UNDERSTANDING CENTRAL BANK DIGITAL CURRENCIES

An Accounting Perspective presented by

WSBA WALL STREET BLOCKCHAIN ALLIANCE

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From the Chairman

On behalf of the Wall Street Blockchain Alliance, we are very pleased to present our latest publication for the Accounting profession: "Understanding Central Bank Digital Currencies - An Accounting Perspective". This work, as are all of the publications and other thought leadership of our Working Groups, is the result of the joint efforts of our global members, principally the firms and individuals who are part of our WSBA Accounting Working Group, as well as the WSBA team, Board of Directors and Advisors. In a world of rapidly evolving innovation and change, we are deeply grateful for their experience, scholarship and wisdom. As per my usual, I reserve special recognition for the Chair of our Accounting Working Group, Dr. Sean Stein Smith. His seemingly boundless energy and forethought regarding global innovation make publications like this possible.

Central Bank Digital Currencies (CBDC's) have garnered an astounding degree of attention in the past year. This is a notable feat to be sure, given that this has happened in the midst not only of rapid evolution in the cryptoasset and blockchain worlds, but also against the difficult tides of global pandemic, geo-political uncertainty and economic disruption.

The rise in prominence of CBDC's is even more pronounced given the fact that there is as of yet no universally accepted definition of them. For some, it might be as basic as stating that they are a digital form of fiat money. I am not so sure it's that simple. Indeed, the discussion about CBDC's actually goes back many years, with early references as far back as 1985. And in 2018, the Bank for International Settlements published a whitepaper attempting to set the stage for a global discussion about central bank based digital assets. The advent and growing adoption of blockchain and cryptoassets has simply hit the accelerator on these discussions.

Regardless, the dawn of CBDC's forces us to address many questions, beyond the definitional. In many respects it causes us to revisit the role of central bank money and payments, how currencies operate, and ultimately the foundational questions related to the movement of assets and the role of the global financial intermediary. In a world of radical disruption, in which physical money sees declining use with each successive generation, these questions are important ones to answer. I am confident that this white paper is the beginning of our arriving at some of those answers.

As with all WSBA publications, we would welcome your thoughts and feedback and hope that you find this document useful and informative.

Sincerely, Ron Quaranta, Chairman of the Board **Wall Street Blockchain Alliance** October 2020

Understanding Central Bank Digital Currencies -An Accounting Perspective

Introduction

There are several important points to make at the beginning of this paper, both in order to avoid any inadvertent confusion, and to focus the analysis contained within this document specifically to CBDCs. First and foremost is that, generally speaking and even with the rapid proliferation of cryptoassets, governments remain the sole legitimate issuer of money. Other cryptoassets, even those that contain several of the core characteristics and functionality of money, are not widely accepted as money by regulatory authorities. From an accounting perspective the implications of this distinction can be summarized with the following question: what the implications are where the functional currency being used by certain individuals or organizations is subject to taxation. This, in turn, leads to other questions including: what the character of the gain or loss is; whether the specific gain is exempt from certain taxes; whether losses can be deferred or disallowed in certain instances; and whether or not cryptoassets such as CBDCs are - in fact - classified as a taxpayer's functional currency at all.

Additionally it is important to recognize the distinction from stablecoins (which may or may not be backed by USD or some other fiat currency), and have been discussed in two prior Wall Street Blockchain Alliance papers on the subject, available <u>here</u> and <u>here</u>. Stablecoins are a mid-point because some stablecoins effectively represent a bailment (claim) for an underlying fiat currency. This paper does not get into issues raised by stablecoins, but it should be noted that some stablecoins - such as Tether - may serve as an unofficial medium of exchange even though these cryptoassets are not officially recognized as money.

Why the WSBA Accounting Working Group

Considering that there is still no authoritative accounting guidance that is globally enforceable it might seem strange that the Wall Street Blockchain Alliances' Accounting Working Group would provide commentary on the topic of Central Bank Digital Currencies (CBDCs). Blockchain and cryptoassets are a fast moving and complicated area, but upon closer examination CBDCs are not as abstract nor as non-accounting a conversation as it might initially appear. Cryptocurrencies have come a long way since bitcoin burst onto the scene via the original whitepaper in late 2008/early 2009, and a significant change in the marketplace has been the rise of asset-backed-coins (stablecoins). The Accounting Working Group had previously published two whitepapers on the stablecoin space, "*Stablecoins: A Primer for the Accounting Professional*" and "*Stablecoins 2.0 – Advanced Considerations for Accounting*

<u>*Practioners*</u>", which have been utilized by universities across the United States for graduate courses, and been cited by numerous financial media outlets.

CBDCs are, at the core of the idea, simply an extension of the stablecoin concept. Stablecoins are cryptoassets issued by a centralized or semi-centralized entity which are supported, tethered, or otherwise connected to an underlying asset. Thus, a CBDC is a cryptoasset issued by a central bank or other quasi-governmental entity that is supported or backed by the full faith and credit of the issuing entity, similar to how fiat currencies are created and issued. Framed in that light and setting aside the geo-political factors that will accompany such a project, the accounting and reporting conversation is a rather obvious next step in this discussion. With that in mind, setting the stage for this analysis and contextualizing how this trend emerged seems like a logical place to begin.

Not just an idea

Building on the importance of contextualization for CBDCs, it should be noted that the concept of a CBDC is much more than just an idea and has rapidly moved to the mainstream financial conversation. In 2020 alone, CBDCs have been reported on the balance sheet of the Central Bank of the Bahamas, over thirty bills have been proposed to the U.S. Congress related to blockchain and cryptoassets, and the Federal Reserve Bank of Boston is currently examining the applicability of over thirty blockchain options for further testing and implementation. Coupled with the beta testing that is already underway by the People's Bank of China under the crypto-yuan initiative, and it quickly becomes clear that - while still flying under the proverbial radar - the idea and implementation of CBDCs is not something which can be ignored.

The bigger picture

No discussion of a CBDC is complete without an understanding and analysis of the context within which CBDCs entered the blockchain and cryptoasset conversation. The irony of such a development

"(T)he underlying value proposition of bitcoin was to create an alternative financial system without the need for an intermediary... cryptocurrency issued, governed, and managed by a central bank is the antithesis of this ideal" should not be underestimated; the bitcoin blockchain was designed explicitly to create an alternative banking and financial infrastructure not connected or tethered in any capacity to a central government, central bank, or other such agency. In other words, the underlying value proposition of bitcoin was to create an alternative financial system without the need for an intermediary; a trustless environment where trust was guaranteed by the code rather than individuals. A cryptocurrency issued, governed, and managed by a central bank is the antithesis of this ideal. That said, and like any other development or change in an underlying technology, examining the context and landscape within which this idea was launched is important. To begin with, for the purposes of this discussion, we will define CBDC as follows:

"A central bank digital currency represents a cryptocurrency that is developed, issued, and maintained by a central government or quasi-governmental agency such as a central bank, and as such is maintained and transacted on a blockchain maintained by said central government or quasigovernmental agency."

Given this definition, let's dive into the three non-blockchain and non-crypto factors that spurred the development of this newest entrant to the cryptoasset conversation:

Political

Like everything else finance related, there is also going to be a political component to blockchain and cryptoasset technology. For example, an unlikely geopolitical struggle between private enterprise and sovereign nations appeared center stage when the Libra Association, publicly commonly associated with Facebook, released its digital currency concept known as Libra, a stablecoin pegged to a reserve of cash deposits and short-term government securities. The Libra Association, a conglomerate of businesses ranging from payment giants like PayPal and Visa, to cryptocurrency focused companies like Coinbase, was established to oversee the governance of the Libra Protocol and the Libra Reserves. The sheer size and influence of Facebook, with its social network, privacy issues that had come to the forefront of some lawmakers during the 2016 U.S. Presidential election, and existing marketplace, was immediately viewed as a threat that drew the attention of regulators. The release of the Libra whitepaper proved untimely due to those privacy and security issues that negatively found Facebook in the press.

The immediate pushback and criticism that the Libra Association received when the initial project was launched can only partially be attributed to the leadership position of Facebook. Upon initial review of

testimony and feedback of Congressional hearings, several trends immediately became clear. First, the specter of a globalized and privatized financial alternative to fiat currencies did not seem to be received with open arms by governmental agencies. Considering that control over currency has long been the domain of individual countries and is still an issue in areas such as the European Union, this political pushback should not seem a surprise. Following this initial pushback, several efforts were launched by multiple

"Like everything else finance related, there is also going to be a political component to blockchain and cryptoasset technology."

nations to develop and distribute nation state cryptoassets. Interestingly, it does seem that some of the most promising CBDCs projects currently underway took significant inspiration from the original Libra Association whitepaper. The COVID-19 global pandemic nearly pushed the concept of a "digital dollar" into the US Congress' stimulus package that came to be known as the CARES Act. Early drafts of bills proposed by both the House and Senate included mention of "dollar balances consisting of digital ledger entries recorded as liabilities in the accounts of any Federal Reserve Bank," and also made mention to digital wallets branded as "FedAccounts." As our contactless society evolves into the new normal, we may see further efforts to replace paper and coin fiat currency (and the potential germs and viruses that may live on it), with a digital currency managed on central bank rails.

Economic

An additional point that needs to be acknowledged in this analysis of CBDCs is that this idea might not be as radically different than it might initially appear. While the United States is by no means the global leader in digital payments at the present, there seems to be increasing comfort by individuals and institutions to utilize a digital version of currency, or a proxy such as proprietary corporate applications residing on private corporate servers. Against that backdrop, the evolution of this trend to a digital dollar, tokenized fiat currency, or a blockchain-augmented payment channel seems to be a logical next step. In other words, CBDCs should not be seen as purely disruptive, but rather iterative in nature.

Even after the decline and sustained lower price levels across the cryptoasset space, the economic potential and current impact of blockchain technology and cryptoassets is difficult to overstate. In

"A driving force...of this continued refinement has been the desire of enterprises and governments to harness the power and potential of blockchain applications." terms of investment alone, there have been billions in dollars (and other local currency units) allocated to the ecosystem. On top of the direct investments into blockchain technology, the cryptoasset space itself has developed numerous different offshoots since the last bitcoin price runup in 2017. Following the price declines in bitcoin, and discovery of the issues inherent to the bitcoin blockchain model - namely scalability and transaction processing speed - other models of blockchain have proliferated successfully on a global basis. A driving force, ironically enough, of this continued

refinement has been the desire of enterprises and governments to harness the power and potential of blockchain applications. Specifically, the rise of stablecoins ties directly into the concept of CBDCs; if a cryptocurrency can be supported or connected to an external asset it would seem reasonable to forecast that fiat currencies could also serve this role.

Technical

Blockchain may have been initially developed with a singular goal in mind, but the technical applications and possibilities of actually integrating blockchain into business operations continues to prove a challenge for organizations. Many organizations are working feverishly to address this problem, and some issues have indeed been resolved in relatively short order. That said, *interoperability* - the ability of blockchains to communicate and integrate with other blockchains

and/or applications - continues to emerge as a leading consideration for new organizations and blockchain applications that have entered the marketplace. Building on this trend of increasingly interoperable blockchains is the reality that in order for a CBDC to transition from concept to reality the interoperability of this cryptoasset must be a priority. In order to scale at a national level, a CBDC enabling blockchain must be able to interoperate seamlessly with every other payment system in - at the very least - the jurisdictional area in question. While still a challenge and outstanding item, it increasingly seems a challenge that the blockchain ecosystem is addressing.

Why a CBDC makes sense

A core question that should be asked of any new technology tool, including new blockchain applications and iterations, is whether or not that this technology actually makes sense in the specific conversation at the organization in question. The blockchain and cryptoasset space, with or without a CBDC, has been rapidly moving and evolving since bitcoin first became part of the mainstream financial markets' conversation. One of the single largest obstacles to broad based adoption of cryptocurrencies by merchants and individuals of all sizes is the lack of consistent regulatory, accounting, and financial frameworks and guidelines in the cryptoasset space. Perhaps the single

largest benefit of a CBDC would be the fact that as a direct result of nation state involvement, regulations will need to be more consistent and transparent. The presence of an explicit government backstop - regardless of political affiliation - would invariably encourage usage of this CBDC as a viable alternative to current fiat as opposed to an investment or hedging instrument.

With thousands of cryptocurrencies being traded on a daily basis, and with a market capitalization worth hundreds of billions of dollars, this lack of authoritative and globally consistent reporting and accounting standards continues to forestall adoption. Accounting and financial reporting might not be as buzz worthy or as headline driving as price swings "One of the single largest obstacles to broad based adoption of cryptocurrencies by merchants and individuals of all sizes is the lack of consistent regulatory, accounting, and financial frameworks and guidelines in the cryptoasset space."

but might actually be more important from a market's perspective. To achieve the goal of cryptocurrency proponents, the utilization of cryptocurrency as a medium of exchange and viable alternative to consistent regulations must exist. CBDCs are by no means a cure-all for the issues facing the blockchain and cryptoasset space but do represent a potentially paradigm shifting iteration.

Prior to discussing the specifics of why a CBDC works where other cryptoasset implementations have not succeeded as widely to date, let's revisit some of the underlying issues with those existing cryptoassets.

Issues Addressed by CBDC

Regulatory - starting with the most obvious basket of issues for current cryptoassets, the regulatory landscape can be best described as a patchwork of regulatory rulings, pronouncements and enforcement actions that are neither consistently nor particularly clear to every situation. Taxation, reporting, disclosure, investor protection, and insurance are simply a few of the areas within which cryptoassets are not regulated consistently. A CBDC, developed and issued by a national government or central bank, would seemingly be able to address many of these issues in short order.

Legal - building on the first point around regulatory issues, there are also a handful of legal matters and issues that seemingly need to be assessed prior to wider mainstream adoption and utilization. For example, are there consistent tools and methods in place to track the provenance and custody of different cryptoassets? What if these assets are lost or impaired as a result of third-party action, such as a bank failure? Lastly, how are these assets to be treated if they are included as part of an estate? Tangentially, the lack of accounting guidance that has been issued on a global basis has not made the resolution of these and other open items any simpler.

Consumer - simply stated there may very well be some hesitation on the part of consumers, retail investors, and merchants to use cryptoassets as a medium of exchange because of several fundamental issues. Although the reputation of cryptoassets have dramatically improved since events like the <u>Silk Road case</u>, there is still some lingering reputational risk when it comes to crypto. The fact that bitcoin is commonly used in ransomware attacks does not address this in a positive manner. A CBDC with an implicit, or potentially explicit, government guarantee and seal of approval would go a long way to banishing these doubts.

Now, let's take a look at how a CBDC could directly address these, and other issues that are commonly associated with current cryptoassets. Price volatility, a lack of consistent regulatory and legal rights, obligations, and enforcement mechanisms are a few of the open items that a CBDC could, by its definition, effectively address. Pegged to an existing fiat currency, the price volatility could be reduced versus untethered cryptoassets such as bitcoin, and since these CBDC could represent the "official" currency in the nation, it would be logical to conclude these CBDCs would fall under existing rules and regulations.

Advantages to a CBDC

Taking a moment to focus on a few of the specific advantages and benefits that a CBDC would create when compared with current existing cryptoassets, there are a few direct areas in which these advantages are most obvious.

"Since a CBDC will serve as a tokenized or digital representative of existing fiat currencies, this would...result in lower volatility associated with this cryptoasset." Having an implicit or explicit government backstop and support of a cryptoasset will, by the very nature of being an "official" government project and program, assist with addressing regulatory, legal, and consumer concerns. Specifically, any potential criminal connotations linked to the usage of this CBDC would be diminished since this cryptoasset would be backed by the full faith and credit of the government.

Two other factors come to mind as inherent advantages of a

CBDC:

- Direct representation of fiat currency Since a CBDC will serve as a tokenized or digital representative of existing fiat currencies, this would, by extension, result in lower volatility associated with this cryptoasset. If a cryptoasset, issued by a governmental entity or central bank is deemed as equivalent to existing physical currency, that should put an end to wild price volatility.
- Increased willingness to use this CBDC A major headwind prohibiting the broader adoption
 of blockchain and cryptoassets continues to be the unwillingness of individuals and business
 owners to actually use cryptoassets as a legitimate medium of exchange. Building on the first
 two points a government backstop and reduced-price volatility an effectively functioning
 CBDC should lead to wide adoption of crypto at large.

Taking a step back then, the underlying message and directive connected to CBDCs becomes increasingly clear. Every iteration of cryptocurrencies, including the hundreds of stablecoins that have recently entered the marketplace, have been developed with the express intent of generating increasing utilization from a mass market perspective. With that context in mind, the implementation and idea of a CBDC is a natural extension of these efforts, instead of an entirely new idea. Even more importantly, and fully acknowledging that a centralized cryptoasset issued by a central bank may be anathema to the original ideals of bitcoin, this step might be the missing piece to fulfilling the original ideal of bitcoin; a new form of currency.

Challenges of a CBDC

With any new technology or idea, no matter how appealing or logical it may appear to proponents, there will invariably be challenges. Let's take a look at a few of those most prominent issues that are - and could continue to - forestall wider development and implementation of CBDC programs.

Politics - Any time the political process is involved in the development of a new program, tool, or initiative there will invariably be complications that arise. While it is impossible to eliminate the political effects of these initiatives, presenting a balanced and objective perspective can go a long way to having a level-headed conversation around CBDCs.

Incumbents - It would be naive to simply assume that incumbent institutions, both in government and private sector, will have nothing to say as the idea of a CBDC moves forward. Frankly, a CBDC is going to require the support, technical expertise, and real-world experience that these incumbents have to offer. The bitcoin ideal may have wished to disintermediate these very players, but wider adoption necessitates working with them instead. "It would be naive to simply assume that incumbent institutions, both in government and private sector, will have nothing to say as the idea of a CBDC moves forward."

Fractional/reserve banking - The inherent challenges of a CBDC are numerous, but one of particular interest is the impact that a

CBDC might have on the current fractional reserve banking system. More information on that system can be found <u>here</u>, but as conversations about the lending, interest generation and rehypothecation of cryptoassets accelerates, CBDCs need to be kept in the loop.

Drilling down for a moment into a few of the specific challenges that a CBDC might pose to the existing financial system, there are a few considerations that do need to be a part of any implementation plan. Specifically, if banking institutions can hold CBDCs from a custodial perspective, this implies that the banking system can use CBDCs to the same degree as other types of money. While seemingly a simple statement, this action raises several other considerations that should be assessed:

- 1. Banks can effect transactions in money issued by foreign governments; can they do likewise with CBDC of foreign countries?
- 2. Banks have risk-based capital rules for fiat money; does a CBDC have the same risk weight as existing fiat alternatives?
- 3. Banks have certain reporting rules when they transmit money and those rules can differ with respect to other asset classes; how does CBDC fit within those rules?

Obstacles to broader adoption

An idea, no matter how well thought out, innovative or market leading, will never be able to simply and *easily* achieve mass market adoption and implementation. CBDCs are a new idea no matter how the concept is examined, but on the other hand this idea does not exist in a vacuum. The very same issues that are top of mind across an array of societal and economic sectors will be equally present in any conversation around CBDCs.

Taking a look at a few of them specifically, a sampling of these potential includes the following:

Privacy - the idea of a central government having access to the totality of transactions used by a

citizenry should be enough to give even the most enthusiastic proponent pause. Especially given the fact that not every nation or central government is also going to have the same ideals or attitudes with regards to personal privacy rights or transactions, this is not an idle concern. In other words, special care will have to be taken to ensure that - by constructing a national blockchain with a crypto-fiat operating on top of it - a turnkey solution for an authoritarian nation is not accidentally created.

"...considerations around the ability of a blockchain and associated cryptoasset to interoperate successfully with other technology and payment systems is critical."

Interoperability - not an accounting specific issue, the considerations around the ability of a blockchain and associated cryptoasset to interoperate successfully with other technology and payment systems is critical. Especially since the directive or primary mission of a CBDC is for it to be used as a mainstream legitimate fiat alternative by both individuals and merchants, the user experience and user interface must be as simple and as convenient as existing options.

Implementation Considerations of a CBDC

While it is true that blockchain and cryptoassets in general have led to a number of unique accounting considerations, a CBDC can create several very specific ones. This is not to say that the existing accounting considerations and issues that form headwinds for blockchain and crypto at large are not relevant for CBDCs. Rather, it is reasonable to project that due to the nature of a CBDC there might very well be additional factors that need to be taken into account:

- 1) There is a possibility that, as implementation occurs but before mass utilization, that some breakdown in the valuation of existing fiat currencies and the newly created crypto-fiat hybrid. This might seem like an illogical conclusion, but whenever there is more than one currency unit in place in a country, a black market invariably develops. Examples that might seem extreme, like black markets in currencies across the world, might not seem as outlandish when viewed through the following lens. In 2016 when the central government of India, virtually overnight, decided to redenominate currency and eliminate entire types of currency, the chaos that resulted was not insignificant.
- 2) Specifically, what measures will be put into place to ensure that this crypto-fiat hybrid does not become associated with criminal activity, restrictions as to usage, or some sort of political affiliation. Granted it will be nearly impossible to separate politics from the process when it is as the name indicates developed, issued, and controlled by the central bank. That said, taking steps to help make sure this project is developed as impartially as possible will be integral toward wider adoption and utilization. For example, if the implementation of a CBDC begins, for whatever reason, with requiring certain individuals or institutions to use this cryptoasset following some sort of criminal activity, this could hinder adoption overall.
- 3) How are updates going to be handled with regards to off-chain transactions, CBDCs held in trusts on the behalf of others, or other blockchain specific considerations? Simply because this specific cryptoasset is to be issued and governed by a central bank or governmental entity does not mean that existing blockchain and cryptoasset reporting considerations can be ignored. Considering that most of the central governments will need to collaborate with some sort of private sector institution, maintaining a succession plan to ensure that the underlying is updated is imperative.

Accounting

Even though the concept and initial implementation of a CBDC might seem like a solution to many of the accounting issues that continue to exist in the space, the reality is that as of this writing there exists no authoritative accounting guidance or reporting for cryptoassets. That said, it would seem logical to conclude that since these cryptoassets are issued and marketed as legitimate fiat alternatives to existing dollars, that the accounting should be similar. Issues connected to valuation, reporting, and taxation should be resolved in relatively short order if CBDCs develop as they seem to be doing based on current market analysis. That said, as of this writing there are still no consistent and authoritative guidelines related to the accounting for cryptocurrencies of any kind. It would stand to reason, however, that if CBDCs are issued, treated, and classified as the equivalent as current fiat options that the accounting for these cryptoassets would be equivalent.

In other words, it seems an opportune time for advocates and proponents of blockchain and cryptoassets to 1) highlight the benefits of CBDCs, 2) illustrate the issues that are resolved by the

"Even though the concept and initial implementation of a CBDC might seem like a solution to many accounting issues...the reality is that as of this writing there exists no authoritative accounting guidance or reporting for cryptoassets." implementation of these tools, and 3) point out just how similar CBDC ideas are to existing financial instruments. Objectivity is always key, but this issue does seem like one that accounting practitioners are well positioned to facilitate moving forward.

Financial Reporting and Disclosure Requirements

Perhaps most important to the accounting conversation around CBDCs are the reporting and disclosure requirements that will accompany these cryptoassets as they mature and enter the marketplace. It is true that these reporting and disclosure issues remain, to date, unresolved for cryptoassets at large, but the fact that a CBDC will represent a crypto-fiat

hybrid would appear to make the eventual resolution of these issues a simpler matter for these instruments than others. Without diving overtly in the technical details of the reporting process, several core areas do appear to be moving to the forefront specifically as they relate to CBDCs.

First, what type of information should be reported and disclosed about these cryptoassets? It would be illogical to assume - especially given the contentious geo-political environment as this writing - that a national scale blockchain would be exempt from national security strategy and planning considerations. Given that, the discussion about just exactly how much data should be published at all about this cryptoasset should form the basis for robust conversation. Also, are these policies in place to ensure that the underlying blockchain for the CBDC will be updated? Assuming yes (and not having these policies is cause for concern), the process and frequency of these updates might not want to be publicly disclosed.

Secondly, and tangentially related to the specific accounting considerations, is the possibility that such a CBDC will eventually help resolve the numerous open items that are related to cryptoasset

accounting guidance and regulation. Specifically, the tax treatment that currently dominates the conversation around cryptoassets does not seem to be designed with fostering continued growth and innovation. Rather, and due to the ambiguous and often conflicting regulatory frameworks and guidelines that have been issued, it remains a challenge for practitioners to offer comprehensive guidance or advisory services to clients either in the United States or internationally.

Also, price stability and deflation of the cryptoasset space at large is a concern. Depending on which counterparty is consulted with, the continued price stagnation that has "Perhaps most important to the accounting conversation around CBDCs are the reporting and disclosure requirements that will accompany these cryptoassets as they mature and enter the marketplace."

existed since the price bubble of 2017 burst is either positive or negative. Introducing one, or several, globally supported and governed cryptoassets that are actually used as legitimate fiat alternatives might result in an interesting price effect on the marketplace. Many cryptocurrencies, especially bitcoin, continue to have the narrative surrounding them dominated by discussions connected to price volatility. Reducing both the price volatility and price spread around cryptoassets can result in, however, more widespread use of both blockchain and cryptoassets by individuals and institutions alike. Lowering, or at least making more predictable, price volatility and price changes associated with cryptoassets seems a logical priority to focus on in terms of further development. This is not to suggest that a CBDC will automatically or instantaneously address price volatility and price uncertainty issues. Rather, the fact that such a fiat-crypto tool is able to come to market at scale should increase the viability of the ecosystem at large. Regardless, any price volatility or fluctuations that are connected with CBDCs will need to be reported and disclosed in some kind of consistent manner.

Lastly, in terms of the reporting and disclosure there is also the question as to whether or not there is a need, expectation, or justification for reporting how widespread the adoption of a CBDC is. During 2020, as a direct result of work stoppages at the U.S. Mint due to COVID19, the U.S. experienced a shortage of coin denominated currency. While this story received headlines and coverage, the weakness it exposed did not. Be it physical currency (such as dollars), or coinage, the same weakness and single point of failure exists; the central mint or issuing governmental entity. It is true that a CBDC will be issued or controlled by a centralized or semi-centralized entity, but the digital nature of a CBDC mitigates against the risk of running out of raw materials or physical units. Is this a defining advantage

of a CBDC over other forms of digital payments? Perhaps not, but it does represent yet another advantage of digital payments when compared against current fiat alternatives.

The Upshot

At the end of the day, any comprehensive conversation around the subject of CBDCs should include the following reality; regulatory enforcement of cryptocurrencies has been inconsistently developed and enforced on a global basis, and even within certain nation-states. This is not to say that a top down or centralized approach to regulation should be encouraged; quite the contrary. Rather, and realizing

"Accounting and financial professionals are not the final say on regulations but have an important role to play in how these regulations are ultimately crafted." that every jurisdiction is going to be different, the implementation of different cryptoassets issued at national levels should help facilitate the regulatory and reporting conversation. No matter how technically superior or functional a cryptoasset is and including those that are developed by central banks or other quasi-governmental entities, without consistent regulatory guidelines, merchants and individuals will be hesitant to use them as a legitimate fiat alternative. Accounting and financial professionals are not the final say on regulations but have an important role to

play in how these regulations are ultimately crafted. Especially with such an innovative idea, and one that builds on the originally innovative idea of cryptocurrency itself, requires regulations and guidelines that are effective while not being overly restrictive.

Conclusion

Clearly there is still much to be developed in the CBDC space, similar to the extensive work still left to do in the wider blockchain ecosystem. Even with the work remaining to be completed however, it should be clear and evident that there are numerous advantages of digital payments compared to physical currency, and that these advantages are amplified when different iterations of cryptocurrency are added to the conversation. Pulled forward, perhaps artificially quickly by the economic impact of COVID-19 and governmental responses, the appeal of a fully digital payments infrastructure continues to increase. Parallel to the increased interest in digital payments overall, the institutional and governmental interest in blockchain and cryptoassets has also accelerated. With several major central banks already prototyping and testing different versions of crypto-fiat hybrids, with many more entering the conversation during 2020 the question is not if a CBDC goes mainstream. Rather, it is how quickly will this occur, and how widespread will this initial adoption become? In any event, and no matter which type or iteration of a CBDC becomes the global standard, accounting and financial reporting frameworks will need to keep pace. The Wall Street Blockchain Alliance, and the working groups therein, stand prepared and ready to analyze these complex issues as they arise, and offer objective thought leadership to the marketplace.

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