PANTERA

EXCERPTS FROM OUR BLOCKCHAIN LETTERS

The Value of Active Management/Risk Management

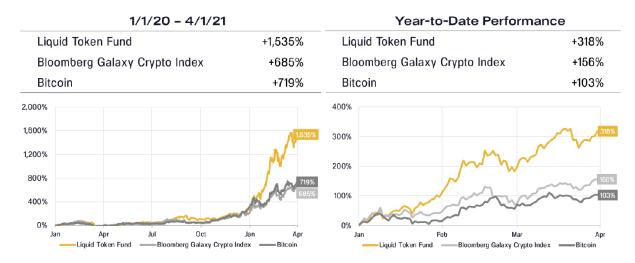
May 10, 2021

PERFORMANCE AND STRATEGY UPDATE BY JOEY KRUG

Since the start of 2021, our portfolio companies have roared from success to success, marking the culmination of years of dedicated work by our founders and their teams. Bitso, a company we invested in in 2019, took six years and seven months to get their first million users on May 25th, 2020. 10 months later, in March, 2021, they reached two million, and they're on track to get to more than three million by the end of this year.

The total value locked in lending protocols, which was negligible one year ago, now exceeds \$30bn. The amount locked in decentralized exchanges is close to \$60bn, and DEX trading volume close to \$75bn. This explosion in DeFi usage has propelled YTD return on our Compound, Aave, and Maker investments to +331%, +363%, and +585%, respectively. DEX protocols have shown equally impressive results, with Uniswap, 0x, and SushiSwap yielding respective YTD returns of +634%, +329%, and +326%.

Each of these individual achievements contributed to the extraordinarily strong Q1 performance of Pantera funds. The Liquid Token Fund is up +1,682% since the start of 2020, and +355% in 2021 alone, vastly outperforming the Bloomberg Galaxy Crypto Index and bitcoin over each of these periods.



As we mark these results, we wanted to take the opportunity to share some insight with our LPs into the strategy that enabled them - and how that strategy continues to evolve to meet the demands of the market cycle. We'll begin by detailing our core investment strategy: why we hold the positions we do, and what can cause our theses to change.

We'll then discuss our approach to risk: how we manage it, how we capitalize on it, and how we recognize opportune times to take risk off the table. Finally, we'll outline our plans to navigate the latter half of this bull run and - when its peak eventually comes into view - pull back on risk to position our investors for the next historic run-up.

1. WHY WE INVEST

As a brief reminder, the overarching thesis of the firm is that: "Blockchain tech and cryptocurrency are the underpinnings of a new financial infrastructure, just as the internet was the underpinning of a new information infrastructure." Given that, we mainly

focus on financial use cases, particularly decentralized finance protocols and layer one blockchains that support them. Within that ecosystem, our investment strategy centers around four fundamental criteria: team, community, valuation, and technical analysis.

(i) Team: First and foremost, we invest in world-class teams. This means brilliant founders with bold visions, unrelenting drive, and the capacity to build agile, execution-focused teams. In environments as dynamic as the crypto and blockchain ecosystems, speed of execution is a key predictor of success: the best teams move quickly and aggressively, are extraordinarily responsive to users, constantly iterate on product, and ship upgrades often and on schedule.

(ii) Community: The community engagement surrounding a crypto project is one of the most reliable proxies for the strength of its value proposition and the viability of its model. Simply put, excellent products generate enthusiasm, particularly if they solve a clear and articulable problem for their users. And nearly every crypto/blockchain project needs network effects to succeed, whether to scale its user base beyond a core group of early adopters or motivate developers to build on their protocol.

When we look at early projects, we're evaluating them to see whether there are early signs of growth - the faster more rapid the growth, the better. One caveat with DeFi protocols though is differentiating between organic real traction and traction that is simply there due to liquidity provisioning rewards. In an open source environment, developer enthusiasm is especially crucial; if a grassroots developer community coalesces around a protocol – as one did, for example, around Polkadot – we view it as an extremely bullish signal that the project is positioned to succeed.

(iii) Valuation: We invest in assets whose prices imply an asymmetric risk/reward tradeoff, i.e. assets that are underpriced in comparison to our fundamentals-based valuation. Just 2-3 years ago, DeFi was nascent and usage was low; this left very little data to inform those kinds of fundamentals-based price analyses. Thankfully, the surge in DeFi adoption has generated rich and varied datasets on implied earnings, free cash flows, costs, margins, and other key financial indicators. These now allow us to update detailed valuation models constantly, identify under- or over-priced assets, and adjust our positions accordingly. For instance, when we looked at adding Compound and Aave to the portfolio, we valued both based on borrow utilization and how that would eventually generate revenue for token holders. Aave looked cheaper, so we weighed it more heavily at the time (but we bought both). We can evaluate decentralized exchanges the same way.

(iv) Technical analysis: Whereas a fundamentals-based analysis evaluates an asset's intrinsic value, a technical trading analysis uses data about trading activity to predict how its price might change on a shorter time horizon. There are a few categories of technical data that are useful in the short to medium term, including market sentiment data, on-chain data, and traditional technical indicators. We look for evidence of trading momentum indicating that an asset's price will continue to rise after it has broken through some resistance level or mean reversion if an asset bounces off of a critical support level.

For example, last fall we put on a sizable UNI position after their volumes kept increasing, but the price was down a lot and hit both a lower bollinger band and fibonacci support level which it bounced off of. It was a great time to initiate a position. On the other hand, we initiated a SUSHI position once we saw their traction growing rapidly and the asset was strong technically (it had just passed a previous resistance level and was trading above bollinger support with a bullish MACD cross). When good projects meet the first three criteria but not the fourth -- i.e., have strong fundamentals but look technically bearish -- we typically monitor them but wait to take any significant position until those technical indicators improve to maximize risk reward. This is a relatively new part of the strategy in the last nine months.

We only invest in projects that excel on all four metrics -- and only hold positions for as long as they continue to clear that high bar. Far from ending when we decide to buy an asset, our analysis of investments is an ongoing, iterative process. We monitor the performance of projects in the portfolio constantly, re-evaluating and updating our models to determine whether to hold, increase, or exit each position.

Broadly speaking, we exit positions for four reasons:

- (i) Changes within a project or its market dampen our assessment of its potential: When adverse developments bear upon our original analysis, we go back to the drawing board to determine whether the original thesis still holds. For example, when we see a drop in a protocol's shipping cadence or waning community engagement, the assumptions that informed our original model may no longer hold.
- (ii) Our thesis is fully borne out: We sometimes exit positions if we conclude our original thesis has been fully borne out, leaving limited additional upside. For example, if a project has achieved the critical milestones we believed would fuel its growth, the value we had hoped to capture may have already been fully realized, marking an end to the asset's critical growth phase. Given how early DeFi still is, this category probably happens the least for long term fundamental positions, but we'd expect to see it more in occasional short term event-driven trades.
- (iii) The market overshoots our thesis: If the price of an asset we hold rises to a level that wildly overshoots our fundamentals-based valuation, we would expect the market to eventually correct. In such cases, we might sell the asset at its inflated price to lock in value before the price adjusts.
- (iv) Our thesis is proven incorrect: We constantly re-evaluate our viewpoints and question their assumptions to determine whether portions of our thesis may have been proven wrong. In early-stage investing, not every bet can be a winner; however, having the humility to identify mistakes and the discipline to exit them quickly allows us to mitigate their ultimate impact on our aggregate portfolio performance.

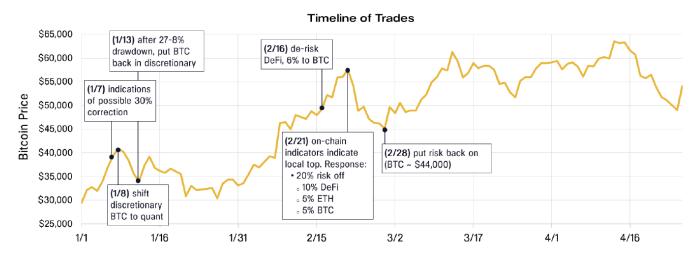
3. HOW WE MANAGE RISK

Even in bull markets – indeed, especially in bull markets in which there are often multiple 30% pullbacks – we spend a considerable amount of time managing risk, striving to take the appropriate amount of risk, of the appropriate kind, at the appropriate time. In practice, this requires having a risk appetite that is extraordinarily responsive to three types of indicators of evolving market conditions: sentiment data, onchain data, and technical trading data.

- (i) Sentiment data allows us to gauge the confidence and convictions of market participants using data from social media activity, search engine queries, viral trends, and more. Measured against asset prices, these can help signal when a market is overbought and ripe for a correction. While sentiment data is an important complement to our other risk management strategies, it has often proven reactive to underlying market conditions, making its utility more confirmatory than prognostic.
- (ii) On-chain data is a good source of predictive market signals. A high volume of bitcoin moving off exchanges lowers circulating supply, for example, which puts upward pressure on prices (although most of the time this data is just noise). Other interesting on chain data includes data surrounding unrealized profits of crypto holders and data on coins held by short-term speculators. If many short-term speculators are sitting on large unrealized gains and the price goes down by 10%, they may panic and sell to lock in those gains. Similarly, while not on-chain data, high leverage can cause short term price dips to trigger cascading liquidations as margin long traders are forced out of their positions. Tracking futures and perpetuals outstanding interest (OI) and when that OI was created, as well as perpetuals funding rates, provides a decent proxy to monitor this.
- (iii) Technical data helps predict when trading trends will break or intensify. For example, assets trading with a high RSI and a bearish MACD cross could be overbought, whereas a low RSI and bullish MACD cross could indicate the market is oversold and bottoming. Market support is also very important, e.g. when the market breaks the prevailing trend, depending on direction that can be very bullish or bearish. By tracking price movements and technical patterns, we capitalize on volatility and position ourselves ahead of market corrections.

Over the past 12 months, we have continually adjusted our risk appetite in response to these three components. When they have aligned to suggest that the market is overbought, we have taken risk off the table, waited for the correction, then put risk back on once the market found support, buying back our positions at newly-depressed (and, in our view, oversold) prices.

For example, on Jan. 07, on-chain and sentiment data indicated that the market was ripe for a correction. The following day, after a technical breakdown on a shorter timescale, we preemptively took risk off the table by shifting discretionary BTC holdings (~17% NAV) to our quant strategy, avoiding the steep 27-8% correction that followed. On Jan 13, sensing we had reached a local bottom, we brought BTC back into discretionary at its then-depressed ~36k price level, having captured 47% of the alpha in that drawdown.



Similarly, on Feb. 21, sentiment, on-chain, and technical indicators all pointed to the market approaching a new local maximum. With BTC still trading at 54k, we pulled back risk across the LTF portfolio, taking off 5% of our ETH, 5% of our BTC, and 10% of our DeFi assets. On Feb. 28, sensing we had reached the bottom, we put risk back on -- buying back our BTC at approximately \$43.5k, capturing 77% of the alpha in that correction.