

When people engage with a market they are trying to get something from it. They have some goal, need or problem and they are looking to the market for the answer. When evaluating a market one of the things I like to do is try to understand the questions being asked of it. Why are people doing what they are doing? What, precisely, are they seeking? With assets like urban real estate the market size is small enough where, if you talk to the right people, you can basically figure out the stated motivations of the major players. With broader public markets this becomes a much more difficult thing. Sometimes though you can get a glimpse, like when Joe Kennedy famously sold all his holdings in 1929, before the crash, when he realized the guy shining his shoes was giving him stock advice.

These days I've got my radar up about something. Increasingly it feels like many market participants are asking the market kind of a crazy question. Instead of looking for something like "good returns" or "to beat the market," people seem to be looking to the market to solve much bigger financial issues. While the story varies—"If X, Y and Z happens, I'm asking questions than actually talking (which, in and of

going to get completely out of debt" or "not have to work a real job anymore" or somehow "obtain financial freedom" the point is this: people are hoping the market will deliver to them something rather extraordinary, something lifechanging. Almost certainly, this phenomenon is a reaction to the incredible tales of overnight success from crypto and meme stocks. Statistically, these kinds of return expectations are lotto-like in their ex-ante probabilities. There's literally almost no chance. But people don't seem to care about all that. History has shown time and time again that people are more than happy to ignore the cold, rational truth, especially when there's a good story behind it all. Look, it's hard to think statistically.

I cannot tell you the number of conversations I've had over the past few months where I've discovered this kind of thinking at the core of someone's heart. The conversation starts off in a pretty rational place. People reach out to me, looking for some advice about the market or for some investment ideas. But as I do my usual—more listening and

itself, is interesting when you think about the going-in point of these interactions)—eventually I'll get to the bottom of things. And as I listen to these articulations of great hope, not only do I understand them, for I've felt them myself before, but also I cannot help but feel great respect and empathy for the vulnerability that's there. It takes courage to talk openly about something like financial insecurity. So, I take these conversations seriously.

Ultimately, there's nothing really wrong with this kind of thinking. The market is as good a place as any to try your hand in the game of life. But when thinking about this from the perspective of the market itself, it's concerning. These kinds of motivations don't form a healthy emotional base for the market. To use the lingo of the Twitter crypto fanatics, there are a lot of "paper hand" players out there (as opposed to "diamond-handed" HODL'ers). What happened with Facebook the other day is a good example:

Meta Platforms Inc. Price

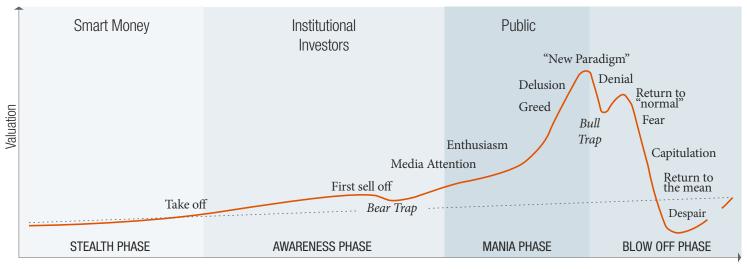


Looks like there was about \$240B worth of paper hand positions, a mere 25% of the company's valuation!

Anyway, to understand what's going on today we have to get into something that most investors find discomforting: the psychology of mania. This is one of those phenomena that feels better to ignore or pretend just doesn't exist. Not only is it intellectually confusing—it's hard to describe even what it is—but also it's one of those things that is psychologically opaque—it's hard even to tell when you are caught up in mania yourself. It's like this very difficult to diagnose mass psychological disorder, perfectly evolved to attack us at all our most vulnerable points as a species—our desire, our love of stories, our propensity to gather in crowds, our almost compulsive need to communicate.... Whether we like it or not, the threat of mania is a perennial problem for investors.

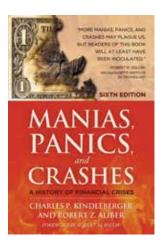
Just what is mania? Well, it turns out it's another of the things where though you kind of know it when you see it, it's rather hard to define. Mania can mean many different things. In a standard dictionary entry, you'll find definitions like "an excessive enthusiasm or desire; an obsession" or "mental illness marked by great periods of excitement or euphoria, delusions and overactivity." In the DSM—the Diagnostic and Statistical Manual of Mental Disorders—mania is classified as a kind of mood disturbance characterized by "a distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased activity or energy." In financial lexicon we can find mania defined as a "speculative bubble" or "irrational exuberance" or "when asset prices trade beyond all reasonable justifications" or "where asset prices are so high compared to underlying fundamentals that they look unreasonable." Just writing this paragraph, I'm confused!

We know at least what mania looks like. Interestingly, financial manias, as expressed by price action for assets, tend to pretty closely follow a set pattern. Whether we're talking tulips, shitcoins or Dotcoms, the charts look the same:



Historically, bubbles weren't all that common. They tended to be isolated, generational affairs, and their occurrence was separated in time by decades if not more. In a way, they were kind of like a pandemic—emerging seemingly out of nowhere, infecting (mimetically) at least an entire generation and then fading away. Of course, mania would inexorably return in time but not for several generations.

This dynamic used to be true at least. These days, we're seeing something quite different. In just the last three or four decades we've had 3 bonafide, verified bubbles—Japan, Dotcom, and Housing—one which lead to a full-blown global financial crisis, the first in almost a century. We also saw what I'm calling the Crypto Wave 1 mini-bubble, which culminated in the absurdities of the 2018 ICO Boom. I'm not sure this one qualifies as a standalone mania. It might even be part of a larger crypto bubble that we are still in the middle of. Anyway, since the onset of COVID, things have only gotten crazier. We've seen mania-like behavior in everything from SPAC's to meme stocks to the wave 2 Crypto / Defi Boom to whatever is going-on today with NFT's and the Metaverse tokens. It seems, in a way, like we are living in an era of mania.



Our understanding of financial mania comes largely from Charles Kindelberger's 1978 landmark "Manias, work **Panics** and Crashes." This oft-quoted text has become the standard on the subject. Drawing heavily on the work and ideas of fellow economist Hyman Minsky, Kindelberger lays out a comprehensive framework for understanding financial mania and reviews almost all the known historical examples, up until the

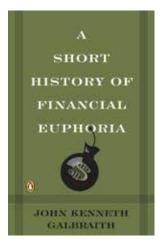
modern era at least! The framework centers around Minsky's Financial Instability Hypothesis, which argues that financial mania is a kind of built-in feature of the capitalist system based upon the credit cycle. Minsky argues that mania is essentially a product of changing risk attitudes for debt and is thus both an expected and predictable outcome. At the core of the argument, Minsky envisions a 3-phase credit cycle:

- 1. In the Hedge Phase: people are still cautious and lenders only make loans where the current cash-flows from investments can cover both principal and interest payments.
- **2. In the Speculative Phase:** there's a little less caution and lenders will make loans where the current-cash flows can cover the interest payments but not the principal payments.
- **3. In the Ponzi Phase:** people throw caution to the wind and lenders make loans that can only be paid back if the underlying asset increases in value.

Fun fact. In the real estate world, we are on the edge between the Speculative and the Ponzi phase already, especially in the hot sectors like multifamily, single family and industrial. Asset values are so elevated that cap rates are barely high enough to cover interest-only loans. And don't forget, this is with interest rates still near all-time lows!

But I digress. Back to Minsky and Kindelberger.

I think the Financial Instability Hypothesis is essentially right but doesn't quite capture the whole range of possibility when it comes to financial mania. For example, while the framework almost perfectly describes what happened with the housing bubble in 2007-08, it doesn't really get at what's been happening with things like crypto and meme stocks. There's a kind of financial mania that has less to do with the credit cycle and more to do with raw animal spirits and our propensity to gamble.



Another great economist, John Kenneth Galbraith, wrote a book called "A Short History of Financial Euphoria" that focuses more on the psychological aspects of mania. Drawing on modern understanding of crowd psychology, Galbraith argues that mania is essentially a function of human nature. He argues there are two kinds of market participants behind any mania. There are those who believe that higher prices are

completely justified. There's just something fundamentally different about the situation and that's why prices are high and will stay that way. In our era, this is the position of the Bitcoin maximalists, for example, or the "Tesla is a not a car company" crowd. Then there are those who, while they don't buy into the story, believe they are smart enough to both perceive the speculative nature of things and get out before it's too late. I like to think I fall into this category but who knows!

What happens in mania, according to Galbraith, is that as these two kinds of participants engage with a market, two psychological vulnerabilities work in conjunction to produce the conditions necessary for a crowd psychology moment: a mass coordinated suspension of disbelief. The first is that the people who are "early" to the story make a ton of money. All of a sudden, they have a powerful personal interest in the situation and, as a result, start to develop euphoric beliefs. Essentially, they've made so much money from the rising asset price that they just have to believe it's all true and based upon something real. This phenomenon, by the way, is all over the crypto world. I can tell immediately whether someone has made early money in crypto or not just based

on how they think and talk about crypto. Anyway, it's when the second vulnerability starts to manifest that things get really interesting. You see, we have this kind of glitch, hardwired into our psychology, where we tend to associate the possession of money with superior financial intelligence. This is a really powerful force actually. It's what's behind the entire Wall Street marketing complex, book and newsletter sales and even podcast downloads. It's the OG "going-viral" meme and it shows up everywhere in our economy and society. In a mania, what happens is that as we see start to hear stories of people who've made all kinds of money, we cannot help but ment—"hey what happens when you simultaneously expose

pay attention. And as we start engaging with the euphoric belief holders, we literally cannot help but think they are on to something. "Hmmm. That's kind of interesting. But isn't it crazy? But wait, they are rich after all, right? Maybe there is something real here." Before long you find yourself calling your broker or more likely in these times, opening your Coinbase account. As the story spreads, new buy orders keep coming in and before you know it, the whole world has gone mad and asset prices are trading in the stratosphere.

Galbraith's framework absolutely nails what's been happening in financial markets since, well, the onset of time. But his framework is particularly well suited to understand the market behavior we've seen since the onset of COVID. Never has the market been more exposed to investor psychology than it is today.

In the old days, it used to be harder for these manias and bubbles to develop. There were these built-in frictions, things called transaction costs (imagine having to pay commissions!) and slower moving communications (or having to phone or fax your buy order in!), that kept things relatively slow and contained. Now though, since we have built the technological infrastructure that's basically tailor-made for spreading memelike ideas around the world, there's no telling what could happen. And look, psychologically, there's nothing all that different between a viral Tik Tok video and a meme stock. They are functioning via the same psychological channels.

It seems like financial mania and the proliferation of asset bubbles is just something we are going to have to get used to, for they are a function of the combination of our psychological frailty, especially in crowds, and our ingrained tendency toward optimism. When asset bubbles burst, we place blame in many places, everything from computer trading to bad actors (think Ponzi or Enron or Madoff) to greedy bankers to bad regulations, but the truth is, without our tendency and vulnerability to optimism—our naïve willingness to believe that we can make a fortune without hard work—there

probably wouldn't be many financial bubbles.

Now we live in a frictionless world of instantaneous information and free trading and things are getting crazy. We live in the era of memes and the "going viral" phenomenon. Historians and social psychologists are going to have a field day when looking back upon our era. There's just so much to study here. By the way, as much as we like to celebrate our technological achievements, it's not clear at all that this is a good thing. It's like we're all living through this giant unplanned experi-

> to psychologically manipulative technology, without any safeguards? What happens when you unleash tools, that are essentially free, that are deliberately designed to amplify the madness of crowds?" So far, the results have been concerning to say the least.

> almost the entire population of the world

Though I remain bullish and optimistic about crypto, I started writing this article because I remain concerned about the extent to which speculative fever is driving the narrative of the market. There's no doubt that the marginal buyer of crypto at any given moment has essentially the same motivation: to make money, ideally a lot of it and as quickly as humanly possible. Perhaps, this is a bit overstated. There are, of course, plenty of what I call "builders" who are motivated in a different, more creative and longer-term

way. These are individuals who are directly involved in the creative aspect of crypto, defi or web3 and are pursuing projects for reasons beyond just to make a quick score. But for every one builder there has to be a hundred or maybe even a thousand straight-up speculators (gamblers).

When I was first introduced to cryptocurrency back in 2015, I was down in the Cayman Islands at a private investor event hosted by Raoul Pal, a co-founder of Real Vision, a great investment mind and a really good guy. The topic of Bitcoin came up and some very savvy investors in the room basically predicted this exact dynamic. I'm paraphrasing here a bit but the argument was something like this:

"Either this is going to be real, the greatest speculative mania of all time or nothing. In 2 out of the 3 cases, Bitcoin goes parabolic. So, buy some Bitcoin and see what happens."

Well, a lot sure has happened:

While I'm not

convinced that

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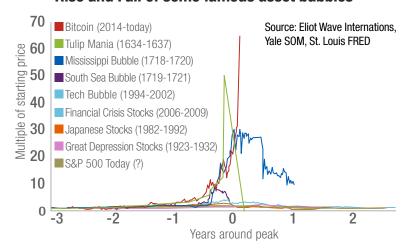
world is in full

mania mode

today, I am

concerned.

Rise and Fall of some famous asset bubbles



And Bitcoin is indeed either real or the greatest mania of all time.

Pal, by the way, is a kind of marketing genius. The way he set-up and ran this whole event was just so well thought out. Whether it was the evening meeting in the private wine cellar or the roundtable overlooking the Caribbean, the whole thing made me feel like I was part of the most exclusive gathering of financial experts in the world. And, in a way, I was. There were some incredible minds in the room that day and they absolutely nailed the potential of the Bitcoin narrative. We talked about how what makes Bitcoin so interesting and susceptible to financial mania is that it has something for everyone. It could be an appealing story for the sound money crew, gold bugs, techno-utopians and even anarchists and gamblers. It's almost as-if it was intentionally designed to appeal to these groups. Who knows, perhaps it was!

As mentioned above, one of the tricky things about a bubble is that it's very difficult to know whether you are in one or not. You cannot just look at the chart and declare a bubble. Sometimes the crazy price just isn't so crazy. Just look at Apple or Amazon for example:

■ Amazon.com Inc Price % Change





If you zoom in on these charts, at many points along the way they looked bubble-like and yet here they stand, two of the most legitimately valuable businesses in the world. Unfortunately, when it comes to bubbles you can only really know the answer when it's all said and done.

While I'm not convinced that Bitcoin and the broader crypto world is in full mania mode today, I am concerned. Certainly, there's an enormous amount of speculative activity out there. You can find ample evidence using both Minsky's and Galbraith's frameworks that crypto is indeed another mania. In some sense, crypto and especially defi skipped right over the first two phases of the Minsky cycle and just went full Ponzi from day one. Look, there aren't any real cash-flows to speak of in the first place! And I would argue that outside of religious contexts and maybe some ideological contagions (think "communism" in the 20th century), we've never seen anything quite like the euphoric belief holders of the crypto story. The early winners have made so much money, so quickly that they have developed what looks and feels like a religious order. If you don't believe me just spend some time on Twitter. It won't be long before you discover the prophets of crypto and their massive followings.

At this point, you might be thinking:

"Wait a second Nick, aren't you bullish on crypto? You're confusing me!"

My apologies for the 3000-word scare piece. That was not my intent, I promise. I wanted to write about this subject because I think it's something that investors today simply cannot ignore. There's a very real possibility that we are indeed in the midst of a mania of historic proportions and if that's true, things could end very badly.

For now though, I remain convinced that there is enough commercial potential here to justify the crypto narrative. Our legacy financial architecture is garbage and badly needs disruption. This is crypto's big opportunity in my opinion.

So, my advice today is simple: as you think about your investments and allocations to crypto, keep the mania threat in mind. Keep a close watch on things. Don't lever-up. Don't gamble. Try to be prudent. And, above all, don't blink!