May 20th, 2022

Submitted by Central Bank Digital Currency (CBDC) Feedback Form

Board of Governors of the Federal Reserve System

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

Ladies and Gentlemen:

The Global Digital Asset & Cryptocurrency Association ("GDCA") appreciates the opportunity to comment on the discussion paper “Money and Payments: The U.S. Dollar in the Age of Digital Transformation” that examines a potential U.S. central bank digital currency (CBDC) as published by the Federal Reserve Board on January 2022.\(^1\)

The GDCA applauds the process undertaken by the Board to solicit public engagement on this important topic, and welcomes the opportunity to be part of the ongoing dialogue.

**Introduction and Overview**

The GDCA is a global self-regulatory association for the digital asset and cryptocurrency industry. We were established to guide the evolution of digital assets, cryptocurrencies, and the underlying blockchain technology within a regulatory framework designed to build public trust, foster market integrity and maximize economic opportunity for all participants. Our broad-based membership includes digital asset trading platforms, proprietary trading firms, institutional investors, fund managers, merchant banks, brokerage firms, miners, node operators, custodians, banks, DAO accelerators, law firms, auditing firms, insurance professionals, academics, consultants, and others.

To fulfill our mission, we create standards and consensus-based solutions designed to responsibly address the major challenges facing the digital asset and cryptocurrency industry. In doing so, we collaborate with stakeholders around the world, including industry leaders, professionals, policymakers and regulators. In particular, we:

- advocate for a regulatory environment that allows innovation and protects consumers, stakeholders, and the broader public interest;
- provide education, training, certification, and other resources to build human and technical capacity;
- provide thought leadership and facilitate industry engagement; and
- oversee our members through a self-regulatory mechanism that is guided by accountability, integrity, and transparency to promote the highest professional and ethical standards.

Set out below are our views and considerations about certain key aspects of the CBDC proposal given its possible influence on the digital asset industry, financial markets, and the general public.

**VIEWS & CONSIDERATIONS**

The GDCA welcomes the new exploration and public discussion of a CBDC by the Board. The GDCA strongly supports the Board’s continued study and exploration of CBDCs. We think that a successful implementation of a U.S. CBDC could have a huge consequence on the various aspects of our society, from strengthening the Fed’s ability to implement policy, to increasing access to financial services, to speeding and modernizing financial transactions. In the long term, a U.S. CBDC, or appropriate support of private digital currency development, is essential to maintaining U.S. dollar dominance and to preserving America’s role on the global stage.

With CBDCs, as with much else in life, the devil is in the details. Well designed, a CBDC could have an overwhelmingly positive influence on the U.S. financial system. Poorly designed, a CBDC could have significant negative impacts, posing a serious threat to privacy and enabling new modes of government surveillance. Ultimately, the outcome rests on the architecture of a CBDC and its ecosystem. We therefore believe that it is important to continue to explore various types of CBDC design, examine existing launched/pilot cases and their implications for the U.S. (the fundamental concepts, design, and technological considerations such the usage of blockchain), and how private digital currency might coexist interoperably with a CBDC. We also believe that a continued open discussion on CBDCs with stakeholders will be crucial to building a better system. The GDCA believes that any consideration of a CBDC should be user-driven and centered around improving the financial ecosystem.

In summary, our main perspectives are:

- The Federal Reserve should continue to study and explore the architecture and issues concerning CBDC, having an open discussion with various actors and ultimately implementing one only after a broad consensus has been reached and Congressional authorization has been given.
- There should be an ecosystem where any CBDC and privately-issued digital currencies co-exist to allow end-users to make a choice between payment methods for each transaction.
- A well designed CBDC system will provide new opportunities and promote participation from the private sector. This collaboration will drive innovation and increase resilience to the financial system as a whole.
- Any U.S. CBDC should be designed to maximize interoperability and integration with systems not only in the U.S. but around the world.

From this perspective, the GDCA has responded to the call for public comments as follows:
CBDC Benefits, Risks, and Policy Considerations

1. What additional potential benefits, policy considerations, or risks of a CBDC may exist that have not been raised in this paper?

Building a functioning CBDC ecosystem will be one of the Federal Reserve’s most important policy considerations. Given that the Federal Reserve’s discussion paper focuses on issuing a retail CBDC, in that context, these policy considerations are: (1) identifying user needs and consumer adoption such as why users may/may not adopt a CBDC, (2) outlining clear functions and responsibility for both public and private stakeholders, (3) considering comparative expertise and related capacity of the private sector, (4) building an incentive system to leverage the private sector’s ability to innovate, (5) ensuring the horizontal coexistence of a CBDC and private digital money, (6) standardizing interoperability in cross-border and cross-currency transactions, (7) examining the effects of the increased diversity of options in payments, (8) building capacity and capability for instant payment at high transaction volumes, and (9) facilitating efficient fiscal transfers; all must be considered and discussed.

2. Could some or all of the potential benefits of a CBDC be better achieved in a different way?

No payment system is perfect, and all means of payment present tradeoffs. Therefore, it is important to achieve vertical interoperability for various actors to collaborate, and at the same time, secure horizontal interoperability in order to allow end-users to make a choice between payment methods for each transaction.

The Federal Reserve’s discussion paper focuses on issuing a retail CBDC using an intermediate model, where the central bank distributes CBDC indirectly to the general public through intermediaries such as commercial banks. However, the Federal Reserve may also consider issuing a wholesale CBDC, which might instead be provided to financial institutions and private digital currency issuers to achieve similar benefits.

Specifically, a wholesale CBDC could be issued by the Federal Reserve and used as collateral by private digital currency providers. Such a scenario would effectively maintain our dual monetary system whereby the public sector provides stability and efficiency while the private sector focuses on innovation and diversity.\(^2\)

Nonetheless, a well-designed CBDC system will provide new opportunities and

\(^2\) A more detailed analysis of how wholesale CBDC could be used to achieve similar benefits can be found [here](#).
promote participation from the private sector. The GDCA believes that this collaboration will drive innovation and increase the resilience of the financial system as a whole.

3. **Could a CBDC affect financial inclusion? Would the net effect be positive or negative for inclusion?**

A CBDC has great potential for promoting financial inclusion. However, the actual design will determine the nature and scale of its impact on improving access to the underserved.

Lowering transaction fees can help improve access and provide more cost accessible and efficient payment means to the underserved. A domestic CBDC could also provide infrastructural support to a broader digital identity framework to eliminate key existing barriers for those excluded.

A CBDC has the potential to decrease fraud in government distributions (i.e. tax returns and assistance) through access to a strong audit log and traceability traits that would greatly promote financial inclusion. However, it will be incumbent on the Federal Reserve to promote an architecture which enshrines these features, as without them, the complexity of a CBDC system may have the opposite impact on government oversight and accountability.

If the intermediary-model (where intermediaries provide access to the CBDC to the end users) were to be implemented, those intermediaries should not be limited to traditional banks, which might prefer current users who are already financially included and might not make much difference. If the intermediary function is open to new participants, that could shed light on those who are underserved in the current system and promote further financial inclusion.

There should also be a system to ensure that the introduction of a CBDCs does not cause further financial exclusion through the lack of devices and a stable network. In addition, financial education accompanied by digital skill building should be offered widely to the general public. Otherwise, a CBDC may widen the digital divide and increase the possibility of causing an exclusion for the most vulnerable.

4. **How might a U.S. CBDC affect the Federal Reserve’s ability to effectively implement monetary policy in the pursuit of its maximum-employment and price-stability goals?**

The transmission of U.S. monetary policy has traditionally been delivered through the banking system. In certain environments, banks have chosen not to pass through changes in monetary policy in full. For example, depending on the design, a CBDC could dramatically improve the monetary transmission mechanism. In a direct retail CBDC system, the Federal Reserve could implement monetary policy directly and
instantly in consumers’ wallets with a remunerated CBDC. The same could be achieved through smart contracts in an intermediated system, achieving 100% pass-through via the deposit channel. In addition, a CBDC could offer the opportunity to implement negative interest rates, which would mitigate the challenges of the zero lower bound. However, the actual effect on the maximum-employment and price-stability goals would need to be closely considered by the Federal Reserve.

In addition, CBDC could enable new policies through its programmable nature. Specifically, the central banks could influence the velocity of money, incentivize consumer consumption by encouraging spending/discouraging savings in a certain amount of time. However, the occasions and extent to which the central bank would actually use this policy tool must be considered carefully.

Historically, the Federal Reserve’s ability to implement monetary policy has been hampered by the fidelity of the resources at hand. For example, inflation is often reported as a static number, while in reality it fluctuates widely based on a number of factors, especially geography. A CBDC could provide a highly targeted response instead of a nationwide response that may not be universally warranted.

5. **How could a CBDC affect financial stability? Would the net effect be positive or negative for stability?**

The impact of a CBDC on financial stability will depend heavily on its design. In the extreme, a direct retail CBDC system could disintermediate the banking system and make the Federal Reserve responsible for all money creation and credit allocation, creating significant challenges for the financial system. Such a design might also require the Federal Reserve to host accounts for consumers directly, a requirement which is currently prohibited by current law. On the other hand, a CBDC built on a distributed ledger could enhance operational resilience and financial stability by eliminating single points of failure in the system. Furthermore, the promotion of a less centralized financial system could also enhance the resilience of the financial system by improving the diversity of service providers. Financial stability risks and mitigation will require careful consideration in the design of any future CBDC, and as such issues are complex, and it is not possible to draw conclusions at this early stage.

There is also a global aspect to financial stability that cannot be ignored. The U.S. Dollar enjoys the luxury of being the world’s main reserve currency. As such, the U.S. currently enjoys advantages on the world stage that could be challenged or eroded as other nations issue their own CBDCs.
6. What tools could be considered to mitigate any adverse impact of CBDC on the financial sector? Would some of these tools diminish the potential benefits of a CBDC?

If the features of the CBDC system and infrastructure are vulnerable to risks, it could adversely affect the resilience of the financial sector. Thus, it will be very important to ensure a CBDC will fulfill the necessary capacity requirements, and to provide capabilities for a CBDC and its surrounding infrastructure to be flexible and adaptable.

By its nature, a distributed model requires distributed solutions. In this case, we recommend a hard look at governance models within the participants along with a focus on systemic risk. In the view of the GDCA, scenario-based stress tests such as those imposed on banking institutions serve as an excellent model.

7. If cash usage declines, is it important to preserve the general public’s access to a form of central bank money that can be used widely for payments?

Access to central bank money is necessary for the general public to participate in everyday market transactions. If cash usage declines without the alternative of a CBDC or private digital currencies, the acceptance of cash might decrease even further. This could lead to an exclusion of certain populations, especially those who remain unbanked.

However, even if cash usage declines, we suspect that the role of cash will never fully disappear, nor do we see its disappearance necessary for the adoption of the CBDC. The strengths of cash include being accessible to anyone and anywhere regardless of age, environment, and situation, as well as its enhanced privacy properties.

8. How might domestic and cross-border digital payments evolve in the absence of a U.S. CBDC?

Because domestic transactions occur digitally through the banking system already, the absence of a CBDC is not likely to dramatically change the existing process of domestic digital payments. However, today, cross-border payments remain slow and expensive, and they would likely continue to remain so. Were a CBDC introduced, companies could build cross-border payment systems on the back of a CBDC, which could speed cross-border payments and at a lower cost.

9. How should decisions by other large economy nations to issue CBDCs influence the decision whether the United States should do so?

Much like regular cash, the holders of CBDC may not be restricted to the citizens of that country alone. Therefore, the issuance of a well-designed CBDC by other large
economies might increase the international influence of other currencies, resulting in the relative decline in the status of the U.S. dollar along with the benefits this status still provides to the U.S. economy.

In addition, many of the benefits for cross-border payments and reserve currency status are enhanced by the ability to interact with other digital currencies around the world. In the end, the U.S. needs to do what is best to retain its international role as the reserve currency to the world.

10. How could a CBDC provide privacy to consumers without providing complete anonymity and facilitating illicit financial activity?

The GDCA recognizes that privacy concerns should be of the utmost importance when considering the implementation of a CBDC.

There are new industry-led solutions in the digital asset space that demonstrate the viability of balancing AML/KYC objectives and privacy protection given the right design. These collaborative industry solutions allow for compliance with the Financial Action Task Force’s Travel Rule while building in safeguards for the sharing of KYC information.

Additionally, there are two-tier CBDC models that rely on commercial entities for distribution, onboarding end users, performing AML, KYC, and CFT. In this model type, current privacy protections can remain in place while also meeting AML/CFT objectives. However, the remaining challenge would be enforcing such existing practices globally with CBDCs.

It is important that the Federal Reserve preserve the anonymity of users similar to current projections when usage of cash. This might include building a system such that the central bank can only access information about transactions between intermediaries, but does not have a record of the transaction between the end-users. However, for the purpose of crime prevention and investigation, it is also necessary to maintain a procedure where, with a warrant, investigators could obtain detailed transactional information.

11. Should a CBDC be legal tender?

The CBDC should be a legal tender. The implementation of a CBDC could open a new door to the digitization of administrative processes such as tax payment. One of the benefits of CBDCs include the facilitation of efficient fiscal transfers, and it would be appropriate for the CBDC to be positioned as a legal tender from the standpoint of promoting financial inclusion.
CBDC Design

12. Should a CBDC pay interest? If so, why and how? If not, why not?

An interest-bearing CBDC would enhance the Federal Reserve’s ability to operate monetary policy directly and instantaneously to the holders of the CBDC. This would improve the transmission of monetary policy. However, an interest-bearing CBDC could also cause a shift away from commercial bank deposits into the CBDC, creating funding issues for commercial banks. This might be particularly acute in a stressed environment, but it could raise funding costs for banks in equilibrium too. In the case of the negative interest rates, the holders would experience a severe inflation cost that would result in the avoidance of a CBDC, particularly if there are easily accessible private digital alternatives.

13. Should the amount of CBDC held by a single end user be subject to quantity limits?

If there are some quantity limits, that would mean that beyond that limit, the end users will have their money in the form of cash or cash deposit. This will restrict the flexibility of payment in the form of CBDC as well as cause confusion among intermediaries and end-users constantly having to check what form of money they have, not just the amount. It is also not appropriate considering that the CBDC is programmable when cash deposits are not. If the CBDC was interest bearing, the end-user’s effect would differ depending on the amount and the form of money owned.

The quantity limits could also be a useful tool when balancing the anonymity of money and compliance with the AML/KYC. There could be various levels of AML/KYC where according to the potential risk and quantity could be used as one standard.

With that said, we recognize there may be a rollout phase where we need to develop trust and foster adoption where one way option would be by requiring some limits as guardrails.

14. What types of firms should serve as intermediaries for CBDC? What should be the role and regulatory structure for these intermediaries?

Intermediaries should not be limited to traditional banks. Nonbanks and other new actors could serve as an intermediary, subject to federal or equivalent oversight structures. However, the institutions should have the capacity and capability to provide an infrastructure to enable high-volume, high-speed transactions in a stable manner. In addition, the institution should be resilient to financial and cyber risk, protect user privacy, and most importantly have the ability to follow compliance measures such as conducting an AML/CFT.
15. Should a CBDC have “offline” capabilities? If so, how might that be achieved?

Offline capabilities mean being able to use CBDC whenever or wherever necessary, even if the network is unavailable. It would promote further financial inclusion regardless of the network infrastructure the end-users have. CBDCs must be accessible regardless of the region and digital capacity. A lack of high-speed internet should not determine accessibility. Offline capability is also a good feature to counter operational disruptions and cybersecurity risks. Being able to use CBDC even in the case of disaster is necessary for a resilient financial environment.

16. How could a CBDC be designed to achieve transferability across multiple payment platforms? Would new technology or technical standards be needed?

Interoperability is an essential part of the CBDC design to leverage the privately driven digital standards that already exist and are constantly evolving. In addition, it is crucial that transferability is not just for private digital money but also for other jurisdiction’s currency when sustaining the dollar’s international role and presence. If other currencies succeed in building a more user-friendly or interoperable platform compared to the U.S., it might cause a shift from the U.S. dollar and cause decline in the U.S. dollar’s international status.

17. How might future technological innovations affect design and policy choices related to CBDC?

Technological innovation is most likely to come from the end-user, private digital money, or intermediaries. Therefore, the CBDC should be designed to be resilient, flexible, and adaptable to react to future innovations, but at the same time avoid rapid changes that would adversely affect the market. As history shows, balancing innovation and stability to maintain trust in the financial system is essential.

The pace of innovation in this space will increase rapidly and its breadth will widen as well. This innovation should not be discouraged through regulation. Therefore, a tiered system of guardrails that promote trust and foster movement towards a stable, easy ecosystem as appropriate. While the architecture of the ecosystem will require thorough consideration, the guardrails should be considered based on multiple factors such as usability, implementation, system risk, and liquidity.

18. Are there additional design principles that should be considered? Are there tradeoffs around any of the identified design principles, especially in trying to achieve the potential benefits of a CBDC?

The design of the CBDC should consider interoperability in cross-country and cross-currency (including private digital money) transactions in order to build an ecosystem which leverages the private sector’s ability to innovate and allows the end users to have a choice of what form to pay from a variety of options to best
meet their needs.

GDCA appreciates the opportunity to comment on this important proposal.

Sincerely,

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