ENIGMA SECURITIES

De-Coding Crypto

Weekly Analysis

The halving: a brief examination

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In this week's issue, we finally tackle the issue of the upcoming BTC halving, and look at in what senses in matter, and perhaps more importantly, in what senses it doesn't.

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Our Market View

May you live in interesting times. Even quieter this week than last; BTC hasn't seriously challenged range on either side, trading around and above $7000 for the most part before some limited slippage on Monday. Overall outlook is similar to where it's been for a while – waiting for more tests on support at $6600 and resistance at $7300, we tend to expect more tests to the upside probabilistically, but upside seems fairly limited and risk is weighted towards a downside cascade.

In the alts market this week, big winners were once again ETH, XTZ, and LINK; these are probably the three exact alt assets that we would want to see doing well in anticipation of any alt run, so somewhat bullish in that regard. ETH in particular will be worth watching over the next couple of days – currently hovering around a psychologically-important level on the ETHBTC pair (0.025) and holding here could open the door for much more to come.

Please direct all enquiries about this week's research to jedwards@enigma-securities.io.

Major

Ticker	Price	7D	1M	6M	12M	Cap
BTC	6969.75	3.71%	11.74%	-24.69%	35.71%	128E
ETH	175.859	12.67%	35.62%	-2.32%	15.59%	19.5
XRP	0.186067	1.84%	20.03%	-36.87%	-36.12%	8.2B
BCH	225.094	2.10%	4.76%	-11.21%	14-.73%	4.1B
LTC	41.1285	1.67%	7.92%	-27.74%	-41.83%	2.7B
EOS	2.55034	5.60%	14.18%	-18.70%	-43.72%	2.4B

Selected

Ticker	Price	7D	1M	6M	12M	Cap
XTZ	2.24049	18.03%	40.47%	168.60%	103.60%	1.6B
LINK	3.63054	15.85%	70.62%	32.58%	56.41%	1.3B

The halving: a brief examination

We are now, approximately speaking, just under three weeks away from BTC's halving.

A couple of months ago, it would be all but inconceivable that you wouldn't have heard about it a million times in the past week alone, but even if you're very involved in the crypto space, you genuinely might have heard so little about it as of late as to have forgotten it was so close. It just has not been on the radar for the most part. Excitement has been so low, in fact, that people have even stopped using that most abominable of terms, "the halvening".

Of course, it still does matter, and massively, particularly when looking towards medium and long-term theses; and while we have talked about the halving and related elements in the past, we have not have a fully halving-related issue as of yet. With that in mind, the time feels right to do something of a whistle-stop tour of the halving; call this a reference document of sorts.

What is the halving?

Let's attempt the quickest possible explanation. BTC is issued on a quasi-fixed schedule - the network is constantly adjusted with the aim of a new block being issued every 10 minutes, and every such block has a set issuance of BTC given to the miner that solves it.

However, BTC was also designed with an upper limit in mind - that there would only ever be 21 million BTC in existence. So, every 210,000 blocks (35,000 hours, 1458 days, 4 years), the reward-per-block halves. It started out at 50 BTC, halved in 2012 to 25 BTC, and halved again in 2016 to 12.5 BTC.

In a few weeks, it will be reduced by half once again to 6.25 BTC. At current prices (for the sake of argument, $7000), around $12.6m of new BTC is 'minted' per day, and $4.6b per year; post-halving, that will be cut to $6.3m per day and $2.3b per year, if that price held.

In other words, minted, issued, mined, whatever you want to call it: production of new BTC from that day on will be half of what it previously was.

Why it matters: supply dynamics

Why does the halving matter? Again, this is something that can be explained very simply in brief: BTC is a large enough and mature enough instrument that a contraction in new supply can meaningfully effect price. Of course, the nature of how BTC tends to be traded makes it extremely hard (even with the benefit of on-chain data and the like) to figure out quite how much new demand and new money is coming in; however, we can be pretty confident that we are at a level of development where it is changing price on both side, because we have seen it on a huge scale over the course of 2019.

As repeated ad nauseam in past issues, it is by now clear that an oversupply of BTC caused by liquidation of assets from the BTC-denominated PlusToken ponzi scheme (estimates vary, but total proceeds from said scheme are generally held to be just south of 200,000 BTC, with the majority of those BTC being liquidated in Q3 and Q4 2019) was likely the primary driving feature in the overall bear trend across the latter half of the year (and indeed, conversely, may have been a demand contributor in the first half of the year; arrests related to the scheme took place on 27th June and withdrawals started failing soon after, which lines up almost perfectly with the overall market top).

Our 8th January issue covers this in more detail, but suffice to say, we feel very confident in those two points of a) supply dynamic mattering and b) supply dynamic hence being bullishly affected by halving.

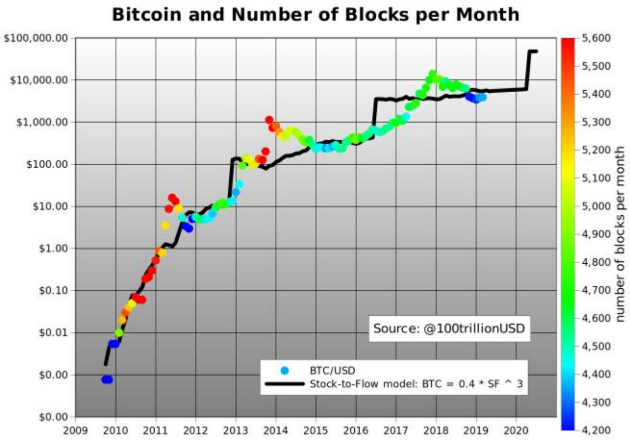
Stock-to-flow

We cannot touch upon supply dynamic discussions without touching upon stock-to-flow. In general terms, stock-to-flow is a measurement of the ratio between new supply of a commodity against existing supply over a year; a ratio of 10, for instance, would indicate that 1/10th of existing reserves were being produced every year (and that it would hence take 10 years to mine as much as existing reserves).

Pre-cryptocurrency, this was generally used in reference to gold, with the explanation being that part of the reason that gold was able to hold its value as consistently as it did was because it had a huge existing supply (that was not broadly being depleted) compared to the amount being produced. In the last two years, however, it has become largely synonymous with BTC.

Why? It's largely because of a single online article. In March of last year, a 'Bitcoin quant' going by the name of PlanB (he still retains the pseudonym but is known to be a quant at a Dutch financial institution by day) published "Modeling Bitcoin's Value with Scarcity".

The basic argument of the piece was this: BTC's value comes from its scarcity, and is often compared to gold; hence, supply modelling based off stock-to-flow relationship should show a good degree of cointegration with price, and it does:



Credit: PlanB.

This model then implies (primarily looking on the basis of past stock-to-flow and price ratios for BTC, and looking at how gold/silver performs), that the natural price of BTC was in the low hundreds between 2012 and 2016, somewhere around $7000-$8000 between 2016 and 2020, and then closing in on $100,000 between 2020 and 2024.

The attraction of stock-to-flow to those in or sympathetic to the crypto space should be clear; it is in the long, long tradition of crypto advocacy arguments that are essentially millenarian in nature, promising somewhere between "multiple hundreds % RoI" and "the complete transformation of society in favour of HODLers". It is telling people - especially retail investors - exactly what they want to hear.

Of course, something can be popular, even populist, without being wrong. Is it wrong? This is a discussion that could go on and on, so we'll try to keep it as brief as possible. The most important thing to understand here is to emphasise: while we have been talking about the importance of supply dynamics in this piece (and will continue to do so), crypto markets more broadly have always been demand-driven above all else, because growth from current levels requires an ever-expanding portion of the population to both mentally buy in to the idea of them as money, and, of course, literally buy into them in terms of creating more new demand than there is new supply.

To be fair, even (sensible) advocates of stock-to-flow don't think we're going to $100,000 overnight, even if they're convinced that we'll get there (apart from anything else, it took a good while to ramp up after the last halving, as discussed later). Ultimately, these are uncharted waters to some extent. A 50% contraction in new supply is absolutely meaningful, and indeed should over time produce an exponential return in prices, but to get there is still going to require an absolutely huge amount of new money coming in. BTC at even $50,000 (another commonly cited figure, generally as a target for 2021) implies a $1 trillion spot market cap; far from inconceivable, especially with large-scale institutional involvement, but still clearly putting a rather significant burden on the faculties of retail investors.

Why it (no longer) matters: demand dynamic near-term

For a time, there was also an argument that the halving would provide (as prominently happened for LTC, which we discuss a little further down) a boon on the demand size in the short-term. The argument here was always pretty simple (and a little oddly circular) - the halving would bring a rush of new interest to cryptocurrency, in part because of the attraction that said supply-side theories (like stock-to-flow) would have for both retail and institutional buyers alike, creating something between an uptrend and a bubble before a single block had been minted on the new issuance schedule.

We think this probably played out to a limited extent; we have noted previously that the January and February run seemed to have been overweight on institutional buyers relative to norms, with money coming in right at the new year. It should admittedly be said that, regardless of the halving, this was really the first year that many among the crypto-curious could truly feel comfortable getting involved on a business level; BTC going into 2017 did not have a track record or market infrastructure that any big player could feel comfortable even touching, BTC going into 2018 was at the peak of a wildly speculative bubble, BTC going into 2019 was at $3000 and realistically looked closer to total collapse as a concept than it had since Mt. Gox. However, we would absolutely tend to think that it helped bring money in that otherwise may have spent another year on the sideline.

In terms of a broader groundswell among retail, we never quite got there, and as a short-term contributor, the ‘hype’-based demand argument no longer seems valid. It is very clear in terms of almost any metric you could cite that any wind that looked like entering those sails in February has been thoroughly taken out of them by now; there are signs that institutional money may be coming back in (still motivated by the potential longer-term effects), but the event itself is now very plainly not serving as much of a catalyst on the retail size, and that was always the more important side of a significant uptrend tied to the halving as an event in itself.

Past halvings (BTC, LTC, BCH, BSV)

It should be noted that BTC is not the only cryptoasset that has this halving process built-in; all three of LTC, BCH, and BSV have their own upper supply limits (the same 21m for BCH and BSV, 84m for LTC) and the same mechanism to handle their own diminutions in that regard.

Therefore, when looking at past halvings, we have several different cases to draw off:

- BTC experienced two halvings in 2012 and 2016.
- BCH and BSV were forked after the 2016 halvings (BCH from BTC in 2017, BSV from BCH in 2018), but issues with code after the BCH fork meant that an excess of blocks were produced at that time, which brought their 2020 halvings forward (ahead of BTC).
- LTC launched in 2011, and hence had halvings in 2015 and 2019.

There are clearly limits on how much we can draw on almost all of these events (especially 2012), but to start, data for before and after the halvings:

-12m	-6m	-3m	-1m		0d
3	5	11	11	**BTC281112**	12
270	451	419	579	**BTC090716**	659
5.74	1.93	1.75	4.95	**LTC250815**	4.00
75	34	75	119	**LTC050819**	96
310	232	240	274	**BCH080420**	267
80	89	171	199	**BSV100420**	186

	0d	1m	3m	6m	12m
BTC281112	12	14	33	129	1102
BTC090716	659	588	618	905	2509
LTC250815	4.00	2.96	3.19	3.37	3.77
LTC050819	96	65	63	73	

Both BCH and BSV are still under 1 month removed from halving, but early returns are poor; as of Tuesday’s close, BCH is at $220, while BSV is at $183.

In any case, while BTC very clearly did well both times, both the 2016 local high for BTC and the LTC on both halvings have been widely cited with regards to the bearish case for halving events; this clearly isn't in terms of being a true bear case in the sense of halvings being fundamentally negative long-term (at least for BTC), but instead that because halvings do tend to be hyped as hyper-bullish turning points, that they have a tendency to attract pre-halving bubbles (that then pop because the bullish effects of halvings are structural and gradual rather than catalytic).

Should we be worried for BTC? We still would tend to say no, because again: if there was any sort of bubble forming, it has clearly already been burst, and there seems to be little on the immediate horizon in terms of demand flooding in (with high short-term expectations). Furthermore, while other coins have struggled to the point of finding themselves down months or years out from halvings, the key point is that, outside of BTC and ETH, no other (non-stablecoin) crypto markets are large enough to the point where we would expect supply dynamics to make a meaningful difference in the sense of creating a natural bullish bottleneck across the whole market; demand is just not at a level to enable that.

While we don't tend to take the 2012 figures too seriously (for reference, even Coinbase was only founded a few months before the 2012 halving, and no data is available from them pre-2015; the 2011-2013 figures here are Mt. Gox figures), 2016 returns are clearly encouraging, though again, it took until the new year in 2017 for thinkgs to really start moving there.

Conclusions

The question you probably have right now is this: where's the price target? This is, of course, something of an industry standard, especially when talking about the halving; even if you're not making the $100k calls of the bolder stock-to-flow advocates, you're generally giving out a figure (and the figure is almost always measured in tens of thousands).

This is quite deliberate in this case, because we want to stress that the nature of the halving, and its implications for markets, mean that thinking in those terms, is probably not helpful. What we are talking about here is a fundamental, long-term, trend alteration. Nobody should be thinking about this in terms of what it might mean for Q2, or even really Q3; as we've seen, it will likely take a couple of quarters for anything to start moving off it.

While we are 100% aware that this sounds like a broken record, we are going to keep saying it: the global situation is, at the very least, at a generational level of uncertainty, and we don't expect anything resembling clarity until at least the autumn on most involved fronts. Everything will depend on the baseline that we're building from at that point.

We are however very confident that the halving will prove to be directionally bullish in the latter half of 2020 and into 2021, and we would still tend to expect at least appreciation multiple times over in those proceeding months and years.

What we're reading

Gemini Clears New Deloitte Audit in Bid to Appeal to Wall Street (Coindesk): Gemini has been in an odd place for a while now – scrupulously clean, and doing everything possible to build themselves as a business that can be trusted for the long haul, but as a result not even attracting the sorts of raw volumes that other relatively clean exchanges have; it does feel like it's going to pay off big in the coming 18 months or so.

Macro investor Raoul Pal: Libra is showing the world that anybody can create a digital currency (The Block): Interesting perspective from a non-crypto endemic who tends to nonetheless be a hardline bull on BTC.

$166B Asset Manager Renaissance Eyes Bitcoin Futures for Flagship Fund (Coindesk): A big headline, but we'll see if anything comes of it; we've been down this road before with similar superstar asset management firms, and it often takes a long time (if ever) between announcements like this coming out and the firms actually doing anything with it.

A Chinese EOS-based wallet app reportedly shuts down, leaving $52M in user funds inaccessible (The Block): In the light of today's discussions on what PlusToken did last year, worth noting for those with holdings in EOS. $52m sounds small, but EOS typically does under $100m a day in official public exchange volumes, so it's entirely possible that this leads to some degree of market disruption at some point.

Until next week – thank you for reading http://www.Enigma-Securities.io

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