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What Popped the Tech Bubble? And, Did it Just Happen Again?

Alambic Insights

Albert Richards, PhD., CFA
CEO and Founder
Alambic Investment Management, L.P.

Albert Richards launched Alambic Investment Management, L.P. in 2006, with over 20-years of equity research experience and a lifetime technical acumen. Bert and Brian Thompson, Bert's longtime friend and colleague from the PhD program at MIT, started the firm to bring thoughtful human insights to the design, development and operation of systematic investment strategies. Now with a 8-year track record, the team launched their first equity market neutral strategy in 2011.

Before starting Alambic Investment Management, Bert perfected the art of tearing apart financial statements to find value and opportunity. As a sell-side analyst and head of research within two large global investment banks, Bert became adept at identifying and quantifying the key drivers of equity valuation and company quality as well as the behavioral pitfalls that create market opportunities.

Full bio: www.alambicim.com

As we approach the 20th anniversary of the Tech Bubble peak (March 10, 2000), we're increasingly feeling a sense of déjà vu. It isn't just the past few days of trading, although they do bear eerie similarities to the days post peak in 2000. Indeed, many of the parallels between then and now were firmly in place well before the full effect of the coronavirus was contemplated (for the record, we still believe investors are underestimating the virus's impact). These include wide and widening growth-value factor spreads, an increasingly-narrow buying frenzy with particular focus on a few names *(e.g.,* TSLA and SPCE), a higher-than-average retail presence (goosed by the elimination of commissions by several brokerages) and foreign economic difficulties that weren't really noticed until they suddenly loomed large.

In this report we look back on the Tech Bubble peak, not so much the frenzy that led up to it, but mainly the events that may have caused the "pop". We find some interesting similarities between markets today and markets back then – ones that go well beyond the recent price action. Overall, we can't help but have that déjà vu sensation, so much so that we believe there's a good chance that we have put the top on this very long-lasting bull market. Without the coronavirus, the market may have run for a while longer, but the coming viral economic disruption may well become the proverbial "straw that broke the camel's back" in what we view as an increasingly fragile market environment. Predicting whether we're "there yet" for market tops is fraught with danger – not to mention career risk – but even if the peak hasn't quite been formed, we doubt the upside from here is that large, particularly since COVID-19 could well be the catalyst for much slower global economic growth, as we reported in the analysis distributed earlier in February.

Whether the market bubble just popped again is of particular importance to "buy the dip" investors. Post March 10th of 2000, ***there were 31 months of market declines when "buy the dip" didn't work***. This could lead to a dramatic reassessment of investing strategy for many market participants.

Since the beginning of the year we've observed factor tilts reminiscent of late 1999 and early 2000 both in terms of direction (value getting killed) and magnitude (some of the widest monthly spreads we've ever seen). Anecdotally, the market has felt like it was in a "feeding frenzy", particularly in January and the first half of February, ever-more-wildly chasing the latest story without regard for the worth of the underlying company.

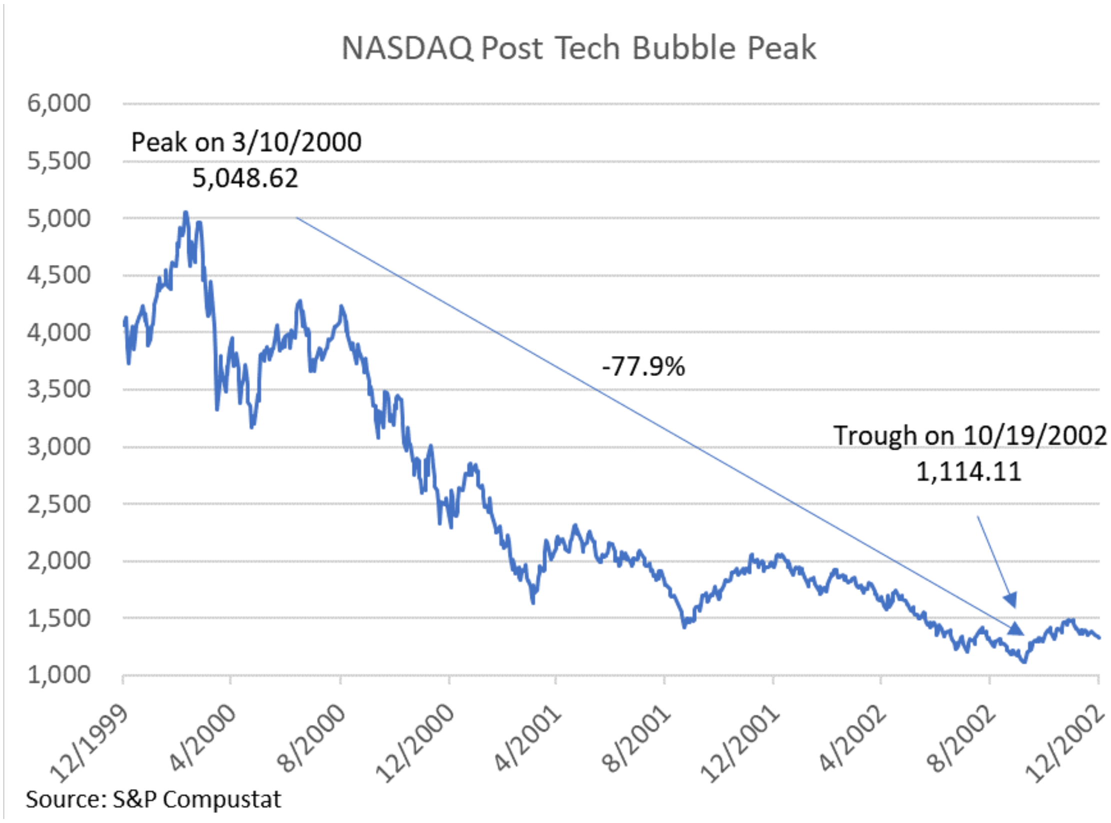
We've seen this movie before, and we didn't like the ending. From the end of 1999 to its peak on March 10, 2000, the NASDAQ rose 24.1%, while the S&P 500 dropped 5.8%. Watching the market back then had that same "feeding frenzy" feel. Factor spreads were similar to those observed since the first of this year. Then the wheels came off… Of course, not everything is exactly the same. The stark difference between Tech and non-Tech stocks that characterized the market in late 1999 and early 2000 has instead manifested in the difference between growth and value stocks today. This has been partly driven by differences in sector performance, but particularly with respect to factors. Markets are quite expensive today, just like they were back in early 2000, although we acknowledge that valuation itself is usually a lousy way to pick a market top. That said, a number of non-valuation signals are flashing today just like they did back then, so in our opinion it's worth looking back at the Tech Bubble burst to get some ideas on whether this is the beginning of a bubble burst.

Twenty Years Ago, Next Month

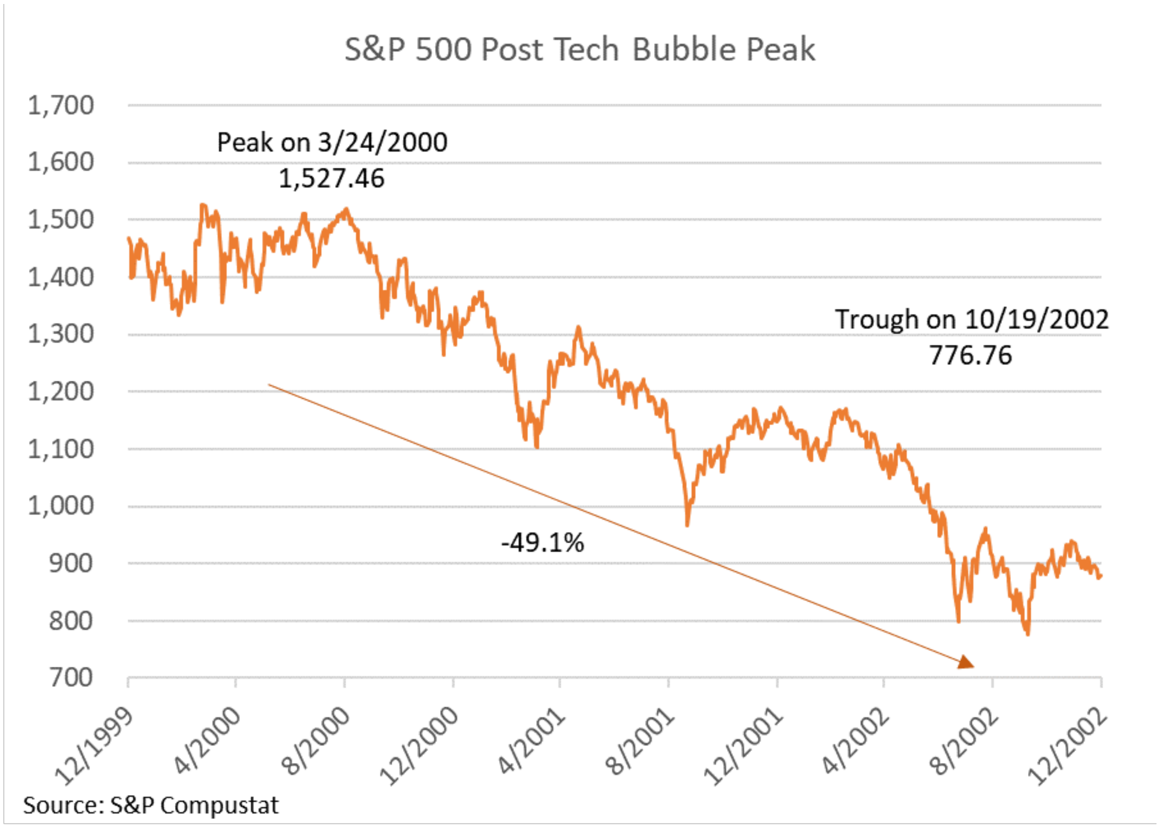
The peak of the Tech Bubble, at least with respect to NASDAQ, was on March 10, 2020 (the S&P peaked a little later, on March 24th). While much has been written about the similarities (or lack thereof) between valuations then and now, scant attention has been paid to what triggered the bubble's pop. Why was Friday, March 10th the top, and what was the news flow that caused the subsequent collapse?

We've done some investigation on the subject, and we've basically decided "nobody really knows", although it might have been concerns about the global economy (with Japan being an initial trigger). And although it is quite difficult to predict the next burst, we are watching the coronavirus and economic developments in Asia quite closely (and the news isn't good).

For NASDAQ, the collapse was quite severe. From the peak on March 10, 2000, NASDAQ dropped 51% into the end of the year, and a full 77.9% before the bottom on October 9, 2002 – some 31 months later. For all the "buy the dippers" out here, note how many dips "didn't work" on this downslide in the chart below.



The S&P 500 (shown below) took a somewhat different path, peaking a little later (March 24, 2000), and initially declining much more slowly. There were several reasons for this. First, at the peak, the NASDAQ was at a huge valuation premium to the S&P 500, so there was a lot more air to be let out of the balloon. Second, the U.S. economy did quite well throughout 2000, so while the S&P declined slightly, it wasn't until the economy deteriorated that the market followed suit. Still, the decline was quite significant, as the market dropped some 49.1% before the bottom, also on October 9, 2002.



Trading results during the first week of the "pop" are shown below. During the first two days after the top, both NASDAQ and the S&P 500 dropped in sync with markets around the world, possibly due to the announcement that Japan had entered into a recession, with NASDAQ leading the way down. NASDAQ continued its plunge on Wednesday, but the S&P actually recovered somewhat as investors strongly rotated out of Tech. Thursday and Friday saw a recovery for both indices (the proverbial "dead cat bounce", particularly for NASDAQ, as it never regained its previous peak). Amazingly, for the week NASDAQ was down 5%, and the S&P 500 was up 5% – quite the rotation!

Date (in 2000)	NASDAQ	S&P 500	Comment
Monday, March 13	-2.8%	-0.8%	Global Selloff
Tuesday, March 14	-4.1%	-1.8%	Global Selloff
Wednesday, March 15	-2.6%	2.4%	Rotation out of Tech
Thursday, March 16	2.9%	4.8%	Recovery and Rotation
Friday, March 17	1.7%	0.4%	More dead cat bounce
Weekly Move	-5.0%	5.0%	That's Rotation!

Contrast the table above with recent trading in response to the coronavirus scare (among other issues, we would argue). Rather than a dichotomy in performance, NASDAQ and the S&P 500 have moved nearly in lock-step. This is partly due to the significant valuation differential back in 2000, whereas both indices have reached quite lofty valuations in the recent bull market. Following Friday's (2/28/2020) trading, since the peak on February 19th, 2020, the market has recorded its fastest correction in history.

Date (in 2020)	NASDAQ	S&P 500	Comment
Thursday, Feb 20	-0.7%	-0.4%	A minor decline
Friday, Feb 21	-1.8%	-1.1%	A bigger selloff
Monday, Feb 24	-3.7%	-3.4%	Getting serious
Tuesday, Feb 25	-2.8%	-3.0%	Definitely serious
Wednesday, Feb 26	0.2%	-0.4%	An attempt at recovery
Thursday, Feb 27	-4.6%	-4.4%	A bit of panic
Friday, Feb 28	0.0%	-0.8%	Fed help hope (we'll see…)
Decline from Peak	-12.7%	-12.8%	Fastest-ever correction

Is 2000 a Useful Guide to "Post-Correction" 2020? What Caused the Tech Bubble to Pop?

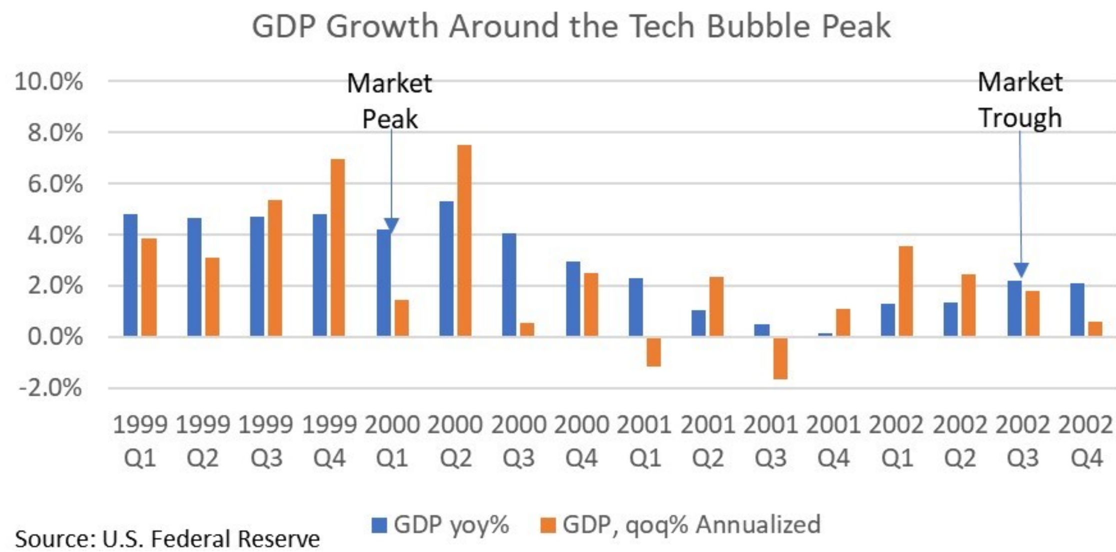
1) Was it the Fed? (probably not)

A potential culprit in 2000 was the Fed, but by early 2000 rising Fed rates were nothing new – there were 3 quarter-point increases in 1999 (Jun 30, Aug 24 and Nov 16) and three more in 2000 (Feb 2, Mar 21 and May 16 – the latter two in spite of the stock market declines). Even though Greenspan telegraphed future rate increases in testimony on February 17, 2000, and while rising rates did eventually cool the economy, there doesn't seem to be anything particularly coincident with early March that would have precipitated the stock market peak.

Comparing the past to the present, we don't think anybody (including ourselves) is predicting Fed rate increases in the foreseeable future. Indeed, any hint at market weakness brings calls for further Fed rate cuts and more liquidity injections, and (so far) the equity market has promptly rallied in response. It is worth pointing out, however, that rate cuts don't always inspire market rallies, as the market continued its declines from mid-2000 to mid-2002, all while the Fed funds rate steadily declined from 6.50% to 1.75%.

2) Was it the U.S. Economy? (no)

Like today, the U.S. economy was doing quite well at the market peak in 2000 – so well, that the Fed felt compelled to raise rates. Real year-over-year GDP growth had met or exceeded 4% in every quarter since Q2 1996, hitting 5.3% in Q2 of 2000. It then slowed over the next several quarters, but it was still 3.0% in Q4 of 2000 – so if the stock market was anticipating a decline (which the market is wont to do), it was doing so with a considerable lead.



Note, however, that quarter-over-quarter growth was a "mere" 1.5% in Q1 of 2000. This was a bit of an anomaly, as Q1 was bracketed by two quarters of fantastic growth, but this little slowdown may have been enough to put investors on edge for any signs of a coming slowdown (again, not too dissimilar to today).

Contrast the GDP growth rates of 1999 and 2000 with GDP growth today. While 4%+ was the norm back then, since the financial crisis the US economy has hit 4% YOY growth only once (Q1 of 2015). Any gains from U.S. tax cuts have also been fleeting, and the most recent year-over-year GDP growth print of 2.3% for Q4 of 2019 is hardly anything to shout about, as it almost exactly equals to the average growth rate since 2010 (also 2.3%). All this said, first quarter 2020 GDP growth was flagged to be weak, even before COVID-19 became widely known, so perhaps there was a bit of fragility in today's market, too.

3) Was it the Global Economy? (maybe!)

While the U.S. economy was strong, news came out on Monday, March 13, 2000 that Japan had once again entered a recession, as the economy contracted at a 1.4% rate for Q4 1999. This (at least according to CNN) was the cause of a global equity sell-off, with NASDAQ dropping 280 basis points and the S&P 500 sliding 82 basis points on that day. The declines accelerated on Tuesday, March 14th, and while the S&P recovered somewhat on Wednesday, the NASDAQ continued downwards, resulting in a 3-day slide of some 9.2%. Sobering thoughts for anyone thinking they will be first out at the next bubble peak.

Given that foreign, particularly Japanese, economic issues were one potential trigger for the start of the sell-off, we find a touch of irony in Japan's recent announcement that (coronavirus-free) Q4 GDP growth widely missed all estimates and declined 1.6% qoq (a -6.3% annualized rate), this after barely growing (+0.1%) in Q3 of 2019. While much of this was due to an October sales tax hike, the addition of the coronavirus into the equation means that, in our opinion, Japan will almost certainly hit the definition of a recession in Q1. Markets, of course, didn't seem to care (much). After initially dropping well over 100 basis points, the Nikkei recovered to finish down 69 bps. While U.S. markets were closed for the holidays, both S&P and NASDAQ futures were indicating increases of around 30+ basis points post the announcement.

4) Was it Earnings? (well, eventually…)

One could argue that the Japanese GDP announcement in 1999 was a shot across the bow for earnings estimates, and it was the eventual earnings decline that justified the stock market rout. The US equity markets of 2000-2002 market consisted of two separate parts; the Tech Sector (Bubble), epitomized by the NASDAQ index, and everything else, for the S&P 500 is a useful proxy, even though it too had a Tech component.

Once the bubble burst, performance of Tech and non-Tech diverged considerably – from March 13, 2000 to the end of the year, NASDAQ was down 51.1%, while the S&P 500 was down just 4.6% and the Dow Jones Industrial Average was actually up 8.5%. If the strength in the "non-Tech" market seems weird to you, remember that the economy was still doing reasonably well, and interest rates were falling precipitously. While today this seems to be a recipe to "buy growth", back then it was the exact opposite.

The NASDAQ bubble was never about earnings or multiples – most of the ridiculously-valued internet companies didn't have earnings anyway, so multiples really weren't relevant. Instead, the Tech Bubble was driven by faith that earnings would eventually come (much like a many of the hot stocks today), and perhaps the prospect of a global slowdown was enough to shake that faith and to the bubble to burst.

While 2000 is thought of as the "year the bubble burst", performance of equity markets, excluding Technology, wasn't that terrible. "Terrible" came later, and the contagion spread as earnings across sectors eventually rolled over, dragging the non-Tech market down as well. S&P500 trailing 12-month earnings slid from nearly $54 in Q3 2000 to just under $25 in Q1 of 2002. This proved to be a drag on the market overall, and the S&P500, after its initial resilience, finally bottomed on October 9, 2002, some 49.1% below its previous peak on March 24, 2000 (two weeks after NASDAQ peaked).

Did Analysts Predict It? (in a word, "no")

While you can always find a person or two who claim to have "predicted the Tech bubble peak", these claims tend to be dubious. If the market finally rolls over in 2021, will we give credit to the people who have been predicting it since 2016?

For the most part, analysts were behind the curve, and we couldn't find one prominent call that coincided with the March 10, 2000, market peak. There were, however, some notable calls throughout the year. For example, one of the first analysts to downgrade the semiconductor sector was Jon Joseph of Salomon Smith Barney, who went from "overweight" to "neutral" on July 5, 2000 – this prompting a one-day 9.3% drop in the Philadelphia Stock Exchanges' Semiconductor Index (SOXX). So controversial was this call, and such was the mania at the time, that Mr. Joseph received death threats – prompting his employer to hire a body bodyguard for the San Francisco research floor.

Was it Buyer Exhaustion? (perhaps)

Another "2000 Bubble Trigger" theory we found was simple "buyer exhaustion". This is much more of a behavioral theory, and the argument is essentially that everyone who could have bought the market did, and then there were no additional marginal buyers – hence the only direction for the market to go was down. In spite of our quantitative bent, we find this theory somewhat attractive, as investor frenzy certainly accelerated throughout 1999 and into early 2000 – at which point just about everybody seemed to be fully “in the market”. Back then it was taxi drivers with the hot stock tips, whereas today our neighborhood restaurant bartender can’t seem to resist touting AMD every time we visit (if I hear “5G” one more time…).

There was also no shortage of hyped business news around that time. The America Online / Time Warner merger was announced on January 10, 2000, possibly helping to fuel the market’s final melt-up (the closest parallel we could find today is Tesla’s recent price action, or the frenzy around the latest “trillion dollar stock”). On March 15, 2000, Yahoo and eBay ended merger talks, and while the Nasdaq fell 2.6% the S&P actually rose 2.4% as investors rotated away from the Technology sector. “Rotation”, however, soon succumbed to “sale” and while the S&P held up much better than NASDAQ, it reached its peak on March 24, 2000.

Looking at the parallels to today, a lack of buyer exhaustion may be one reason this market just keeps going. The Fed has pumped so much liquidity into the market, and there is just so much cash out there (just look at the level of bank deposits in M2 relative to history, for example).

Did It Just Pop Again?

This, of course, is the question of the day – do we buy this dip, or are we in for an extended period of “dips not working” as happened over a 31-month stretch post the popping of the Tech Bubble?. We would note the following similarities to early 2000:

- Market valuations, on many measures, are stretched.
- The few months before the top felt like a feeding frenzy
- Factor spreads have blown out
- Hot stocks are really hot, g. Tesla or any of the “trillion $ club”.
- “The Internet is changing everything” vs. “5G is changing everything”
- Japan’s economy is on the ropes

Add to this a new variable, a potential coronavirus pandemic, and we believe that the potential for a very meaningful economic slowdown, if not an outright recession, is very much in the cards. China’s position in the global economy is much larger than it was during the SARS outbreak in 2003 – and the economic impacts of COVID-19 may well be much larger than those for SARS (and it’s not just Mainland China – Singapore, Hong Kong and Japan are all on the edge of their own epidemics). Our initial coronavirus report had “containment failure” as our base case, and while we were below consensus, we will also admit that the speed the virus has moved across international boundaries is even faster than we expected. Hence, we believe the initial consensus forecasts of a V-shaped recovery is overly optimistic. Recently, others have joined this view. All this points to a strong likelihood, in our view, that we have just put the top on a very long and strong bull market.

Finally, while everyone (including us) has made various predictions for both Chinese and global growth going forward, we find it difficult to fathom how much the economy might have slowed given how empty the streets are, even in places like Shanghai, which is well outside the virus-center of Hubei. With hard data difficult to come by, we have been fascinated by the snippets of real life available on social media, one example of which is “Andy’s Shanghai Life”, which can be found here: https://www.shine.cn/andyboreham/. Some of the videos are mesmerizing. While watching, ask yourself how “nearly all the shops are shut” correlates with “growth this quarter will slow from 6% to 4.5%”.

Disclosure:

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