STRATEGIC RESOURCE MANAGEMENT

Strategic Resource Management's response to the US Treasury's request for public comment on Digital Assets Development

https://www.federalregister.gov/documents/2022/07/08/2022-14588/ensuring-responsible-development-of-digital-assets-request-for-comment

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Adoption to Date and Mass Adoption

(1) What explains the level of current adoption of digital assets? Please identify key trends and reasons why digital assets have gained popularity and increased adoption in recent years. In your responses, please address the following:

a. Who are the users, consumers, and investors that are adopting digital assets? What are the geographic composition and demographic profile of consumers and investors in digital assets?

It's estimated that between 15%-30% of American adults own or use some form of digital assets, including cryptocurrency. While most of these people are leveraging digital assets for speculative purposes, there is a segment that utilizes them for peer-to-peer payments, international remittances, or as a savings/borrowing mechanism. For those utilizing these digital assets, most are doing so as an alternative to the existing financial system.

Digital asset ownership tends to be diverse in terms of ethnicity, age, and income levels. The underbanked are more inclined to use digital assets/cryptocurrency for transactions.

- 13% of people who used cryptocurrency for transactions lack a typical bank account
- 27% do not have a credit card
- Nearly 60% of people who use cryptocurrency for transactions earn less than $50,000 annually. Only 24% earn more than $100,000

Source: Morning Consult Poll, Harris Poll, NORC University of Chicago, Forbes, Fed Report 2022

There is another segment of consumers who buy and hold digital assets to build long-term digital wealth. They tend to be less speculative and are more likely to take money out of savings or investment accounts with low rates with the hopes of diversifying and securing a potential higher rate of return. There are also institutional investors that have easier access to crypto and an ability to put it on their balance sheets – earning more on dividends than they would with a traditional business account.

Digital assets have received significant media attention in recent months and coverage has driven investor interest in this emerging asset class.

Investors are using digital assets as further diversification in their portfolio and some advisors are suggesting an allocation of 2-5%.

https://www.pewresearch.org/fact-tank/2021/11/11/16-of-americans-say-they-have-ever-invested-in-traded-or-used-cryptocurrency/
https://www.insiderintelligence.com/insights/us-adults-cryptocurrency-ownership-stats/
https://www.fool.com/the-ascent/research/study-americans-cryptocurrency/

b. What businesses are adopting digital assets and for what purposes?

Some credit unions and banks are implementing digital asset solutions to become familiar with the underlying technologies, defend their deposits (most are experiencing significant outflows to crypto exchanges), drive new sources of interest and noninterest income, obtain new clients, increase market share, drive client engagement, and access younger people who are attracted to digital asset solutions.

Most solutions to date have been retail banking focused and include buy/sell/hold digital assets via third-party relationships, rewards, payments, cross-border scenarios, lending against these digital assets, and/or considering digital assets when making a traditional lending decision.

Added use cases for corporate banking, treasury, and capital markets functions are being considered, including custody, collateralized lending, clearing/settlement, cross-border remittances, and trade finance. Many use cases for private and investment banking, wealth management, and trust are also being evaluated, including custody, staking/yield, digitized assets/securities settlement, and tranche lending.

Back-office use cases include digital ledger technologies, smart contracts, digital/secure identity, and tokenization.

Merchant processing companies (like FIS, Fiserv, and NCR) and retailers are looking at blockchain and stablecoin as ways to make cheaper, faster, and more-secure payments compared to existing card networks. Merchants are looking at blockchain to track inventories, suppliers, and proof of provenance.

Individual artists in the entertainment industry are currently investigating and developing use cases around NFTs to help protect intellectual property and convey certain rights to the content producers rather than those rights being controlled by large third-party intermediaries.

https://www.investor.fisglobal.com/news-releases/news-release-details/worldpay-fis-becomes-first-global-merchant-acquirer-offer-direct

https://www.ledgerinsights.com/fis-worldpay-to-enable-conventional-businesses-to-receive-usdc-stablecoin/

https://www.forbes.com/sites/ninabambysheva/2022/04/07/strike-announces-shopify-integration-partnerships-with-ncr-and-blackhawk-bringing-bitcoin-lighting-payments-to-major-merchants/?sh=28ce8ff52fc2

https://newsroom.fiserv.com/news-releases/news-release-details/fiserv-and-bakkt-innovate-mainstream-use-crypto-assets-leading

https://www.computerworld.com/article/3454336/walmart-launches-world-s-largest-blockchain-based-freight-and-payment-network.html

https://www.lexology.com/library/detail.aspx?g=0218ab9e-d4cd-497b-b96c-1df004425322#:~:text=Without%20any%20assignment%20or%20transfer,only%20in%20the%20NFT%20itself.

c. What are the main use cases for digital assets for consumers, investors, and businesses?

For consumers, the main use cases are:

- Store value/wealth: savings, investing, diversifying, 401K, IRAs, and NFTs
- Speculative: staking, yield farming, investing in early startups via ICOs
- Transactional: international remittances, P2P and increasingly retail payments, charitable and political donations, decentralized finance, and virtual gaming.

Institutional investors, as well as public and private companies, are increasingly using digital currencies to diversify their holdings, provide yield opportunities, and secure a hedge against inflation.

Businesses, including retailers are leveraging digital assets and underlying technologies to improve payments and provide customers with more payment options. Leveraging blockchains and digital assets could lower prices on retail items, or at least make costs more equitable. Many customers currently pay higher prices to subsidize individuals with rich reward programs that are supported by merchant acquirer fees. Settling merchant transactions on a blockchain versus traditional networks could be faster and cheaper and result in less fraud because blockchain's merchant payment solutions involve significantly less intermediaries and touchpoints for customer data to be compromised. This is especially possible given layer-2 blockchain solutions like the Lightning Network. The Bitcoin "Lightning" Network can process a million transactions per second (TPS). By comparison, Bitcoin can process about 7 TPS, while Visa and Mastercard can process tens of thousands TPS.

https://lightning.network/

https://www.forbes.com/sites/ninabambysheva/2022/04/07/strike-announces-shopify-integration-partnerships-with-ncr-and-blackhawk-bringing-bitcoin-lighting-payments-to-major-merchants/?sh=31bb31b052fc

d. What are the implications for equitable economic growth?

Digital assets like cryptocurrency offer lower barriers to entry than existing regulated markets like equities and bonds – especially for younger, tech-savvy clients. They can also lower customer costs (see prior answer).

Digital assets are becoming a significant industry – providing jobs for younger people and encouraging them to understand the technical foundations of money. The adoption of stablecoins (a type of cryptocurrency) collateralized by USD could support the status of USD remaining the world's reserve currency.

Digital assets also offer better options to payday lending and check cashing services (a $19+ billion industry in the US) that trap consumers during a bad financial cycle. Digital assets offer investors a way to build wealth and position themselves to find their way to more traditional finance products over time.

(2) Factors that would further facilitate mass adoption

a. Describe a set of conditions or pre-conditions that would facilitate mass adoption of digital assets in the future. To the extent possible, please cite any public data related to the responses above.

Having clear regulations and consumer protection laws, while remaining supportive of innovation, would assist mass adoption.

Improved interoperability and cross-chain protocols.

Other conditions:

- Failure of the existing monetary system and/or a loss of trust in the traditional platforms
- Strong competition from another digital currency, like the digital yuan/renminbi.

https://www.markettradingessentials.com/2021/07/chinas-digital-yuan-could-pose-challenges-to-the-u-s-dollar/

https://carnegieindia.org/2021/08/31/china-s-digital-yuan-alternative-to-dollar-dominated-financial-system-pub-85203

- Wealth inequalities could push those on the losing side to seek alternatives to traditional finance.

Digital asset adoption is largely driven by network effects and initial growth and adoption may come from outside the US in countries with weaker or more expensive banking systems.

Given the global nature of trade, the US could see quick adoption as payment via digital assets becomes more common internationally and/or as online retailers start accepting digital assets as payments. About 75% of retailers plan to accept crypto payments within the next two years.

https://www.msn.com/en-us/money/markets/nearly-75-25-of-retailers-plan-to-accept-cryptocurrency-payments-within-the-next-2-years/ar-AA106JTm

The globalization of commerce and international money movement is forcing solutions that are around the clock, faster, cheaper, and don't require financial intermediaries to act as gate keepers.

Finally, shifting demographics might drive mass adoption. Millennials and Gen Z who lived through the negative impacts of the 2008 financial crisis are less trusting of traditional financial institutions and payment solutions. They are digital natives – more tech savvy and holding higher expectations of service than prior generations. As a result, they are gravitating to neobanks, fintech, brokerages, and crypto exchanges for financial solutions.

They are going to be the recipients of a large transfer of wealth as baby boomers passes on. If traditional finance doesn't find a way to connect with these cohorts before that wealth transfer occurs, the likelihood of traditional finance ever capturing that segment for more traditional financial products will be unlikely. Crypto solutions offer traditional finance an opportunity to capture Millennial and Gen Z's business.

b. What developments in technology, products, services, or markets account for the current adoption of digital assets? Are there specific statutory, technology, or infrastructural developments that would facilitate further adoption?

Secure digital identification like zero knowledge proofs would facilitate adoption by proving that an individual is not a prohibited person or from a sanctioned country, and it wouldn't require sensitive personal data to be passed between parties, as is today. This would minimize fraud and support adoption.

Further regulatory guidance on stablecoin for use in retail transactions would accelerate digital asset adoption. Improved tax treatments supporting the use of native digital assets for purchases at point-of-sale and avoiding complicated tax liabilities – such as proposed by Sens. Pat Toomey and Kyrsten Sinema – would assist adoption.

https://insidebitcoins.com/news/senators-propose-bill-exempting-crypto-tax-for-transactions-under-50

Cryptocurrency trading apps, DeFi, NFT, stablecoins, and DAOs have driven much interest in the emerging digital asset technology. NFTs and stablecoins are starting to move into traditional finance. Stablecoins are being considered for faster and cheaper international commerce, inter- and intra-bank settlement. Large merchant processors are investing in blockchain and associated digital ledger technologies in hopes of providing alternatives to the traditional payment rails, which could lower merchants' cost of doing business and let merchant processors acquire payment volume from the existing, aging, payment networks.

Lastly, there's efficiency and cost savings in the loan process. The mortgage process could have less friction points if NFTs are used for proof of ownership (potentially eliminating the need for title companies) and smart contracts that can quickly execute the escrow function. Removing friction points could facilitate a better homebuying experience and reduce fraud and errors.

Opportunities for Consumers, Investors, and Businesses

(3) What are the main opportunities for consumers, investors, and businesses from digital assets? For all opportunities described, please provide data and specific use cases to date (if any). In your responses, please consider:

a. Potential benefits of decentralized and disintermediated systems

It would provide much needed competition in financial services, leading to lower costs and more access for traditionally excluded and marginalized communities. Removing intermediaries could lead to better service and lower costs, much like Uber and Lyft have done to the taxi industry.

At a macro level, there's no single point of failure and reduced fraud possibilities.

b. Creation of new types of financial products and contracts

Smart contracts offer the ability to further automate many banking processes, leading to lower costs and fewer errors. If done correctly, there's an ability to remove much of the inherent biases humans have – similar to how automated lending helped eliminate behaviors that led to redlining. Most digital assets and underlying technology are supported by, and developed in, an open-source community (much like the internet). Leveraging this work could help accelerate development of new financial products/solutions and ensure that the US remains competitive.

c. Potential for improved access to and greater ease of use of financial products

Tokenization of digitization of assets could release locked liquidity and improve participation – especially for individuals that currently are unable to participate in capital markets. We could see fractional ownership opportunities, trading 24/7, and real-time settlements.

Some lenders have been investigating using blockchain to improve the mortgage servicing process and reduce processing costs by 100 bps.

https://www.housingwire.com/articles/figure-partners-with-sagent-for-mortgage-servicing-blockchain/

Likewise, it's possible that loan participation and escrow analysis could be improved by removing paperwork and automating certain functions via smart contracts and blockchain.

e. Potential opportunities for building wealth

Bitcoin (BTC) has long promised opportunities for wealth accumulation by allowing individuals to put some portion into an asset that doesn't have a significant or ever-increasing base (like gold). Given the design of BTC, it could potentially become a good savings tool and hedge against inflation. This benefit potential could apply to central bank balance sheets – especially if its popularity continues to grow. BTC historic YOY returns have been over 200%.

f. Potential benefits of interacting with counterparties, suppliers, vendors, and customers directly

One of the benefits of BTC is it carries no liability. It's a barer instrument. There's little counterparty risk. Additionally, Decentralized Finance (DeFi) does a good job of eliminating counterparty risk – largely because most lending is done via over-collateralized borrowing agreements. In DeFi there's limited opportunity to become over leveraged. That wasn't the case in Centralized Finance (CeFi), where we recently saw the likes of 3AC, Celsius, and Voyager Digital undertake hedge fund behaviors by becoming leveraged without hedging those positions, not understanding the counterparties, rehypothecating collateral, and cascading liquidations – all behaviors we saw with traditional finance during the 2008 financial crisis. These bad behaviors had little to do with digital assets, but were driven more by greed, misunderstanding, and bad actors.

g. Potential for improved cross-border payments and trade finance

The Bank for International Settlements (BIS) has said digital currencies will reduce the cost of cross-border payments and can reduce the process speed of cross-border payments from three to five working days to only a few seconds.

https://www.bis.org/press/p210928.htm

General Risks in Digital Assets Financial Markets

(4) Please identify and describe any risks arising from current market conditions in digital assets and any potential mitigating factors. Identify any such responses that directly relate to:

a. Market transparency, including pre- and post-trade transparency

Some of the issues that affect the digital asset industry include the manipulation of data, mistrust between the parties involved, and consequently the fear of being at the mercy of fraudsters or scammers. Fraudsters take advantage of the fact that most people involved in the digital asset/crypto business are not really acquainted with its advance technology. A mitigating factor could be education.

Education and understanding of digital assets are particularly important for legislators asked to make rules for digital assets. Can federal agencies be expected to create procedures when existing understanding of the digital asset ecosystem is so broadly misunderstood? The Office of Government Ethics recently barred federal workers who own crypto from working on policies that could influence the value of their digital assets. This rule would appear to severely limit involvement to people who don't understand digital assets or are strongly opposed. Yet, there are various carveouts that let federal workers work on policies of equities and other asset classes.

b. Accuracy and reliability of market data

There are multiple markets for cryptocurrency. Some are centralized and others decentralized. The speed and quality of data updates and price can vary.

c. Technological risks, including attacks, bugs, and network congestion

Technology risk, attacks, bugs, and network congestion are being addressed by the digital asset industry through blockchain upgrades, open-source development, and bounty programs for Whitehat hackers.

d. Smart contract design and security

Smart contracts are software written to automate agreed actions under a contract, usually on an "if/then" basis. What smart contracts do is automate the process: a computer program monitors X and Y and places an order for Z automatically, all without direct human involvement.

Most smart contracts are misnamed: the majority being neither smart ("if/then" contracts having been around forever) nor do most smart contracts meet the legal definition of a contract.

Due to the complexity of code, even though most are open source, it's possible that bugs or backdoors exist that let fraudsters take advantage of a smart contract.

Once written to the blockchain, smart contracts are nearly impossible to change.

e. Settlement and custody

Settlement Risk

The legacy financial system embraces unsettled trades and imprecise ledgers, while the cryptocurrency system does not. Hybrids between legacy and crypto systems could pose operational challenges. Additionally, like with traditional markets, settlement for some digital assets could be impacted by lack of liquidity in markets.

Custody Risk

Private keys let users access their digital assets and protect against unauthorized access or transactions. If a private key is compromised – e.g., through fraud or theft – third parties may be able to control the digital assets. It is important to create and store private keys and their backups in a secure manner.

Some of the biggest risks for the users are their private keys and their backups are being compromised and confidentiality, availability, or integrity is therefore lost.

https://www.pwc.ch/en/insights/digital/crypto-custody-risks-and-controls-from-an-auditors-perspective.html

f. Jurisdictional and legal conditions

Legal and Regulatory arbitrage is an issue due to the differences in regional or international rules. Having an organization coordinate standards could be helpful.

Risks to Consumers, Investors, and Businesses

(5) Please identify and describe potential risks to consumers, investors, and businesses that may arise through engagement with digital assets. Identify any such responses that directly relate to:

a. Frauds and scams

Fraud and scams are common due to social media misinformation and targeting, the desire to get rich quick, and the complexity of DeFi and other digital asset solutions. These frauds include Ponzi schemes, pump-and-dump schemes, fake celebrity endorsements, fake exchanges, fake apps, fake press releases, and phishing/spoofing. None of these are unique to the digital asset space. Education and enforcement, as seen with other asset classes, would be helpful.

b. Losses due to theft

Due to improvements in security and better use of cold storage solutions, loss due to theft is becoming uncommon with exchanges and other institutions holding cryptographic keys.

Education about keys and how to avoid scams is very important for individuals. See the above answer for some examples of types of fraud/scams.

Finally, better prosecution by law enforcement for theft, fraud, and scams would go a long way toward reducing it.

c. Losses of private keys

Private key management is important and a big responsibility for anyone to take on. It is critical that people can hold their own keys in their own private wallets if they want. Just like people can hold cash today.

d. Losses from the failure/insolvency of wallets, custodians, or other intermediaries

This has been sorted out by the industry. Most of the custody providers are very secure. Still, there are issues with hedge funds, crypto lenders, and other firms that caused failures like we saw with 3AC, Celsius, and Voyager Digital. Those were due to unhedged bets, improper liquidity, re-lending collateral, being over leveraged, and lack of transparency for investors.

e. Potential losses associated with interacting with counterparties directly

This is largely not a concern in the DeFi space where most loans are overcollateralized. However, this is an issue in the CeFi space with firms like those mentioned above.

f. Disclosures and amount of fees

Transparency is good except for people's understanding of price/trading spreads.

h. Disclosures of other relevant terms

People need to be better aware of what is insured and by whom.

i. Authenticity of digital assets, including NFTs

This has potential application in banking as digital titles to real or virtual assets and offers the potential of significantly speeding up or simplifying traditional mortgages and auto loans. NFTs could have the application for the digitization and fractionalization of other assets like equities.

j. Ability of consumers, investors, and businesses to understand contracts, coding, protocols

Understanding is unfortunately limited today. In the future, better understanding will not be a requirement to use these technologies since, over time, coding, contracts, and protocols will operate behind the scenes. It would be much like the internet today where users don't need to understand HTTP, SMTP, TCP, or IP protocols like once required.

Much of the above addresses general market integrity risks and potential market manipulation. This is especially relevant given how small the digital asset market capitalization is relative to other markets. A $1 Trillion dollar market with multiple exchanges and various assets, doesn't require much to manipulate a price movement. Mitigation could be additional enforcement action against bad actors involved in insider trading or market manipulation.

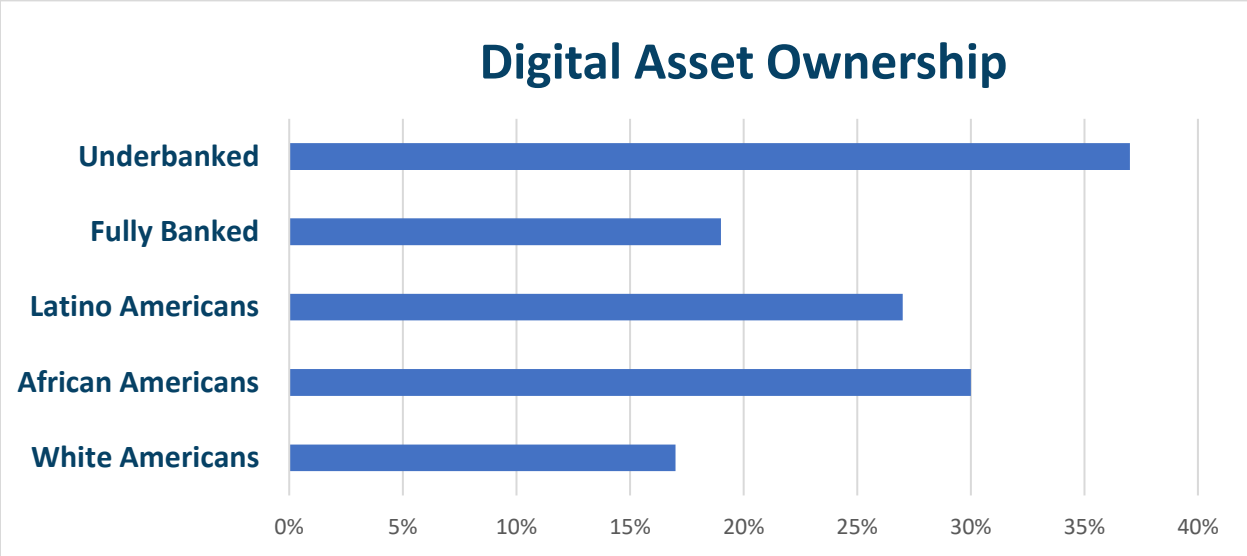
https://www2.deloitte.com/content/dam/Deloitte/us/Documents/finance/us-crypto-regulatory-whitepaper.pdf

Impact on the Most Vulnerable

(6) According to the FDIC's 2019 "How America Banks" survey, approximately 94.6 percent (124 million) of U.S. households had at least one bank or credit union account in 2019, while 5.4 percent (7.1 million) of households did not. And roughly 25 percent of U.S. households have a checking or savings account while also using alternative financial services. Can digital assets play a role in increasing these and other underserved Americans' access to safe, affordable, and reliable financial services, and if so, how?

a. In your responses, please describe specific ways in which digital assets can benefit the underserved and the most vulnerable vis-à-vis traditional financial products and services. Address factors such as identify verification process, costs, speed, ease of use, and access.

Many individuals utilizing digital assets are disproportionately underbanked and more heavily tied to marginalized communities.



Sources: Morning Consult Poll, Harris Poll, NORC University of Chicago, Forbes, Fed Report 2022

Our hypothesis is that many people are leveraging digital assets due to cost and/or access factors.

Some of the more common traditional financial instruments used by the under/unbanked include:

- Loan sharks and payday lenders – 500% APR/Fees
- Pawn shops – 60%-240% APR/Fees
- Money transfer (international remittances) companies like Western Union & Money Gram – 6-7% Fees
- Check Cashing – about 2-3% Fees

Digital assets and DeFi can lower costs for the underbanked.

- Collateralized crypto loans cost about 5% Fees
- Crypto fees are usually less than a couple of dollars or a few percent
- Money movement is instantaneous
- Money lending – offers >4% Yield
- No identification needed – trustless
- No credit needed – just collateral
- No access to a bank needed – just internet or a cell phone

b. In your responses, please describe specific ways in which digital assets can pose risks to the underserved and the most vulnerable given rapidly developing and highly technical and nature of the industry. Address factors such as financial and technical literacy and accessibility.

If these digital assets are used largely for speculative purposes, rather than as an alternative to traditional more expensive payment rails, the potential benefit to improve the access and cost for the underbanked might be missed.