



Cryptocurrency in Higher Education

How Institutions Should Approach The \$3 Trillion Market



1) Review of Cryptocurrency and Higher Education Touchpoints



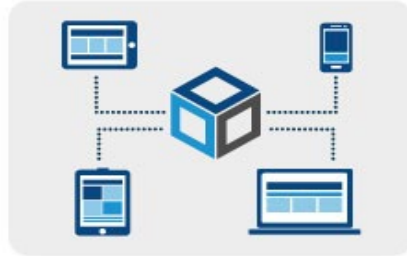


BLOCKCHAIN AT A GLANCE

How it works:



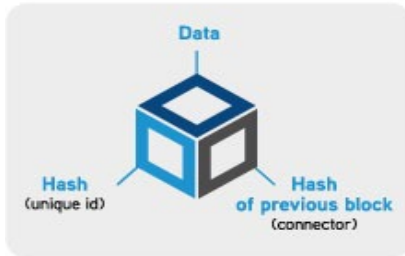
A transaction is requested
(cryptocurrency, contracts, records, etc.)



The transaction is represented as an **online block**.
Which is broadcasted to an encrypted P2P network of computers known as nodes.



Validation
the nodes validate the transaction and the user's status.



Once approved, new transactions are combined to create a block for the ledger.



The block is added to the existing blockchain, it's unique, permanent, and unalterable.



The transaction is complete.

8 Different Type of Crypto Assets

WIREX

Payment currencies:



Used to pay for goods, services and bills

Blockchain economies:



Allows you to create your own digital assets on their platform

Privacy coins:



Digital assets created with a focus on privacy

Stablecoin:



A fixed-price cryptocurrency whose market value is attached to another stable asset.

Utility coins:



Used for a blockchain-based product or service.

Security coins:



Used for the process of crowdfunding a new blockchain / cryptocurrency project

Non-fungible tokens:



A cryptographic token that represents something unique and is not mutually interchangeable

Decentralised Finance:



Blockchain-based form of finance that does not rely on central financial intermediaries

Storage and Custody



How to hold Cryptocurrency

Hot Wallet - Stored online; the benefit of a hot wallet is that transactions can be completed more efficiently than with a cold wallet.

Cold Wallet - Offline wallet stored on a platform that isn't connected to the internet, protecting it from cyber hacks and other risks associated with online wallets.



Custody Issues to Consider

- Control of private keys
- Strong passwords
- Two factor authentication provides an extra layer of security.
- Check to make sure URLs are proper to avoid phishing.

Non-Fungible Token (NFT)

Definition:

Non-fungible means that something is unique and can't be replaced (i.e. digital artwork, digital collectable).

IRS - NFT is treated as a collectible if the NFT's associated right or asset falls under the definition of collectible in the tax code

Uses in Higher Education

- The University of Oregon Is Using NFTs to Support Women in Student Athletics
- Duke University has provided educational credentials to its students in the form of NFTs for its Master of Engineering in Financial Technology degree.
- NFTs for College Athletes



Key Higher Education Touch Points

Philanthropy

- Access to new donors/vehicle for donors with capital gains
- Given limited adoption, early entrants play in a “small pond”
- Integration with research centers on crypto and financial innovation

Investments

- Rapidly growing asset class
- Many investors have created portfolio allocation for crypto
- Not for all endowments, however, all should deliberate

More uptake, particularly via a few high-profile gifts and investment allocations

Tuition

- Potential for lower transaction fees
- Limited payment friction, particularly for international students

Very limited uptake given recent challenges with crypto

Vendor Payments

- A form of payment to external vendors
- Potentially useful for international vendors

Some Prominent Crypto Gifts Have Flowed To Early Adopters



Institution	Gift Amount	Purpose
San Francisco State University	\$25 Million	School of Business and a Center for Global Innovation
UC San Diego	\$15 Million	To support research on airborne diseases in a changing climate
University of Maryland	\$9.4 Million	School of Public Health airborne disease research
University of Pennsylvania	\$5 Million	School of Business and a Center for Financial Innovation
Carnegie Mellon University	\$4.2 Million	Research into decentralized finance and applications
University of the People	\$1 Million	To seed an endowment fund based in cryptocurrencies
University of Illinois	\$100,000	To support educational efforts around Blockchain
UC Berkeley	\$50,000	To support a Blockchain lab
Lehigh University	\$42,000	To support a startup academy
University of Puget Sound	\$10,000	General operating support



Crypto Has Shown Up in Academic Portfolios and Continues to Proliferate

Growth in Academic Crypto Offerings

- Higher education institutions are still seeing some growth in academic initiatives around crypto after an initial proliferation of academic movement into the space
- Crypto offerings are part of interdisciplinary centers, school-based research centers, academic initiatives, and individual courses
- Offerings driven by student demand, employer demand, and benefactor interest and support
- This is the most prominent way in which institutions have adopted crypto

Select Institutions with Crypto Initiatives



Crypto is Stabilizing in its Allocation in Endowments

“Coinbase has helped a number of endowments, institutional family offices, and leading wealth management platforms buy and store crypto assets for their investment portfolios”*

- Higher education investment allocations to crypto remain small and details scant and this is likely to remain the case for a period of time, but large, high-profile endowments have dipped their toes in
- Michigan and Yale have invested in Crypto, while Harvard and Brown were rumored to have similarly invested
- Columbia and the University of California’s respective endowments have indicated crypto is worth keeping an eye on and that is likely here to stay



*Coinbase 2020 Year in Review, “Crypto is an Institutional Asset Class,” published January 2021.

HE Has Not Yet Adopted Crypto Usage for Tuition, Fees, and Vendor Payments

- A few institutions have generated a splash of publicity by accepting crypto as payment for courses on the topic of crypto or in other limited circumstances
- No broader adoption of crypto for tuition and fees or for vendor payments
- This trend is generally consistent with the adoption of crypto in society at large
- Crypto has first appeared in the broader discourse, then in investments and philanthropy, and then slowly – at first in an experimental fashion – as a means of payment for goods and services



2) FTX and What Comes Next



History of FTX



- Exchange founded in 2019 by Sam Bankman-Fried and Gary Wang
- July 2021 had over one million users and third largest cryptocurrency exchange by volume.
- FTX offered a range of trading products, including derivatives, options, volatility products, and leveraged tokens.
- 134 Subsidiaries and organization is more complex than Lehman Brothers

History of FTX

Celebrities to endorse FTX

- Purchased the rights to name the Miami Heat Arena
- Tom Brady, Stephen Curry, Shaquille O'Neal and Larry David becoming ambassadors for the exchange.
- Kevin O'Leary recently admitted that he was paid \$15 million to be a spokesperson for the exchange.

In 2022, FTX raised \$400 million to bring the total funding up all the way to \$2 billion and the valuation to \$32 billion.



Binance, FTX and Alameda Research



Binance and FTX

- In 2019 Binance purchased 20% of FTX for \$100M
- FTX required various licensing and Binance would not comply with regulators' request
- The only option the management and Sam Bankman-Fried had was to buy him out at an extraordinary valuation close to \$32 billion, which impacted liquidated
- Part of the Sale transferred 23M FTT or \$53M worth of FTT to Binance

Alameda Research and FTX

- Created by Sam Bankman-Fried in 2017
- FTX and Alameda had an extremely problematic relationship
- The two firms — one of the world's biggest crypto brokers and one of the world's biggest crypto buyers — were supposed to be separated by a firewall.
- Alameda made money by buying crypto assets in one part of the world and sold them in another, pocketing difference
- \$65B secured backdoor line of credit from FTX to Alameda and line of credit was financed with FTX customer funds

What Went Wrong

Macro events in 2022

- Wave of titans in the crypto sector folded as depressed token prices took liquidity out of the market
- The stablecoin known as terraUSD, or UST, and its sister token Luna — wiping out \$60 billion
- When the Fed introduced restrictive monetary policies by hiking rates in 2022, this caused equity markets and cryptocurrencies to appropriately decline in value

Highly Leveraged

- Leverage is the source of every implosion in financial institutions, both traditional and crypto,” said Hart Lambur, a former Goldman Sachs Executive
- Bankman-Fried tried to bail out some of the failing crypto firms
- Amid the wave of bankruptcies, some of Alameda’s lenders asked for their money back.
- FTX borrowed from customer deposits in FTX to quietly bail out Alameda.
- Reuters and the WSJ both reported that the lifeline was around \$10 billion



Timeline

November 2 Coindesk publishes a concerning article about FTX and Alameda Research.

- This was a concern because FTX was using FTT as collateral on the balance sheet. This meant that the assets were tied to a risky and volatile token

November 6 Binance sells FTT holdings.

- Based on the Coindesk report, Binance, a rival exchange announced it was going to sell around \$530 million worth of FTT.
- Run on the bank – Withdraw request of \$6B
- Liquidity Crunch and paused withdraws within 72 hours

November 8 Binance announces agreement to buy FTX.

- Binance announced the very next day that due to the news of mishandling customer funds and an alleged U.S. agency investigation, they couldn't go through with the acquisition of FTX.

November 11 FTX files for bankruptcy with all of its subsidiaries.



Greater Impact

Private Equity - Q4 of 2022 recorded only \$3.7 billion in funding, a 61% decline against the \$9.6 billion in Q4 of 2021.

- Sequoia Capital loss of \$150 Million in FTX
- Ikigai Asset Management - lost majority of assets due to crypto fall out

Banks

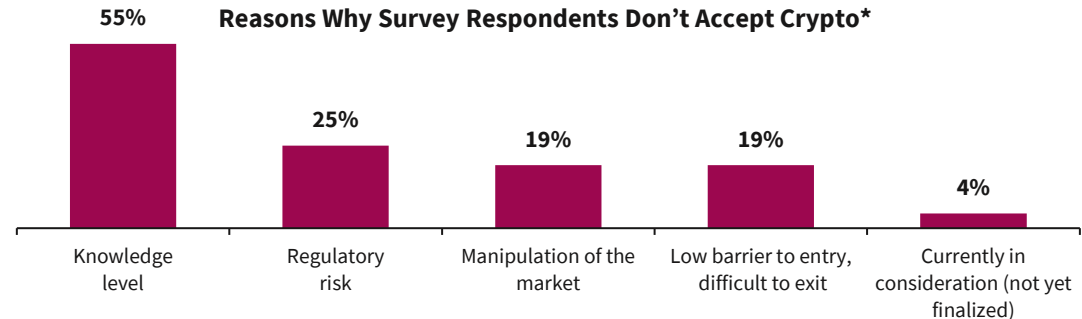
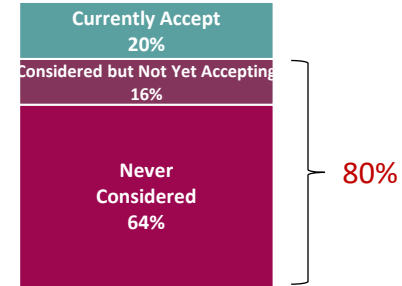
- SVB – Crypto Firm Circle has \$3.3B exposure to SVB
- Silvergate – Bank lost \$1B in fourth quarter due to FTX
- Signature Bank – accepted crypto deposits and it was major issue



3) Cryptocurrency Policy Development in Higher Education

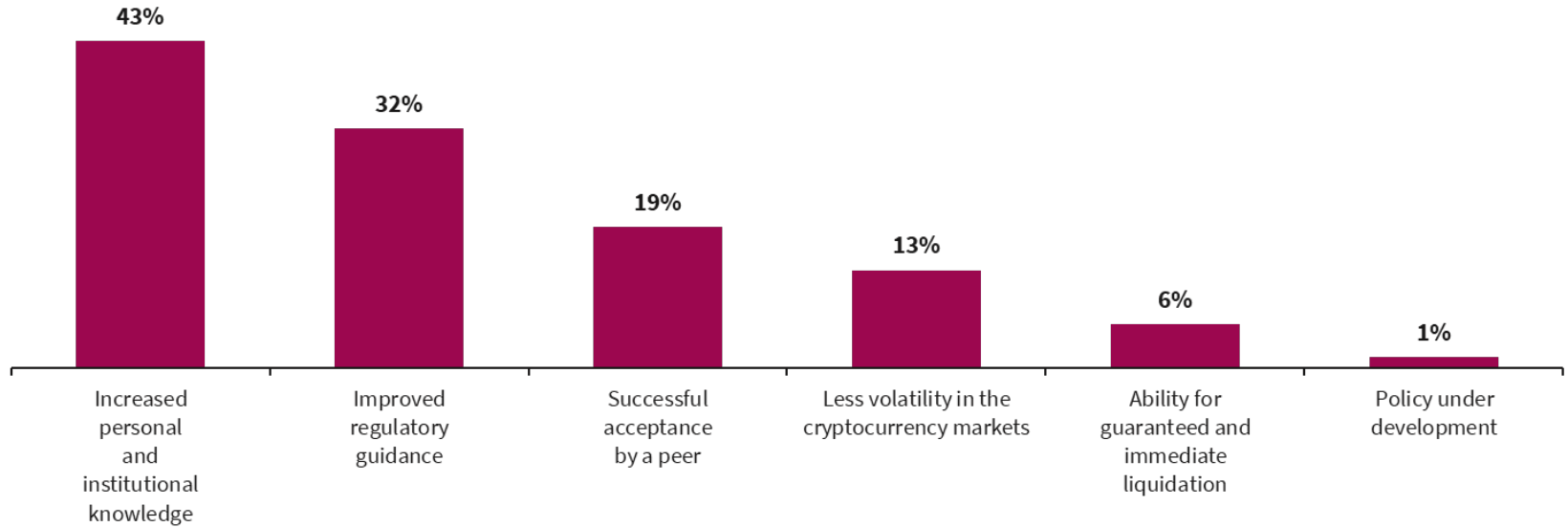
Crypto Adoption By Higher Education and Not-For-Profits

- Moss Adams and Hilltop conducted a survey of higher education and not-for-profit institutions to assess prevalence and mechanism of crypto adoption
- We found limited consideration of whether to accept crypto, and conditional on an evaluation of whether to accept crypto, more limited consent to adopt crypto
- 7 respondents indicated they had a written and documented policy on accepting cryptocurrency and nearly all of these institutions have a policy to liquidate upon receipt



*Percentages indicate for all 69 survey respondents, how many respondents indicated they did not accept cryptocurrency for each provided reason. Some respondents offered multiple reasons, and as such, figures total greater than 100%

What Would Need to Change For Survey Respondents to Accept Crypto*

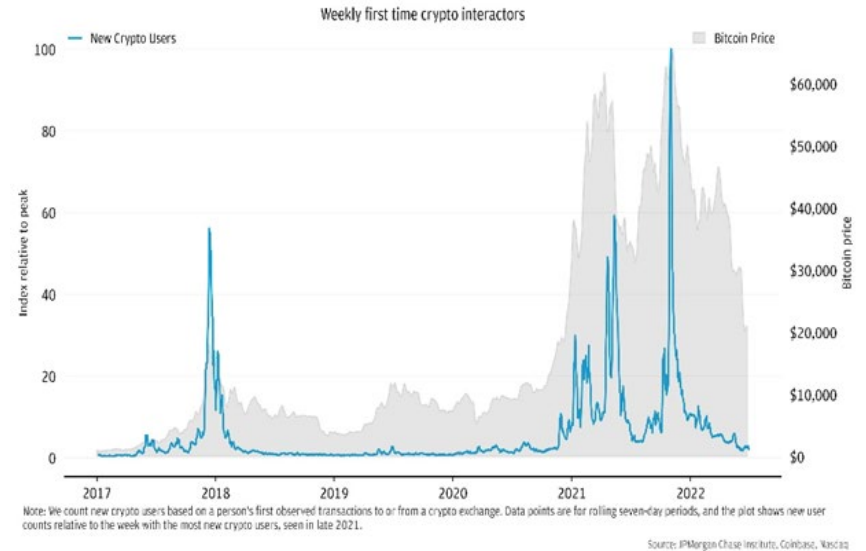


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Developments In Crypto Over the Last Year Have Likely Led to Slippage in Crypto Adoption

- Institutions previously responded that improved regulatory guidance, successful acceptance by a peer, and less volatility in crypto markets would be supportive of further adoption of cryptocurrency
- Each of these factors has been dented by recent turmoil and events in the crypto markets
- General market acceptance and views of cryptocurrency have also taken a hit which will undoubtedly spill into the higher education and not-for-profit sectors
- Further, when crypto prices are high the asset class attracts significant attention and inflows; Recent research has shown the reverse is true as well

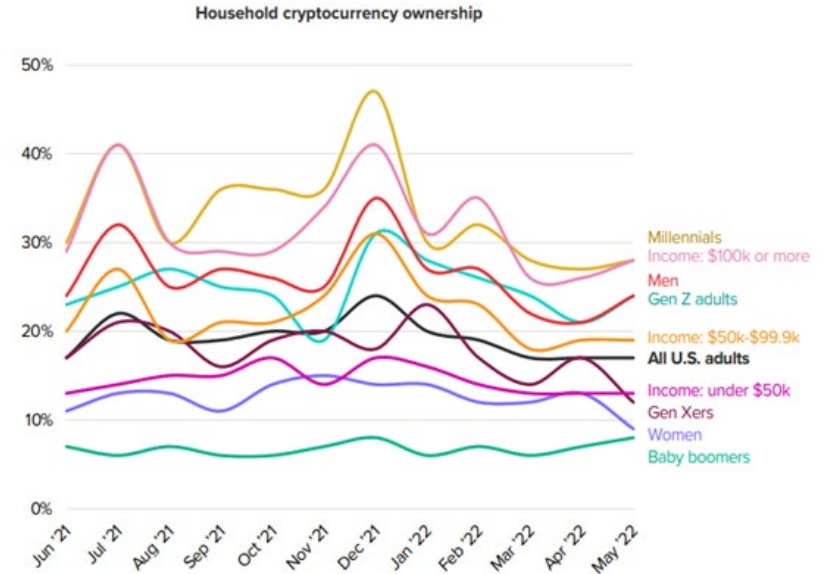


*Wheat, Chris, George Eckerd. 2022. "The Dynamics and Demographics of U.S. Household Crypto-Asset Use." JPMorgan Chase Institute. <https://www.jpmorganchase.com/institute/research/financial-markets/dynamics-demographics-us-household-crypto-asset-cryptocurrency-use>



Market Tone Has Shifted And Crypto Is Not Viewed In As Favorable A Light

- Volatility and turmoil in the markets have impacted crypto adoption
- As crypto prices pulled back and the events of FTX moved to the front pages, consumers pulled back on their exposure to crypto
- Institutions, particularly in more conservative and risk-averse fields such as higher education, likely followed suit



Implications for Cryptocurrency Policy Development

Implications for Crypto Policy Development

- The turmoil in the crypto market speaks to the need for a formal policy around how institutions treat crypto
- The decision as to how to treat crypto should be deliberate and forward-looking rather than in response to market tone and developments, which leads to increased risk a decision is not aligned to institutional risk tolerance and preference
- Limited knowledge has been cited as a primary reason for non-acceptance of crypto as an asset

Areas of Limited Knowledge

Knowledge

- Knowledge of underlying technology not necessary for adoption
- Key risks and operational components must be understood

Regulatory Guidance

- Current GAAP guidance = intangible asset
- Executive Order by President Biden to create national policy

Key Internal Leadership

- No consensus on office to lead
- Important constituents include Advancement, Investment, Admissions, President, Board

Peer Adoption

- Limited peer acceptance
- Chicken / egg problem

Decision To Reject Crypto Should Be Deliberate

- Similar to investment policies and debt policies, all institutions should consider cryptocurrency policies, which includes a deliberate and thoughtful approach on how cryptocurrency fits (or does not fit) with their mission execution
- The process of developing a policy:
 - ✓ Fosters internal communication
 - ✓ Inspires confidence throughout the enterprise
 - ✓ Unifies the institution on practices and approach
 - ✓ Ensures strategies and procedures incorporate institutional best-thinking
 - ✓ Mitigates risk (and ensures broad ownership of key decision points)
 - ✓ Ensures long-term strategic approach, particularly during periods of volatility
 - ✓ Helps institutions better understand themselves



Key Policy Decision Points

Areas For Consideration	Currency Types & Thresholds	Operational Components	Third-Party Partners/Vendors
<ul style="list-style-type: none">• Tuition & Fees• Philanthropy• Endowment Allocation	<ul style="list-style-type: none">• Acceptable/Unacceptable currencies• Minimum/Maximum payment levels• Target investment allocation	<ul style="list-style-type: none">• Methods of accepting / storage (hot and/or cold wallet)• Point of valuation• Liquidation procedures	<ul style="list-style-type: none">• Third-party custodians / intermediaries• Level of due diligence on third-parties and intermediaries• Cold/Hot wallet storage procedures/partners

Crypto Policies Can And Should Apply To Investment Advisors and Other Vendors To An Institution

- Higher education institutions will almost certainly engage third parties in the course of handling crypto whether through philanthropic adoption, an investment allocation, or tuition and vendor payments
- Crypto policies should bind these third-parties contracted by an institution, which is an important dimension of effectuating a strong crypto policy
- The fall of FTX and the volatility in crypto markets is a case in point for why a deliberate consideration of whether to accept crypto is important and why the application of the policy to third-parties matters



Crypto Approach Is A Function of Institutional Risk Tolerance

Each institution has a different risk tolerance, which in turn is informed by:

- Mission
- Culture
- History
- Key constituent composition (e.g. board, faculty, alumni, student body & administration)

Understanding your institution's risk tolerance will inform how to approach:

- Appropriate currencies
- Minimum/maximum thresholds
- Investment approach
- Operational components (hot/cold wallet, liquidation procedures, etc.)



Steps To Creating A Cryptocurrency Policy

Identify Internal Working Group

- Finance office likely takes leadership role
- Identify key representatives from advancement, investment office & admissions

Convene Working Group Sessions To Determine Key Policy Points

- Ensure key stakeholders have opportunity to provide input
- Deliberate how crypto can (or can't) advance mission of institution
- Discuss / determine key policy guidelines / thresholds
- Draft cryptocurrency policy; present to President
- Board considers cryptocurrency policy for ratification

Updating & Benchmarking

- Process for ensuring policies and procedures remain up-to-date
- Connect with peers to share cutting-edge best practices

4) Cryptocurrency Accounting Considerations

Accounting For Contributions of Digital Assets And Cryptocurrency

The initial recognition of contributions of cryptocurrency is similar to other contributed assets (cash, stock, real estate, contributed goods, etc)

- Per FASB ASC 958-605-25-2, recognize the revenue in the period received.
- Per FASB ASC 958-605-30-2, contributions received shall be measured at their fair values.



Recording The Initial Digital Asset Or Cryptocurrency Gift

- For contributions through an exchange, wallet, or other service (such as BitPay, Coinbase, etc.), the fair value initially recorded could likely be the transaction price provided by the service.
- For contributions received directly to an NFP's own wallet, the fair value of another pricing source may be needed.
- For contributions through an intermediary (such as The Giving Block, BitGive Foundation, Fidelity Charitable, etc.) you will likely get either crypto or cash proceeds, depending on the service

Subsequent Accounting For Cryptocurrency Coins And Tokens

Asset classification — The subsequent accounting is first going to depend on the type of asset you classify cryptocurrency as.

Some accounting alternatives for not-for-profits could include:

Intangible asset — If the not-for-profit considers the cryptocurrency to be an intangible asset, because it is not a financial asset and lacks physical substance, then account for it as an indefinite-lived intangible asset.

- Historical cost less impairment (FASB ASC 350-30-35-15 to 35-20)
- Test annually for impairment
- Recoveries of impairments not allowed



FASB issues proposed ASU on crypto asset accounting

Relevant dates:

February 1, 2023	FASB completed initial deliberations of the proposed ASU and instructed the FASB staff to draft the proposed ASU
March 23, 2023	FASB issued proposed ASU
June 6, 2023	Comments due on proposed ASU

FASB issues proposed ASU on crypto asset accounting

Scope

The guidance would apply to digital assets that satisfy the following criteria:

- ✓ Meet the US GAAP definition of an intangible asset
- ✓ Do not provide the asset holder with enforceable rights to, or claims on, underlying goods, services or other assets
- ✓ Reside or are created on a distributed ledger based on blockchain technology
- ✓ Are secured through cryptography
- ✓ Are fungible
- ✓ Are not created or issued by the reporting entity or its related parties

FASB issues proposed ASU on crypto asset accounting

Measurement of in-scope crypto assets

- They would be measured at fair value, with fair value changes recorded in current period earnings
- Commissions, transaction fees and other charges incurred to acquire crypto assets would be expensed as incurred

Questions?



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