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INCLUSIVE BANKING DURING A PANDEMIC: USING FEDACCOUNTS AND DIGITAL TOOLS TO IMPROVE DELIVERY OF STIMULUS PAYMENTS

HEARING

BEFORE THE

TASK FORCE ON FINANCIAL TECHNOLOGY

OF THE

COMMITTEE ON FINANCIAL SERVICES

U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTEENTH CONGRESS

SECOND SESSION

JUNE 11, 2020

Printed for the use of the Committee on Financial Services

Serial No. 116–95

U.S. GOVERNMENT PUBLISHING OFFICE
42–895 PDF WASHINGTON : 2021

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INCLUSIVE BANKING DURING A PANDEMIC: USING FEDACCOUNTS AND DIGITAL TOOLS TO IMPROVE DELIVERY OF STIMULUS PAYMENTS

Thursday, June 11, 2020

U.S. HOUSE OF REPRESENTATIVES,
TASK FORCE ON FINANCIAL TECHNOLOGY,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The task force met, pursuant to notice, at 12 p.m., via Webex, Hon. Stephen F. Lynch [chairman of the task force] presiding.

Members present: Representatives Lynch, Scott, Lawson, Axne, McAdams, Wexton, Tlaib; Emmer, Hill, Davidson, and Steil.

Ex officio present: Representatives Waters and McHenry.

Chairman LYNCH. The Task Force on Financial Technology will now come to order.

Without objection, the Chair is authorized to declare a recess of the task force at any time. Also, without objection, members of the full Financial Services Committee who are not members of the task force are authorized to participate in today's hearing.

Members are reminded to keep their video function on at all times, even when they are not being recognized by the Chair. Members are also reminded that they are responsible for muting and unmuting themselves, and to mute themselves after they are finished speaking. That would be helpful.

Consistent with the regulations accompanying House Resolution 965, staff will only mute Members and witnesses as appropriate when not being recognized by the Chair, and for the purpose of preventing inadvertent background noise. Members are reminded that all House Rules relating to order and decorum apply to this remote hearing.

Today's hearing is entitled, "Inclusive Banking During a Pandemic: Using FedAccounts and Digital Tools to Improve Delivery of Stimulus Payments."

I now recognize myself for 4 minutes for an opening statement.

Over the past several months, the coronavirus has spread devastation across our country. It has killed more than 110,000 Americans, it has robbed millions more of their jobs, and it has left Americans wondering how they will pay for even the most basic necessities such as rent and food.

In response to this crisis, Congress passed the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Among its many provisions, we included economic impact payments: $1,200 for every

adult making less than $75,000 a year, with $500 per parent and child. That was all with the intent to provide immediate relief to those most in need of it.

The CARES Act was passed into law on March 27th. Today is June 11th: 76 days later, some Americans are still waiting on their so-called immediate relief. Many of those people who needed the help the most were the last to receive it. Although the IRS and Treasury acted quickly to distribute payments to Americans, they ran into problems. Some of those problems were foreseeable; they exist due to long-standing inequities and deficiencies in our banking system.

We on this committee, and on the task force, have spent considerable time in this recent session searching for ways to improve financial inclusion. But the simple truth is that millions of Americans still lack access to the traditional banking system. The FDIC has said that nearly 8.5 million households don't have a bank account, often because bank accounts are too expensive.

Americans without bank accounts receive their economic impact payments much, much later than those with bank accounts and direct deposit. And to make matters worse, many of those without bank accounts have had to pay check-cashing fees, exorbitant fees, once they did receive their checks.

A family struggling to make ends meet, while not having access to bank accounts, is difficult enough in normal times. In times like these, it can be the difference between a refrigerator full of groceries and going to bed hungry. With all of our resources in this country, no family should have to experience hunger simply because they don't have a bank account.

So today, we will hear testimony on ways to improve the delivery of direct benefit payments to Americans. FedAccounts, consumer accounts at the Federal Reserve, have the potential to provide free access to bank accounts for the millions of Americans currently without one, giving them immediate access to Federal benefits.

Further, we will explore the ways in which new technology that many of us now use every day, such as the digital wallets on our phones, can improve inclusion and efficiency in programs like this.

This conversation is timely and necessary. The House passed another set of economic impact payments in the Health and Economic Recovery Omnibus Emergency Solutions (Heroes) Act, to continue providing this important relief to Americans. We must learn from the immediate past and the mistakes we have recently made to ensure that every American gets the access they need and deserve.

And I look forward to today's discussion.

I would now like to recognize the ranking member of the task force, my friend from Minnesota, Mr. Emmer, for 4 minutes to give his opening statement.

Thank you.

Mr. Emmer, I think you are muted. If you would look at that row of icons just above the picture frame—

Mr. EMMER. It is the Financial Services Committee's Task Force, and I warned Petrina when this started—you would think we would be better with the technology, but here we go.

So, you missed all the wonderful things I said about you, Mr. Chairman. I want to thank you, my colleague from Massachusetts,

for moving this task force ahead, and making sure it continues to meet. I appreciate you, and I appreciate all of your staff who are making these things happen, but just for the record, I want it be known that I think this is outrageous, ridiculous, and totally unnecessary. I think we should be in Washington doing our job, and I hope that people will see that soon.

The conversation today stands to be very insightful on two topics: the ways the Federal Government can better utilize technology to increase efficiency in delivery of government services; and the concept of a centrally-backed digital currency. I appreciate and look forward to our witnesses' thoughts on these subjects.

Two months ago, I wrote a letter, along with my colleague, Darren Soto, urging Treasury to take additional steps to leverage everything that American ingenuity, entrepreneurship, and innovation has to offer. As co-Chairs of the Blockchain Caucus, we have been diving deep on all of the technology and what it has to offer. It could help to serve both topics of this hearing that I mentioned previously.

In addition, a wide array of technologies could help the Treasury distribute the remaining stimulus payments that have not been distributed yet, and I urge them, and each agency, to consider new technologies that could help the agencies operate more efficiently and more quickly.

I want to turn now to the second topic, and what I think could stand to serve as the sole topic of a hearing like this: a centrally-backed digital currency. Representative Hill, who now serves as ranking member of our Subcommittee on National Security, International Development and Monetary Policy, highlighted this topic many months ago to the Federal Reserve, and did it in a bipartisan fashion. Since then, I have heard that the Fed has been working to research and develop the concept, a process which I emphatically support, but unfortunately they have not received the level of public consideration and transparency that I think is fundamentally necessary for such a pursuit.

The dollar is changing, and Americans deserve a full accounting of the work being done and the considerations they will have to make in ensuring that their leaders continue to guarantee their freedom and their methods of exchange. In fact, cash is a public payments infrastructure available to all citizens without any need for permission. Currently, cash works solely by the bearer of the instrument. As the economy moves increasingly online, the use of cash will diminish.

To engage in electronic commerce, citizens need an intermediary in most cases, including many cryptocurrencies. To be a truly permissionless digital cash however, a digital dollar must have the same attributes as physical cash. Anything less would simply create a new intermediate, and it could even be one offered by the government in competition with private financial institutions.

It is American values like freedom, privacy, openness, and permissionless entrepreneurship that have led us to dominate global commerce and innovation. We should have the courage of our convictions to build these values into a digital dollar, and not to emulate systems like China's new digital wand, which is closed,

centralized, surveilled, and permissioned so that access can be denied and payments blocked by those in power.

Electronic cash will be as susceptible to illicit use as the dollar is today. The same rules that apply to physical cash that should apply to a digital dollar. While this may not go far enough for some, the only way to go further would be to create a permission closed and surveilled system like China's.

I hope the conversation surrounding the digital dollar today takes into account these essential freedoms that Americans may often take for granted, but must also ensure to continue on as we move into this new era. As I have said from the beginning, technologies like this can empower individuals and make their government more accountable directly to them. We can't cede this power to the government at the expense of the individual.

With that in mind, I appreciate the witnesses' time. Mr. Chairman, I yield back.

Chairman LYNCH. The gentleman yields back.

The Chair now recognizes the gentlewoman from California, the Chair of the full Financial Services Committee, Chairwoman Waters.

Okay. We are going to wait for Chairwoman Waters.

I now recognize the ranking member of the Full Committee, the gentleman from North Carolina, Mr. McHenry, for 1 minute.

Mr. MCHENRY. Thank you, Mr. Chairman, and thank you, Mr. Ranking Member. Thanks for holding this hearing. And I want to thank our witnesses for being available to us digitally.

I think when we look back at this period of time, it will be viewed as a great accelerator, especially when it comes to technology enhancing and quickening technological trends across-the-board. What I mean by that is it has forced us to adopt a new way of living right now that only a few months ago seemed years away.

Think about, for example, a remote work force. That was commonly viewed as an option for some, but now it is a default for all of us—or most of us.

Banking is undergoing a fundamental change as well. To meet these challenges, we have to change our mindset about how we build for tomorrow. We need to explore advanced digital tools to make banking easier, safer, and especially, more inclusive.

So, thank you for the hearing today. Thanks for the engagement, and I look forward to the questions.

Chairman LYNCH. Thank you. The gentleman yields back.

The Chair now recognizes the gentleman from Georgia, Mr. Scott, for 1 minute.

Mr. SCOTT. Thank you, Chairman Lynch.

And let me just echo everything that has been said. We have this new and exciting technology to use to be able to sustain our American consumers.

As you will recall, in the 2008 dilemma that we had, our crisis, it took an extraordinarily long time to even get the help down to our constituents. This time, we did it a little quicker with this pandemic, but not quickly enough.

I look forward to our great panel of witnesses who will be providing information in terms of how we can really take this exciting

technology and bring it home and deliver better reception to our American people.

Thank you, Mr. Chairman.

Chairman LYNCH. I thank the gentleman.

Today, we welcome the testimony of an esteemed panel of experts.

First, Mehrsa Baradaran, a professor of law at the University of California, Irvine. Professor Baradaran has written extensively about financial inclusion and inequality, including the books, "How the Other Half Banks: Exclusion, Exploitation, and the Threat to Democracy," and "The Color of Money: Black Banks and the Racial Wealth Gap." We want to welcome you, professor.

Second, the Honorable Chris Giancarlo, senior counsel at Willkie Farr & Gallagher, and the former Chairman of the U.S. Commodity Futures Trading Commission. Mr. Giancarlo also leads the Digital Dollar Foundation, which is dedicated to exploring options for a central bank digital currency. Welcome.

Third, Jodie Kelley, the CEO of the Electronic Transactions Association, which represents over 500 companies in the electronic transactions space. Ms. Kelley also previously served as Vice President and Deputy General Counsel of Fannie Mae. Welcome.

Fourth, Morgan Ricks, professor of law at Vanderbilt University. Professor Ricks has worked extensively on financial reform, including the FedAccounts proposal, and from 2009 to 2010, was a senior advisor at the Treasury Department. Welcome to you, also.

Our witnesses are reminded that your oral testimony will be limited to 5 minutes. A chime will actually go off at the end of your time, and I ask that you respect the members' and other witnesses' time by wrapping up your oral testimony. And without objection, your prepared statements will be made a part of the record.

Professor Baradaran, you are now recognized for 5 minutes to give an oral presentation of your written testimony.

STATEMENT OF MEHRSA BARADARAN, PROFESSOR OF LAW, UNIVERSITY OF CALIFORNIA IRVINE SCHOOL OF LAW

Ms. BARADARAN. Thank you.

Chairman Lynch, Ranking Member Emmer, and members of the Task Force on Financial Technology, thank you for calling this important hearing on this critical issue.

Last week, hundreds of people waited for hours in a single-file line for an ATM at a New York City branch of KeyBank, the only bank branch offering unemployment benefits without fees. The New York Times reported that every day from dawn till dusk, since the beginning of the crisis, there has been a long line. The New York Post reported that the crowd, mostly made up of people of color, had come from the five burroughs amidst a pandemic, and rolled the dice on their health, just to avoid getting gouged with surcharges at out-of-network banks.

Mr. Quan, a former Food Network "Chopped" champion, who is now out of work, said he biked from Chinatown to save $3, which can sometimes mean a meal eaten or not.

Mr. Flores, a 45-year-old, out-of-work line cook from Queens, waited nearly 3 hours before getting to the teller. He said, "I feel tired, but I need the money." Mr. Flores, who has a wife and 2 chil-

dren, withdrew $500. He pays his $1,500-a-month rent in Astoria in installments to his landlord because he has to make sure his family has enough to eat.

Ms. DeLeon, after about 3 hours in line, finally withdrew $1,000, but she needed the full $1,500. She said, "My feet hurt, my back hurts," but she has to go back in line the next day.

These problems are not new. In fact, I have been shouting into the void of academic research for a decade about how our banking system leaves out some of our most vulnerable communities—Black communities, Brown communities, low-income communities, and rural communities.

Believe it or not, the problem has gotten even worse since I began researching these issues. Over the last 10 years, as banks have become bigger and more profitable, over 93 percent of bank closings were in low- to middle-income (LMI) communities. Rural America has lost 50 percent of its banks.

With the Fed's recent approval of the SunTrust-BB&T merger, an estimated 700 more branches will likely be closing soon, mostly in the south and the southeast, and many of these areas will be lower-income areas.

Even in places where the banks are plentiful, like New York City, there are barriers: high fees, which are primarily paid by low-income people; slow payment processing; and the lack of trust in banks. Those who are unbanked or underbanked, which is up to 25 percent of the population, spent time and money in line to pick up their checks, and then in another line to pay their bills in cash to the electricity office, the water office, and the landlord, and in line to purchase money orders so they can mail their bills on time, and on and on and on.

Those of us with enough of a financial cushion, who put our bills on autopay and easily switch between syntax apps and credit cards, might need some financial education to understand the difficulties faced by our fellow Americans, like having to bike from Queens to Manhattan to avoid bank fees just to use our money. This crisis will push many more families onto this thin ice.

The simple problem is this: The U.S. payment system is only available to banks and their customers. If you are outside of it, you pay a toll. I urge Congress to open up these tracks on which our nation's commerce runs. To everybody, Congress need not reinvent the wheel. Congress already created a public system, the Federal Reserve. The Fed's explicit charter is to serve the public interest and to increase the integrity, efficiency, and equity of the U.S. payment system. That was a mandate that Congress gave.

I urge Congress to ensure equal access to this important public utility. I believe the most effective way to do this is through a partnership between the Fed and the postal offices of this country. On the back end, these deposits would be handled by the States and secure Central Bank as my colleague, Morgan Ricks, will explain.

On the consumer side, you could go to the local post office, deposit your money, and take cash out of the ATM without fees. You could set up automatic bill pay through online or mobile banking, get a debit card, and use it for online shopping, et cetera.

FedAccounts, digital wallets, all of those are essential and will be great, but we need to close this cash digital divide first. Between

20 to 40 million Americans don't have broadband. A lot of the elderly are not comfortable with mobile payments or don't have mobile phones.

To illustrate the point, I have another story that happened in Duncan, Arizona, when they lost their only bank. The nearest bank was 40 miles away. Business revenue shrank by 20 percent when they lost their bank. American Banker journalist, Kevin Wack, went to the town and began talking to residents. One hotel owner said that she just walks over to the post office, buys a single stamp, and requests cash back, which is cheaper than patronizing any of the town's ATMs.

An electricity cooperative in town uses the post office for their business accounts rather than keeping currency on hand or driving far away. Thankfully, he says, the post office is the unofficial bank.

Another resident said, "It has made me think, why shouldn't the post office start to fill the role of small banks in these towns?"

The last thing I will say, and then I will close, is that the post office is America's most trusted institution, according to a new marketing firm, and it was designed that way by our first President, George Washington, in 1792. For over 200 years, the USPS has maintained its public-serving mission by offering equitable services to all.

Thank you.

[The prepared statement of Professor Baradaran can be found on page 30 of the appendix.]

Chairman LYNCH. Thank you.

Mr. Giancarlo, you are now recognized for 5 minutes.

STATEMENT OF THE HONORABLE J. CHRISTOPHER GIANCARLO, SENIOR COUNSEL, WILLKIE FARR & GALLAGHER, AND FORMER CHAIRMAN, U.S. COMMODITY FUTURES TRADING COMMISSION

Mr. GIANCARLO. Thank you, Chairman Lynch and Ranking Member Emmer, and also, thanks to Chairwoman Waters and Ranking Member McHenry.

I would like to begin with three observations from my time in public service.

First, much of America's physical infrastructure, its bridges, tunnels or airports that were once state-of-the-art in the last century, as we have all seen, have been allowed to age, deteriorate, and become obsolete in this century.

Well, the same is true about some of our financial infrastructure. Methods of payment and settlement, shareholder and proxy voting, and investor access to disclosure that were once state-of-the art in the 20th Century are showing age and limitations in this new 2lst Century. Nothing reveals the limits of our accounts-based financial system more starkly than the current COVID-19 pandemic, when tens of millions of Americans are waiting a month or more to receive these payments by paper check.

My second observation is that we are certainly entering a new era when things to value, like money and agricultural and mineral commodities, CompTraks, stock certificates and land records, and cultural assets like art and music and votes, and even personal identities, will be stored, managed, and moved around in a secure

way from person to person without central validators. It is done by collective cartography and a decentralized network of computational algorithms.

And my third observation is that unless we act, this coming wave of innovation will put enormous strain on our aged financial systems.

This task force is reviewing several ideas for digital dollar electronic cash payments. They look at digital dollars in terms of benefits distribution and financial inclusion for existing account-based systems.

Today, I would like to discuss with you a far more fundamental digital dollar proposed recently by the Digital Dollar Project. It is a U.S. central bank digital currency, or CBDC, as it is known. This type of digital dollar would be a new additional form of money. It would be a digital bearer instrument with the same legal status as the dollars in one's purse, but on a mobile device. It would operate alongside existing forms of money distributed through the existing two-tier banking system open to new entrants and potentially recorded by distributed ledger technology.

This type of CBDC would increase financial inclusion by broadening access to services through digital wallets on smartphones, and would enable the sending of COVID relief immediately to the electronic wallets of underbanked populations and expand their ability to access financial services and to use e-commerce platforms that do not accept physical cash.

Yet, this type of digital dollar is about more than financial inclusion in a crisis. Today, most of the world's tradeable commodities and contracts are priced in U.S. dollars. Tomorrow, they will be digitized, tokenized, and coupled with algorithmically-driven smart contracts.

We must prepare to modernize the dollar from a simple analog instrument into a digitized unit of account, one that measures, supports, and transacts those same digital commodities and contracts.

We must future-proof the dollar today for that digital tomorrow. Doing so is in the national interest. It will spark a creed of new industries and economic growth. Yet, crafting it will be an enormous undertaking. It must be done carefully, thoughtfully, and deliberately.

Something that is worthy of the dollar's global importance can't be rushed. It will take time to get right, but now is the time to get started.

The recent launch of SpaceX reminds us that the United States explored outer space through a series of pilot programs. They were called Mercury, Gemini, and Apollo. So, too, we should explore a digital dollar through a series of pilots. The Federal Reserve is already looking at central bank digital currency—

Chairman LYNCH. The gentleman's time has expired.

Mr. GIANCARLO. Thank you very much.

[The prepared statement of Mr. Giancarlo can be found on page 39 of the appendix.]

Chairman LYNCH. Ms. Kelley, you are up next for a 5-minute presentation of your written testimony.

Thank you.

STATEMENT OF JODIE KELLEY, CEO, ELECTRONIC TRANSACTIONS ASSOCIATION (ETA)

Ms. KELLEY. Thank you, Chairman Lynch, Ranking Member Emmer, and members of the Task Force on Financial Technology. My name is Jodie Kelley. It is my privilege as CEO of the ETA to speak with you today on how the modern payments industry is using digital tools to deliver CARES Act stimulus money to the American people.

ETA is a trade association that represents the broad group of companies that provide electronic products and services, including credit and debit cards, peer-to-peer products, mobile wallets, and other forms of digital payments.

Ours is an industry that in North America alone, moves over $8.5 trillion a year in card and P2P payments securely, reliably, and quickly. During the 5 minutes I will speak today, over 1.3 million transactions will be processed. It is highly regulated, highly competitive, constantly innovating, and investing and leveraging new technologies to create better products and services.

On behalf of ETA and its members, thank you for the opportunity to participate in this important discussion. The unprecedented challenges caused by the pandemic have appropriately caused policymakers not only to move quickly to address the immediate crisis, but also to ask how we can position ourselves to do even better in the future. That is a particularly important question when it comes to those who are most vulnerable.

I am honored to be part of such a distinguished panel who bring a variety of perspectives on ways in which technology may be brought to bear to advance financial inclusion, and most relevant for today's hearing, to further improve delivery of stimulus money to those who need it most. These are important conversations that have potentially broad-reaching implications.

The perspective I bring today is on what is happening now and the ways in which the electronic payments industry is bringing to bear the innovation, the technology, and the know-how it has developed over decades to deliver these stimulus funds quickly and securely. I am proud of the role that our industry is playing in delivering both economic impact payments and much-needed unemployment benefits.

I would just like to highlight today in particular a few ways in which that is happening. The first is through the use of prepaid cards. This is a simple but effective solution which has long been deployed to distribute roughly $140 billion per year of government benefits, including SNAP and Social Security payments. Nearly all States also use these types of cards to distribute over $20 billion in unemployment benefits a year. And for consumers, these prepaid cards work. They are network-branded. They can be used to make purchases online or in stores in the same way a credit or debit card can be used. The funds on them are FDIC-insured, and critically, they carry the same consumer protections as credit and debit cards do. Most notably, they are protected from liability if the cards are lost or stolen, or if fraudulent charges are made on the card.

And for those Americans with a smartphone—over 80 percent of us—there are additional benefits. These cards can be loaded into mobile wallets, bringing added convenience and additional security,

and both the cards and the mobile wallets can be used simply by tapping at the point of purchase. There is no need to sign anything, no need to touch anything that is not your own. Surveys of consumers during the pandemic made clear that that provides peace of mind.

I would also like to touch on peer-to-peer (P2P) payments such as PayPal, Venmo, and CashApp. These were also used to distribute stimulus dollars. These apps are popular. In 2019, they were used to transfer over $300 billion. And their popularity is growing, and it is growing because these products have quickly evolved in response to consumer needs. Individuals can now have their paychecks, their tax refunds, or their benefits payments sent directly to them. Consumers can load cash on the P2P services, they can store money, they can use them to make purchases, and they can use them to reload prepaid cards.

As a general matter, consumers are not charged to use these services, and because they can be accessed through a smartphone, again, there is broad reach and it is easy for individuals to use them.

Now, in my time this morning, I have only touched on the innovation that is happening in the electronic payments industry. Our members are investing tens of billions of dollars annually in research and development that harnesses and deploys technologies, including blockchain, to make it easier for individuals to accept, hold, and use money securely. And we will continue to integrate new ideas and technology to make the current global payment system stronger and safer.

The future is exciting, but we also appreciate the opportunity, as we look forward to the possibilities, to take a moment to discuss what is already happening and the very tangible and real ways that current products and services are being deployed to meet the needs of individuals, including the underserved. We are keenly mindful of how important that is.

So on behalf of ETA and our member companies, thank you, once again, for the opportunity to participate. I am happy to answer any questions that you may have.

[The prepared statement of Ms. Kelley can be found on page 99 of the appendix.]

Chairman LYNCH. Thank you, Ms. Kelley.

Professor Ricks, you are now recognized for a 5-minute presentation of your written testimony.

Thank you.

STATEMENT OF MORGAN RICKS, PROFESSOR OF LAW, VANDERBILT UNIVERSITY LAW SCHOOL

Mr. RICKS. Chairman Lynch, Ranking Member Emmer, and members of the task force, thank you for the opportunity to testify today on this vital topic.

My remarks will focus on the FedAccount proposal. The coronavirus crisis has highlighted critical shortcomings in the U.S. system of money and payments. The FedAccount proposal offers a compelling way for Congress to address these shortcomings. FedAccounts would improve the delivery of relief payments to

American households during crises, and they would offer an array of other transformative benefits as well.

So, what are FedAccounts? FedAccounts are digital dollar balances maintained on the books of the Federal Reserve. It is important to understand that the Fed already offers accounts to a small, favored set of clients. These accounts are called reserve balances, which are dollar balances maintained as ledger entries on the Fed's electronic books.

The Fed's digital dollar accounts are highly attractive, offering instant payments, higher interest than ordinary bank accounts, and full government backing, no matter how large the balance, with no need for deposit insurance.

But these accounts are currently restricted to an exclusive clientele, consisting of banks, certain other large financial institutions, and governmental entities. What this means is that the Fed currently issues two types of money: first, it uses paper dollars, an open access resource available to all; and second, it issues digital dollars, which are restricted to a small number of privileged financial institutions. This creates a striking asymmetry at the core of our monetary framework, and Congress should do away with it. Specifically, Congress should direct the Fed to give the general public, individuals, businesses, and institutions the option to hold digital dollar accounts at the central bank.

Under the version of the proposal that I and my co-authors have described, FedAccounts would offer all of the functionality of ordinary bank accounts, with the exception of overdraft coverage. It would come with debit cards, for example, and they would support online bill pay. But the Fed would charge no fees and would not impose any minimum balance requirements.

Moreover, the Fed could partner with the U.S. Postal Service to serve as a ubiquitous, ready-made, physical branch network for these accounts. The FedAccount program would transform digital dollars into an open access resource, a form of public infrastructure just like the paper dollars that the Fed issues.

And this would offer a range of major public policy benefits. First, it would foster financial inclusion. If properly structured, the FedAccount program could bring millions of households into the mainstream of money and payments. This would not only lubricate future relief payments during crises, but it would also improve the economic well-being of low- and moderate-income families.

Second, it would enhance consumer protection by lessening a consumer's need for expensive non-bank credit products, such as payday loans.

Third, it would reduce the likelihood of financial crisis by displacing unstable deposit substitutes, which are a major source of instability in our financial system.

Fourth, it would speed up payments. When it comes to payment speed, the U.S. lags behind much of the rest of the world. Payment delays are costly for the economy as a whole and are especially so for households living paycheck-to-paycheck. FedAccounts would ameliorate this problem, because all payments between FedAccounts would clear in real-time on the Fed's books, just like interbank transfers have for decades.

Fifth, FedAccounts would improve monetary policies, because the Fed's interest rate adjustments would be transmitted directly to a wide swath of the public rather than just to banks, as they are today.

Sixth, the FedAccount program could greatly reduce payment system tolls, because the Fed presumably would not charge interchange fees to merchants accepting its debit cards. This would be a boon to businesses large and small.

Finally, FedAccounts would help maintain the dollar's status as the dominant global currency. As we speak, China is piloting its digital Yuan. If we don't innovate, we risk falling behind.

Far from straining fiscal resources, FedAccounts would likely generate revenue for the Federal Government, provided the program attracted profitable large accounts and not just small accounts.

Keep in mind, the Fed is a moneymaker for taxpayers. It remits tens of billions of dollars to the Treasury Department every year. With FedAccounts, those remittances would probably increase.

To be sure, the FedAccount program will present implementation challenges. Cyber security, fraud prevention, and privacy issues would need to be addressed. However, as and I and my co-authors have described in our writings, these challenges are surmountable. Moreover, like other digital currency, it would rely primarily on efficient, reliable systems that the Fed has used successfully for decades, and FedAccounts would be fully integrated and seamlessly interoperable with the mainstream payment system.

To conclude, FedAccounts could deliver an array of transformative public policy benefits, both in and out of crisis periods. The system of money and payments is a public good. It is critical public infrastructure, akin to highways and the legal system. The FedAccount proposal would supply this resource directly to the general public. It deserves serious consideration from Congress.

Thank you again for the opportunity to testify today. I look forward to answering your questions.

[The prepared statement of Professor Ricks can be found on page 114 of the appendix.]

Chairman LYNCH. Thank you, Professor Ricks.

At this time, I would like to go back to the Honorable Mr. Giancarlo. Sir, I inadvertently shortened your time. You had another 45 seconds. So, I apologize to you for interrupting. There was a rogue chime that I heard in my headphones, and I cut you short.

So, how about if I give you another minute? If you have any other ideas you would like to amplify on some of the things you raised, I would be happy to recognize you for 1 minute.

Mr. GIANCARLO. That is very kind, Mr. Chairman.

There is a point I would like to make, which is that what we would like to see is exploration of the idea of a U.S. CBDC through a series of pilot programs. I mentioned the ones that we used to explore space, and I think a similar approach should be taken here.

Throughout our history, America has been a leader in innovation. Whether it was launching the space program or building the internet, we brought to every one of those innovations our core values: the rule of law, individual liberty; free enterprise; and, importantly, the right to privacy.

Around the world, CBDC innovation is gaining peak global momentum, and the world is asking what role America is going to play and whether our core values will be brought to bear.

The choice is either that we take a leadership role or that we accept that others will take a leadership role and they will put their values in this new innovation. I think we have to choose to lead, and I think if we do, we will increase financial inclusion, enhance democratic values, and further improve the dollar for more generations to come.

Thank you for that additional time. Those are my final remarks.

Chairman LYNCH. Thank you, sir. I appreciate that, and again, I apologize.

I will now recognize myself for 5 minutes for questions.

Based on the conversation today, a few things are clear. We have millions of Americans who are in need of help to weather this storm currently, and we have millions of Americans who are being shut out of the banking system, making it harder to get aid to them; but I think the panel here has described some measures that could certainly mitigate or possibly eliminate the challenges.

One of the things I worry about is, even looking at the Fed right now—let's go to the FedAccounts issue. I have been watching over these last few years how the Fed has tried to go to this FedNow program, which is actually a miniature version of what we are talking about with FedAccounts. For those who are not familiar with it, the FedNow accounts were really meant to provide immediate relief to banks. The Fed is a bank to the banks, and they were trying this whole framework where they would do for the banks what FedAccounts would do for citizens. That process, the rule took 3 years, and now the implementation—I think we are talking about 7 or 8 years for the Fed to upload that program.

So I want to ask, Professor Ricks and Professor Baradaran, what are we talking about here in terms of getting this up and running? We have this desperate need out there now that we all recognize and the structural inequities here. What are we talking in timeframe if we really focus on this, put resources towards it, best-case scenario, what do you think that looks like?

Ms. Baradaran, I would like to hear from you first, if possible.

Ms. BARADARAN. I think it will take as long as we put our priority into it. If we want FedAccounts through postal banks, we can do that. We have the technology. There are a few things around the edges that we could do. We would need ATMs at certain post offices. We would need the Fed to do real-time payments and other types of efficiency things. But those are things that are well within our technological capacity, our institutional capacity. These are things that we can and could have done a year ago, so I think we could do that very quickly.

Chairman LYNCH. Okay. Thank you.

And, Professor Ricks, could you amplify on that a little bit?

Mr. RICKS. The FedNow initiative was an outgrowth of the faster payments initiative that the Fed started in or around 2015, and we have been waiting a long time for this. There have been improvements. The clearinghouse, the private consortium has taken measures to improve payment speed and yet we are still lagging behind the rest of the world.

The Fed itself has been processing real-time instant payments between accounts on its own for many, many decades through the Fed wire system, which is extremely efficient. Accounts on the Fed's own books are processed—the payments between them are processed extremely quickly in real-time. If you could put more accounts on that system, you will have more real-time payments. Now, how long does that take? Well, the Fed has been opening accounts on its own books since its inception and processing payments between them.

Retail operations are a different matter, and that would take some time for the Fed to build out that infrastructure; but in the meantime, it could rely on contracting with private sector contractors, external service providers in the banking system itself to assist until it could build its own infrastructure.

So if it is a priority, it could be done very, very quickly.

Chairman LYNCH. That is great to hear.

Ms. Kelley, in your testimony you mentioned Venmo and some of the new apps that are out there, and new technology that really has expanded access to people who are comfortable with that technology and those who have access to these smartphones. It is really amazing.

Do you see any gaps in sort of our technology infrastructure that might be needed in order to push this out, to get that segment of the population that is not participating right now?

Ms. KELLEY. Thank you. That is a great question.

What I would say is, 80 percent of Americans have smartphones and have great facility with them. Clearly, there is still a gap, with the 20 percent who don't, but the number of smartphones is increasing, the use of them is increasing. I just also want to highlight, for those middle- and low-income consumers who may not have them, they have indicated they prefer debit cards, they like using debit cards, so there is a combination of technologies, I think that is well-positioned to deliver.

Chairman LYNCH. That is great. Thank you.

My time has expired. I will now recognize the ranking member of the task force, Mr. Emmer, for his questions.

Thank you.

Mr. EMMER. Thank you, Mr. Chairman. Hopefully, you can hear me.

I want to thank the panel for being here today, and participating under these unusual circumstances, and I reiterate that I hope we get back to work in Washington, D.C., and do our job because if we don't want to show up, I am sure there are a lot of people who would be happy to replace us.

This one is for Mr. Giancarlo. Under your proposed plan—and that is what I am going to call it, your White Paper I think that you recently put out—would the Federal Government have the technical capability to deny access to or shut down the accounts of persons who are abiding by the law?

Mr. GIANCARLO. Simply, no. We have a long tradition of privacy rights. It is enshrined in our Constitution in the Fourth Amendment, and I think actually if we do CBDC right and bring to it those values, I think an American CBDC could be the killer app compared to other sovereign CBDCs where there is not the same

expectation of privacy from government surveillance, such as ones coming out from nondemocracies.

So, I think programming into a central bank digital currency, a level of individual privacy that accords with our society's value is vitally important and actually could be very attractive in a global setting.

Mr. EMMER. That is great.

Continuing with that, Mr. Giancarlo, under your proposed plan, would personal details from payment activities be available to law enforcement without a search warrant, either as names of senders and recipients, amounts sent, or any other revealing metadata generated by digital dollar payments?

Mr. GIANCARLO. I would certainly hope not.

Mr. EMMER. That is not the intent, right?

Mr. GIANCARLO. That is certainly not.

Mr. EMMER. Okay.

Mr. GIANCARLO. We value privacy very highly. It is interesting, if you look around the world, say, in Europe, for example, the Europeans are very sensitive about commercialization of their data, and yet in their law, the General Data Protection Regulation (GDPR), they don't have the same restrictions against government surveillance.

In the United States, we are more comfortable with commercial use of our data, but we are very sensitive about government exploitation. We have it enshrined in our Constitution.

I think if we make sure that the jurisprudence is developed around this and those values are reflected in the U.S. digital dollars, the central bank digital currency (CBDC), I think it could be very attractive on a global and a domestic basis.

Mr. EMMER. At some other time, I would love to have more discussion with you about the idea that Americans are more comfortable with the commercial use of our data. I disagree with that. I think this is going to be a place where we are going to have to do some work in terms of how much information Americans actually have about how their personal data is being used for commercial purposes, and I think that is a different frontier.

But I do agree with you on the privacy issues, obviously, and that is why I wanted you to emphasize that.

Thank you.

Ms. Kelley, if I could change gears a little bit, I wanted to take this opportunity to praise the Administration for the speed in which the Administration got the majority of the stimulus payments out the door. This has clearly helped Americans who need the money the most.

With that said, I think it is essential that we work to get money to the remaining 35 million American citizens who have not received their stimulus payments as fast as those others. Many of these citizens are unbanked and have bills coming due and need the money. Treasury, through the Bureau of the Fiscal Service in the IRS, has attempted to reach citizens through existing programs. It seems that Treasury could look at alternative payment solutions, like new digital channels that provide instant access to funds to reach these unbanked individuals.

What is your suggestion for Treasury to identify more effective, efficient modern payment solutions, aside from prepaid cards and sending paper checks?

Ms. KELLEY. Thanks for that question.

We agree completely that it is critical to get these dollars in the hands of those Americans who need them and to do so quickly, and we are mindful, as you are, of the fact that so many have not yet received the payments. We agree that checks are not the right way to go for all of the reasons that the panels have discussed. It is slow, you then have to cash the checks, which can be expensive and difficult, and then once the checks are cashed, you have to do something with the cash.

We think in the very short term, leveraging existing programs is the way to go. It works. We know it works. It is being used and has been used successfully. But we agree that industry should work in partnership with government to determine ways in which we can deploy additional technologies, both to get these current payments out but also to position for the future.

But for now, we think both of the mechanisms that we described are actually working relatively well and, because they are available and immediate, would be the things that we recommend turning to in the short term.

Mr. EMMER. Thank you.

Thank you, Mr. Chairman. My time has expired.

Chairman LYNCH. The gentleman yields back.

The Chair now recognizes the gentleman from Georgia, Mr. Scott, for 5 minutes.

Mr. SCOTT. Thank you very much, Mr. Chairman.

As I am listening to this exciting and exuberant conversation, I am concerned about our inability so far to be able to address what I think is a very pressing issue, and that is the lack of financial education, particularly for our younger generations.

When I listen to the information that our panelists are passing out, I am aware of how rapidly we are moving to a cashless society, without cash, and doing this without any regard to how, do we bring our American people along with us, how do we bring along our younger generations?

Did you all know, for example, that out of 50 States in our nation, only 17 of our State school systems even offer one course in financial education or financial literacy? And then, with this technology coming in, as wonderful an asset as it is, it is making our financial system far more complicated.

And as you move from a cashless society, there are certain segments of our population who are not even on board the train: 65 percent of African Americans conduct their financial transactions in cash. When you put that together with only 17 of our State school systems even offering one course in financial education, we need to begin to draw our attention to it and make sure we are bringing our full nation along with us as we move in what is warp speed with this technology.

Having said that, let me start with you, Ms. Kelley. With the 2008 crisis that came along, it took 10 weeks to get the stimulus checks out. With this crisis, it took 2 weeks. Now, that is a really good improvement. What do you attribute that improvement to?

Ms. KELLEY. It is definitely true that as we have moved forward in time, our ability to push money out has improved with it, and we are moving more quickly this time than we did in the last instance that you referenced. But I would also say, as others have said, it is equally true that they are not moving quickly enough, and that there is more that needs to be done.

And there are different things that we are doing this time, like increasing the use of prepaid cards, and increasing the use of digital tools, including P2P, that have helped with that clearly and that can help more if we rely on them more, if we rely on them further and really kind of leverage what we are doing well now to do better.

Mr. SCOTT. Good.

Let me move to another area that I have been working on, and that is frauds and scams as we have moved along, particularly with the stimulus checks, and using—the thieves, the scammers out there are using our advances in technology to create even more creative ways of doing the scams.

And I would like to ask you—and, Mr. Giancarlo, if you are there, I know that you were a former Chairman of the Commodity Futures Trading Commission (CFTC), and it was wonderful to work with you over in my committee, CEAC, on several of those issues, and I know the CFTC has been very interesting; but how can—what do you all see on how we can get greater safety and a concern with the different techniques of scams that are out there?

Chairman LYNCH. The gentleman's time has expired, but we will allow Mr. Giancarlo to answer the question.

Mr. GIANCARLO. Thank you very much. I don't see myself on the screen, so I hope you can see me.

When I was at the Commission, with your great support, we really had a very strong enforcement program because, as the technology moves on, the fraudsters and the scammers move along with it. And it is critically important that regulatory agencies that have enforcement efforts and have enforcement powers stay ahead of the technology so they can stay ahead of the next generation of fraudsters and scammers.

Mr. SCOTT. Thank you.

Mr. GIANCARLO. Thank you.

Chairman LYNCH. Thank you to the gentleman, Mr. Scott.

Next, we have the Full Committee ranking member, the gentleman from North Carolina, Mr. McHenry, for 5 minutes.

Mr. MCHENRY. Thank you, Chairman Lynch.

My question is for you, Mr. Giancarlo. Can you explain why the digital dollar is such an important tool? Just the top line here, in a succinct way, what does the digital dollar have to do with financial inclusion in government subsidies? Why don't we start there?

Mr. GIANCARLO. Well, it is so important, for the reasons we are talking about, because we have populations that are underbanked and unbanked, and they are a diverse population. There are a lot of reasons. Some of those are young people who just have not yet come into—they don't have mortgages and they don't have automobiles, and they have very rudimentary banking activities, but they are very skilled with smartphones and mobile devices, and that is a way of reaching them. It is about reaching—it is about

onramps into the financial system and making them as simple and as accessible as possible. And for a new generation, this is how—you go to where they live, and this is where they live. They live in an underlying mobile environment. Let's bring it to them.

Mr. MCHENRY. Okay. But many folks live in rural America, and they live in areas that I like to refer to—I think they should be referred to as, "banking deserts." Just like we have food deserts in urban areas, we have banking deserts in certain communities in urban areas, and certain communities in rural areas. And so if you travel across the country, you recognize this, and you see they don't have access to branches.

So, how would something like a digital dollar help these folks?

Mr. GIANCARLO. During my time with the Commission, I traveled around the country, and I met with folks in rural areas, and the big issue for them is broadband access. I met with agricultural producers who use their mobile devices to look up prices that are trading in places like Chicago for agricultural commodities to know that they are getting the right price at the grain elevator. Once they go out of broadband access or wireless access, then they have trouble with that. They are sophisticated as well. We need to get them access; but if we do, the lack of a branch bank is not insurmountable because they can have that access on their mobile device.

Mr. MCHENRY. Okay. So to that point, access to broadband and access to a mobile phone, would that access issue be a barrier to accessing the digital dollar? How do you remedy that?

Mr. GIANCARLO. No. I think it would actually be a direct onramp to a digital dollar. What is a digital dollar? It is the same thing as the dollar in your pocket, only it is on your mobile device. And we have a big problem with mobile access in rural areas, but if we solve that, the facility that people have with the mobile phone is great.

There are populations—and I think Mr. Scott mentioned this—with folks who have just been outside the banking system but are very comfortable with the notion of bearer instruments and fiat currency. They may also find that a digital currency is a starting point to come into greater financial inclusion easier than actually going to a bank. Even if there was a bank in their district, they might find a mobile device to be an easier access point.

Mr. MCHENRY. Okay. So what you are suggesting is this could be a major answer for people accessing even basic governmental benefits, not sophisticated and complicated issues of commodities trading, but just basic access to the benefits that they are rightfully due under the law; is that—

Mr. GIANCARLO. Yes, it is. And I think that, if we think about benefits, the cost in the infrastructure perhaps for certain populations making mobile devices available may be lower costs than actually trying to make bank accounts available to them, at least as an entry point into CBDC.

Mr. MCHENRY. Okay. So what about our competition with China, can you touch on that? How does it play a role in this?

Mr. GIANCARLO. I mentioned this in my opening statement. I think it is about values. Look, China is going to do what China is going to do, and they see this as an opening. They have a phrase

in China called, "passing on the curve." The curve is that whenever there is a technological change, they see that as an opportunity to get a jump on their competition. And they see this, combined with their Belt and Road Initiative, as a major opportunity to move out of the global banking system which the United States dominates.

They have to do what they have to do. Their currency is not a global reserve currency. So, they have an opportunity here to take advantage. We, though, think about it in different terms, and that is, how do we make sure that our values are brought to bear in this new technology? Because this is coming. The question is, what role do we want to play in it, and are we determined to bring our values to bear or are we willing to live with the values of our economic competitors brought into this new round of things?

Mr. MCHENRY. Thank you. Thanks for your testimony.

I yield back.

Chairman LYNCH. The gentleman yields back.

The Chair now recognizes the gentleman from Utah, Mr. McAdams, for 5 minutes.

Mr. MCADAMS. Thank you, Mr. Chairman.

Ms. Kelley, I am going to direct my first question to you. As you know, as Congress responded to the coronavirus pandemic, we faced a choice of moving quickly or responding perfectly, and I think we made the correct choice by responding quickly. And many of those programs have now been implemented or are underway, whether it is the Paycheck Protection Program or the economic stimulus payments, and many of your member companies have been involved in both of those programs and others.

So my question is, taking a step back and thinking toward the next economic or other crisis and what we can do to prepare now for that crisis, what are some of the lessons that we have learned from our COVID response? How can we improve delivery of benefits to businesses and individuals moving forward, and what role can new technologies play in delivering those benefits?

Ms. KELLEY. Thank you for that question, Congressman. We applaud the actions of Congress in moving quickly to respond to the crisis. And we agree that the impetus to move quickly and the quick action was the right call.

In terms of taking a step back and looking at lessons learned and where we are today, there are a few I think that we can draw already and others that we will clearly draw over time.

First, I think there is a real need for government and industry to come together and identify exactly what it is we are trying to accomplish, whether it is getting dollars in people's hands quickly across a broad spectrum or otherwise, determine what is available and where there are gaps, and then look for existing tools to fill those gaps and particularly technology tools.

There are so many fintech tools out there that can be deployed. As we were doing this in real time, obviously, that is difficult to do, but now that we have a moment to take a breath, I think it is the time to do it.

I also just think we should leverage what we have. As we discussed, surveys of unbanked and lower- to middle-income Americans demonstrate that they actually prefer to spend using debit cards. Well, through this crisis, we have put those in people's

hands. Some people already have them as part of their government benefits, but they now have them as part of this. We should be out there educating people on how they can use them, making sure they hang onto them, because now that they have them, if we need to act again, we can quickly do so, so, leveraging what we already have.

And I just want to make one more point with respect to them that is important. We talked about the fraud that inevitably comes up when there is a crisis like this. That is true. That is an added benefit of these debit cards. They protect consumers from fraud. So if they are lost or they are stolen or they are scammed or a bad actor gets ahold of them, that provides protection to a population that really, really needs it, and that we provide.

Mr. MCADAMS. So I guess to any of the other panelists, any lessons learned from this pandemic that might be applied to the future?

Mr. GIANCARLO. If I could make a suggestion, I think we do need to explore this new innovation. We need to start exploring the next level of technology side by side with the existing accounts-based technology if, for nothing else, to build greater redundancies in the system, but also greater optionality, and more tools in our toolbox to use in crises like this.

Ms. BARADARAN. And I think I want to underscore what Ms. Kelley said here. It is using the tools that we have very quickly, and I think this is one of the things—she is right. Most people, under $50,000, prefer to use debit cards. And so, how do we meet people where they are at, and make sure our solutions match the problem and is not something that we want on the other side?

So what we want is a blockchain basis, and we can discuss that, but the problem here is the banking deserts. It is the unbanked and underbanked who—and we have the technology to meet those needs. And so, I think that is critical at this juncture.

Mr. MCADAMS. Thank you.

Mr. Chairman, I yield back.

Chairman LYNCH. Thank you, Mr. McAdams.

The gentleman yields back. We will now go to the gentleman from Arkansas, Mr. Hill, for 5 minutes.

Mr. HILL. Thank you, Mr. Chairman. I want to thank you for this terrific hearing. I want to thank Lisa and Clement for maintaining our technology for our committee, and I particularly want to thank Full Committee Chairwoman Waters and Ranking Member McHenry for recognizing back in the autumn of 2018 that a FinTech Task Force was essential for the United States to review its regulations, review its laws, review State laws, and make sure that we can be competitive globally as the financial services industry continues its migration from paper to analog to a fully digital distribution system.

And, of course, as a Vandy graduate, it's always good to have a professor from Vanderbilt. "Anchor Down," Professor Ricks, I'm glad to have you here.

Mr. RICKS. I want to mention first this issue of underbanked, particularly in rural areas and the number of counties that now no longer have a physical banking location. I spent a good part of my career in community banking in a rural State, Arkansas, so I'm

very familiar with this challenge. It is particularly bad in our large rural States in the western part of the country.

Part of this is the way we regulate. The Herfindahl-Herschman Index, which governs bank mergers and forced divestitures, and the Fed's determination of who gets to buy banks, really have contributed to this. In other words, we have forced banks to divest of branches in small rural towns, even though their share of deposits isn't even a very accurate measure of banking concentration any longer. It is a very old idea and no longer relevant. And this hearing is an example of why it is not really relevant.

Second, the Fed limits those branch sales mostly to other banks. And we have a lot of innovative credit unions, small credit unions, Community Development Financial Institutions (CDFIs) and other institutions that would love to serve customers in some of these rural environments, or somebody doing a partnership in that effort. So I think we need to think differently about rural banking particularly, and that is not to say there aren't urban challenges in this arena as well.

Let me turn to this issue of the Fed also being the central public utility deliverer. Professor Ricks, great presentation, and, academically, I think it is elegant. I have seen this in other countries, this kind of thing, a postal bank as a centralized delivery for consumers. I worked in eastern Europe in the early 1990s after the Berlin Wall fell. Of course, those countries were trying to get away from the one-size-fits-all postal delivery system, but it doesn't take anything away from your idea.

Representative Bill Foster and I have worked mightily on this digital dollar issue. And I would like to ask Mr. Giancarlo, you are really talking about a digital dollar, which Bill Foster and I have really supported the concept of since we have written the Fed and the IME about this, and you are creating that government digital dollar, but you are allowing other people to use it and set up payment rails. You are not proposing to centralize that digital dollar at a Fed-only distribution network. Is that right?

Mr. GIANCARLO. That is correct. So it would be—

Mr. HILL. Tell us a little bit more about that?

Mr. GIANCARLO. Yes. It would be distributed through the existing two-tier banking system. It would be created by the Federal Reserve, and distributed through commercial banks and other entrants that would be subject to an appropriate level of regulation against reserves that would be posted by banks to the Federal Reserve, in the same way the dollar is distributed now. And then the distribution ledger would be created, would be able to be written at the point of utilization. So, that could be at the bank use or perhaps even at the wallet use, but with the Anti-Money-Laundering/Know-Your-Customer (AML/KYC) provided, subject to appropriate standards.

And it may be that it is provided by wallet providers, by existing financial solution providers or others. But it would be a widely distributed but not a totally decentralized system. It would be distributed through regulated actors in the marketplace.

Mr. HILL. Thanks. I noted when David Marcus, who is the former CEO of Libra, testified several times last year, he said, "We

would use a digital dollar if it existed." Now, that may be sales talk to the Members of Congress on his part, but thank you, Mr. Lynch.

And I yield back.

Chairman LYNCH. Thank you. The gentleman yields back.

We will now recognize the gentleman from Ohio, Mr. Davidson, for 5 minutes.

Mr. DAVIDSON. Thank you. And I appreciate everyone for participating in this hearing. And the process is a little different. I echo the desire to do things live and in person, but at least we are live. So, thanks for the work that it has taken to get us to here, and at least we are using some form of technology here for the hearing.

I would ask unanimous consent to submit for the record a letter that several of my colleagues, including Ranking Member Emmer, co-signed to the Secretary of the Treasury, asking for him and his staff to look for ways to integrate blockchain technology into our response to this public health crisis.

Chairman LYNCH. Without objection, it is so ordered.

Mr. DAVIDSON. Thank you. Many American companies are on the leading edge of blockchain technology. And I believe China's recent adoption of a fintech platform, along with the awareness that delivery of COVID-related payments could be improved, has generated renewed interest in the power and capabilities of blockchain, including moving payments securely, quickly, and transparently.

I will also add that I have been proud to participate in events hosted by Women of Color in Blockchain, and Coinbase, organizations that have shown that blockchain is a force of financial and entrepreneurial inclusion and diversity that I think members of this committee should take seriously, particularly as we have put a lot of emphasis on underbanked and unbanked people.

However, I am concerned that our laws or, more accurately, our lack of laws and lack of regulatory clarity within the digital asset space will hamper the innovation that needs to take place here in the United States, which is why I continue to stress the importance of a bill I have introduced called the Token Taxonomy Act. It is a bipartisan bill cosponsored by Democrats and Republicans, including many members of this committee.

The bill would help regulators, industry, and consumers have certainty and clarity about when securities law would apply to distributed ledger-based projects. The bill has received supportive statements from organizations such as the U.S. Chamber of Commerce, the Blockchain Association, NASDAQ, IBM, and the Coin Center.

We are here today, though, to discuss the government's role in adoption of financial technology to improve the delivery of payments to individuals. And I have joined several colleagues in the letter referenced.

Mr. Giancarlo, you are a well-regarded subject matter expert in this space, and really moved the U.S.'s role far down the road in your previous role at the CFTC. You have clearly taken an interest in the whole space, not just in the central bank digital currency (CBDC). As you look at it, what drives the need for a central bank digital currency versus other types of digital tokens such as stablecoins, cryptocurrencies or other existing tokens in the space?

Mr. GIANCARLO. Please don't perceive any of my advocacy for development of a U.S. central bank digital currency to be a call for any suppression of, or moving away from, these other efforts. I think in our free market system, America has always innovated, with a lot of innovation going on simultaneously, and it is for the marketplace to determine which of those new innovations are appropriate and receive the public's patronage.

And so, I think we have benefited to some degree from the launch or the work of Libra to see inefficiencies in our own system, and yet at the same time, I view a U.S. central bank digital currency as a fundamental element of the economy.

Our economy is built upon the dollar. If we don't modernize the dollar for modern times, then it will be like our airports and our public transportation systems; it will become increasingly out of date.

All of the economic activity that is built upon the dollar relies on the dollar to modernize. And as we watch these other innovations going on, we see the creativity around them, the exploration they are doing. We need to take some of that and apply it to our dollar itself so that it stands the test of time.

Mr. DAVIDSON. I think that was well-said. I have likened some of our approach in this space to the Sears Roebuck approach to retail, and we certainly don't want to replicate that effort.

My time is rapidly fading away, but briefly, when you think about all of the use cases, so much in the blockchain technology is focused on payment systems and currency. In fact, so much of the language refers to it as, "cryptocurrency." Could you maybe highlight the importance of blockchain beyond just payment systems and technology, and the opportunity we have if we had regulatory clarity.

Mr. GIANCARLO. I had the honor to serve at the U.S. Commodity Futures Trading Commission, which oversees some of the world's largest markets for hedging and some of the world's most important commodities and contracts, whether they be agricultural commodities like soybeans and cotton, whether they be mineral commodities, whether they be energy products or some of the world's most important contracts, hedging instruments. All of them are priced in dollars. That is an enormous advantage to the United States. It is one of the many underpinnings of the dollar supremacy, that the world hedges its exposure to all of those commodities in dollar markets.

All of these commodities are moving to a digital format. They are going to go onto distributed ledger. They are going to become tokenized. They are going to become programmable. How long can the dollar remain a world reserve currency if it does not also become digitized, programmable, so that those instruments can be converted into this new digital format? This is a sea change. This is a new wave of the internet that is coming over us. It is going to have profound ramifications, and we need to innovative alongside of it. We can't stand still.

Mr. DAVIDSON. Thank you so much. My time has expired, and I yield back.

Chairman LYNCH. Thank you. The gentleman yields back.

We will now go to Mr. Steil of Wisconsin for 5 minutes.

Mr. STEIL. Thank you very much, Chairman Lynch. I appreciate you holding today's hearing. I, too, look forward to being back and in person for future hearings in Washington.

I think we are diving into a terrific question, which is, how do we get more people banked? How do we increase our inclusion in the financial services space? And as I am reading a lot about the potential in particular on the FedAccounts, I think it is a bit of an incomplete solution.

So, what I would love to do if I can, Mr. Chris Giancarlo, is ask you a question about, where else can we look inside these regulatory burdens that we place on traditional depository institutions that, if reformed and if we make the adjustments, would actually, just using our current system, really create access for the unbanked to join the current financial services system?

Mr. GIANCARLO. Please don't read anything into what I am saying to be pouring cold water on the need to modernize our banking system, to further financial inclusion, to bring participants who should have bank access into that. We need to do that. And I think some of my fellow panelists have explored some very good ideas on this, and their expertise on this is greater than mine. My background is as a market regulator, not a banking regulator.

But I also believe that this new CBDC technology provides a way to both move into the future, to—the great Wayne Gretzky says he was successful because he skated to where the puck is going. This is where the puck is going. We need to skate to where the puck is going. But that doesn't mean we should not still take steps to further financial inclusion. Issues of banking deserts are really important issues.

So we do need to take steps, and there are some very good ideas out there. I wish my expertise was deeper in this to give you specific suggestions, but we have a great panel who can.

Mr. STEIL. I appreciate it. I just think it is important to reiterate that inside this discussion of what I think is a bit of an incomplete solution on the Federal accounts, is to make sure that we don't take our eye off the ball, on the importance of reviewing what is a heavily regulated sector of our economy.

And removing some of these unnecessary barriers, I think will actually have a positive impact on individuals who have been historically underserved and those who are deserving and in need of bank access.

Let me shift gears for you, Mr. Giancarlo, if I can, and come back to you again. And in particular, as we look, China has begun experimenting with digital currencies, and it has been commented on, could you just continue that discussion about the potential implications of a Chinese digital currency? Because I think what we need to be aware of is, as you said, go where the puck is going for the great Wayne Gretzky.

But what is China doing today? What should the United States be doing? And as China is moving forward, what are the implications for the U.S. as a world reserve currency, U.S. sanctions enforcement, consumer privacy in trade? If you could just comment, obviously briefly, here.

Mr. GIANCARLO. To explore that, perhaps I could just paint a picture of, say, a few years from now in East Africa there is a city

of, say, 4 million people and it has one water purification plant built by China under its Belt and Road Initiative.

It will use 5G technology and sensors built in that plant to indicate when the plant is running low in chlorine, for example. It will send a 5G message back to a Chinese supplier that will supply that chlorine.

But here is the important thing: It will be paid for in digital RMB directly to the Chinese supplier. It will totally bypass the global banking system, which we in the United States have dominated, but which is also the basis of sanctions power. Sanctions power is a way of dunning bank activity.

So China is building this very thoughtfully, but they will, within their Belt and Road Initiative, be outside of a banking system.

Now, China has its reasons for doing what it has to do, but do we sit still or do we also explore this technology and bring to it the values that we have brought to the space program, that we have brought to the internet: values of privacy; values of government with respecting the rights of individuals and not seeing it as a means of surveillance; the rule of law; et cetera, et cetera. That is why we can't sit still.

This is going to be a very powerful new technology. We have used that in the past. We need to use it in the future to be a leader in that new technology.

Mr. STEIL. Thank you very much. I couldn't agree more that we need to be forward-thinking, and forward-looking to make sure that we remain globally competitive, in particular against the Chinese, who are moving aggressively in the financial services space.

I appreciate your time, and everyone's time here today.

And I yield back. Thank you.

Chairman LYNCH. The gentleman yields back.

I am now happy to recognize the full committee Chair, the gentlelady from California, who has been the leading advocate for inclusive banking and using FedAccounts to accomplish that purpose, Chairwoman Waters.

Chairwoman WATERS. Thank you so very much, Chairman Lynch. I certainly appreciate your leadership. I appreciate this hearing we are having today, but I appreciate more than anything the fact that you have been in the leadership of dealing with the problem that so many of us have been concerned about for so long, and that is, what are we going to do about the unbanked?

People in America continue to lack access to basic banking services, which has slowed the delivery of stimulus payments from the CARES Act. In fact, nearly 35 million people have received paper checks, not direct deposits to their bank account.

However, I am concerned that the people who most likely need stimulus payments may not even be able to deposit a paper check.

Some reasons that folks say they are unbanked include: distrust of banks; not having enough money to maintain a bank account; and a lack of accessibility to a branch bank.

Fintech companies are stepping into the unbanked space by marketing digital wallets as low-barrier alternatives to bank accounts for U.S. consumers.

And so to Professor Ricks, you have penned a proposal to use FedAccounts to quickly deliver stimulus payments to all individ-

uals in a crisis. I agree with you, and I have drafted a bill that I would like to have your comments on, a bill that would use this delivery mechanism to require the Fed to provide $2,000 in monthly payments for adults, and $1,000 for every child, until the pandemic ends.

Would you briefly describe how this proposal could help bank the unbanked and be a more efficient and equitable way to deliver stimulus payments? How does this proposal compare to what fintech companies are doing to provide financial services to unbanked households? And if you have been through this before I joined the hearing today, please just say so.

Mr. RICKS. Thank you so much, Chairwoman Waters. Just by way of context, Congress had hearings in the late 1980s on the problem of the unbanked, and here we are more than 3 decades later still facing the same issues.

The Federal Reserve Board gave testimony at that hearing in 1989 and said, "Don't worry, private sector innovation is going to solve this problem." And here we are 30 years later, talking about the same problem. So we should applaud and celebrate private sector innovation and technology developments, but it shouldn't be an excuse for public policy stasis.

When the Fed was created, at the time it was created, before it was created bank notes themselves, paper money was issued by the private banking system. We created the Fed and it took on that role.

And most of us think that was a good idea, that the Fed should be in the business of offering physical paper currency to the general public as a resource. The question is whether we should do that now that we are in the 21st Century. The same thing for digital money, and that is what FedAccounts are. It is a form of digital money on the books of the Fed.

And this could be offered. It is an attractive, and compelling way to deal with the problem of the unbanked, which, as you know very well through your leadership, Chairwoman Waters, has been on the public policy agenda for decade after decade, and we still face the same problem and talk about it again and again.

At some point, direct public provisioning needs to be part of the conversation. Other countries have 99 percent bank account penetration. Here we do not, and we need to figure out actual public policy solutions.

Chairwoman WATERS. Thank you so very much. I appreciate it.

And I yield back the balance of my time.

Chairman LYNCH. The gentlelady yields back.

I would now like to recognize the gentlelady from Michigan, Ms. Tlaib, for 5 minutes.

Ms. TLAIB. Thank you so much to Chairwoman Waters, and thank you so much to Chairman Lynch for this hearing. I also want to thank your leadership in making sure that everyone stays safe during this pandemic, including our witnesses who don't have to travel all the way down to Washington, D.C., and risk their lives. So I appreciate that and that we are putting public health first.

As you all know, I represent the third-poorest congressional district in the country, so this is a really critical issue to my neigh-

bors. And we got hit really, really hard, not only public health-wise with COVID, but also the economic instability that was created because so many of my residents were already in survivor mode before the pandemic.

I know, as you all have already testified, that many of our folks don't really understand what options are out there, but even more significantly, they don't have access to broadband. So a lot of them don't really truly understand the alternative opportunities out there. And, as many of you know, I introduced the Automatic BOOST to Communities Act (ABC Act), which would only use/deliver cash assistance through preloaded debit cards, but would also use the data and that infrastructure as a way to build out FedAccounts, postal banking, and digital accounts and eCashing systems.

Professor Baradaran, in your research you wrote about the need for postal banks and how that could provide services to unbanked and underbanked communities, and my community as well, in rural areas. Could you talk to us about that?

Ms. BARADARAN. Sure. So if we are going to talk about what people are doing abroad, every single country practically, China, India, all of Europe and the United States from 1910 until 1966. Postal banks are a natural ally to the Federal Reserve central bank banking system, and the reason is because they have the footprint in every community, regardless of cost, because that is the mission of the Post Office. It is a very democratic institution.

And so by linking up the payment system, this is not a technology problem. The payment system is already there. Linking up the payment system to the Post Office so people can go, take out cash and use that money. And if we want to move toward any of these policies, then we need that one crucial step of that cash-digital divide, and that is what postal banks do. It is what they have done here. It is what they do abroad.

So if we want to follow other countries' lead, we could, but we also are leaders. Our Federal Reserve is probably the best payment system in the world. It is the most trusted. It is the most secure. And so, we can just make it a little bit better. We don't need to follow in this. We can lead.

Ms. TLAIB. Thank you so much. I would love for you to take a look at the ABC Act.

Ms. Kelley, it took the IRS about 10 weeks to start distributing the 2008 stimulus payments after enactment. By contrast, the IRS delivered the first round of the CARES payments 15 days after the enactment, mostly via direct deposit, as you probably know, though some have still not received their payments yet.

I know many of my colleagues on the call, probably get calls still. Not only that, mix-ups where there is a married couple who only get the $1,200; they don't get the payment for the spouse. So, it is just disastrous.

Would the technology described in the Automatic BOOST to Communities Act, with the preloaded debit cards, with eCash, eWallets, postal bank and FedAccounts, be able to kind of address the issue around some of these implementation problems you see now with paper checks?

Ms. KELLEY. Thank you very much. We agree completely that paper checks are not the way to go, for reasons that we have discussed, for every reason, the expense associated with them, the length of time it takes to get them. That is the wrong way to go.

I think there are lots of interesting proposals out there. As we discussed, I think they are worthy of conversation and study. And I think, as everyone agrees, we all should be forward-looking and looking to see how we can use technology, harness technology to deliver more effectively to those who need it most.

As we sit here today, as we talk about the stimulus that needs to be delivered today, however, what is clear is that we are going to have to harness the infrastructure that is there today and that is actually working. Prepaid cards, as you referenced, actually work well and consumers like them, so getting them in the hands of those consumers.

There is no broadband issue with a prepaid card. That is something that we can deploy now, and we are, that works well and can be transitioned, candidly, to the technology, including P2P mobile wallets. You can load your prepaid card onto them as we evolve. We can harness those technologies as well.

And I just want to make the point that those also work well in rural areas, in some of the areas that we talked about, because not only is fintech stepping in, but it is leveraging the existing infrastructure in terms of independent ATMs, which are prevalent in those areas, but also big box stores, and other grocery stores, which are also now participating in the system, helping consumers get cash onto these technologies or get cash off where they need it.

Ms. TLAIB. Thank you so much.

I yield back, Mr. Chairman.

Chairman LYNCH. The gentlewoman yields back.

And that concludes our questioning, I believe. If any Member is out there and I have not called upon them, let me know. But I would like to take this opportunity to thank all of our witnesses for their thoughtful and enlightening testimony.

Without objection, the following letters have also been entered into the record and will be admitted after today's hearing: the American Bankers Association, eCurrency, Cardtronics, the Credit Union National Association, the Innovative Payments Association, and Professor Tony Yezer of George Washington University.

The Chair notes that some Members may have additional questions for this panel, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to these witnesses and to place their responses in the record. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

I remind Members to submit written questions and materials for the record to the email address provided to your staff.

This hearing is now adjourned. Thank you. Be safe.

[Whereupon, at 1:34 p.m., the hearing was adjourned.]

A P P E N D I X

June 11, 2020

TESTIMONY OF MEHRSA BARADARAN

Professor of Law, University of California Irvine School of Law
before the
United States House of Representatives
Committee on Financial Services Task Force on Financial Technology

Chairman Lynch and Ranking Chair Emmer, members of the Task Force on Financial Technology, thank you for this opportunity to testify on "Inclusive Banking During a Pandemic: Using FedAccounts and Digital Tools to Improve Delivery of Stimulus Payments." As the United States enters a state of recession with unprecedented rates of unemployment, savings accounts are being depleted, expenses are rising, and the future of household well-being appears uncertain. Congress swiftly responded with the CARES Act to provide relief to families and businesses impacted by the virus. A chief goal of this bill was to put money directly into people's hands through increased benefits and direct stimulus payments. Yet the dispersal of these funds has revealed deep-rooted problems with the US payments system that have made it difficult for some of the Americans most in need to access stimulus funds.

Many Americans have had to wait long hours in ATM lines, pay fees to alternative service providers, or wait weeks or months to receive their stimulus funds.[1] Up to 70 million Americans will encounter delays or problems in receiving their payments.[2] For those without a bank account, the wait can be as long as five months.[3] The massive scale of this crisis will mix with the financial precarity of many Americans and will likely lead them into the open arms of high-cost check-cashers, payday lenders, title lenders, pawn shops, and other high-interest lenders. Though this recession is likely to make these problems more acute, the gaps in our exclusionary payments system are not new.

There are practical solutions to these problems that can quickly and effectively achieve financial inclusion and democratize the United States financial system. I urge Congress to authorize basic checking accounts at the United States Postal Service in partnership with the Federal Reserve Payments System. In order to cross the cash-to-digital divide, unbanked and underbanked individuals need an account with physical locations. Adopting digital accounts without providing access points for communities already excluded from the banking system would further exacerbate longstanding inequalities in access.

I: The Problem: Banks Do Not Serve Every Customer

A quarter (25%) of Americans are unbanked or underbanked.[4] These low-income families spend about 10% of their total income in fees to alternative financial service providers just to use their money.[5] Being underbanked is expensive and time-consuming as each financial transaction

involves fees and hurdles.[6] The unbanked must spend time and money to send and receive money, cash checks, use debit cards, and otherwise engage in commercial activities that are routine and nearly free for most Americans. Only chartered banks and their customers can access the payments systems built, maintained, and overseen by the Federal Reserve.[7] Yet banks are not mandated to offer these services to all people.

Banks have abandoned certain low-profit communities and customers. Over the last several decades, deregulation, heightened market competition, and the subprime crisis has led to wave after wave of bank mergers and a conglomerated banking industry. Industry consolidation has left many communities, especially in lower income zip codes, without access to a bank.[8] In fact, rural America has lost over half of its banks in the last few decades with 1 in 8 communities designated as a banking desert.[9] Due to industry consolidation, 93 percent of the 1,800 bank branches that have closed since late 2008 were in postal codes where the household income is below the national median.[10] In these banking deserts, it is not uncommon that the only ATM in the entire area is at a gas station with fees up to $7.50 per transaction.[11] Research shows that when banks leave a community, businesses lose 20% of their revenue.[12] Based on the current economic pressures on small banks and businesses, more banks will likely have to shut their doors, leaving small businesses in even more dire conditions. This is a particularly acute problem for Minority-owned businesses who are particularly vulnerable to failure in challenging economic conditions.[13]

Even in zip codes where banks are physically available, there remain many barriers for low-income Americans. The FDIC survey of the unbanked and underbanked showed that over one third of respondents did not trust banks with distrust increasing over time. Banks charge excessive and onerous overdraft fees and excess activity fees—fees that are lucrative for banks and disastrous for low-income consumers.[14] Banks no longer offer small loans and though some promise "free checking," there are hidden fees and requirements that repel most small balance customers. Most banks require balances of $1,500 to avoid fees on their basic accounts, and small accounts are not profitable for banks, so they avoid them—either by leaving low income areas or repelling low income customers through fees. [15]These fees, borne primarily by LMI bank customers, has become a profitable business with some large regional banks reporting that fees account for 40% of their income. Together, consumers paid $17 billion in overdraft fees in 2015, according to the Center for Responsible Lending.[16] Faced with seemingly random and punitive fees, low-income customers have taken their business to the fringe banking sector.[17]

Without bank accounts, many Americans do not have a safe and accessible means for saving their money.[18] More than 40% of Americans do not have even $500 in savings and would need to borrow if they had a shortfall—over 60% would need to borrow $1000 if they faced a financial emergency.[19] Many Americans do not save because they do not earn enough even while working full time, but even if they have money to save, most accounts are not accessible to those with small savings.[20] Cash savings are vulnerable to theft and loss.[21] Research abroad has demonstrated that increased access to a savings account enhances economic welfare and other important outcomes.[22]

Having a safe, low-cost, and easy savings account could lead to more savings, which could diminish the need for payday loans when families hit a snag.[23] When individuals can dip into savings, they are less likely to need payday loans.

Another important way that banks are not meeting the needs of low-income Americans is the delay in making funds available to customers. Payments clearing—the time between when a check is deposited and when the funds can be withdrawn as cash—can take three to five business days. For families who do not have a buffer of wealth and need to spend their paychecks for food or rent, this delay is costly and onerous. In order to avoid this time gap, families often resort to check-cashers or payday lenders. Estimates show that $89 billion is spent each year by the unbanked on financial fees and services, including payday lenders, check cashers, pre-paid cards, and other services.[24]

II: The Federal Reserve Has a Mandate to Make Services Equitable

The Federal Reserve payments system has proved secure, private, and safe and is among the most reliable in the world—but it is exclusionary. Congress established the Federal Reserve in 1913 to increase the integrity, efficiency and equity of US payments. The Federal Reserve states that it has "a public-interest motivation in seeking to stimulate improvements in the efficiency of the payments system."[25] This, according to their own mission, requires it "to provide equitable access and an adequate level of services nationwide."[26] Indeed, achieving this mission today is essential to helping many vulnerable Americans access much-needed funds during the current recession

The Federal Reserve has only offered its payments system to banks with the implicit understanding that banks would provide these services to customers, which they have not done. This is a problem that can and must be fixed through policy rather than outsourced to technology or banking corporations to solve. In order to achieve this mission, the Federal Reserve must open up its payments system to all Americans. If the Federal Reserve falters in its mission, it falls in Congress's purview to enforce it. To the extent that this system is exclusionary, it is up to our democratically elected representatives to update this mission and mandate that the Fed promote efficiency and financial inclusion to the benefit of more Americans. Money itself is a public good and its creation, supply, and stability is a function of the US Treasury in coordination with the Federal Reserve.[27] Every American not only deserves the right to participate in the economy, but also to participate democratically in the federally supported payments system.

Financial technology companies ("fintechs") and blockchain providers have promised that alternative technologies and services can lead to financial inclusion.[28] Fintechs, which are distinct from traditional banks, provide technology-centered products and services directly to consumers. Unlike traditional banks, fintechs do not have access to the Fed's payments system.[29] They must partner with a U.S. chartered bank in order to offer payments services. As required by anti-money laundering and anti-terrorism laws passed by Congress, banks must ensure accurate identification of

their customers. Allowing these private companies access to these essential payments systems without the oversight under which banks operate would put Congress's interests in security and crime prevention in danger.[30] These companies offer customers greater convenience and easy to use apps, but their ability to achieve financial inclusion is limited due to their lack of a large physical footprint. This is the critical missing step into widescale fintech or digital account use. For communities without bank branches or for customers who are unbanked or underbanked, the many fintech options, including FedAccounts and digital wallets will not be able to overcome access issues if they are not linked with a place where cash can be deposited or withdrawn. Moreover, many communities do not have the technology yet to be able to move all of their financial transactions to mobile or internet accounts. Many LMI individuals and communities, with estimates between 20 to 40 million Americans, do not have broadband internet services and many other users prefer cash or a simple debit card for transactions.[31] Most LMI communities still operate at least some portion of their financial activities in cash and the majority of Americans with an income of less than $50,000 use a debit card as their preferred payment method.[32] A physical location with simple ATM and debit card capabilities would help many Americans avoid the high cost alternative service providers. Those who are unbanked need a way to cross the cash/digital divide so they can engage in commerce.

III. The Solution: Digital Accounts at the Post Office

A simple solution to this problem is for the postal service to offer a simple checking account with online capacities to all communities.[33] The post office can provide the physical services necessary for the unbanked and underbanked to access FedAccounts, digital wallets, and other fintech services. As America's oldest instrument of democracy in action, the Post Office can offer an essential service to every community. This is not a new or radical idea. The United States Postal Service (USPS) operated a savings bank for much of its history and the majority of postal services worldwide offer banking services. Postal banking has been operational in many Western countries since the 1800s, and currently, fifty-one countries have postal banking as their primary method of financial inclusion—only 6% of postal carriers worldwide do not offer banking services. (It is estimated that postal banking has banked over 1 billion people worldwide.)[34] There are a variety of models worldwide—some focused on the poor and others that offer postal banking services to the entire population. In fact, the United States is one of the only developed countries in the world without a postal banking network. Though we do not need to look abroad for a justification or even a model for postal banking when we can refer to America's own rich history of postal banking.

The post office can deliver the physical branches, ATMs and checking account services in partnership with the Federal Reserve that would provide the same access that it provides currently to banks. The funds would be placed in the Fed's reserve account, which is the most secure depository in the world. Many individuals and communities need a bridge toward the digital cash economy. They need a point of physical contact so that people who need to withdraw cash or deposit their wages into an account and the Post Office is ideally suited to help with the transition

toward the digital economy. In fact, in communities without banking services, many are already using the post office for simple financial transactions. Financial journalist Kevin Wack reports that in a rural town that lost its bank, one hotel proprietor "will walk over to the post office, buy a single stamp and request a check back," which is "cheaper than patronizing either of the town's two ATMs." An electricity cooperative in town uses the post office for their business accounts: Rather than keeping a lot of currency on hand, or embarking on long drives to the nearest bank, an employee goes to the post office several days each week and buys a money order. 'Thankfully the post office is the unofficial bank,' the cooperative's CEO, Steven Lunt, said."[35] These customers and businesses need a way of converting cash to digital accounts and vice versa. This is a crucial need that fintech providers are not able to meet in many areas. Once customers have a digital account, they can use fintech services for their transactional needs.

The Post Office has the largest physical footprint of any other institution with over 30,000 branches and over 160 million delivery points nationwide making it the most ideally suited institution to help LMI zip codes and rural communities cross the cash/digital divide.[36] Professors Terri Friedline and Mathieu Despard created a database and five research reports concerning US households' access to financial services in which they determined that "37% of all zip codes in the US lack either a bank or credit union." Further, almost 90% of these banking deserts were in rural areas." The concluded, "the good news is that the density of post offices in these deserts is 1.11 per 1,000 people, compared to only 0.27 in non-deserts. This means that post offices are abundantly located in places where financial services are lacking." It is these areas that have suffered the most from the trends toward acute inequality. It is also in these regions where check cashers and payday lenders congregate.

Because the Post Office never left communities deserted by banks and other businesses, it is not only available in all the regions forsaken by banks, it has developed an ongoing relationship of trust within these communities. Among the unbanked and underbanked, many do not use banks because of a lack of trust. Meanwhile, a recent survey of the "Most Trusted Brands" in the United States, the USPS was ranked number one—with the most survey respondents stating that it was the institution that they most trusted "to do what is right."[37] No banks were on the list of the top 25 companies. The Postal Act of 1792, passed by Congress and signed into law by President George Washington, gave the USPS a mandate to honor the privacy of citizens and to offer services to all communities. For over 200 years, the USPS has maintained its public-serving mission by offering equitable services to all. I would urge Congress to continue their support of this foundational American institution by allowing it to help democratize the financial system.

The Post Offices could offer banking services across the country at a much lower cost than banks, alternative service providers, and even fintech because (1) they can use natural economies of scale and scope to lower the costs of the products, (2) their existing infrastructure significantly reduces overhead costs, and (3) they do not have profit-demanding shareholders and would be able to offer products at cost.[38] Both postal banking and FedAccounts could be designed to create

revenue for the post office and the Federal Reserve while offering lower cost services to the unbanked and underbanked.[39] In addition to physical branches and FedAccounts, a Realtime payments could help eliminate unnecessary delays in processing.[40] The technology is already available to modernize all of these issues that present obstacles for many Americans.[41]

Postal savings accounts have the potential to become an accessible and inclusive account for Americans left out of the banking system. Many customers already operate a provisional savings account by purchasing money orders at the post office.[42] Even having a few hundred dollars stored away can make a significant difference to a moderate-income family who may face an emergency in their lives. It is difficult to measure how many people are not saving in banks because of financial and cultural barriers of entry, but it is possible that just as in the past, funds would pour into the postal banks from under proverbial mattresses, in prepaid cards, or otherwise wired abroad. Just as our postal banks did successfully for half a century, lowering barriers of access to low-cost savings accounts can greatly benefit a population living without any financial cushion.

IV. Conclusion

In order to meaningfully participate in the economy, the excluded, unbanked, and communities living in banking deserts need access to the safe and subsidized payments system operated by the Federal Reserve. Justice Louis Brandeis believed banking to be among the industries that might be considered a public utility because, as he explained, "deposit banking should be recognized as one of the businesses 'affected with a public interest.'"[43] Achieving an equitable financial system requires that the payments system operated by the Federal Reserve be opened to all. The central bank payments system already resembles a public utility, but it is currently only a public service open to banks who operate as an intermediary. Opening the payments system to the unbanked and underbanked would not cause any disruptions to the financial market and would be a boon to low- and moderate-income families who are currently paying to use a public resource. Postal banks would offer a free checking account with digital services that would enable the unbanked and underbanked to engage in simple financial transactions through the public payments system instead of high cost non-bank options. It would also help the Federal Reserve achieve its Congressionally mandated mission of creating an equitable financial system.

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United States House of Representatives
Committee on Financial Services
Task Force on Financial Technology

Inclusive Banking During a Pandemic:
Using FedAccounts and Digital Tools
to Improve Delivery of Stimulus Payments

June 11, 2020

Testimony
of
Hon. J. Christopher Giancarlo

Thank you, Chairman Lynch and Ranking Member Emmer, for the opportunity to testify before the Task Force on Financial Technology. I also thank Chairwoman Waters and Ranking Member McHenry of the House Committee on Financial Services.

I am Chris Giancarlo, former Chairman of the U.S. Commodity Futures Trading Commission. This testimony is given on my own behalf and not on behalf of any organization or enterprise.[1]

Introduction

As this hearing is being conducted, the United States, along with the rest of the world, is recovering from the COVID-19 pandemic. Among the emergency relief policy responses to the current crisis are direct payments to individuals to offset lost wage income. This initiative has revealed persistent deficiencies and shortcomings in the effective distribution of monies, as an estimated 70 million Americans will need to wait a month or more to receive their direct payments via paper check as the legacy accounts-based infrastructure does not provide a more direct means of payment.

The pandemic-induced crisis should be a call to action to renovate long-neglected yet critical payment and financial infrastructure that is becoming increasingly outdated. Proposals have been made for "digital dollar" electronic cash payment structures to distribute electronic payments directly to consumers, which this Task Force is considering. These proposals generally consider "digital dollars" in terms of benefits distribution functionality through accounts-based systems and not as a form of tokenized central bank digital currency or "CBDC" as it is known.

[1] My professional associations are set out in my resume attached hereto.

Today, I would like to propose a far more fundamental "digital dollar": a US central bank digital currency. This type of "digital dollar" would be a new, additional format for US currency. It would be a digital bearer instrument that has the same legal status as the dollars in one's purse, but on a smart phone. It would operate alongside existing forms of money, would be primarily distributed through the existing two-tiered architecture of commercial banks and regulated money transmitters and would be recorded on new transactional infrastructure, potentially informed by distributed ledger technology.

Before explaining how such a "digital dollar" will address the topic of inclusive banking in a pandemic, let me first provide some background.

The Digital Dollar Project

Early this year, my brother, Charles Giancarlo, a veteran Silicon Valley engineer, entrepreneur and corporate executive, Daniel Gorfine, the CFTC's former Chief Innovation Officer and I created the Digital Dollar Foundation, a not-for-profit enterprise. The Foundation partnered with David Treat and his innovation team at Accenture as lead architect and technology innovation advisor[2] on a pro bono basis.

Together, the Foundation and Accenture launched the *Digital Dollar Project (https://www.digitaldollarproject.org)*. The Project's purpose is to lead public discussion of the merits of a tokenized form of a U.S. CBDC or, what we alliteratively termed in January of this year, a "Digital Dollar." The Project is not a commercial enterprise, but an effort to encourage research and public discussion on the potential advantages of a US CBDC, convene private sector thought leaders and actors and propose possible models to support the public sector as it considers development, testing and adoption. The Project looks to advance the public interest by future-proofing the dollar for consumers and institutions here in America and around the world.

To gain diverse perspectives from key stakeholders, the Digital Dollar Project formed a non-partisan advisory group that includes a broad array of economists, business leaders, technologists, innovators, lawyers, academics, and consumer advocates across the social and political spectrums.[3] The Advisory Group helps explore design options and approaches for creating a US CBDC through a deliberative process, including stakeholder meetings, roundtable discussions and open forums.

Two weeks ago, the Project published its inaugural white paper detailing a path

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[2] Globally, Accenture's work on central bank digital currency includes engagements with the Bank of Canada, the Monetary Authority of Singapore, the European Central Bank, and, most recently, Sweden's Riksbank.
[3] Members of the Digital Dollar Project Advisory Board are listed here: https://www.digitaldollarproject.org/advisory-group.

forward and considerations for the development of a US CBDC. I ask that a copy of the Project's white paper be made a part of the record with my testimony.

The white paper proposes a tokenized US CBDC, outlines the benefits of a CBDC in the context of the US dollar, and proposes potential use cases and pilots. As I said earlier, the white paper proposes a US CBDC that operates alongside existing monies, is primarily distributed through the existing two-tiered architecture of commercial banks and regulated money transmitters and is recorded on new transactional infrastructure, potentially informed by distributed ledger technology.

Among the multitude of highly effective payment options in the United States (e.g., cash payment, credit, debit, etc.), a CBDC would offer a new choice for digital transactions, instantaneous peer-to-peer payments and in-person transactions. It could also potentially lower costs and further diversify payment rails. A US CBDC could be distributed to end-users through commercial banks and trusted payment intermediaries. It would facilitate financial inclusion by broadening access to services through additional mechanisms, such as digital wallets. In particular, a US CBDC could expand the ability of currently un-or-underbanked populations to access digital financial services and transact on e-commerce platforms that do not deal in physical cash.[4]

Central Bank Digital Currencies: Decentralized Emergency Money

Before delving further into the benefits of a US CBDC, it may be helpful to review the ability to distribute money with existing financial infrastructure. Practically speaking, traditional dollar bank notes are local instruments. They are distributed by the Federal Reserve to local banks and can be held universally. But they are naturally impractical for large value payments and restricted to transactions in the presence of payer and payee. Traditional dollar banknotes do not work in modern eCommerce.

A US CBDC would represent a new format of central bank money to complement bank notes and reserves while integrating seamlessly with existing banking and payments functions. The innovation rests in the adoption of properties akin to a token or digital bearer instrument allowing the dollar to become digital and portable. Distributed ledger technology (DLT) offers the most effective approach to issue, distribute, transfer and redeem tokens. It would enable the dollar to be sent in real time as easily as sending a text message.

The issuance, distribution and redemption of a US CBDC would take place just as cash does today. US CBDC would be issued by the Federal Reserve to domestic

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[4] Bank notes are often used to make small payments in the physical world, although, on average, physical cash usage is in decline compared against other payment methods. This dynamic is likely to progress in a post-COVID 19 world, thereby making it increasingly important for digital financial options to extend more broadly.

banks against reserves and credited in the banks' electronic vaults. Banks would distribute digital dollars to domestic end-users' electronic wallets against bank deposits and against collateral to non-resident banks. It would be redeemed against bank deposits and collateral at banks and against reserves at the central bank. The token-based properties would allow digital dollars to be intermediated through existing channels.

For domestic end-users, the electronic wallets would offer essential payment functionalities and be integrated with existing banking services to enable a seamless integration with the financial system. Payments at points of sale would be conducted through conventional terminals. Commercial banks would extend such wallets to their customers through existing outlets for mobile phone applications covering needed know-your-customer and anti-money laundering provisions. For unbanked end-users, wallets could be extended by mobile phone service providers. Advanced off-line capabilities are possible to allow local transactions to take place when the telecommunication networks are down.

The DLT network would operate on an autonomous permissioned network and ensure validity and integrity of all transactions. The verification of transactions would rest on the complete history or lineage of the tokens since issuance to attest tokens are genuine and have not been double spent. The advantages of tokens rest in the ease with which interactions with existing banking and payment functions can be performed. Participants only need to interact with the tokens and do not require to be connected to a payment system.

DLT network participants could be the central bank, resident banks and other financial intermediaries affording greater resilience in payment processing. The distributed nature of the DLT platform would enhance security as manipulation of the network would be computationally near impossible. The DLT platform would operate on separate payment rails using the Internet adding to payment system diversification. It would enable distribution of central bank money independent of the functioning of the banking system.

Inclusive Banking During a Pandemic

One area of great promise with respect to a US CBDC is in expanding financial access and inclusion for unbanked populations. A 2017 Federal Deposit Insurance Corporation survey found that roughly 14 million American adults lack a bank account—a figure that has become all the more important during the COVID-19 pandemic.

The crisis revealed fundamental shortcomings in the capacity of existing government payment relationships to swiftly channel financial resources to the non-

banked public. The US Federal Reserve has no direct relations or connectivity with the non-banked public. It cannot therefore distribute to resident households social security benefits, school meal vouchers, food stamps, other income support or reserves to non-resident banks. Away from the Federal Reserve, Federal and State government agencies have only partial direct banking relationships with the general public through tax and social benefits but their reach is not universal.

Had a US CBDC been in circulation during the Covid crisis, it would have enabled the sending of monetary relief instantaneously to the electronic wallets of targeted beneficiaries.

During non-crisis conditions, a US CBDC may hold advantages over traditional bank accounts in terms of expanding access for underserved populations due to lower system costs and the ready availability of digital wallets. Given the limited but critical functional scope of a digital wallet, it is possible that the costs associated with providing individuals with wallet services might be lower than the costs of hosting a traditional bank account, particularly given the range of programs and government benefits that can be distributed utilizing wallet services. This would also allow private sector providers to expand coverage of such services to un-or-underbanked populations that have access to mobile devices.

In order for this to be true, however, the digital wallet will need to prove to be less expensive to offer from a technology, regulatory and administrative perspective. This hypothesis can be tested in real-world pilot programs. In situations where private sector solutions are not viable, policy solutions could be developed around public wallet government programs or services that fill remaining gaps in coverage.

Assuming the technological efficiency and potentially reduced regulatory costs associated with offering a digital wallet, one can imagine smart phones and devices preloaded with such a solution, or at a minimum, the application programming interfaces to allow for mobile applications to function. The wallet could be readily registered through a regulated hosting intermediary performing requisite Know Your Customer/Anti-Money Laundering (KYC/AML) checks. Had this been the case during the COVID-19 crisis, many of the currently underbanked may have had an alternative means of receiving funding other than by physical check.

Tokenized Money: A Brief History...and a Glimpse of its Future

Yet, a US CBDC is about more than financial inclusion amidst a pandemic. A dollar CBDC would offer new functionalities and more refined tools to overcome existing limitations of central bank money. It would take advantage of emerging distributed

ledger technology to enable more direct monetary relations and diversified payment systems. It would enhance the dollar's functionality for a new digital age.

Money has evolved over the span of human civilization. Initially trade was through barter: a chicken for a clay pot. However, what does a society do when a person wants to trade a blanket, but doesn't need a clay pot in return? The answer was a token that society recognized as representing value and could be traded for any good whether a clay pot or a blanket. The first token may have been shells or beads. It evolved to things that carried some inherent value such as salt (the currency of the Roman army from which the word "salary" derives) or coins minted from precious metals like silver and gold. In more recent times, tokens of currency were based on intangible items of little intrinsic value such as paper or, today, polymer notes. As economies evolve into the future, so will their tokens.

That future is beginning to reveal itself. It will be a future in which things of value like money, agricultural and mineral commodities, contracts, stock certificates, land records, cultural assets such as music, and votes in an election, and even personal identities will be stored, managed, transacted and moved around in a secure private way from person to person, without third-party intermediaries. In this era, trust will not be achieved by some established, central institution as is the case in most of the world's existing financial market infrastructure. Rather, it will be achieved by collaborative cryptography and a decentralized network of computational algorithms.

In the same way that the early phase of the Internet enabled instantaneous transfer of words and information from computer to mobile phone. This next phase will enable instantaneous person to person transfer of things of value, be they shares of stock, automobile titles or monehy. Today, most of the world's tradable commodities and contracts are priced in US Dollars. Tomorrow, they will be rendered into digitized, tradable tokens and coupled with algorithmically driven smart contracts.

We should prepare to reformat the US dollar into a digitized unit of account that measures, supports and transacts with tomorrow's digital things of value. We should transform the greenback from a simple analog instrument into a tokenized and programable currency. We should take steps today to future-proof the dollar for a digital tomorrow.

A well-architected, durable, and universal US CBDC is in the national interest. Crafting it will be an enormous and complicated national undertaking. It needs to be done carefully, thoughtfully and deliberately. Something as complex and worthy of the US dollar's global importance should not be completed in a hurried manner. It will take time and seriousness to get it right.

Nevertheless, now is the time to get started. The recent launch of SpaceX reminds us that the United States explored outer space and the lunar surface through a series of pilot programs known as Mercury, Gemini and Apollo. So too, should the US explore a digital dollar in a series of well-conceived and executed pilot programs.

The Federal Reserve is already looking thoughtfully at central bank digital currency. It should go further and work with the US Treasury to kick off a series of pilot programs drawing upon the innovativeness of the private sector to test various design options and specific approaches, technologies and protocols.

Among other imperatives, the pilot programs should explore how a central bank digital currency can:

- Preserve the effectiveness of US monetary policy and financial stability;
- Enable ease of payments and provision of financial services to those parts of the American population that are financially underserved or excluded;
- Enhance scope, access, diversification and resilience in US dollar payments;
- Provide needed scalability, security and privacy in retail, wholesale and international payments;
- Offer comprehensive and seamless integration with the financial infrastructure and interoperability with central bank digital currency infrastructures being developed outside of the United States;
- Adhere to existing KYC/AML requirements amid distribution through regulated payment intermediaries and banks, preserving the two-tiered banking system;
- Ensure requisite individual privacy and security laws and regulations in payments is preserved and enhanced;
- Enhance economic policy insights through greater transparency offered via digital payments; and
- Develop US leadership and best-in-class technology to support needed digital currency functionalities.

In addition, the US Treasury and the Federal Reserve could regularly update Congress on the progress of these pilot programs and their achievement of these objectives, including enhancing financial inclusion, and offer proposals to further build out and implement a US CBDC across the financial system.

Conclusion

A new technological age is unfolding, bringing with it the digitization of things of value that can be tokenized, decentralized and programmed. Across the globe, governments and private entities are experimenting with tokenized commodities, contracts, legal titles and, most critically, commercial and central bank digital currencies.

A US CBDC would address limitations in the ability to distribute emergency monetary relief that was revealed by the COVID-19 crisis. It can provide the tools and infrastructure to make emergency liquidity distribution work better and faster. It can provide advantages over traditional bank accounts in terms of expanding access for underserved populations due to lower system costs and the readily availability of digital wallets.

Yet, a US CBDC is about more than financial inclusion amidst a pandemic. It is about the architecture of money in this new digital era. It offers new functionalities and more refined policy tools. It takes advantage of emerging distributed ledger technology to enable more direct monetary relations and a more diversified payments infrastructure. It recrafts the architecture of central bank money and, in effect, reimagines the future of money itself.

Throughout its history, the United States has been a leader in innovation and building systems for the next generation. Whether launching the space program or building the internet, the United States has conducted large technological endeavors through public and private partnerships reflecting longstanding American values of economic stability, technological innovation, individual liberty and privacy, free enterprise and the rule of law.

This global wave of digital currency innovation is quickly gaining momentum. The questions for the United States are what role it will play in this wave of the Internet and to what degree will its core values be brought to bear. The United States must take a leadership role in this next wave of digital innovation or be prepared to accept that the innovation will incorporate the values of America's global competitors.

The launch of a US CBDC is a logical and critical next step to increase financial inclusion, enshrine democratic values in the future of money, drive societal and economic benefits and future-proof the US dollar for generations to come.

Attachment A

Resume: J. Christopher Giancarlo

The Honorable **J. Christopher ("Chris") Giancarlo** served as 13th Chairman of the United States Commodity Futures Trading Commission (CFTC). Mr. Giancarlo was first nominated as a CFTC Commissioner by President Barack Obama and unanimously confirmed in June 2014. He was subsequently nominated as CFTC Chairman by President Donald Trump and again unanimously confirmed in August 2017. He departed the CFTC in July 2019 following the expiration of his five-year term.

As CFTC Chairman, Mr. Giancarlo served as a member of the U.S. Financial Stability Oversight Committee, the President's Working Group on Financial Markets, and the Executive Board of the International Organization of Securities Commissions and participated in meetings of the Financial Stability Board. During Mr. Giancarlo's Chairmanship, the CFTC published primers on virtual currencies and smart contracts, oversaw the launch of the first bitcoin futures contracts, created LabCFTC as the agency's stakeholder in the digital evolution of derivatives trading markets and entered into FinTech cooperation agreements with several overseas regulators.

Mr. Giancarlo is Senior Counsel to the international law firm, *Willkie Farr & Gallagher*. He serves as Chairman of the Board of *Common Securitization Solutions LLC*, a joint venture between Fannie Mae and Freddie Mac. In addition, he serves as an independent director of the *American Financial Exchange*, the sponsor of Ameribor and Ameribor Futures, and on the Advisory Board of the *Chamber of Digital Commerce*.

Before entering public service, Mr. Giancarlo served as Executive Vice President of financial services firm GFI Group Inc., leading its initial public offering, and as Executive Vice President & U.S. Counsel of Fenics Software. Previously, he practiced law in New York and London as a partner in the law firms of Brown Raysman Millstein Felder & Steiner and Giancarlo & Gleiberman and an associate with Curtis, Mallet-Prevost, Colt & Mosle.

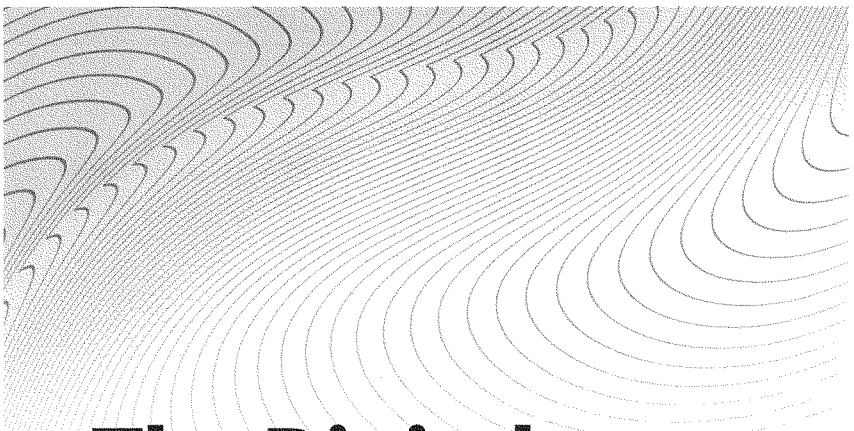
Mr. Giancarlo was Founding Co-Editor In Chief: *eSecurities: Trading and Regulation on the Internet (Leader Publications)*. He received his J.D. in 1984 from Vanderbilt University School of Law and graduated with a B.A. in 1981 *Phi Beta Kappa* from Skidmore College. Mr. Giancarlo is a member of the bar (1985) of the State of New York. Among other honors, Mr. Giancarlo has been awarded: "*Contribution to Regulatory Reform*" by IFLR Americas (2020); "*The Freedom of the City,*" from The City of London (May, 2019); and "*Person of the Decade*", from The French American Academy (October 2017).

Attachment B

White Paper: "Exploring a US CBDC"

The Digital Dollar Project

May 2020



The Digital Dollar Project

Exploring a US CBDC

May 2020

DIGITAL DOLLAR FOUNDATION accenture

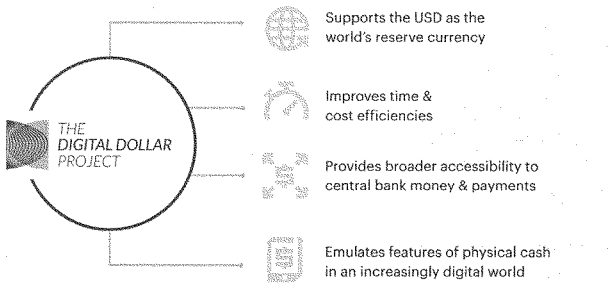
Table of contents

The road to a US digital dollar

What is the Digital Dollar Project?

The Digital Dollar Project (Project) is a partnership between the Digital Dollar Foundation (Foundation), a not-for-profit organization, and Accenture (NYSE: ACN) to advance the exploration of a central bank digital currency (CBDC)—or a "digital dollar." The purpose of the Project is to encourage research and public discussion on the potential advantages of a tokenized dollar, convene private sector thought leaders and actors, and propose possible models to support the public sector as it considers development, testing, and adoption of a CBDC.

The Project seeks to advance the public interest by future-proofing the dollar for consumers and institutions across both domestic and global economies. Given the US dollar's status as the world's primary reserve currency and exploration of CBDC by other national governments and stakeholder organizations, the Digital Dollar Project sees piloting a US digital dollar across a range of use cases as a critical and prudent initiative for the United States to begin now. The Project views the infrastructure underpinning the US dollar as a critically important public good and believes that upgrading this infrastructure will provide current and future generations enhanced flexibility, optionality, stability, and prosperity.



Illustrative purposes only

The Foundation has engaged Accenture as lead architect and technology innovation partner. Globally, Accenture's CBDC work includes engagements with the Bank of Canada, the Monetary Authority of Singapore, the European Central Bank, and, most recently, Sweden's Riksbank.

To gain diverse perspectives from key stakeholders, the Digital Dollar Project has formed an advisory group that includes a broad array of economists, business leaders, technologists, innovators, lawyers, academics, and consumer advocates. The members range across the social and political spectrum. The Advisory Group has conducted several virtual meetings and provided thoughtful insight to the Project, including to the content of this white paper.[1]

Going forward, the Project will further explore design options, real-world pilots, and approaches for creating a digital dollar through a deliberative process that includes stakeholder meetings, roundtable discussions, and open forums.

[1] The views expressed in this white paper are those of the authors and do not necessarily represent the views of the Advisory Group or its individual members.

Introduction

Throughout its history, the United States has been a leader in innovation and building systems for the next generation. Whether launching the space program or building the Internet, US technological initiatives are typically undertaken through a series of partnerships between the private and public sectors. These endeavors incorporate and reflect longstanding US values of economic stability, technological innovation, individual liberty and privacy, free enterprise, and the rule of law.

A new technological age is unfolding, bringing with it the digitization of things of value that can be tokenized, programmable, and decentralized. Across the globe, governments and private entities are experimenting with tokenized commodities, contracts, legal titles and, most critically, commercial and central bank digital currencies. This wave of digital currency innovation is still gaining momentum. The questions for the United States are what role it will play in this innovation and to what degree will its core values be brought to bear.

We believe the United States should take a leadership role in this new innovation. The launch of a tokenized digital dollar is a logical and critical next step to future-proof the dollar and enshrine its democratic values in the future of money.

Successfully creating a digital dollar will be an enormous undertaking that should be done carefully, in a thoughtful and deliberative fashion. The critical monetary and public policy imperatives of the public sector should combine with the knowhow, ingenuity, and dynamism of the private sector.

While CBDC is a relatively new concept, we believe there is enough research and evidence to support a champion-challenger approach. The Project will explore the thesis that a tokenized US dollar will provide societal and economic benefits but continue to identify challenges and the merits of alternative models. The Project's "champion" model is a tokenized form of the US dollar that:

- **operates alongside existing monies**
- **is primarily distributed through the existing two-tiered architecture of commercial banks and regulated money transmitters**
- **is recorded on new transactional infrastructure, potentially informed by distributed ledger technology**

While existing electronic payment mechanisms work on an account-based model, our champion model of a digital dollar differentiates itself through its nature as a token, combining cash-like properties with many of the benefits of the existing account-based payment mechanisms. This paper will flesh out the rationale for a tokenized digital dollar that would not only maintain the economic stability of today's US dollar, but also offer the potential for new market opportunities, broader accessibility, reduced costs, and increased efficiencies.

To test our hypotheses and ensure tokenization solves real-world problems with anticipated benefits, the Project will continually consider "challenger" models depicting alternative approaches to modernizing monetary and payments infrastructure. This can be done through a series of real-world pilots that explore application across retail, wholesale, and international use cases.

TENETS OF A DIGITAL DOLLAR

The following characteristics are part of the Digital Dollar Project's champion model:

Tokenization: A digital dollar will be a tokenized form of the US dollar

Third format of currency: A digital dollar will operate alongside existing fiat currency and commercial bank money. It will mirror many properties of physical money, including its ability to work alongside existing account-based systems

Maintenance of the two-tiered banking system: A digital dollar will be distributed through the existing two-tiered architecture of commercial banks and regulated intermediaries

Privacy: The digital dollar will support a balance between individual privacy rights and necessary compliance and regulatory processes, decided upon by policymakers and ultimately reflecting the jurisprudence around the Fourth Amendment

Monetary policy neutral: A digital dollar will not impact the Federal Reserve's ability to affect monetary policy and control inflation. A digital dollar could act as a new policy tool

Technology decisions and design choices driven by functional needs: The policy and economic requirements of a digital dollar will inform both the underlying technology and ultimate design choices

Future proofing the architecture through flexibility: The chosen technological architecture will offer the flexibility to adapt configurability based on policy and economic considerations

Continued private sector innovation: A digital dollar will act as a catalyst for innovation and will not be antithetical to the development of private sector initiatives

DIGITAL DOLLAR FOR CRISIS RELIEF

As this paper is being published, the United States, along with the rest of the world, has been struck with and partially immobilized by the COVID-19 pandemic. As Washington, DC has formulated its emergency relief policy response in the face of the current crisis, it has set upon issuance of direct payments to individuals to offset lost wage income. This initiative has revealed persistent deficiencies and shortcomings in the effective distribution of monies, as an estimated 70 million Americans will need to wait a month or more to receive their direct payments via paper check as the legacy infrastructure systems do not provide a more direct means of payment.[a] We see yet another example with the sudden need for retired COBOL programmers to support legacy computer systems underpinning state unemployment benefit programs.[b]

The pandemic-induced crisis should be a call to action to renovate these long-neglected yet critical payment and financial infrastructure that are becoming increasingly outdated.[c] A CBDC could dovetail nicely with other projects seeking to replace legacy technology infrastructures, such as cloud computing, digital identity,[d] and automation. Some proposals have been made for "digital dollar" electronic cash payment infrastructures to distribute electronic payments directly to consumers. These proposals to date appear to consider "digital dollars" in terms of benefits distribution functionality through accounts-based systems and not as a form of tokenized CBDC.

[a] Klein, "70 million people."

[b] The resultant spike in demand for state unemployment systems has exposed the enormous nationwide risk of technical debt to a legacy computer programming language called COBOL. The call has gone out across the country for retired COBOL programmers to help out of pure necessity. Lee, "Wanted urgently".

[c] Gorfine/Kumar, "Opinion."

[d] A trusted digital identity will be a critical component of an end-to-end solution for effective benefit distribution; however, digital identity is not the focus of this paper and as such is not expounded upon.

CBDC explanation

Introduction to CBDC

The Digital Dollar Project seeks to encourage the next major innovation in the US currency: a tokenized digital dollar that has the same legal status as physical bank notes. This US CBDC issued by the Federal Reserve System would enjoy the full faith and credit of the US government, represent a third format of central bank money, and be fully fungible with Federal Reserve notes (bank notes or cash) and reserves.

The fundamental benefit of this concept is that there is no better, riskless settlement medium than US central bank money.

Across retail, wholesale, and international payments, a tokenized digital dollar would provide a new payments infrastructure that complements and sits alongside existing infrastructures, offering optionality, reduced risk, increased efficiency, and if desired broader access to central bank money.

This development would be a logical step forward given the increased digitization of human and economy activity.

In the two-tiered banking system within the United States, the Federal Reserve issues bank notes for the general public and reserves for the banking system. Our proposed digital dollar would maintain the two-tiered distribution architecture: commercial banks (and potentially other regulated intermediaries with access to the Fed) would exchange reserves for digital dollars to be distributed to end users much in the way they currently do when issuing physical cash to customers through ATMs.

We further believe that a US CBDC would serve to upgrade the infrastructure of money (the ultimate public good) and act as a catalyst for private sector and market innovation. We accordingly do not view a digital dollar as antithetical to the development of private sector payments and stable coin[2] initiatives, many of which seek to tokenize commercial bank money.[3] Similar to today, private sector innovation will build on and around the public infrastructure underpinning the US dollar.

INTEROPERABILITY

Interoperability in the context of this paper means that the digital dollar can function and coexist with current and future financial infrastructure systems both domestically and abroad.

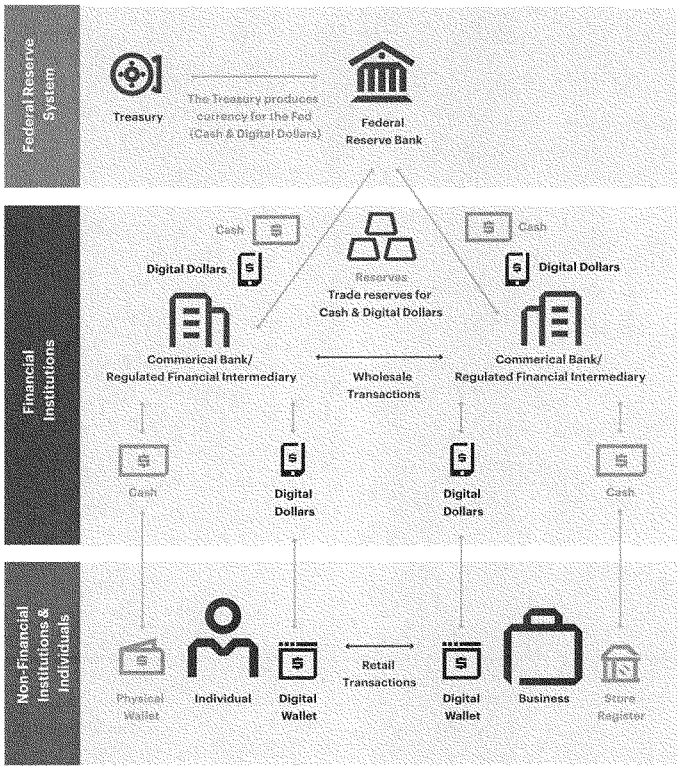
The Project will continue to engage with ongoing CBDC research studies[4] and pilots around the world and encourage the collective effort to achieve the financial infrastructure of the future.

[4] The Project supports collaborative approaches, including the sharing of learnings and best practices, with trusted institutions, such as the Bank for International Settlement (BIS), International Monetary Fund (IMF), Bank of England, Sweden's Riksbank, and others.

[2] A stable coin typically has two components: the token itself and then the value to which that token is pegged. A CBDC addresses the latter component with its value represented as a liability of the Fed. However, a CBDC does not inherently include the business logic built into stable coins.

[3] A key distinction between CBDC and tokenized bank money is that the former is a liability of the Fed and the latter is a liability of the issuing commercial bank.

Two-tier Distribution Model of Physical Cash and Tokenized Digital Dollars



This diagram reflects the current US, two-tier distribution model of physical cash and hypothesized tokenized digital dollars to sit alongside it.

Illustrative purposes only

Enablement: tokenization

"Tokenization" is an essential term to define in order to understand why it is core to our proposed approach. Tokenization is the act of turning an asset, good, right, or currency into a representation with properties that suffice to attest to and transfer ownership. As an analogy to our current world, cash is a physical token. To verify the transaction, you only need to verify the authenticity of the bill (the token), and because each bill is unique, it is impossible to spend the same bill more than once at the same time. As a bearer instrument, a dollar bill cannot be physically held by two people simultaneously (i.e., when it leaves one person's hands, it is now in the counterparty's possession). This differs from account-based electronic money, which uses a reconciliation-intensive, message-based approach to adjust entries in a ledger.

> **Tokenization can provide a new level of portability, efficiency, programmability, and accessibility, ensuring the tokenized digital dollar's ability to complement existing formats of money while simultaneously modernizing our payment and financial infrastructure.**

While electronic transfers of cash have been evolving for several decades, US central bank money as legal currency has seen few, if any, innovations since the proliferation of bank notes during the nineteenth century. Its circulation has remained strictly local and its functionalities limited. The Digital Dollar Project's vision is a tokenized digital dollar that would serve as a new and more dynamic format of central bank money.

The value case for a tokenized digital dollar

The introduction of a tokenized digital dollar would be a driver of innovation for the broader financial system in a fundamental way. A tokenized digital dollar as a new financial medium, combined with new transactional infrastructure such as distributed ledger technology, would provide a new payment rail upon which central bank money can be sent and received. To meaningfully expand upon existing capabilities, it should be portable, sent like a text, thereby allowing settlement irrespective of space and time.

A tokenized digital dollar could play a crucial function in serving as the safest form of money and therefore offers value above and beyond existing currency mediums. Programmability is another feature that could unlock additional avenues for innovation and precision in value transfers. A tokenized digital dollar could enhance confidence, efficiency, and functionality in dollar payments across retail, wholesale, and international payment use cases:

Retail Payments: Among the multitude of highly effective payment options in the US (e.g., cash payment, credit, debit, etc.), a digital dollar would offer a new choice for digital transactions, instantaneous peer-to-peer payments, and in-person transactions. It could also potentially lower costs and further diversify payment rails. A digital dollar could be distributed to the end user through commercial banks and trusted payment intermediaries while facilitating financial inclusion by broadening access to services via additional mechanisms, such as digital wallets. In particular, a digital dollar could expand the ability of currently un-or-underbanked populations to access digital financial services and transact on ecommerce platforms that do not deal in physical cash.[4] Bank notes are often used to make small payments in the physical world, although, on average, physical cash usage is in decline compared against other payment methods.[5] This dynamic is likely to progress in a post-COVID 19 world, thereby making it increasingly important for digital financial options to extend more broadly.

[4]Within the existing framework of online commerce (i.e., when payment is required at time of purchase with a delayed delivery), transacting in a digital dollar may raise new challenges. Today's payments made via card networks establish a consistent set of terms for recourse if a consumer is not satisfied with their purchase. A potential solution to consider would be the inclusion of such consumer protection frameworks around online payments from private sector wallet issuers.

[5]Kumar and O'Brien, "2019 Findings."

Wholesale Payments: Today, wholesale payments rest on national payment systems, and they are typically conducted through interbank clearing using central bank money to settle securities and other large value payments in real time gross settlement (RTGS) systems like Fedwire. Current wholesale large value transactions are account-based and predominantly executed by banking and payment providers who have accounts with the Federal Reserve. Due to the nature of the prevailing account-based system, only organizations with accounts can transact in central bank money. Just like a physical dollar, a tokenized digital dollar would provide alternative access to central bank money outside of accounts. Accordingly, it could facilitate broader, more diverse access for institutions to large value payments and support the emergence of digital financial market infrastructures. Furthermore, from a settlement perspective, a tokenized digital dollar could provide atomic delivery, either Delivery versus Payment (DvP) or Payment versus Payment (PvP).[6] These potential approaches could serve as a way to reduce fraud and counterparty risk, although the decision for settlement time duration will be a business and/or policy design choice to determine the optimal settlement window for transactions.

International Payments: International payments currently cannot be conducted digitally in US central bank money. A digital dollar could allow more direct monetary relations to be established, reduce risks, address time delays caused by today's correspondent banking model, enhance competition in international payments, and advance financial market integration.[7] The use of a digital dollar in cross-border and offshore transactions would allow digital payments in central bank money to be made for remittances and large value payments, including the possibility to conduct offshore securities settlement.

[6] Atomic DvP or PvP occur when both legs of a transaction (payment or asset) are exchanged simultaneously. While atomic delivery can also occur with a tokenized US CBDC in retail and international payments as well, it has been highlighted primarily as a benefit for wholesale payments due to the large transaction size typically associated with these transactions.

[7] A digital dollar could make remittances sent in US dollars cheaper and more efficient, but these end-to-end benefits would be muted for remittances where a US CBDC is exchanged for a non-tokenized foreign currency.

ACCESS AND INCLUSION

One area of promise with respect to a US digital dollar is in expanding financial access and inclusion for unbanked populations. A 2017 FDIC survey[a] found that roughly 14 million American adults lack a bank account—a figure that became all the more important during the COVID-19 pandemic when the US government struggled to distribute emergency relief funds to many of these individuals. The Project believes that lower system costs and digital wallets tied to the custody of tokenized digital dollars may hold advantages over traditional bank accounts in terms of expanding access to underserved populations.

Given the limited but critical functional scope of a digital wallet in focusing on custody, it is possible that the costs associated with providing individuals with wallet services might be lower than the costs of hosting a traditional bank account, particularly given the range of programs and government benefits that can be distributed utilizing wallet services. This would also allow private sector providers to expand coverage of such services to un-or-underbanked population that have access to mobile devices.

In order for this to be true, however, the digital wallet will need to prove to be less expensive to offer from a technology, regulatory, and administrative perspective. This hypothesis can be tested in real-world pilot scenarios. In situations where private sector solutions are not viable, policy solutions could be developed around public wallet government programs or services that fill remaining gaps in coverage.

Assuming the technological efficiency and potentially reduced regulatory costs associated with offering a digital wallet, one can imagine smart phones and devices preloaded with such a solution, or a minimum, the application programming interfaces (APIs) to allow for mobile applications to function. The wallet could be readily registered through a regulated hosting intermediary[b] performing requisite Know Your Customer/Anti-Money Laundering (KYC/AML) checks. Had this been the case during the COVID-19 crisis, many of the currently underbanked may have had an alternative means of receiving funding other than by physical check.

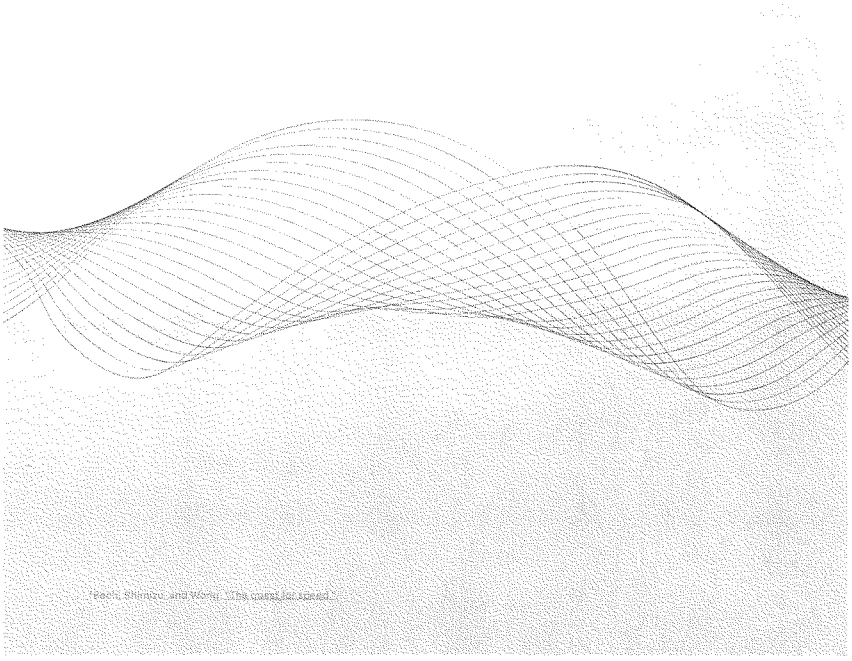
[a]Prang and Kayashi, "US 'Unbanked'."

[b]Of course, this discussion contemplates hosted digital wallets, which would require a regulated intermediary providing the service. There are a range of non-hosted wallets that could also conceivably custody a tokenized digital dollar. These solutions would not be managed by a regulated intermediary, however. The decision to permit un-hosted wallets is a separate policy and design choice subject to separate analysis and consideration.

Taxonomy

Payments are transfers of monetary value from payers to payees that come in many forms, usually in exchange for goods and services or to fulfill contractual obligations. For this paper, we will classify all payments made between financial institutions as "wholesale" and all payments made between non-financial entities, even if financial institutions are intermediaries in those transactions, as "retail." This classification means that the specific payment channel or value does not determine whether a payment is retail or wholesale.

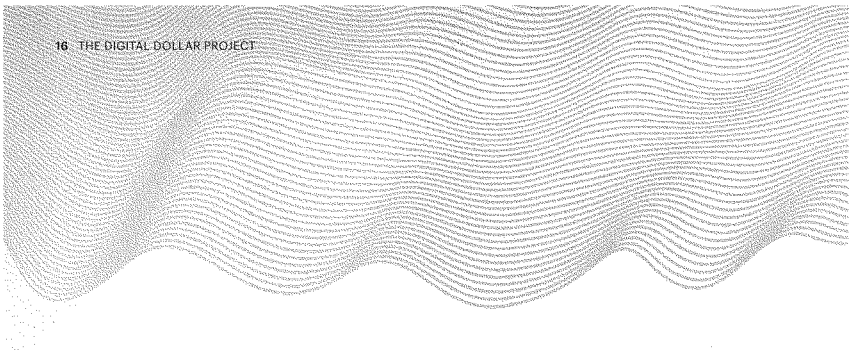
Nonetheless, wholesale payments are typically high-priority, large-value transfers. Wholesale payments are usually settled via dedicated interbank settlement systems. In contrast, retail payments are usually lower-value transactions between individuals, businesses, and governments in forms such as cash, checks, credit transfers, and debit and credit card transactions.[8]



Within the United States, there are six primary payment mechanisms (other than cash):

Category	Name	Ownership Structure	Geography	Participants	Accessibility	Differentiator
Wholesale payment systems	Fedwire[9]	Public; owned by the Federal Reserve	Domestic	10,000 financial institutions[10]	Limited	Real-time gross settlement system (RTGS) that allows participants to send and receive final payments in central bank money
	Clearing House Interbank Payments System (CHIPS)[11]	Private	Domestic and international	50 financial institutions	Extremely limited	A US network that batches and nets payments before processing; may rely on Fedwire for settlement
	National Settlement Service (NSS)[12]	Public; owned by the Federal Reserve Banks	Domestic	1,097 active settlers (e.g., clearing houses, financial exchanges, and other clearing and settlement groups)	Partially limited	Settlement service offered for participants that sums and settles transactions across multiple parties rather than settling transactions individually; may rely on Fedwire for settlement
Retail payment systems	Check clearing systems[13]	Public and private	Domestic and international	Consumers, businesses, and federal, state, and local governments	Widely accessible	Systems involving either accounting entry settlement or interbank settlement[14]
	Automated Clearing House (ACH)[15]	Public (Federal Reserve) or private (Clearing House's Electronic Payments Network, EPN)	Domestic and international	Consumers, businesses, and federal, state, and local governments	Widely accessible	Nationwide electronic file transfer mechanism that processes both credit and debit transfers initiated by depository institutions and can be eventually settled on the financial institutions' Federal reserve account
	Payment card networks[16]	Private	Domestic and international	Consumers, businesses, and federal, state, and local governments	Widely accessible	Credit card and debit card networks that sort and route transaction data from acquiring to issuing banks over proprietary networks

[9]FRBservices.org, "Fedwire®."
[10]"Financial institutions" when used here means any institution that maintains an account at a Federal Reserve Bank and includes Federal Reserve member banks, non-member depository institutions, and certain other institutions, such as US branches and agencies of foreign banks. The US Treasury and other federal agencies, as fiscal principals, can participate in Fedwire.
[11]The Clearing House®, "About CHIPS."
[12]FRBservices.org, "National Settlement Service."
[13]CPSS – Red Book, "Payment, clearing."
[14]Paper-based checks are primarily scanned ("truncated") and processed electronically. Ibid
[15]Ibid
[16]Ibid



These payment processing systems work in conjunction with each other (e.g., across both retail and wholesale payments), combining the benefits of individual systems.[17]

CBDC, as a new format of the existing currency, is distinct from existing payment methods and allows for the creation of new payment channels that would help support an innovative and more resilient payments landscape. CBDC could exist alongside Fedwire and complement (not impede) in-flight initiatives like FedNow.[18] Despite a slight overlap with existing and proposed payment initiatives, a US CBDC unlocks new benefits due to its new payment architecture.

As mentioned above, all the existing payment mechanisms work on an account-based model. Our model of the digital dollar is distinguished by its nature as a token, allowing cash-like properties to complement benefits of the existing account-based payment mechanisms. A breakdown of token-based versus account-based models is discussed on the following page.

[17] Below are examples of payment systems that are utilized for both "retail" and "wholesale" payments (ibid):

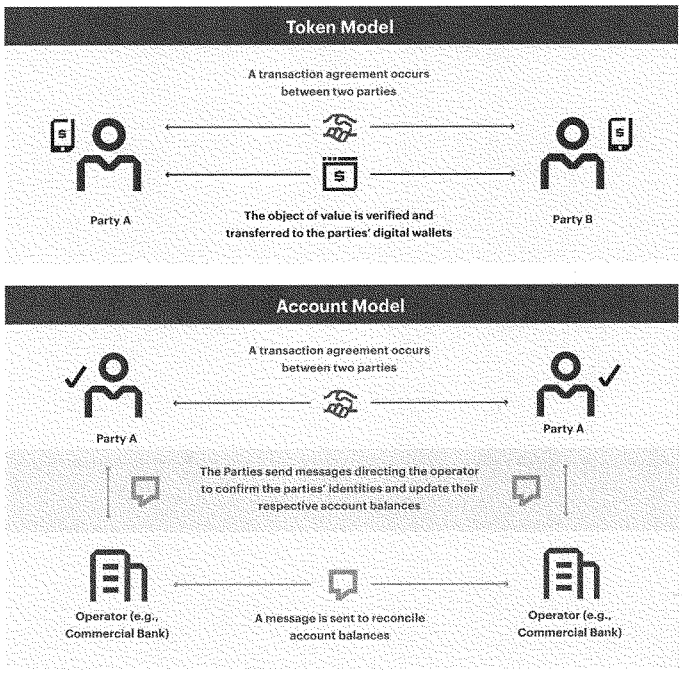
- ACH + Fedwire settlement example: Individuals use ACH to send payments to businesses or other individuals throughout the day. These transactions would be considered retail transactions because they are between non-financial entities. Those ACH payments are intermediated by financial institutions, and on a periodic basis, netted and settled between each other using Fedwire. The settlement transaction between the financial institutions would be wholesale.
- FedNow example: A real-time gross settlement (RTGS) system focuses on providing real-time settlement for low-value, high-volume transactions, targeted specifically to address individual-to-individual and individual-to-business transactions. Even though all FedNow transactions are settled in real-time between financial institutions in their reserve accounts, those financial institutions are only acting as intermediaries for their customers. FedNow transactions settle immediately, as opposed to ACH, which is why ACH requires a separate settlement transaction.

[18] The Federal Reserve Banks are developing a new interbank 24/7/365 RTGS service with integrated clearing functionality called the FedNow Service. When available, the service will help enable financial institutions to deliver end-to-end faster payment services to their customers. FedNow is expected to be available in 2023 or 2024. (The Federal Reserve. "FedNowSM Service."; The Federal Reserve, "Federal Reserve Announces.")

Benefits of tokenization

When we talk about a digital dollar, we are referring to a token-based digital representation of money issued by a central bank that is a digital bearer instrument, akin to a digital bank note representing a direct liability of the Federal Reserve. Other literature on the topic of CBDC makes a distinction between token-based and account-based. The method of exchange verification primarily differentiates the two vehicles.[19]

In a token-based system, the token contains all information necessary for the recipient to verify the legitimacy of the transaction, and the recipient can verify the object transferred (i.e., the token).



Illustrative purposes only

[19] For a recent example, see Bank of England Discussion Paper, "Central Bank."

In an account-based system, the operator of the system authenticates the sender to ensure authorization to update account balances on a potentially centralized account ledger.[20] Physical cash (i.e., bank notes) is an example of token-based central bank money, and central bank reserve accounts is an example of central bank account-based money. Negotiable instruments (e.g., promissory notes) and bearer bonds are also usually token-based.

Token-based systems rely on the object transferred. They allow various degrees of decentralization since transactions can occur upon the bilateral transfer of the token rather than relying on a potentially centralized account ledger.

Because the object is the value, validation channels to limit counterfeit tokens and duplicate tokens must be included to provide integrity in the system. The onus lies on the intended recipient to verify the integrity of the token and that its value is transferrable in a subsequent transaction. For example, when physical bank notes, a token-based form of money, are used in a transaction between a consumer and a retailer, the retailer may use methods, such as examining the paper and looking at the security ribbon and holograms, to ensure the authenticity of the bank note because the merchant's bank will not accept a counterfeit bill in a deposit.[21]

In a token-based model, distributed ledger technology (DLT)-based or -inspired systems ensure uniqueness and prevent duplicate spends. That is, data is available that indicates where control of tokens should be at any given time, so that recipients can automatically check tokens' future transferability. DLTs function by implementing synchronization rules whereby multiple machines storing copies of the ledger achieve "consensus" on transaction ordering. Key to this model is its ability to automate—and thereby enhance the efficiency of—transactions. The consensus model could fall along a spectrum from centralization under the control of one entity to high decentralization depending on the desired features of the system. The synchronization or consensus rules provide a mechanism to design and control specific transaction features, depending on the desired control of the network operators.

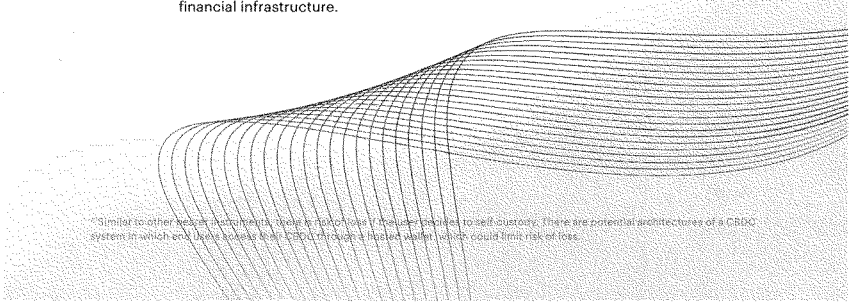
[20] Decentralized or distributed account-based systems exist without a centralized "operator" or centralized ledger. The key feature making even these decentralized systems account-based is that transactions require updating a balance, as opposed to providing an object (token) that can be further transmitted without verifying a balance on the ledger.
[21] For a list of security features and to learn how to authenticate a $100 bill, see: US Currency Education Program, "$100."

Account-based systems rely on authentication to authorize an instruction to update balances on a ledger. That authorization could be anything from an approval after logging into a bank's mobile application, a pseudo-anonymous account number and secret password, a non-third-party paper check, a SWIFT message, or any other method to provide an authenticated message. Most account-based systems rely on a trusted third-party operator to maintain a single ledger, as is the case with Federal Reserve accounts and depository accounts.

Account-based systems exist in part because of the limitations of physical tokens in that physical tokens like bank notes can be difficult to transmit, store, handle, and use anywhere other than face-to-face transactions. The six primary payment mechanisms in the United States described above, all account-based, have dominated the payment landscape because they make the transmission of money extremely efficient and solve many of the challenges of physical tokens for many use cases.

However, physical cash continues to be used because token-based mechanisms have benefits with which account-based mechanisms cannot compete, including a degree of decentralization, privacy, resiliency, and safety[22] that a bearer-like object uniquely provides.

The inherent portability of a tokenized US digital dollar allows for the token (i.e., a bank note in digital format) to be exchanged in near real-time, regardless of physical location. This new feature allows a tokenized digital dollar to complement existing currency mediums such as bank notes and accounts. We believe that tokenization provides unparalleled opportunities for innovation in the areas of payment and financial infrastructure.



[22] Similar to other bearer instruments, there is no privacy if holder resolves to self-custody; there are potential architectures of a CBDC system in which end users access their CBDC through a hosted wallet which could limit risk of loss.

Privacy

Privacy is a deeply personal concept; individuals have their own barometer of what they consider private, including when and with whom their personal information can be shared. Recognition of an individual's right to protect privacy, particularly from the federal government, was a central tenet of the development of the US constitutional form of government and is most prominent in the Fourth Amendment to the Constitution.

Options for addressing privacy considerations can be viewed on a theoretical scale. On one end, there could be a completely anonymous, untraceable system. Despite its appeal, such a system would facilitate illegal and illicit behavior. Not only would this be undesirable from the perspective of law enforcement, it would also gradually undermine the very value of the currency itself. Conversely, a system designed for full surveillance and traceability may achieve broad goals of law enforcement and national security. However, that transparency would reduce its attractiveness and inhibit adoption by even the most law-abiding users and thus lessen demand for, and by proxy the value of, the currency at home and abroad.

Accordingly, practical consideration should be given as to where to draw the line in developing a digital dollar so that individual privacy rights are respected but necessary compliance and regulatory processes (e.g., AML/KYC) are properly enabled.[23] Technology solutions that might permit simultaneous pursuit of proper regulatory and privacy interests should also be explored.

One approach in balancing privacy and law enforcement surveillance could involve a system that follows the current treatment of cash. However, it is important to remember while physical monies were not designed to protect the privacy of transactions or its user—it was simply an inherent feature of an analog bearer instrument—the US government and financial regulators have provided guard rails around cash in an attempt to limit illicit behavior. Such regulations include the filing of IRS form 8300 to report cash payments over $10,000 received in a trade or business.

HYPOTHETICAL TRANSACTION LIMITATIONS

Thoughtful macro, micro, and behavioral economic analyses should be undertaken to find the equilibrium threshold that maximizes consumer activity and minimizes illicit activities. For physical cash, policymakers have determined that the threshold is at $10,000. As development of a digital dollar progresses, policymakers will need to determine parameters, such as timeframe, participants, and/or amount, that maintain individual liberty and minimize illicit behavior given the newfound ease of use of a digital dollar.

[23]European System of Central Banks (ESCB) tested a proof-of-concept (PoC) for retail CBDC in which they demonstrated the feasibility of constructing a simplified CBDC payment system that allowed users some degree of privacy for lower-value transactions while ensuring that higher-value transactions were subject to mandatory Anti-Money Laundering/Combating the Finance of Terrorism (AML/CFT), the European equivalent of AML/KYC, checks. (IN FOCUS, "Exploring.")

The degree of privacy available in a digital dollar will ultimately reflect the development of jurisprudence around the Fourth Amendment. When personal information is taken by the federal government directly from a person, the Fourth Amendment clearly requires that seizures and searches of their "papers and effects" must not be "unreasonable." The general legal exception to the Fourth Amendment, known as the "third-party doctrine," is that information knowingly shared with a third-party is not subject to constitutional protection and is therefore subject to seizure and search according to lower statutory standards. Yet, the third-party doctrine predates the digital era. It now arguably conflicts with the US Supreme Court's often-stated goal of preserving the degree of privacy against government that existed when the Fourth Amendment was adopted, and the Court has recently declined to extend the third-party doctrine to cellular communications data.

Fourth Amendment protections against government infringement of individual financial privacy are not insignificant compared to other democracies and non-democracies. The digital dollar should be designed to support the full array of information policies that exist now and that may exist in the future, from information-free cash transactions to payments that are recorded, reported, or limited for tax, law enforcement, and national security purposes. With the proper legal and jurisprudential development, the digital dollar may well enjoy superior constitutional privacy rights over many competing digital currencies. Transparency in the design and implementation of policy-based limits and requirements would help ensure that the tension among values is resolved consistently with democratic and rule-of-law norms.

Configurable design choices and options

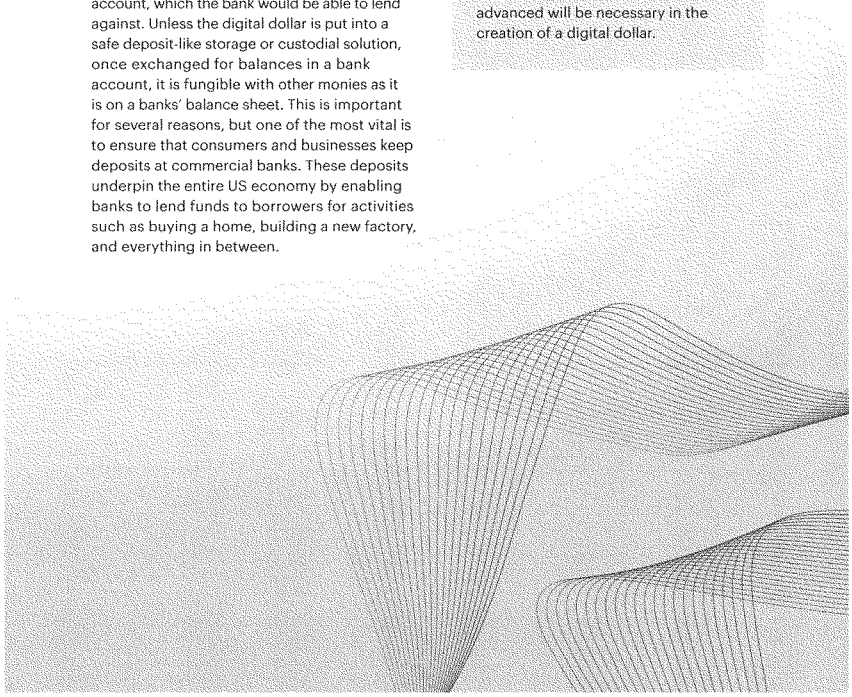
One of the exciting innovations of a tokenized CBDC is the concept of "programmable" money. This concept means that, as part of the design and build phases, the technology can be configured, and potentially reconfigured, to enable critical functional requirements and achieve desired benefits. More specifically, tokenization can allow for individual programmability per token and transaction rather than uniform programming across an entire ledger or infrastructure.

The Project recognizes that policies and implementation surrounding a tokenized US CBDC will be made by US policymakers, but we seek below to offer our insight and guidance to the public discourse and provide thoughtful recommendations where possible. With that in mind, key configurable functionalities of a tokenized digital dollar provide innovative currency benefits such as controlled anonymity, interest-bearing capabilities, account limits, and broader accessibility.

We believe it is essential that a US CBDC maintains and supports the current two-tier banking system as the overarching architecture. A two-tiered banking system preserves the current distribution architecture and its related economic and legal advantages, while inviting innovation and accessibility.

Similar to how commercial banks distribute cash on behalf of the Fed, the Fed would issue digital dollars to regulated intermediaries in exchange for reserves, and the intermediaries would distribute digital dollars to their customers on demand. A user would have the ability and choice to hold their digital dollar in their digital wallets, or deposit it into a bank account, which the bank would be able to lend against. Unless the digital dollar is put into a safe deposit-like storage or custodial solution, once exchanged for balances in a bank account, it is fungible with other monies as it is on a banks' balance sheet. This is important for several reasons, but one of the most vital is to ensure that consumers and businesses keep deposits at commercial banks. These deposits underpin the entire US economy by enabling banks to lend funds to borrowers for activities such as buying a home, building a new factory, and everything in between.

CYBERSECURITY
Cybersecurity will be a central requirement of a digital dollar. There are many solutions addressing cybersecurity such that risk can be mitigated. Our current financial infrastructure exists on legacy systems and has significant modernization needs; as a result, it is vulnerable to exploitation. By launching a tokenized US CBDC, a new infrastructure could be built leveraging the latest cybersecurity technology. The highest standards to which cybersecurity can be advanced will be necessary in the creation of a digital dollar.



Recognizing that a US CBDC involves both change and innovation, we are cognizant of persistent themes regardless of use case. As noted above, there are myriad design configurations, but below are a few points highlighted for further discussion as they will be critical elements of a successful digital dollar.

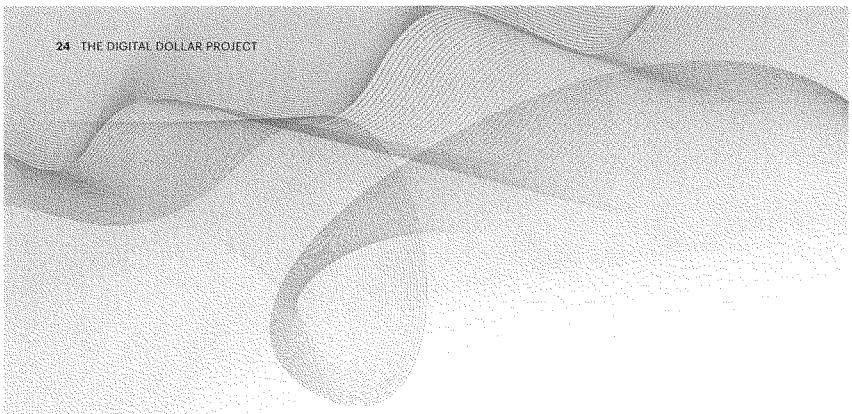
National Security: The US, especially after September 11, 2001, has invested considerable resources to maintain the national security of the US. A tokenized CBDC should be configured to provide effective infrastructure to support transactional security standards such as KYC, AML, Anti-Terrorist Financing (ATF), and anti-fraud as well as anti-counterfeiting measures. The Project intends to convene stakeholder working groups to develop these design features and recommendations.

Interest-Bearing: A US CBDC could be configured with the functionality for the token itself to be interest-bearing or not. If chosen not to include that functionality, the system would work in the same manner that cash does today in that it does not bear interest when held outside of an account but can bear interest upon deposit. In today's world, consumers can choose to maintain their money in either a safe deposit box or in the safety of their own homes with the understanding that they will not earn interest or receive Federal Deposit Insurance Corporation (FDIC) insurance protection. If and when money is placed into commercial bank accounts, the money becomes fungible for the bank to use and lend in return for bearing interest to the depositor. If it is decided that the CBDC would include interest-bearing functionality, the ability to apply a positive or negative interest rate could enhance opportunities for the implementation and transmission of monetary policy. The risk is that, as an interest-bearing instrument, CBDC would resemble more of a bank account and could complicate the impact of a CBDC on banks. The substitutability between bank accounts and CBDC remains a decisive element for the intermediation role of the banking system.[24]

Transaction Security: Transaction security across multiple dimensions like KYC, AML, counterfeit, and fraud must be considered. The maintenance of the US two-tiered banking system allows existing financial institutions to maintain and deploy their KYC/AML policies when it comes to distribution as well as the use of a US CBDC. Furthermore, a US CBDC could inherently encompass qualities such as instantaneous verification to reduce counterfeit efforts and potential fraud.

Validation and Governance: A digital dollar would be enabled by new payment infrastructures inspired by distributed ledger and decentralized technologies. Our champion model intends to explore DLT, with public, private, and perhaps novel public-private organizations validating transactions. Through careful deliberation, the Project will develop a framework for the validation and governance of the new network. The Project's approach is inspired by the creation of the internet, which was developed through a model of public-private partnership.

[24]As we experience the effects of today's near-zero interest rate environment, it is worth discussing the theoretical possibility of negative interest rates and the effects of a tokenized US CBDC. In a zero or negative interest rate environment, the opportunity cost of holding cash is low and perhaps attractive given the inability to earn interest. As long as physical cash continues to exist alongside a tokenized digital dollar, per our recommendation, the subsequent broadening of the monetary transmission tunnel and the potential effect of near-zero to negative interest rates would be muted.



Benefits of a CBDC in the context of a US dollar

Throughout history, currency has undergone functional advancements to improve its usability as a result of new demands and changing economies. As we enter the third decade of the twenty-first century, a CBDC is the next logical step in the evolution of currency to support the demands of an increasingly digital economy. The creation of a digital dollar provides an infrastructure that could facilitate global trade, catalyze private sector innovation, unlock new markets, and equip our financial system for the digital world. It provides new functionalities and utilities beyond those of today's central bank reserves and paper money, including portability and programmability. It could offer broader access to US dollars, reduced operational complexities, improved cost efficiencies, greater market transparency, reduced counterparty risk, and increased trade liquidity. The features of cash in a digital format would enable commerce to happen at a greater velocity and allow money to flow more efficiently through the domestic and global economies.

When discussing the US dollar, there are some unique factors to consider. Contrary to conventional wisdom, the dollar is not the money of the US, but US money is expressed in dollars. The dollar is normally associated with physical dollar bills, but there are multiple monetary liabilities denominated in dollars. Money is mostly a liability of depositary institutions, but currency is a liability of the Federal Reserve (Figure 1).

Figure 1. US money in billions as of January 31st, 2020[25]

*Excludes small-denomination time deposits. **Includes other checkable deposits at commercial banks and thrifts institutions including NOW and ATS balances.

Illustrative purposes only

[25] The Federal Reserve, "Aggregate."

The Federal Reserve issues central bank money comprised of currency, in the form of dollar bills, and reserves. Dollar bills are available to the general public and used mostly for retail payments. Federal Reserve notes and US Mint coins are legal tender in the US and obligations of the US Treasury. Reserves can only be held by banks and are used mostly in inter-bank clearing to settle large-value or wholesale payments. Currency and reserves are fully fungible. Most payments are conducted in liabilities of depository institutions or bank money, including through credit cards, money transmissions, and wire transfers.

Central bank money plays a special role, particularly in wholesale payments and foremost in securities trading. In the US, no money is safer than money issued by the Federal Reserve. It mitigates risks and offers settlement finality. Regulators and market participants have a strong preference for using central bank money.

The distribution of currency occurs through the banking system. Banks acquire currency from the Federal Reserve against reserves. Individuals can obtain currency from their banks against debits of the demand deposits. The Federal Reserve buys and sells mostly government securities from banks in exchange for reserves.

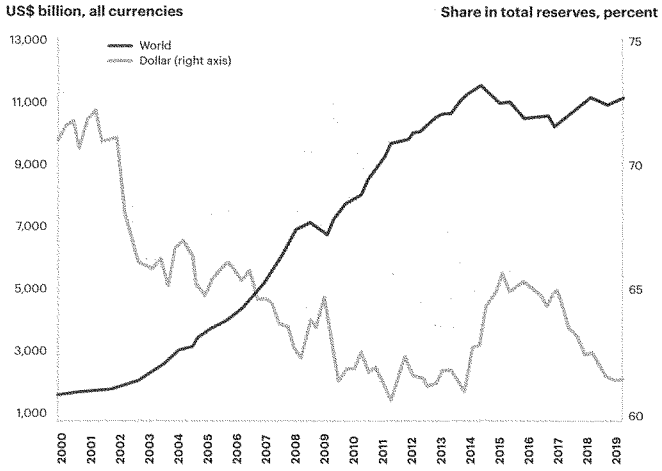
A US CBDC would be a liability of the Federal Reserve denominated in dollars and form an integral part of M0 (Figure 1). It would be distributed like, and act as a complement to, dollar bills and could be used in transactions conducted in currency and reserves.

Understanding the role of the dollar in the global economy

US money is by far the most important money in today's global world. Its role rests on the use of dollars to conduct international transactions based on the availability of financial instruments denominated in dollars and the depth of the US financial markets, including derivatives markets for the hedging of dollar exchange and interest rate exposure. It is also anchored in the relative stability of the dollar against most other currencies, instilling trust and confidence that dollars serve as an effective medium of exchange and store of value.

The use of dollars is revealed in the high share of the dollar in foreign exchange transactions, bank funding, invoicing of exports and imports of goods and services, central bank foreign exchange reserves, and international loans (Figure 2). The widespread use of dollars implies that a large proportion of securities and other liabilities denominated in dollars are held by entities abroad.

Figure 2. Central banks' foreign exchange reserves[26]



Illustrative purposes only

The international use of the dollar has attracted considerable criticism. Some argue that the US incurs undue benefits, often associated with the notion of "exorbitant privilege," as foreigners are obliged to hold liabilities denominated in dollars, providing the US with low funding costs and allowing it to sustain large external deficits.[27] Others argue that the dollar's popularity is a burden, as the US, unlike other countries, cannot use the exchange rate as an effective policy instrument. The universal use of the dollar and a large proportion of foreigner-held liabilities have established considerable interdependencies between the US and other countries.

[26] IMF, "Table 1." The dollar has remained the dominant reserve currency over time despite changing shares of the dollar in foreign exchange reserves. Central banks accumulate reserves in foreign exchange, whose amounts fluctuate. The dollar has stabilized around ~66% of central banks' foreign exchange reserves and therefore has remained the dominant reserve currency despite fluctuations.
[27] The notion of exorbitant privilege can be traced back to remarks made by President Charles de Gaulle in 1965.

The importance of dollars in international transactions makes the Federal Reserve the only central bank that can create international liquidity. The March 2020 augmentation and extension of the Federal Reserve dollar liquidity swap lines with some of the leading central banks reveals the importance of dollars to support orderly international transactions. The lack of dollar liquidity, often shown in an appreciation of the dollar against other currencies, has often been associated with financial crises.

The success of the US dollar rests on a number of key factors that explain why most countries do not have currencies that are readily accepted in international transactions. Most currencies do not have the necessary infrastructure (including deep, liquid financial and hedging markets and technology and operational channels) for currency transacting, clearing, and settlement. Most currencies also do not enjoy comparable economic and governmental stability, rule of law, and trust to be used outside their home countries.

While several countries aim for their currencies to play a greater role internationally to reduce dependence on the dollar, the persistent strength of the dollar indicates the formidable advantages it enjoys.

Rather than being a defensive measure, tokenization of the US dollar should be viewed as a proactive opportunity to enhance the technological infrastructure underpinning our currency to future-proof its role in the global economy.

Improvement in the future utility of the dollar

The increasing digitalization in payments has transformed money, and as a result, money will need to adjust to new payment needs to preserve its utility. The US was a pioneer in payment innovations with the introduction of the credit card (Diners Club), the real-time gross settlement system (Fedwire), and online money transfers (PayPal). The dollar's primacy can be attributed to many factors, several of which stem from the Bretton Woods Agreement of 1944, the resulting network effects, and the absence-to-date of a serious competitor for reserve currency status; however, the dollar's utility is and remains a critical success factor. The US should ensure its money remains competitive, as past performance is not an indicator of future success.

Money has been represented by book entries (i.e., accounts) for centuries. Book entries imply money exists as a liability of the bookkeeper, and parties would need to hold an account with the same bookkeeper to transact in that same money. Coins and the proliferation of modern bank notes have enabled the portability of money to exist in parallel with the book entry (accounts) system.[28] Portable, digital money by the Federal Reserve, however, does not exist.

[28] Smith, "What is Debt?"

The digital portability of money endows it with new functionalities and utility. One of these new innovations may be a consumer wallet infrastructure that enables custody and recoverability[29] of digital dollars, a function unavailable with physical cash. Securities could be settled against central bank money anywhere. Foreign currencies could be exchanged by a simple swap of central bank money. Emergency support could be sent in real-time. Monetary relations would be more direct, and execution, instantaneous.

Like cash, digital dollars will be unique—existing only in a single location—and are the responsibility of the owner. If someone were to lose or destroy the cash in their physical wallet, their banks would not be responsible for replacing the lost cash. Similarly, if a digital dollar is withdrawn from the banking system and exists on an individual's non-hosted digital wallet, and if that digital wallet were to be lost or destroyed, the individual would be the sole responsible party for the loss.[30] There are important implications of this that may influence the decision of the individual to hold their money outside of a regulated custodial wallet or bank account. The flexibility of how a CBDC can be stored, backed up, and maintained are decisions that should be determined through policy, regulatory, and infrastructure discussions.

While monetary innovations are typically developed by private sector actors, central bank money maintains a critical role in providing confidence and reducing settlement risk. This special role of central bank money means that the US cannot delegate all monetary innovation to the private sector. Therefore, the development of a US digital dollar as a public good, upon which private sector innovators can build, will influence its future utility.

How a digital dollar supports a key Federal Reserve System objective

The Federal Reserve pursues the longstanding public policy objective of promoting the safety and efficiency of the payment system and ensuring an equitable provision of payment services to financial markets.[31] The effective distribution of Federal Reserve money is essential to support the orderly functioning of financial markets and payments. It will depend on distribution, transparency, efficiency, resilience, and innovation in payments.

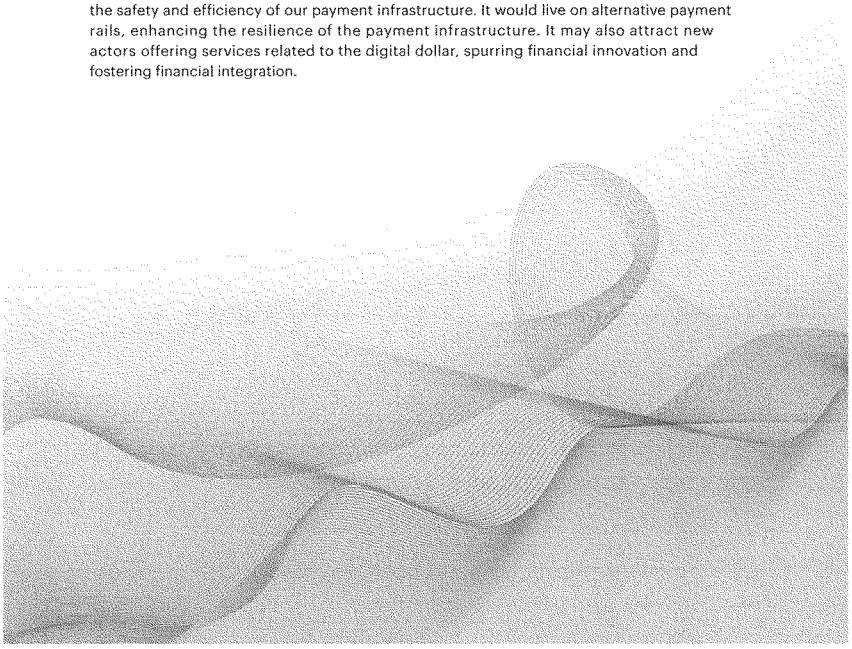
The portability of a digital dollar would enhance reach and effectiveness and complement existing operations of the Federal Reserve. A digital dollar would facilitate the distribution of central bank money abroad. While the Federal Reserve dollar swap lines only reach foreign central banks and do not afford foreign financial institutions settlement in central bank money, the Federal Reserve could allow digital dollars to be sent abroad through the domestic banking system directly to foreign institutions in need.

[29]This functionality would likely be a private sector innovation and not a function of a US digital dollar, as a CBDC should be thought of as a bearer instrument. Private sector companies must carefully evaluate the benefits of this option, as it may introduce moral hazard risk and increased incentive to hold large sums of CBDC outside of the banking system.
[30]As stated previously, there is risk of loss if the user decides to self-custody their CBDC. There are potential system architectures in which end users access their CBDC through a hosted wallet, which could limit risk of loss.
[31]*The Federal Reserve System Purposes & Functions*, "Fostering Payment."

Digital dollars could be used to conduct settlement of US government securities in central bank money to afford the same confidence and quality of settlement as trading domestically. It could reduce funding stresses abroad and shield the domestic market from adverse foreign shocks.

The digital dollar would also enhance payment transparency, thereby supporting the Fed's objective to promote safe and efficient payments. Depending on design choices, digital transactions could offer degrees of traceability, and aggregate payment data could be analyzed in real-time to provide key insights into economic health and activity. This enhanced transparency and real-time analytics would, of course, need to be considered and implemented within the proper legal frameworks.

The digital dollar would promote diversification of the payment system, thereby increasing the safety and efficiency of our payment infrastructure. It would live on alternative payment rails, enhancing the resilience of the payment infrastructure. It may also attract new actors offering services related to the digital dollar, spurring financial innovation and fostering financial integration.



The dollar remaining as the world's premier reserve currency

In the analog world, during the turn of the twenty-first century, the unit of account for most of the world's tradable commodities, financial benchmarks, and important contracts was the US dollar. As we approach the middle of the century, new technology has emerged that enables digitization and tokenization of things of value. Across the globe, governments and private institutions are experimenting with tokenized commodities, contracts, legal titles and, most critically, commercial and central bank digital currencies that can be coupled with algorithmically-driven smart contracts. Although nascent, this digital innovation continues to expand globally.

Imagine, for example, a large African city with a critically important water filtration station, in which a computerized sensor recognizes that its reserves of chlorine are running low. Thanks to 5G telecommunications technology, it would not be long before that sensor instructs a computer to order chlorine from an overseas supplier automatically, direct a CBDC payment to that supplier, and accept a drone delivery of the supplies all with little-to-no human management.

Undoubtedly, such a system, rooted in a digital infrastructure and tokenized currencies, would create direct information and money transfer mechanisms that avoid transaction intermediaries, which would bring efficiency gains to smart cities, supply chains, and electricity grids. It would also create enormous geopolitical power and influence for nation-states that develop, deploy, and dominate the technology behind DLT applications involving autonomous sensors and 5G telecommunications technology. This influence would extend due to the integration of those technologies with direct peer-to-peer payments in their sovereign CBDC that supports micropayments for largely automated economic activity.

The US should thoughtfully consider what role it will play and to what degree its core values will be incorporated in the principles and design of this future system.

> **If the US dollar is to remain the world's primary reserve currency in the unfolding century, it cannot remain an analog instrument and unit of account for things increasingly denominated as digital tokens. It must itself become a digital tokenized currency that measures, supports, and transacts with the world's digital tokenized things of value.**

As was the case in the analog era, for the US dollar to remain a reserve currency, a US CBDC must carry longstanding US values of economic stability, individual liberty and privacy, free enterprise, and the rule of law into the digital age.

If payment systems could bypass Western banks heavily linked economically and geopolitically to US dollar reserves, the effectiveness of economic sanctions as a central and unifying tool of our foreign policy would be at serious risk. It would mean US global leadership, particularly in the exercise of soft power, would be at risk as well. Furthermore, if foreign central banks no longer need to maintain US dollar reserves to fund purchases in dollars, demand would decline for US government bonds, resulting in greater constraints on US fiscal policies and higher interest rates for the government and consumers.

The United States cannot take the US dollar's predominant status in the international financial system for granted. Along with the other key factor noted above, the dollar's primacy is at risk if it remains anchored in its analog state (inclusive of its manual processes and legacy infrastructure) while other leading central banks are advancing considerations for central bank digital currencies. If the dollar is to retain its preeminent role, it must remain up to date and technologically competitive.

In this time of great global economic uncertainty, the longstanding role of the US dollar as a source of global economic stability is essential. Thus, the US dollar needs to adapt to meet new digital functionalities that consumers, businesses, and governments increasingly demand. The status of US money domestically and abroad would, in large part, depend on whether the Federal Reserve can provide these new and needed functionalities in a digital world.

Unlocked opportunities with a digital dollar

The advent of a digital dollar would spark new industries and modernize existing ecosystems. Similar to how, decades ago, the internet and, more recently, the creation of smartphones and app stores heralded a wave of ingenuity, efficiency, and consumer centralism, a digital dollar would create opportunities for both new and existing players.

> **The programmable and customizable aspects of digital currencies could enable the private sector to offer varying privacy customizations, data ownership controls, transaction and treasury management efficiencies, and financial accessibility.**

Not only would a digital dollar create new markets, but also it would enable new players to enter established markets. The benefits of a digital dollar can be applied to niche industry demands and areas of risk. As market players gain access to the capabilities of a digital dollar, they could apply it to specific industries. A digital dollar would provide a modern currency architecture for the private sector to utilize and build upon.

Use cases

A critical point to reiterate about the introduction of a tokenized US dollar is that it would sit alongside the existing forms of money and would enhance competition and choice in financial service infrastructures. Thus, we do not expect it to materially change all existing processes but instead to drive benefits and unlock new opportunities in specific use cases. Below, we outline several initial use cases to which we believe a tokenized US dollar could add material value. Through engagement with stakeholders, the public sector, and our advisory group, we intend to refine these use cases further and identify potential pilots to test the value hypotheses and inform design decisions. The below is a summary; further details can be found in the Appendix.

Summary of use cases:

Category	Use Case	Impacted Stakeholders	Sizing	Hypothesized US CBDC Benefits (Qualitative and Quantitative)	Hypothetical Pilots
Domestic Payments	Peer-to Peer (P2P) Payments	Consumers (end users); commercial-banks; mobile payment providers	$310B transaction value (2019)[32]	Faster accessibility of funds Reduced cost of a mobile payment transfer Increased financial inclusion Increased speed and ease by which developers can build secure digital wallets	Work with policymakers and private sector in administering benefits and ensuring retailers are able to accept tokenized money Work with private sector in leveraging existing or creating low-cost digital wallets (to ensure access and economic viability)
	Domestic Retail Payments (Consumer)	Consumers (end users); commercial banks; retailers; mobile payment providers	$7.08T total card payments value in 2018[33]	Reduction of trapped liquidity Reduced need for intermediaries Additional consumer payment choice Introduction of cash-like treasury benefits Reduced verification costs	See above
	Domestic Retail Payments (Business)	Manufacturers; wholesalers; retailers	$25T B2B payment volume in the US in 2016[34]	Introduction of Fedwire-like benefits for non-Fedwire participants Introduction of finality of settlement Reduction of settlement risk	Work with targeted stakeholders within an ecosystem (e.g., agriculture supply chain)

[32] He, "Strong."
[33] The Federal Reserve, "2019 Payments Study."
[34] Mastercard, "New Opportunities."

Category	Use Case	Impacted Stakeholders	Sizing	Hypothesized US CBDC Benefits (Qualitative and Quantitative)	Hypothetical Pilots
Domestic Payments	Delivery Versus Payments (DVP)	Settlement & clearing systems; buyer; seller	Average US equities daily volume of 100M trades per day (2018)[35]	Introduction of settlement innovation, straight through processing, and efficiencies in risk and margin requirements	Work with clearing and settlement institutions to pilot DVP for tokenized assets
International Payments	Remittance Payments	Consumers (end users); commercial banks; banking intermediaries	$68.4B remittance outflows from US (2018)[36]	Ability to transfer funds without needing an intermediary Reduced costs to transfer funds Increased speed and efficiency for remittance payment processing	Develop a testing partnership in a targeted corridor between US and partner country (e.g., Mexico given the $30B in remittances sent from US to Mexico in 2019[37])
	Cross-Border Payments	Institutional payers and payees; correspondent banks; settlement agents	$136T in cross border payment flows (2018)[38]	Introduction of atomic settlement, trade oversight transparency, risk management, and interoperability Improved efficiency Enablement of front-end modular innovation Improved experience in niche trade corridors	See above
Government Benefits	Benefit Administration	Government agencies, consumers (end users)	52.2M benefit recipients in the US in 2012[39]	Streamlined, transparent, and expedited distribution of benefits Operational time and cost efficiencies	Partner with federal or state government agency in deploying benefits
	Exceptional Circumstances	Government agencies, consumers (end users)	125M COVID-19 relief recipients in 2020[40] $16.9B in FEMA aid for New York's Hurricane Sandy Recovery[41]	New ability to transfer riskless means of payment quickly and autonomously to households and corporations during times of crisis and national emergencies	See above

[35]DTCC, "DTCC announces."
[36]The World Bank, "Migration."
[37]Pew Research Center, "Remittance flows"
[38]McKinsey & Company, "Global Payments."
[39]United States Census Bureau, "21.3 Percent"
[40]Still et al., "Calculate."
[41]FEMA, "FEMA aid."

Conclusion

Throughout history, the United States has been a leader in innovation and building structures for future generations. A new technological age is unfolding, allowing for digitization of things of value to become tokenized, programmable, and decentralized. Across the globe, governments and private entities are experimenting with tokenized commodities, contracts, legal titles and, most critically, commercial and central bank digital currencies. This wave of digital token innovation is still gaining momentum.

The questions for the United States are what role it will play in this innovation and to what degree will its core values be brought to bear. If the US dollar is to remain the world's primary reserve currency in the unfolding digital century, how can it remain an analog instrument and unit of account for things increasingly programmable and denominated as digital tokens? Should it not also become a digital tokenized currency that measures, supports, and transacts with the world's digital things of value? Should the dollar not carry with it into the new digital age longstanding US values of economic stability, individual liberty and privacy, free enterprise and the rule of law? If not, is the United States willing to accept the values of its economic competitors imposed on the future of money?

We believe the United States should, and must, take a leadership role in this new wave of digital innovation. Furthermore, we believe the launch of a tokenized digital dollar is a logical and critical next step to future-proof the dollar, enshrine its democratic values in the future of money, drive societal and economic benefits, and unlock new policy tools. In summary, the Project considers our "champion model" to be a tokenized form of the US dollar that:

- **operates alongside existing monies**
- **is primarily distributed through the existing two-tiered architecture of commercial banks and regulated money transmitters**
- **is recorded on new transactional infrastructure, potentially informed by distributed ledger technology**

We believe that exploring a well-architected, durable, and universal digital dollar is in the national interest. Successfully creating it is an enormous undertaking and needs to be done carefully, thoughtfully, and deliberately. Something as complex and worthy of the US dollar's global importance should not be completed in a hurried manner. It will take time to get it right. Nevertheless, now is the time to get started. The Digital Dollar Project is here to assist.

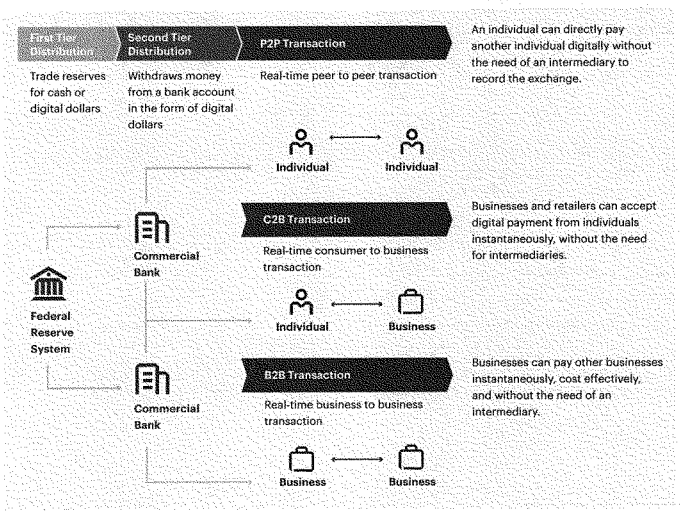
Next steps

In the near term, we will examine potential use cases and pilots to test the outlined hypotheses of our champion model and pivot to consider challenger models of alternative approaches as needed. We must ensure that the net benefits of the creation of a US CBDC outweigh its implementation challenges and risks. In addition, we anticipate hosting roundtable discussions with key constituent groups, both public and private, as we explore and refine the configurable design choices, opportunities, and unlocked value of a US CBDC. We welcome your comments and questions at feedback@digitaldollarproject.org as we continue our exploration of a tokenized US digital dollar.

Appendix

Domestic payments

Potential Digital Dollar Distribution and Domestic Transaction Model



Illustrative purposes only

Peer-to-Peer (P2P) Payments

As our economy became more digitized with more transactions occurring virtually, the private sector developed solutions for peer-to-peer (P2P) money transfers that overcame the limitations of physical cash. There has been a new wave of innovative message-based payment systems that have created faster transaction methods and improved user experiences. A digital dollar would leverage a fundamentally different architecture that could serve actual digital P2P transactions without the need for an intermediary to control a ledger. Over the past decade, P2P mobile payment services, such as PayPal, Venmo, and Zelle, have created faster and more direct methods of transferring funds. Despite their greater speed and convenience, such P2P mobile payment systems are still account-based, meaning the transactions are not fully complete or "final" and could still be reversed until their respective debit and credit transactions are recorded, reconciled, and settled.[42]

[42] This is not to imply that fraudulent, incorrect, or impermissible CBDC transactions are not reversible, but it speaks to the necessary risk and control processes needed to settle an account-based transaction.

In 2019, there were more than 69 million mobile P2P payment system users in the United States,[43] with an estimated total transaction value of $310 billion.[44] A transaction records in seconds, but it can take between one and five business days for the funds to be accessible, depending on the P2P system and the amount transferred.

A digital dollar could support a more natural P2P payment system that would resemble a physical, P2P cash transfer. Individuals would be able to send or receive payments almost instantaneously without the need for an intermediary. Although a CBDC direct transfer would serve some of the P2P volume, the mobile payment providers would be able to adapt to serve as wallet providers for digital dollars. The wallet provider would be able to design transaction and wallet size based on customer preferences and jurisdictional mandates. A desirable outcome of this development would be creating low-cost digital wallet services better able to reach unbanked populations.

As the benefits of a CBDC have become clearer to existing industry participants, they have begun to prepare for, and explore the use of, digital assets. A digital dollar brings many advantages to the electronic P2P infrastructure. The speed, efficiency, and ability to transfer a token directly allows for reduced time and costs associated with a P2P transfer. Through additional analysis and pilots, we will test the hypothesis that a CBDC could reduce the cost of a mobile payment transfer, which, in the case of Zelle, currently costs a participating bank between $0.50 to $0.75 per transaction.[45]

One design benefit offered by CBDC is the ability to customize the design options of payment transactions. Through careful and thoughtful explorations of privacy optionality, the US could implement select privacy controls such as anonymizing transactions under a certain value threshold. There is an opportunity for the US government to design a CBDC that protects users' privacy and gives the user control of how and with whom they share their personal data. The programmability and design choices for a digital dollar could provide better controls for how user data is collected and leveraged. Payment service institutions are currently recording and, in some cases, capitalizing on users' personal payment data.[46] The anonymizing elements of cash transactions could be reflected digitally in a tokenized digital dollar.

Domestic Retail Payments (Consumer)

A digital dollar would provide dynamic capabilities to the domestic retail payment landscape. The cash, debit, and credit infrastructures in the US are very sophisticated and are crucial payment channels, but each have their own tradeoffs.[47] There are merchants and consumers who prefer, and will continue to prefer, cash payments, given that they provide immediate liquidity without the need for an intermediary. However, physical cash has transport and storage limitations. The recent COVID-19 crisis further raises concerns about the public health implications of handling physical cash.[48] Furthermore, merchants could offer incentives in the form of discounts to encourage consumers to use CBDC versus other available payment methods.[49]

[43]He, "Strong."
[44]Ibid.
[45]Mulligan, "Zelle."
[46]Withers and White, "Dollars."
[47]Merchants and consumers may choose to continue using more traditional electronic payment methods for retail payments. The intermediary serves to handle disputes, provide fraud protection to both merchant and consumer, provide rewards to the consumer, and provide customer service.
[48]The US government was concerned about handling physical cash during the COVID-19 crisis. (Schroeder and Irrera, "Fed.")
[49]This assumes that consumers weigh the discount as more valuable than benefits offered by other methods like paying on credit or receiving purchase protection.

Electronic credit and debit payments provide broader access and optionality for consumers but create trapped liquidity throughout the settlement process for merchants who depend on bank intermediaries. Due to the limitations of cash and bank payments, retailers have begun to accept more innovative payment methods such as cryptocurrencies or digital payment options such as Venmo.[50]

With a CBDC, customers would be able to pay the retailer directly and instantaneously, for lower costs, and without the need of traditional intermediaries. A digital dollar would provide not only small businesses treasury benefits that cash currently provides, but also electronic access that does not require a banking intermediator to verify and settle the transaction. A CBDC could unlock transaction savings by providing an alternate payment method to debit, credit, prepaid card transactions[51] and cash payments which cost a retailer five to 15% of their annual revenue in cash-handling costs.[52]

A digital dollar would thus offer retailers, customers, and financial institutions a potentially more affordable and efficient payment method over existing cash and card payments.[53] Due to the cost savings that retailers would enjoy, retailers could incentivize the retail use of a digital dollar by offering discounts similar to when customers pay with cash in stores today.[54] Retailers would have faster access to money, as they would not have to wait anywhere from a few hours to five days for credit and debit payments to process.[55] The increased speed by which merchants receive and access funds would provide them with working capital benefits.

Domestic Retail Payments (Business)

An effective domestic payment system is critical in supporting American businesses; business-to-business (B2B) transactions occur between manufacturers, wholesalers, and retailers for the production and sale of goods and services. Most B2B payments are made using checks, credit, or debit transactions, or systems like Fedwire or Automated Clearing House (ACH).[56] The innovation of a CBDC rests in allowing businesses to transact in central bank money, which guarantees finality of settlement, which in turn removes counterparty risk. This would enable non-Fedwire market participants to experience Fedwire-like benefits without opening additional Fed accounts, which has been explored by policymakers.[57]

Businesses are looking for more immediate, transparent, accessible, and secure methods of making payments to other institutions. CBDC would unlock a tier of benefits, including a faster, more secure method of B2B payments and instantaneous settlement to a broader participant base. Leveraging an existing CBDC could unlock an additional tranche of innovation, including improved treasury management, financing analytics, liquidity, and security measures.

Although a CBDC would serve as an architecture for B2B payments, the Project does not intend to disrupt current global initiatives to implement RTGS systems. There have been intentions for

[50]Nasdaq, "7 Major Companies."
[51]In 2018, debit, credit, and prepaid card transactions cost an estimated $154.72 Billion to merchants. (Derived calculation [The Federal Reserve, "FRPS Initial Data Release"] using average credit card, debit card processing and interchange fee [Resendiz, "Credit."])
[52]Burak, "Cash."
[53]The design and inclusion of consumer protection frameworks will be critical in assuring consumers of the various protections they have come to expect from other payment methods.
[54]Federal Trade Commission, "New Rules."
[55]Johnson, "The Merchant's Guide."
[56]Checks and ACH transfers were the most common types of B2B payments. In 2018, 47% of B2B payments were made by paper check, compared to 34% via ACH and 13% via bank wires. Only 6% were made by credit card (Rustos, "The stats.")
[57]It is worth noting that policymakers have explored individual Fed accounts despite it being currently prohibited by law.

the Federal Reserve to enable a more accessible and efficient payment rail through their FedNow Initiative, built on traditional technologies. The need to improve a domestic payment solution is already being addressed by the FedNow service and is not the driving force behind US CBDC.

Delivery Versus Payment (DvP)

From humble beginnings in Philadelphia, the US securities industry has been a leader in innovation globally, including the launch of the world's first fully electronic exchange, NASDAQ (1971) the establishment of the DTCC (1973), and the eventual dematerialization of securities. The continuous innovation by the New York Stock Exchange (NYSE), NASDAQ, and exchanges globally have increased market efficiency, access, and durability during volatile times. While exchanges in the US continue to innovate and adapt for the benefit of market participants, CBDC represents a fundamental shift that unlocks previously unattainable capabilities for settlement, straight-through processing, and reduction in risk and margin requirements.[58]

CBDC can provide an important mechanism for innovation that reduces risk and increases efficiency in the US securities industry. Settlement of securities currently occurs using DvP, meaning that delivery of a security occurs if, and only if, payment occurs.[59] We emphasize that DvP does not imply instant settlement, nor does it imply atomic settlement.[60] There are three models of DvP that differ primarily on the time of settlement (obligation by obligation or net basis) and result in different potential credit risks that are today mitigated by central securities depositories (CSD):

Model	Securities Settlement	Payment Settlement	Potential Credit Risk
Model 1	Gross	Gross	No
Model 2	Gross	Net	Yes
Model 3	Net	Net	Yes

Model 1 provides simultaneous settlement of both individual securities transfers and associated funds transfers, usually by maintaining funds accounts for participants and making all transfers by book entries.[61] Transactions become final on an obligation-by-obligation basis, thus reducing credit and liquidity exposure. A disadvantage of Model 1 is that it can require potentially large amounts of liquidity from participants since the full principal value of each transaction must be covered.[62]

Participants require eventual final settlement of payment to occur in nothing less than Federal Reserve backed money, which digitally can only occur in reserve accounts. CBDC in a Model 1 system provides the most benefits of programmable money coupled with digital securities,

[58] The DTCC estimates that "on average over $5 billion is held in margin to manage counterparty default risk...[with] additional liquidity resources for peak settlement days..." (DTCC, "Modernizing.") Additionally, the current settlement failure rate of 2% accounts for about $3 billion in losses every year (McNeil, "Eliminating.")

[59] BIS and OICV-IOSCO, "Principles," 8.

[60] "Atomic settlement" means "that the transfer of two assets is linked in such a way as to ensure that the transfer of one asset occurs if and only if the transfer of the other asset also occurs—that is, settlement is conditional." (Bank of England and RTGS, "Call," 1.)

[61] BIS and OICV-IOSCO, "Principles."

[62] Ibid.

allowing true gross atomic settlement. While other forms of value, including private currency or commercial bank money, can be used as the payment leg, those forms introduce counterparty risk that would not otherwise exist when using a CBDC.

Model 2 provides simultaneous settlement of only securities, while associated funds transfer occurs on a net basis. Securities are held on an account-basis by the entity providing securities settlement and settled by a book entry, while fund accounts can be maintained by a different entity, including a commercial bank or a central bank.[63] The primary advantage of Model 2 is that it requires significantly less liquidity for settlement as compared to Model 1. The primary disadvantage is that it introduces risks due to the delay in settlement finality, which only occurs when payment is final.[64]

Instead of using payment systems like CHIPS or Fedwire, which are not widely accessible, settlement could occur using CBDC, providing more inclusive accessibility. Such accessibility, easier reconciliation, and other features could unlock innovation that allows more frequent net settlement to more participants than the current mechanisms, thereby reducing credit risk and costs.

Model 3 provides the simultaneous net settlement of both securities and funds.[65] Like Model 2, settlement and fund accounts can be held by two separate entities. The primary benefit of Model 3 is that the book-entry transfers of the securities and funds only occur at the end of the processing cycle.[66]

Like Model 2, CBDC in a Model 3 system could provide the payment leg for final settlement. This could again provide increased accessibility, easier reconciliation, and spur innovation.

Overall, while innovation in the securities settlement space can occur with other forms of payment, we believe that CBDC could provide benefits that exceed the current settlement mechanisms. Settlement in a form other than central bank money would be a step backward that could introduce systemic risk in the securities and financial system.

International payments

Remittance Payments

Remittance payments from individuals play a massive role in the US financial ecosystem. In 2018, the total value of remittance payment outflow from the US reached a record high of $68.4 billion.[67] Remittances can be sent via a money transfer service (e.g., Western Union) or an electronic payment system (e.g., wiring through a bank). Remittances are commonly sent by foreign-born non-citizens and foreign-born citizens, of which, 47.2% and 28.1% respectively are un- or underbanked.[68] This population of immigrants is typically excluded from participating in traditional financial services and thus rely on alternative financial services with high fees.

[63] Ibid.
[64] Ibid.
[65] Ibid.
[66] Ibid.
[67] The World Bank, "Migration."
[68] Foreign-born citizens were 4.8% unbanked and 23.3% underbanked. Foreign-born non-citizens were 16.2% unbanked and 31.0% underbanked. (Apgar et al., "2017 FDIC.")

Remittance payments are often exchanged into local currencies for making purchases.[69] The flow and usage of dollars into foreign countries often coincide with periods of financial unrest, including periods of high inflation, where countries turn to a dollar-denominated informal market instead of using their local currencies.[70] A potential design choice could allow end users receiving remittances to transact outside of the US for regular shopping needs. Simultaneously, another design choice could allow for the digital dollars to be held, or stored, as needed. Depending on the CBDC architecture, the system could allow for individuals to transfer funds abroad directly without needing an intermediary. In cases where an intermediary is required, reconciliation and manual intervention could still be reduced and therefore decrease the cost to transfer funds. This improves safety, efficiency, and cost for individuals moving and using dollars around the world.

Improving the ease of access to dollars abroad strengthens the use of the dollar abroad and provides benefits for countries who use the US dollar as their currency or peg their currency to the dollar.[71] Unlocking faster remittance payments could help disaster relief efforts, raise the living standard abroad, and address global poverty. By lowering the costs and time of remittance transfers, a CBDC can widen bank access to the unbanked population while keeping transaction costs very low and simultaneously profitable for banks.

Cross-Border Payments

As the world has become more globalized, cross-border and multicurrency (CBMC) payment systems have developed to support international commerce, primarily for B2B uses. Cross-border payments are where the payer and payee are in different jurisdictions and are debited and credited in different currencies. Cross-border payments have historically been slower, more complex, less transparent, and more expensive than domestic payments. They are usually executed though chains of correspondent banks[72] or the use of a dedicated cross-border or multicurrency payment system.[73] CBMC payment systems have developed to provide more efficient and timelier cross-border transactions in specific, high-volume payment channels. CBMCs have gone through major advancements and expansions over the past 20 years, and there are still plans to introduce new CBMCs in the next few years, as manufacturers expand their supply chains internationally. The dollar remains the most commonly used invoice currency, with many commodities priced in USD. Internationally, digitizing the dollar as a CBDC, would significantly reduce complexity and improve cross-border trade.

A digital dollar would provide many of the capabilities that are being sought after with current CBMC initiatives, including automatic settlement, trade oversight transparency, risk management, and interoperability. These added benefits to international trade improve the

[69]Remittance payments can also theoretically be kept and maintained in US dollars.
[70]Winton, "Shining."
[71]We recognize that increased international dollarization could present unique policy and economic challenges that require further exploration.
[72]SWIFT, "SWIFT GPI."
[73]Bech, "Payments without borders."

efficiency of cross-border payments, enable front-end modular innovation, and improve the user experience in niche trade corridors. With a digital dollar, parties in the same international jurisdiction could settle in USD without needing a settlement agent who has access to the US payment system to net positions. A digital dollar would serve as a platform for innovative private-sector systems to manage cross-border single and multicurrency transactions that involve the US dollar.[74]

Government payments

Government Benefit Administration

According to the US Census Bureau, the US government routinely sent assistance to approximately 52.2 million people each month in 2012.[75] Under normal circumstances, the distribution of government benefits administered under both mandatory and discretionary spending[76] typically are managed and distributed well.[77] In exceptional circumstances, however, the government lacks an autonomous method (i.e., outside of the existing commercial bank system) to provide central bank money instantaneously to targeted recipients: consumers, households, and corporations.

Direct payments, excluding tax-related payments,[78] to Americans have historically only been used in times of financial distress. For example, during the 2008 financial crisis, President George. W. Bush signed a law on February 13, 2008 to send direct payments to Americans, but it was late April before money, in the form of physical checks, was sent. Payments were largely complete by the following summer, after a few months.[79]

The inefficiencies in distributing emergency financial support promptly and effectively have been highlighted during the COVID-19 crisis. The government currently lacks the ability to distribute benefits with autonomous settlement and minimal transaction risk. A tokenized US digital dollar could provide instantaneous distribution of central bank money through the introduction of an additional, autonomous payments infrastructure for distribution of government benefits. For government agencies charged to distribute government crisis benefits to needy people, especially those without access to banking services, direct transmittal of digital dollars to mobile devices may be a timesaver.

[74]BIS, "Cross-border."
[75]United States Census Bureau, "21.3 Percent."
[76]"Mandatory and discretionary spending account for more than 90% of all federal spending and pay for all of the government services and programs on which we rely." The remaining 10% includes interest on debt, the interest the government pays on its accumulated debt, minus interest income received by the government for assets it owns. (National Priorities Project, "Federal.")
[77]Mandatory programs such as income support programs (e.g., Unemployment Compensation, Child Nutrition, etc., and retirement and disability programs for civil servants, the Coast Guard, and the military) total $645B. (Amadeo, "Current.")
[78]2020 tax-related direct deposits are estimated to be 80 million through leveraging 2018 or 2019 IRS tax return information. There were an estimated 140 million taxpayers in 2017. Nearly half of the direct payments distributed to Americans in 2020 due to COVID-19 will therefore be mailed via check, a process expected to take as long as 20 weeks, as the IRS has capacity to issue about five million checks per week. (Frankel, "Stimulus," and York, "Summary.")
[79]Rubin, "The Government."

For example, the Supplemental Nutrition Assistance Program (SNAP) is a mandatory government program that provides eligible people with benefits cards, typically plastic electronic benefits transfer (EBT) cards, to buy food at authorized grocery stores and farmers markets. EBT is an electronic system that allows a recipient to authorize the transfer of their government benefits from a federal account to a retailer account to pay for products received.[80] Roughly 38 million people, or 12% of Americans, participated in SNAP in 2019.[81]

In exceptional circumstances, government benefit administration of SNAP could be streamlined and expedited through the distribution of a CBDC, or digital dollars, to an end user's digital wallet instead of an EBT card.[82] Reducing SNAP's distribution time ensures that the benefits will get into the hands of those who need it as quickly as possible. Payments could occur through conventional terminals, thus causing limited disruption to end user and retailer experiences. Commercial banks could extend such wallets to existing customers through existing mobile applications covering KYC/AML provisions. For the un- and underbanked, P2P providers, FinTechs, or even telecom providers could adapt to provide digital wallet services at a lower cost.[83] Those wallets could then be leveraged by dedicated agencies based on set eligibility criteria and requirements to receive benefits in the first place.

The identification of those who receive benefits in the form of tokenized digital dollars would leverage existing, readily available information on targeted end users and be managed by existing government agencies. Although the end users or benefit recipients may not recognize the full advantages of CBDC, the government would experience time and cost savings from efficiently targeting and distributing funds to recipients. Looking forward, there are a variety of Government-to-Person (G2P) and Person-to-Government (P2G) payments (e.g., student loan payments, municipal payments, etc.) that could be made more efficient by a tokenized digital dollar and whose positive effects could be experienced by all payment participants.

[80] USDA, "What."
[81] Nchako, "A Closer."
[82] Today, generally, it takes up to 30 days to receive the first EBT card, whereas expedited/emergency SNAP is dispensed to those who qualify within seven calendar days. (gettingsnap.org, "FAQs.")
[83] Developer-friendly "open source API" would lower the barriers to entry to creating digital wallets and thus provide the creation of a product geared toward those who are financially underserved today.

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About the Digital Dollar Project

To help launch the Project, J. Christopher and Charles H. Giancarlo and Daniel Gorfine have formed the Digital Dollar Foundation (The Foundation), a not-for-profit organization supporting the Digital Dollar Project's efforts to advance exploration of a United States central bank digital currency. The Honorable J. Christopher Giancarlo is Senior Counsel to the international law firm Willkie Farr & Gallagher and the former Chairman of the US Commodity Futures Trading Commission (CFTC). Charles Giancarlo is the CEO of Pure Storage (NYSE: PSTG) and formerly served in senior executive roles at Cisco Systems (Nasdaq: CSCO) and Silver Lake Partners, the private equity firm. Daniel Gorfine is founder and CEO of Gattaca Horizons LLC and previously served as the CFTC's first Chief Innovation Officer and Director of LabCFTC. Visit us at www.digitaldollarproject.org.

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Acknowledgements

The Digital Dollar Project would like to acknowledge the many valuable contributions to this work through expert knowledge, interviews, and feedback. In particular, the Project recognizes the valuable participation of members of the Advisory Group. *The views expressed in this white paper are those of the authors and do not necessarily represent the views of the Advisory Group or its individual members.*

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Testimony of Jodie Kelley, CEO of ETA
Before the House Financial Services Committee Task Force on Financial Technology Hearing
on
Inclusive Banking During a Pandemic Using FedAccounts and
Digital Tools to Improve Delivery of Stimulus

Chairman Lynch, Ranking Member Emmer, and members of the Task Force on Financial Technology, my name is Jodie Kelley and it is my privilege as CEO of the Electronic Transactions Association ("ETA") to submit this statement on the role of the electronic payments industry in promoting inclusive banking and financial services, including by using digital tools to distribute economic stimulus payments during the COVID-19 pandemic. On behalf of ETA and its members, thank you for the opportunity to participate in this important discussion.

Our industry is acutely aware of the hardships that the COVID-19 pandemic has imposed on our country over the past several months, and the challenges that we face in rebuilding our economy and supporting those who have been hardest hit. We share your commitment to financial inclusion and recognize that the past few months have highlighted the need to ensure that individuals and businesses have access to useful and affordable digital payment tools and financial products that meet their needs.

As an industry, we have long worked to help ensure that all Americans have access to secure, convenient, and ubiquitous payments and related financial services. When the Coronavirus Aid, Relief, and Economic Security Act [1] ("CARES Act") became law and state and federal policy makers began to look for ways to get stimulus money to consumers and businesses as quickly and securely as possible, ETA members immediately offered the tools of

[1] Public Law No: 116-136, 03/27/2020

the modern electronic payments industry to help. ETA is pleased to provide the Task Force information on the ways in which the digital payments industry is supporting financial inclusion during this challenging time, as well as detail on how the modern payments industry is helping deliver CARES Act stimulus money to the American people.

I. Background

ETA is the leading trade association for the electronic payments industry, representing over 500 companies that offer electronic transaction processing products and services, including credit and debit card processing, peer-to-peer (P2P) products, mobile wallets, and other forms of digital payments. ETA's members include: financial institutions; payment processors; payment facilitators; mobile payment service providers; mobile wallet providers; software service providers; companies providing security services; and non-bank online lenders that make commercial loans to small businesses, either directly or in partnership with other lenders.

Every day, ETA member companies are creating innovative offerings in financial services, spending billions of dollars annually on research and development to develop and deploy new products and services that securely move trillions of dollars each year. To put the electronic payments industry in context, during 2019, consumers and businesses spent $7.58 trillion in card volume in the U.S.[2] and another $1 trillion was moved over the largest peer to peer networks. Combined these equate to 40% of the U.S. GDP in 2018. Payments are ubiquitous

[2] https://www.federalreserve.gov/paymentsystems/2019-December-The-Federal-Reserve-Payments-Study.htm

on a global scale as well. During 2019, ETA members helped global consumers and businesses make $24.3 trillion in purchases; that number is expected to grow to $24.6 trillion in 2023.[3]

The infrastructure supporting this system is sophisticated, secure and fast – processing over 270,000 transactions per minute.[4] The electronic payments system is also reliable - it operates 24/7/365, in the U.S. and around the globe, without interruption.

Every day, Americans rely on the modern payments industry, whether we are paying our babysitters using a digital app, shopping online while we are quarantined at home, or tapping our phones to make a secure payment at the grocery store. And ETA members are not slowing down; the industry is constantly investing and innovating, creating new financial services and payments products that benefit individuals and small businesses alike.

II. Helping the Underserved Including Through Distributing Stimulus Dollars

a. ETA Member Companies' Commitment to the Underserved

ETA and its members are long-standing proponents of an inclusive financial system that provides high quality, widely accessible, easy to use, affordable financial services. Our annual white paper on the subject highlights some of the ways in which our industry is providing products and services designed to help the underserved, including through mobile payments, prepaid products, mobile banking, P2P payments, and education on financial literacy and readiness.[5]

b. The Electronic Payments Industry's Assistance Distribution of Stimulus Dollars

[3] https://www.statista.com
[4] This translates to 16,130,136 per hour, 387,123,287 per day, or 141,300,000,000 per year.
[5] https://www.electran.org/wp-content/uploads/ETA-WP-UnderServed-2B.pdf

The COVID-19 pandemic has brought a sharp focus to the importance of this work – now, more than ever individuals and businesses need access to affordable and secure payments and financial services. As discussed in this statement, the payment industry is well-positioned to help – and in fact is already helping. Digital payments products are being deployed today to assist with the delivery of the (as of June 6) $266.8 billion in EIP[6] and $511 billion in PPP[7], along with the $260 billion in unemployment insurance allocated under the CARES Act.

i. General Purpose Reloadable Prepaid Cards

General purpose reloadable prepaid cards ("prepaid") is one of the mechanisms currently being deployed to deliver stimulus money. A prepaid card is a form of secured card that is linked to a previously added cash balance. In essence, a prepaid card allows a user to load money on the card, then spend that money as they need – as they purchase, those purchases are checked for approval against existing funds. As the funds are spent down, they can be reloaded.

Prepaid cards are backed by banks and typically carry major association logos and can be used to make purchases just like credit and debit cards. They come with the same fraud protections and security measures, the same dispute resolution rights as traditional credit and debit cards, and, like bank accounts and P2P service, the funds loaded on them are FDIC insured. Prepaid cards can be loaded directly with government benefits or by direct deposit of paychecks, or funds can be loaded from a bank account, at thousands of retail locations,

[6] Through June 5, 2020. The CARES Act authorized $290 billion.
[7] https://home.treasury.gov/system/files/136/SBA-Paycheck-Protection-Program-Loan-Report-Round2.pdf

transferred from a P2P service, or transferred from another prepaid card. According to the Federal Reserve, at the beginning of 2019 there were 2.2 billion cards in circulation, valued at $60 billion.[8]

- **Prepaid Cards Have Long Been Used to Deliver a Wide Array of Government Benefits**

Prepaid cards are simple to use and manage. They are also administratively less expensive than paper checks (or other paper-based payment instruments such as vouchers or coupons). Additionally, the back office management of prepaid cards -- including issuing the cards, disbursing program funds, and providing customer service – can be outsourced to financial institutions.

Because these cards do not require a bank account and can be used easily and broadly, numerous federal and state government benefits and reimbursements are already delivered via prepaid card. For example, the Supplemental Nutritional Assistance Program, the largest government program user of prepaid cards for distribution, disbursed over $60 billion on prepaid cards in 2018. The Social Security Administration has been using prepaid cards since 2011, and currently disburses almost $40 billion annually through those cards. Other examples of federal benefits distributed using prepaid cards include:

- Child Support
- Temporary Assistance for Needy Families
- Low Income Home Energy Assistance Program

[8] Board of Governors of the Federal Reserve System, Report to the Congress on Government-Administered, General-Use Prepaid Cards - September 2019

- Childcare
- Refugee Assistance
- Various General Assistance Programs
- Women, Infants, and Children
- Veterans
- Payroll
- Income Tax Refunds
- For government employees:
  - Health Savings Accounts
  - Flexible Spending Accounts
  - Health Reimbursement Arrangement Accounts
- Jury Duty Payment Programs
- Tribal Government Programs

During 2018 alone, the Federal Reserve reported that government agencies disbursed $137 billion through prepaid cards.[9] Additionally, more than forty states use these types of cards to distribute unemployment benefits, and last year over $20 billion in unemployment benefits were distributed using prepaid cards. [10]

- **Prepaid Cards are Being Used to Deliver Stimulus**

The CARES ACT was designed to provide quick relief to Americans who needed it because of the pandemic. For those Americans without a bank account, many of whom are

[9] Board of Governors of the Federal Reserve System, Report to the Congress on Government-Administered, General-Use Prepaid Cards - September 2019

[10] Ibid.

among the most vulnerable, the stimulus dollars were particularly needed. Those funds are now being disbursed, in part, on prepaid cards.

Specifically, the CARES Act expanded unemployment insurance by 13 weeks and increased the amount the benefit by $600 a week through July 31, 2020. States are currently delivering these unemployment benefits electronically using prepaid cards.

The CARES Act also authorized EIP's totaling $290 billion. The Treasury Department[11] and the Social Security Administration[12] turned in part, to two long-standing prepaid card programs - Direct Express and US Debit - to distribute stimulus funds. As of June 5, 2020 via prepaid cards over $9 billion in EIP's has been distributed to 5.7 million Americans.[13]

Prepaid cards allowed the EIP stimulus to reach consumers quickly, and the funds could be used immediately. Individuals did not have to wait weeks or months for a physical check, then figure out how and where to cash that check (assuming that cash would suffice to meet their payments needs). Instead, armed with the prepaid card, they could immediately use stimulus funds, directly advancing the goals of this important program. In fact, the utilization of prepaid cards allowed many consumers to use the critical stimulus money even before actual transfers were made to the financial institution, as prepaid issuers could allow consumers access to funds as soon as the pending credit appeared on the account, where traditional checks may have a processing period of up to three business days for stimulus checks to clear.[14]

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[11] https://home.treasury.gov/news/press-releases/sm1012
[12] https://home.treasury.gov/news/press-releases/sm979

[13] https://home.treasury.gov/system/files/136/EIP-data-update.pdf
[14] https://www.washingtonpost.com/business/2020/04/14/1200-relief-checks-have-begun-arriving-bank-accounts-people-are-mostly-spending-it-food/

For the most vulnerable and hardest-hit consumers and small businesses, those saved days matter.

ii. P2P Services

Peer-to-peer payment systems — also known as P2P payments or money transfer apps – are also being used to distribute stimulus dollars. P2P systems — like PayPal, Venmo, Zelle, and Cash App -- allow users to send one another money from their mobile devices through a linked bank account or card. Consumers are not typically charged to use them. Hundreds of millions of Americans used P2P services to transfer over $300 billion dollars during 2019. Consumers can use P2P services to store money, make purchases at merchants, transfer money to other users on the same system and, as previously noted, to reload prepaid cards.

Because P2P services can be accessed from a smartphone, they can reach the vast majority of individuals, regardless of where they live or whether they have access to a bank account. The Pew Research Center found that 98% of the U.S. adult population has a mobile phone, and that 81% of people have smartphones.[15] That number has been steadily increasing and is expected to rise further. The ubiquity of smartphones has made it an ideal platform to house robust payment solutions.

While final numbers are not yet available, it is estimated that hundreds of thousands of EIP stimulus dollars were sent to P2P accounts directly. P2P services thus made it possible for individuals to securely and quickly receive stimulus money and then immediately use it to make needed purchases, or transfer money to a family member or friend.

iii. **Mobile Wallets**

[15] https://www.pewresearch.org/internet/fact-sheet/mobile/

Mobile wallets have increasingly been used by individuals during the pandemic. A mobile wallet is an app on a mobile device, such as a smartphone, that stores payment information from a credit card, debit or prepaid card.[16] The phone can then be used to securely make purchases. There are a number of different mobile wallets that are compatible with specific devices. The stimulus dollars sent to prepaid cards or bank accounts linked to a card (credit or debit) already loaded into a digital wallet, are very easy for consumers to spend the money quickly, easily and securely.

Mobile phones and wallets are not only ubiquitous, they are also highly secure. To access a smartphone, some form of authentication is required such as biometric (fingerprint, face recognition) or entry of a pin. Additionally, mobile wallets do not hold any actual payment card numbers, instead converting the payment card number to a token. When making a transaction, it is the token that is transmitted to the issuing bank, which converts the token back to the account number. Thus, even if a transaction using a mobile wallet was compromised, the bad actor would only have access to a token that could not be used to commit fraud.

iv. Contactless Payments and COVID-19

In addition to the security and speed of receiving stimulus and making payments, another important feature of all three of these products is that they are contactless -- which means that they allow a consumer to make a purchase by simply tapping the card or device at a

[16] ApplePay and GooglePay are mobile wallets that, as introduced, hold payment card credentials, but do not allow users to store money. P2P services like Venmo are sometimes referred to as mobile wallets, but offer additional services, including allowing the user to store money, and make transfers and purchases. For purposes of this statement we distinguish between P2P services and mobile wallets based on this distinction.

terminal. Contactless products use a technology called Near Field Communication, which allows the card or phone to communicate with the terminal when the cardholder places their payment card or mobile phone near it.

Consumers are increasingly adopting contactless payments because they allow consumers to pay without touching anything other than their own card or their own phone. They are not required to hand their card to a cashier or dip or swipe their card into the point of sale terminal. Because it allows them to transact without touching common surfaces, the use of contactless payment methods has risen dramatically during the pandemic. For example:

- A Mastercard Global Consumer study (April 2020) found that between February and March, contactless transactions grew twice as fast as non-contactless transactions in grocery and drug stores.

- Visa[17] reports that:
    - In March 2020, 31 million Americans tapped a card or mobile device which is almost 50% higher than it was 6 months ago;
    - In the last twelve months (March 2019 – March 2020), there has been a 150% increase in contactless payments
    - Outside the U.S., more than 60% of all payments at a physical point of sale are contactless and the U.S. is quickly accelerating its adoption

v. ETA Members Also Played a Role in Distributing Stimulus to Small Businesses

The electronic payments industry's ability to deliver stimulus also included relief to small businesses. ETA members - both traditional and fintech participants - used modern lending tools to help the Small Business Association process and disburse $659 billion in Paycheck

[17] https://usa.visa.com/visa-everywhere/blog/bdp/2020/04/30/merchants-and-consumers-1588276426783.html

Protection Plan loans. As of June 6, the SBA disbursed $511 billion to over 4.5 million businesses.[18]

III. The Broader Electronic Payments Industry

The specific payments products used to distribute and use stimulus dollars are part of a broader payments landscape, fueled by innovation and security, providing ubiquitous access to convenient, secure, financial and payments products and services, both here in the US and across the globe.

It is an industry that has evolved dramatically since 1958 when the first credit card was issued. A system that started as one in which plastic cards were run through "knucklebuster" machines, and authorizations were obtained through merchants calling in a request, has now evolved to one in which individuals and merchants have a wide array of electronic payment options available that allow them to instantly and safely transfer money to one another, store their money and their credit cards on their smartphones, buy products and services online, and quickly and safely purchase goods in stores with the mere tap of a card or phone.

That innovation has accelerated in recent years in response to consumer demand and has been fueled by competing technologies and companies that invest billions of dollars annually to develop and constantly improve products that meet individuals' needs, in a secure way. Many of the technologies that we take for granted – our ability to use an app on our phones to order and pay for a car or taxi to take us from one place to another, or to order and pay for dinner that will be delivered to our homes – are examples of that innovation. The

[18] https://home.treasury.gov/system/files/136/SBA-Paycheck-Protection-Program-Loan-Report-Round2.pdf

pandemic has further accelerated those trends as consumers figure out how to transact in new ways while social distancing. And, as discussed above, it has also highlighted the need to have solutions that benefit the underserved. The payments industry has proudly demonstrated both its commitment and ability to do so, including by efficiently distributing stimulus dollars to individuals. [19]

IV. Providing Security for Electronic Payments

Importantly, the story of payments is one of both innovation and security. The industry has quickly innovated in the security space as well; recent examples include the tokenization of data to minimize or eliminate the exposure of data that would allow credentials to be used unlawfully[20]; the introduction of point-to-point encryption (P2PE)[21]; the deployment of tools for monitoring and analyzing payment data for suspicious activity; and the protection of data through PCI-DSS[22], chip cards, and EMV technologies. When combined with state-of-the-art authentication techniques, including biometrics, these various security technologies help make payments secure and safe.

These efforts have been remarkably successful in reducing fraud. During 2019 alone, the electronic payments industry detected and prevented $84 billion in fraud.[23] That is not to

[19] Importantly, the system is also interoperable and facilitates cross-border commerce. Consumers can use credit cards when they travel abroad and when they don't -- cross-border commerce is increasing. Cross-border shopping is estimated to reach $1 trillion during 2020. 54% of US shoppers reported making online purchase from a foreign site. https://www.invespcro.com/blog/cross-border-shopping/

[20] Tokenization is a technology that replaces a user's actual card number with a token (typically a random string of numbers) so that the user's card number cannot be intercepted by fraudsters when transmitting payment information from the mobile wallet to a retailer's payment terminal.

[21] Encryption involves the use of cryptography to protect data while in transit. The data is scrambled between the end points using encryption, with a third party responsible for providing encryption keys to both end points.

[22] The payments industry took the lead in developing the Payment Card Industry Data Security Standard (PCI-DSS) for handling the safety of cardholder data. The PCI-DSS sets forth requirements designed to ensure companies that process, store, or transmit credit card information maintain a secure environment for such data.

[23] https://cmspi.com/nam/resources/pi-magazine-march-2020/.

say, of course, that fraud has been eliminated. It has been minimized, however; according to the Federal Reserve, the fraud rate is a mere $0.46 for every $10,000.00 in payments.[24]

And where fraud occurs notwithstanding efforts to prevent it, the payments industry protects consumers from financial harm. When it comes to credit cards, for example, if a consumer is the victim of fraud he or she can notify the bank that issued the credit card and the acquiring bank or merchant – *not the consumer* – will bear the cost of the fraud. Consumers using debit cards benefit from similar protections. These safeguards are among the many reasons consumers continue to choose electronic payments over cash and checks.

V. Electronic Payments are Subject to a Robust Legal, Regulatory, and Self-Regulatory Framework

The electronics payments industry is subject to robust oversight from federal, state, and international regulators and law enforcement, and the industry has spent decades building out systems to ensure that it complies with its legal and regulatory obligations. The list is long, but a few examples include laws related to anti-money laundering, know-your-customer, money services, business licensing, the Electronic Fund Transfer Act, the Gramm Leach Bliley Act, and the Truth in Lending Act.

And that is just the beginning. The payments industry has always been a leader in self-regulatory efforts. In addition to the legal framework, the payments industry has implemented robust and sophisticated self-regulatory programs to further protect the integrity of the payments ecosystem and the consumers and businesses that rely on it with every transaction.

[24] https://www.federalreserve.gov/publications/2018-payment-systems-fraud.htm

These self-regulatory programs govern all aspects of the electronic payments industry and include due diligence, contract, transaction monitoring and data security requirements. The various parties in the ecosystem have built robust infrastructures to ensure they comply with both legal and regulatory requirements, and the additional rules developed by the industry itself. This effort involves hiring and training staff, developing and implementing software solutions, and constantly working to improve compliance and fraud monitoring.

At ETA, we are proud to have developed guidelines to help industry participants, including new entrants, ensure they are meeting their legal obligations and deploying best practices. [25]

VI. The Future

ETA members are already working on the next generation of digital payment tools and services. While we are working to ensure merchants can safely accept payments in light of COVID-19, we are developing new products and services to allow consumers move money, to shop in-store, on-line, and with a mobile phone, securely, quickly and readily available to all Americans.

VII. Conclusion

The payments industry is innovative, dynamic, and competitive, focused on delivering cutting edge products with robust security measures to help consumers connect with merchants, make payments, and move money. This system is already effectively delivering government benefits quickly and securely and is proud to have delivered billions of dollars in stimulus dollars during the pandemic. The modern payments industry is already hard at work

[25] https://www.electran.org/industry-affairs/srp-eta-self-regulation-program/

developing the next generation of products and services and fraud prevention technologies to help individuals move money and stands ready to assist further in the distribution of government benefits, including any additional stimulus dollars.

TESTIMONY OF MORGAN RICKS

Professor of Law, Vanderbilt University Law School

before the

United States House of Representatives

Committee on Financial Services

Task Force on Financial Technology

June 11, 2020

Chairman Lynch, Ranking Member Emmer, and members of the Task Force, thank you for the opportunity to testify today on the topic of "Inclusive Banking During a Pandemic: Using FedAccounts and Digital Tools to Improve Delivery of Stimulus Payments."

The coronavirus crisis has highlighted critical shortcomings in the U.S. system of money and payments. Economic Impact Payments (EIPs) authorized by the CARES Act have been central to the federal government's policy response to the pandemic and its economic fallout. EIPs can provide critical help to individuals and families struggling to make ends meet during an economic disruption, and they can soften the blow of macroeconomic crises by boosting aggregate spending. But to be maximally effective in providing relief to individuals and families and stimulating economic activity, EIPs must arrive quickly.

Unfortunately, in the wake of the CARES Act, millions of EIPs have not been distributed as rapidly as one might have hoped. Even taxpayers with direct deposit information on file with the I.R.S.—the first to receive their relief payments—often had to wait several days for their payments to clear through automated clearinghouse (ACH) systems. This is a meaningful delay in the context of an unfolding economic disaster. On top of that, tens of millions of Americans

have received or will receive their EIPs as paper checks, which must be printed and physically delivered—a time- and labor-consuming task. When time is of the essence, paper check distribution is far from ideal.

Why has the federal government resorted to distributing millions of paper checks, rather than paying everyone electronically? Part of the problem is that many Americans do not fully participate in the mainstream system of money and payments. Whereas bank account penetration in other advanced economies like Canada, France, Germany, Japan, and the United Kingdom exceeds ninety-nine percent,[1] 6.5 percent of U.S. households, made up of 14.1 million adults and 6.4 million children, are unbanked, meaning that no individual in the household has a bank account.[2] Another 18.7 percent of U.S. households, made up of 48.9 million adults and 15.4 million children, are underbanked, meaning that, despite having a bank account, they rely to some extent on expensive nonbank services—such as nonbank money orders, check cashing, and payday loans—for payments and other financial needs.[3] Un- and under-banked households are primarily low-income and disproportionately minority.

Banks have little incentive to service low-balance accounts because it is typically unprofitable to do so. Consequently, bank branch locations are less prevalent in low-income communities and their hours of operation are inconvenient for many prospective users. Minimum balance requirements, account fees, and delays in check clearing deter low- and moderate-income households from opening or retaining accounts. (Bank of America announced in 2018 that it would begin imposing a $12 monthly maintenance fee on all accounts not meeting certain

[1] *See* World Bank, *Global Findex Database 2014: Measuring Financial Inclusion around the World* at 84.

[2] *See* 2017 FDIC NATIONAL SURVEY OF UNBANKED AND UNDERBANKED HOUSEHOLDS 1.

[3] *See id.*

criteria, including minimum balance criteria.[4]) Other factors also come into play. For example, the second most cited reason for lacking a bank account is "don't trust banks."[5] There can be little doubt that this distrust is attributable in part to previous bad experiences with banks, such as unexpected, costly overdraft charges.

Congress has at least two policy levers at its disposal to bring un- and under-banked households into the financial mainstream. One approach would be to impose universal service requirements on U.S. banks, an approach that has been used in countries such as Canada.[6] An alternative approach would be direct public provisioning: the federal government could supply digital money-and-payment services directly to the general public.

In the remainder of my testimony, I will focus on one such public option: expanding access to the bank accounts the Federal Reserve already offers to a small, favored set of clients. These accounts consist of digital dollars—they are dollar balances maintained as ledger entries on the Fed's electronic books. The Fed's digital dollar accounts are highly attractive, offering instant payments, higher interest than ordinary bank accounts, and full government backing no matter how large the balance, with no need for deposit insurance. These accounts are currently restricted to an exclusive clientele, consisting of banks, certain other large financial institutions, and certain governmental entities.[7] Privileged access to these accounts creates a striking

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[4] *See* Rachel Louise Ensign, *Bank of America: No More Free Checking for Customers With Low Balances*, WALL ST. J., Jan. 22, 2018.

[5] *See* 2017 FDIC NATIONAL SURVEY OF UNBANKED AND UNDERBANKED HOUSEHOLDS 24.

[6] Bank Act, Canada § 448.1; Access to Basic Banking Services Regulations § 3.

[7] In addition to U.S. depository institutions, see 12 U.S.C. § 342, the Federal Reserve is authorized to maintain accounts for the U.S. Treasury, see 12 U.S.C. § 391, certain government-sponsored enterprises in the residential mortgage area, see 12 U.S.C. §§ 1435, 1452(d) & 1723a(g), foreign governments, banks, and central banks, see 12 U.S.C. §§ 347d & 358, certain international organizations, such as the International Monetary Fund and the World Bank, see 22 U.S.C. § 286d, and certain designated financial market utilities, see 12 U.S.C. § 5465, as well as assorted other governmental and government-sponsored entities that I omit here.

asymmetry at the core of our monetary framework: government-issued physical currency is an open-access resource, available to all, but government-issued digital currency (in the form of central bank accounts) is not.

Under the FedAccount proposal, Congress would direct the Federal Reserve to give the general public—individuals, businesses, and institutions—the option to hold accounts at the central bank. The FedAccount program would put government-issued digital or "account" money on par with government-issued physical currency, transforming digital dollars into a resource that anyone can use. Digital dollars would be an open-access resource, a form of public infrastructure, just like the paper dollars that the Fed issues.

Under the version of the FedAccount proposal that I and my coauthors have described,[8] FedAccounts would offer all the functionality of ordinary bank transaction accounts, except for overdraft coverage. They would come with debit cards for point-of-sale payments and ATM access. They would support direct deposit and online bill pay. Account holders could access their accounts on the internet or through a mobile phone application. Monthly statements would be supplied by email (preferably) or in hard copy. There would be a customer service number. But the Fed would charge no fees and would not impose any minimum balance requirements. FedAccounts would also have all the special features that banks currently enjoy on their central bank accounts: real-time payments, high interest compared with ordinary bank accounts, and full government backing with no need for deposit insurance.

Moreover, the Fed could partner with the U.S. Postal Service to serve as a ubiquitous physical branch network for these accounts. Thus FedAccounts could be merged with postal

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[8] *See* Morgan Ricks, John Crawford & Lev Menand, *Central Banking for All: A Public Option for Bank Accounts*, THE GREAT DEMOCRACY INITIATIVE (June 2018); Morgan Ricks, John Crawford & Lev Menand, *FedAccounts: Digital Dollars*, GEO. WASH. L. REV. (forthcoming 2020).

banking proposals to create a robust public system for money and payments.[9] The U.S. money-and-payments system would, in effect, become fully public infrastructure akin to roads, sidewalks, public libraries, and the judicial system. Viewed from this infrastructural perspective, exclusion from the mainstream money-and-payments system is another dimension of the "digital divide" that has been exacerbated by the COVID-19 crisis.[10]

Opening up access to FedAccounts would offer a range of substantial public policy benefits:

- *Financial inclusion.* Properly structured, the FedAccount program could bring millions of households into the mainstream system of money and payments. This would not only lubricate future EIPs, as noted above, but also improve economic well-being.[11]
- *Consumer protection.* FedAccounts would lessen consumers' need for expensive nonbank credit products, such as payday loans, to cover cash shortfalls and emergency expenses, both because it would speed up payments (see below) and because it would help individuals qualify for credit cards and other forms of bank credit, which are cheaper and safer.
- *Financial stability.* FedAccounts would likely reduce the probability of future financial crises by "crowding out" unstable deposit substitutes, such repurchase agreements or "repo," Eurodollars, and money market mutual fund shares, which are a major source of financial instability.

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[9] Regarding postal banking, see Mehrsa Baradaran, *Postal Banking's Public Benefits*, AMERICAN AFFAIRS (Fall 2018); Mehrsa Baradaran, *It's Time for Postal Banking*, 127 HARV. L. REV. F. 165 (2014).

[10] *See* Klint Finley, *When School is Online, the Digital Divide Grows Greater,* WIRED, April 9, 2020.

[11] *FedAccounts Would Provide Economic Relief—and Inclusion—in the Short and Long Term,* ROOSEVELT INSTITUTE, Apr. 22, 2020

- *Payment speed and efficiency.* Payment delays are costly for the economy as a whole and are especially so for households living paycheck to paycheck.[12] While the Fed uses real-time gross settlement (RTGS) for interbank transfers, retail payment networks in the United States are far slower—another respect in which our payment system lags behind much of the rest of the world. FedAccounts would make the U.S. system faster and more efficient because all payments between FedAccounts would clear in real time on the Fed's books, just like interbank transfers have for decades.
- *Monetary policy transmission.* Since late 2008, the Federal Reserve has implemented interest rate changes by adjusting the interest rate it pays to banks on their central bank accounts. But the Fed has struggled at times to achieve efficient "pass-through" of these interest payments to broader market interest rates. FedAccounts would improve the transmission of monetary policy because the Fed's interest-rate adjustments would be transmitted directly to a wide swath of the public rather than just to banks. Congress could also authorize the Fed to conduct direct "helicopter drops" of money into FedAccounts for emergency stimulus if necessary.[13]
- *Payment system tolls (interchange fees).* The FedAccount program could greatly reduce payment system tolls, because the Fed presumably would not charge interchange fees to merchants accepting its debit cards. Reducing aggregate interchange fees would be a boon to businesses large and small. Ultimately the benefits would be passed along to consumers in the form of lower prices for goods

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[12] *See* Federal Reserve System, *Strategies for Improving the U.S. Payment System*, Jan. 26, 2015, at 38–39; Aaron Klein, *How the Fed Can Help Families Living Paycheck to Paycheck*, Brookings Institution, Nov. 22, 2017.

[13] *See, e.g.*, Julia Coronado & Simon Potter, *Securing Macroeconomic and Monetary Stability with a Federal Reserve-backed Digital Currency*, PIIE Policy Brief 20-4 (2020).

and services. In addition, the Fed could process peer-to-peer payments between FedAccounts for free, creating a frictionless system.

Far from straining fiscal resources, FedAccounts would likely generate revenue for the government, provided the program attracted profitable large accounts and not just small accounts. Central banks' asset portfolio returns typically exceed their interest payments and other expenses by a wide margin. These earnings are called "seigniorage": fiscal revenue from money creation. The amounts are large. The Fed remitted $81 billion, $65 billion, and $55 billion in earnings to the U.S. Treasury Department in 2017, 2018, and 2019, respectively.[14] The FedAccount program might very well augment these remittances because the Fed's incremental account liabilities would be matched by incremental interest-earning assets. In effect, large-balance FedAccounts would generate substantial earnings for the Fed, which could cover the cost of servicing smaller accounts.

To be sure, the FedAccount program would present implementation challenges. It would require the Federal Reserve to build the capacity to service retail accounts, which would be a major operational undertaking. In addition, cybersecurity and fraud prevention for FedAccounts would place a significant new burden on the Fed. While the Fed already runs a highly secure information technology system with expert cyber-defense capabilities at the *system* level,[15] even the most robust perimeter security would not stop customers from compromising their *individual*

[14] *See* Board of Governors of the Federal Reserve System, Press Release: Federal Reserve Board Announces Reserve Bank Income and Expense Data and Transfers to the Treasury for 2019, Jan. 10, 2020.

[15] *See* Shane Harris, *Exclusive: Meet the Fed's First Line of Defense Against Cyber Attacks*, FOREIGN POL'Y, Apr. 29, 2014 (describing the National Incident Response Team, the Fed's "crack cyber security unit"). Furthermore, the Treasury auction process now includes hundreds of bidders and transacts trillions of dollars per year. *See* Treasury Auctions, Federal Reserve Bank of New York, available at www.newyorkfed.org.

accounts—misdirecting funds, losing their passwords, or falling prey to malicious actors.[16] But the Fed could turn to the Department of Homeland Security or third-party contractors to ensure that its account security system is state of the art.

Congress and the Fed would also need to establish privacy protections to ensure that governmental actors do not misuse customer information or inadvertently or deliberately share it with third parties. Of course, the degree to which existing bank accounts are "private" should not be overstated. Information contained in bank records is not protected by the Fourth Amendment.[17] Congress has chosen over time to strike a balance between privacy concerns and other priorities, especially crime prevention and national security. Bank Secrecy Act compliance by banks requires extensive reporting to the government of qualifying financial transactions. FinCEN's database of currency transaction reports and suspicious activity reports contains hundreds of millions of entries; the database is searched tens of thousands of times daily by law enforcement agencies and government investigative bodies.[18] In addition, the Federal Reserve is already subject to privacy laws, but new legislation might adopt more stringent privacy protections akin to those used for taxpayer information. The IRS has adopted comprehensive policies and procedures to protect private data[19] and invests heavily in compliance.[20] Data access

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[16] *See, e.g.*, Stacy Cowley, *Zelle, the Banks' Answer to Venmo, Proves Vulnerable to Fraud*, N.Y. TIMES, April 22, 2018.

[17] This is the "third-party doctrine." *See* United States v. Miller, 425 U.S. 435 (1976) (holding that financial records given to a third-party financial institution receive no Fourth Amendment protection). Also, bank accounts can be garnished or levied by creditors, including federal government agencies acting in their creditor capacities. FedAccounts would be no more readily garnishable than commercial bank accounts.

[18] *See* Brian Monroe, *After Upbeat Congressional Hearing, FinCEN Could Get Help in Information Sharing, Hiring, GTOs*, Assoc. of Cert'd Fin. Crime Specialists, May 5, 2017.

[19] Internal Revenue Manuals Part 10, Security, Privacy and Assurance.

[20] *See, e.g.*, 2017 Annual Privacy, Data Mining, and Section 803 Reports *passim*, Dep't of the Treasury (describing measures implemented by the IRS, among other departments, in privacy protection and compliance).

is carefully limited and tracked within the agency,[21] and unauthorized disclosure and even inspection are criminal offenses punishable by imprisonment[22] in addition to civil damages, including punitive damages.[23] In creating a legal and logistical framework for privacy protection, the IRS could serve as a useful model for FedAccount. The Fed's unmatched level of administrative independence supplies an extra layer of protection in this regard; unlike the IRS, the Federal Reserve Banks are not part of the executive branch.

Let me conclude by comparing FedAccounts to other approaches to implementing a digital dollar. Over the past few years, central bankers around the world have become increasingly worried that privately controlled digital currencies, like Facebook's Libra, will relegate them to the sidelines of monetary affairs. To avoid this fate, central banks have been studying, and in some cases actively pursuing, issuing digital currencies of their own: so-called central bank digital currency (CBDC). China's digital yuan is reportedly in pilot runs.[24]

The FedAccount system *is* a CBDC—it is a digital dollar—but it differs from most CBDC proposals. Those proposals typically envision a closed system of digital wallets that is segregated from the existing system of money and payments, further balkanizing dollar-based payments. Oftentimes CBDC proposals foresee a digital dollar based on distributed ledger technology, like the blockchain technology that undergirds Bitcoin and (prospectively) Libra.[25]

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[21] *See* Alan Rappeport, *Will a Leak Reveal Trump's Tax Returns? Don't Hold Your Breath*, N.Y. TIMES, Mar. 9, 2017.

[22] *See* 26 U.S.C. § 7213(a)(1) (disclosure); 26 U.S.C. § 7213A (inspection).

[23] *See* 26 U.S.C. § 7431.

[24] Aditi Kumar & Eric Rosenbach, *Could China's Digital Currency Unseat the Dollar?*, FOREIGN AFFAIRS, May 20, 2020.

[25] *See, e.g.*, Tommaso Mancini-Griffoli et al., *Casting Light on Central Bank Digital Currency*, IMF STAFF DISCUSSION NOTE, Nov. 2018, at 29 (describing a CBDC design involving "preloading tokens onto a wallet"); Benoit Cœuré, *The Future of Central Bank Money*, speech at the International Center for Monetary and Banking Studies, Geneva, May 14, 2018 ("[C]entral banks today could make use of new technologies that would enable the

By contrast, FedAccounts, like existing reserve accounts that banks maintain at the Fed, would be fully integrated and seamlessly interoperable with the mainstream payment system—a significant advantage. FedAccounts would also rely on low-cost, reliable systems and technologies that the Federal Reserve has used successfully for decades.

To conclude, FedAccounts have the potential to deliver an array of transformative public policy benefits, both within and outside of times of crisis. The proposal deserves serious consideration from Congress. Thank you again for the opportunity to testify today at this important hearing. I look forward to answering your questions.

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introduction of what is widely referred to as a 'token-based' currency—one based on a distributed ledger technology (DLT) or comparable cryptographic technology.").

Statement for the Record

On behalf of the

American Bankers Association

before the

Task Force on Financial Technology

Of the

House Financial Services Committee

June 11, 2020

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The American Bankers Association[1] (ABA) appreciates the opportunity to submit a statement for the record for the hearing titled "Inclusive Banking During a Pandemic: Using FedAccounts and Digital Tools to Improve Delivery of Stimulus Payments." The COVID-19 pandemic has laid bare the consequences of many forms of inequality, including – at the heart of today's hearing – access to banking services. As we have seen over the past few months, the government's ability to deliver aid quickly to support families and small businesses can be literally a matter of life or death. Banks have played a critical role in delivering much-needed stimulus and are supporting their customers and communities affected by the pandemic – and we are committed to improving the system so it's even faster, more effective, and more inclusive. We do not, however, believe that recent proposals to create FedAccounts backed by digital dollars is the answer.

A disruptive federalization of the banking system introduces serious risks to monetary policy, financial stability, credit availability, and financial inclusion. There is important work already underway to ensure all Americans have access to both basic and innovative banking services including real-time payments. Congress can best support pandemic relief efforts and future rounds of stimulus payments by supporting these initiatives.

Banks Have Been a Critical Delivery Mechanism for COVID Relief

As the coronavirus continues to impact communities across the country, America's banks have stepped up to assist individual and business customers affected by the pandemic, as well as the communities they serve. Banks have developed numerous programs to help their customers and acted as a critical delivery mechanism for government stimulus programs designed to help those impacted by this health crisis.

[1] The ABA is the voice of the nation's $18.7 trillion banking industry, which is comprised of small, midsized, regional and large financial institutions. Together, these institutions employ more than 2 million people, safeguard $14.6 trillion in deposits and extend more than $10.5 trillion in loans.

Banks are helping consumers access their Economic Impact Payments.

Digital tools have been a key factor in the unprecedented speed and efficiency of the Economic Impact Payments (EIP) program, and many of these innovations, including remote account opening, remote check deposit, and real-time payments continue to evolve to ensure a more inclusive, accessible, and secure banking ecosystem. Banks have worked hard to ensure the safe and secure delivery of 512 billion in EIPs to more than 159 million Americans under the CARES Act. More than 80 million EIP recipients received their payment electronically on the first day of the program. [2]

This is significantly more efficient than past stimulus payments. It took Treasury just two months to deliver the 159 million payments. The last time a similar effort was undertaken in 2009 it took over two months to deliver 800,000 payments. The majority of the payments this year were made electronically with 120 million delivered by direct deposit and 4 million in the form of a prepaid card.

ABA encouraged Treasury to maximize the use of electronic payments by leveraging all existing government data sources to identify eligible recipients with deposit account information on file and by creating a web portal to allow individuals not in those systems to upload their direct deposit information and promoted that portal once it was established. We also worked with the FDIC and others to promote remote account opening offerings, including those that could be funded initially with an EIP.

Banks are also working to help check recipients access their EIPs. They are creating "safe" and socially distant ways to cash checks. In addition, a number of banks have committed to cash stimulus checks for noncustomers for free.

ABA agrees, however, that improvements can be made to deliver even more payments electronically and to move those electronic payments even more quickly by leveraging existing real-time payments and other capabilities. We have committed to working closely with the Department of Treasury to consider these changes for future rounds of stimulus payments.[3] In addition, ABA has worked with other banking trade associations and with consumer and public interest groups to seek legal clarity that stimulus payments are critical economic relief and should not be subject to garnishment.[4]

Banks have been central to delivery of Paycheck Protection Program funds.

Banks have also played a central role in delivering the Paycheck Protection Program (PPP) loans designed to give businesses the resources to keep their workforce employed through the pandemic. As of June 8, the PPP has delivered 4.5 million loans worth $512 billion at an average size of $113,000.

Banks' presence in their community and their strong balance sheets enabled them to quickly move to get these funds where they were most needed. In the first round of the program, banks accounted for 93.7% of

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[2] https://home.treasury.gov/news/press-releases/sm1025

[3] May 13, 2020, Joint Trade Association letter to Treasury Fiscal Assistant Secretary David Lebryk.

[4] May 26, 2020, Press Release, Consumer, Banking Groups Applaud Bill to Exempt Economic Impact Payments From Garnishment,

all PPP loans. While full cumulative data is not yet available, banks account for 81.7% of loans made by institutions under $1 billion.[5]

One factor that contributed to banks' swift response is their balance sheet driven model. While market-funded lenders had to wait for new funding facilities, many banks were able to leverage their deposit funding to begin funding loans right away. If FedAccount proposals were successfully implemented, they would severely limit the kind of deposits that made this swift action possible.

Banks are working with their customers.

In addition to their role in delivering government stimulus, banks have provided unprecedented assistance to customers affected by the pandemic. The relief, which varies by institution and depends on a customer's individual circumstances, includes (but is not limited to):

- Offering hardship programs
- Waiving certain fees
- Deferring loan payments
- Providing temporary credit lines
- Modifying loans
- Helping customers use mobile and digital banking platforms
- Alerting customers to scams related to the coronavirus
- Offering "safe" banking services by expanding drive-through and ATM operations
- Establishing "Golden Hours" when at risk individuals such as seniors can bank in a branch with less risk of exposure to the virus

Implementation of FedAccounts or a digital dollar would not help deliver COVID aid.

The implementation of FedAccounts cannot be accomplished by flipping a switch and would take far too long to have any impact on the COVID recovery. Before the Federal Reserve could unveil FedAccounts they would have to carefully consider the implications to the monetary and banking systems and build the infrastructure and expertise to operate a consumer-facing bank.

The Monetary Control Act and the Federal Reserve's longstanding policy regarding the provision of payments services requires the Federal Reserve to meet three criteria when considering offering a new service. The basic requirements are:

1. Full recovery of costs over the long run.
2. The service will provide a clear public benefit.
3. The service should be one that other providers alone can't be expected to provide with reasonable scope, effectiveness, and equity.

[5] https://www.nber.org/papers/w27095

Banks are Committed to Financial Inclusion; FedAccounts Would Undermine those Efforts

A foundational goal of FedAccounts (and similar proposals like postal banking) is to promote financial inclusion and to give more Americans access to fast payments. America's banks are committed to promoting financial inclusion. Access to banking services provides people with a means to save for their future and economic opportunity that is critical to promoting social equality. This is an important and urgent goal; however, by taking too narrow a view of the problem, FedAccount proposals risk undermining these efforts.

ABA and its member banks are leveraging new digital tools to bring more Americans into the banking system.

FedAccount proposals focus solely on the question of access to a deposit account. While it is true that deposit accounts are often the first step towards inclusion, 95% of U.S. households already have access to a bank account or prepaid card account.[6]

The U.S. rate of inclusion positions the U.S. as a global leader in financial inclusion, but it is not good enough, and there is work to be done. Banks are committed to continued investments to ensure all Americans have access to the banking system.

Today, unbanked customers have numerous options to open bank accounts. ABA has worked collaboratively with the FDIC and BankOn[7] to publish a list[8] of banks where consumers can open an account entirely online, with no need for a customer to visit a branch. Many of these accounts can be opened with a zero balance and funded entirely by an EIP.

Through BankOn and other efforts, free and low-cost bank accounts are widely available at banks of all sizes. BankOn sets account standards that provide a benchmark for safe, affordable accounts at mainstream financial institutions, setting consumers on a path toward financial inclusion. Today, these accounts are available at over 24,000 branches across the United States.

FedAccount proposals would do little to improve on these programs or address the true reasons that consumers don't have accounts today. The top three cited reasons cited for not having a bank account

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[6] 2017 (most recent) FDIC National Survey of Unbanked and Underbanked Households. which shows that 93.5 percent of households have a checking or savings account (page 2) and an 26.9 percent of the unbanked have a prepaid account (page 7). Prepaid accounts generally offer the same features and functions of as checking accounts though they do not permit overdrafts.

[7] Bank On platform supports local coalition and financial institution efforts to connect consumers to safe, affordable banks accounts and worked to develop Bank On National Accounts standards.

[8] https://www.aba.com/banking-topics/payments/economic-impact-payments/banks-offering-online-account-opening?utm_source=fdic&utm_medium=referral&utm_campaign=covid&utm_content=fdiclink

include "don't have enough money to keep in account" (52%), "don't trust banks" (30.2%), and "avoiding bank gives more privacy" (28%). [9]

The benefits of a long-term banking relationship go well beyond a deposit account.

By focusing solely on Americans without access to an account, FedAccount proposals ignore the 18.7% of U.S. households that are considered underbanked. These households have an account at an insured institution but also have had to rely on financial products or services outside of the banking system like payday lenders.

Not only do current FedAccounts proposals not address this serious issue, they will likely exacerbate it. Philadelphia Fed Research referenced above found that these proposals would create a "deposit monopoly" that would "attract deposits away from the commercial banking sector." This has the effect of reducing the funds on banks balance sheets that is available to lend which would reduce access to credit.[10]

Innovation in banking has the strongest potential to drive inclusion.

ABA believes that responsible innovation in financial services will continue to benefit customers as it has throughout the history of banking and has the potential to drive financial inclusion. New technologies have been shown to make it possible to extend credit to many more borrowers.

Digital technology has put a bank branch into a consumer's pocket. This makes banking more convenient but also more accessible. The scalable nature of these technologies mean that it is cheaper today to extend financial services to more people. Recent examples include:

- Mobile banking that can give people without easy access to physical branches access to a full suite of banking services;
- New underwriting technologies like cashflow lending that allow banks to evaluate the creditworthiness of those with little to no credit history;
- Automated underwriting that lowers the cost of underwriting individual loans making it possible to profitably extend smaller loans; and
- AI and other technologies that have created easy-to-use and intuitive interfaces that make technology more accessible.

Fast, Electronic Payments are Already a Reality

While FedAccount proposals claim to speed up payments, the reality is that the majority of payments in the U.S. are already digital. Today, consumers and businesses have the option to pay with credit or debit cards, payments applications like Zelle or Venmo, and via automated clearinghouse (ACH).

Efforts to modernize and speed up our payments system have been underway for some time and are already being implemented. The Federal Reserve's 2017 Faster Payments Task Force examined the entirety of the payment system and its experts, including consumer groups, recommended faster networks – not a

[9] https://economicinclusion.gov/downloads/2017_FDIC_Unbanked_HH_Survey_Report.pdf

[10] https://www.philadelphiafed.org/-/media/research-and-data/publications/working-papers/2020/wp20-19.pdf

new currency. As a result of these efforts, the Federal Reserve is building out a instant payments solution called FedNow.

Industry has been driving these improvements as well. The Real-Time Payments (RTP) Network is a brand-new instant payment system that represents an advancement equivalent to moving from dial-up to broadband in terms of speed and features. ABA was a strong advocate for using this capability as part of the EIP program to speed electronic payments to those with bank accounts or even prepaid cards.

Together, RTP, FedNow, and faster ACH systems are forming a web of super-fast, low-cost or free digital payment options that will make waiting for days a thing of the past.

Implementing FedAccounts would be a distraction that creates delays in deploying many payments improvements, and derail some entirely. Even the newest systems would have to be reworked and the Fed's resources would be diverted from developing and deploying FedNow, an urgent priority.

Given the significant investments in digital payments and the strong progress that has been made, there is little role for a digital dollar. Governor Brainard came to the same conclusion in her evaluation of CBDC noting:

> There is no compelling demonstrated need for a Fed-issued digital currency. Most consumers and businesses in the U.S. already make retail payments electronically using debit and credit cards, payment applications, and the automated clearinghouse network. Moreover, people are finding easy ways to make digital payments directly to other people through a variety of mobile apps. New private-sector real-time payments solutions are beginning to gain acceptance in the United States. And the Faster Payments Task Force has laid out a roadmap embraced by a variety of stakeholders for a fast, ubiquitous, and secure payments system to be in place in the United States in the next few years. In short, a multiplicity of mechanisms are likely to be available for American consumers to make payments electronically in real time. As such, it is not obvious what additional value a Fed-issued digital currency would provide over and above these options.[11]

FedAccounts Proposals Have Wide-Ranging Implications that Would Undermine Recovery and Limit Future Economic Growth

The implementation of FedAccounts have serious implications for the transmission of monetary policy and would fundamentally reshape our banking system. While the goals of these propoals are narrow, they have wide-ranging unintended consequences that undermine these goals and would do more harm than good.

FedAccounts threaten the retail banking model.

The successful implementation of FedAccount proposals would have serious implications for retail banking that reach well beyond payments. In effect, these accounts will serve as an advantaged competitor to retail bank deposits that will move money off bank balance sheets where it can be lent back into the economy and into accounts at the Federal Reserve.

While depositors at FDIC insured banks have never lost a penny of an insured deposit, it is hard to compete with a government agency that prints that money. Philadelphia Federal Reserve research found that

[11] https://www.federalreserve.gov/newsevents/speech/files/brainard20180515a.pdf

depositors value this and will, in equilibrium, choose to hold their funds at the Federal Reserve instead of at retail banks, establishing the Federal Reserve as a "deposit monopolist."

Unlike retail banks, the Federal Reserve is not prepared to make loans to consumers and businesses. As deposits migrate from bank balance sheets to the Federal Reserve, it will severely restrict the availability of the capital that fuels economic growth.

In times of economic hardship, banks' balance sheet driven model is even more important. Banks' balance sheets and strong capital position allow them to make long-term investments and continue lending throughout a downturn, just when it is needed most.

A digital currency also creates a risk to financial stability. In times of economic stress, depositors are likely to prefer holding their money at the Federal Reserve. This creates a risk of bank runs that would undermine financial stability.

Federal Reserve is not positioned to be a retail bank.

The Federal Reserve has neither the authority nor experience to operate a consumer-facing bank. The banking industry has a long track record of serving customers. To do this, America's banks employ more than 2 million people. Today the Federal Reserve System has about 20,000 employees. Building a nationwide consumer-facing bank would require a substantial investment in staff, expertise, processes and infrastructure.

Governor Brainard details some operational challenges that this would entail,

> "First, there are serious technical and operational challenges that would need to be overcome, such as the risk of creating a global target for cyberattacks or a ready means of money laundering. For starters, with regard to money laundering risks, unless there is the technological capability for effective identity authentication, a central bank digital currency would provide no improvement over physical notes and could be worse than current noncash funds transfer systems, especially for a digital currency that could circulate worldwide. In addition, 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. Any implementation would need to adequately deal with a variety of cyber threats--especially for a reserve currency like the U.S. dollar." [12]

A central bank digital currency implicates societal values and privacy.

By making a quasi-governmental body into the nation's near-monopoly provider of currency, bank accounts, and payment services, the Federal Reserve would quickly become politicized as the central control point for monitoring and potentially denying transactions. For controversial but locally-regulated purchases such as cannabis and firearms, a central bank digital currency would entangle the Federal Reserve as a national arbiter of social issues. The right of people to transact outside the view of the central bank is a cherished civil liberty that is preserved and protected by the due process of a competitive private banking sector.

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[12] https://www.federalreserve.gov/newsevents/speech/files/brainard20180515a.pdf

Conclusion

As our nation faces a pandemic, it is only natural that we look to technology for innovative solutions to address the new problems that we face today. The rapid convergence of banking and technology is quickly changing the financial services market in ways that are making financial services cheaper and more widely available and accessible.

FedAccount and digital dollar proposals are well-intentioned but ineffective responses to the challenges identified by supporters. They look to provide more efficient COVID relief, but would take far too long to implement to have any meaningful effect. They look to promote financial inclusion but take a narrow view of the problem and would ultimately undermine it. They seek to speed up payments while ignoring the cross-industry efforts that are already underway and delivering for consumers.

Ultimately these proposals fall short on their promise and introduce serious unintended consequences that would undermine our recovery and future economic growth.

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11 June 2020

To: U.S. House Committee on Financial Services
Task Force on Financial Technology
From: Robert Hockett, Edward Cornell Professor
Cornell Law School
Re: Dollar Digitization & Financial Inclusion

Dear Members of the Task Force,

I write to urge you to consider multiple options where both dollar digitization and financial inclusion are concerned, and hence to schedule multiple hearings as quickly as possible to begin vetting all plausible options. Today's hearings will make for a helpful start, but will not of themselves take us to where we must go with anywhere near sufficient alacrity.

While adding functionalities to the Fed or the Postal Service as you are considering today have much to recommend them, one serious drawback they share is that they would take quite long to institute and then implement. There are at least two reasons for that.

One reason is that adding these functions to the Fed's or the Postal Service's mandates would affect the conduct of many other functions that both of these instrumentalities perform, and would accordingly have to be done pursuant to careful design to ensure inter-functional compatibility. The other reason is that these new functions involve operations with which neither the Fed nor the Postal Service has had any relevant experience in well over half a century.

There is another option, by contrast, that could be instituted and fully implemented this very summer – both by a federal instrumentality that has much current experience with the relevant operations, and in a manner that requires only minimal harmonization with current functions. I refer to the already-existent 'TreasuryDirect' system of individual taxpayer digital savings accounts.

TreasuryDirect enables anyone with a Social Security or Taxpayer Identification Number to open an electronic account with the Treasury – a TreasuryDirect Account, or 'TDA.' Through this account the accountholder may purchase or redeem U.S. Treasury securities.

While at present use of TreasuryDirect requires accountholders already to possess bank accounts out of which to make and into which to receive payments to and from Treasury, all that would be necessary to convert *TDAs themselves* into digital bank accounts would be to authorize accountholders to receive and hold dollars in, and to pay dollars out, of them. These could in turn be digital Federal Reserve Notes equivalent to current paper dollars, or newly authorized legal tender digital *Treasury* Notes that would be Federal Reserve Note equivalents.

Moreover, were 'horizontal' peer-to-peer (P2P) connectivity to be added to TreasuryDirect accounts alongside the already present 'vertical' connectivity between TreasuryDirect Accounts and the Treasury,

we would have in the new TreasuryDirect system a complete and universally usable online digital savings and payments platform – in a word, digital banking – for literally every person and business in America. U.S. Digital Service, an executive agency, avers that it could work this conversion within literally weeks.

Some of you might find the idea that Treasury could itself issue digital dollars and administer an associated digital banking platform surprising. In fact, however, it is not at all exotic.

For one thing, the digital accounts infrastructure itself, as I say, already exists – this is all that TreasuryDirect *is*. For another thing, issuance of a Treasury Dollar would be nothing more than a digital version of what we did as a nation upon first adopting a *paper* dollar during the Civil War era. I refer to the Treasury-issued 'Greenback' from which our current paper dollar developed – a currency that was effectively *the* US paper dollar until well into the 20th century after the Fed was established.

What is more, the TreasuryDirect option can always later be migrated, in the fullness of time, over to Fed administration – just as we did with the Greenback, which morphed into our present-day paper dollar. This means that we could have universally available digital banking for all *this very summer*, allowing yourselves and the Fed or Postal Service all the time you might need to determine how best to migrate the system over to *their* 'wheelhouses' later.

You could also, if you thought it best, limit the amounts people may hold, or that Treasury might deposit, into TreasuryDirect accounts, thereby minimizing any undesired 'disruption' to the private sector banking sector that currently serves (a mere) 75% of our population.

I attach to this letter a brief white paper and draft statute (the latter requires only three pages exclusive of findings and definitions) that both blueprints and diagrams my proposed platform and explains just how easy it would be to institute and implement it. I'll also link to a number of OpEds I've published on the idea in the *Wall Street Journal*, *Forbes*, *Bloomberg*, *The Hill*, and a large number of other tech and financial journals.

I implore you seriously to explore this option. The nation quite literally cannot afford now to put universal financial inclusion or dollar digitization off any longer. You can quite literally have Treasury making stimulus payments in real time to literally everyone this very summer. You can always then tweak the resulting system, or migrate it over to the Fed or the Postal Service, later.

Sincerely,

Robert Hockett
Edward Cornell Endowed Chair
Cornell Law School
Visiting Professor of Finance
Georgetown McDonough School of Business

Attachment: White Paper: Digital Greenbacks

Credit Union National Association
CUNA

Jim Nussle
President & CEO

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99 M Street SE
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June 10, 2020

The Honorable Stephen Lynch
Chairman
House Financial Services Committee
Task Force on Financial Technology
Washington, DC 20515

The Honorable Tom Emmer
Ranking Member
House Financial Services Committee
Task Force on Financial Technology
Washington, DC 20515

Chairman Lynch and Ranking Member Emmer:

On behalf of America's credit unions, I am writing to express credit unions views ahead of the hearing titled "Inclusive Banking During a Pandemic: Using Fed Accounts and Digital Tools to Improve Delivery of Stimulus Payments" The Credit Union National Association (CUNA) represents America's credit unions and their 115 million members.

The Task Force's hearing is timely as we now have experience with several programs that were part of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), which was enacted to provide economic relief and bolster the economy in response to the COVID-19 pandemic. We appreciate the hearing's focus on economic impact payments (EIP) or "recovery rebates" as they were also called in the hearing memorandum. EIPs were payments to individuals that were distributed by the Internal Revenue Service (IRS) in conjunction with the Treasury Department's Bureau of the Fiscal Service.

As you are aware, it appears that the majority of EIPs were made by direct deposit though a significant number of payments were also made by check. Payments by check could ultimately be as high as 65 million according to the Hearing Memorandum. While there are numerous reasons why individuals received checks instead direct deposits, the focus at this hearing is the lack of access to financial services. According to the Federal Deposit Insurance Corporation (FDIC), there are approximately 8.4 million households (6.5 percent of all households) that are unbanked with another 24.2 million households (18.7 percent) that are "underbanked," meaning they may have an account at a financial institution but utilize other non-banks for some financial service needs.

Chairwoman Waters introduced the "Financial Protections and Assistance for America's Consumers, States, Businesses, and Vulnerable Populations Act," to address numerous issues arising from the pandemic. The bill includes a provision to provide monthly stimulus payments and for these payments to be distributed by direct deposit or to a new, basic bank account backed by the Federal Reserve, called "FedAccounts." Senator Brown has also introduced the "Banking for All Act," which would create similar methods of payment. The creation of FedAccounts is similar to past proposals that would create deposit accounts at post offices allowing them to be used as banks.

While credit unions agree with the spirit of those proposals to create FedAccounts, we think that Americans would best be served by leveraging the banking system already in place. There is no need to pass legislation requiring the Federal Reserve or the United State Postal Service to provide products and services that the organizations were not designed to provide. Instead, Congress should be using its public platform to encourage all consumers, especially the most vulnerable among us, to seek out financial services from a community-based, not-for-profit credit union. As the nation's original consumer protectors, credit unions have a long history of providing affordable, responsible

access to banking services. In fact, membership in a credit union provides a consumer with protections and access not available through a FedAccount:

- **Affordable Products and Services:** Credit unions provide best in the business products and services at lower rates than their bank counterparts. For example, as of December 2018, credit unions' average interest rate for classic credit cards stood at 11.61 percent compared to banks' average interest rate of 13.47 percent.
- **Usury Cap:** The Federal Credit Union (FCU) Act and National Credit Union Administration (NCUA) Board has set a usury cap of 18 percent for most financial products, including credit cards.
- **Broad Access for Consumers:** The Shared Branching Network and other arrangements have established a wide-ranging, surcharge-free ATM network that allows a credit union's members to use branches of other credit unions. This cooperative network ensures members have access their money almost anywhere.

Congress and credit unions can work together to increase awareness among the unbanked giving options for affordable financial services that are available and convenient through the credit union system. A part of that effort would be erasing misconceptions about credit unions: while everyone cannot join the same credit union, there is a credit union for everyone to join.

We agree that consumers should have access to financial services, but we think that credit unions are the best organization to deliver financial services. That is why CUNA has advocated for solutions to help consumers access credit unions, including reduced regulatory burden, increased authority for credit unions to expand product offerings, and increased ability to expand fields of membership into areas in need of high-quality financial services. If the door to a credit union was open a bit wider, then the underserved and unbanked would be a lot better off.

On behalf of America's credit unions and their 115 million members, thank you for holding this important hearing and considering our views.

Sincerely,

Jim Nussle
President & CEO

eCurrency

The Honorable Maxine Waters
Chairwoman
Committee on Financial Services
U.S. House of Representatives
Washington, DC 20515

The Honorable Patrick McHenry
Ranking Member
Committee on Financial Services
U.S. House of Representatives
Washington, DC 20515

The Honorable Stephen Lynch
Chairman
Taskforce on Financial Technology
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The Honorable Tom Emmer
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Subject: June 11, 2020 - Virtual Hearing – Inclusive Banking During a Pandemic: Using FedAccounts and Digital Tools to Improve Delivery of Stimulus Payments.

Letter proposing a Fed Issued Digital Dollar (FIDD) to enhance Financial Inclusion and efficient delivery of stimulus payments.

Dear Chairwoman Waters, Ranking Member McHenry, Chairman Lynch, and Ranking Member Emmer,

On behalf of my colleagues at eCurrency, I would like to thank you, the members of this task force, and the Committee for this opportunity to provide input to your deliberation on June 11, 2020. In particular, we would like to put forth for your consideration a Fed Issued Digital Dollar as a prudent solution for the challenges inherent in our current financial infrastructure.

eCurrency is a technology infrastructure provider founded solely to create the technology to allow central banks, such as the US Federal Reserve, to issue fiat digital currency. We are a security technology provider working exclusively on digital secure currency technology making us unique in the industry. We are not a cryptocurrency (e.g., bitcoin) company. We do not portend to issue a crypto stablecoin such as Libra. We believe that only the United States can issue a Digital Dollar and that the US Federal Reserve should have that authority.

Today, the Federal Reserve works with the United States Department of Treasury to print and issue US Dollar currency. Likewise, we see the Fed issuing a Digital Dollar in the future. eCurrency focuses on providing the technology infrastructure to ensure that the Digital Dollar is secure, safe, and cannot be counterfeited. The Fed Issued Digital Dollar currency cannot be replaced by a cryptocurrency, stablecoin, or any other privately issued crypto.

eCurrency

We applaud the initiative to examine Digital Tools and believe a Fed Issued Digital Dollar is an efficient mechanism for delivery of payments. We would further like to suggest that a Fed Issued Digital Dollar provides all the capabilities anticipated in FedAccounts and mitigates the challenges and risks associated with creating FedAccounts for each and every citizen of the United States. There are numerous converging factors that encourage us to examine the Fed Issued Digital Dollar. These include:

1. Financial Inclusion enabled by a Fed Issued Digital Dollar – reaching everyone including the unbanked and marginalized populations while protecting privacy and self-determination. This is especially important in this COVID crisis but also has implications in the long run development of financial services infrastructure for inclusive services.[1][2][3][4]

2. Privacy considerations associated with digital tools – whereas a centralized account held at the Fed could violate individual privacy, a Digital Dollar can be implemented so as to protect privacy. Furthermore, the Digital Dollar should be decoupled from the wallet in which it is held to ensure the appropriate level of privacy. The design of the Fed Issued Digital Dollar has to incorporate support for other security requirements and regulations.

3. Ensure US leadership in fintech and preserve the role of the US Dollar in global trade – in light of the People's Bank of China announcing the issuance of a digital Renminbi. China's stated goal of making the Renminbi an internationally viable currency.[5][6]

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1 Ye, Chen, Desouza, Kevin C. "The Current Landscape of Central Bank Digital Currencies", Brookings.edu, 13 December 2019, www.brookings.edu/blog/techtank/2019/12/13/the-current-landscape-of-central-bank-digital-currencies/.

2 Adrian, Tobias, Mancini-Griffoli, Tommaso. "Central Bank Digital Currencies: 4 Questions and Answers", IMFBlog - Insights and Analysis on Economics and Finance, 12 December 2019, blogs.imf.org/2019/12/12/central-bank-digital-currencies-4-questions-and-answers/.

3 CEMLA Fintech Working Group. "Key Aspects around Central Bank Digital Currencies, Policy Report", cemla.org, May 2019, www.cemla.org/fintech/docs/2019-06-KeyAspectsAroundBankDigitalCurrencies.pdf.

4 Dharmapalan, Jonathan, McMahon, Carolyn. Case for digital legal tender- Central Bank Issued Digital Currency and its Impact on Financial Inclusion, eCurrency, April 2016, www.ecurrency.net/media/document/201901/TheCaseForDigitalLegalTender-ImpactOnFinancialInclusion.pdf.

5 Elegant, Naomi Xu. "Why China's Digital Currency is a 'Wake-Up Call' for the U.S.", Fortune.com, 1 November 2019, fortune.com/2019/11/01/china-digital-currency-libra-wakeup-call-us.

6 Casey, Michael. "Why the U.S. shouldn't let China dominate the digital currency race", Fortune.com, 7 April 2020, fortune.com/2020/04/07/china-us-digital-currency-coronavirus/.

4. A response to cryptocurrency propositions – the recent proposal by Facebook to issue a Libra cryptocurrency and the growing popularity of Bitcoin and other cryptos enabling speculations and illicit trade should encourage the US to examine a Fed Issued Digital Dollar.[7][8][9]

For all of the above reasons, we encourage the committee to consider the benefits of a Fed Issued Digital Dollar. With that said it is important to address the legal and policy considerations of the Fed Issuing a Digital Dollar. Of paramount importance is the legal authority of the Fed to extend its role in issuing paper currency to issuing digital currency. A discussion on legal and policy considerations follows:

Policy input to ensure the safe issuance of a US Fed Issued Digital Dollar (FIDD)

In order to facilitate the creation of a Fed Issued Digital Dollar Congress must:

- Enhance existing legislation to clarify that the Federal Reserve extend its authority to issue a Fed Issued Digital Dollar, in digital form, much like it issues the US Dollar today.
- Ensure legislation that no other organization, public or private, may issue a Digital Dollar in the United States.
- Ensure that no other currency, crypto or stablecoin, attempts to compete with the US Dollar in the United States, digital or otherwise.
- Clarify that the Fed Issued Digital Dollar is not an account at the Federal Reserve that competes with commercial bank accounts.
- Ensure that the Fed Issued Digital Dollar can be widely distributed to the public by both public and private sector participants very much like the US Dollar is today.
- Clarify legislation that the Digital Dollar is Legal Tender and as such a public instrument of the United States Treasury thereby decoupling legal tender from wallets and payment systems which are provided by private sector participants.
- Ensure Digital Dollar legislation does not attempt to specify technologies, architectures or designs limiting the ability of the Federal Reserve to evolve to the best available technology.

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7 Brett, Jason. "How Project Libra and COVID-19 Drove Digital Dollar Idea in Congress", Forbes.com, 24 April 2020, www.forbes.com/sites/jasonbrett/2020/04/24/how-project-libra-and-covid-19-drove-digital-dollar-idea-in-congress/#67791b1e2c51.

8 Heeb, Gina. "The Federal Reserve is looking into developing a digital currency in the US, Powell confirms", Markets Insider, 20 November 2019, markets.businessinsider.com/news/stocks/the-federal-reserve-is-looking-into-developing-digital-currency-us-2019-11-1028705211.

9 Guarascio, Francesco. "Alarmed by Libra, EU to look into issuing public digital currency:draft", Reuters, 5 November 2019, www.reuters.com/article/us-eu-cryptocurrency-regulations/alarmed-by-libra-eu-to-look-into-issuing-public-digital-currency-draft-idUSKBN1XF1VC.

- Ensure Digital Dollar legislation continues to protect privacy; the introduction of a Digital Dollar should not violate privacy regulations.
- Recognize the Digital Dollar as a security instrument and if compromised might have adverse impact on national security. It must comply with the security requirements of US classified systems and with security requirements for High Impact systems per the Federal Information Security Management Act.

eCurrency Central Bank Digital Currency (CBDC) Solution

The eCurrency CBDC solution allows the issuance, distribution, and transaction of CBDCs with sufficient speed, scale, instant and final settlement, and continuous operations. eCurrency technology enables central banks to issue electronic value infusing trust creating sovereign-backed currency, a digital bearer instrument. Each unit of CBDC consists of a self-contained security instrument made up of many layers of security technology uniquely bound together. The CBDC instruments are protected by secure quantum resistant algorithm, protecting against counterfeit and tampering. It is transported in digital form within a secure storage device to institutions such as banks and other financial service providers. Those institutions will then distribute it to consumers in the same manner that paper currency is distributed today. Consumers will transact using existing payments networks (payment cards, mobile money accounts, etc.).

One of the key advantages of a Fed Issued Digital Dollar would be the decoupling of the US Digital Dollar from a FedAccount system. Digital bearer instruments do not require the Federal Reserve to manage FedAccounts, which would likely include hundreds of millions of users. This would allow the Federal Reserve to preserve its role as the issuer of money and not necessitate it to take on the role traditionally played by commercial banks.

Decoupling the Digital Dollar from wallets means that the Fed Reserve would be the issuer of the sovereign digital currency, financial intermediaries the distributors, and individuals and businesses the users through existing payment rails. This helps create a risk-free digital payments system backed by the state as a public good, bringing efficiency gains from sharply reduced transaction costs and cash use, and helping expand markets. Because of the interoperability of this public-private partnership architecture, it is pro-competition and pro-financial inclusion. Such a design also means that access to real-time digital data enhances policy making. Decoupling the Digital Dollar from wallets also allows the Fed to monitor currency without compromising privacy objectives.

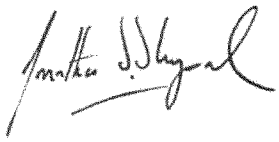
The financial infrastructure must evolve and change to effectively address financial inclusion. eCurrency is committed to support the development and deployment of the Digital Dollar by the Fed. The adoption of CBDC will enable initiatives like the distribution of stimulus during the pandemic and allow the US government to efficiently and economically reach marginalized populations.

eCurrency

The US Dollar is the most widely accepted and held currency in the world. As other nations begin to test and deploy digital currency, it is imperative that the US remains competitive and is able to maintain the role of the US Dollar as the world's strongest currency by deploying a US Fed Issued Digital Dollar.

We are honored to submit our input for the consideration of the US House Committee on Financial Services. We again thank you for this opportunity and look forward to the results of the Committee's findings.

Sincerely,



Jonathan Dharmapalan
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June 11, 2020

The Honorable Stephen Lynch
Chairman
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House Committee on Financial Services
2109 Rayburn House Office Building
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The Honorable Tom Emmer
Ranking Member
Task Force on Financial Technology
House Committee on Financial Services
315 Cannon House Office Building
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Dear Chairman Lynch and Ranking Member Emmer:

This letter is submitted to the to the House Task Force on Financial Technology (the "Task Force") in relation to its June 11, 2020, hearing entitled, "*Inclusive Banking During a Pandemic: Using FedAccounts and Digital Tools to Improve Delivery of Stimulus Payments.*" on behalf of the Innovative Payments Association.[1] The IPA appreciates the opportunity to share its comments with the Task Force regarding the prepaid industry's response to the COVID-19 pandemic, the industry's ongoing efforts to promote financial inclusion, and the benefits and protections that prepaid accounts offer consumers, governments, and businesses alike.

The IPA acknowledges that this hearing is taking place during a very difficult time for millions of Americans, especially those directly impacted by the COVID-19 pandemic. In response to the national emergency created by COVID-19, Congress passed the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) to provide direct financial support to individuals and small businesses. Notably, Congress authorized direct relief payments, called Economic Impact Payments (EIP), to individuals —up to $1,200 for individuals and $2,400 for married couples, plus an additional $500 per child subject to income limitations. As a result of actions taken by Congress and the President, federal agencies mobilized to provide solutions to help Americans through this crisis. The IPA appreciates and applauds the positive actions taken by the Congress, the Department of the Treasury (Treasury), the Internal Revenue Service (IRS), the Consumer Financial Protection Bureau (CFPB), and others to ensure that EIP made into the hands of Americans quickly, securely, and conveniently. Moreover, the IPA commends the unsung heroes who work at Treasury, the IRS, and the Bureau of Fiscal Service (BFS) for accepting the seemingly impossible and unprecendent challenge of distributing nearly $250 billion Economic Impact Payments (EIP) authorized by the CARES Act in less than two

[1] The IPA is a trade organization that serves as the leading voice of the electronic payments sector, including prepaid products, mobile wallets, and person-to-person (P2P) technology for consumers, businesses and governments at all levels. The IPA's goal is to encourage efficient use of electronic payments, cultivate financial inclusion through educating and empowering consumers, represent the industry before legislative and regulatory bodies, and provide thought leadership. The comments made in this letter do not necessarily represent the position of all members of the IPA.

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months.

We note that prepaid accounts serve a crucial function in disbursing financial payments and government benefits. Recognition of the important role that can be played by prepaid accounts in making such disbursements efficiently during this critical time is evidenced in the myriad letters written to the U.S Department of Treasury and Internal Revenue Service by Congressional representatives, urging these agencies to utilize prepaid accounts for the disbursement of economic relief payments. Copies of these congressional letters are attached hereto for your reference as Exhibit A.

The IPA believes that the importance of prepaid account products during the COVID-19 crisis underscores the significant consumer benefits offered by these products and services more generally. In April, the CFPB publicly encouraged the use of prepaid cards to disburse EIPs, stating prepaid accounts are faster, more secure, more convenient, and less expensive than paper checks. On top of having the backing of the government's top consumer finance watchdog, the Chairman of the House Financial Services Committee Subcommittee on Consumer Protection and Financial Institutions, U.S. Representative Greg Meeks authored a bipartisan letter supporting the use of prepaid products to distribute EIPs.

Given the positive support of prepaid products outlined above, the recent announcement by the U.S. Department of the Treasury that the IRS intends to distribute nearly 4 million Economic Impact Payments (EIPs) by prepaid card is further acknowledgment that prepaid cards are an indispensable tool in help Americans during the current national crisis. In fact, U.S. Treasury Secretary Steve Mnuchin told the President in a cabinet meeting that "we [Treasury] think [prepaid] debit cards are a safe and secure way of delivering refunds." Several states also use prepaid cards to distribute unemployment benefits.

The use of prepaid accounts for the disbursement of government benefits has increased in popularity and use over the past several years as state and federal governments move consumers away from paper checks in order to reduce fraud, save money, and improve the overall customer experience in receiving benefits. The Federal Reserve regularly reports to Congress on the use of prepaid accounts for distributing government benefits. The first sentence in their September 2019 report (Report to the Congress on Government-Administered, General-Use Prepaid Cards - September 2019) explains why governments do this:

> *Federal, state, and local government offices use prepaid cards to disburse funds at a lower cost than checks (or other paper-based payment instruments such as vouchers or coupons) and to provide an alternative to direct deposit for payment recipients, especially those recipients who do not have a bank.*

In 2011, then U.S. Treasury Secretary Rosie Rios estimated the cost of issuing paper checks

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to be 92 cents higher than the cost of direct deposits. Further, the U.S. Treasury Department estimated federal beneficiaries to be 125 times more likely to have difficulties with paper checks versus electronic payments and an added taxpayer price tag of $120 million for paper checks that would only increase as more baby boomers retire. The federal government disbursed $137 billion in benefits, including Social Security, veterans' benefits, and child support, using prepaid cards in 2018.

They are not alone. Every state in the Union uses prepaid cards to distribute benefits such as Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance to Needy Family (TANF) benefits, Social Securtiy and unemployment insurance to their citizens. In doing so, they save taxpayer dollars, administrative time, and bureaucratic troubles over paper check payments. When it comes to unemployment insurance specifically, the IPA would like to note the success of state unemployment insurance prepaid programs. With an estimated 42 million unemployment claims filed since the beginning of the COVID-19 crisis, prepaid providers worked hard with their parteners at state agencies to quickly scale up their programs to handle the increased number of support payments.

As discussed above, the move away from checks benefits not only taxpayers, but the benefit receipents as well. Checks present a variety of challenges that often put a great deal of friction in between a recipient and their money. This is especially true for unbanked individuals. For instance, checks create undue burdens on unbanked individuals because the recipient has to find a location to cash their check which can be difficult during the current national emergency since many bank branches are simply not open due to COVID-19. In addition, many banks won't cash a check if the recipient doesn't have an account at that particular bank. Lastly, checks also have no protections. If a check is stolen all of the funds associated with that check will be unrecoverable. Alternatively, prepaid cards offer Regulation E protections, which fully protects a card holders' funds in the event of fraud or unathorized use.

The IPA and its members have long championed efforts to provide greater access to banking services to the unbanked and underbanked. For over a decade, the prepaid account products offered by our members have been an invaluable tool used by a number of types of organizations (e.g., state and federal governments, universities and corporations) to make a wide variety of payments (e.g., government benefits, payroll, healthcare reimbursements, transit reimbursements, disaster relief, rebates and incentives, insurance claim payments, student loan disbursements, and corporate expense reimbursement) to unbanked and underbanked individuals. These cost effective products save millions of dollars each year in disbursement costs compared to checks and provide unbanked and underbanked consumers a convenient and economical substitute for a traditional bank account.

In addition to being cost effective and convenient, prepaid accounts in their many forms (cards, mobile wallets, etc.) also offer unbanked and underbanked consumers strong consumer protections, as many prepaid account products are strictly governed by the CFPB's own prepaid

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account rule (the "Prepaid Rule"), which Christina Tetreault, senior staff attorney for Consumers Union, described as a rule that is "strong and will protect consumers from hidden fees and losing their money to fraud and mistakes." Given the value and convenience offered by prepaid accounts paired with the strong consumer protections applicable to them it is no surprise that in its most recent Consumer Response Annual Report the CFPB noted that only 0.8% of all consumer complaints received by the CFPB involved prepaid account products. In fact, the benefits afforded by prepaid accounts have been cited by a number of regulators, legislators, and financial services stakeholders in a variety of publications, a sample of which has been attached hereto as Exhibit B for your convenience.

As technology has developed, so has the evolution of payments. As the original fintech payment product, consumers turned to traditional plastic prepaid cards, but now, Silicon Valley companies and others have taken this technology and created new products based on a prepaid platform such as mobile wallets (ex: PayPal, Google Pay, Apple Pay, etc.) which are now increasingly the new normal. However, it is important to keep in mind that the critical elements of privacy, safety and convenience, however, have remained steady over time.

Looking ahead, it is clear that the future of the American wallet will continue to rely on prepaid structures. In fact, almost every payments innovation over the past decade has borrowed from or been built on top of a prepaid platform. In a rapidly changing world, finance and technology are nearly synonymous, and the emergence of "fintech" as its own industry category is proof. Most emerging business models in the space are not new. Instead, the modern consumer is technologically savvy and values convenience above all else. As a result, fintechs offer products that meet these needs through mobile wallets and P2P services by leveraging existing prepaid technology.

Finally, the IPA recognizes that Congress may decide that another round of direct relief payments to individuals is appropriate at a future date. If that does occur, the prepaid industry stands ready to ensure that relief payments make into the hands of Americans quickly, securely, and conveniently. The record is now clear – when the federal, state, and local governments need a tool that will help them deliver payments to millions of Americans in a safe, reliable, and efficient manner, we know which product is at the top of their list – prepaid accounts.

In closing, the IPA appreciates the opportunity to submit this statement for the record. If you have any questions or concerns, please do not hesitate to contact me at btate@ipa.org.

Respectfully submitted,

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EXHIBIT A

Congressional Letters to Federal Agencies in Support of Prepaid Accounts

[See Attached]

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EXHIBIT B
STAKEHOLDER STATEMENTS ON PREPAID ACCOUNTS

- CFPB Press Release announcing Interpretive Rule on Compulsory Use for Pandemic Payments:
  - "…the disbursement of funds via alternative means, such as a newly-issued prepaid account, may be faster, more secure, more convenient, and less expensive—for both the government agency and the consumer—than making disbursements through other methods such as paper check."
- Lauren Saunders of the National Consumer Law Center in a NPR article on EIP and debt collectors:
  - "Lauren Saunders, with the nonprofit National Consumer Law Center, is hoping the system will soon have multiple options to receive the money. "Hopefully they can set up direct deposit to a traditional bank account or to a prepaid account," she says. So the government could load the money onto a type of debit card that doesn't require you to have a bank account."
- Christina Tetreault of Consumers Union [from IPA op-ed in Bloomberg]
  - "Christina Tetreault, senior staff attorney for Consumers Union, said "The rule [is] strong and will protect consumers from hidden fees and losing their money to fraud and mistakes." The most recent CFBP Consumer Response Annual Report found that only 0.8% of all complaints were about prepaid accounts."
- Financial Health Network:
  - Prepaid Card Page: "Called prepaid debit or general purpose reloadable (GPR) cards, prepaid cards represent an important opportunity for underserved consumers by filling a longstanding need for those operating between traditional checking or savings accounts and the cash economy."
  - 2016 Prepaid Scorecard:
    - "Prepaid cards – specifically, general-purpose reloadable (GPR) cards – are versatile financial tools that provide consumers with valuable access to the financial system. When designed well, prepaid cards can help people build financial health by allowing them to spend wisely, save, and plan for the future."
    - "Prepaid cards are generally high-quality products that allow consumers to build financial health by helping them spend wisely, save, and plan for the future."
- Federal Reserve Report to the Congress on Government-Administered, General-Use Prepaid Cards - September 2019:
  - "Federal, state, and local government offices use prepaid cards to disburse funds at a lower cost than checks (or other paper-based payment instruments such as

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vouchers or coupons) and to provide an alternative to direct deposit for payment recipients, especially those recipients who do not have bank."

- Former U.S. Treasurer Rosie Rios from 2011 announcement that new Social Security and other federal benefits would be made electronically :
    - "It costs 92 cents more to issue a payment by paper check than by direct deposit. We are retiring the Social Security paper check option in favor of electronic payments because it is the right thing to do for benefit recipients and American taxpayers alike."
- Letter from Rep. Gregory Meeks (D-NY), Chairman of Subcommittee on Consumer Protection and Financial Institutions of the House Financial Services Committee, and Rep. Scott Tipton (R-CO), Vice Ranking Member of the Subcommittee on Consumer Protection and Financial Institutions, to Treasury proposing to give unbanked Americans the option and ability to receive their CARES Act funds directly into a newly-opened, no-cost or minimal-cost bank account that has a linked digital and/or physical card:
    - "This solution will have the following benefits:
        - It will provide immediate access to funds. Virtual cards linked to the bank accounts give access to the funds on the same timeframe as if the recipient had direct deposit. The funds can be accessed and used anywhere electronically until the physical debit card arrives.
        - The use of such cards would ensure that funds distributed are FDIC insured, and thus protect recipients from theft and fraud.
        - Such a solution avoids the significant costs and risks of check cashing and processing, as well as the health risks associated with accessing physical locations. This solution would have zero cost for recipients.
        - This solution also avoids the significant costs of printing checks, postage and reconciling unbanked checks, and other costs borne by Treasury when issuing physical checks."
    - "This solution has the added benefit of bringing a significant share of unbanked Americans on the path to inclusion into the mainstream financial system."
- Letter from Rep. Sanford Bishop (D-GA) to Treasury on the benefits of prepaid and recommending Treasury include an option for "GPR cards" in their online portals:
    - "General Purpose Reloadable (GPR) cards can often be more affordable than check cashing for many of the citizens receiving these funds and can be delivered much more quickly."
    - "GPR cards, directly distributed to these individuals, could be a valuable and efficient alternative for this group as they provide an access to funds that is less expensive than cashing checks, easy-to-use, and generate immediate economic activity. My understanding is that they are also safe and secure, due to the protections provided by their issuers. I recommend that the IRS consider including a GPR card option for receiving the relief funds, alongside direct deposit and

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checks. In addition, I urge the IRS to allow already existing GPR card routing and account numbers to be approved for use on the new website."

- Letter from Rep. Lucy McBath (D-GA) to Treasury on the benefits of prepaid:
  - "I write to you to respectfully request that Treasury, where available, allow the forthcoming economic impact payments to be disbursed via General Purpose Reloadable (GPR) cards. GPR cards can often be more affordable than check cashing and can be delivered to citizens faster. The option to receive GPR cards may help unbanked and underbanked Americans receive their economic impact payments allocated to them under the CARES Act."
  - "Currently, millions of taxpayers receive their tax refunds on prepaid debit cards-it is important that all of these individuals have the option to receive their economic impact payments similarly. Instead of having to wait for a paper check that could take up to 20 weeks to arrive, they would receive their economic impact payments with the rest of their regular direct deposit."
  - "Prepaid debt cards are a proven, secure, and efficient alternative distribution method, and would generate immediate economic activity. I request the IRS consider including a prepaid card disbursement option alongside the direct deposit and check. This is a timely solution to ensure payments are received as quickly as possible."
  - "During this unprecedented time, it is necessary that all options are utilized to ensure the economic and social well-being of our citizens. I urge the department to consider the GPR card as an option for citizens to receive their economic impact payment."
- Letter from Sens. Doug Jones (D-AL) and Tom Cotton (R-AR), both members of the Senate Banking Committee, to Treasury requesting they utilize its Direct Express debit card as one method for disbursing Economic Impact Payments:
  - "In order to provide this much needed assistance directly and quickly, we request the Treasury Department utilize its Direct Express debit card as one method, at the option of the individual, for disbursing these payments as an alternative to paper checks."
  - "It is our understanding that payments made electronically can be distributed quickly, but the Internal Revenue System (IRS) must print paper checks and mail them separately. As a result, we encourage the Treasury Department to offer a targeted group of Americans the option of receiving their direct assistance payment on the Direct Express debit cards, which are used for other federal benefits like Social Security and Veterans Affairs benefits. Using debit cards could be limited to Americans eligible for this program not already signed up for direct deposit, have a bank account, or require a paper check."
  - "…we support delivering benefits automatically to as many people as possible and request that debit cards be offered as an option to distribute the assistance payment. Debit cards are a safer method of delivery than paper checks. Paper checks will

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force Americans to leave their homes to deposit the funds and can be a source of fraud."

- Letter from Reps. Barry Loudermilk (R-GA) & Bill Foster (D-IL) on the IRS' web portals
  - "Fortunately, there are well-established payment methods available from private sector payments providers, including diverse, innovative financial services companies, that can assist with distributing these funds. General purpose reloadable (GPR) cards are one such method for which the process for an individual to receive the payment would be relatively simple. An eligible individual could order a GPR card online without having to go into a physical store, input the card information and their personal information into the IRS portal, and receive the funds onto the card– and the cardholder could even use the funds to make purchases online or via mobile pay using the card number before the physical card arrives in the mail. We believe this would be a much more effective method of distributing funds than sending out millions of paper checks to Americans, many of whom do not have a checking account."
  - "However, we also believe it is critically important for the IRS to update its non-filers portal and get my payment portal to make it clear that GPR cards are an option as those are the primary places where consumers will go for information about their recovery rebate. This would help reduce public confusion and allow a large segment of Americans to receive their support payments more quickly. We have learned that some individuals are unaware that they can use their GPR card's routing and direct deposit number to register their card with the IRS and expedite their payment. Accordingly, we respectfully request that GPR cards be clearly listed as an option in the IRS's portals so that millions of Americans with GPR cards will know that they can use their card and know how to register it with Treasury and receive a direct deposit in a timely manner."

LUCY McBATH
6TH DISTRICT, GEORGIA
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WASHINGTON, DC 20515
(202) 225-4501

5775 GLENRIDGE DRIVE
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Congress of the United States
House of Representatives
Washington, DC 20515-1006

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HEALTH, EMPLOYMENT, LABOR, AND PENSIONS
WORKFORCE PROTECTIONS

April 10, 2020

Ms. Lauren Nunnally
Deputy Assistant Secretary for Appropriations Management, Office of Legislative Affairs
Department of the Treasury
1500 Pennsylvania Ave. NW
Washington, DC 20220

Dear Deputy Assistant Secretary Nunnally,

I write to you to respectfully request that Treasury, where available, allow the forthcoming economic impact payments to be disbursed via General Purpose Reloadable (GPR) cards. GPR cards can often be more affordable than check cashing and can be delivered to citizens faster. The option to receive GPR cards may help unbanked and underbanked Americans receive their economic impact payments allocated to them under the CARES Act.

According to the Federal Reserve, more than 25% of U.S. households are unbanked or underbanked. In Georgia that number is 35%. These households tend to be among those most affected by an economic crises, and are often the households most in need of rapid liquidity. To ensure vulnerable Americans have swift access to their economic impact payments, I urge the IRS to include GPR cards as an alternative to paper checks.

Currently, millions of taxpayers receive their tax refunds on prepaid debit cards—it is important that all of these individuals have the option to receive their economic impact payments similarly. Instead of having to wait for a paper check that could take up to 20 weeks to arrive, they would receive their economic impact payments with the rest of their regular direct deposit. Additionally, there are millions of eligible recipients who do not have bank account information on file with the IRS or are not required to file taxes.

Prepaid debt cards are a proven, secure, and efficient alternative distribution method, and would generate immediate economic activity. I request the IRS consider including a prepaid card disbursement option alongside the direct deposit and check. This is a timely solution to ensure payments are received as quickly as possible.

During this unprecedented time, it is necessary that all options are utilized to ensure the economic and social well-being of our citizens. I urge the department to consider the GPR card as an option for citizens to receive their economic impact payment.

Sincerely,

Lucy McBath

Lucy McBath
Member of Congress

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Congress of the United States
Washington, DC 20515

April 17, 2020

The Honorable Steven Mnuchin
Secretary
U.S. Department of the Treasury
1500 Pennsylvania Avenue NW
Washington, D.C. 20220

The Honorable Charles Rettig
Commissioner
Internal Revenue Service
1111 Constitution Avenue NW
Washington, D.C. 20224

Dear Secretary Mnuchin and Commissioner Rettig,

Thank you for your leadership in distributing CARES Act recovery rebates to Americans as quickly and efficiently as possible.

As part of that effort, we write to bring your attention to payment mechanisms that can be useful for distributing recovery rebates to Americans who do not have direct deposit information on file with the IRS. According to the FDIC 2017 national survey of unbanked and underbanked households, more than one in four American households– approximately 27 percent– are either unbanked or underbanked. While the rate of unbanked Americans is near an all-time low due to technological innovations in the financial services marketplace like mobile banking, approximately 6.5 percent of U.S. households– or 8.4 million– still do not have anyone in the household with a checking or savings account. Additionally, the IRS has estimated that approximately 80 million of the 150 million Americans eligible for a recovery rebate do not have direct deposit information on file. This will inevitably lead to challenges with distributing these payments efficiently.

Fortunately, there are well-established payment methods available from private sector payments providers, including diverse, innovative financial services companies, that can assist with distributing these funds. General purpose reloadable (GPR) cards are one such method for which the process for an individual to receive the payment would be relatively simple. An eligible individual could order a GPR card online without having to go into a physical store, input the card information and their personal information into the IRS portal, and receive the funds onto the card– and the cardholder could even use the funds to make purchases online or via mobile pay using the card number before the physical card arrives in the mail. We believe this would be a much more effective method of distributing funds than sending out millions of paper checks to Americans, many of whom do not have a checking account.

On April 15, the Consumer Financial Protection Bureau updated its guide to COVID-19 economic stimulus relief to indicate that consumers can receive their stimulus payment using a prepaid card. This was an important development and will help inform consumers that prepaid is an option. However, we also believe it is critically important for the IRS to update its non-filers portal and get my payment portal to make it clear that GPR cards are an option as those are the

primary places where consumers will go for information about their recovery rebate. This would help reduce public confusion and allow a large segment of Americans to receive their support payments more quickly. We have learned that some individuals are unaware that they can use their GPR card's routing and direct deposit number to register their card with the IRS and expedite their payment. Accordingly, we respectfully request that GPR cards be clearly listed as an option in the IRS's portals so that millions of Americans with GPR cards will know that they can use their card and know how to register it with Treasury and receive a direct deposit in a timely manner.

In sum, we hope that alternative payments methods like GPR cards can be an option for unbanked and underbanked Americans to receive recovery rebates. Thank you for your consideration of this request.

Sincerely,

Barry Loudermilk
Member of Congress

Bill Foster
Member of Congress

SANFORD D. BISHOP, JR.
SECOND DISTRICT, GEORGIA

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FAX: (478) 803-2637

April 8, 2020

Ms. Lauren Nunnally
Deputy Assistant Secretary for Appropriations Management, Office of Legislative Affairs
Department of Treasury
1500 Pennsylvania Ave. NW
Washington, DC 20220

Dear Deputy Assistant Secretary Nunnally:

I write to you today to discuss the valuable solutions for delivery of the individual relief funds outlined in the CARES Act, shared with me by my constituents and the Georgia-based American Transaction Processors Coalition. I have been informed that the prepaid industry is ready to assist in disbursing these funds in the most efficient, cost effective, and timely manner. General Purpose Reloadable (GPR) cards can often be more affordable than check cashing for many of the citizens receiving these funds and can be delivered much more quickly.

I understand that the Internal Revenue Service (IRS) intends to employ direct deposit information used by individuals on their 2019 or 2018 tax returns to disburse the relief funds to approximately 60 million people. Millions of tax filers, however, already receive their tax refunds on GPR cards. I urge the IRS to ensure that the direct deposit option will be used for both traditional bank accounts as well as GPR card accounts.

I also understand that the IRS will be developing a website to allow those who do not have bank account information on file to submit their information so that their qualifications for relief funds can first be determined before the funds are directly deposited into their accounts. I commend this effort as this group potentially includes over 90 million eligible Americans, and this effort will further expedite the delivery of these funds. According to the Federal Reserve Bank, more than 25% of U.S. households are unbanked or underbanked and these are the same households that may require swift access to their funds the most.

GPR cards, directly distributed to these individuals, could be a valuable and efficient alternative for this group as they provide an access to funds that is less expensive than cashing checks, easy-to-use, and generate immediate economic activity. My understanding is that they are also safe and secure, due to the protections provided by their issuers. I recommend that the IRS consider including a GPR card option

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for receiving the relief funds, alongside direct deposit and checks. In addition, I urge the IRS to allow already existing GPR card routing and account numbers to be approved for use on the new website.

In this unprecedented time, it is necessary for us to take all steps available to ensure the economic and social well-being of our citizens. Consistent with all applicable rules, regulations, and policies, I urge the Department of Treasury to consider the solutions listed above for the distribution of the COVID-19 relief funds.

With warmest personal regards, I remain

Sincerely yours,

Sanford D. Bishop, Jr.
Member of Congress

United States Senate
WASHINGTON, DC 20510-0106

April 7, 2020

The Honorable Steven T. Mnuchin
Secretary of the Treasury
U.S. Department of the Treasury
1500 Pennsylvania Avenue NW
Washington, D.C. 20220

Dear Secretary Mnuchin,

The Coronavirus Aid, Relief, and Economic Security (CARES) Act included economic relief to Americans in the form of direct cash payments to provide support during this unprecedented public health and economic crisis. In order to provide this much needed assistance directly and quickly, we request the Treasury Department utilize its Direct Express debit card as one method, at the option of the individual, for disbursing these payments as an alternative to paper checks.

We were alarmed by the *Washington Post* report on April 2, 2020, that "$30 million in paper checks for millions of other Americans won't start being sent out until April 24, as the government lacks their banking information. And some of those checks won't reach people until September."[1] Americans should not have to wait five months to receive their checks.

While a slight lag between Congressional action and the support arriving to workers is understandable, the Treasury Department must act expeditiously to get these funds to their intended recipients. These direct assistance payments are aimed at assisting American workers in covering the cost of essentials household items, including rent and mortgage payments, outstanding bills, and food to feed their families.

It is our understanding that payments made electronically can be distributed quickly, but the Internal Revenue System (IRS) must print paper checks and mail them separately. As a result, we encourage the Treasury Department to offer a targeted group of Americans the option of receiving their direct assistance payment on the Direct Express debit cards, which are used for other federal benefits like Social Security and Veterans Affairs benefits.[2] Using debit cards could be limited to Americans eligible for this program not already signed up for direct deposit, have a bank account, or require a paper check.

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[1] Lisa Rein, "IRS to begin issuing $1,200 coronavirus payments April 9, but some Americans won't receive checks until September, agency plan says," *The Washington Post*, April 2, 2020. Available at: https://www.washingtonpost.com/politics/irs-to-begin-issuing-1200-coronavirus-payments-april-9-but-some-americans-wont-receive-checks-until-september-agency-plan-says/2020/04/02/8e0cfc84-751e-11ea-85cb-8670579b863d_story.html

[2] https://fiscal.treasury.gov/GoDirect/about-faq/index.html#electronicpayments

As Americans across the country practice social distancing to contain the spread of COVID-19, we support delivering benefits automatically to as many people as possible and request that debit cards be offered as an option to distribute the assistance payment. Debit cards are a safer method of delivery than paper checks. Paper checks will force Americans to leave their homes to deposit the funds and can be a source of fraud. We appreciate your consideration of this request to keep Americans safe during these challenging times.

Sincerely,

Doug Jones
United States Senator

Tom Cotton
United States Senator

Congress of the United States
Washington, DC 20515

April 11, 2020

The Honorable Steven Mnuchin
Secretary
U.S. Department of the Treasury
1500 Pennsylvania Ave. NW
Washington, D.C. 20220

Dear Secretary Mnuchin,

We are writing to you on a timely matter regarding the distribution of direct payments authorized by the CARES Act. Given the unprecedented and rapid impact that COVID-19 is having on our economy, it is vital that the payments Congress authorized reach the intended recipients in the most efficient manner, especially for those who lack access to the mainstream financial system.

If implemented appropriately, tens of millions of Americans will receive support in the coming weeks to help address their critical needs while the U.S. economy is partially shut down. We remain deeply concerned, however, that the nearly 15 million Americans without bank accounts will face difficulty accessing these essential funds. These recipients may have no choice but to receive physical checks with the following consequences:

1. It may take 20 weeks or more (including postage and processing) for these Americans to receive their checks, versus between 2 and 5 weeks for those with bank accounts. The unbanked segment also has the lowest savings balances and are most susceptible to employment loss in a downturn. They simply cannot survive this long without income. It risks causing irreparable damage to these families, to the stability of their communities, and to the infrastructure required to rebuild our economy.
2. When unbanked Americans do finally receive their checks, they are likely to have no providers with whom to cash their check for free, no remote or online services to support their access to funds, and nowhere to deposit the money. They will have to leave their homes and possibly break shelter-in-place rules to go to predatory check cashing stores where they will be exposed to health risks and pay very high fees to receive cash, which they will have to physically store in their homes. The Treasury Department must ensure that the maximum amount of these funds end up in the hands of the people for whom they were intended, not diverted to cashing, processing and other avoidable fees.

Sending paper checks to Americans disadvantages those who need the funds the most. To the greatest extent possible, the Treasury Department must seek to leverage existing banks and innovations in electronic payments to instantly and affordably reach this segment of America.

We propose that the Treasury Department give unbanked Americans the option and ability to receive their CARES Act funds directly into a newly-opened, no-cost or minimal-cost bank account that has a linked digital and/or physical card. The Treasury Department could negotiate the inclusion of such a product with banks and companies that provide such cards and are willing to provide the service. By making this option available on Treasury's web portal, people will be able to select how to receive their funds. This solution will have the following benefits:

1. It will provide immediate access to funds. Virtual cards linked to the bank accounts give access to the funds on the same timeframe as if the recipient had direct deposit. The funds can be accessed and used anywhere electronically until the physical debit card arrives.
2. The use of such cards would ensure that funds distributed are FDIC insured, and thus protect recipients from theft and fraud.
3. Such a solution avoids the significant costs and risks of check cashing and processing, as well as the health risks associated with accessing physical locations. This solution would have zero cost for recipients.
4. This solution also avoids the significant costs of printing checks, postage and reconciling unbanked checks, and other costs borne by Treasury when issuing physical checks.

This solution has the added benefit of bringing a significant share of unbanked Americans on the path to inclusion into the mainstream financial system. Offering the solution outlined above, as an option through the online portal that the Treasury Department is developing, will help ensure that all Americans, regardless of their means, will have access to the critical CARES Act funds as expeditiously as possible.

Thank you for your prompt attention to this urgent matter.

Sincerely,

Gregory W. Meeks
Member of Congress

Scott Tipton
Member of Congress

June 18, 2020

Chairman Stephen Lynch
Financial Technology Task Force
Washington, DC 20515

Ranking Member Tom Emmer
Financial Technology Task Force
Washington, DC 20515

Dear Chair Lynch And Ranking Member Emmer:

Chairman Lynch, Ranking Member Emmer, and Members of the FinTech Task Force, my name is Isaiah Jackson and I am the author of "Bitcoin and Black America". I am writing this letter in response to the hearing held last week titled, "Inclusive Banking During a Pandemic: Using FedAccounts and Digital Tools to Improve Delivery of Stimulus Payments" held on Thursday, June 11, 2020. As a concerned citizen, I would like to suggest that the Fintech Task Force uses Bitcoin exchanges and on-ramps to facilitate timely payments to the unbanked around the United States.

The American economic system does not recognize Bitcoin as an official currency for citizens. However, the invention of Bitcoin spawned numerous digital solutions to payments. These tools include Blockchain, distributed ledger technology and central bank digital currency (CBDCs).

Using Blockchain technology, different cryptocurrency companies have been able to facilitate something called an "airdrop". This is a technical term for an instant payout to investors who provide their cryptocurrency address. I suggest that the Fintech Task Force explore a similar solution for the unbanked.

If the unbanked have chosen not to use the services of traditional financial institutions, then you need to introduce new ways to send your constituents the stimulus check they are owed. One suggestion would be to work with Bitcoin exchanges such as Gemini, Coinbase[1] and Uphold to onboard unbanked citizens. Then provide them with an option to receive their stimulus check via "airdrop" and they can receive their choice of CBDCs.

You know like I know that the Federal Reserve is printing trillions of dollars which drives inflation and has devalued our dollar over 99% since 1913. How much more value can it lose? As a concerned citizen, your digital payments should be distributed to the unbanked on platforms where they can choose to keep the fiat currency or invest in a censorship resistance money system that is best used when governments fail to provide a form of currency that is accessible to all citizens?

Introducing this option will show that as an American citizen you will no longer take the printing of necessary dollars and you stand on the side of the people by giving them a choice to use the people's money. This is not a new concept with companies like Cash App[2] allowing users to

1 https://www.bloomberg.com/news/articles/2020-05-12/jpmorgan-is-now-banking-for-bitcoin-exchanges-coinbase-gemini
2 https://cash.app/stimulus

collect their stimulus check on their platform. The option to buy Bitcoin or keep their payment in cash is available and the unbanked are able to get their money in a timely manner.

Thanks for taking the time to explore this idea and I am available if any Members have questions or want to learn more about the phenomenon I describe as 'Bitcoin And Black America," a book that just recently was #2 on Amazon BestSeller list. The way I see it, Bitcoin is the people's money and for a country that prides itself on freedom, I think our country can pride itself on diversity and inclusion as well by officially legalizing Bitcoin.

Best Regards,

Isaiah Jackson

Isaiah Jackson
6-18-2020

MOCAFI

Statement for the Record of Wole Coaxum
President and CEO of Mobility Capital Finance Inc (MoCaFi)

House Financial Services Task Force on Financial Technology
Virtual Hearing

"Inclusive Banking During a Pandemic: Using FedAccounts and Digital Tools to Improve Delivery of Stimulus Payments"
June 11, 2020

MOCAFI

The Honorable Maxine Waters
Chairwoman
House Committee on Financial Services
2129 Rayburn House Office Building
Washington, DC 20515

June 11, 2020

The Honorable Patrick McHenry
Ranking Member
House Committee on Financial Services
4340 O'Neill House Office Building
Washington, DC 20024

Chairwoman Waters, Ranking Member McHenry, Members of the committee and Sub-Committee Chairman Lynch, thank you for the opportunity to provide a statement for the record on Inclusive Banking during a Pandemic/Stimulus Payment Delivery.

I am Wole Coaxum, Founder and CEO of Mobility Capital Finance, Inc. (MoCaFi). I spent the first phase of my career working at Citigroup, Willis Towers Watson and J.P. Morgan. As a Managing Director, and one of the most senior African Americans at J.P. Morgan, I managed national and global sales and operations teams in the areas of Treasury Services, Commercial Card and Business Banking. In my final role there, I was responsible for millions of their Business Banking customers and the bankers that serviced them.

In August 2014, I – like the rest of the country – watched, as the city of Ferguson, Missouri erupted in protests following the shooting death of Michael Brown.

At the time, there was a strong sense that Michael Brown's death would forever change Ferguson and America. It changed me! In that moment, I made the decision to find ways to help communities like the one where Michael lived and ultimately was killed.

In recent months the inequities of our country's financial systems have been highlighted and exacerbated first by the public health crisis and most recently by historic public unrest. Looking back on the experience of Ferguson, this should not have come as a surprise. Consider the inequities with which a young man like Michael Brown, who allegedly pinched a dollar's worth of cigars from a corner market, lived on a daily basis. In Ferguson, a suburb of St. Louis, 25 percent of African Americans lived below the poverty line compared to 11% of Caucasians. The area had seen a 99 percent increase in its impoverished population in a city of just over 21,000.[1]

[1]https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2014/08/26/ferguson-other-us-suburbs-see-poverty-rise

And, in this community -- like so many others across the nation with similar statistics -- you will find more liquor stores than community centers, more corner-store carry outs than grocery stores and more alternative financial services (check-cashing, payday lending, pawn stores) than banks. With these challenges in mind, I decided to use my training and experience in financial services to create a series of tools that would foster economic development in the black community -- my community -- all across the United States.

I wanted to be a part of an economic agenda that could complement the social agenda for the Black Community. At that time, according to the 2013 FDIC Survey of Unbanked and Underbanked Households, 7.7 percent (1 in 13) of households in the United States were unbanked. This proportion represented nearly 9.6 million households. Additionally, 20 percent of U.S. households (24.8 million) were underbanked, meaning that they had a bank account but also used alternative financial services (AFS) outside of the banking system.[2] That was a total of nearly 35 million people who did not use banks to handle their everyday affairs. Today, the FDIC finds that more than 25 percent of all U.S. households are unbanked or underbanked[3] while the Federal Reserve puts the number closer to 55 million households.[4] In the black community, the statistics are almost double those statistics.

Recognition of this reality, with its consequent impacts on opportunity and economic development, began my quest to ensure that everyone in this country who wants access to a bank account can get one. Two years after the Ferguson tragedy, I launched MoCaFi, which stands for Mobility Capital Finance, with a goal to provide finance for all, and especially those in communities like those where Michael Brown lived.

MoCaFi is a New York City MWBE Certified financial technology company that offers an array of financial products and services including FDIC-insured bank accounts. The mission of MoCaFi is to work with vulnerable populations in a low-cost, safe, and responsible way by providing banking services for the communities who are traditionally left out of the system. By offering these services, we can begin to close the wealth gap for vulnerable communities and help small businesses that are too often unable to access capital. MoCaFi provides individual customers with no-fee bank accounts and has products that comply with all federal and state regulations.

[2] 2013 FDIC National Survey of Unbanked and Underbanked Households

[3] 2017 FDIC National Survey of Unbanked and Underbanked Households

[4] Holder, Sarah (2019-06-04). "Why Cleveland Wants to Bring Back Postal Banking". CITYLAB. The Atlantic Monthly Group. Retrieved 2019-06-05.

MOCAFI

I commend the Task Force for its continued focus on the unbanked and underbanked in our country. MoCaFi is committed to addressing the needs of Americans who currently fall outside the margins of the existing financial system. Each day, we are reaching and connecting with residents who fall into the category of people who are either unbanked or underbanked -- including school teachers, home healthcare workers, public housing residents and even first responders.

The process of dispersing Economic Impact Payments (EIP) as provided through the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") laid bare the plight of the unbanked and underbanked, the inability for current federal programs and agencies to reach them, and the increased injury this disconnect provides for an already vulnerable segment of our population.

As the Task Force explores low or no cost banking options that utilize technology and digital methods to deliver stimulus payments from the government more efficiently in a time of crisis, I would like to take this opportunity to provide recommendations and provide lessons MoCaFi has learned in our effort to serve individuals not currently served by our existing financial system.

MoCaFi supports the focus of today's hearing and the efforts of the Committee and believes the federal government can play a critical role in addressing the needs of the unbanked and underbanked in our country. However, we challenge policymakers to envision a new approach that can provide a 21st century solution to problems that have existed for generations. We are working as a partner with existing financial institutions to help solve intractable problems. Despite everyone's best efforts, some communities – particularly communities of color – remain very difficult to reach. The implementation and delivery of CARES payments highlights these challenges and points a way toward a better future with more opportunity.

Traditional financial models do not lend themselves to high volume, low dollar transactions that would be the norm as communities enter the banking system.

We, and other financial technology companies are able to help reach those communities. Financial technology companies can lend their technology and customer base, while banks can provide the licenses and regulatory infrastructure to support this customer base.

Another benefit of these partnerships is that banks would not be forced to create a separate subsidiary to handle services for the unbanked and underbanked community. Creating separate subsidiaries would only add costs to a segment of the market where banks do not want to play and do not make any money.

Government can also play a critical role in providing the right incentives for financial technology and traditional institution partnerships. The government can allow Community Reinvestment Act

credit for these partnerships. One of MoCaFi's key tenets, that we bring with us to these partnerships, is to help people build their credit. Our innovation is to make it easy for anyone to have their monthly rent payments added to their credit score. We give people a free option to have their monthly rent payment history delivered to two of the three credit bureaus. We are working to report these payments to all three bureaus by the end of the year. Some individuals experience a 30-50 point increase in their score within 60 days of using this service. This new platform, working in concert with the Federal government when appropriate, can put tools in place to ensure universal access to low cost, high quality banking products.

As traditional banks partner with companies like ours, we can help to close the banking gap in vulnerable communities. These platforms come with little cost and allow anyone with a smartphone to enter into a financial system that can provide opportunity to all.

We face many challenges as a nation. However, we also have a unique opportunity – one highlighted by the recent pandemic, economic dislocation, and civil unrest that have had an outsized impact on underserved communities -- to bring millions of people into a banking system that works for everyone. This newfound strength will create wealth-building opportunities for our communities, enable people to save time and money by being able to bank more efficiently and begin to level the playing field regarding access for all people. The power sits with each of you today to move us closer to achieving true financial inclusion.

Thank you again for this opportunity, I look forward to working with the committee in the future.

Congress of the United States
Washington, DC 20515

April 23, 2020

The Honorable Steven T. Mnuchin
Secretary of the Treasury
Department of the Treasury
1500 Pennsylvania Avenue NW
Washington, DC 20220

Dear Secretary Mnuchin,

Thank you, and those working diligently across the Department of Treasury, for your efforts to implement the CARES Act and help America respond to and recover from the current pandemic and its impact on our economy.

We understand your primary mission is to deliver urgent and necessary assistance to America's small businesses and working families. As the pandemic continues to impact the economy, we look forward to supporting the Administration's efforts to get American small businesses running while also prioritizing health, safety, and proper oversight.

We believe there are additional steps the Treasury Department should take to leverage all that American ingenuity, entrepreneurship, and innovation has to offer. Our nation's technology companies are envied around the world and have produced some of the most important innovations of the past century. Among the most important and relevant are new mechanisms capable of moving money and providing liquidity quickly, securely, and transparently, including through reliance on blockchain and distributed ledger technologies (DLT), a point not lost on China which recently announced its own plans to launch a national blockchain platform in the coming days. We thus strongly encourage the Treasury Department to utilize private sector innovations such as blockchain and DLT to support the necessary functions of government to distribute and track relief programs and direct that all guidance support the use of technology to facilitate delivery of CARES Act benefits. Such steps will ensure both that America retains its technological advantage and that relief is delivered quickly to the small businesses and individuals who need it most.

Thank you for your consideration. We look forward to working with you and to meet the needs and address the challenges of all Americans during these times of hardship.

Sincerely,

Darren Soto
Member of Congress

Tom Emmer
Member of Congress

David Schweikert
Member of Congress

Ro Khanna
Member of Congress

Stacey E. Plaskett
Member of Congress

Warren Davidson
Member of Congress

Ted Budd
Member of Congress

Tulsi Gabbard
Member of Congress

Anthony Gonzalez
Member of Congress

Bill Posey
Member of Congress

Ben McAdams
Member of Congress

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June 9, 2020

The Honorable Stephen Lynch
Chairman
House Financial Services Committee Task Force
On Financial Technology
2109 Rayburn House Office Building
Washington, DC 20515

The Honorable Tom Emmer
Ranking Member
House Financial Services Task Force
On Financial Technology
315 Cannon House Office Building
Washington, DC 20515

Dear Chairman Lynch and Ranking Member Emmer,

Chairman Lynch, Ranking Member Emmer, and Members of the Task Force on Financial Technology, thank you for the opportunity to submit this letter for the record, in response to today's hearing, "Inclusive Banking During a Pandemic: Using FedAccounts and Digital Tools to Improve Delivery of Stimulus Payments."

Cardtronics and Coinstar are cash infrastructure companies involved in the recycling, processing, handling, and dispensing of currency in the United States. Cardtronics is the largest independent ATM owner and operator in the world. Coinstar is the largest recycler of coin in the U.S., providing consumers a convenient way to exchange loose coins for paper currency, donations, or gift cards in retail locations.

Together, our companies advocate for consumer payment choice in America. Over the course of the pandemic, a growing number of businesses have been instituting cashless only policies due to misinformation and unfounded fear being spread by the media and others, that cash is a transmitter of COVID-19. *Our intent with this letter is to share with the committee scientific evidence that demonstrates cash is safe, and urge Congress to implement public policy that both encourages payment innovation and ensures Americans can continue to use cash---often the only payment method for some---to purchase essential goods like food and medicine, without stigma or discrimination.*

Merchants refusing to accept cash based on risk of spreading virus defies scientific evidence. Amid the pandemic that has enveloped the nation, there has been an acceleration of national and regional merchants,[1] such as coffee chains,[2] clothing stores,[3] and grocery stores[4] refusing to accept cash. This is because they erroneously believe that banknotes and coins transmit the COVID-19 virus. However, public health officials have not recommended that people avoid using cash due to risks of contracting COVID-19.

Most notably, in its updated May guidance, the U.S. Centers for Disease Control and Prevention noted that the virus is not believed to be spread from touching surfaces or objects.[5] CDC experts maintain that COVID-19 spreads primarily from person to person, between people who are within around six feet of each other, and through droplets produced by a sick person's cough or sneeze.

Additionally, of note, Germany, a heavy cash user nation, has the lowest rate of COVID-19 deaths. Roughly 80% of all transactions in Germany are conducted in cash. And while some merchants in the U.S. refuse to accept cash, most businesses and restaurants in Germany accept only cash. [6] The low

[1] https://www.eater.com/2020/3/12/21177059/restaurants-encourage-cashless-payments-because-coronavirus-covid-19-outbreak
[2] https://fortune.com/2020/04/27/whole-foods-cash-payments-restricted-some-stores/
[3] https://www.cnbc.com/2020/05/05/coronavirus-nordstrom-is-preparing-to-reopen-its-stores.html
[4] https://www.usatoday.com/story/money/food/2020/05/05/starbucks-reopening-stores-coronavirus-lockdown-restrictions-case/5173209002/
[5] https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html
[6] https://www.bloomberg.com/news/features/2018-02-06/germany-is-still-obsessed-with-cash

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COVID-19 mortality rate in Germany, at just over 1%, is far below its neighboring European countries, because of Germany's decision to implement widespread testing of people suspected of having the virus, as opposed to Italy or the U.K.'s decision to test only symptomatic cases.[7]

Academic research finds no evidence money transmits COVID-19.
There is a preponderance of science[8] demonstrating that good hygiene and the washing of hands is the best defense against contracting COVID-19 and there is no evidence that the virus has been transmitted through currency. "We don't have any evidence that money in any form has ever been a source of any kind of infection," observed, Marilyn Roberts, a microbiologist at the University of Washington School of Public Health. And given the way it appears that Covid-19 is transmitted, she posits, focusing on money misses a more important point: "Are you in a crowded theater? Are you in a restaurant? Are you in a store? You're more likely to pick up Covid-19 from people exposure than from the type of payment."[9]

Microbiologists from the University of Arizona and Michigan State University conducted a study in 2013 to measure "transfer efficiency" on U.S. currency, which is made of a porous material that is a unique blend of 75 percent cotton and 25 percent linen, according to the Department of the Treasury website. The study explored the likelihood that bacteria and viruses could be transmitted from a variety of surfaces, both porous and nonporous, to the hands of people who had touched those services. U.S. currency was selected as one of three porous surfaces (along with six nonporous surfaces, such as metal, glass, and ceramic tile) that were considered. The study, published in the *Journal of Applied and Environmental Microbiology*,[10] found that **U.S. currency, a porous surface, had the lowest average transfer efficiency of any of the surfaces considered,** ranging from 0.05 percent to 0.2 percent – while among the nonporous surfaces, that same efficiency was measured at average levels as high as 79.5 percent among the nonporous surfaces.

Global central banks advocate for cash.
The stigmatization of cash has become so concerning that at least seven central banks have issued statements to citizens advising them that cash is safe to use during the COVID-19 pandemic. They include the Royal Australian Mint,[11] Bank of Canada,[12] Central Bank of Luxembourg,[13] Bundesbank,[14] Reserve Bank of New Zealand,[15] Bank of England,[16] and the South African Reserve Bank[17].

Further, the Bank of International Settlements (BIS), owned by 62 central banks, published Bulletin #3, ***Covid-19, cash, and the future of payments*** on Friday, April 3, 2020, regarding how the public is responding to paper currency use. **The bulletin noted, "To date, there are no known cases of Covid-19 transmission via banknotes or coins."[18]**

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[7] https://www.cnbc.com/2020/04/03/germany-has-a-low-coronavirus-mortality-rate-heres-why.html
[8] https://www.globenewswire.com/news-release/2020/05/06/2028611/0/en/COVID-19-Currency-Poses-No-Greater-Risks-Than-Bank-Cards-or-Mobile-Phones.html
[9] https://www.technologyreview.com/2020/03/12/905341/coronavirus-contaminated-cash-quarantine/
[10] https://www.globenewswire.com/news-release/2020/05/06/2028611/0/en/COVID-19-Currency-Poses-No-Greater-Risks-Than-Bank-Cards-or-Mobile-Phones.html
[11] https://www.ramint.gov.au/news-media/news/cash-usage-regarding-covid-19
[12] https://www.bankofcanada.ca/2020/03/bank-canada-asks-retailers-continue-accepting-cash/
[13] http://www.bcl.lu/en/Media-and-News/Press-releases/2020/03/coronavirus/index.html
[14] https://www.bundesbank.de/en/tasks/topics/cash-poses-no-particular-risk-of-infection-for-public-828762
[15] https://www.rbnz.govt.nz/news/2020/03/cash-and-other-payments-systems-ready-for-covid-19
[16] https://www.bankofengland.co.uk/faq/banknote
[17] https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9779/The%20SARB%20warns%20the%20public%20that%20it%20is%20NOT%20withdrawing%20banknotes%20and%20coin%20because%20of%20COVID-19.pdf
[18] https://www.bis.org/topic/coronavirus.htm?m=5%7C435%7C702

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"During this time of heightened public health measures intended to limit the transmission of COVID-19, some consumers and businesses are choosing not to use cash to limit potential exposure. Refusing cash could put an undue burden on people who depend on cash as a means of payment. The Bank strongly advocates that retailers continue to accept cash to ensure Canadians can have access to the goods and services they need," advised the Bank of Canada.[19]

Retailers refusing to accept cash puts an unnecessary burden on vulnerable populations. The COVID-19 crisis has accelerated this rise of cashless business, which has effectively shut lower income, minority, and older Americans, who rely more on cash than do other groups, out of commerce during this troubling time. For the 25% of American households that are unbanked or underbanked,[20] lower income households, and populations without regular access to broadband services,[21] businesses refusing to accept cash exclude financially disadvantaged populations from basic commerce.

Regardless of the payment method, prepaid card, ACH or direct deposit, these trends demonstrate that consumer demand, and more importantly consumer *need* for cash remains strong during this pandemic. During times of national economic crisis and emergency preparedness, consumers access cash at greater rates. Around mid-April, as economic stimulus measures and unemployment funding [22] were starting to be distributed in the U.S., Cardtronics saw a 50% increase in consumers accessing cash from its ATMs.

Cash matters to Americans in times of crisis because it is convenient and makes budgeting easier. Some use cash because they have no alternative in their wallet. While others choose cash because it cannot be hacked or tracked by a third party, and remains private, which is increasingly a priority among Americans. In a world that has become more vulnerable to lax data privacy practices and cyber-attacks, cash transactions are inherently more secure and private than their digital counterparts.

Cash is the only "legal tender" backed by the federal government and the only payment method that can be used universally by any American, regardless of income, creditworthiness, age, gender, ethnicity, or race. All other payment methods are operated by private companies that set terms and conditions about who can use or access their payment platforms.

As the Task Force weighs different payment methods to speed the delivery of stimulus funds to unbanked and underbanked Americans, we also urge members to pass the Payment Choice Act, H.R. 2650, that protects everyone's right to choose to pay with cash.

We thank you for the opportunity to submit this letter in writing.

Sincerely,

Edward H. West
CEO, Cardtronics

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1940829B15084DE...
Jim Gaherity
CEO, Coinstar

[19] https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9779/The%20SARB%20warns%20the%20public%20that%20it%20is%20NOT%20withdrawing%20banknotes%20and%20coin%20because%20of%20COVID-19.pdf
[20] https://www.fdic.gov/householdsurvey/2017/2017execsumm.pdf
[21] https://www.pewtrusts.org/-/media/assets/2018/07/broadbandresearchinitiative.pdf
[22] https://nypost.com/2020/05/30/hundreds-join-massive-line-at-nyc-atm-for-unemployment-benefits/

June 9, 2020

The Honorable Stephen Lynch
Chairman
House Financial Services Committee
Task Force On Financial Technology
2109 Rayburn House Office Building
Washington, DC 20515

The Honorable Tom Emmer
Ranking Member
House Financial Services Committee
Task Force On Financial Technology
315 Cannon House Office Building
Washington, DC 20515

Dear Chairman Lynch and Ranking Member Emmer,

My name is Tony Yezer. I am professor of economics at George Washington University in Washington, DC. The views in this testimony are my own. I want to thank Task Force Chairman Lynch, Ranking Member Emmer, and the other Members of the Task Force for the opportunity to discuss key concerns regarding the creation of a centralized digital dollar or a Central Bank Digital Currency (CBDC) in the United States.

The Federal Reserve Note (FRN) which is shorthand here for both coin and currency is widely used as a medium of exchange. The privatized banking and payment system facilitates the majority of transactions through accounts denominated in dollars and allows the ready exchange of the FRN for various types of deposits.

Currently there are proposals for the FED to provide what is termed a digitized dollar, the central bank digitized currency (CBDC) which would the valued in dollars but take the form of digitized token money held in accounts at the central bank. Under the CBDC proposals accounts would somehow be opened and maintained for an unspecified but presumably very large population of individuals and organizations called "account holders" (AH) here. The claim is that these accounts would facilitate funds transfer to individuals by government as well as produce savings in transactions among AH. Individuals who are currently unbanked would be induced to hold CDBC accounts through some unspecified mechanism. At the same time, there is a movement to limit the use of the FRN in transactions, specifically by permitting firms and individuals to refuse accept the FRM as a means of payment There is a claim that use of debit or credit cards saves costs associated with handling currency. A more recent claim is that currency could carry disease whose transmission could be controlled by use of card payment systems.

Thus, it appears that there is are both carrot and stick movements to promote reduced reliance on the FRN. The carrot is the claim that the CBDC would achieve efficiencies in distributing funds and facilitating transactions. The stick involves not allowing the FRN to be used as a means of payment and forcing the use of electronic payment systems.

A first question is why the government should be involved in creating a new payment system. Take the CB away from CBDC and you have a system that could be innovated by the private sector. Clearly the proponents of the CBDC have no confidence that private agents would voluntarily choose this innovation, and that government compulsion is required to make it

feasible. With regard to the decision to stop accepting the FRN as a means of payment, no compulsion is apparently necessary for some retailers to adopt this policy. Accordingly, any argument against allowing retailers to refuse to accept the FRN should be based on the notion that such private actions were producing public harm. That is arguments that promoting the FRM as a means of exchange advances a public purpose. The remainder of this essay will discuss whether there is a government purpose in providing the legislative carrot that would clearly be needed for an innovation like the CBDC to move forward and whether the stick of allowing private decisions to refuse to accept the FRN harms a significant public purpose.

Should a government stick be used to promote the CBDC?

Cryptocurrency accounts are already available. Some, like bitcoin, that have achieved a measure of success without government compulsion and nothing in this discussion of a policy stick should be taken as an argument against the privatized digital currency movement. Indeed, the existence of this sector is an argument against the need for the government to enter the market with a competing digital currency.

There is a claim that the CBDC is a significant innovation. This is not true. Digital currencies are available now. But, other than remarkable technological innovations regarding the supply of cryptocurrencies through intensive computing, the economic innovation associated with digital currencies is negligible. They are a form of warehouse banking in which tokens are held by individuals and may be transferred under secure orders to another account. In terms of banking, this is a very old idea that existed for some time before the invention of modern fractional reserve banking. Accounts in warehouse banking pay no interest and indeed may involve payment of maintenance fees. Items deposited are identical to those withdrawn and transferred. In essence the individual has a safe deposit box but one that is not very versatile in that it only holds one type of asset which can be transferred at negligible cost upon order of the owner to a safe deposit box owned by another owner.

Clearly warehouse banking with this exchange feature is not particularly useful unless the number of AH is substantial. This means that every entity that is the object of transactions must hold an account. Thus, CBDC accounts would be forced on all current AH in the economy, and on others who for various reasons are currently unbanked, in order for the operation of the system to achieve the degree of promised efficiency. This means that current AH would be compelled to accept and maintain these additional accounts, whether they wanted them or not. The cost to society of forcing such additional burdens on current AH is potentially substantial.

It is not clear how large the number of CBDC AH might become if these accounts were to dominate the payment system. U.S. citizens abroad, foreign visitors and other foreign entities might be compelled to open a CBDC account in addition to their own accounts with foreign banks.

Why would a stick be necessary to achieve the coverage level needed to induce substantial numbers of individuals, firms, and organizations to hold CBDC accounts? If this type of account provides superior services to AH, there are private cryptocurrency alternatives that offer transactional efficiency, potential for return, and privacy. However, these private

alternatives have had limited appeal. The answer to this question reflects a host of hidden costs and criticisms of the proposal

First, for those with banking and broker-dealer accounts, the CBDC account would simply be an additional account that would not substitute for the services provided by banks and broker-dealers. Accordingly, households, firms, and organizations would be expected to undertake the cost and trouble of maintaining an account that provided no advantages over current accounts and yet could not fully replace the functions of these accounts.

Second, there is no provision for the CBDC to pay interest to attract depositors. Thus, carrying balances would have, most, the same attraction as any prepaid vehicle, i.e. the limited appeal of current prepaid cards. Transactions in the CBDC would not accrue rewards as with credit cards and hence many households would not use them for this purpose.

Third, access to the account would presumably require individuals to carry another separate identifier which could be subject to theft and unauthorized use.

Fourth, as with payment systems, other than the FRN or commodity money, electronic payment systems can be compromised by hackers, identity thieves or other types of cyber criminals.

Fifth, electronic payment systems may not work in remote areas, or in times of emergency due to storm, conflict, or disaster. In such circumstances the FRN provides robust assurance of the ability to continue transactions, which are essential at such times. Ironically this new account would fail at precisely the times that other electronic means of payment fail.

Sixth, and perhaps most important, it is not clear how to achieve universal coverage of the CBDC accounts. Saying that an account is "free" does not automatically induce everyone to take the trouble to acquire such an account. Free banking accounts and prepaid cards are currently offered online without universal uptake. Some fraction of the population may simply prefer not to have a deposit account of any type for privacy or many other personal reasons.

Seventh, if the CBDC were to succeed perhaps because the stick was sufficiently big, it would stifle innovation. The CBDC is essentially a monopoly payment system and monopolies, particularly government monopolies like the USPS, have little incentive to innovate or even to minimize cost.

Eighth, there are already innovations that promise to speed transactions and lower cost in the payment clearance system. The new "FedNow" Service is a real time, payment clearing system designed to provide clearance services within seconds 24 hours per day, 365 days per year.[1] FedNow is designed to expand the ability of depository institutions to support further advances in the provision of real time payment services to customers, i.e. account holding individuals and firms. This type of innovation, along with similar efforts by the private sector,

[1] The discussion here is based on the description of FedNow on the website of the Board of Governors under the payment systems tab. The system is currently scheduled for implementation in 2023 or 2024.

will be obstructed by the provision of a competing and redundant, but mandatory system, such as the CBDC.

In return for all these problems associated with the CBDC proposal, which in part explain the limited appeal of bitcoin and similar token currencies, there are no general public benefits that could justify public action to compel adoption of the system. The argument that the FRN spreads germs and viruses, even if it were true, does not establish a significant cost to society. There is no serious evidence that eliminating the FRN would have a significant effect on periodic pandemics. But if there were a temporary problem, individual merchants or customers would be free to use debit or credit cards, there are many alternative cashless payment systems. Again, the DBDC is a redundant innovation. Furthermore, there is no requirement that the FRN be used for payment, only that it be a possible choice for the payee. If the recipient of the payment wishes to disinfectant the FRN as it is received, this is easily accomplished.

The idea that there must be unspecified benefits because the Chinese or other banking systems have a version of the CBDC would only be a recommendation to move the innovation to the US if those banking systems provided superior performance, and there is no evidence that this is the case. The US is the world leader in financial innovation because of the competitive nature of its banking system. Furthermore, it is likely that innovations in payment systems in the Chinese banking system are motivated by a desire for social control and elimination of privacy than on efficient promotion of transactions.

Overall, the failure of the private sector to innovate a token currency held in warehouse accounts that could prove a generally attractive alternative to other assets and payment systems available to the public is consistent with the arguments made above that, for the majority of individuals, these accounts are burdensome and not attractive.[2] For those who wish to hold cryptocurrency accounts, they are readily available from the private sector. To force the CBDC on the public with a stick approach is hardly the role of a benevolent or efficient government.

Should the government use the carrot of discouraging use of the FRN to promote the CBDC?

In addition to direct promotion of the CBDC as a payment system, the government can also discourage use of the FRN. This would make the CBDC, or private sector alternatives, more attractive. Currently the FRN is widely accepted as payment for debts and transactions are conducted in dollars. The Dodd-Frank Act of 2010 allows merchants to offer discounts for paying in currency but does not allow them to advertise the discount. It is likely that most consumers are not aware of this change and hence pay with currency without asking for the discount or use credit or debit cards thinking that the law of one price holds. It is important to note that, as recently as 2010, the Congress passed major legislation which was designed to encourage use of the FRN for payment by providing merchants the freedom to offer discounts for using the FRN. This recent attempt to incentivize use of the FRN suggests that it would be

[2] The number of cryptocurrency accounts under 50 million.

consistent for the Congress to take further measures to allow consumers to benefit from discounts for cash rather than allow retailers to deny use of the FRN as a means of payment.

A general principle underlying Federal policy toward regulation of credit markets and financial services is that there are gains to allowing all consumers to patronize all retailers. This promotes competition and allows consumers to benefit from the information produced by better informed shoppers. Low income, less educated individuals who do not have debit or credit cards should not be segregated into a special class of retailers because this group is most vulnerable to high cost retailers.

One useful example of this general principle from US financial history is the movement to raise usury ceilings (note that technically charging any interest is usury), which limit the maximum interest rates that could be charged on consumer credit.[3] At the start of the twentieth century this maximum was generally about 6% and since then there have been waves of change in which the maximum rate has risen. There are two main arguments advanced by economists for these changes. First, setting a maximum based on the nominal rate of interest is not economically sound because the cost of credit is the real interest rate. In times of high inflation, nominal rates are much higher than real rates. Unfortunately, state and national limits on interest rates are based on nominal rates. Second, binding usury rate ceilings result in a two-tiered market in which "regular" merchants require payment in cash or financing at or below the maximum rate, while others incorporate the price of credit in the cost of the merchandise. Frantic Fred sells furniture with deferred payments over time but prices the furniture at 50% above the regular merchants. This tends to segregate low income consumers into Frantic Fred's Furniture where they have restricted alternatives and perhaps poor choices compared to regular retailers who are subject to intensive market competition. This artificial segregation of consumers results in significant welfare losses most of which are borne by low income consumers.[4]

The development of the Fair Credit Reporting Act in 1970 was based on the same idea that expanding access to consumer credit by facilitating the transmission of credit histories would allow more consumers to shop at regular retailers. This was particularly important given a mobile population and the difficulty of establishing creditworthiness after moving across state lines.

Although US government policy has been to promote the ability of consumers to shop in a single market, there are certainly divisions based on product quality. Low and high income consumers likely do not shop in the same clothing stores, but the level of consumer segregation is modest given the changes in maximum interest rates and the rising availability of credit cards.

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[3] Usury rates on consumer credit may generally be set by states but the Supreme Court, in 1978, ruled that the ceiling in a national bank's home state rather than the borrower's state of resident was binding. This led to an unwinding of rate ceilings due to competitive forces among lenders.

[4] Technically the "time price doctrine" can allow retailers to post different prices for cash and installment sales without the higher installment price being regarded as an implicit interest rate subject to usury laws but the inflexibility of time pricing (i.e. one schedule for all) still tends to result in segregation of high risk consumers into retailers who specialize in selling to those whose creditworthiness is low.

Furthermore, this segregation is based on preferences, needs, and wants rather on access to credit.

Allowing merchants to refuse to accept the FRN as payment reverses this policy of expanding consumer access. Given the association of credit and debit card use with income, like the usury rate ceiling, failure to accept the FRN tends to segregate low income consumers out of retail opportunities where they would ordinarily participate along with the more affluent. Access to credit or payment with the FRN is segregating consumers rather than their own choices based on individual needs and desires.

It may be that there are some areas or circumstances where transactions in currency are slightly more expensive for retailers than those with credit cards. However, in most cases currency should receive a discount because it provides a cost advantage to the retailer. A small cost increase associated with the FRN should not be the basis for refusal to accept currency as a means of payment. If necessary, cost differences between means of payment could be priced with either a small premium for currency (where it is more costly) and a discount for currency where it is less costly to the merchant. Surely this makes more sense that a system in which currency is refused or, where accepted, the discount that merchants would be willing to offer cannot be advertised. To the extent that government is concerned with poverty and the welfare of the poor, encouraging an open system where merchants can advertise either a premium or discount for currency is consistent with other public policies to aid the poor. It is likely that low income consumers who pay in currency are unaware of the potential discount which could be negotiated under the Dodd Frank Act.

Based on the arguments made here, rather than discouraging use of the FRN as a means of payment, there are good public policy reasons to encourage its use as an antipoverty measure. Just as the poor are more likely to be unbanked, they are also most likely to be dependent on the FRN as a means of payment. Measures to ensure that the FRN remains widely acceptable as a means of that payment will generally aid the poor while imposing negligible costs on the rest of society. Indeed, some effort to acquaint consumers with the possibility of asking for a discount for paying with the FRN should be considered rather than steps to limit the number of retailers accepting it as a means of payment.

Thank you, Chairman Lynch and Ranking Member Emmer for the opportunity to submit testimony on this matter and please do not hesitate to contact me in the future if you have any questions.

Sincerely,

Dr. Anthony Yezer, Ph.D.
Professor of Economics
George Washington University