

BofA Global Research Podcasts

Crypto tokens, differentiating the useful from the useless and utility of stablecoins

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BofA SECURITIES **BofA Research Podcasts: Crypto tokens, differentiating the useful from the useless and utility of stablecoins****01 March 2022**Cryptocurrency & Digital Assets
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Crypto&Digital Assets Strategy
BofAS**Cryptocurrencies – Not just for speculating**

Cryptocurrencies have received a lot of focus in recent years as crypto market values have turned some small investors into wealthy investors. But with the number of tokens proliferating and numbering over 17,000, it's clear that many will not create wealth and it's critical to understand which tokens offer usefulness and potential longevity. Alkesh Shah joins us to discuss some of his new analysis and how daily active users, transaction count and developer activity can help indicate which blockchain platforms will grow and which will shrink. Regulation will play a key factor in the mass adoption of stablecoins and how consumers can exchange their coins for dollars. Alkesh also discusses the use of NFTs and how they can grow from digital art to an ownership contract or an event ticket. *BofA Global Research Podcasts can now be found on public podcast platforms including Spotify, Apple Podcasts, Google Podcasts and Amazon Music. These podcasts are first released to clients and then to the platforms.*

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Full Podcast Transcript

T.J. Thornton, Head of Product Marketing and Predictive Analytics: Hello, and welcome to BofA Global Research Podcast, where we discuss what's rising from growth industries to rising risks and opportunities in global markets. I'm T.J. Thornton, Head of Product Marketing and Predictive Analytics at BofA Global Research, and we're recording this episode on Tuesday, February 8, 2022.

"You're starting to see it in insurance, but you're seeing it in supply chain management and loyalty cards. You're seeing applications hitting each industry, but really every industry ultimately can use digital assets as a form of application development and as platforms that can make them more frictionless, so cheaper transactions and really much easier to use for their customers and their developers." -Alkesh Shah

Price swings in cryptocurrencies and certainly the recent declines have gotten a lot of focus, but aside from looking at price and technical levels, how else can digital assets be analyzed, and how do you compare tokens to one another and what about NFTs? Here today to talk about this is Alkesh Shah, Head of Global Cryptocurrencies and Digital Assets Strategy in Global Research. Thanks Alkesh for joining us today.

Alkesh Shah, Head of Global Cryptocurrencies and Digital Assets Strategy:

Thanks for having me on T.J.

T.J. Thornton: Okay. Alkesh a lot of people talk about crypto market values, which is a useful way to think about what's big now, but you note in your recent report out this morning that only five tokens in the top 20 by market value in January of 2018 remain in the top 20 today. Can you talk about some of the ways to assess which tokens might be big in the future?

Alkesh Shah: There's limited ways that people are really analyzing these tokens today, and we are working on creating a framework so that we can really apply analytics here. So, if you take a step back, there's 15 to 20k tokens out there, and very little analysis is done on those 15 to 20k, and you can actually create a new token for just a few hundred dollars. I could create Alkesh coin in 72 hours for \$300, but I'm not sure how much demand there's going to be. What we've done is we've found those tokens that actually have blockchains that are either operating systems that you can build applications on top of, or are applications that people are actually using. So, by looking at that ecosystem of developers, users, transactions, and finding clear use cases for blockchains, we can bring that universe of tokens that really are growing in value down to maybe a hundred tokens.

T.J. Thornton: Okay. Now, Alkesh, you discussed the importance of a token's DAUs or Daily Average Users and the number of transactions. Are we seeing increased or decreased usage across digital assets, especially with the selloff, and what does that mean?

Alkesh Shah: So, as we think about blockchains as operating systems, and I'm putting Bitcoin to the side because Bitcoin is more of a supply/demand commodity, but the newer blockchains that have really been created over the last few years Ethereum, Solana, Avalanche, Polkadot, Polygon usage is key to see which ones will survive, which ones are going to grow and which ones are going to shrink. Our view is that by analyzing the daily active users, the transactions, as indicators of use and looking where there's growth, that's where the value is going to rise because that's where people are going, that's what people are using and that's where applications are being built.

T.J. Thornton: Okay, and on-chain analytics gets discussed a lot. It's a tool that's unique to crypto because of the blockchain transparency. What can it tell us, and how do you actually do the analysis?

Alkesh Shah: A lot of people think blockchain is this murky sort of area where everything is anonymous and you don't really know what's happening, but actually



everything in the blockchain is public, so you can track the flows of different trades of different funds as they move through wallets. When we look at token flows and stablecoin flows through wallets and also wallets that are held on exchanges, what we can see is that if a token moves out of a wallet and goes to an exchange, it's likely because somebody wants to either sell the token or do something with it, but since they might be selling it, there could be some sell pressure. On the other hand, when stablecoins are transferred to an exchange wallet, usually those are used to really do trading or staking, so that could be an increase in buy pressure for tokens generally. By tracking these flows, you can actually see where there could be future selling or buying pressure, as well as where there might be a reversal of trends, if a token has gone up a lot or gone down a lot.

T.J. Thornton: Okay. Got it. And quick follow up there. Is there a typical lead time between when somebody say transfers a token to an exchange wallet and when they actually sell it? Do they tend to transfer an amount and then sell a smaller amount overtime, and therefore it can be a leading indicator?

Alkesh Shah: We probably still need to do more work on that, but usually if somebody has a wallet that's outside of the exchange and they move it onto the exchange, they're probably going to transact fairly quickly, as opposed to just leaving it there since they probably are looking for yield, they're looking to buy something with that token that they put onto the exchange. We think the lead time is fairly short, but we still need to do some work.

T.J. Thornton: Okay and you and the data team have also looked at alternative data like token mentions on Reddit and Twitter. What do you find and do these mentions of specific coins, merely track price, or could a big spike in mentions actually be a contrarian signal?

Alkesh Shah: It really works both ways. It's a reinforcing loop, meaning that if somebody's really excited about token, and it could be because the tokens providing a really good application use case as we've been talking about in terms of building an ecosystem, or it could be that people are just excited about a meme - like shiba because it's cool, but it helps us figure out on the positive side as that's going on, but at the same time, it's also works on the negative side. So, you do get exaggerated moves, up and down depending on sentiment. And what I mean by the negative side is somebody is disappointed by a blockchain or token, or if they're turning against a meme, then it reinforces on the downside as well. So, really this is useful for is to see where you're going to get more and more momentum, either to the upside or the downside, but you do have to do another layer of work to figure out if the sentiment's positive or the sentiment's negative.

T.J. Thornton: Okay. Well, Bitcoin is often viewed as an inflation hedge or store of value. What has your analysis shown about how much of an inflation hedge it actually is? If it's not one now, do you think that it could become one in the future?

Alkesh Shah: So Bitcoin has been an amazing risk asset. It's gone from nothing to \$800bn of value for those 19 million coins in 10 years - so one of the best risk assets in history. Our analytical work shows no support for a store of value because it's just gone up. A store of value tends to be flat or as an inflation hedge, and that might possibly be we haven't had a lot of inflation over the last number of years, so we haven't been able to do that work to see whether it is an inflation hedge. It could be, we don't know, but really Bitcoin, as well as other cryptocurrencies, act very much like risk assets and as an emerging growth sector broadly. So, speculative risk asset, doing extremely well, supply demand dynamics are really what drive Bitcoin, and with supply relatively fixed and demand continuing to grow, we actually think it'll continue to rise as a risk asset, intermediate and long-term.



T.J. Thornton: So Alkesh you've written that you expect blockchains to differentiate themselves over time through optimization for specific use cases. Can you explain what you mean by this, and what are the implications for token prices?

Alkesh Shah: Sure. So, if you think about, again, blockchains as operating systems, really they're built on three legs. They're built on either they're scalable, they're decentralized, or they're very secure and there's a tradeoff among all three, depending on the blockchain. And so since blockchains after Bitcoin, Bitcoin is a fixed blockchain with a fixed application, but since then the other blockchains that are acting like operating systems like Ethereum, like Solana, like Avalanche, they actually stress one of those legs over the others to provide different types of use cases. That's really, what's differentiating these blockchains, depending on if they're able to attract the applications that leverage that differentiation, and then those applications can actually get the users, then the value of that blockchain operating system can rise. But they actually have to provide that differentiation. They have to attract the developers to build on their operating system or blockchain, and get the users on for that value to actually happen. But we are definitely seeing blockchain differentiation happening. Ethereum was the first one that operated as an operating system, and it has thousands of applications built on it, and it's so successful, that it's become congested, but it really tried to do everything for everyone. And these new blockchain operating systems that have really been formed, only over the last couple of years, are providing more and more differentiation, so that financial applications may be built on a blockchain that's faster. NFT creation may be built on a blockchain that's cheaper, and so you're definitely seeing that differentiation occur.

T.J. Thornton: Okay, great. Could some of those apps move away from Ethereum, as other blockchains do become more efficient, maybe faster?

Alkesh Shah: Sure, and we don't view this as a zero sum game. We actually think there's going to be more and more applications across more and more use cases across every single industry. Right now you can see applications, certainly in the financial area, payments area; you're seeing it in art. You're starting to see it in insurance, but you're seeing it in supply chain management loyalty cards. You're seeing applications hitting each industry, but really every industry ultimately can use digital assets as a form of application development and as platforms that can make them more frictionless, so cheaper transactions and really much easier to use for their customers and their developers.

T.J. Thornton: Okay and another big topic: regulation. You've written that regulation, particularly around stablecoins, could be a catalyst to mass adoption, so why do you think that this is the case?

Alkesh Shah: So, stablecoins are a really interesting application of these blockchain operating systems. Stablecoins are built on the blockchain operating systems, mainly Ethereum today, but they may move on to other operating systems over time. And what really makes stablecoins interesting is they're pegged to a currency. It's usually the dollar, but there's stablecoins pegged to gold, there's stablecoins pegged to other stablecoins. But what's good about stablecoins is because they're pegged to a fiat currency and usually the dollar, they're stable, meaning they're not volatile. Which means that you can actually use it for a payment, so that if you're sending money overseas, you can actually use a stablecoin, and if you send a dollar worth of stablecoins, it's received as a dollar. Why would you do it with a stablecoin, as opposed to just sending a dollar? Is that the fee to send a dollar is around 5%, whereas using a stablecoin, it's relatively free cause it's going from smartphone wallet to smartphone wallet. Also, to send a dollar across the border, it can take two to five days to settle, whereas with a stablecoin, it happens within minutes, maybe even within seconds. And so that's why stablecoins, certainly for transfer of funds, is very interesting. At the same time, it's also something that if you're going to go to the metaverse and you are going to buy something, virtually, having a stablecoin is really much more useful than converting fiat currency into



whatever currency that metaverse happens to use. It could be corporate metaverse, it could be anything, but ultimately we're all probably going to do some transactions over the metaverse over the next five to 10 years, and that's why regulation really needs to come in here because if transactions of stablecoins have reached about a trillion dollars a month this year, that's up from a trillion and a half dollars, a quarter for stablecoin transactions. It's something that people are really using. When you think about the next billion people that are going to do cryptocurrency trading, payments, using it just to buy stuff in stores, you really need to make sure that if somebody markets a stablecoin as a dollar, that it's backed actually buy a dollar, and if you want your dollar refunded, you could actually get it.

T.J. Thornton: Okay and another interesting aspect to stablecoins, one that you wrote about today, is that some of them actually have increased in value and can also pay a yield. So, you're saying they don't just track say the U.S. dollar, and why is it that they can fluctuate in value and pay something?

Alkesh Shah: What's interesting about stablecoins is when you use a stablecoin in an exchange, you're using it to buy other things, and when there's volatility in the market, you might want to go to your stablecoin for safety. And so therefore demand for stablecoins can rise, which because they're pegged to a dollar and they have to shift, there's a little bit of a lag, so they could be worth a little bit more than a dollar at times when demand is very high, they could go a little bit below a dollar. But they're relatively at a dollar. In terms of yield though, what's interesting is that you can actually stake your stablecoins to provide liquidity for other markets and for other exchanges. By doing that, you tie up your stablecoin for a while, just like a money market instrument, you know how for a CD, if you lock it up for six months, you make a little bit more than a savings account, not a lot more, but a little bit more. In this case with stablecoins, because liquidity is so important for lending and other parts of the digital asset universe, you can make 2 to 5% on average with a stablecoin as a yield with relatively low risk because of over collateralization, which is why it's attracting so much and why we're reaching that trillion and a half dollars of transactions a quarter last year and close to a trillion dollars a month this year.

T.J. Thornton: Okay - last question, NFTs. You've written that they're much more than weird looking JPEGs that sell for millions of dollars. So, what are some of the other use cases for NFTs? And I know you did some analysis in this piece too, have they gained in popularity very recently, even as we've seen this decline in crypto?

Alkesh Shah: NFTs definitely have gotten much more interesting. They've been around since 2018, when there were just a bunch of NFTs that had cute cats. But then really last year with the sale of a digital art piece for \$69mn at Christie's, everybody wanted to get involved. And so first as digital art, it's also still important. There are funny looking apes and so on, but what's really interesting is that they've been able to add applications to NFTs. They've made NFTs dynamic. What that means is that you can turn NFT into an event ticket and that event ticket, every time you go to the event; it actually is smart enough to know whether or not you can have access to backstage, whether or not maybe you can get a free t-shirt when you're there, so it can actually provide some perks. At the same time, NFTs can also, again, because you can now stick applications on them, you can have a musician sell an NFT as ownership to a song and have the royalty stream, part of it come back to the musician, and part of it go to the person who bought the NFT. So, then it becomes an ownership stake, but also a royalty stream, and then finally, one of the really interesting cases for NFTs is using it as an insurance contract. Now you can connect a real live data link into an NFT. Say a farmer buys the NFT, and if the temperature goes above a certain range or below a certain range, the insurance policy is immediately paid out to the farmer. You don't need an insurance adjuster. The insurance company doesn't have to constantly rewrite insurance contracts, and so NFTs have a number of use cases because they are, and the technical term is smart contract enabled,

but once you do you that you actually can do so many more things, besides digital art, but the digital art world is also very important.

T.J. Thornton: Okay - Alkesh thank you very much for an excellent conversation. I hope to have more of these because we only just touched on so many interesting topics. Appreciate your time.

Alkesh Shah: Great. Thanks a lot for having me.

T.J. Thornton: There are 17,000 tokens out there. It's cheap and easy to create new ones, but only a small percentage of them actually have use cases, and that's why Alkesh has analysis of daily average users, transactions and even the number of developers on a platform is so important to understand which actually have promise. And staying on the theme of usefulness, payments companies could integrate stablecoins into their networks to allow for cheaper payments and cross-border transactions; a better regulatory framework probably helps there. And NFTs aren't just pixelated art; they can prove you have insurance coverage, backstage access at a concert and many other things. NFT sales volume on a major exchange actually doubled in January versus December. Thanks very much for joining us today.



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