The Viability of Cryptocurrencies
Introduction

Although cryptocurrencies are still in their infancy, important headway has been made in the broader world of digital currencies as of late by regulatory bodies, central banks, start-ups, tech giants and traditional FIs – domestically and internationally. As institutions begin to experiment with potentially far-reaching use cases and regulatory agencies play catch up, the drawbacks and theoretical benefits associated with cryptocurrencies and, particularly, blockchain have the potential to give way to tangible applications which deliver real value to consumers and institutions alike. For institutions, an exploratory approach to understand the technology and its implications is advisable. Experimentation is more about the potential to unlock the upside of the underlying technology than indicative of an incoming paradigm shift for US consumers towards using cryptocurrencies as a primary means of payment.

For institutions, an exploratory approach to understand the technology and its implications is advisable
Developing consumer sentiment and merchant acceptance

From a demand-side perspective, FIs will want to keep a close eye on consumer adoption and positive attitudes towards cryptocurrencies. The number of cryptocurrency users has risen from 8.9M in September 2016 to 42.3M in 2019.1 With cryptocurrencies come a promise of improved transaction speed, decreased fees due to disintermediation, better security, confidentiality, and record storage over traditional forms of payment. Merchant acceptance of cryptocurrencies, facilitated by third parties, has been on the rise as well as of late. Flexa has notably enabled Nordstrom, Starbucks and Whole Foods to take Bitcoin payments. Other providers such as Coinbase, give merchants the ability to provide discounts for accepting Bitcoin. While acceptance has increased, interest in Bitcoin and other cryptocurrencies is more so the result of their increasingly evident viability as an investment vehicle rather than an indication of demand for them as an everyday alternative to existing payments methods.

Consumer applications have not picked up steam in the US

Facebook made headlines when it announced its own cryptocurrency, Libra (initially set to be launched in 2020 but has been delayed). Libra promises a lower volatility cryptocurrency, made available to anyone with a smartphone and data connectivity, that can serve to promote greater financial inclusion for the world’s 1.7B unbanked. Facebook’s proposed currency has had some pre-launch struggles with notable partners of the Libra Association (the group of organizations mandated with overseeing the currency) leaving, citing concerns ranging from Facebook’s involvement to compliance shortcomings. It’s unlikely we’d see a consumer-facing use case for cryptocurrencies such as Libra proliferate in the US, largely because of the strong foothold of traditional FIs and the lack of immediate consumer need for a change to the payment ecosystem in the US versus less developed geographies where many are completely unbanked.

In March 2020, it was announced that Facebook is reconsidering Libra’s framework and evaluating the possibility of adding functionality so that the social network can accept different forms of coins, including central bank digital coins (CBDCs) – in essence a pivot to more of a network than a single cryptocurrency.

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**Cryptocurrencies 101**

*Blockchain:* A distributed ledger that can record transactions/interactions between entities efficiently and in a permanent, verifiable manner. Each ‘block’ contains a record of the previous block – they are linked by a process called cryptography.

*Digital Currency:* Currency available in a digital form. Can be central bank-issued or issued by another party, universally accessible or privately accessible and peer-to-peer or facilitated through the use of an intermediary.

*Cryptocurrency:* A type of digital currency that is universally accessible (permission-less – i.e. anyone can participate) and peer-to-peer (no middleman), working through distributed ledger technology (blockchain).

*Stablecoin:* A type of cryptocurrency designed to have minimal volatility – a stablecoin can be pegged to a commodity or traditional fiat money. Stablecoins which are redeemable in fiat money or commodities are ‘backed’ whereas stablecoins tied to computer algorithms to control money supply are not backed.

**Sample Payments Use Cases:** Cryptocurrency ATMs; Remittances; Wallet Accounts; Disbursements; Prepaid Reloadable Crypto Cards; KYC through authenticated blockchain IDs
But large-scale B2B applications are gaining traction

JP Morgan Chase, whose chief executive previously called Bitcoin a fraud, released its own digital currency in February 2019. JPM Coin is 1:1 redeemable to fiat currency and currently only for institutional customers with three early use cases: international payments for large clients as a substitute to wire transfers with Swift, instant settlements for securities transactions and, lastly, for institutional treasury services. JP Morgan was not the first US bank to issue its own digital currency. Signature Bank, a smaller New York based FI, released Signet for institutional use about a year before JP Morgan announced the JPM coin. At the time, Signature bank was also one of the few FIs that would provide cryptocurrency startups access to deposit services.

Almost across the board, other large US players have begun to experiment. Wells Fargo is also said to be launching a stablecoin primarily for internal settlement (Wells Fargo Digital Cash) in 2020; Goldman Sachs is said to be developing a cryptocurrency asset as well – Goldman’s CEO has stated he believes global payment systems are heading the direction of stablecoins; and Bank of America holds the most cryptocurrency patents though the bank’s official stance on cryptocurrencies is fairly bearish. Citibank, on the other hand, cancelled plans to issue its own digital coin, opting instead to make improvements along the firm’s existing rails. In other geographies, Japan’s biggest bank Mitsubishi UFJ Financial Group gave up on launching a standalone cryptocurrency in favor of a consumer-facing digital currency that works more similarly to JPM Coin.

International Case Studies

Santander & Ripple
With Ripple’s help, Santander has recently launched One Pay FX, a blockchain-based international transfer service in Spain, the UK, Brazil, Poland and launching in Mexico registered on the Ethereum blockchain network.

Julius Baer & Seba
The Swiss private bank announced in early 2020 plans to begin offering its clients services such as secure digital asset custody and cryptocurrency transaction solutions after partnering with startup Seba Bank AG.

Arab Bank Switzerland & Taurus
The bank will be launching a suite of new digital services including Bitcoin and Ethereum storage and brokerage out of a growing demand by younger clients to include digital assets in their portfolio.

New legislation in Singapore
In early 2020, Singapore passed the Payments Services Act, including wide-ranging regulation from digital payments to crypto trading, to provide more certainty to both consumers and firms considering entering the country.
China, Japan and the European Union have taken steps towards digital currencies

Central Bank Digital Currencies (CBDC) are picking up steam across the world. This is theoretically bad news for FIs as it serves to shift deposits outside their ecosystem, if they fail to adapt their functionalities and offerings to get involved. While the FED has only begun looking into a CBDC, China already has plans to issue a digital yuan to several notable corporations such as the Bank of China, ICBC, Alibaba and Tencent. In February 2020, Japan also released a proposal for a CBDC. Switzerland, Sweden, Russia and England amongst others have also indicated intent to study or move towards a CBDC. There is some speculation, however, that central banks are largely posturing rather than legitimately interested in issuing a government digital currency – European Central Bank insiders, for example, “say it has no laboratory working on a digital euro and little intention to create one any time soon. These comments seem designed to jolt the private sector into improving the inefficient, costly and time-consuming world of cross-border payments”.

Notable regulatory developments as of late in the US

An ambiguous regulatory landscape in the US has, to some extent, contributed to stalled progress. On a federal level, the SEC and CFTC both claim jurisdiction over cryptocurrency though the former classifies and regulates them as securities and the latter as a commodity. Further muddying the waters, cryptocurrency regulations vary on a state-by-state basis. Some experts claim that it the fact that “regulatory authority in the U.S. is split among too many diverse agencies [with] unique missions and interests to assert” has led to some over-regulation. There are, however, positive signs of regulatory progress in the US. The Cryptocurrency Act of 2020, which surfaced in December 2019, has a stated purpose of clarifying which Federal agencies regulate digital assets. Furthermore, the Federal Reserve announced in early 2020 that it is looking into launching its own digital currency. Federal Reserve Governor Lael Brainard announced that the FED is looking into uses cases for “digital currencies, including the potential for a CBDC (central bank digital currency)”.

Cryptocurrencies and Economic Uncertainty

During periods of economic compression, cryptocurrencies can provide investors with an alternate place to store assets and invest. For example, due to Bitcoin’s scarcity many believe that during recessionary periods the cryptocurrency is more likely to behave like a safe haven commodity similar to gold than a traditional equity. Overall, from a payment’s perspective, recessions are unlikely to alter the method by which people spend – if anything, more volatile cryptocurrencies may be even less attractive options for transactions as consumers seek certainty and liquidity. Digital currencies, however, may be a viable option for government stimulus payments. In 2020, when Congress was considering methods for paying out funds associated with the Cares Act (or Coronavirus relief bill) there were discussions of using a digital payment system to do so – while it did not make it in to the final bill it is indicative of increased regulatory openness towards digital coins.
In the last few years, closed network digital coins such as JPM Coin and central bank digital currencies are where we have seen the most progress. These do not necessarily fit the definition of a cryptocurrency. While they are electronic, they tend not to be accessible outside of the specific network in question (thus, universal) or peer-to-peer as institutions are still playing the role of middle-man to some extent. It is possible that digital currencies are a first step towards permission-less (currencies where anyone can participate) cryptocurrencies built on a peer-to-peer network, but this is unlikely. Rather, we believe digital currencies have significantly more sticking power and potential applications, at least in the US, market than do cryptocurrencies.

Ease of use, application and regulation are the primary barriers which impact widespread consumer and institutional adoption

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<th>Ease of Use or Implementation</th>
<th>Consumer Facing</th>
<th>B2B/Institutional</th>
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<td><strong>Medium</strong></td>
<td>From a consumer-facing perspective there is still some friction between cryptocurrency’s core value proposition of simplicity/convenience and the hurdles associated with all the options of exchange mediums, FIs blocking transactions etc. Outside of Bitcoin, other players are not widely known and Bitcoin’s use as a medium of consumer exchange is questionable given its volatility and high settlement costs.</td>
<td>From a B2B perspective, it is more of a question of ease (and cost) of converting existing processes to (and implementing) blockchain technology. Legacy FIs will inevitably be playing catch up with fintechs who have built processes around blockchain from the start.</td>
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<th>Application and/or Use Cases</th>
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<td><strong>High</strong></td>
<td>Given the financial services landscape in US, consumers have less incentive to adopt the use of cryptocurrencies than in geographies where trust in the financial system is low and/or access to financial services is limited. There is a general lack of demand for cryptocurrencies as a payment vehicle.</td>
<td>Several large tech companies and financial institutions have begun experimenting in the US, likely more so out of a view in the value of blockchain and distributed ledger technology than in cryptocurrencies themselves. For smaller FIs, the potential cost savings versus required investment (in a partnership or build) generally makes adoption of the technology more cost prohibitive.</td>
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<td><strong>Low</strong></td>
<td>Regulatory liability generally does not fall on consumers and regulatory factors are likely not what is stalling consumer adoption of cryptocurrencies.</td>
<td>Lack of regulatory consensus amongst federal branches and state governments has stalled institutional progress to some extent though some encouraging signs as of late.</td>
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Takeaways for financial institutions

A shift in institutional sentiment is likely representative of blockchain’s sticking power

Large financial institutions, tech companies and central banks have begun to experiment with digital currencies, but fundamentally it’s about beginning to create the foundations of back-office internal blockchain/distributed ledger networks. As Wells Fargo stated in their announcement of Wells Fargo Digital Cash, “The internal DLT network will be a reusable enterprise utility for Wells Fargo to build and deploy multiple DLT-based applications” — other organizations likely see it the same way.
Widespread consumer adoption is unlikely to catch on in the US

Currently the consumer-facing threat of cryptocurrency displacing existing rails is significantly more limited given the strong foothold of traditional financial institutions and, most of all, a lack of incentive for consumers to shift to crypto. From a consumer standpoint, there isn’t much of an advantage for selecting cryptocurrencies over cash, debit or credit in the US. In the long-term, it seems more likely the US would see centralized digital currencies that use blockchain technology rather than the proliferation of what are traditionally thought to be cryptocurrencies.

Small FIs can take some cues from large players

Large corporations are beginning to experiment with building digital currencies and blockchain capabilities. This experimental attitude is advisable with a new technology that has such transformative potential, and while building capabilities is likely outside the scope of what is possible for smaller FIs, as some larger players have done, partnering with and/or investing in cryptocurrency startups, pooling resources as well as joining a consortium can also be a viable options. In the long-term, small players should focus on ensuring there is a functional knowledge base of the technology within the organization (ideally also held by senior leaders) in order to adequately identify where it can be implemented to drive the most value.

At the same time, small FIs don’t need to follow

As larger FIs hesitate, smaller players can capitalize. Bigger FIs have been quite hesitant to work with cryptocurrency companies due to the regulatory scrutiny that comes along with it. San Diego’s Silvergate Bank doubled their assets under management to nearly $2B USD by allowing crypto-related businesses to use their financial services ⁶. Quontic Bank, Signature Bank (who beat JP Morgan in issuing an institutional digital coin) and Metropolitan Commercial are other examples of smaller US FIs that actively work with cryptocurrency clients, who have been largely shunned by the big players. Being open to cryptocurrency clients can be a better way to understand the technology and risks as well as gain some expertise in the space.

Be wary of the risks

FIs working with cryptocurrency clients face increased regulatory scrutiny around know your customer (KYC) and anti-money laundering (AML) requirements and are generally quite selective about which clients they do take on. FIs that begin to experiment with blockchain and cryptocurrencies also absorb additional cybersecurity and fraud risks – both internally and through any cryptocurrency clients they are working with. Risks range from identity management, to the lack of a proper dispute mechanism when things go wrong to the nuances involved in transferring complex physical contracts to a digital footprint.

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Conclusion

It is important to delineate clearly between how organizations should approach blockchain technology and cryptocurrency. While the former has transformative potential for back-office use, the latter is unlikely to lead to a consumer-facing payments paradigm shift in the US.

- Organizations would be wise to begin experimenting with blockchain technology as those that do may benefit from a first-mover advantage in terms of understanding the technology and potentially unlocking upside.

- Smaller FIs don’t necessarily need to follow the lead of big players. Innovation for large FIs has been somewhat bogged down by the complexity of integrating blockchain and cryptocurrency use cases within a larger ecosystem. A number of small institutions have seized this opportunity and opened their doors to cryptocurrency clients – one way to gain knowledge and begin experimenting in the space.

- On the consumer side, the US environment is not conducive to any meaningful adoption of cryptocurrencies - it would not only require an ecosystem of cooperative regulators, consumers, exchanges, merchants, FIs and payment networks as well as systems that speak the same (or a translatable) language, but also a fundamental shift in what consumers want.

- There is certainly some interest in cryptocurrencies as a digital asset but, there has been less of an indication that cryptocurrencies hold sticking power as a form of payment, at least in the US – digital currencies, on the other hand, may be a different story.

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1. Statista, “Number of blockchain wallet users worldwide”
2. Financial Times, “Central bank talk of launching cryptocurrencies is all bluff”, 2019
4. Reuters, “Fedcoin? The U.S. central bank is looking into it”, 2020
6. Cryptoslate, “Small Banks Looking to Capitalize on Cryptocurrency Customers”, 2018