

Memo to: Oaktree Clients
From: Howard Marks
Re: On Bubble Watch

Exactly 25 years ago today, I published the first memo that brought a response from readers (after having written for almost ten years without receiving any). The memo was called bubble.com, and the subject was the irrational behavior I thought was taking place with respect to tech, internet, and e-commerce stocks. The memo had two things going for it: it was right, and it was right fast. One of the first great investment adages I learned in the early 1970s is that “being too far ahead of your time is indistinguishable from being wrong.” In this case, however, I wasn’t too far ahead.

This milestone anniversary gives me an occasion to write again about bubbles, a subject that’s very much of interest today. Some of what I write here will be familiar to anyone who read my December memo about the macro picture. But that memo only went to Oaktree clients, so I’m going to recycle here the part of its content that relates to the subject of bubbles.

Since I’m a credit investor, having stopped analyzing stocks nearly five decades ago, and since I’ve never ventured far into the world of technology, I’m certainly not going to say much about today’s hot companies and their stocks. All of my observations will be generalities, but I’m hopeful they’ll be relevant nonetheless.

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In this century’s first decade, investors had the opportunity to participate in – and lose money due to – two spectacular bubbles. The first was the tech-media-telecom (“TMT”) bubble of the late ’90s, which began to burst in mid-2000, and the second was the housing bubble of the mid-aughts, which gave rise to (a) extending mortgages to sub-prime borrowers who couldn’t or wouldn’t document income or assets, (b) the structuring of those loans into levered, tranching mortgage-backed securities, and consequently (c) massive losses for investors in those securities, especially the financial institutions that had created them and retained some. As a result of those experiences, many people these days are on heightened alert for bubbles, and I’m often asked whether there’s a bubble surrounding the Standard & Poor’s 500 and the handful of stocks that have been leading it.

The seven top stocks in the S&P 500 – the so-called “Magnificent Seven” – are Apple, Microsoft, Alphabet (Google’s parent), Amazon.com, Nvidia, Meta (owner of Facebook, WhatsApp, and Instagram), and Tesla. I’m sure I don’t have to go into detail regarding the performance of these stocks; everyone’s aware of the phenomenon. Suffice it to say that a small number of stocks have dominated the S&P 500 in recent years and have been responsible for a highly disproportionate share of its gains. A chart from Michael Cembalest, chief strategist at J.P. Morgan Asset Management, shows that:

- the market capitalization of the seven largest components of the S&P 500 represented 32-33% of the index’s total capitalization at the end of October;
- that percentage is roughly double the leaders’ share five years ago; and
- prior to the emergence of the “Magnificent Seven,” the highest share for the top seven stocks in the last 28 years was roughly 22% in 2000, at the height of the TMT bubble.

It's also important to note that at the end of November, U.S. stocks represented over 70% of the MSCI World Index, the highest percentage since 1970 according to another Cembalest chart. Thus, it's clear that (a) U.S. companies are worth a lot compared to the companies in other regions and (b) the top seven U.S. stocks are worth a heightened amount relative to the rest of U.S. stocks. **But is it a bubble?**

What Is a Bubble?

Investment lingo comes and goes. My young Oaktree colleagues use a lot of terms these days for which I have to request translation. But "bubble" and "crash" have been in the financial lexicon for as long as I've been in the investment business, and I imagine they'll remain there for generations to come. Today, the mainstream media uses them broadly, and people seem to consider them to be subject to objective definition. **But for me, a bubble or crash is more a state of mind than a quantitative calculation.**

In my view, a bubble not only reflects a rapid rise in stock prices, but it is a temporary mania characterized by – or, perhaps better, resulting from – the following:

- highly irrational exuberance (to borrow a term from former Federal Reserve Chair Alan Greenspan),
- outright adoration of the subject companies or assets, and a belief that they can't miss,
- massive fear of being left behind if one fails to participate ("FOMO"), and
- resulting conviction that, for these stocks, "there's no price too high."

"No price too high" stands out to me in particular. When you can't imagine any flaws in the argument and are terrified that your officemate/golf partner/brother-in-law/competitor will own the asset in question and you won't, it's hard to conclude there's a price at which you shouldn't buy. (As Charles Kindleberger and Robert Aliber observed in the fifth edition of *Manias, Panics, and Crashes: A History of Financial Crises*, "there is nothing so disturbing to one's well-being and judgment as to see a friend get rich.")

So, to discern a bubble, you can look at valuation parameters, but I've long believed a psychological diagnosis is more effective. Whenever I hear "there's no price too high" or one of its variants – a more disciplined investor might say, "of course there's a price that's too high, but we're not there yet" – I consider it a sure sign that a bubble is brewing.

Roughly fifty years ago, an elder gave me the gift of one of my favorite maxims. I've written about it several times in my memos, but in my opinion, I can't do so often enough. It's "the three stages of the bull market":

The first stage usually comes on the heels of a market decline or crash that has left most investors licking their wounds and highly dispirited. At this point, **only a few unusually insightful people are capable of imagining that there could be improvement ahead.**

In the second stage, the economy, companies, and markets are doing well, and **most people accept that improvement is actually taking place.**

In the third stage, after a period in which the economic news has been great, companies have reported soaring earnings, and stocks have appreciated wildly, **everyone concludes that things can only get better forever.**

The important inferences aren't with regard to economic or corporate events. They involve investor psychology. It's not a matter of what's happening in the macro world; it's how people view the developments. When few people think there can be improvement, security prices by definition don't incorporate much optimism. But when everyone believes things can only get better forever, it can be hard to find anything that's reasonably priced.

Bubbles are marked by bubble thinking. Perhaps for working purposes we should say that bubbles and crashes are times when extreme events cause people to lose their objectivity and view the world through highly skewed psychology – either too positive or too negative. Here's how Kindleberger put it in the first edition of *Manias, Panics, and Crashes*:

. . . As firms or households see others making profits from speculative purchases and resales, they tend to follow. When the number of firms and households indulging in these practices grows larger, bringing in segments of the population that are normally aloof from such ventures, speculation for profit leads away from normal, rational behavior to what have been described as “manias” or “bubbles.” **The word “mania” emphasizes the irrationality; “bubble” foreshadows the bursting.** (Emphasis added)

For me, it's psychological extremeness that marks a bubble. Often, as Kindleberger indicates, it can be inferred from widespread participation in the investment fad of the moment, especially among non-financial types. Legend has it that J.P. Morgan knew there was a problem when the person shining his shoes started giving him stock tips. My partner John Frank says he saw it in 2000, when he heard the dads at his son's soccer game bragging about the tech stocks they owned, and again in 2006, when a Las Vegas cab driver told him about the three condos he'd purchased. When Mark Twain purportedly said, “history doesn't repeat itself, but it often rhymes,” it's this kind of thing he was talking about.

The New, New Thing

If bubble thinking is irrational, what is it that permits investors to get away from rational thinking, like the thrust of a rocket ship that breaks free of the limits imposed by gravity and attains escape velocity? There's a simple answer: **newness**. This phenomenon relies on another time-honored investment phrase, “this time is different.”

Bubbles are invariably associated with new developments. There were bubbles in the Nifty Fifty stocks in the 1960s (more on them just below), disc drive companies in the 1980s, TMT/internet stocks in the late 1990s, and sub-prime mortgage-backed securities in 2004-06. These relatively recent manias followed in the tradition of ones like (a) the 1630s craze in Holland over recently introduced tulips and (b) the South Sea Bubble in 1720 England concerning the riches that were sure to ensue from a trading monopoly that the Crown had awarded to the South Sea Company.

In normal circumstances, if an industry's or a country's securities are attracting unusually high valuations, investment historians are able to point out that, in the past, those stocks had never sold at more than an x% premium over the average, or some similar metric. In this way, **attention to history can serve as a tether, keeping a favored group grounded on terra firma.**

But if something's new, meaning there is no history, then there's nothing to temper enthusiasm.

After all, it's owned by the brightest people – the ones who are showing up in the headlines and on TV – and they've made a fortune. Who's willing to throw a wet blanket over that party or sit out that dance?

The explanation often lies in Hans Christian Andersen's story *The Emperor's New Clothes*. Con men sell the emperor an allegedly gorgeous suit of clothes that only intelligent people can see. But in actuality there is no suit. When the emperor parades around town naked, the citizens are afraid to say they don't see a suit, since that would mark them as unintelligent. This goes on unchecked until a young boy steps out of the crowd and – in his naivete – points out that the emperor has no clothes. Most people would rather go along with a shared delusion that's making investors buckets of money than say something to the contrary and appear to be dummies. **When a whole market or a group of securities is blasting off and a specious idea is making its adherents rich, few people will risk calling it out.**

My Baptism Under Fire

They say **experience is what you got when you didn't get what you wanted**, and I got my most formative experience at the very beginning of my career. As many of my memo readers know, I joined the equity research department at First National City Bank (now Citi) in September 1969. As was the case with most of the so-called “money-center banks,” Citi invested mainly in the “Nifty Fifty”– the stocks of the best and fastest-growing companies in America. These companies were considered to be so good that (a) nothing bad could ever happen and (b) there was no price too high for their stocks . . . literally.

Three factors contributed to investors' fascination with these stocks. First, the U.S. economy grew strongly in the post-World War II period. Second, these companies benefitted from their involvement with areas of innovation such as computers, drugs, and consumer products. And third, they represented the first wave of “growth stocks,” a new investment style that separately became a fad in itself. The Nifty Fifty were the object of the first big bubble in roughly 40 years, and since there hadn't been one for so long, investors had forgotten what a bubble looks like. As a result of the popularity that was conferred on them, if you bought these stocks on the day I started work and held them tenaciously for five years, you lost well over 90% of your money . . . in the best companies in America. What happened?

The Nifty Fifty had been put on a pedestal, and investors get hurt when something falls from it. The stock market as a whole declined by about half in 1973-74. And it turned out these stocks had been selling at prices that actually were too high; in many cases, their price/earnings ratios fell from the range of 60 to 90 to the range of 6 to 9 (that's the easy way to lose 90%). Further, bad things actually did happen to several of the companies in fundamental terms.

My early brush with a genuine bubble caused me to formulate some guiding principles that carried me through the next 50-odd years:

It's not what you buy, it's what you pay that counts.

Good investing doesn't come from buying good things, but from buying things well.

There's no asset so good that it can't become overpriced and thus dangerous, and there are few assets so bad that they can't get cheap enough to be a bargain.

Things Can Only Get Better

The bubbles I've lived through have all involved innovations, as I noted above, and many of those were either overestimated or not fully understood. The attractions of a new product or way of doing business are usually obvious, but the potholes and pitfalls are often hidden and only discovered in trying times. A new company may completely outclass its predecessors, but investors who by definition lack experience in

this new field often fail to grasp that even a bright newcomer can be supplanted. The disrupters can be disrupted, whether by skillful competitors or even newer technologies.

In my early decades in business, technology seemed to evolve gradually. Computers, drugs, and other innovative products improved a little at a time. But in the 1990s, innovation came in a big rush. When Oaktree was founded in 1995, I insisted that I could get by with just WordPerfect for word processing and Lotus 1-2-3 for spreadsheets. But when we moved to our current office in 1998, I threw in the towel and let our IT team install e-mail and the internet (and, of course, WordPerfect gave way to Word, and Lotus 1-2-3 to Excel). At the time, investors were sure “the internet will change the world.” It certainly looked that way, and that assumption prompted tremendous demand for everything internet-related. E-commerce stocks went public at seemingly high prices and then tripled the first day. There was a real goldrush.

There’s usually a grain of truth that underlies every mania and bubble. It just gets taken too far. It’s clear that the internet absolutely did change the world – in fact, we can’t imagine a world without it. But the vast majority of internet and e-commerce companies that soared in the late ’90s bubble ended up worthless. When a bubble burst in my early investing days, *The Wall Street Journal* would run a box on the front page listing stocks that were down by 90%. In the aftermath of the TMT Bubble, they’d lost 99%.

When something is on the pedestal of popularity, the risk of a decline is high. When people assume – and price in – an expectation that things can only get better, the damage done by negative surprises is profound. When something is new, the competitors and disruptive technologies have yet to arrive. The merit may be there, but if it’s overestimated it can be overpriced, only to evaporate when reality sets in. In the real world, trees don’t grow to the sky.

The foregoing discussion centered on the risk of overestimating fundamental strength. But optimism surrounding the power and potential of the new thing often causes the error to be compounded through the assignment of too high a stock price.

- As mentioned above, for something new, there by definition is no historical indicator of what an appropriate valuation might be.
- Further, the companies’ potential hasn’t yet been turned into steady-state profits, meaning the thing that’s being valued is conjectural. In the TMT Bubble, the companies didn’t have earnings, so p/e ratios were out. And as startups, they often didn’t have revenues to value. As a result, new metrics were invented, and trusting investors ended up paying a multiple of “clicks” or “eyeballs,” regardless of whether these measurables could be turned into revenues and profits.
- Since bubble participants can’t imagine there being any downside, they tend to award valuations that assume success.
- In fact, it’s not infrequent for investors to treat all contenders in a new field as likely to succeed, whereas in reality only a few may thrive, or perhaps even survive.
- Ultimately, with a really hot new thing, investors can adopt what I call “a lottery ticket mentality.” If a successful startup in a hot field can return 200x, it’s mathematically worth investing in even if it’s only 1% likely to succeed. And what doesn’t have a 1% likelihood of success? When investors think this way, there are few limits on what they’ll support or the prices they’ll pay.

Obviously, investors can get caught up in the race to buy the new, new thing. That’s where the bubble comes in.

What's the Appropriate Price to Pay for a Bright Future?

If there's a company for sale that will make \$1 million next year and then shut down, how much would you pay for it? The right answer is a little less than \$1 million, so that you'll have a positive return on your money.

But stocks are priced at “p/e multiples” – that is, multiples of next year's earnings. Why? Because presumably they won't earn profits for just one year; they'll go on making money for many more. When you buy a stock, you buy a share of the company's earnings every year into the future. The price of the S&P 500 has averaged roughly 16 times earnings in the post-World War II period. This is typically described as meaning “you're paying for 16 years of earnings.” It's actually more than that, though, because the process of discounting makes \$1 of profit in the future worth less than \$1 today. The current value of a company is the discounted present value of its future earnings, so a p/e ratio of 16 means you're paying for more than 20 years of earnings (depending on the interest rate at which future earnings are discounted).

In bubbles, hot stocks sell for considerably more than 16 times earnings. Remember the 60 to 90 times for the Nifty Fifty! Investors in 1969 were paying for companies' earnings – even after giving them credit for significant earnings growth – many decades into the future. Did they do so consciously and analytically? Not that I recall. Investors thought of a p/e ratio as just a number . . . if they thought about it at all.

Today's S&P-leading companies are, in many ways, much better than the best companies of the past. They enjoy massive technological advantages. They have vast scale, dominant market shares, and thus above average profit margins. And since their products are based on ideas more than metal, the marginal cost of producing an additional unit is low, meaning their marginal profitability is unusually high.

The further good news is that today's leaders don't trade at the p/e ratios investors applied to the Nifty Fifty. Perhaps the sexiest of the seven is Nvidia, the leading designer of chips for artificial intelligence. It's current multiple of future earnings is in the low 30s, depending on which earnings estimate you believe. While double the average post-war p/e on the S&P 500, that's cheap compared to the Nifty Fifty. But what does a multiple in the 30s imply? First, that investors think Nvidia will be in business for decades to come. Second, that its profits will grow throughout those decades. And third, that it won't be supplanted by competitors. **In other words, investors are assuming Nvidia will demonstrate persistence.**

But persistence isn't easily achieved, especially in high-tech fields where new technologies can arise and new competitors can leapfrog incumbents. It's worth noting, for example, that only about half the Nifty Fifty (as enumerated by Wikipedia – there is no agreed-on list) are in the S&P 500 today (that figure undoubtedly looks worse than the reality, since mergers and acquisitions caused some of the old names to disappear, not failures). Leading lights of 1969 that are missing from the S&P 500 today include Xerox, Kodak, Polaroid, Avon, Burroughs, Digital Equipment, and my favorite, Simplicity Pattern (how many people make their own clothing these days?).

Another indication of how hard it is to persist can be seen in the names of the top twenty S&P 500 companies. At the beginning of 2000, according to finhacker.cz, these twenty companies were the most heavily represented in the index:

Microsoft
General Electric
Cisco Systems
Walmart

Merck
Coca-Cola
Procter & Gamble
AIG

Exxon Mobil
Intel
Citigroup
IBM
Oracle
Home Depot

Johnson & Johnson
Qualcomm
Bristol-Myers Squibb
Pfizer
AT&T
Verizon

At the beginning of 2024, however, only six of them were still in the top twenty:

Microsoft
Walmart
Exxon Mobil

Johnson & Johnson
Procter & Gamble
Home Depot

Importantly, of today's Magnificent Seven, only Microsoft was in the top twenty 24 years ago.

In bubbles, investors treat the leading companies – and pay for their stocks – as though the firms are sure to remain leaders for decades. Some do and some don't, but change seems to be more the rule than persistence.

Whole Markets

The greatest bubbles usually originate in connection with innovations, mostly technological or financial, and they initially affect a small group of stocks. But sometimes they extend to whole markets, as the fervor for a bubble group spreads to everything.

In the 1990s, the S&P 500 was borne aloft by (a) the continuing decline of interest rates from their inflation-fighting peak in the early 1980s and (b) the return of investor enthusiasm for stocks that had been lost in the traumatic '70s. Technological innovation and the rapid earnings growth of the high-tech companies added to the excitement. And an upswing in the popularity of stocks was reinforced by new academic research showing there had never been a long period in which the S&P 500 failed to outperform bonds, cash, and inflation. The combination of these positive factors caused the annual return on the index to average more than 20% for the decade. I've never seen another period like it.

I always say the riskiest thing in the world is the belief that there's no risk. **In a similar vein, heated buying spurred by the observation that stocks had never performed poorly for a long period caused stock prices to rise to a point from which they were destined to do just that.** In my view, that's George Soros's investment "reflexivity" at work. Stocks were tarred in the bursting of the TMT Bubble, and the S&P 500 declined in 2000, 2001, and 2002 for the first three-year decline since 1939, during the Great Depression. **As a consequence of this poor performance, investors deserted stocks en masse, causing the S&P 500 to have a cumulative return of zero for the more than eleven years from the bubble peak in mid-2000 until December 2011.**

Lately, I've been repeating a quote I attribute to Warren Buffett: "When investors forget that corporate profits grow about 7% per year they tend to get into trouble." What this means is that if corporate profits grow at 7% a year and stocks (which represent a share in corporate profits) appreciate at 20% a year for a while, eventually stocks will be so highly priced relative to their earnings that they'll be risky. (I recently asked Warren for a source on the quote, and he told me he never said it. But I think it's great, so I keep using it.)

The point is that when stocks rise too fast – out of proportion to the growth in the underlying companies’ earnings – they’re unlikely to keep on appreciating. Michael Cembalest has another chart that makes this point. It shows that prior to two years ago, there were only four times in the history of the S&P 500 when it returned 20% or more for two years in a row. In three of those four instances (a small sample, mind you), the index declined in the subsequent two-year period. (The exception was 1995-98, when the powerful TMT bubble caused the decline to be delayed until 2000. But then the index lost almost 40% in three years.)

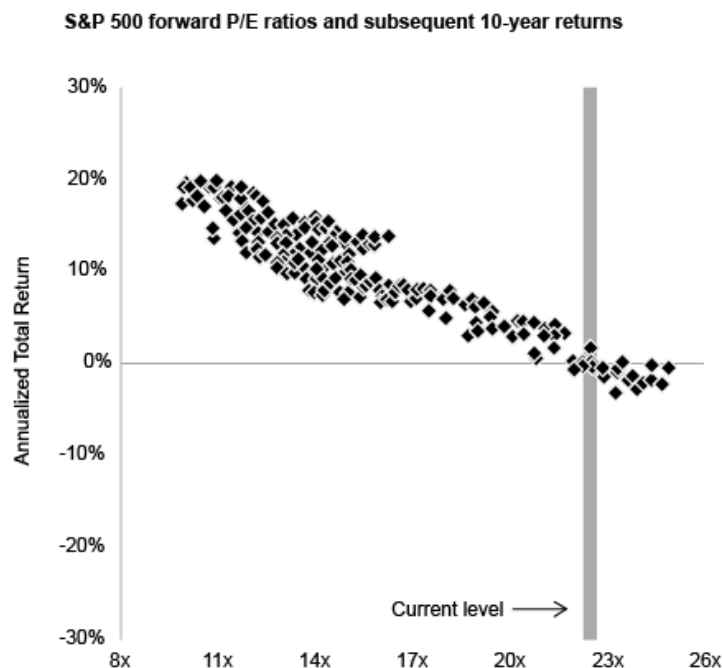
In the last two years, it’s happened for the fifth time. The S&P 500 was up 26% in 2023 and 25% in 2024, for the best two-year stretch since 1997-98. That brings us to 2025. What lies ahead?

The cautionary signs today include these:

- the optimism that has prevailed in the markets since late 2022,
- the above average valuation on the S&P 500, and the fact that its stocks in most industrial groups sell at higher multiples than stocks in those industries in the rest of the world,
- the enthusiasm that is being applied to the new thing of AI, and perhaps the extension of that positive psychology to other high-tech areas,
- the implicit presumption that the top seven companies will continue to be successful, and
- the possibility that some of the appreciation of the S&P has stemmed from automated buying of these stocks by index investors, without regard for their intrinsic value.

Finally, while I’m at it, although it’s not directly related to stocks, I have to mention Bitcoin. Regardless of its merit, the fact that its price rose 465% in the last two years doesn’t suggest an overabundance of caution.

I often find that, just as I’m about to release a memo for publication, something comes along that demands inclusion, and it has happened again. On the last day of 2024, I received something from two sources that fits that description:



The graph, from J.P. Morgan Asset Management, has a square for each month from 1988 through late 2014, meaning there are just short of 324 monthly observations (27 years x 12). Each square shows the forward p/e ratio on the S&P 500 at the time and the annualized return over the subsequent ten years. The graph gives rise to some important observations:

- There's a strong relationship between starting valuations and subsequent annualized ten-year returns. **Higher starting valuations consistently lead to lower returns, and vice versa.** There are minor variations in the observations, but no serious exceptions.
- Today's p/e ratio is clearly well into the top decile of observations.
- In that 27-year period, when people bought the S&P at p/e ratios in line with today's multiple of 22, they always earned ten-year returns between plus 2% and minus 2%.

In November, a couple of leading banks came out with projected ten-year returns for the S&P 500 in the low- to mid-single digits. The above relationship is the reason. **It shouldn't come as a surprise that the return on an investment is significantly a function of the price paid for it. For that reason, investors clearly shouldn't be indifferent to today's market valuation.**

You might say, "making plus-or-minus-2% wouldn't be the worst thing in the world," and that's certainly true if stocks were to sit still for the next ten years as the companies' earnings rose, bringing the multiples back to earth. But another possibility is that the multiple correction is compressed into a year or two, implying a big decline in stock prices such as we saw in 1973-74 and 2000-02. The result in that case wouldn't be benign.

The above are the things to worry about. Here are the counterarguments:

- the p/e ratio on the S&P 500 is high but not insane,
- the Magnificent Seven are incredible companies, so their high p/e ratios could be warranted,
- I don't hear people saying, "there's no price too high;" and
- the markets, while high-priced and perhaps frothy, don't seem nutty to me.

* * *

As I said at the start of this memo, I'm not an equity investor, and I'm certainly no expert on technology. **Thus, I can't speak authoritatively about whether we're in a bubble. I just want to lay out the facts as I see them and suggest how you might think about them . . . just as I did 25 years ago.**

I hope you'll keep reading for the next 25!

January 2, 2025

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