economy or gaps in financial infrastructure.

[21] : BIS, "Ready, steady, go? Results of the third BIS survey on central bank digital currency," Paper No. 114, 7 (January 2021).
[22] BIS, "Central bank digital currencies: a new tool in the financial inclusion toolkit?" FSI Insights No. 41. Nine central banks were interviewed and only one, the Central Bank of Canada, represented an advanced economy.

Credit Unions Are Better Alternative for Promoting Financial Inclusion

The Federal Reserve has taken the position that CBDC should demonstrate a capacity to yield its purported benefits "more effectively than alternative methods." NAFCU agrees that this criteria must be the foundation on which all further analysis rests. Applying this criteria to the financial inclusion component of a hypothetical, general purpose CBDC, NAFCU finds that credit unions are a superior mechanism for achieving this goal.

Credit unions, like many community institutions, have strong relationships with their members and strive to provide affordable financial products and services that are tailored to individual needs. While the products offered by credit unions can vary based on particular fields of membership, the credit union industry as a whole has embraced new technology over the past twenty years, such as remote deposit capture (RDC) and mobile banking, to improve access to financial services.[23]

Credit unions have also demonstrated a commitment to maintaining a physical presence in the communities they serve. A 2019 Federal Reserve study demonstrated a recent dramatic decline in bank branches in rural areas.[24] More specifically, the study showed that 7 percent of rural bank branches were closed between 2012 and 2017 and that number grew to 11 percent through 2019. Credit unions were the only financial institution that added branches in both rural and urban areas, demonstrating credit unions' commitment to their members and to serving underserved communities.

Investment in physical branches located in rural areas shows that credit unions are expanding into underserved areas. This type of brick-and-mortar presence provides tangible evidence of financial inclusion and participation in the affairs of a community; whereas a CBDC provides simply another means of executing electronic payments.

The paper frames discussion of a CBDC's purported financial inclusion benefits primarily in terms of its potential to facilitate cheaper cross-border or domestic payments.[25] There are already industry-led efforts aimed at improving the speed and efficiency of cross-border payments, and these do not depend on the introduction of a CBDC to yield meaningful benefits for consumers and businesses. To the extent that there are other, theoretical cost savings that can be associated with the introduction of a new CBDC payments rail, these can also be realized through existing public and private efforts. Within the credit union industry, there is already significant attention to payments innovation. In surveys conducted between 2019 to 2021, more than half of NAFCU-member credit unions indicated that they expected to invest in payments processing over the next three years.[26]

---

[23] NAFCU, 2020 Report on Credit Unions, 19 (2020), available at https://www.nafcu.org/sites/default/files/2020%20NAFCU%20Annual%20Report%20on%20Credit%20Unions.pdf.
[24] *See* Federal Reserve, Perspectives from Main Street: Bank Branch Access in Rural Communities (2019), available at https://www.federalreserve.gov/publications/november-2019-bank-branch-access-in-rural-communities.htm.
[25] Federal Reserve, Money and Payments: The U.S. Dollar in the Age of Digital Transformation, 8-9.
[26] NAFCU, Report on Credit Unions, 21 (2021).

To accomplish broader financial inclusion objectives that payments improvements alone may not fully address, NAFCU encourages the Federal Reserve to support legislative proposals to grant all federal credit unions the ability to include underserved areas in their fields of membership. Bills such as Expanding Access for Underserved Communities Act would complement existing credit union efforts to provide low-cost loans and accounts to populations in need and simultaneously fill the gap left by departing bank branches in rural and underserved areas.[27]

How Might Domestic and Cross-Border Digital Payments Evolve in the Absence of a U.S. CBDC?

As noted above, NAFCU expects that future enhancements to cross-border digital payments will be driven by industry-led investments that are not dependent on the introduction of a U.S. CBDC. NAFCU anticipates a similar outcome for domestic payments, which will gain the additional benefit of public investment through the introduction of the FedNow Service.

Domestic Payments

From a technical standpoint, a CBDC that meets the design criteria outlined in the paper could complement existing faster payments capabilities by supporting instantaneous settlement of funds. While the availability of a CBDC payments rail could potentially encourage wider adoption of faster payments for small-dollar transactions (bearing in mind proposed limits on end-user CBDC balances), demand for faster payments already exists and has already catalyzed development of new private and public settlement systems.

Consumers and business use-cases for faster payments are well established: instantaneous account-to-account transfers, consumer-to-business payments, and real-time invoicing, are just some of the use-cases that the Federal Reserve has already cited as part of FedNow's value proposition.[28] It is doubtful whether introduction of a CBDC would meaningfully expand faster payments use-cases. NAFCU expects that a new CBDC payments rail would provide functionality that is equivalent to existing or in-development real-time gross settlement systems, such as The Clearing House's RTP service and FedNow, which will launch in 2023.[29]

Notably, the Federal Reserve's decision to pursue development of FedNow has catalyzed credit union interest in real-time payments. In 2020, nearly half of NAFCU-surveyed credit unions reported that development of FedNow would accelerate adoption of faster payments.[30] In the same

---

[27] H.R.7003, "Expanding Access for Underserved Communities Act," 117th Congress (2021-2022), https://www.congress.gov/bill/117th-congress/house-bill/7003/all-actions?s=1&r=1&overview=closed. *See also* NAFCU Letter re: Bank Attacks on H.R. 7003 – Expanding Financial Access for Underserved Communities Act (April 25, 2022), available at https://www.nafcu.org/system/files/files/4-25-22%20NAFCU%20Letter%20on%20Banking%20Deserts%20and%20HR%207003.pdf.

[28] *See* Federal Reserve Financial Services, Use Case Series: Unlock instant payment use cases with the FedNowSM Service, available at https://www.frbservices.org/binaries/content/assets/crsocms/financial-services/fednow/general-use-case.pdf.

[29] *See* Federal Reserve, Money and Payments: The U.S. Dollar in the Age of Digital Transformation, 7.

[30] NAFCU, Report on Credit Unions, 32 (2020), available at https://www.nafcu.org/sites/default/files/2020%20NAFCU%20Annual%20Report%20on%20Credit%20Unions.pdf.

survey, only 7 percent of surveyed credit unions said that they were not considering real-time payments—a sign that the industry is already committed to future payments innovation.[31]

NAFCU has long been supportive of the Federal Reserve's involvement in developing a real time payments system and appreciates the agency's continued engagement with credit unions and other industry stakeholders as it prepares FedNow for launch. To ensure that the Federal Reserve continues to prioritize FedNow and has the necessary resources to upgrade the functionality of the service over time, NAFCU requests that the Federal Reserve not divert resources to CBDC research and development. The Federal Reserve might also consider, as a related issue, whether a CBDC payment system might compete against FedNow and change original cost-recovery assumptions for the service.

In general, the existing alternatives to CBDC already provide a robust payments ecosystem and are capable of supporting future innovation. On the public side, the Federal Reserve maintains several services to facilitate wholesale and retail payments. These include a check-processing service, FedACH, which supports credit transfers and direct debits, the Fedwire Funds and National Settlement Services, which support wholesale payments, and in 2023, the FedNow Service, which will support real-time transfers of interbank payments. On the private side, there is ample evidence that payments innovation is a priority for credit unions as well as other payment system stakeholders.

<u>Cross Border Payments</u>

NAFCU expects that future enhancements to cross-border digital payments will be driven by industry-led investments. For example, in April 2022, The Clearing House, EBA CLEARING, and SWIFT announced that they would launch a pilot service for immediate cross-border (IXB) payments. Separately, the BIS is pursuing its own cross-border payments improvement project, Nexus, which proposes to streamline the process of linking national banking systems

The introduction of a CBDC would not address major barriers that have frustrated efforts to improve the speed and cost of cross-border payments.

While a CBDC might technically facilitate faster settlement between central banks, legal obstacles would remain. Furthermore, the ability to leverage a U.S. CBDC for cross-border payments would likely depend on the efforts of other central banks to adopt mechanisms for accepting digital dollars and converting them to local currency. While some proposals for improving cross-border payments have suggested a potential role for CBDC, most policy objectives are oriented towards harmonization of legal requirements, data formatting standards, and coordination of AML/CFT frameworks.[32] NAFCU does not anticipate that adoption of a U.S. CBDC, by itself, would directly contribute to these goals.

---

[31] *Id*.

[32] BIS – Committee on Payments and Markets Infrastructure, Enhancing cross-border payments: building blocks of a global roadmap (July 2020), available at https://www.bis.org/cpmi/publ/d193.pdf.

To the extent that cross-border payments improvement is a priority for the Federal Reserve, a more targeted approach that considers existing public and private sector initiatives would likely achieve better results. For example, the Federal Reserve is already pursuing enhancements to the messaging standard it uses for Fedwire, which will eventually support greater interoperability with global settlement systems.[33] By comparison, a wholesale CBDC would only offer an alternative and unproven technical approach without addressing other major barriers to cross-border payments efficiency, such as the need for regulatory harmonization.

Risks Associated with Nonbank Access to CBDC Payments

Allowing nonbank firms to facilitate CBDC payments by transacting directly with the Federal Reserve could profoundly change competitive dynamics within the current payments landscape and create additional operational and financial stability risks. Credit unions currently generate fee revenue from payments made through issued debit cards which supports card programs, their security, and continued payments innovation.

Granting nonbank firms direct access to CBDC payments would likely disrupt the current two-sided market that exists for electronic payments, where card networks respond to changes in supply and demand driven by card-issuing institutions and card-accepting merchants. If the Federal Reserve were to enter this market by offering payment services directly to end users, it is likely that credit unions would suffer adverse competitive effects that could negatively impact future payments-related investments and innovation.

While it might be argued that government intervention in retail payments markets could have positive effects for consumers, this assumes that merchants will pass on their cost-savings. However, research on the effects of interchange price caps suggests that these savings would be retained by merchants. In 2014, the Federal Reserve Bank of Richmond presented research which found that 77.2 percent of merchants did not change their prices after the Durbin Amendment and Regulation II were implemented, and 21.6 percent of merchants actually increased prices.[34] There is, however, clear evidence regarding the loss of income that credit unions and other depository institutions have experienced as a result of the regulatory burden imposed by the passage of Regulation II and the Durbin Amendment.[35]

If the Federal Reserve were to prioritize CBDC design features that would have a negative impact on credit union interchange revenue, then a necessary tradeoff would be the quality and affordability of financial products supported by related fee income. Comparing the effects of such disruption to the introduction of Regulation II, it is likely that such a tradeoff would have negative implications for consumers and financial inclusion. Research has found that financial institutions

[33] *See* Federal Reserve, "New Message Format for the Fedwire® Funds Service," 86 Fed. Reg. 55600 (October 6, 2021).

[34] Zhu Wang, Scarlett Schwartz, and Neil Mitchell (2014), "The Impact of the Durbin Amendment on Merchants: A Survey Study." Federal Reserve Bank of Richmond Economic Quarterly, Volume 100, Number 3.

[35] *See* Manuszak, Mark D. and Krzysztof Wozniak (2017). "The Impact of Price Controls in Two-sided Markets: Evidence from US Debit Card Interchange Fee Regulation," Finance and Economics Discussion Series 2017-074. Washington: Board of Governors of the Federal Reserve System, https://doi.org/10.17016/FEDS.2017.074.

offset approximately 30 percent of lost interchange revenue with higher fees on deposit services after the introduction of interchange price caps.[36] Another study found that 35 percent of financial institutions were less likely to offer consumers free checking because of capped debit interchange fees, and debit cardholder reward recipients declined 30 percent since the Durbin Amendment passed.[37]

As an additional complication, it remains unclear what flexibility financial institutions would have to price CBDC accounts and balance operational costs. If future laws were to limit financial institutions from charging service fees in their capacity as intermediaries (or by only allowing recoupment of certain costs for CBDC accounts), the price adjustments necessary to offset loss of interchange income might fall disproportionately on non-CBDC financial products. This could create further competitive imbalance and potentially encourage outflows to CBDC accounts even during times of economic stability.

Lastly, allowing nonbank firms to facilitate CBDC payments could have negative implications for consumer privacy and security, particularly if nonbank intermediaries offset lower fee income from processing activities with increased revenue from data monetization strategies. If payments are commoditized to the point where there is no more value to be extracted from providing a dependable and secure payments service, then use of customer data may fill the gap. If nonbank intermediaries are not subject to the same level of supervision and regulation as credit unions and other chartered financial institutions, granting these entities direct access to CBDC payments could also introduce new security risks that might impact the overall safety of the U.S. payments system.

Privacy Interests Cannot be Balanced in the Absence of a Specific Framework for Managing Anti-Money Laundering (AML) Risks and Counter-Terrorism Financing (CFT) Requirements.

Some of the purported benefits of a CBDC require tradeoffs that could erode either consumer privacy or the auditability of transactions.[38] While a maximalist view of CBDC often asserts that preserving both the anonymity and auditability of transactions can be achieved at a technical level, lack of tangible details makes evaluation of costs and benefits of proposed solutions and their associated tradeoffs difficult.[39]

The BIS, for example, has suggested that it may be possible to protect the anonymity of small-value transactions by having a "separate data registrar" issue CBDC vouchers in a user's name.[40]

---

[36] Kay, Benjamin S., Mark D. Manuszak, and Cindy M. Vojtech (2014). "Bank Profitability and Debit Card Interchange Regulation: Bank Responses to the Durbin Amendment" Finance and Economics Discussion Series 2014-77. Washington: Board of Governors of the Federal Reserve System.
[37] *See supra* note 26.
[38] *See* Federal Reserve Bank of Boston and Massachusetts Institute of Technology Digital Currency Initiative, Project Hamilton Phase 4-5 A High Performance Payment Processing System Designed for Central Bank Digital Currencies, (February 3, 2022).
[39] *See id*. at 5 ("Equally, clear public policy objectives and product design decisions are required to inform the appropriate technical design for the system.")
[40] Bank of International Settlements, BIS Annual Economic Report, 85 (June 23, 2021), available at https://www.bis.org/publ/arpdf/ar2021e3.htm.

Yet this proposal offers no practical discussion of the administrative costs associated with maintaining separate ledgers to segregate anonymous transactions from those that are subject to full AML/CFT compliance. Furthermore, even assuming prudent limits on the number of anonymous, small-value digital transactions a single user can make, transaction structuring would remain a risk.

The cost of implementing parallel systems to support a layer of anonymous CBDC transactions could also be cost prohibitive for smaller financial institutions providing CBDC accounts. One widely cited proof of concept for voucher-based anonymity suggests that compliance with individual limits on CBDC-vouchers should be enforced at the level of individual intermediaries.[41] This allocation of responsibility could introduce significant cost overlays for smaller institutions, such as credit unions, who would likely need to purchase new systems and software to keep track of “voucher” balances while also ensuring full AML/CFT compliance for higher-value CBDC transactions.

Leveraging the programmability of a CBDC could possibly reduce compliance costs by automatically enforcing limits on anonymized CBDC transactions, but “regtech” solutions of this variety are still at the proof-of-concept stage. Moreover, it remains unclear whether this type of regulation by design is even achievable within an intermediated model.

A practical difficulty might arise, for example, if future policy demands that limits on anonymized CBDC transactions be enforced across accounts. If consumers are permitted to hold multiple accounts at different financial institutions, and allowed to make anonymous, low-value CBDC transactions subject to specific limits, then enforcing those limits on a per user basis would require either new models for compliance or require some degradation of anonymity to limit an individual’s transactions across accounts. If all compliance functions are delegated exclusively to account-holding institutions, any framework for supporting an anonymous layer of CBDC transactions would require new models for interbank coordination that could complicate, rather than complement, payment operations.

Some proposed solutions for preserving anonymity may not even be compatible with U.S. consumer expectations for privacy. For example, China’s solution of firewalling access to the digital identity associated with its version of CBDC, the e-CNY, has been cited favorably by the BIS as a potential solution since the central bank would “not have access to the underlying personal details.”[42] However, there is no mention of whether other government entities might have access to e-CNY transaction records, even if telecom operators (the identity providers) and the central bank do not.[43] Even assuming the best of intentions, the privacy model for the e-CNY has been described as more pseudonymous than anonymous—a nuance that reflects the fact that providers of digital identities (the telecoms) are still legally obliged to surrender any data to police or court

[41] European Central Bank, “Exploring anonymity in central bank digital currencies”, In Focus, no 4, December 2019 (“[l]imits on the amount of CBDC that can be transferred in a given period of time and caps on the CBDC holdings of individual users are enforced at the level of individual intermediaries.”)
[42] Bank of International Settlements, BIS Annual Economic Report, 85 (June 23, 2021).
[43] Reuters, Technology News, “China’s digital currency not seeking ‘full control’ of individuals’ details – central bank official”, 12 November 2019.

requests in China and the digital identity associated with an e-CNY transaction is ultimately traceable back to an individual.[44]

The e-CNY example also reveals a more general challenge that exists when attempting to evaluate the privacy solutions adopted by other central banks that have either introduced or pursued development of a CBDC. Solutions developed in other countries for preserving the anonymity of individual CBDC transactions cannot be evaluated without a clear understanding of foreign AML/CFT rules and how they compare with equivalent laws in the United States. Additionally, attempts to moderate privacy interests in favor of greater transaction auditability might impair any aspirational goal of achieving financial inclusion with a CBDC. A significant share of underbanked individuals surveyed by the FDIC have cited the need for greater privacy as a reason for not having a bank account.[45]

Even if the Federal Reserve has no intention of monitoring the individual transaction history of every end-user, transaction auditability must be at least good enough for financial institutions issuing CBDC to satisfy their own BSA/AML requirements. Possibly those requirements could be adjusted in the future to reflect a balancing of privacy interests or potential limits on how CBDC is held or transacted. However, without a specific regulatory proposal to consider, financial institutions must assume that they will be held to the same standards which apply to other types of electronic transactions. If a CBDC ultimately inflates regulatory costs by complicating AML/CFT compliance, the burdens born by credit unions and their member-owners would likely overshadow the modest benefit of granting members access to another way to make digital payments.

Implications for digital assets

As a nearly risk-free form of virtual money, CBDC could displace interest in privately issued stablecoins. The extent of stablecoin substitution would likely depend, in large part, on whether end-user CBDC balances or transactions are limited, but because the paper does not suggest any parameters for those limits, the exact degree of disruption to stablecoin markets is difficult to ascertain. However, this uncertainty has not prevented certain government stakeholders from speculating, somewhat obliquely, that a CBDC could patch holes in financial regulation or mitigate the influence of stablecoins on financial stability.[46]

The paper suggests that a CBDC could lower costs to private firms associated with issuing private digital currency and "allow private-sector innovators to focus on new access services, distribution methods, and related service offerings." Elsewhere, the paper notes that a CBDC could mitigate the hazards associated with the "proliferation of private digital money."[47] The Federal Reserve

---

[44] Zeyi Yang, "Who should be scared of China's big, bad digital yuan?" Protocol (July 27, 2021), available at https://www.protocol.com/china/digital-yuan-real-worries.
[45] *See* FDIC, "How America Banks: Household Use of Banking and Financial Services," 2 (2019).
[46] "Thus, it is also important to contemplate the potential role of a CBDC to promote financial stability in a future financial system in which a growing range of consumer payment and financial transactions would be conducted via digital currencies such as stablecoins." Speech by Federal Reserve Governor Lael Brainard, "*Preparing for the Financial System of the Future*" (February 18, 2022), available at https://www.federalreserve.gov/newsevents/speech/brainard20220218a.htm.
[47] *See* Money and Payments: The U.S. Dollar in the Age of Digital Transformation at 14-15.

does not elaborate on what specific features of CBDC would simultaneously mitigate these hazards while promoting "related service offerings." However, there is some suggestion that the solution to the private currency problem, which has been characterized as a possibly regressive development, might be to reduce the influence of digital dollar imitators and offer the public the genuine article.[48]

NAFCU does not believe that introducing a CBDC is the appropriate solution for addressing the risks of unregulated stablecoins or other digital assets. The best tool for addressing stablecoin risk is an appropriate regulatory framework developed with the input of relevant federal banking regulators, including the NCUA.

Technology and Security

As a matter of principle, a CBDC should be designed in a way that minimizes the technology cost associated with sending, verifying and protecting transactions. NAFCU agrees with earlier assessments by Federal Reserve staff that a CBDC would need to operate with a guarantee of integrity, operational resilience, and operational robustness.[49]

NAFCU assumes that the technological foundation for a CBDC would share a design similar to the transaction processor tested by the Federal Reserve and Massachusetts Institute of Technology as part of Project Hamilton.[50] Notably, Project Hamilton is not a replica of the bitcoin blockchain since it eschews the decentralized trust of a distributed ledger in pursuit of a more centralized processing system.[51]

Although NAFCU remains skeptical of the proposed benefits of a CBDC, the decision to adopt a centralized architecture is sensible; the creation of new CBDC and settlement activities should be controlled by the Federal Reserve. In addition, a centralized architecture would alleviate performance bottlenecks and vulnerabilities that are typical of node-based, distributed ledger systems.[52] On the other hand, greater centralization could make the transaction processor a singular target for criminals and other cyber threat actors.[53]

A CBDC architecture oriented around centralized trust in the Federal Reserve would reduce dependence on potentially numerous endpoints that are commonly seen in distributed ledger

[48] See e.g., Jess Cheng and Joesph Torregrossa, "A Lawyer's Perspective on U.S. Payment System Evolution and Money in the Digital Age," FEDS Notes (February 4, 2022) ("[I]s a market where these kinds of arrangements could flourish outside federal financial regulation, with all these legal questions handled in a profusion of unclear and incompatible ways, progress for the U.S. payment system?"), available at https://www.federalreserve.gov/econres/notes/feds-notes/a-lawyers-perspective-on-us-payment-system-evolution-and-money-in-the-digital-age-20220204.htm.
[49] FEDS Notes, Preconditions for a general-purpose central bank digital currency (February 24, 2021).
[50] *See* Federal Reserve Bank of Boston and Massachusetts Institute of Technology Digital Currency Initiative, Project Hamilton Phase 1 A High Performance Payment Processing System Designed for Central Bank Digital Currencies, (February 3, 2022).
[51] *See id*. at 29
[52]*See* World Economic Forum, CBDC Technology Considerations, 12-15 (2021), available at https://www3.weforum.org/docs/WEF_CBDC_Technology_Considerations_2021.pdf.
[53] *See id*. at 9.

models. In general, transaction throughput and scalability are positively correlated with greater centralization in processing architectures, whereas decentralization can introduce limits on transaction volume depending on the speed or size of the validating network.[54] A centralized architecture will also be more energy efficient as there would be no need to rely on computationally expensive proof-of-work algorithms that are implemented in systems of decentralized trust.

Security

Although the findings from Project Hamilton acknowledge a potential role for a blockchain-type implementation of CBDC where there is a need to distribute governance or validation functions to intermediaries, NAFCU does not believe such a need exists.[55] Instead, the security and operation of a hypothetical CBDC transaction processor should be managed primarily by the Federal Reserve.

In terms of evaluating the potential tradeoffs associated with the technology design of a CBDC, the Federal Reserve should be cautious of granting nonbank intermediaries direct access to a central transaction processor, particularly if those intermediaries are not subject to comprehensive federal supervision.

As noted previously, NAFCU believes that issuers of CBDC should be limited to federally insured depositories. Other entities that are not subject to rigorous cybersecurity regulation and examination could pose unique security risks. These concerns are not merely speculative; the Federal Reserve has already proposed enhanced guidelines for evaluating nonbank requests for Reserve Bank accounts and direct access to payment services, citing, among other things, the need for heightened due diligence.[56]

Legal Tender

Giving CBDC the status of legal tender could complicate administration of CBDC accounts belonging to creditors who receive CBDC as payment. For example, if policymakers decide that end-user balances of CBDC should be capped, it remains unclear how financial institutions would handle payments to a creditor that has already reached its limit for aggregate CBDC holdings. Potentially an intermediary institution could convert a portion of a CBDC payment into bank money and deposit it into a commercial deposit account; however, this process would likely delay receipt of the non-CBDC portion of funds. In these situations, frequent conversions of CBDC to commercial bank money could also entail elevated levels of compliance and monitoring. Furthermore, if nonbank intermediaries were permitted to issue CBDC accounts, customers of those entities without access to deposit accounts would likely encounter additional difficulties if they exceed end-user balance limits.

---

[54] *See* World Economic Forum, CBDC Technology Considerations at 14.
[55] *See* Federal Reserve Bank of Boston and Massachusetts Institute of Technology Digital Currency Initiative, Project Hamilton Phase 1 A High Performance Payment Processing System Designed for Central Bank Digital Currencies at 22.
[56] *See* Board of Governors of the Federal Reserve System, "Guidelines for Evaluating Account and Services Requests," 87 Fed. Reg. 12957, 12958 (March 8, 2022).

Conclusion

NAFCU does not believe that sufficient evidence exists to justify development of a CBDC, particularly when there are alternative paths for achieving the benefits described in the Federal Reserve's paper. Furthermore, achieving those benefits with a CBDC, instead of existing financial sector infrastructure, would require tradeoffs that would likely have serious, negative implications for financial stability and the competitive viability of credit unions.

NAFCU understands that there are efforts currently underway at other federal agencies to examine the role of a potential CBDC.[57] Although NAFCU does not believe the paper puts forward a viable model for CBDC, the Federal Reserve should use the feedback it receives on its consultative paper to inform those parallel efforts and provide useful commentary on the tradeoffs and costs that may be involved. In terms of performing the assessments described in Executive Order 14067, the Federal Reserve's research could help other agencies make more precise judgments about the expected costs of a CBDC and the feasibility of implementing related policies—such as how to protect the privacy of end-users.

To the extent that investigation of CBDC remains a priority for the Federal Reserve, future requests for information should provide a more descriptive list of assumed features and limits, accompanied by a different scope of inquiry. For example, the Federal Reserve might consider ways to improve domestic or cross-border payments functionality by inviting consideration of private and public initiatives to improve payments speed and efficiency, rather than focusing on a CBDC.

When considering ways to promote financial inclusion, the Federal Reserve should focus its attention on ways to leverage the existing resources of credit unions and opportunities to enhance the industry's ability to reach underserved populations. Support for existing financial sector capabilities and private-public partnerships will yield greater benefits to consumers and businesses than introduction of a CBDC, which is unlikely to strike the desired balance in terms of complementing, rather than disrupting, the role of credit unions.

NAFCU and its members appreciate the opportunity to comment on the Federal Reserve's consultative paper. Should you have any questions or require any additional information, please contact me at amorris@nafcu.org or (703) 842-2266.

Sincerely,

Andrew Morris

Andrew Morris
Senior Counsel for Research and Policy

[57] *See* Executive Order 14067, "Ensuring Responsible Development of Digital Assets," (March 9, 2022).