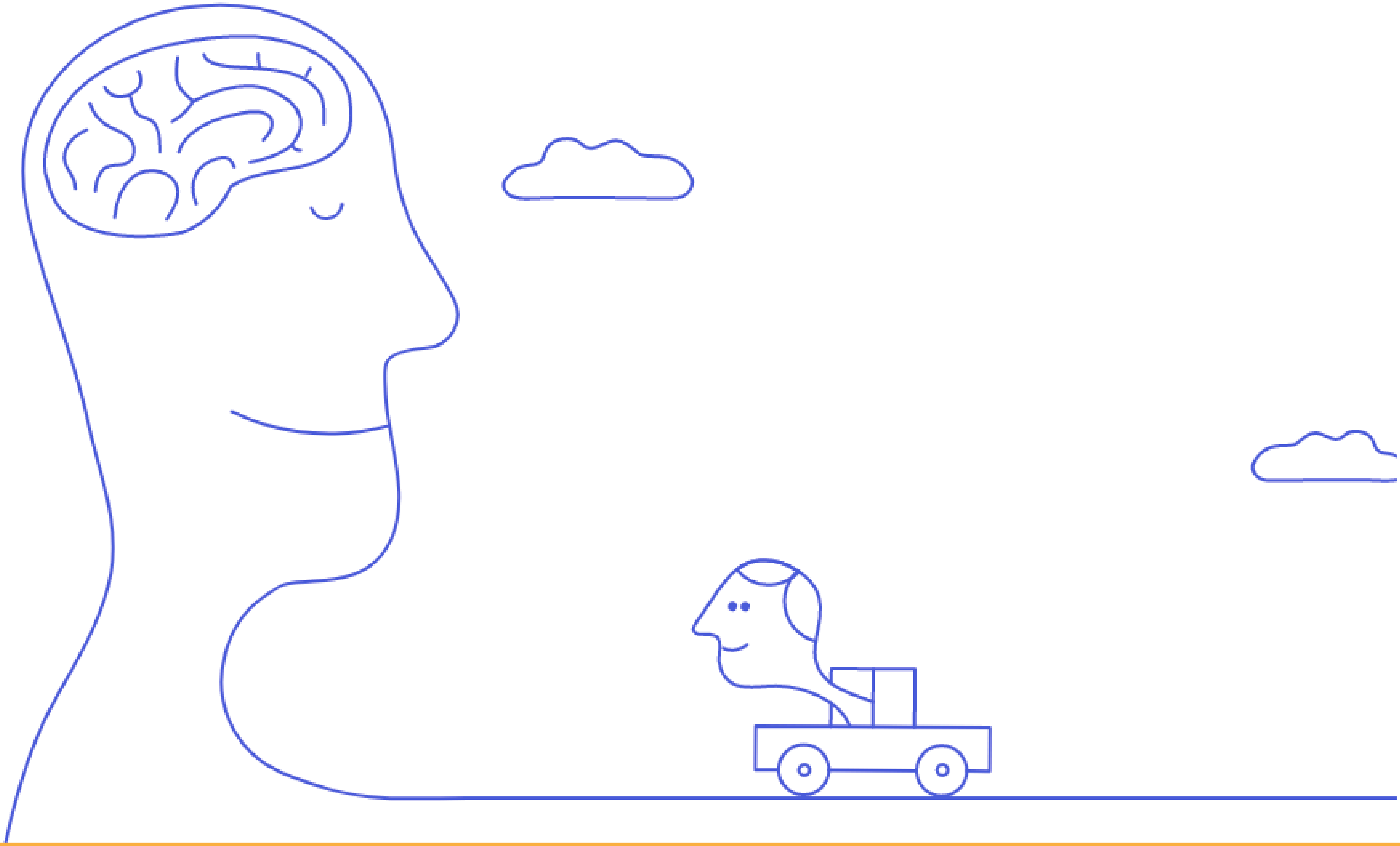
The Reasonable Formation of Unreasonable Things

An explanation of market bubbles that doesn't blame greed or incompetence, and a strategy to protect yourself from their inevitability.



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The majority of your lifetime investment returns will be determined by decisions that take place during a small minority of the time.

Most of those periods come when everything you thought you knew about investing is thrown out the window.

How you invested from 1990 to 1998 wasn't all that important. The choices you made from 1999 to 2001 shaped the rest of your investing career.

What you did from September 2008 to March 2009 likely had more impact on your lifetime investment returns than what happened cumulatively from 2002 to 2007, or from 2009 to 2017.

The pilot's famous answer when asked about his job -- "Hours of boredom punctuated by brief moments of terror" -- applies perfectly to investing. The brief moments of terror are the rise and fall of bubbles.

But there's a problem.

Bubbles are not like cancer, where a biopsy gives us a clear warning and diagnosis. They are more like the rise and fall of a political party, where the outcome is known in hindsight but the cause and blame are never settled on.

Competition for returns is fierce, and someone has to own every asset at every point in time. Which means the idea of bubbles will always be controversial in real time, and in hindsight we're more apt to blame than learn.

After suffering from financial bubbles for hundreds of years, we still don't have a good definition of what they are, let alone an understanding of why they happen. Without an easy and logical answer, most bubble commentary shifts to the comfort of attacking others (the Fed, banks, Congress) and, worse, assuming they're one-off accidents.

This is unfortunate, given how much impact they have on our investment results. As a rule of thumb, the more indignant you are, the harder it is to understand what's happening.

I've always considered it a cop-out to blame bubbles on greed and incompetence alone. This report will argue three points:

- Bubbles are not anomalies or mistakes. They are an unavoidable feature of markets where investors with different goals compete on the same field. They would occur even if everyone was a financial saint.

- Bubbles have less to do with rising valuations and more to do with shrinking time horizons among people playing a different game than you are.

- Protecting yourself as an investor is mostly a function of understanding and acting upon your own time horizon, accepting that other people's goals are different than your own.

To make these points, we first have to understand the philosophies of a wild-haired economist named Hyman Minsky, who figured out decades ago that all financial markets are utterly incapable of sitting still.

1: The Inevitability of Insanity Among Sane People

The 1960s were a period of scientific optimism. In the previous 50 years the world had gone from horse and buggy to a man on the moon, and from bloodletting to organ transplants.

This caused a push among economists to try to eradicate the scourge of recessions. If we could launch intercontinental ballistic missiles, surely we could prevent two quarters of negative GDP growth.

Hyman Minsky, who spent most of his career at Washington University in St. Louis, was fascinated in the boom and bust nature of economies. He also thought the idea of eradicating recessions was nonsense, and always would be.

Minsky's seminal theory was called the financial instability hypothesis.

The paper itself wasn't heavy on math and formulas. It briefly explained the origin of financial crises that happen in the absence of an outside shock, like a war.

The instability hypothesis basically goes like this:

- When an economy is stable, people get optimistic.
- When people get optimistic, they go into ever increasing amounts of debt.
- When they pile on debt, the economy becomes unstable.

Minsky's big idea was that *stability is destabilizing*. A lack of recessions plants the seeds of the next recession. Which is why we can never get rid of them.

"Over periods of prolonged prosperity, the economy transits from financial relations that make for a stable system to financial relations that make for an unstable system," he wrote.

A growing belief that things will be OK pushes us, like a law of physics, toward something not going OK.

This applies to investments too.

To wrap your head around the inevitability of the financial instability hypothesis, you have to take it to its extreme.

Imagine a world where bear markets are somehow outlawed. Market stability is all but assured.

What would you do?

You would buy as many risky assets as you possibly could. You'd bid their valuation up to the point that their return prospects equaled other non-volatile assets, like FDIC-insured bank accounts.

That would be the *smart, rational* thing to do. Everyone would do it.

And the seeds of breakdown would, at that moment, start to sprout.

The higher valuations become, the more sensitive markets are to being caught off guard from life's inevitable ability to surprise the hell out of you in ways you never imagined.

There are six inevitabilities that will always be present in any social gathering:

- Incomplete information.
- Uncertainty.
- Randomness.
- Chance.
- Unfortunate timing.
- Poor incentives.

With assets priced high and no room for error, the world would be hanging on by a thread, snipped at the first sniff of anything less than perfection.

The irony is that when markets are guaranteed not to crash -- or, more realistically, when people think that's the case -- they are far more likely to crash. The mere idea of stability causes a *smart and rational* movement toward bidding asset prices up high enough to cause instability.

Think of it this way. There are two states that financial markets can be in:

- Knowing there will be an eventual decline.

- Thinking there won't be an eventual decline, in which there will be one soon.

If Minsky were alive today, I imagine he'd describe investing like this:

- If markets never crashed, they wouldn't be risky.

- If they weren't risky, they would get really expensive.

- When they're really expensive, they crash.

The important thing is realizing that crashes are not a mistake, or a bug. They don't (necessarily) indicate that politicians failed, the Fed screwed up, that companies are greedy, or that investors are short-sighted.

They would happen if everyone was a well-behaved financial saint. Because if assets didn't crash they wouldn't offer a big return. And since we want big returns we push them toward occasional crashes.

Constant and guaranteed volatility, like a law of physics.

2: When Reasonable Insanity Gets Out of Hand

There is a distinct difference between volatility and things getting completely out of hand.

Stocks fell 19% in the summer of 2011, and quickly recovered. That's volatility. The Nasdaq fell 80% after 2000, and didn't recover for a decade. That's something else.

But the fact that markets spread from volatile to utterly out of control -- like a bubble -- makes sense. *Rational sense*. It makes so much sense that we should expect it to keep happening.

One of the biggest flaws to come out of academic finance is the idea that assets have one rational price in a world where investors have different goals and time horizons.

Ask yourself: How much should you have paid for Yahoo! stock in 1999?

The answer depends on who "you" are.

If you have a 30-year time horizon, the smart price to pay was a sober analysis of Yahoo!'s discounted cash flows over the subsequent 30-years.

If you have a 10-year time horizon, it's some analysis about the industry's potential over the next decade and whether management could execute on its vision.

If you have a 1-year time horizon, it's an analysis of current product sales cycles and whether we'll have a bear market.

If you're a daytrader, the smart price to pay is "who the hell cares?," because you're just trying to squeeze a few basis points out of whatever happens between now and lunchtime, which can be accomplished at any price.

When investors have different goals and time horizons -- and they do in every asset class -- prices that look ridiculous for one person make sense to another, because the factors worth paying attention to are totally different.

People can look at Yahoo! stock in 1999 and say "This is crazy! A zillion times revenue! This valuation makes no sense!"

But many investors who owned Yahoo! stock in 1999 had time horizons so short that it made sense for *them* to pay a ridiculous price.

A daytrader could accomplish what they need whether Yahoo! was at $5 a share or $500 a share, as long as it moved in the right direction. Which it did, for years.

Money chases returns. Bubbles form when the momentum of short-term returns attracts enough money that the makeup of investors shifts from mostly long term to mostly short term.

That process feeds on itself. As traders push up short-term returns, they attract more traders. Before long -- and it really doesn't take long -- the dominant price-setters with the most authority are those with ever-shortening time horizons.

Bubbles aren't so much about valuations rising. That's just a symptom of something else: Time horizons shrinking. This might seem like subtle point, but it explains a lot about why the mere existence of bubbles confuses so many smart investors.

Valuations during the dot-com bubble made no sense if you were a long-term investor. But most participants were not long-term investors.

People say the bubble was rooted in irrational optimism about the future. Really? One of the most common headlines of that era was announcing record trading volume. Investors -- particularly the ones setting prices -- were not thinking about the next 20 years. The average mutual fund had 120% annual turnover in 1999, meaning they were, at most, thinking about the next 8 months.

So were the individual investors who bought these funds. Maggie Mahar wrote in her book Bull!:

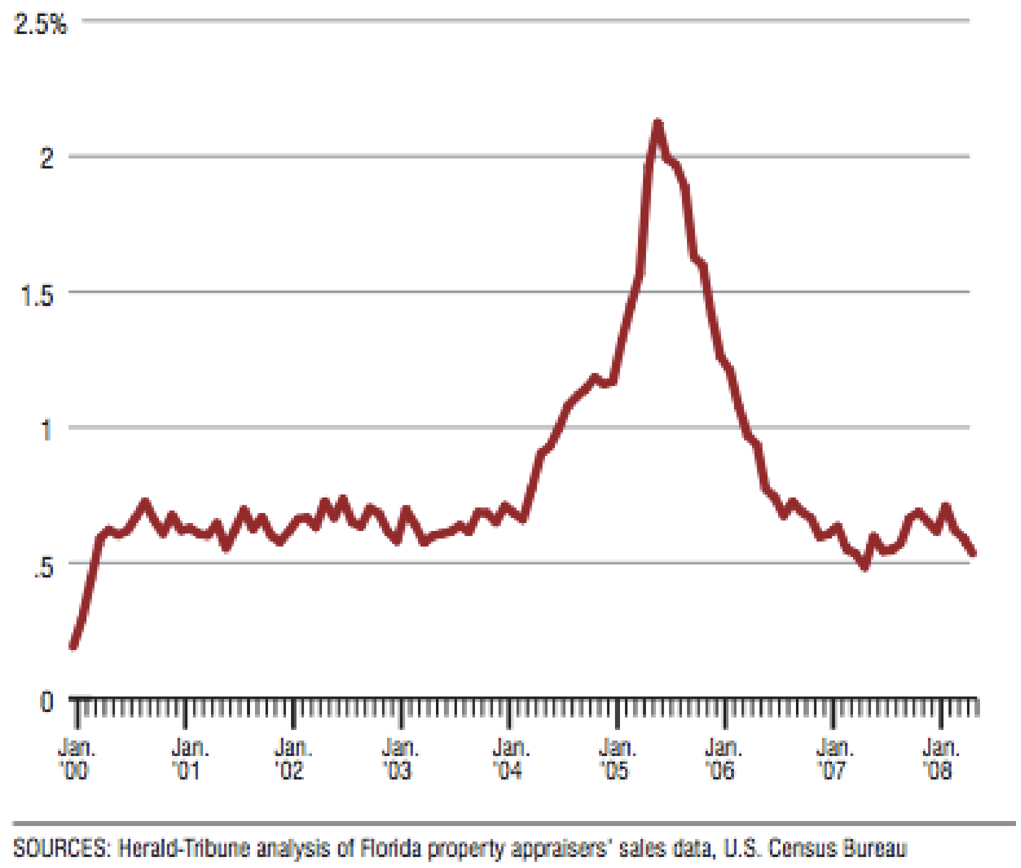
"By the mid-nineties, the press had replaced annual scorecards with reports that appeared every three months. The change spurred investors to chase performance, rushing to buy the funds at the top of the charts, just when they were most expensive."

This was also the era of day trading, short-term option contracts, and up-to-the minute market commentary. Not the kind of thing you'd associate with investors excited about the prospects of the generation.

Same for the housing bubble.

It's hard to justify paying $700,000 for a two-bedroom Miami track home to raise your family in for the next 20 years. But it makes perfect sense if you plan on flipping it in a few months into a liquid market with price momentum. Which is exactly what many people were doing during the bubble.

This chart shows the percentage of Florida home sales whose previous owner held the property for less than six months. Do you think these people cared about long-term price-to-rent ratios? Of course not. It wasn't relevant to their game.



You can say a lot about these investors.

You can call them speculators. You can call them irresponsible. You can shake your head at their willingness to take huge risks.

But I don't think you can call all of them irrational.

Bubbles aren't so much about people irrationally participating in long-term investing. They're about people somewhat rationally moving toward short-term trading to capture momentum that had been feeding on itself. What do you expect people to do when momentum creates a big short-term return potential? Sit and watch patiently? Never. That's what Minsky proved. And the short-term traders that flood in operate in an area where the rules governing long-term investing -- particularly around valuation -- are ignored, because they're irrelevant to the game being played.

Which makes bubbles more rational than they are often portrayed.

It's why we'll always have them.

It's also why they're so dangerous.

3: Wandering to the Wrong Side of the Tracks

The dot-com bubble reduced household wealth by $6.2 trillion.

The housing bubble cut away more than $8 trillion.

It's hard to say something so destructive "makes rational sense."

The disconnect between bubbles happening for rational reasons and doing huge societal harm comes down to people with different objectives thinking they're playing the same game.

Imagine a group of accountant buddies who want to play a friendly game of flag football. They find a field at a local park to play. There's even a group of players at the field who want to join them. They're 300-pound NFL players, suited up and ready to smash anyone in their way.

A coach in this situation would step in and say, "Whoa, guys, no. I know you're both playing football, but your goals are so different that you have to play on different fields."

The problem is that there's one field in investment markets, where the accountants have to play with the Raiders.

Think about the daytrader in 1999 whose marginal trade helped push Yahoo! stock to $430 a share. This trade made sense, because he thought shares would probably go to $431 by closing, when he'd sell.

Now think of the grocery store worker who was saving for her retirement 40 years down the road. If she wanted to invest in Yahoo! that day, $430 per share is the price she has to pay, because there's only one market price. And it's a price that, if taken, materially reduced her chance of retiring.

These two people rarely even know that each other exist. They're playing completely different games. But they're on the same field, running toward each other. When their paths collide, someone gets hurt.

Bubbles do damage when long-term investors mistakenly take their cues from short-term traders.

It's hard to grasp that other investors have different goals than we do, because an anchor of psychology is not realizing that rational people can see the world through a different lens than your own. When momentum entices short-term investors, and short-term investors dominate market pricing and activity, the long-term investor is at risk of seeing rising prices as a signal of long-term worth. Rising prices persuade all investors in ways the best marketers envy. They are a drug that can turn value-conscious investors into dewey-eyed optimists, detached from their own reality by the actions of someone playing a different game than they are.

Few things matter more in investing than understanding your own time horizon and not being persuaded by the price actions caused by people with different time horizons.

No matter what kind of investor you are, the key to success is not participating in a game other than the one you intended to play. And you can only do that if you make an effort to identify what games the people surrounding you are playing, separating them from your own. It is the only way I know of to have a reasonable shot at not getting sucked into bubbles in the first place.

This requires:

- Sizing up the value of news, commentary, and analysis based on whether it aligns with your own goals and time horizon, rather than its analytical merits alone.

- Paying extraordinary attention to things like volume and asset turnover in your industry, understanding that it reflects the marginal investor's time horizon, and tells you what game current prices are keeping score of.

The latter is particular important because of how bubbles play out.

All games eventually end, and the rational move toward short-term trading potential that defines bubbles eventually becomes tapped out, as Minsky wrote decades ago.

It's at these moments -- when there's a transition from one game to the next -- that bubbles do the most damage.

If you view the plunge in asset prices that marks the end of bubbles as an indication that everything you thought you knew about long-term investing is wrong, you end up using the end of someone else's game as an excuse to never again play your own. Like a passenger who questions whether it's safe to get on a plane because he sees hundreds of people eagerly getting off the previous flight.

It is the most devastating trick investors play on themselves.

Realizing that the rise and fall of bubbles does not negate the effectiveness of diversified long-term investing is one of the most powerful understandings an investor can have. And one of the hardest things an investor can do is maintain conviction on a long-term strategy when there's a changing of the guard between one game and the next.

These moments have outsized influence on your lifetime returns, because extreme high or low valuations magnify the impact of investment decisions. The exponential nature of compounding means that the decisions you make when assets are in a state of chaos are magnitudes more important than the ones you make when they're tranquil. This is why periods when markets are transitioning from one game to the next -- perhaps 1% or 2% of your time as an investor -- are so important.

Investing is seven parts emotional, three parts analytical. The emotional rollercoaster of bubbles will always be something even the smartest investors struggle with.

But a lot of the emotions -- excitement, greed, fear, and frustration -- stem from not knowing what bubbles are or why they're happening. Breaking the process down into two points:

- Volatility has to happen for any asset to have decent long-term returns, and;
- Sometimes that volatility gets out of hand when people with short time horizons become the dominant investors, pricing assets in ways that make no sense to long-term investors,

... is the strongest shield I know of to maintain a level head through the inevitable chaos.