

# Q1 Market Observations

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# Q1 Market Activity Snapshot

# \$20.0B

2021 Q1 Loan Originations

# \$9.0B

Total Active Loans as of Mar 2021

# \$31.5B

Q1 Spot Volume Traded

# \$10.5B

Q1 Derivatives Volume Traded

# Introduction

Genesis is building the world's premier institutional digital asset financial services firm.

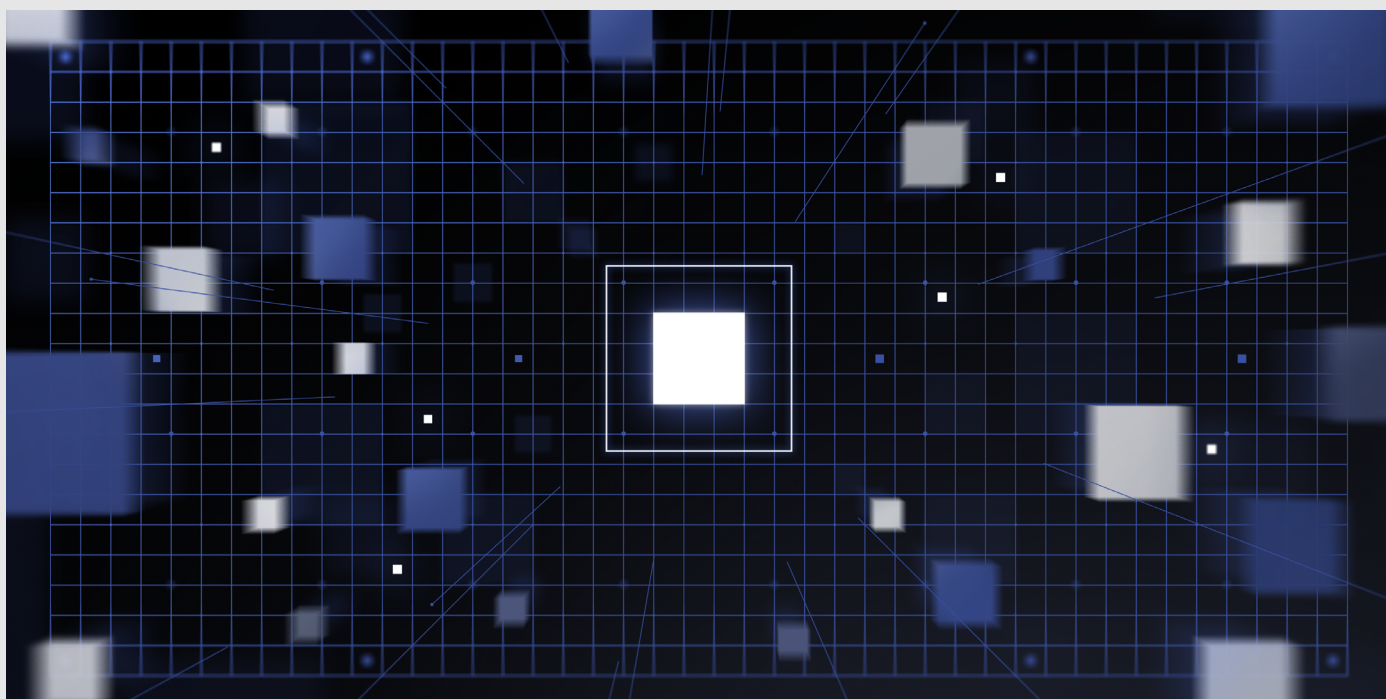
This report highlights key trends our team observed across institutional digital asset markets in Q1. Genesis has a unique vantage point on the industry with business lines spanning spot trading, derivatives trading, lending, custody, treasury and prime brokerage services.

In Q1, Genesis facilitated over \$60B in trades, loans and transactions. As the largest institutional digital asset lender, our loan book grew to over \$9B in active loans outstanding. This report outlines what we saw during a particularly notable phase of growth as Coinbase's direct listing focused attention on digital assets globally.

## More Information

To learn more about Genesis, or to work together with the Genesis team, contact us at:

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[www.genesistrading.com](http://www.genesistrading.com)

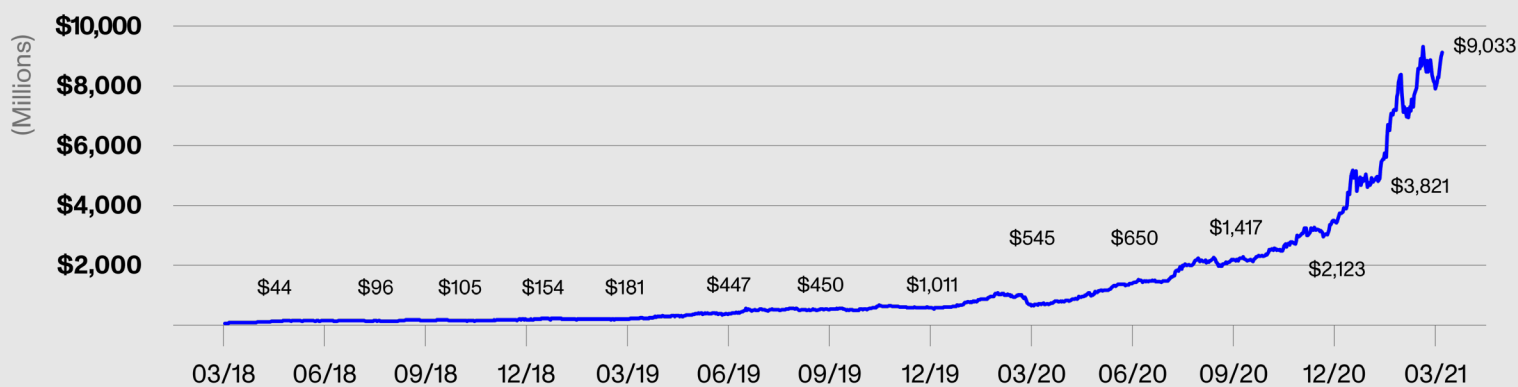


# 1 Digital Asset Lending

In Q1, Genesis **added over \$20B in new originations**. This marks a significant increase over the \$7.6B we originated in Q4 2020.

Active Loans Outstanding increased to \$9B, up 136.4% from \$3.8B last quarter.

Active Loans Outstanding



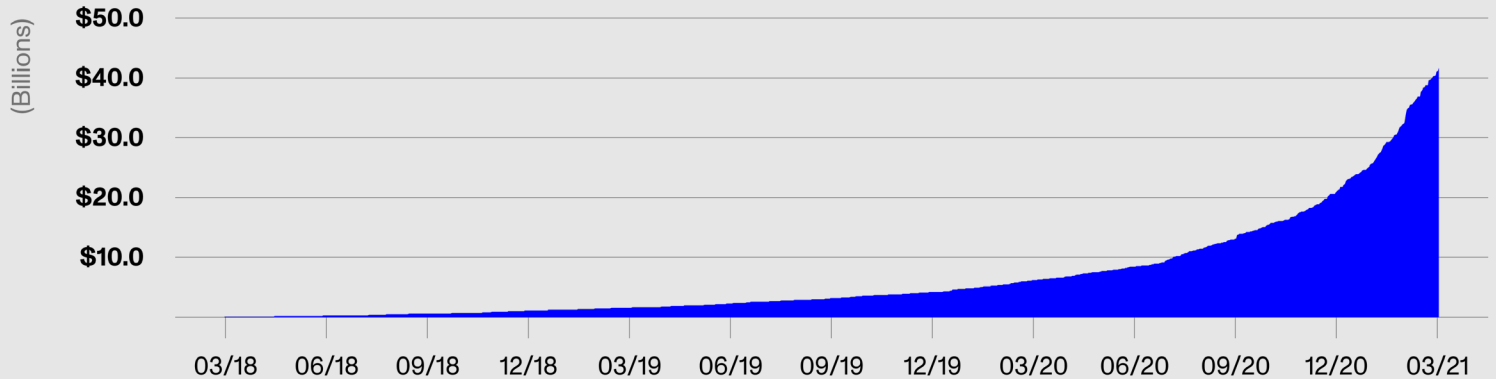
Genesis Internal Data

Cumulative originations increased 94.8%. This marks our twelfth consecutive quarter of growth and **brings total originations to \$40B since the launch of our lending business in March 2018**.

Our loan portfolio increased substantially in value through a combination of new issuance across cash, ETH, and Decentralized Finance (DeFi) assets alongside a significant rise in asset prices across our existing crypto book.

(\$ In MM, Except BTC Price)	12/31/2020	03/31/2021	QoQ Growth
Cumulative Originations	\$21,137	\$41,181	94.8%
Active Loans	\$3,821	\$9,033	136.4%
BTC Price	\$29,374	\$58,919	100.6%

### Cumulative Originations



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## Q1 2021 Loan Portfolio Composition

When examining our Q1 loan portfolio composition, **a few key stories are important to highlight.**

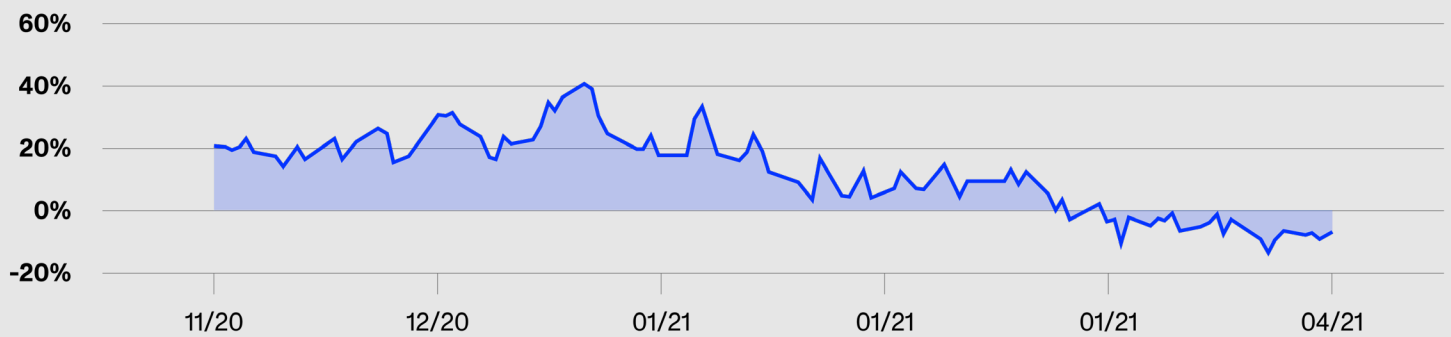
Asset	06/30/2020	09/30/2020	12/31/2020	03/31/2021
BTC	51.2%	40.8%	53.9%	42.8%
BCH	4.5%	4.3%	2.9%	1.3%
ETH	7.4%	12.4%	15.5%	27.0%
ETC	1.7%	1.0%	0.2%	0.2%
XRP	1.9%	1.4%	0.4%	0.1%
LTC	0.3%	0.6%	1.0%	0.7%
USD & Equivalents	32.0%	34.5%	23.2%	21.0%
Other	1.0%	4.9%	2.8%	7.0%

### Lackluster BTC Borrow Demand

We saw a significant decline in BTC as a percentage of our overall portfolio composition, falling to 42.8% from 53.9% over the previous quarter.

There are several reasons why, on a relative basis, there was less BTC lent out to the market in Q1 than over previous quarters. First, the level of demand to borrow BTC to arbitrage products like the Grayscale Bitcoin Trust (GBTC) declined as the premium to Net Asset Value (NAV) shifted and became a discount towards the end of the first quarter. Traders who previously borrowed BTC to contribute in-kind to the private placement or similar securities, with the intent to sell at a premium in the public market after the vesting period, lost the ability to arbitrage this spread. As a result, less BTC borrow was needed to enable this trade.

**Discount or Premium to NAV Chart**



Ycharts.com

Separately, spreads between futures and spot markets were present and persisted. Borrowing BTC to short spot and long future to bet on a widening curve doesn't make sense when basis is trading wide.

Given the lackluster demand for BTC borrow, yields on borrowed BTC also fell substantially. In previous quarters, Genesis borrowed BTC at between 3-6% per ann. In the current market structure, in most cases, rates have fallen to 1-3%.

Later in this report, we'll dive in deeper on BTC rate compression and discuss why we think we're currently close to the floor.

## DeFi Driving Growth In ETH And Alt Borrow

Another important narrative to highlight around our loan portfolio is the increase in ETH and other altcoin loans as a percentage of our book.

ETH and other altcoins now represent roughly 35% of our lending business. In notional terms that is \$3.15B. In ETH terms (based on quarter-end ETH/USD prices) that equates to 1.6mm ETH outstanding to borrowers.

With the rise of DeFi protocols, and yield opportunities on platforms including Compound, Uniswap, Sushiswap, Aave, and Maker, there are more openings for traders to arbitrage Centralized Finance (CeFi) lenders with DeFi.

Over the last year, total ETH locked in DeFi increased significantly from \$15B to \$60B, a **300% increase**. ETH Genesis has on loan increased from \$465mm in Q4 to \$2.4B in Q1, a **400% increase**.

Setting aside the general price appreciation of ETH, we were not surprised to see our active loans in ETH continue to rise with the Total Value Locked (TVL) on DeFi protocols. Many of the hedge funds actively innovating and utilizing these protocols are also active borrowers from Genesis.

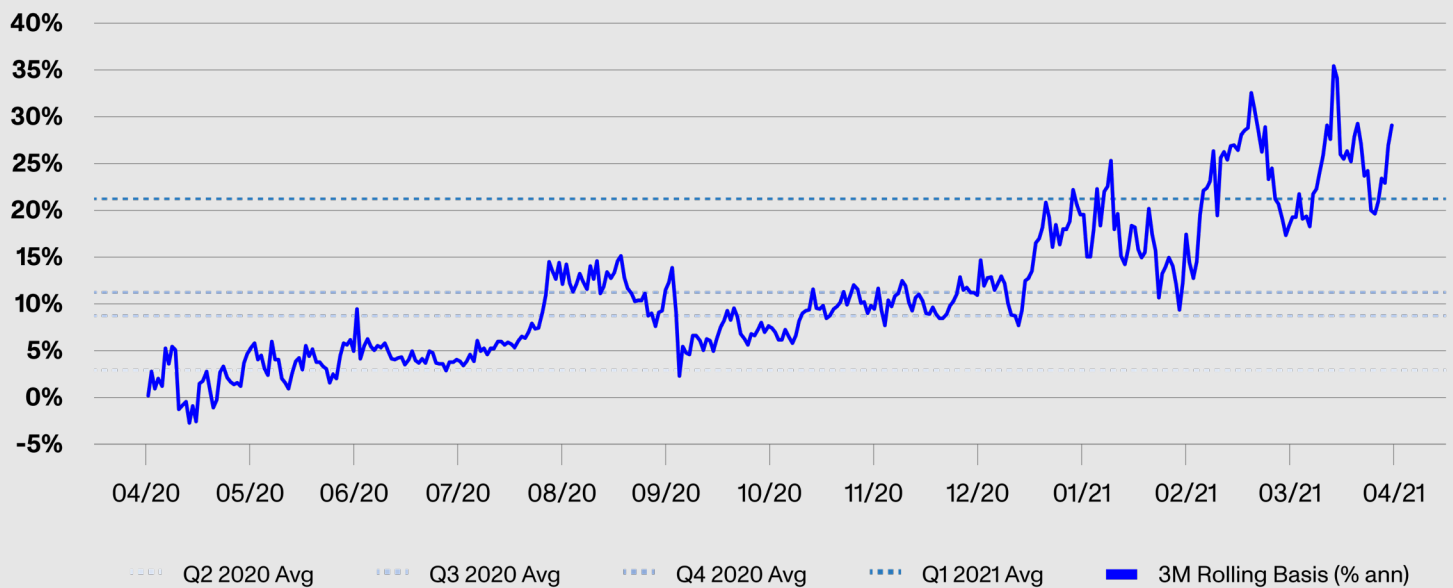
## USD And Stablecoin Demand

The final theme to highlight around our portfolio composition is that USD and stablecoins have remained roughly 21% of our book (despite a 136% increase in the notional size of our loan book.)

This means we have added roughly \$1.2B in new cash loans this quarter. Demand for cash has been ongoing as the implied yields on BTC basis remained at trailing 12-mo highs, reaching roughly 40% per ann by the end of the quarter.

As seen in the chart below, the average 3-mo rolling basis in Q1 was roughly 22% per ann, significantly higher than the average over the trailing three quarters.

### FTX BTC Near-Dated 3M Rolling Basis (% ann)



Skew.com

This persistence in basis premium has led many more institutions to eye crypto yield opportunities, driving our cash portfolio's continued growth.

As the June basis continued to widen into the end of the quarter, our derivatives desk saw increasing demand from macro discretionary firms and arb shops to put on the basis / cash-and-carry trade through our desk. Some key advantages for trading the basis in a bilateral OTC format include physical settlement of the forward and collateralizing the forward with the underlying crypto asset.

In many ways, the persistence of basis is a cash-deficit issue within crypto market structure. As more large balance sheet lenders, including medium and large-sized banks grow comfortable with the idea of holding BTC as a collateral asset, there should be increasing downward pressure on basis spreads correlated with more cash entering the market.

Genesis is helping to bridge the gap between the digital asset market structure and multi-billion-dollar institutions, including banks, traditional lenders and trading firms.

We are also excited to grow our partnerships with existing lenders including Gemini Earn, Luno, LEDN, BitcoinIRA and Circle, and to build new relationships with lenders who want to put cash to work at rates that are highly competitive relative to alternative credit markets.

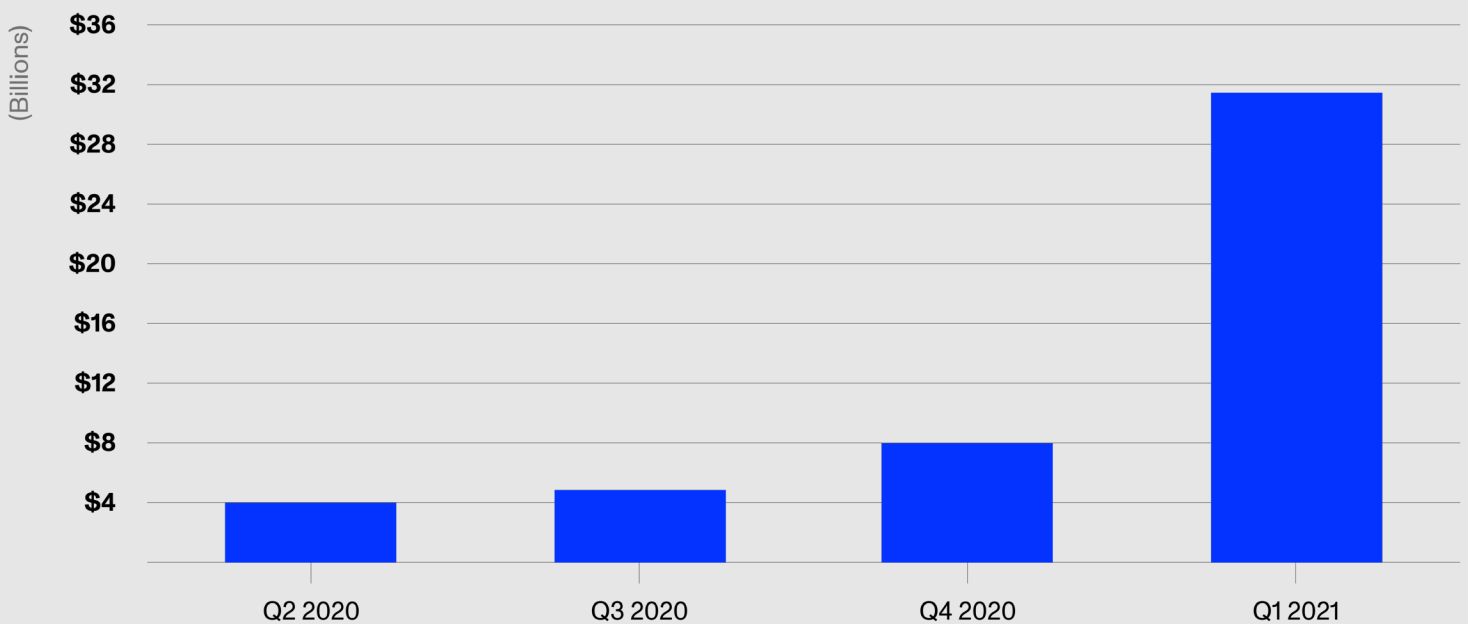


## 2 Digital Asset Trading

Genesis traded **\$31.5B in spot in Q1**, an increase of 287% from Q4 2020. Much of this volume came from new market participants. These numbers were bolstered by the launch of **Genesis Treasury**, our newest service that helps corporates enter the market through various accumulation strategies. Genesis Treasury has seen a tremendous amount of interest.

Genesis continues to broaden its suite of supported crypto assets. Although most transactions are traded on an OTC basis to minimize market impact, there has also been a consistent upward trend in electronic execution as a percentage of our overall trading composition. 33% of spot trading utilized our Prime smart-order routing engine, an increase over the previous quarter. We expect usage to continue to grow as we introduce new algorithmic strategies that clients will be able to access directly when we launch agency trading. We will also be using these strategies internally to hedge our principal trading flow, allowing us to make tighter markets for clients on larger OTC trades.

Genesis Spot Trading Volumes



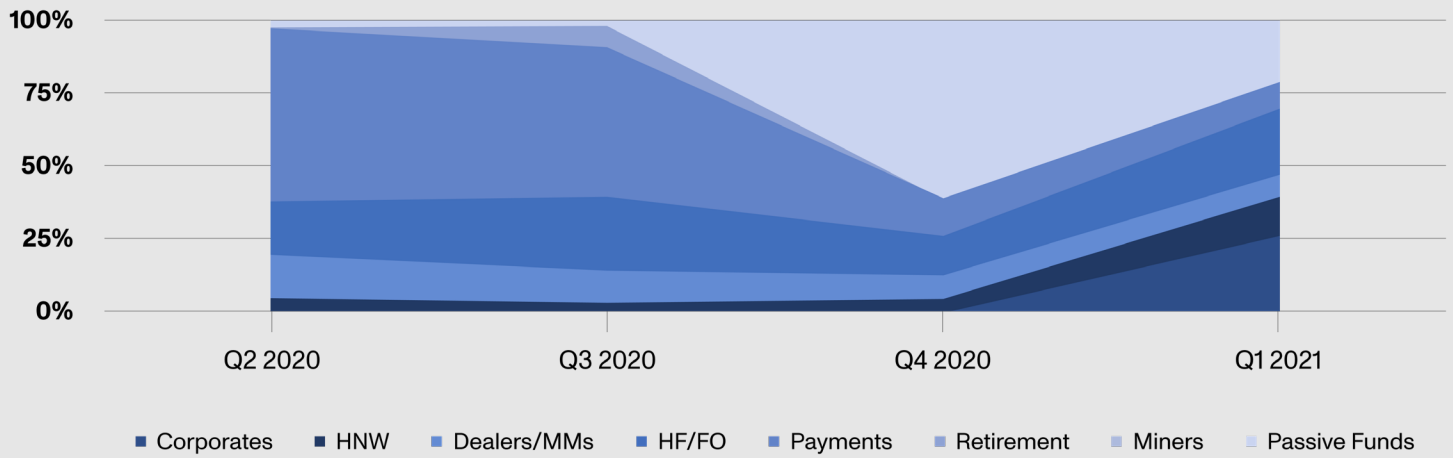
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When viewing our top 100 largest clients by OTC volume traded, Genesis saw volume from “Corporates” increase to over 25% of our total activity. Much of this surge was attributable to a mix of clients taking positions in bitcoin for the first time, existing clients adding to their positions, and clients choosing to take a more active approach to manage their exposure.

	Q2 2020	Q3 2020	Q4 2020	Q1 2021
Corporates	0.00%	0.60%	0.49%	27.06%
HNW	4.90%	2.40%	4.21%	13.00%
Dealers/MMs	17.26%	13.53%	9.84%	9.55%
HF/FO	16.25%	23.20%	11.31%	20.57%
Payments	59.43%	51.67%	14.06%	8.92%
Retirement	0.18%	7.28%	0.09%	0.12%
Miners	0.38%	0.26%	0.18%	0.05%
Passive Funds	1.60%	1.06%	59.83%	20.72%

Before Q1 2021, hedge funds and passive funds were some of our largest clients by OTC volume. As corporate clients began buying bitcoin for their treasuries in Q1, our ratios shifted. The entrance of companies like Tesla, MicroStrategy and Square led to a wave of interest from corporates looking to work together with Genesis Treasury for their own treasury allocation efforts.

### OTC Volume In BTC By Client Type (% Of Total)



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Genesis expects this trend to continue as more corporates enter digital asset markets and want to execute various accumulation and hedging strategies.

# 3 Digital Asset Derivatives

The Genesis derivatives desk saw 133% quarter-on-quarter growth across bilateral OTC and negotiated derivative blocks **to reach \$10.5B in notional traded.**

Although we grew our counterparty base by 21% over the quarter, our most significant drivers of growth were higher frequencies of trades and increased notional per trade from our crypto-native hedge fund client base. These clients were early adopters of our platform and were well-positioned to take advantage of the OTC liquidity we provided to take short-term, tactical bets in option format.

From a high level, the major thematic categories of our flow netted out to:

- HNW individuals and systematic yield funds taking advantage of higher implied vols and the spot rally to lighten up on length via call overwriting.
- Recycling risk in medium- to long-dated calls between overwriters and counterparties looking to add length in a levered but limited-loss format. (The relative implied funding cost of perpetual swaps vs. longer-dated futures sometimes made buying longer-dated calls a more attractive option.)
- Corporate accounts and venture books using puts to hedge their business risk or illiquid portfolio risk.
- Selective hedging of impermanent loss via short-dated gamma portfolios.
- The proliferation of DeFi assets, new token issuances and vesting schedules creating and increasing demand for hedging products. This quarter saw an explosion of new base layers and protocols focused on everything from file storage to data indexing to NFT's.

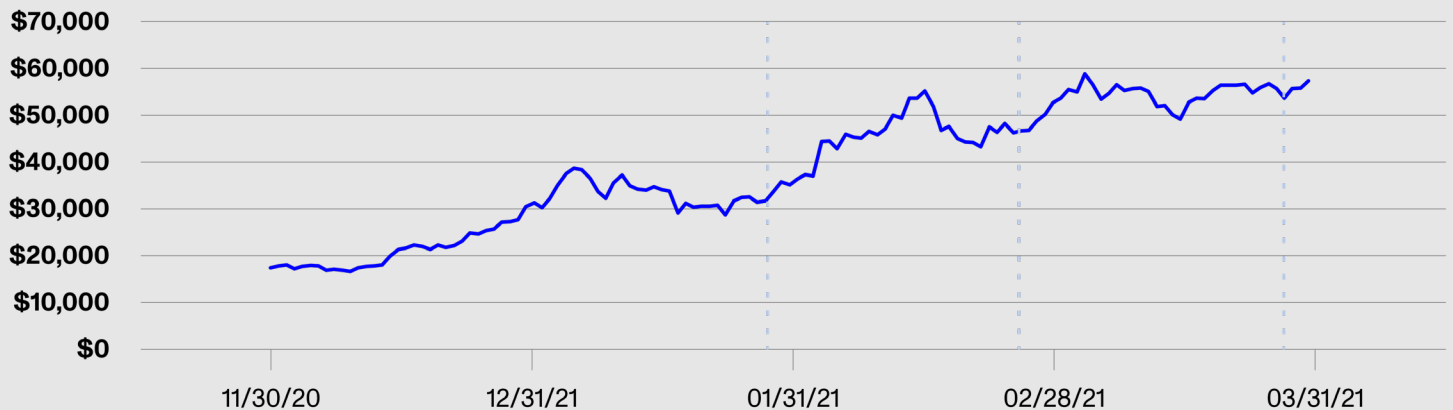
Genesis has partnered with major stakeholders across these ecosystems to match supply and demand using our balance sheet and in derivative format. (Reach out to our desk if we can help grow liquidity for your project.)

## Looking For Patterns

Although bitcoin doubled in price from \$29k at year-end to a mid-March high of \$62k, the path between those points was hardly a smooth ride.

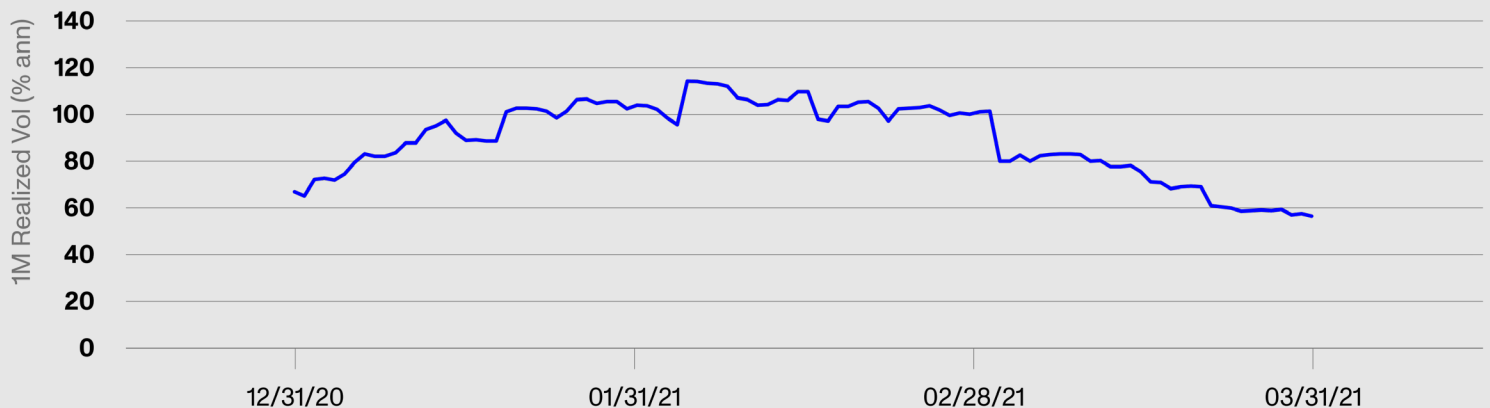
In BTC's run in Q4, there were few major pullbacks, largely staying below 75v realized. In Q1 BTC regularly realized north of 100v in BTC/USD, especially during Jan's -23% sell-off into option expiry and Feb's -23% sell-off (also into expiration). The market quickly picked up on this pattern and sold into March expiry -14% only to rally post-expiry.

**BTC/USD Spot Price**  
(Option Expiry Dates Indicated In Dotted Vertical Lines)



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**1-Month Realized Volatility In BTC/USD Spot Price**



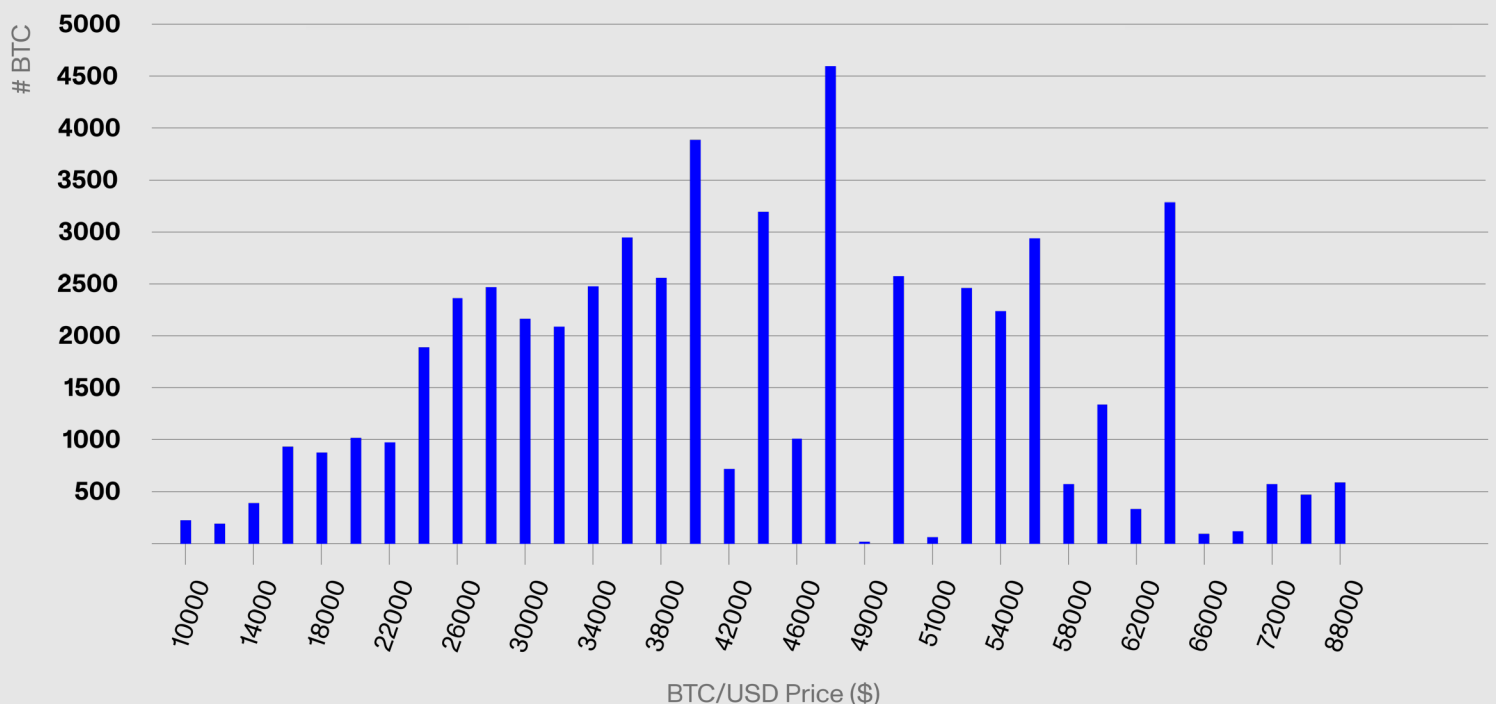
Skew.com

The table below shows the performance of a buy-on-expiration strategy over the last three months. There have been multiple explanations for why this occurred. Some of our clients told us they believed dealers deliberately pushed spot below open call strikes where they are short. We did not find that interpretation compelling, given most dealers are not taking large delta risk in their options books.

Month	Date of Peak	Peak BTC/USD Spot Price	Option Expiry Date	Expiry BTC/USD Settlement Price	Peak-To-Expiry Return %	Expiry +7d BTC/USD Spot Price	Expiration to +7d Return %
Jan 2021	8-Jan-21	41,986	29-Jan-21	32,210	-23.3%	37,625	16.8%
Feb 2021	21-Feb-21	58,367	26-Feb-21	44,741	-23.3%	47,190	5.5%
Mar 2021	13-Mar-21	61,788	26-Mar-21	53,204	-13.9%	59,555	11.9%

Another explanation is that spot is gravitating toward or getting pinned on long gamma strikes that dealers are concentrated in, either in listed or OTC strikes. The chart below shows open interest by listed strike at Feb expiry which does show concentration in \$44k and \$46k strikes.

Open Interest By Strike Prior To Feb Expiry



Genesisvolatility.io

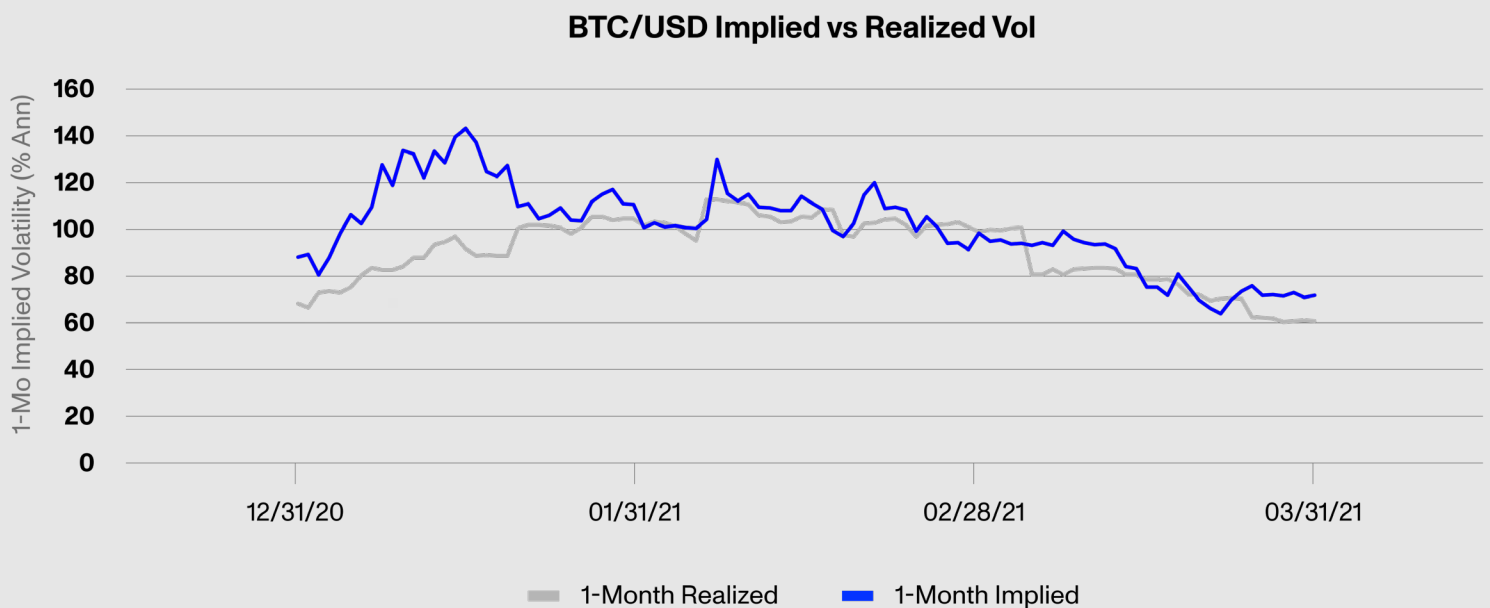
A third explanation is related to monthly fund flows – with new fund subscriptions being deployed at the end of the month into the first week of the new month (option expiry is always the last Friday of the month), BTC/USD outperforms post-expiry.

A final explanation – having seen this pattern emerge for the last few expirations – is that it's possible a number of systematic funds may have been trading cyclical more aggressively.

## Relative Value In Vol

Throughout Q1 Bitcoin implied volatility naturally followed realized volatility as it round-tripped higher then lower. The early Jan rally in implied vols came with the sharp move higher in BTC/USD spot at the top of the year due to capital inflows. The peak in 1-month implied vols above 140v came in mid-Jan as BTC/USD looked poised to take out previous highs around \$40k.

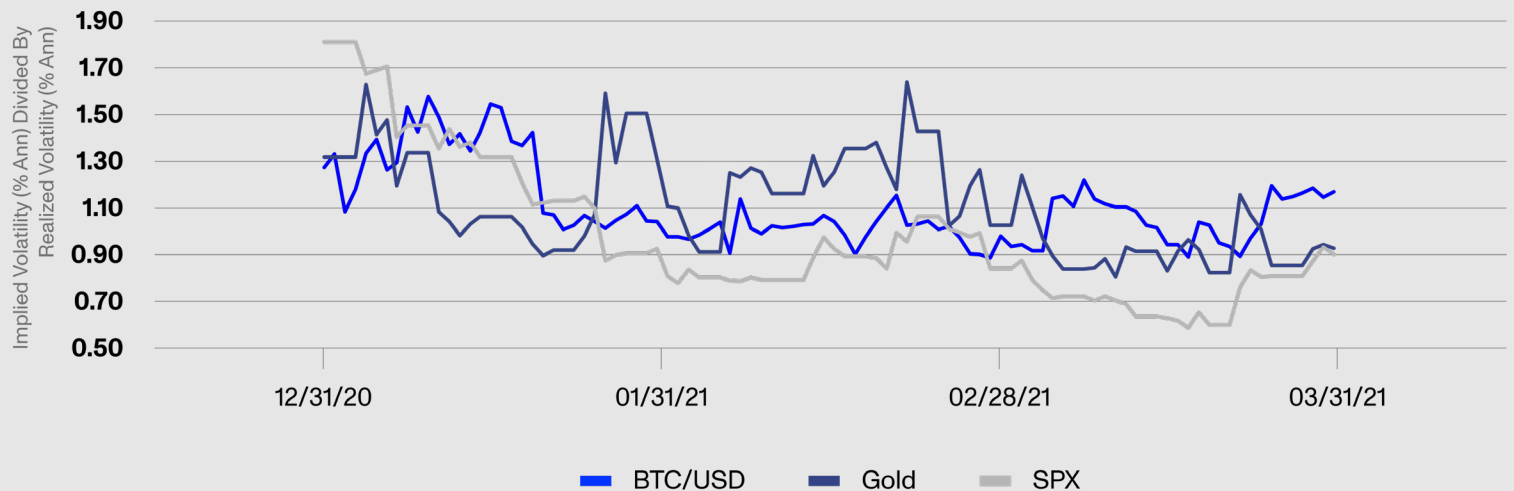
A spillover effect from traditional markets came from the GME short squeeze at the end of Jan. GME was a visceral demonstration of the power of retail to collectively move markets. As GME peaked in the high \$400s per share, BTC/USD bottomed in the low \$30k range, and we saw a small surge in implied vol to 117v as upside tail risk came into focus.



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Counterparties also brought up relative risk premia across BTC and traditional assets as an area of focus. Below, we've charted 1-month implied-to-realized ratios for BTC/USD, gold and SPX. While this is a relatively short time-series, it illustrates the relative risk premia moved broadly in line, with equities serving as a weak leading indicator for crypto:

**Implied-To-Realized Ratios Across Assets**



Genesis Internal Data

Deribit also began publishing DVOL<sup>1</sup> recently - a forward implied vol index for BTC/USD intended to emulate the VIX index for equities.

<sup>1</sup> Reference: [Deribit](#)

We believe Deribit will list linear and non-linear products linked to DVOL soon. Genesis expects to be a liquidity provider as DVOL products become an important hedging instrument for our counterparties.

## Rotation Trades For A Range-Bound BTC Market

BTC dominance reached a peak at the beginning of the year before slumping to new lows as the quarter progressed.

Meanwhile, market euphoria expressed itself dramatically through the upward performance of altcoins.



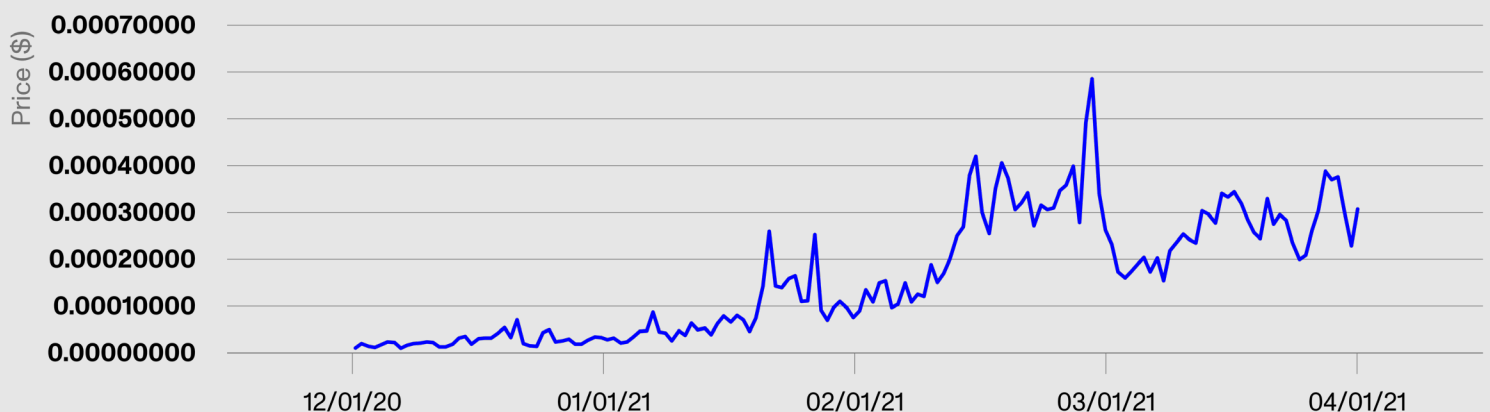
There were several major reasons for the decline in BTC dominance and the rise of alts (including DeFi governance tokens):

First and foremost, DeFi became a phenomenon in the crypto community. Historically, the main knock on DeFi has been that it is largely inaccessible to regular retail investors and traders. With the rise of more user-friendly products that require little more than Metamask to start trading, lending and borrowing, TVL exploded. At the same time, celebrity investors became vocal proponents of DeFi protocols. Coinbase and Gemini aggressively listed governance tokens - making them widely accessible to retail investors and increasing awareness of the technology. Controversy around GME/Robinhood also served as a call-to-action for many traders who viewed the episode as an indictment of centralized trading platforms, compelling them to explore DeFi as an alternative.

Second, the institutional adoption of ETH became a major theme on the back of DeFi's growth, which occurred largely on ETH's network. EIP 1559 provided another deflationary catalyst bolstering ETH's monetary premium. As additional access vehicles like the Ethereum ETFs in Canada and the CME ETH futures emerged, diversifying crypto allocations in ETH became much easier.

Finally, while ETH was in the spotlight, challengers to its claim on being THE DeFi base layer started to arrive on the scene. Notable competitors include Solana (SOL) backed by Alameda, Polkadot (DOT), which gained strong traction in Asia, and Binance Smart Chain (BNB), a marginally more centralized chain designed to make it easy to port ETH projects. All of these challengers benefited from a migration of dev talent and users as gas costs on ETH climbed higher.

**ETH Mean Gas Price (USD)**



The Genesis derivatives desk expanded its offerings to include underlying assets across each of these new ecosystems over the course of Q1. It also facilitated spread trades in synthetic format. While altcoin vols can be steep, especially in names with one-sided flow, we have been active in calls and puts for clients looking to add convexity or generate yield in these names.

# 4 Milestones & Future Scenarios

## Institutional Milestones For Crypto

If 2020 marked the beginning of the institutional epoch in crypto, the first quarter of 2021 was a Cambrian explosion of institutional investment themes and capital inflows into crypto assets of all stripes. The positive news for crypto stood in stark contrast to the negative headlines for traditional markets, especially as drama around GameStop and Archegos unfolded.

In Q1, many marquee traditional financial services firms revived their crypto trading efforts which had been shelved since the 2017 ICO bubble popped:

- **Goldman Sachs** announced they will begin actively trading Bitcoin futures and NDFs with clients while working on a custody offering.
- **Morgan Stanley** expanded the mandates of a dozen of their branded mutual funds to include GBTC and CME futures. The firm also began to offer crypto fund products via their private wealth management platform and reportedly evaluated a bid for a Korean crypto exchange.
- **BNY Mellon** announced a partnership with Fireblocks to offer crypto custody services.

Institutional market access proliferated beyond Grayscale products and the CME futures market:

- **Fidelity** filed for a Bitcoin ETF, following Morgan Stanley/NYDIG, VanEck and WisdomTree.
- **Canada** continued to push the bar for listed products with Purpose, CI, 3iQ and Evolve all launching Bitcoin and Ethereum ETFs.
- **CME** added to their stable of crypto futures with the launch of ETH futures and micro BTC futures geared towards smaller investors.

The trend of corporate treasury reserves and merchant adoption of crypto accelerated:

- **Tesla** announced a \$1.5B treasury allocation into BTC while accepting crypto payments for purchases.
- **Microstrategy** completed another \$1bn offering of convertible notes to fund BTC purchases.
- **Meitu**, a Chinese app company, purchased \$50mm in BTC and ETH as part of a board-approved investment policy.
- **Paypal** made several significant inroads into crypto – including buying custodian Curv, launching a crypto checkout service and offering crypto trading via its Venmo app.
- **Visa** began using USDC to settle transactions. They also began using the ETH network to receive payment at their account with Anchorage.

Meanwhile, politicians and regulators continued to focus on strengthening market integrity and fostering innovation:

- The **SEC** charged Ripple Labs with conducting an unregistered securities offering, with implications on all token issuances.
- **The New York Attorney General's office** settled with Bitfinex and Tether, ending a two-year inquiry into reserves at the stablecoin issuer.
- **Miami Mayor** Francis Suarez announced his intention to make the city a hub for crypto innovation, offering to pay public employees and accept taxes in crypto. In another surprise, crypto exchange FTX won naming rights for the home arena of the Miami Heat

The loudest drumbeat behind the institutional activity in Q1 was Coinbase's S-1 registration, which became a matter of public record at the end of Feb. While the market widely anticipated their direct listing, the event created visibility, additional access and price discovery for public investors interested in crypto. Although many macro factors converged to create such a bullish Q1, we believe much of the institutional bid underlying price action was positioning into this catalyst.

## “What Happens If...”

Given where the market is now, there is a lot of foreshadowing and prediction emphasis on near-term outlooks and price movements. In this section, given the range of variables and moving pieces, we explore several plausible future scenarios.

### What happens if BTC yields keep falling?

Currently, BTC yields are falling due to the supply side expanding while the demand side has fewer low-hanging opportunities.

There are several reasons why BTC supply in the market has increased. 1) As the lending industry matures, holders have grown more comfortable seeking out yield on their assets. 2) It's grown easier to earn yield on deposits than ever before, with programs like Gemini Earn, Ledn, and Luno offering simple points of access for worldwide communities of users. 3) As the futures curve is richer to spot, cash piles into long spot and short futures. That long spot inventory adds to supply in the market.

On the demand side, many of the easier trades in the market dried up in Q1. The largest example of this was the trust premium arbitrage trade discussed earlier in this report, which resulted in diminished demand into trusts.

All of this begs the question - where do BTC rates floor?

The key consideration to determine this is the ability to use BTC as collateral to borrow other assets, primarily stablecoins and cash (USD). So long as BTC can be used as collateral to borrow USD, the opportunity of USD yields impacts what you pay on BTC.

For example, suppose there are 40-100% annual interest yield opportunities available in USD. In that case, it makes sense to borrow BTC unsecured at some positive rate such that you can borrow from either centralized desks or decentralized protocols to generate USD at a positive rate. Margin is a major consideration, but so long as you can manage the borrow appropriately, the positive unsecured rate on BTC factors into your weighted average cost of capital on

USD. Leading decentralized finance protocols like MKR and AAVE often have stable borrow rates in the 5% to 9% annualized range, substantially below market-neutral cash yield strategies.

## What happens if 1T is allocated towards short basis?

The Bitcoin basis trade is one of the most well-known and longstanding arbitrage opportunities in the history of commodity markets. As FTX CEO Sam Bankman-Fried explains [here](#), there is a useful framework for thinking about the basis spread. It goes like this:

The crypto market is currently worth 1T, yet traders want it to be worth 4T. There is only 0.5T willing to be loaned to the market to express that view, so the remaining 2.5T of demand is bid up in interest rates. The key variables at play here are:

M: the current market cap

D: the desired market cap

C: the amount of cash available to be loaned into the market

R: the amount bidding up interest rates

A formula to express the above becomes  $D - M \cdot C = R$ .

To answer the initial question of what happens if 1T of cash liquidity is injected into the crypto market, it depends on what the market is currently worth relative to what it is expected to be worth.

Right now, holding forward market cap expectations constant, 1T should reduce interest rates and basis spreads. However, if forward market cap expectations widen, the 1T matters much less.

Ultimately, it's easy to say as more cash piles into the crypto ecosystem, interest rates should collapse. In reality, it's more nuanced than that. Looking only at the infusion side is solely the supply side. The demand side for forward growth expectations plays a large factor.

To take this exercise further, if the interest rate between USD and BTC widens so broadly that the rate on USD is multiple magnitudes higher than BTC, the derivatives market could partially break. Quarterly futures would widen over their duration, but ultimately - at expiry - they should match spot price and offer traders the ability to get out. On the other hand, perpetual swaps would perpetually widen and risk never coming back to parity. One way to exit this type of move would be to buy back the perp and sell a calendar future against it, but if the flow became too large the calendar futures could, in theory, trade cheap to perp but rich to spot. In this scenario you would have a very unusual forward curve where spot and calendar trade below perp. While the probability of this occurring is extremely low, it's worth keeping an eye on and watching as the market evolves.

## About Genesis

Genesis is a global leader in institutional digital asset markets, facilitating billions of dollars in digital currency transactions on a monthly basis. We provide sophisticated market participants advanced tools to trade spot and derivatives, lend, borrow, and custody digital assets, alongside full-service digital asset prime brokerage services.

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