Navigating the Markets

2020 Finally in the Rearview

Aletheia Private Client Group's 2020 Year-End Letter

Letter in brief…

- What an investor pays for an asset—it's starting valuation—matters a lot. If price matters, then the relationship between risk and return cannot be a static, set and forget, concept.
- Index funds and ETFs ("passive investments") have attracted the lion share of flows into equities over the last decade presenting significant risks to complacent investors and markets.
- In the same breath, the global market is full of potential, yet uniquely fragile and challenging; we conclude it's imperative to utilize active management and pay attention to risk
- Finally, and we will touch on this in more in our next letter, we believe we are in the early innings of a transformative era of Innovation, driven by the convergence and application of technological advancement. We must continuously seek ways to invest in these opportunities.

Aletheia Private Client Group of Oppenheimer & Co. Inc.
One North Brentwood Boulevard
Suite 600
St. Louis, MO 63105
(800) 782 6217 Toll Free
(314) 863 1809 Fax
oppenheimer.com

No amount of hyperbole can do justice to the curve ball thrown at the human race in 2020. While not completely in the clear, with vaccinations underway, it looks like we can see light at the end of the tunnel. To everyone—clients, families and friends—particularly those who have experienced loss or hardship due to the pandemic, we hope 2021 is a happy and healthy year.

Coronavirus Meets Stock Valuations

> *The one reality that you can never change is that a higher-priced asset will produce a lower return than a lower-priced asset. You can't have your cake and eat it. You can enjoy it now, or you can enjoy it steadily in the distant future, but not both – and the price we pay for this market going ever higher is a lower 10-year return from the peak.*
>
> *– Jeremy Grantham, November 12, 2020*
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> *…notice that it took two cycles, not just one, to fully dissipate the valuation extremes observed at the 2000 market peak. It's instructive to observe that the total return of the S&P 500 lagged Treasury bills for the full period from May 1995 to March 2009, despite two intervening bubbles. Such long, interesting trips to nowhere typically result from elevated starting valuations, depressed ending valuations, or some combination of both. Given current extremes, that's exactly what I believe passive investors should expect."*
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> *– John Hussman, January 2021*

The rather sober quotes above refer to the starting price paid for an asset and the simple math of future returns. At the present moment, this concept doesn't appear to be on the mind of too many investors. We won't attempt any simple explanations for this, but we do know that COVID-19 probably pulled forward years of growth in technology. Much of what we witnessed in 2020—work and workouts from home, video calls, etc.—are viewed as things that would have become widely adopted, eventually, before COVID forced us to adopt these things in a highly compressed period. Catching almost everyone off guard, the stock market reflected that adoption with blinding speed. For instance, as of year-end;

- Tech stocks were worth more than the entire European stock market

- The market cap of Apple exceeded the entire Russell 2000 and Tesla's market cap equals $1.5M for every car sold versus $9,000 for GM.
- The 25% concentration of the top 5 stocks in the S&P 500 is the highest in its history, and collectively technology stocks equal ~40% of the total Index[1]

Is the Market Getting This 100% Right?

While recent market behavior might defy easy explanation, there is general acceptance that lower long-term economic growth, stubbornly low productivity and historically low interest rates are contributing significantly to the huge premium being paid for growth stocks. After all, Apple stock went up 50% in 2020 mostly due to multiple expansion not earnings growth. So, do investors decide to turn down the heat on technology as COVID becomes a less dominant influence and life slowly returns to normal in the next year or two? Put differently, while these long-term trends are very real, what appears to be a permanent adoption of Peloton rides at home, Zoom meetings and higher than normal e-commerce, will presumably revert to a more normal, sustainable growth trend.

At what point do you call it a bubble? We rely on a variety of valuation indicators as a guidepost but one of the most reliable is the "Buffett indicator" or total stock market capitalization to GDP, which has broken through its all-time-high set in 2000. While Growth stocks have been quite expensive for several years now, seasoned investors are frequently at pains to remind us that there is more to an investment bubble than elevated valuations. A case can be made for classic characteristics of a bubble: astronomical valuations, explosive price increases, record equity issuance, and extremely speculative investor behavior. Nevertheless, expensive markets might be a poor investment signal on a forward-looking basis, but not a bubble.

Until this year, the post-Global Financial Crisis 10-yr bull market had been notable for how boring it had been. Certainly the acronym "FAANG+M"[2] will define the era (other tech stocks exploded in value too, but nothing comparable in scale), but compared to the frenzy for internet stocks in the late 1990s or, indeed, for flipping condos prior to 2008, there just didn't seem to be the type of mania that a bubble requires. Then 2020 happened! Too much time at home, stimulus checks, no sports to bet on…whatever the explanation, craziness was everywhere in 2020:

- Hertz rising 10x despite the fact that the company was bankrupt
- Kodak traded 80,000 shares at $2 and in days the stock rose to $33 on volume of 230 million shares after announcing it was going to start making chemicals to enable the production of Covid-19 treatments (today it's ~$8)
- More than 150 stocks with market caps >$250M have tripled (many 5-10x their March bottom)
- 480 IPOs (including an incredible 248 SPACs[3]) breaking the old record for new listings of 406 IPOs in 2000
- Retail call buying was almost 10x the volume of 2019

There are dozens more examples. In any case, it's really not important to get a bubble call right. What's important is to recognize when the risks far outweigh the returns.

Ultimately, a security is nothing more than a claim on some set of future cash flows an investor expects in hand over time. The higher the price an investor pays today for some amount of cash in the future, the lower the long-term return the investor can expect on that investment. Period.

Passive Investing 2020

The rise of the low fee index fund over 30+ years is fantastic. Index funds are a vast improvement over many of the mediocre high-fee, active mutual funds in existence. But we need to understand index funds for what they are and not for the product as marketed to investors.

Our uneasiness about the tidal wave of fund flows into indexing predates the Covid-19 bull market, but 2020 only served to make it a greater concern. We'll start with two quick observations. First, investing in an index fund is not a passive investment strategy and, for accuracy, our industry should cease using passive and indexing interchangeably. Here are two key reasons: (a) using market-cap weighted indexes like the S&P 500 Index as the principle anchor in equity oriented portfolios is a very active decision; (b) the dedicated flows into Index replication shapes the market itself. The committees who construct, modify and rebalance an index wield immense influence with zero concern for valuation or trading impact (see Tesla below). Trillion-dollar index/ETF providers, dominated by Vanguard and Blackrock, must replicate the index with theoretically zero friction. Now these same players, who also dominate the 401(k) industry, have successfully shifted the lion share of contributions to indexed target-date funds. While our comments focus primarily on the S&P 500, we extend the critique of the current passive universe to all indexed ETFs, regardless of

1 Source: Wall Street Journal.

2 "FAANG+M" represents the acronym for Facebook, Apple, Amazon, Netflix, Google, and Microsoft.

3 SPAC, Special Purpose Acquisition Company.

their weighting scheme, including a myriad of "smart beta" products. The impact of all of this on the market is worthy of its own white paper, but it cannot be dismissed.

Second, the common critique of indexing vs. active management usually boils down to a discussion of the fees investors pay and whether active is worth it. Don't be fooled, every corner of the financial services industry—including index funds!—survives on fees, which makes a debate strictly over fees just two sides "talking their book." Extensive academic work has been done on market efficiency, active share, etc., and it's much more complicated than the popular wisdom conveyed by the financial press. However, we won't let an ostensible bias or concern that we're talking our book, stop us from discussing risks when we see them.

Indexes are Amazing, But They Aren't Perfect

Will the "game-over" success of indexing be its ultimate undoing? Here are our two biggest concerns:

- **Diversification and valuation** – does the S&P 500 meet the do-no-harm test?
- **Cyclicality of returns** – active management is still relevant, despite being the industry punching-bag for the past decade

Where Are They Now?

10 LARGEST RUSSELL 1000 COMPANIES AS OF 3/31/2000[1]

	Price as of 3/31/2000	Price as of 9/30/2020	% Change
Cisco Systems	$77.31	$39.39	-49.1%
General Electric	$51.88	$6.23	-88.0%
Intel	$65.97	$51.78	-21.5%
Microsoft	$53.13	$210.33	295.9%
Exxon Mobil	$38.97	$34.33	-11.9%
IBM	$118.00	$121.67	3.1%
Citigroup	$449.06	$43.11	-90.4%
Lucent Technologies	$61.25	$2.34[2]	-96.2%
AT&T	$42.13	$28.51	-32.3%
Oracle	$39.03	$59.70	53.0%
Russell 1000	1536.33	3699.93	134.3%
S&P 500	1498.58	3363.00	124.4%

Data as of 9/30/2020.(1) Any securities referenced should not be considered a recommendation to purchase or sell a particular security. The past performance of these securities is no guarantee of future results. (2) Lucent merged with Alcatel on 11/30/2006. Closing price on 11/29/2006 was $2.34. Source: FactSet , and Renaissance / AMG.

It's fair to ask, "Will the largest companies today, still be the largest companies 10 years from now?" More importantly, "What small or mid cap stocks can I invest in today with the potential to become the Apple, Amazon and Facebook of the next decade?"

Assuming the future has been written has obvious risks. Historically only 2 to 3 of the top 10 stocks ranked by global market-cap remain in that list 10 years later. While we all lived through these slow, tectonic changes in leadership—Energy, Banks, Technology—only with hindsight does it become obvious how and why new businesses take over. The biggest difference today compared to the past is the leaders have never been this profitable or as large a share of total market capitalization.

In the real world, where it actually takes considerable time to build a company and wealth, investing success is measured by one thing only—the compounding of returns. Diversification, on the other hand, isn't about building wealth; rather, it is simply the acclaimed free lunch that keeps an investor in the game long-term by preventing unforeseen, wealth-destroying events from disrupting the miracle of compounding. Cheap, effective diversification is why the index was created in the first place.

If diversification is so important, does the large-cap Index of 2021 meet the standard? While the S&P 500 is often synonymous with the market, it represents ~20% of the world's financial assets. Indeed, it houses many of the finest businesses every conceived, but to overweight the S&P is a bet that it will always do better, no different than choosing an active manager to pick one slice of the market over another. If the goal is to own a little of everything in order to always own the winners, the S&P 500 (Russell 1000, etc.) has lost much of its effectiveness because it now has an unprecedented weight in just six stocks, which extends to a record concentration in technology generally (see prior FAANG+M reference). We will set aside whether fantastically successful tech companies can defy history to produce enough growth in their second or third decade of existence to justify a massive valuation premium and just say it's very hard. More important, however, is whether such concentration creates risks for investors who simply want to a) be diversified; b) gain access to the winners, whichever company or industry that happens to be long-term; (c) don't have the luxury of a long holding period (30+ years).

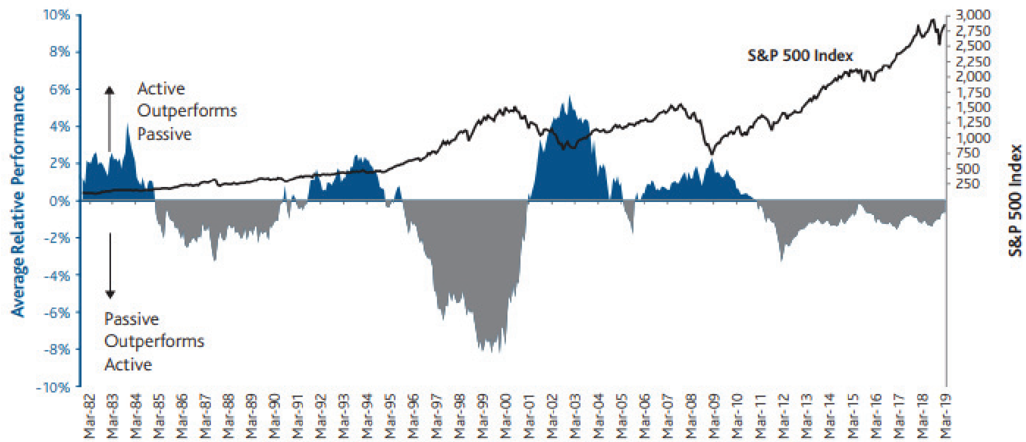
What if large tech stocks take a breather for a while and an industry like energy roars back to life? The global energy market is massive but as of Q4, with its current weight of 2.4% of the Index, down from 13% in 2009, it won't move the needle. The current combined weight of every Industrial, Basic Materials and Energy stock in the Index is only about 13%. Furthermore, it's not possible to rebalance the index even if desired. Who is going to buy the hundreds of billions of dollars of FAANG+M stocks required to be sold to accomplish a rebalance? It can't be done. Stock currently held by index funds combined with concentrated insider ownership leaves very little float available to actively trade. For example, if the FAANG+M stocks declined by just 10%, in order keep the return flat, the bottom 100 stocks in the S&P 500 would have to rise by a collective 90%. In laymen terms, this is a genuine liquidity concern, and the violently compressed downdraft in March 2020 proves it.

Index poster child: Tesla. We predict Tesla will define the story of the 2020 market. We love Tesla, it's an amazing company, and we all wish we'd bought it at virtually any point prior to 2020. There are multiple ways to look at Tesla's valuation yet, whether it's a per-car sold metric or a P/E of 1,200x, it's rich! In late December, the Company was added to the S&P 500 Index as the sixth largest holding with a market cap that has reached ~$800 billion – so valuation be damned, as an index investor, you own it now! If an index does not care about price when it buys, it will not care about price when it sells.

Cyclicality of Returns

The Performance of Active and Passive Managers Has Been Cyclical

Difference in Average Performance Between Large-Cap Active and Passive Funds

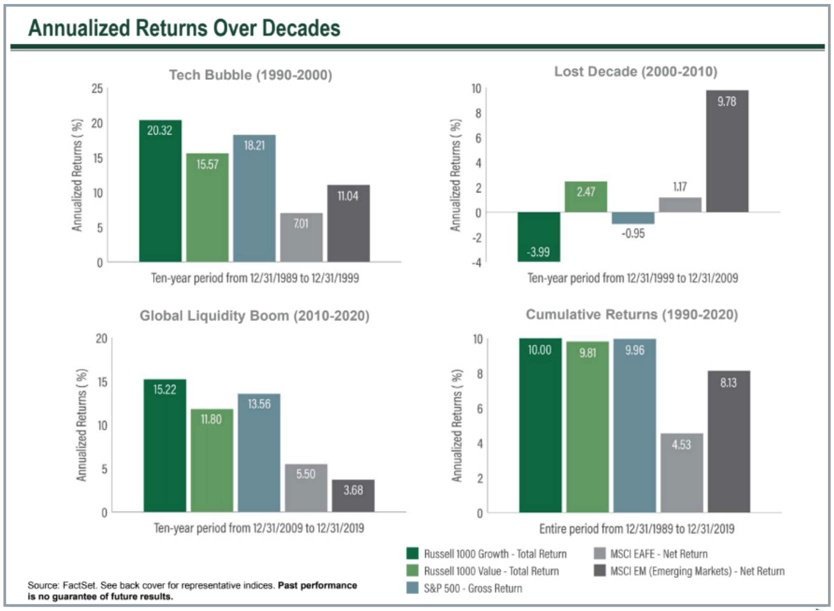


Source: Morningstar Direct, Baron Capital.
The analysis is based on monthly rolling 3-year returns for the period 3/31/1982 to 3/31/2019.
The performance of active funds is calculated as the average 3-year performance of all share classes of open-end non-index funds in Morningstar's US Fund Large Growth, US Fund Large Value, and US Fund Large Blend categories.
The performance of passive funds is calculated as the average 3-year performance of all share classes of open-end index funds in Morningstar's US Fund Large Growth, US Fund Large Value, and US Fund Large Blend categories.

Investing reminds us that we aren't as rational as we might think. An investment in the S&P 500 Index fund in the early 1990's through today has been a tumultuous, but ultimately satisfying journey. To recap, this period included a 5-yr stretch from '95-99 that produced the best run in the history of equity markets—resulting in truly obscene overvaluation—followed by the very unpleasant decade of 2000-2009 with two catastrophic declines (notably, during this period, value stocks and emerging markets dominated returns). Finally, in the last ten years, the Index outperformed all other equity categories globally by a huge margin.

Bottom line: returns and styles are highly cyclical and the shifting of money between active and passive has a cyclical nature too. In investing, time is your best friend, maybe your only friend; after a large, painful decline, do not forget just how much time is truly required.

To be clear, we believe the most effective portfolio construction methodology typically includes both active and indexed strategies. However, it is also our belief that **the allocation in a portfolio to active and indexed strategies is significantly influenced by current market valuations and long-term return expectations.** In March 2009, with the S&P 500 trading at 9x EPS, investors definitely wanted to own "the market." Load up on the index—i.e., cheap beta—with leverage if possible, and let it ride. January 2021 is not March 2009, and the next ten years simply won't be a repeat of the past ten. **We like equities in portfolios so this isn't a market call. We're just shouting from the rooftops that every investor in U.S. stocks today needs to be eyes wide open.**



Source: AMG

Quick Thought on Risk…
a Topic That Never Gets Old

This is the time of year when strategists and pundits make forecasts for the year ahead. We think it's a waste of time, but in theory it can be attempted when the markets are trading on something closer to a normalized basis. By any definition, we are not in normal times. Instead, in our minds, energy is best spent preparing for volatility, and assuming it will appear with a vengeance out of nowhere. If everyone is talking about a specific risk or risks, one can be assured the real risk is still unknown (it's not the bus you see that hits you).

What can we say about risk that might help us right now? The Quant world measures risk in many ways: Volatility, Skew, R-squared, Beta, Correlation, etc. The risk we and our clients care about most is **Drawdown Risk**—in other words, a decline—both permanent and temporary. Losses are conveniently measured in the same units (%) as returns, and it captures the cognitive threshold of pain that clients are willing to endure before calling it quits. Saying that realized volatility was 15% vs expected 8% is very different than a loss from the peak of 45% vs 24% (even though it's the same math). The worst witnessed drawdown for the U.S. Large Cap Equities was -84% on June 1932, when the 5-year standard deviation was 32%. Down 84% is clear; standard deviation of 32% is not. In 2018, the S&P declined -4%, but the December drawdown was -13%[4]. The calendar year return looks harmless, but by year-end, investors were pretty close to panicking, because of the sudden drawdown and volatility spike. So while the psychology of dealing with declines doesn't always fit neatly into a mean-variance calculation and a benchmark comparison, it is a significant behavioral risk that often ruins long-run investing.

By extension we get **Low Return Risk**, the environment we potentially face in coming years. Investors frequently fail to put low returns into the 'risk' category, because it seems benign compared to losses, and often ends up botching the risks vs returns balancing act. We believe low returns are a significant risk because an extended period of under-performance causes investors to abandon their previously selected strategies (asset allocation, sub-asset classes, or individual managers) at exactly the wrong time. These moves lock-in accumulated under-performance and encourage chasing an alternative, typically over-valued, solution. Such reactions create permanent damage to portfolios, the risk on which we all agree.

Closing Comments

Hopefully we've been clear. At a minimum, we believe parts of the market, predominantly very high-multiple growth stocks, along with trendy and speculative themes of the moment are either stretched, or even obscenely, overvalued. The challenge becomes, so what, because we never know the timing or the catalyst of a change. Instead, there is just a host of issues—interest rates, inflation, the U.S. dollar, the unintended consequences of Central Bank intervention, Asia vs. the West—which all "known unknowns," but none on their own prompting action. Again, what inevitably sets off the market is the plumbing—the parts of an infinitely complex system you can't actually see or measure, like liquidity. Here are some of things we hope will help us:

Think differently about growth

- What companies can be the Facebook/Amazon/Apple/Google/Microsoft/Netflix/Tesla of 2030?

4 Source: Bloomberg

- Tech is changing the world before our eyes. Seek out the most innovative and transformative companies whether small or large, public or private
- It's OK to pay up for growth, but reduce exposure to companies with huge multiple expansion not matched with earnings growth

Identify segments of the equity markets that look historically attractive on a valuation basis

- High-quality, underappreciated value along with emerging markets

Make portfolios more robust and resilient to reduce downside risk

- Equity long-short with successful hedging strategies
- Non-correlated and diversifying strategies with different return drivers or ones that might benefit from a shifting "macro" backdrop of interest rates, inflation, currencies and commodities
- High-quality, actively managed tax-free bond portfolios

2020 will be one for the history books.

"History happens at inflection points. In other words, the world appears normal until it's not." –anonymous

Respectfully yours,

The Aletheia Private Client Group

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The Standard & Poor's (S&P) 500 Index is an unmanaged index that tracks the performance of 500 widely held large-capitalization U.S. stocks. Russell 1000 Index (Russell 1000): Measures the performance of the 1,000 largest companies in the Russell 3000 Index. Frank Russell Co. ranks the US common stocks from largest to smallest market capitalization at each annual reconstitution period.

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Investors should consider an ETF's investment objective, risks, charges, and expenses carefully before investing. The prospectus, which contains this and other important information, is available from your Financial Advisor and should be read carefully before investing.

Investing in securities is speculative and entails risk, including potential loss of principal.

Diversification does not guarantee a profit nor protect against a loss.

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