



Investment Insights Monthly

From The Desk of Bill Hornbarger, Chief Investment Officer

February 2021



Bubble Talk

“The key to making money in stocks is not to get scared out of them.”

– Peter Lynch (b. 1944), American investor, mutual fund manager, and philanthropist

In the financial markets, a bubble is defined as a rapid escalation in the value of an asset that exceeds its intrinsic value. Bubbles are characterized by “irrational exuberance,” often drawing in less-educated investors with talk of “this time it’s different.” Bubbles are usually only identified after the fact and after they have been “popped,” resulting in a significant price decline.

The strong rebound in equity prices since the pandemic-induced crash in March and the string of new highs in several of the more widely followed averages, coupled with the activity in Bitcoin and, more recently, the so-called meme stocks in general and GameStop in particular, have increased

fears of a bubble among some investors. According to Google Trends, search interest in the term “stock market bubble” is at its highest level since 2004 (first data available).

Are we in a bubble? As we noted previously, one of the characteristics of the bubble is that it is usually identified after the fact. Instead of attempting to answer the bubble question, let’s look at some historical measures of valuation for the equity market and where we stand today. For the purposes of this discussion we will focus our attention on the S&P 500.

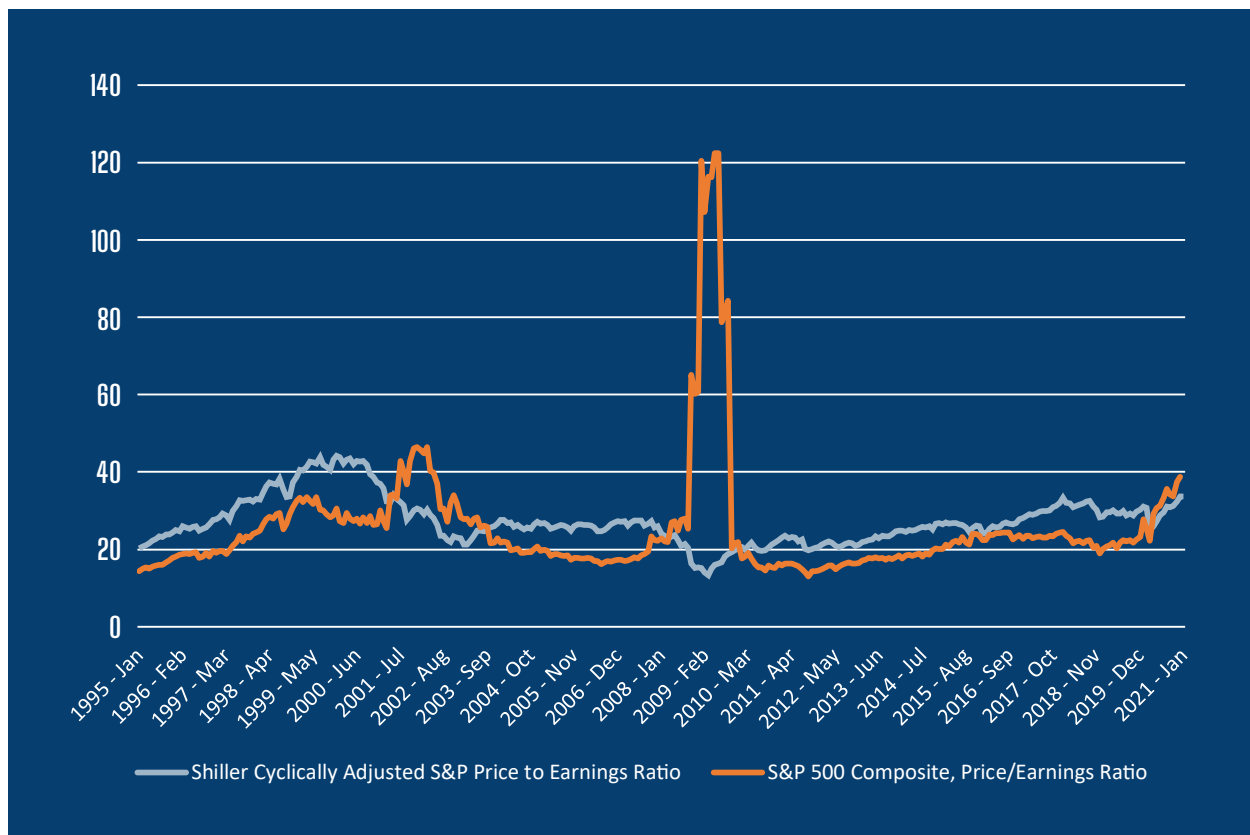


The most common metric used in valuing an equity or equity index is the price earnings (PE) ratio. It simply divides the current price level by four quarters' worth of earnings, either on a trailing or projected basis. Price earnings ratios are dynamic, changing with investor confidence, economic conditions, and interest rates and vary industry to industry and sector to sector. For example, growth stocks typically trade at a higher multiple to earnings than value stocks, as investors tend to be willing to pay a higher price (multiple) for companies growing their earnings at a higher rate. Earnings and earnings projections can also be somewhat volatile, with a good example being 2020 and the impact of the coronavirus on economic activity and earnings across most industries.

When earnings collapse, PE ratios can look inflated for a period. One of the ways investors try to reduce the short-term variability this has on PE ratios is using a Cyclically Adjusted Price Earnings (CAPE) ratio. It is defined as price divided by the average of 10 years of earnings (moving average), adjusted for inflation. While the CAPE isn't perfect either, looking at both can give a quick historical perspective on market levels.

Currently, even though the S&P 500 is at/near record high levels, both PE measures are below their peak readings (Chart 1). Nominal PEs were higher in 2009 when earnings collapsed more than prices during the Global Financial Crisis, and the CAPE was higher in the 1999-2000 period when tech stocks were booming.

Chart 1. S&P 500 Price/Earnings Ratios
1995 to Present



Source: Haver Analytics



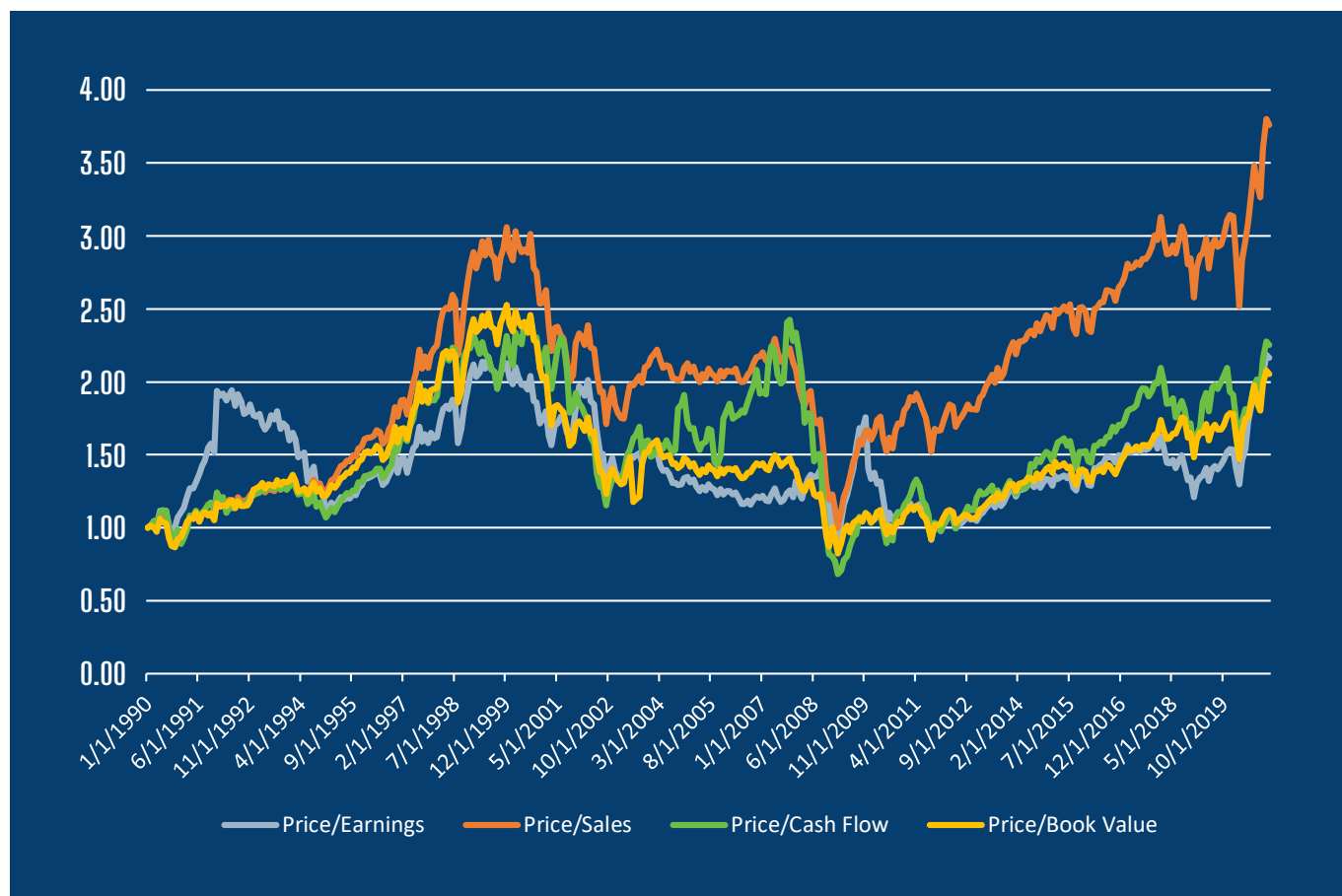
Several other valuation metrics for equities include price to book value (market value to net assets), price to sales (sales or revenue multiple), and price to cash flow (market value to operating cash flow). These measures can be less volatile than PE ratios and can also provide important insights on a company or sector's valuation (Chart 2). If one wanted to smooth out the variability in any one of these individual factors, they might combine them and create a single time series for review. A simple, equally

weighted index of these four factors shows that it would also be trading at record-high valuation levels (Chart 3).

One other popular metric, often called the Buffet indicator, compares aggregate market capitalization to a country's GDP. To maintain consistency, we have used just the total market cap of the S&P 500 compared to GDP and are showing a longer term (50 year) history (Chart 4).

Chart 2. S&P 500 Valuation Metrics

January 1990=1

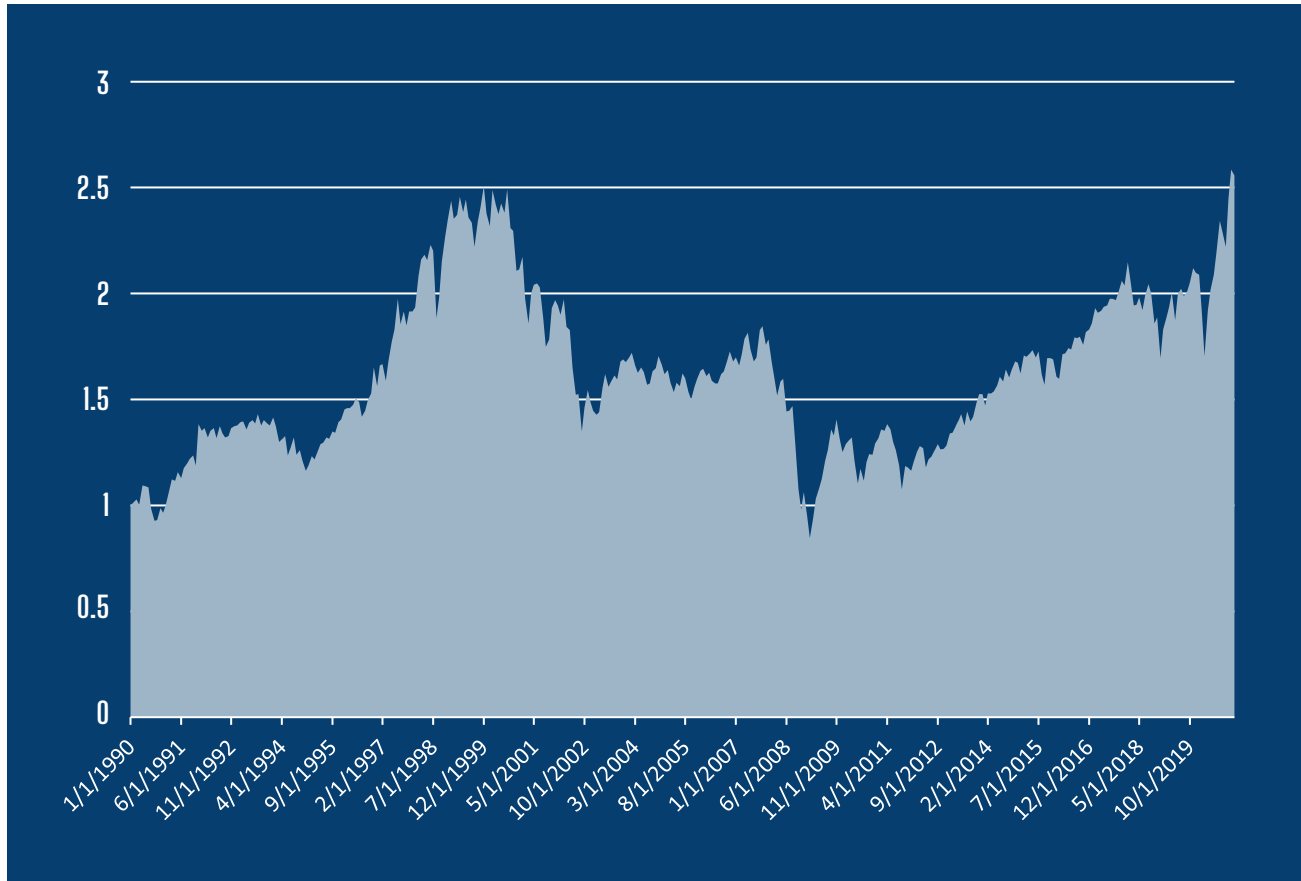


Source: Bloomberg, BFE calculations



Chart 3. Four Factors - P/E, P/S, P/CF, P/B

January 1990=1



Source: Bloomberg, BFE calculations

By just about any metric chosen, equities currently trade at or near record-valuation levels relative to their own history. It is important to keep in mind the evolution of the markets over the past several decades. There have been changes in monetary policy and its transparency, a period of steadily declining bond yields, and changes in the underlying indices. For example, tech stocks currently have the largest weighting in the S&P 500 at 28% (think of firms such as Facebook, Apple, Microsoft, Amazon, and very recently Tesla) and the sector tends to have higher valuation multiples than many other sectors. This weighting has changed dramatically over the years. Travel back 20-30 years or longer and one will find fewer tech companies and more emphasis on other sectors.

It is also worth noting that prior to 2008, the Fed funds target rate had never been at zero and at that time quantitative easing was launched in the U.S. The Fed's target rate has been below inflation for most of the past decade and nominal cash and bond yields have been at "low" levels. This has increased interest in other asset classes such as stocks. That interest (and trading volume) has increased as low rates have perpetuated and the cost of trading stocks has fallen and is now at/near the zero bound for many investors. In our opinion, all these factors should result in higher valuations. The question is how high?

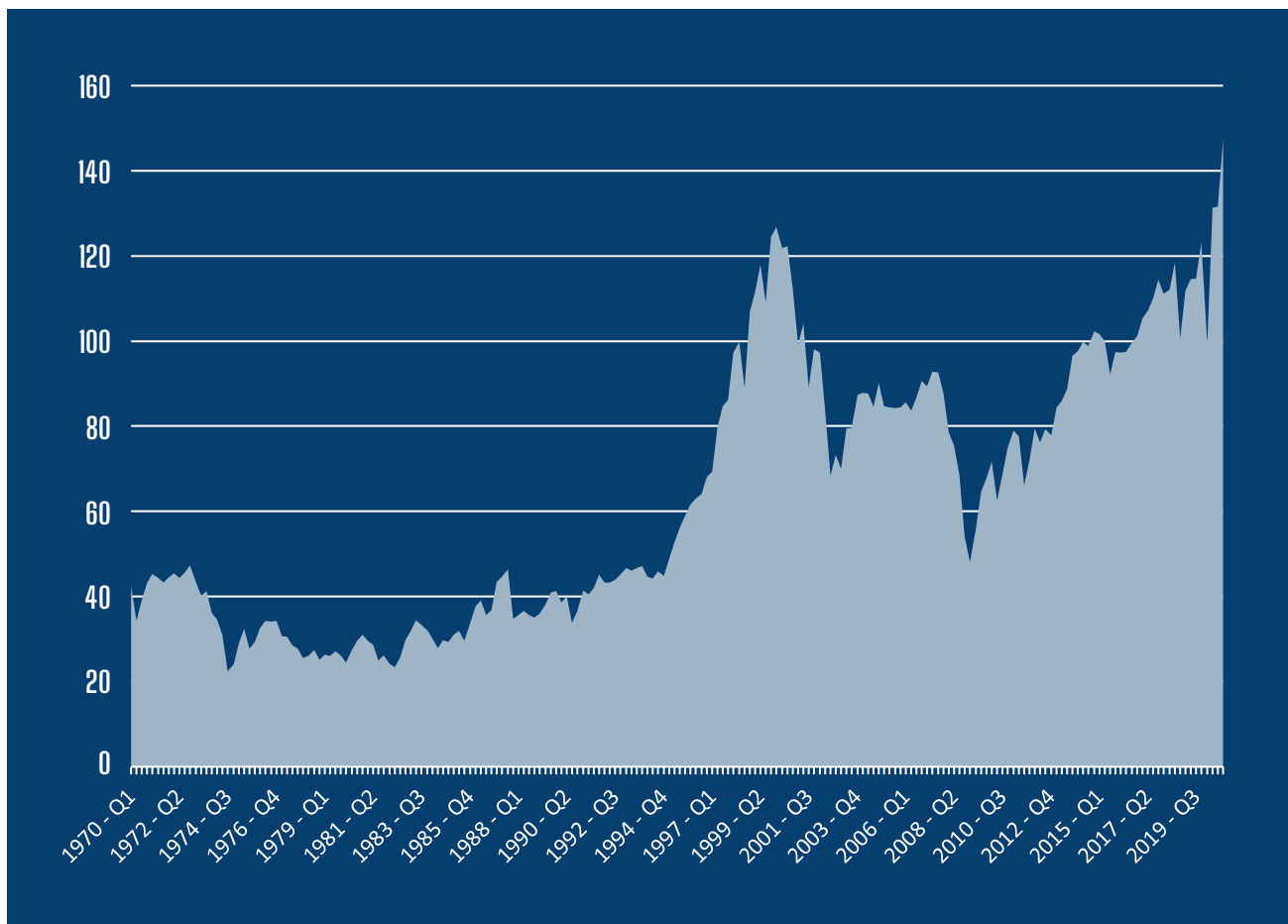


Investors don't make the decision to allocate to stocks in a vacuum. As they are building an asset allocation mix between stocks and bonds, they must choose how much risk they are willing to take balanced against how much return they desire. While bonds are less volatile than stocks, investors must also compare the potential returns from each to help make the allocation decision.

While stocks and bonds have different attributes and roles, one way to compare them is to use the earnings yield of equities and compare it to bond yields. The

earnings yield of equities is simply the inverse of the PE ratio. This metric is often used by asset allocators to determine relative values between asset classes. In the era of 0% Fed policy and low bonds yields, the earnings yield of equities has been consistently higher than that of bonds and remains so today (Chart 5). When investors are deciding how to allocate their assets, this is an important consideration. We should also note that the S&P 500 dividend yield remains higher than the 10-year Treasury, another factor that indicates on a relative basis stocks are less expensive than bonds.

Chart 4. S&P Market Cap/GDP

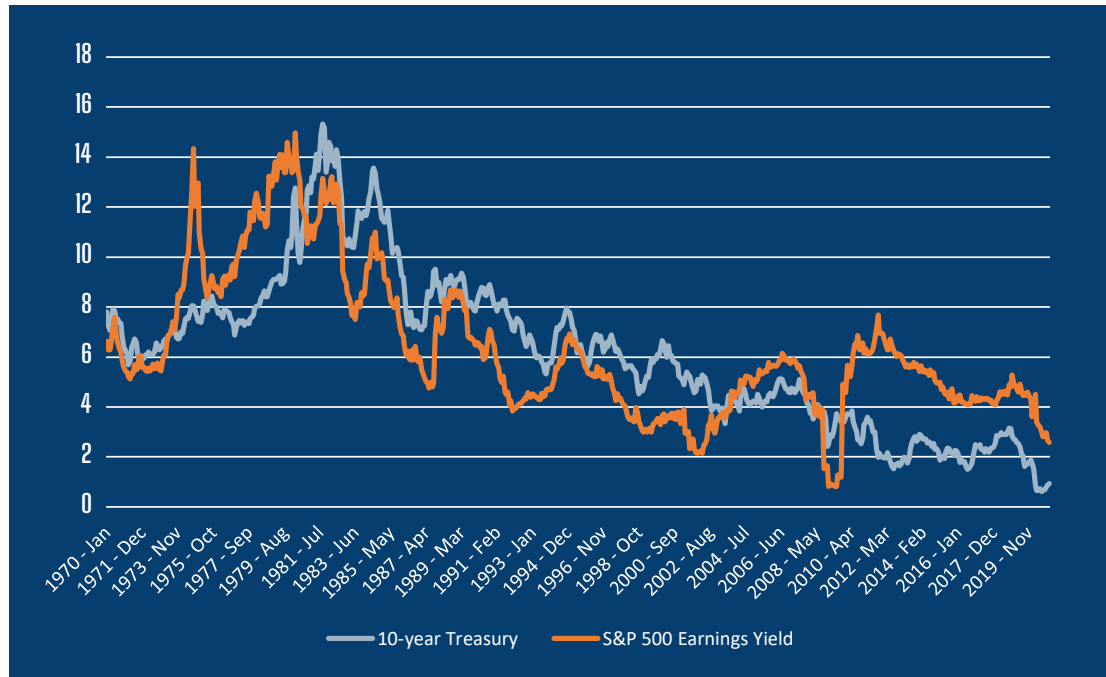


Source: Haver Analytics/BFE calculations



Chart 5. S&P 500 Earnings Yield vs. 10-Year Treasury Yield

1970 to Present



Source: Haver Analytics/BFE calculations

It must be acknowledged that equity valuations are elevated relative to history. That, however, is not the definition of a bubble and not the only factor an investor focuses on. Bubbles are often accompanied by both complacency and euphoria, neither of which appear to be prevalent today. The CBOE Volatility Index (VIX) is often referred to as the fear gauge. It hit a record high in the March 2020 bear market and has remained somewhat elevated since then, indicating a heightened level of anxiety. And while online chat rooms and social media have been full of comments on the meme stocks, the modern version of the proverbial shoeshine boy (maybe a coffee shop barista?) giving stock tips hasn't materialized in a meaningful way.

Instead of trying to time the next bubble and trade it, we would remind investors:

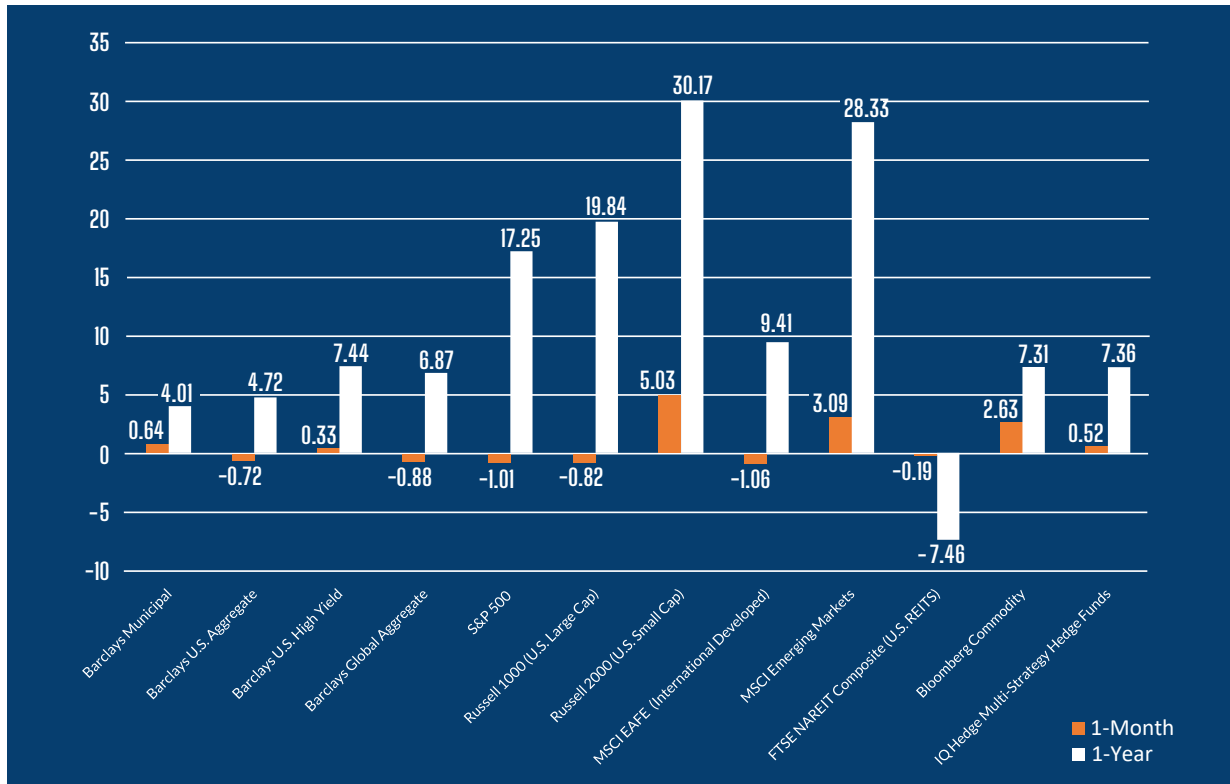
- Remain focused on investment goals.
- Understand that even with valuations extended, over the intermediate and longer-term, projected returns for equities are significantly better than those for fixed income.
- Acknowledge that to realize those higher projected equity returns, the tradeoff is more volatility in the form of corrections and periodic bear markets in stocks.
- Bear markets and corrections happen with some frequency. According to Yardeni Research, since 1928, there have been 21 bear markets (losses >20%) or roughly one every five years; 10% corrections happen more frequently, about once every two years.
- Now is an opportune time to revisit one's personal risk tolerance and asset allocation. The equity markets are at/near all-time highs, bond yields remain low (the equivalent of high bond prices), and liquidity is good. Better to contemplate changes when the markets are healthy than in a distressed market.

As always, your Benjamin F. Edwards advisor is there to help you with any questions you might have.



Asset Class Returns

Comparing Recent Month and Trailing One-Year Total Returns



Source: Morningstar

Fixed Income

- Intermediate- and long-maturity benchmark Treasury yields increased, and the yield curve steepened. The widely followed 10-year Treasury yield traded above 1% for the first time since last March.
- Municipal bonds were the best performing area of the fixed income markets. January is typically a strong month for municipal cash flows from interest payments and called and maturing bonds with January/July payment/maturity dates.

Equities

- Equity markets were mixed.
- Volatility increased late in the month and market participants focused on the action in several stocks widely discussed on social media platform Reddit.
- The Russell 2000 (small cap) continued its recent trend of outperformance relative to the Russell 1000 (large cap).

Real Assets

- Real estate generally traded sideways during the month.
- Commodities were generally higher in January, and oil was up over 7%/bbl on inflation concerns amid talk of better economic activity later this year and a weaker dollar.



| January 29, 2021 | MTD | QTD | YTD | 1-Year | 3-Year | 5-Year | 10-Year |
|---------------------------------------|--------|--------|--------|---------|---------|--------|---------|
| Fixed Income Indices | | | | | | | |
| Barclays U.S. Treasury Bill 1-3 Month | 0.01% | 0.01% | 0.01% | 0.42% | 1.49% | 1.13% | 0.59% |
| Barclays Municipal | 0.64% | 0.64% | 0.64% | 4.01% | 5.28% | 3.79% | 4.77% |
| Barclays U.S. Aggregate | -0.72% | -0.72% | -0.72% | 4.72% | 5.49% | 4.00% | 3.75% |
| Barclays U.S. High Yield | 0.33% | 0.33% | 0.33% | 7.44% | 6.14% | 9.01% | 6.60% |
| S&P/LSTA Leveraged Loan | 1.19% | 1.19% | 1.19% | 3.77% | 4.09% | 5.62% | 4.24% |
| Barclays Global Aggregate | -0.88% | -0.88% | -0.88% | 6.87% | 4.13% | 4.43% | 2.72% |
| JPM GBI EM Global Diversified | -1.07% | -1.07% | -1.07% | 2.92% | 1.15% | 6.42% | 1.54% |
| U.S. Equity Indices | | | | | | | |
| DJ Industrial Average | -1.95% | -1.95% | -1.95% | 8.54% | 7.12% | 15.47% | 12.43% |
| S&P 500 | -1.01% | -1.01% | -1.01% | 17.25% | 11.70% | 16.16% | 13.50% |
| NASDAQ Composite (Price) | 1.42% | 1.42% | 1.42% | 42.83% | 20.82% | 23.15% | 17.08% |
| Russell 1000 | -0.82% | -0.82% | -0.82% | 19.84% | 12.48% | 16.69% | 13.64% |
| Russell 1000 Growth | -0.74% | -0.74% | -0.74% | 34.46% | 19.92% | 22.22% | 16.83% |
| Russell 1000 Value | -0.92% | -0.92% | -0.92% | 4.09% | 4.41% | 10.71% | 10.15% |
| Russell Mid Cap | -0.26% | -0.26% | -0.26% | 17.73% | 10.14% | 14.88% | 12.15% |
| Russell 2500 | 2.45% | 2.45% | 2.45% | 25.48% | 11.11% | 16.11% | 12.09% |
| Russell 2000 | 5.03% | 5.03% | 5.03% | 30.17% | 11.11% | 16.50% | 11.78% |
| Russell 2000 Growth | 4.82% | 4.82% | 4.82% | 42.69% | 16.54% | 20.19% | 14.08% |
| Russell 2000 Value | 5.26% | 5.26% | 5.26% | 16.42% | 5.08% | 12.34% | 9.21% |
| Non-U.S. Equity Indices | | | | | | | |
| MSCI World | -0.97% | -0.97% | -0.97% | 16.04% | 8.90% | 13.99% | 10.13% |
| MSCI ACWI | -0.43% | -0.43% | -0.43% | 17.59% | 8.47% | 14.17% | 9.49% |
| MSCI ACWI Ex-U.S. | 0.23% | 0.23% | 0.23% | 14.45% | 3.57% | 11.05% | 5.32% |
| MSCI EAFE | -1.06% | -1.06% | -1.06% | 9.41% | 2.73% | 9.37% | 5.64% |
| MSCI EAFE Growth | -1.36% | -1.36% | -1.36% | 17.74% | 7.94% | 12.09% | 7.73% |
| MSCI EAFE Value | -0.77% | -0.77% | -0.77% | 0.78% | -2.63% | 6.45% | 3.42% |
| MSCI Europe | -1.44% | -1.44% | -1.44% | 7.08% | 1.87% | 8.58% | 5.38% |
| MSCI Japan | -1.00% | -1.00% | -1.00% | 15.33% | 4.52% | 10.70% | 6.68% |
| MSCI AC Asia | 2.24% | 2.24% | 2.24% | 28.11% | 6.39% | 14.16% | 7.19% |
| MSCI EAFE Small Cap | -0.36% | -0.36% | -0.36% | 15.68% | 3.39% | 11.54% | 8.10% |
| MSCI ACWI Ex-U.S. Small Cap | -0.17% | -0.17% | -0.17% | 18.15% | 3.27% | 11.51% | 6.35% |
| MSCI Emerging Markets | 3.09% | 3.09% | 3.09% | 28.33% | 4.81% | 15.45% | 4.60% |
| MSCI EM Asia | 4.36% | 4.36% | 4.36% | 40.70% | 8.09% | 17.56% | 7.54% |
| MSCI China | 7.36% | 7.36% | 7.36% | 46.24% | 7.53% | 20.12% | 8.67% |
| MSCI EM Eastern Europe | -2.02% | -2.02% | -2.02% | -9.51% | 0.82% | 13.81% | 0.27% |
| MSCI EM Latin America | -6.71% | -6.71% | -6.71% | -14.56% | -7.64% | 8.81% | -3.38% |
| MSCI EM Small Cap | 0.09% | 0.09% | 0.09% | 24.79% | 1.17% | 10.36% | 2.96% |
| MSCI Frontier Markets | 0.38% | 0.38% | 0.38% | 2.10% | -1.45% | 8.19% | 3.66% |
| Hedge Fund Indices | | | | | | | |
| IQ Hedge Long/Short | -0.12% | -0.12% | -0.12% | 13.04% | 5.35% | 0.07 | -- |
| IQ Hedge Multi-Strategy | 0.52% | 0.52% | 0.52% | 7.36% | 3.55% | 4.60% | 3.70% |
| Real Assets Indices | | | | | | | |
| FTSE NAREIT Composite | -0.19% | -0.19% | -0.19% | -7.46% | 6.08% | 7.47% | 8.55% |
| Alerian MLP | 5.84% | 5.84% | 5.84% | -20.04% | -12.67% | -2.61% | -2.04% |
| Bloomberg Commodity | 2.63% | 2.63% | 2.63% | 7.31% | -2.33% | 1.90% | -6.35% |
| S&P Global Infrastructure | -2.11% | -2.11% | -2.11% | -9.22% | 1.57% | 7.61% | 5.90% |
| Other | | | | | | | |
| Oil Price Brent Crude | 7.20% | 7.20% | 7.20% | -6.69% | -7.66% | 10.38% | -5.57% |
| Crypto/Bitcoin | 12.73% | 12.73% | 12.73% | -- | -- | -- | -- |
| CBOE Market Volatility (VIX) | 45.45% | 45.45% | 45.45% | 75.64% | 34.70% | 10.37% | 5.41% |

Source: Morningstar



The information provided is based on internal and external sources that are considered reliable; however, the accuracy of this information is not guaranteed. This piece is intended to provide accurate information regarding the subject matter discussed. Investing involves risk including the potential loss of principal. No investment strategy, including asset allocation and diversification, can guarantee a profit or protect against loss in periods of declining values. Past performance is no guarantee of future results. Indexes are unmanaged and investors are not able to invest directly into any index. This information does not constitute a solicitation or an offer to buy or sell any security mentioned.