EAGLEBROOK ADVISORS

Questions – June 14th, 2022

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Bitcoin, ether, and digital assets face the brunt of macro selling pressure as inflation and sentiment data sparks further concerns over the Fed's ability to achieve a "soft landing"

KEY TAKEAWAYS

+ Bitcoin, ether, and digital assets face the brunt of macro selling pressure as inflation and sentiment data sparks further concerns over the Fed's ability to achieve a "soft landing" – markets are now pricing in a 75bp hike in the June (tomorrow the 15th) and July Fed meetings

+ Within digital assets, concerns over the solvency of a large "CeFi" lender Celsius Network have emerged as the corporation pauses withdrawals, transfers, and trading given 'extreme market conditions'

+ This week, we offer our answers to many of the questions we've received from clients, with topics including inflation, a potential recession, the bottom, correlations, and fundamentals

THE BIRD'S EYE VIEW

And there we have it. Risk assets experienced increased selling pressure last week and into Monday's trade as recent economic data has caused further concerns over the Fed's ability to achieve a "soft landing."

On Friday, May's headline CPI reaccelerated to a new four-decade high with an increase of 8.6% y/y. It was no help to risk assets that just an hour and half later, University of Michigan Consumer Sentiment Index came in at an historic low of 50.2, the lowest point on record since creation in January of 1978.

In response, interest rates moved rapidly higher (2yr +25bps on Friday), while risk assets moved lower, and the S&P 500 and the Nasdaq Composite lost -5.0% and -5.6% on the week. Bitcoin and ether continued their decline over the weekend, ending at -8.6% and -18.5% by Sunday's close.

With no let up on Monday, the 2yr treasury yield moved another 29bps (from 2.81% to 3.35% in two trading days), and risk assets experienced another down day with the S&P 500, the Nasdaq, bitcoin, and ether losing -3.9%, -4.7%, -15.1%, and -16.0, respectively.

And as a result of reaccelerating inflation and market volatility, participants now expect Fed Chair Powell to raise rates by 75bp in both the June (tomorrow the 15th) and July meetings.

After claiming that inflation was transitory for much of 2021, Fed Chair Powell told the market he would not need to go 75bps in his May 2022 meeting, and now, he is likely to raise the policy rate by that very number just six weeks later.

With confidence in the Fed rapidly deteriorating from already questionable levels, a 75bp increase may prove to market participants that the group of policymakers is, in fact, attempting to curtail four-decade high inflation. Powell needs to prove he is not a "do nothing" Chairman as it now appears participants would rather see him hike in an attempt to avoid a recession, rather than sit back and let inflation create one.

It is no surprise that bitcoin, ether, and digital assets have again faced the brunt of macro selling pressure, as the riskier assets often go first when portfolio managers deleverage.

But similar to the Luna situation in early May, losses for bitcoin and ether were exacerbated by concerns over the solvency of Celsius Network, one of the largest "CeFi" lending institutions in digital assets ($11.8 billion in assets on May 17th). Celsius has paused all withdrawals, transfers, and trades in response to "extreme market conditions", but the lender is known for utilizing various DeFi protocols to gain leverage, borrow, and offer high yields to those seeking high interest rates.

In an already weak market, these concerns led to bitcoin breaking key psychological support of both $30,000 and $25,000, reaching a low of $22,603 before ending at $23,209 on Monday. Ether reached a low of $1,165 and closed at $1,240. This is the lowest for both bitcoin and ether since Dec '20 and Jan '21.

So, all eyes are on the Fed with the damage that has been done. The S&P 500, the Nasdaq, bitcoin, and ether are now down 21.8%, 32.7%, 65.7%, and 74.2% from their 52-week highs, placing new lows on Monday the 13th. Fixed income has provided no support with Barclays Agg down 13.2% as well.

So, what do we do from here? Well, we recommend letting the dust settle before making any portfolio decisions. While this scary environment may test the conviction of many investors, selloffs such as the one occurring have happened numerous times in bitcoin's history. Most recently, December 2018 and March 2020, which then experienced strong bounces for bitcoin, ether, and the broader ecosystem.

While negative sentiment remains extreme, markets over time have a way of sorting themselves out. Knowing what you own, why you own it, and how it's expected to perform helps investors maintain conviction in the most difficult of market environments.

This week, we offer our answers to many of the questions we've received from clients through this recent volatility.

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Isn't bitcoin supposed to be an inflation hedge?

It depends. Bitcoin's perception as an inflation hedge comes from its hard-coded, fixed supply structure of 21 million coins. This digital scarcity serves as protection against monetary inflation, or the sustained increases in money supply.

As we've seen recently, monetary inflation led to price inflation, and bitcoin rallied alongside inflation-sensitive assets in late Q4 2020 and throughout much of 2021. However, rampant price inflation seen in today's environment often reduces risk appetite, and very few assets aside from maybe commodities and real estate can hedge against this type of inflation.

Are bitcoin and digital assets only a product of Fed liquidity?

Unlikely. Bitcoin and digital assets are supported by long-term secular trends such as digitalization, technology, demographics, and populism. These trends have supported adoption over the last decade and will likely continue to do so going forward. All that bitcoin requires is an internet connection, and technology and ease of access are significant tailwinds to bitcoin and digital asset adoption.

Cyclically, macro events such as monetary and fiscal easing accelerate adoption. These events include the multi-decade run of lower interest rates (which has increased risk appetite) as well as the increasing willingness of policymakers to provide fiscal and monetary stimulus (which has brought global money supply above $100 trillion).

Bitcoin and digital assets are a product of adoption, which recent studies illustrate is growing faster than the internet did in its earliest stages. This opportunity for long-term investors is much larger than the cyclicality of Fed liquidity.

How low can bitcoin go?

While we have no crystal ball and there is never an all-clear signal, we'd expect the bottom in bitcoin to occur alongside the bottom in equities. If equities continue a downturn, it's likely this selling pressure across digital assets can continue.

That being said, we've seen many times the ability for bitcoin to bounce off the lows. Most recently, in the six months following the December 2018 drawdown, bitcoin rallied 182.1% vs. the S&P at 25.3%. In the March 2020 drawdown to the end of that year, bitcoin rallied 352.0% vs. the S&P's 67.9%.

One valuation metric that could signal a buying opportunity is the MVRV multiple, which compares bitcoin's current market capitalization with the capitalization using the average on-chain cost basis. According to data from Glassnode, an MVRV multiple of less than one has occurred very few times in bitcoin's history, each of which has proven to be a great buying opportunity:

- 2011, low MVRV of 0.39 on 10/19/2011
- 2012, low MVRV of 0.84 on 2/15/2012
- 2015, low MVRV of 0.55 on 1/14/2015
- 2018, low MVRV of 0.70 on 12/16/2018
- 2020, low MVRV of 0.85 on 3/12/2020

With on-chain cost basis of $23,214 by Monday's close, bitcoin's MVRV multiple was less than one at 0.97.

What happens to bitcoin in a recession?

While markets are not always in line with the economy and a recession is not always a crisis, broader risk appetite for now is important function of digital asset price advances. As volatility rises, correlations go to one, and we'd expect digital assets to mirror other risk assets through tumultuous times.

But in itself, bitcoin has no credit or counterparty risk, which is attractive in recessionary environments. The asset provides economic incentive to support the network through block rewards. Bitcoin is a very simple asset - a digital store of value and an emerging global payments system tied to the evolution of money.

We know that recessions often call for monetary and fiscal easing, which often drives risk assets higher - we'd expect this to benefit bitcoin and digital assets at that time as well.

Have long-term investors lost confidence?

We don't believe so. Bitcoin and digital assets are long-term investments and should be treated as so. In our annual outlook, we mentioned the possibility of a long-drawn out equity bear market testing the conviction of crypto investors. This conviction is likely being tested at this very moment, with price levels not seen since December 2020.

While the growing narrative of a pending recession certainly impacts risk-appetite, on chain-data suggests holding trends have remained strong: according to Glassnode, a record 65% of supply has been held for longer than one year, and a record 38% of supply has been held for longer than three years. We know that most bitcoin investors have incredibly "strong hands" with the ability to hold through many cycles given long-term investment horizons.

Are high correlations here to stay? Are digital assets just tech+?

Unlikely. Digital assets have experienced rising correlations to growth and technology equities in these uncertain times. But while bitcoin is an emerging technology, the asset really is a digital store of value and global payments network. We'd expect it to ultimately trade more in line with those objectives in the future. As Ethereum is a platform for the new internet labelled Web 3.0, it relies on demand for underlying applications of stablecoins, NFTs, DeFi, gaming, and services, and thus, is more cyclical in nature. While ether should trade more in-line with technology, its different drivers of returns provide diversification benefits.

Have the fundamentals changed?

No. Bitcoin, ether, and digital assets are long-term investments that are supported by secular trends and accelerated by macro events. The evolution of money and the evolution of the internet will not go away in a bear market. Calls for the end of the internet in the dotcom bubble were proved to be ill-advised, and we believe a similar opportunity is now present with bitcoin and digital assets, particularly for long-term investors.
Those that can practice patience, maintain discipline, and remain convicted will likely be rewarded just as they have in the past.

Stay Tuned,
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KEY MARKET DATA

As of Monday, 6/13/2022

Market Capitalization	2018	2019	2020	2021	2022 YTD
Bitcoin Market Cap (mlns)	$65,307	$130,517	$538,811	$876,370	$428,989
Ether Market Cap (mlns)	$13,886	$14,141	$84,171	$433,423	$142,718
Total Crypto Market Cap (mlns)	$122,177	$186,105	$766,003	$2,250,184	$859,043
Bitcoin Dominance %	53.5%	70.1%	70.3%	38.9%	49.9%
Ethereum Dominance %	11.4%	7.6%	11.0%	19.3%	16.6%

Source: Glassnode, TradingView, Eaglebrook Advisors

Bitcoin	2018	2019	2020	2021	2022 YTD
Supply (mlns)	17.5	18.1	18.6	18.9	19.1
Market Price	$3,674	$7,158	$28,996	$46,334	$23,210
Realized Price	$4,556	$5,587	$9,206	$24,480	$23,214
Realized Value (mlns)	$79,524	$101,309	$171,112	$463,063	$442,609
Market Value / Realized Value	0.82	1.29	3.15	1.89	0.97
Hash Rate	40.5 EH/S	94.3 EH/S	153 EH/S	179.2 EH/S	197.2 EH/S
Transfer Volume (USD, mlns)	$2,127,287	$1,893,560	$2,327,727	$13,106,605	$7,469,963
Avg Daily Transfer Volume (USD, mlns)	$5,828	$5,188	$6,360	$35,909	$45,549
Avg Transaction Value (USD)	$26,518	$18,073	$21,266	$138,824	$176,957

Source: Glassnode[1], Bloomberg, Eaglebrook Advisors

	Level	WTD%	MTD%	QTD%	YTD%	1 Year%	3 Year%	5 Year%	% off 52Wk High	90D Annualized Vol.
Bitcoin	$23,210	-15.1%	-27.0%	-49.3%	-49.0%	-40.9%	181.0%	759.1%	-65.7%	57.1%
Ether	$1,240	-16.0%	-36.5%	-62.4%	-66.6%	-50.9%	379.0%	219.1%	-74.2%	68.6%
S&P 500	3,750	-3.9%	-9.2%	-17.0%	-20.8%	-10.5%	36.2%	67.9%	-21.8%	26.7%
Nasdaq Composite	10,809	-4.7%	-10.5%	-23.8%	-30.7%	-22.6%	41.6%	82.4%	-32.7%	36.1%
Bloomberg Barclays Agg	2,070	-1.6%	-3.5%	-6.6%	-12.1%	-12.0%	-3.9%	2.3%	-13.2%	7.6%
Gold Spot $/Oz	$1,819	-2.8%	-1.0%	-6.1%	0.2%	-3.1%	35.5%	43.6%	-11.3%	16.3%
DXY Index	$105	0.9%	3.3%	6.9%	9.8%	16.0%	8.3%	8.4%	0.0%	7.9%
WTI Crude	$121	0.2%	5.5%	20.6%	57.1%	70.5%	131.3%	160.3%	-2.2%	58.5%

Source: Bloomberg, Eaglebrook Advisors

"Tantrum Table"

Asset	High Since 9/30/21	Max Drawdown	Low Close Date	Rally From Low	YTD Price % Change
ARK Innovation ETF	11/1/2021	-70.8%	6/13/2022	0.0%	-61.3%
iShares MSCI USA Momentum ETF	11/3/2021	-29.8%	6/13/2022	0.0%	-25.1%
Invesco S&P 500 High Beta ETF	11/8/2021	-28.3%	6/13/2022	0.0%	-24.9%
iShares Russell 2000 Value ETF	11/8/2021	-21.0%	6/13/2022	0.0%	-15.8%
iShares Russell 2000 Growth ETF	11/8/2021	-38.5%	5/11/2022	0.1%	-31.3%
Barclays US Aggregate Index	11/9/2021	-13.6%	6/13/2022	0.0%	-12.1%
Bitcoin	11/9/2021	-65.1%	6/13/2022	0.0%	-49.9%
Ether	11/9/2021	-74.3%	6/13/2022	0.0%	-66.4%
Us Breakeven 30 Year	4/21/2022	-0.56	2/18/2022	0.35	0.09
Us Breakeven 10 Year	4/21/2022	-0.47	5/25/2022	0.12	0.09
Us Breakeven 5 Year	3/25/2022	-0.85	5/24/2022	0.18	0.16
Gold Spot $/Oz	3/8/2022	-11.7%	5/13/2022	0.4%	-0.5%
Nasdaq Composite Index	11/19/2021	-32.7%	6/13/2022	0.0%	-30.9%
S&P 500 Info Tech Index	12/27/2021	-29.7%	6/13/2022	0.0%	-28.5%
S&P 500 Index	1/3/2022	-21.8%	6/13/2022	0.0%	-21.3%

Source: Bloomberg, Eaglebrook Advisors

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DISCLOSURES

[1]Realized Price, Source: Glassnode. Realized Price is the Realized Cap divided by the current supply. Realized Capitalization, Source: Glassnode. Realized Cap values different part of the supplies at different prices (instead of using the current daily close). Specifically, it is computed by valuing each UTXO by the price when it was last moved. Market Cap / Realized Cap, Source: Glassnode. Market Value to Realized Value (MVRV) is the ratio between market cap and realized cap. It gives an indication of when the traded price is below a "fair value". Hash Rate, Source: Glassnode: The average estimated number of hashes per second produced by the miners in the network. Total Transfer Volume, Source: Glassnode. Data is change-adjusted, annual sum: The total amount of coins transferred on-chain, adjusted by change volume. Only successful transfers are counted. Avg Daily Transfer Volume, Source: Glassnode. Data is change-adjusted, daily average: The total amount of coins transferred on-chain, adjusted by change volume. Only successful transfers are counted. Avg Transaction Value, Source: Glassnode. The mean value of a transfer, adjusted by change volume. Only successful transfers are counted.

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Volatility Risk: Digital currency is a speculative and volatile investment asset. Investors should be prepared for volatile market swings and prolonged bear markets. Digital currency can have higher volatility than other traditional investments such as stocks and bonds and market movements can be difficult to predict.

Economic Risk: The economic risk associated with digital currency is in the lack of widespread or continuing digital currency adoption. The market and investors could decide that digital currency should not be valued at the current market capitalization due to a variety of factors. Regulatory Risk: Digital currency could be banned or highly regulated by governments that would deter investors from buying or holding digital currency.

Technical Risk: Digital currency is a dynamic network with a codebase that is updated to add new security and functionality features. The updated code that is merged by the core developers could potentially have an error that threatens the security or functionality of the digital currency network.

Cybersecurity Risk: Digital currency exchanges and wallets have been hacked and digital currency has been stolen in the past. This is a potential risk that clients must be comfortable with when investing and holding digital currency. Theft is less likely when holding digital currency at a qualified custodian in offline systems (cold storage) with institutional security and controls.

The indexes presented are unmanaged portfolios of specified securities and the performance shown is gross of fees which do not reflect any initial or ongoing expenses. Indexes cannot be invested in directly. Returns for digital assets may differ significantly from the returns of indexes which hold securities. Returns are for the time periods shown.

BGN, Bloomberg Generic Price: A real-time composite based on quotes from multiple contributors that provides a market indication of where assets are priced. BGN uses both executable and indicative pricing, depending on the type of quotes available in the marketplace at the time of pricing. This methodology is used for bitcoin and ether.

The S&P 500 Index is an unmanaged value-weighted index of 500 common stocks that is generally considered representative of the U.S. stock market.

The NASDAQ Composite Index is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.

The Bloomberg US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate pass-throughs), ABS and CMBS (agency and non-agency).

The ICE U.S. Dollar Index is a geometrically-averaged calculation of six currencies weighted against the U.S. dollar.

The Gold Spot price is quoted as US Dollars per Troy Ounce.

Bloomberg's spot crude oil price indications use benchmark WTI crude at Cushing, OK ; and other U.S. crude oil grades trade on a price spread differential to WTI, Cushing.

The Volatility Index (VIX) shows the market's expectations of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 index options. The VIX is a widely used measure of market risk.

ARK Innovation ETF is an actively managed exchange-traded fund incorporated in the USA. The Fund will invest in equity securities of companies relevant to the theme of disruptive innovation. Relevant themes are those that rely on or benefit from the development of new products or services in scientific research relating to Genomics Revolution, Web x.0, and Industrial Innovation.

iShares MSCI USA Momentum Factor ETF is an exchange traded fund incorporated in the USA. The Fund seeks to track the performance of an index that measures the performance of U.S. large and mid capitalization stocks exhibiting relatively higher momentum characteristics, before fees and expenses.

Invesco S&P 500 High Beta ETF is an exchange-traded fund incorporated in the USA. The Fund tracks the S&P500 High Beta Index which consists of the 100 stocks from the S&P500 with the highest sensitivity to market movements, or beta, over the past year. The index is designed for investors initiating a bullish strategy or making a directional bet. The Fund is rebalanced quarterly.

iShares Russell 2000 Value ETF is an exchange-traded fund incorporated in the USA. The ETF tracks the performance of the Russell 2000 Value index and holds small cap US equities focused on low price to book ratios and lower forecasted growth. Its investments are primarily focused in the consumer discretionary, financial and industrial sectors. The ETF uses a representative sampling approach.

iShares Russell 2000 Growth ETF is an exchange-traded fund incorporated in the USA. The ETF tracks the performance of the Russel 2000 Growth Index and invests in over 1000 small cap US equities across all sectors. The ETF weights its holdings using a representative sampling indexing strategy, generally investing at least 90% of its assets in the underlying index.

US Breakeven Rates: The rates are United States breakeven inflation rates. They are calculated by subtracting the real yield of the inflation linked maturity curve from the yield of the closest nominal Treasury maturity. The result is the implied inflation rate for the term of the stated maturity.

Standard and Poor's 500 Information Technology Index is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period.

For more information, please see our Form ADV Disclosures and Privacy Policy on our website.

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