

[Transcript] FYI - For Your Innovation / Big Ideas Monday Mini: Bitcoin

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This annual research report seeks to highlight the technological breakthroughs evolving today and creating the potential for super-exponential growth tomorrow.

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Hi everyone, welcome to Bitcoin Big Ideas 2023.

My name is Yassine Alondra.

I'm ARC's Crypto Lead and I have the pleasure of being joined by David Quell, ARC's Crypto Research Associate.

And today we're super excited to dive into the Bitcoin section of this year's Big Ideas.

Now considering all the contagion and volatility we experienced in 2022 now feels like the perfect time to take a step back, put the year in perspective, and dive into some of Bitcoin's fundamentals that are often overlooked, especially deep in a bear market.

So without further ado, let's get started.

Starting with a look into how severe Bitcoin's drawdown was in this cycle compared to previous drawdowns.

Now, in November 2022 Bitcoin appears to have found a bottom of around \$15,800 which makes it the fifth largest and second longest price drawdown in history.

I think this is really a helpful perspective to understand that really every market cycle that Bitcoin has gone through, it suffered a really severe collapse after a meteoric rise and this cycle was no different, drawing down from about 77% from its all-time high. Now relative to previous all-time highs on a percentage basis, Bitcoin really experienced the mildest correction it ever has in a bear market.

The 2018 bear market, for instance, saw an 84% drawdown from its 2017 top.

And in the 2013 to 2015 bear market saw an 87.7% drawdown.

Now when you look at the price action from peak to peak and trough to trough, what has been encouraging to see is Bitcoin has not broken any trend despite experiencing some of the most damaging events we saw this year.

Both its peak to peak and trough to trough compound annual rate of returns stand at approximately 150%.

And as of this recording, Bitcoin is up from about 45% from the bottom.

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So especially in an asset class that's extremely volatile, it's really helpful to gain some perspective on what Bitcoin's price action looks like from one bottom of the bear market to another and one top of the bull market to another.

Relative to traditional asset classes, Bitcoin continues to outperform on three, four, and five-year time horizons, even in the face of experiencing five plus drawdowns of greater than 75%.

I think it's really interesting, as you can note from this table, that Bitcoin has outperformed traditional asset classes, including global equities, global debt, and gold on every time frame, as denoted in the table, which is really a testament to the importance of maintaining a long-term focus.

Relative to previous drawdowns and similar price points, Bitcoin's fundamentals are also getting a lot stronger.

And I really liked doing this exercise for this Bitcoin big idea because often the question is, okay, we've seen this relative drawdown and we've seen Bitcoin as bottom, but how are the fundamentals looking relative to previous market cycles?

Now Bitcoin bottomed again at 15,800 in 2022, which was a drop of 77% from its all-time high.

And as you can see from this table, its fundamentals were stronger at that time than they had been in prior instances when it was at the same value, 15,800, or similarly down by 77%.

We can run through a simple example just with the market cost basis.

It's the first time Bitcoin hit 15,800.

It was an all-time high in late 2017.

Its market cost basis was only at \$58 billion.

And when Bitcoin drew down 77% from its all-time high in November 2018, its market cost basis was \$85 billion.

And then again, when it hit \$15,800 in the 2021 bull market, its market cost basis was \$126 billion.

Finally, the market cost basis, when it bottomed at that 15,800 down 77% in November 2022, the market cost basis basically exceeded all of those points and stood at around \$393 billion.

This same pattern applies to other metrics like hash rate, long-term holder supply, and lightning network capacity.

So in terms of capitulation, meaning when does it can make here a seller exhaustion, we found several metrics, two of which we see here, which denote that historically Bitcoin has found seller exhaustion on a long-term basis.

First off, the percentage of Bitcoin trading on a loss reached an all-time high during Q4 of 2022 in the duration of the FTX collapse.

And at the same moment, the cumulative realized losses for 2022 in USD denomination also hit an all-time high.

Now looking at holder behavior in the Bitcoin network, we found that the cohort denominated as long-term holders, which is holding coins that haven't moved in the last 155 days, are still steady.

The 155-day threshold is very important given that the probability of a Bitcoin being spent into the future drops dramatically into less than 3% or 4%.

So we found that after this major threshold, the coins in the Bitcoin network develop a lindy effect of torments.

That's why this metric is very important over a long-time horizon.

Now we've seen that during most of the year in 2022, slowly and steadily, the long-term holder supply kept making new highs as the bear market kept progressing, indicating that people holding Bitcoin for between five and six months were going into longer-time horizons year to years, etc.

So we noticed major outflows from centralized exchanges, especially given the various collapses during 2022, the trust in centralized entities dropped substantially, and that's denoted by the amount of outflows of coins leaving those centralized exchanges over time, especially during and in the aftermath of FTX.

At the same time, we noticed the start of a very important trend given transparency to the crypto ecosystem, which is the concept of proof of reserves, which although several entities had already provided, but it's considered a cryptographic proof with different degrees of cryptographic accuracy and security, the number of entities providing the proof of reserves increased during the aftermath of the FTX collapse into 2023 as well.

So with peak capitulation with long-term holders at an all-time high, we also saw that miners really did not slow down in 2022.

As you can see from this chart, Bitcoin's average annual hash rate, which is a proxy for network security, has now increased 12 consecutive years, whereas price was down 64.2% in 2022, hash rate was up 55%.

Again a testament to the fundamentals continuing to show resilience independent of price action. Bitcoin mining, which really started off as a hobbyist activity, has really now evolved into a full-fledged industry and incentivizes new and more efficient forms of energy generation by offering this bounty, i.e. Bitcoin, to anywhere, anyone at any time.

Whereas in the past, electricity generation was only economically viable in the locales that were relatively close to the site of consumption, Bitcoin mining allows us to develop power generation infrastructure in remote energy-rich locations, and this is a boon for alternative energy sources which have faced scaling and commercialization problems.

Now they can leverage Bitcoin mining and play the arbitrage between electricity prices and Bitcoin prices.

In particular, the natural gas industry can significantly benefit from the promise of Bitcoin mining.

We can see installing natural gas generators at well sites, and then using methane that otherwise would be vented to mine Bitcoin could not only generate electricity at a much lower cost for relative traditional Bitcoin miners, but could also make the difference between high and low returns on investment in oil and gas fields.

There's also talk often about Bitcoin's energy consumption being non-ESG friendly.

This provides a clear use case as to how Bitcoin can actually help curb some of these emissions by re-channeling the flare into actual Bitcoin mining.

2022 was really, I'd say, a change, especially in the spare market from what we've seen in previous spare markets.

The trend is usually one where in a bull market, every institution, every media has nothing wrong to say about Bitcoin and crypto as an asset class, but then comes a massive deleveraging cycle like what we saw in 2018 where there was a massive collapse following the ICO craze and all the institutions take a step back and say, this is no longer an asset class that

we're interested in.

There's clearly a lot of maturity that's required.

There's a change in tone from a lot of major institutions, even in the face of a centralized counterparty mismanagement and the contagion that we saw.

I think we've been quite pleasantly surprised at how institutions remain committed to Bitcoin in particular during this spare market.

We saw really interesting partnerships between BlackRock, Aladdin, and Coinbase Prime to provide institutional clients with direct access to crypto starting with Bitcoin.

That was really announced prior to the FTX collapse in the most recent news cycle and events we've seen that both BlackRock and Coinbase remain committed to this partnership. BNY Mellon also launched a crypto asset custody platform for institutional investors and we know just how big BNY's Mellon's footprint is in the investable asset world.

Eaglebrook Advisors along with the partnership with ARC now is offering financial advisors direct access to crypto SMAs and this includes direct crypto asset exposure and provides a great opportunity for RIAs and wealth managers to gain exposure to crypto in a way that they're familiar with in other asset classes.

Finally, Fidelity has been a longtime friend of Bitcoin, has been committed to the space really since the early days, has officially launched their retail Bitcoin and Ether trading platform and again all of this in really the depths of a bear market because a testament to some of the long-term conviction that these players have shown.

Now as the best performing asset in the last 10 years a lot of investors do believe that they've missed the Bitcoin boat or other investors see this massive drawdown and say that they're not yet ready to commit long-term to an asset class that shows such volatility. I think in the first slide as we saw there's a lot of upside to a highly volatile asset and despite some of the wild price swings over longer-term time horizons Bitcoin and crypto we believe will continue to significantly outperform asset classes. We believe Bitcoin's crypto market capitalization which we highlighted in the overview section could increase by more than 25-fold to 25 trillion dollars of market value by 2030 with Bitcoin taking a majority of share and if it were to it would still only represent a fraction of equities, global money supply, bonds, real estate.

A 25-fold increase from today's prices would translate to roughly a \$680,000

Bitcoin price. We further dimension this opportunity highlighting eight use cases each contributing to Bitcoin's potential appreciation. The largest use case still remains Bitcoin as this digital store of value competing with gold but it extends to other use cases like acting as an institutional investment in a portfolio diversifier, as a global economic settlement network, as a seizure resistant asset, as a potential emerging market currency.

It's important to also note here that given the contagion we have slightly adjusted this model as compared to last year's model to account for a reputational setback that the industry may have seen in light of the collapses from centralized counterparties including FTX and Genesis and Eros Capital. In this year's presentation we've also added a bear, a base, and a bull price target as opposed to that single price target given in the last year's big ideas report.

You can see in our bull case we still remain pretty confident that Bitcoin could still reach a \$1.4, \$1.5 million price by 2030. Now despite the rough year as hopefully we've highlighted Bitcoin really hasn't skipped a beat. I think the future looks bright if you look at the fundamentals and we really look forward to seeing what's in store for 2023. If you'd like to learn more

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or download the full big ideas report you can check out our website www.arc-invest.com and get more information there. Thank you very much.