Both Sides of the (Bit) Coin

WHO BENEFITS FROM DIGITAL ASSET INSTITUTIONALIZATION

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It's Not All Dogecoin and Shiba Inu….

In the decade since crypto-related assets first started making their mark, their fortunes have waxed and waned. Early enthusiasts felt the fire of potential innovation. An entire tv episode of *Big Bang Theory* was built around a "missing bitcoin." The value of a single Bitcoin rose from $200 in January 2015 to nearly $*20,000* in December 2017 before cratering by about 80%.[i] Popular attention rose in blockchain – the facilitating innovation that makes digital asset trading possible – and headlines championed its potential to "massively disrupt" all types of industries. Interest in digital assets then started to climb again and between March 2020 and a year later rose nearly twelve-fold, before selling off *again*, reminding everyone of the considerable volatility of this corner of global markets. This time, though, the institutional infrastructure to support an eventual rebound, has been quietly built out and may help the asset class accelerate broader based acceptance over time. There has also been a clarification around those assets on a proprietary blockchain, and those on *their own* blockchain.

> *Both Sides of the (Bit) Coin* goes *beyond* digital assets' individual performance to understand the fundamental shift that has made their institutionalization a compelling proposition for various actors across financial services. What started with an intent to ensure "no bank or security agency should know who is spending the money, who is receiving it, what it is for, or at what time and place the exchange is taking place," has flourished in part *because of* its institutionalization, not its existence in potentially murky corners of the global capital markets system.[1] **When new asset classes emerge, so do new ecosystems to support them, and digital assets are no different. We increasingly see firms: offering loans against digital assets, building new exchanges for them, launching custody solutions for them, and hosting large scale conferences for them, among others.**

What we are witnessing is a potential broad-based institutionalization of a new asset class. While many regulatory and policy questions remain, it is worth exploring some of the drivers of this transition, and the implications as it continues to evolve.

Truly new broadly traded asset classes are few and far between. Reasonable people can disagree, but many feel the last "new" asset class that gained broad support because of institutional traction was the rise of securitized products in the 1970s and 1980s – first mortgages, then the expansion to non-mortgage asset classes. Now, we have the rise of digital assets, which, it must be said, absolutely still have a way to go. But much has happened in the last five years, and with a global market cap north of $1 trillion, it is increasingly challenging to look at the ecosystem that has cropped up and not see the potential for an asset class that has a routine place in investors' portfolios. We hope *Both Sides of the (Bit) Coin* help drive conversation and explore what may lie ahead.

Shannon Murphy
Head of Strategic Content
Shannon.murphy@jefferies.com
+1 (212) 336.1139

[1] James Bridle. Introduction to "The White Paper" by Satoshi Nakamoto. 2019

THE INSTITUTIONALIZATION OF DIGITAL ASSETS: 10 PREDICTIONS FOR 2021 AND BEYOND

It would be foolish to see a direct path forward for the institutionalization of digital assets. Like most innovation, there will be fits and starts, blunders and success. But here are 10 of our predictions for the coming years that may shape this space.

1. **Global Market Capitalization of Digital Assets Will Top $2 trillion by mid-2022**. This is more than half of the global hedge fund industry assets, about one third the market cap of gold, and larger than Saudi Aramco and Amazon (respectively). Given incremental institutionalization, it will recover from its recent drawdown and will continue to grow in the next decade.

2. **"Cryptocurrency" Needs A Standardized Definition – And Will Likely Get One**. Googling "how many cryptocurrencies are there?" reports anywhere from the low hundreds to more than 10,000. Institutions and regulators will standardize a definition, allowing firms to offer institutional products and services to a smaller subset.

3. **As Standardization Occurs, Institutionalized Products and Services Will Proliferate**. Crypto leveraged loans? Sure. Venture capital funds for cold storage? Why not? Prime brokerage services and lending? Expect acceleration. We strongly anticipate solutions like custodying digital assets will accelerate, and indeed some firms have already found success here.

4. **"Highly Banked" and Publicly Traded Crypto Exchanges Continue to Emerge.** Coinbase is a ~$50 billion market cap firm[2] with institutions like Vanguard, Tiger Global and FMR among its top holders and more than $1.4 billion in outstanding debt.[3] There are *already* major institutions willing to buy debt and equity from them. As competitors emerge and join the public markets, we expect this support to accelerate.

5. **Leveraged Loans Become an Intriguing Way to Play Digital Asset Investments**. As institutions increase their holdings of digital assets, they will seek liquidity for these positions. These may require more collateral due to the volatility of these assets, but over time will become a common product for accessing liquidity from larger (and in the near term, mostly Bitcoin and Ethereum) holders.

6. **More Firms Offer Digital Asset Custodying**. Custodying crypto assets is no different than that of other assets – an institution holds the asset to minimize the potential for risk or loss. They provide a secure "location" for the safeholding of assets – crypto custodying is no different – the provision of storage and security services for designated assets.

7. **Endowments and Foundations Increasingly Welcome Donations in the Form of Digital Assets, Potentially Enhancing Their Legitimacy**. As various strands of institutionalization come together and build a stronger and more secure profile, institutions that *invest* in cryptocurrencies will increasingly *welcome* and take donations of the assets in the same way they welcome other assets.

8. **We Will Witness the Rise of the Cryptocurrency Cybersecurity Specialist**. Security is all. No one would invest in any assets they felt they couldn't ensure the safekeeping of. As cryptocurrencies rise in relevance and importance, they become an ever-bigger target for hackers. Firms and individuals specializing in crypto security will start to appear in headlines and become must have talent for many organizations.

9. **Mainstream Payments Systems Increasingly Work to Accept Crypto.** Payments will remain one of the more challenged corners of this due to the assets' volatilities, but Visa recently took a step in this direction, piloting a transaction involving a payment of USD Coin, a dollar pegged cryptocurrency.

10. **Cryptocurrency ETFs Are Still A Year (or More) Away**. It's not *all* full steam ahead….U.S. regulators aren't incentivized to speed a crypto ETF to market. As such, one of the easiest products for retail investors to access will remain out of reach until many remaining questions are answered.

[2] As of June 2, 2021

[3] Bloomberg

A Word on…Words

Because so many of these terms are used interchangeably, sometimes erroneously so, it's worth fleshing out what – exactly – we're talking about when we use digital asset terms and the institutionalized products and systems that may arise to service them.

Figure 1: CryptoGlossary 101

The Assets	The Technologies	The Products & Services
Digital Assets: In financial services, digital assets are those that exist as binary data, which are self-contained, uniquely identifiable and have a value or use case. Broadly, this phrase can refer to any asset that is stored digitally (i.e. – powerpoint, jpeg or video file). **Cryptocurrencies**: A digital asset that is on a native blockchain. All cryptocurrencies are digital assets, but not all digital assets are cryptocurrencies. Gemini notes, "a cryptocurrency is the native asset of a blockchain network that can be traded, utilized as a medium of exchange, and used as a store of value."[2] **Tokens:** Additional crypto assets that leverage a non-native blockchain. For example: Stablecoin **Bitcoin:** The earliest broad use cryptocurrency and blockchain technology. **Ethereum, Dogecoin, Cardano, Polygon, Maker, Kusama…:** New cryptocurrencies and tokens (among many others) that are increasingly exchange tradeable.	**Blockchain**: A "distributed ledger," or a specific type of database that stores information in chains of "blocks" and oriented such that no one person or group may control the entirety of the blockchain. **Mining:** The creation of a new "block" of code that creates a new crypto coin. Mining requires considerable computing power to execute the complex problems required to solve to create a new block. **Private Key:** A unique combination of letters and numbers in cryptography allowing users to access their crypto assets. **Cold Storage**: Ironically, an *offline* wallet used for storing crypto assets. Cold storage stores these assets on platforms that aren't connected to the internet – lowering vulnerabilities to hacking. Some see similarities to a safe deposit box for your crypto.	**Custodying**: The act of holding an asset for safekeeping to lower risk of loss or theft. **Leveraged Loan:** A loan between two parties collateralized by crypto assets. **Crypto ETF:** An exchange traded fund tracking the value of Bitcoin (or other crypto assets) and trade on traditional market exchanges rather than cryptocurrency exchanges. **Crypto Prime Brokerage:** The service of providing leverage against crypto asset portfolios, may also include cross-asset margining, custodying or broader collateral management solutions that involve crypto assets. **Exchange:** A digital marketplace where traders can buy and sell crypto currencies or tokens using different fiat currencies or crypto assets.

These are among the many other traditional financial services infrastructure, products and services that are increasingly being applied to the crypto world (for example: crypto futures or options). Let's explore the explosive growth that has prompted even more conservative institutions to reconsider their reluctance to get involved in the digital asset space.

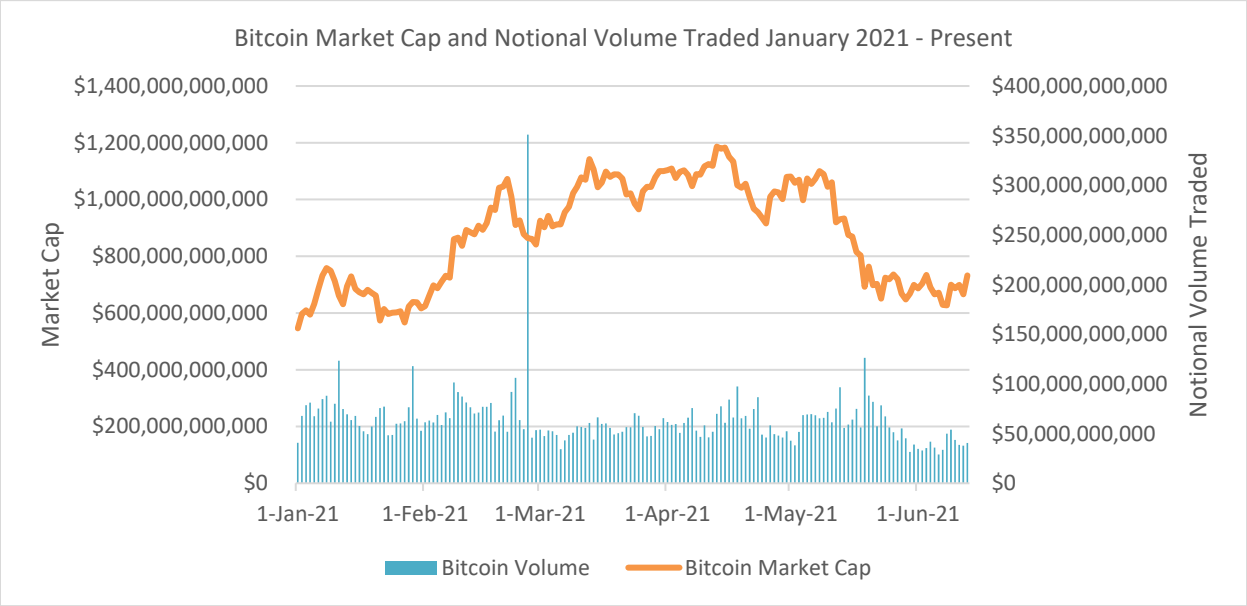
Sizing the Digital Asset Universe

To understand why institutionalization has begun to materially accelerate – let's explore the recent explosive growth associated with various digital assets. The market cap of Bitcoin and Ethereum, while declining from 2021 highs, have both grown exponentially since 2017. While there are literally thousands of digital currencies and tokens that may fall in this asset class, we focus on two of the most liquid and popular.

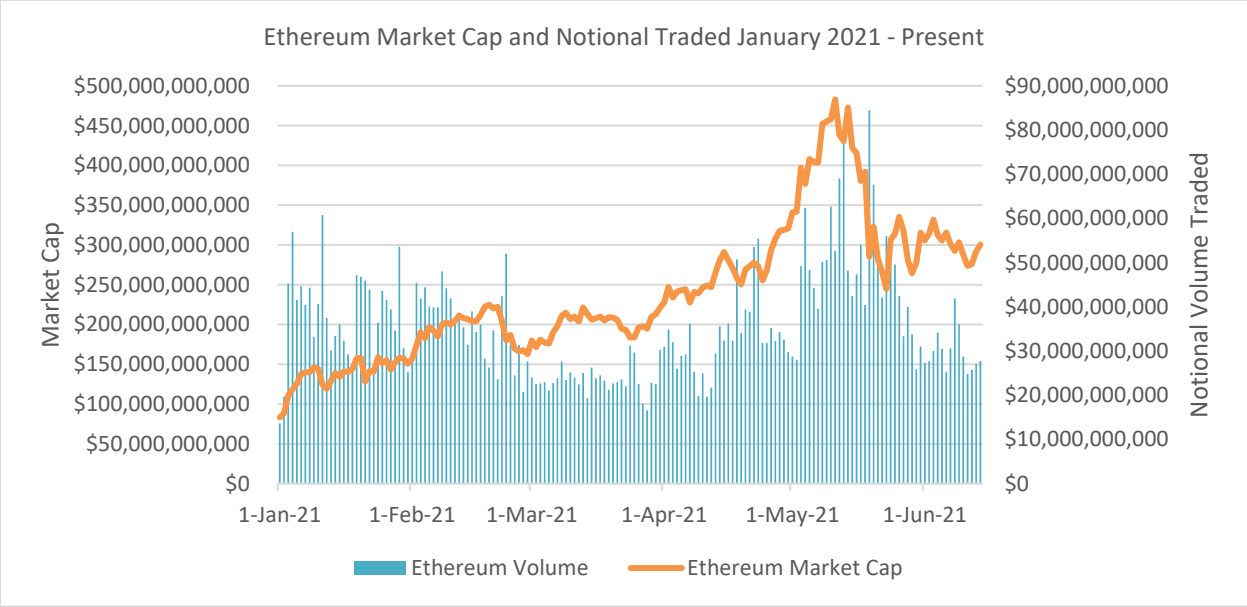
Market Cap of Bitcoin 2017 - Present

Source: CoinMarketCap

Most recently – while the market cap of Bitcoin has receeded below $1 trillion, and Ethereum below $300 billion, the notional volume traded remains remarkably material – often topping $50 billion a day for Bitcoin and $25 billion a day for Ethereum, before a June lull.



Source: Factset, Jefferies

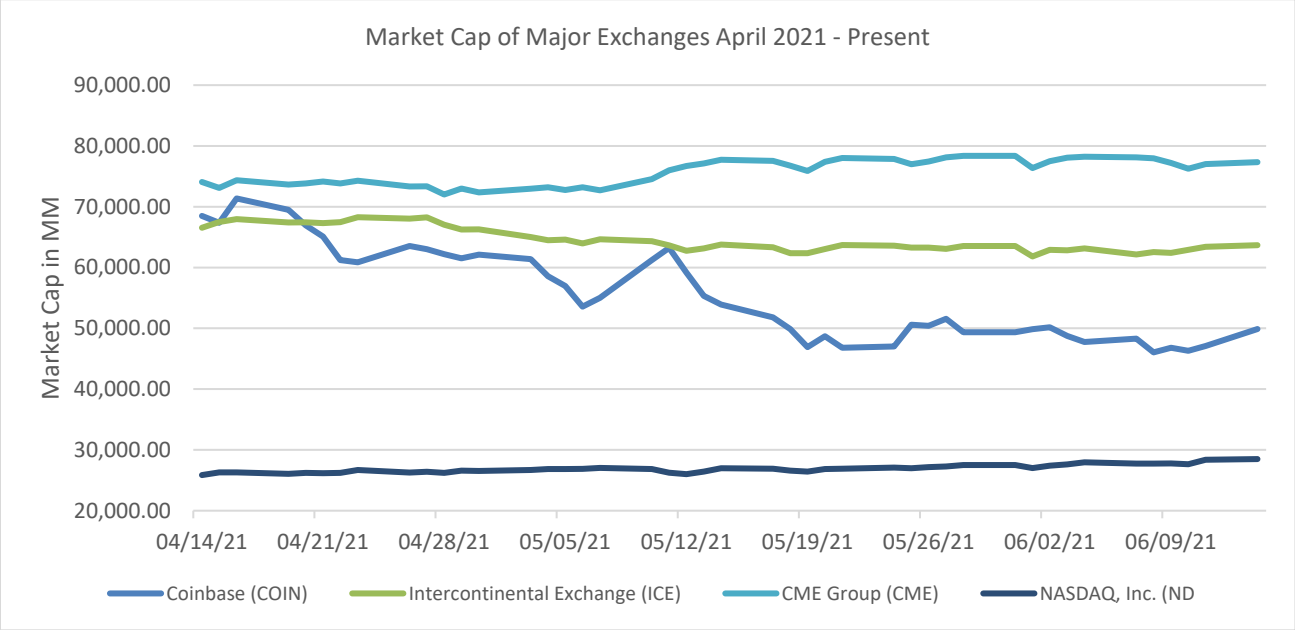


Source: Factset, Jefferies

If we turn to an important and adjacent signal of potential future institutionalization – the market cap of Coinbase, one of the major exchanges on which investors can trade various digital currencies – at one point rivaled that of the CME group and exceeded that of ICE, which owns the New York Stock Exchange (NYSE). It remains more than 50% higher than NASDAQ's.

Like other digital assets, it has since come off its earlier 2021 highs, but think about the ramifications of a $50 billion market cap company, whether part of the crypto industry or any other. A $50 billion company is **in the top third of the S&P 500 companies by market cap – bigger than Walgreens Boots, Schlumberger, Marriott, eBay and BNY Mellon. Or bigger than Raymond James Financial, NewsCorp and American Airlines – *combined*.**

Coinbase is also the most liquid of the exchanges – we normalized for May and June following its April 2021 debut, and the number of shares traded daily remains materially higher than those of its peers.



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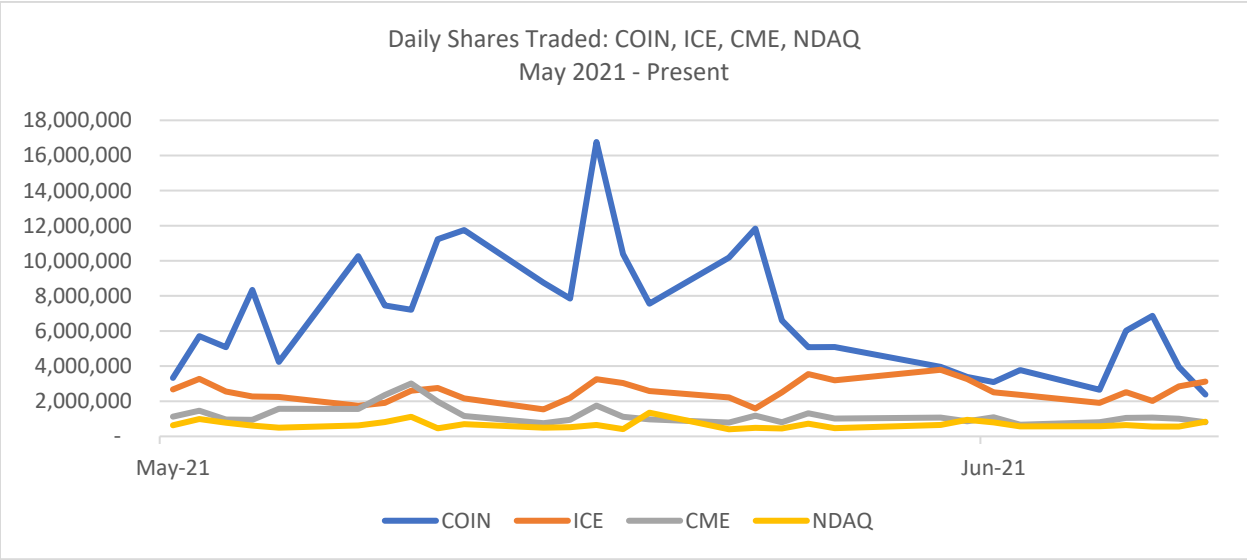


Source: FactSet

This is just one example of a company involved in the digital space making a considerable mark, and creating opportunities for banks, lenders and investors to buy its debt or equity, seek a margin loan collateralized *by* said debt or equity, or develop additional business models that would serve the firm's needs.

Given the size, volume and magnitude of these corners of the digital asset world, it makes sense why other institutional transactions and assets are popping up to support it.

CUSTODY, COLLATERAL AND COLD STORAGE: THE INFRASTRUCTURE OF INSTITUTIONALIZATION

After years of witnessing the slow but growing institutional ecosystem underpinning digital assets evolving, in June of 2021, the Republican National Congressional Committee declared it would begin welcoming crypto donations.

And a growing number of the world's largest endowments have been quietly investing in the digital asset ecosystem – if not the currencies and tokens themselves, then in VC funds involved in the space or other start ups dedicated to commercializing digital asset technology.

These types of players are critical to the next chapter of acceptance and growth for the asset class.

Custody

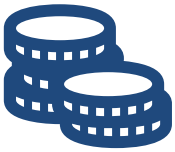
- Digital asset custodying solutions **are on the rise**, giving greater assurance to buyers and sellers about the security of their assets, given the still novel nature
- This will be **increasingly important** as more institutions seek to add the new asset class to portfolios

Cold Storage

- A type of custodying crypto assets. Growing in importance for digital asset owners who seek other methods of security
- **Improves optionality** for owners who want 'off the grid' options

Payments & Donations

- **One of the most interesting areas** of growth but still in the very early stages
- **Save the Children and the National Republican Congressional Committee** both welcome cryptocurrency donations
- Payments even slower to market but with considerable global upside
- **Volatility makes this among** the hardest opportunity set to solve for



Debt and Collateral

- It's still in early days but we are increasingly hearing of **senior and subordinated debt collateralized by digital assets**
- At the same time, **leveraged loans collateralized by digital assets are on the rise**

What Does This Mean

New asset classes emerge and recede every decade. *Institutionalized* asset classes are the ones with a shot at durability and moving from just novel dinner party conversation to true pieces of investors' portfolios.

In recent weeks, many have cited digital asset investing as a potential way to hedge inflation. We have no opinion as to whether this is a shrewd allocation or not – but what *is* clear is that the path to normalized acceptance of this group of assets doesn't lie in a single trading strategy (or hedge). It lies in the world's biggest institutions increasingly accepting that: a) an arising new asset class that has low enough risk to consider investing in, b) this new asset class doesn't pose material risks to the broader portfolio or open the investor to material or acute losses and c) these risks get minimized *by the institutionalization of the asset class and the building of a global ecosystem that services and keeps a watchful eye over it.*

Much of the world's wealth is owned or managed by institutions – institutions that need to answer to their end asset owners and justify investment and risk strategies. As such, attracting the interest *and allocation* of these institutions will in part rely on their broader institutionalization. Assets that are regulated, taxed, liquid, less volatile and have broader global institutional acceptance make them more appealing to a broader audience, as they have a perceived lower risk.

This is somewhat ironic given the earliest crypto enthusiasts wanted a currency/asset that did *not* require the pipes and plumbing of traditional global bank ecosystems. They wanted anonymity and immediate trade and settlement. The global financing landscape requires nearly the opposite – knowing one's customer, being able to identify both sides of a transaction (and sometimes the motivations of the buyers/sellers) and understanding asset movements cross border or cross institution.

Bitcoin and other cryptocurrencies are taxed by the IRS and are treated as "property." While numerous investors have traded a growing number of digital assets over the last decade, we believe we have hit an inflection point with the global ecosystem that is necessary to allow them to be held by sophisticated institutions that have much lower risk tolerance (and in many cases, many more assets under management). It is this adding to institutions' portfolios we believe will trigger even wider and more broad based acceptance, creating a virtuous cycle of broader acceptance → greater institutionalization and creation of products and vehicles to serve this growth → continued expansion of the asset class.

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[i] Bloomberg

[2] Gemini