

Monthly Investment Update

May 2022

April was an abysmal month for most risk assets, with the S&P 500 index (large US companies) declining nearly 9 percent bringing year-to-date losses for the index to almost 13 percent. In addition, unique to 2022 relative to historic norms, bonds have not offered much shelter from losses. The Bloomberg Barclays US Aggregate Bond index has declined 9 percent in 2022 after losing nearly 4 percent in April alone. Investors have been focused on the same risks for most of the year, and many of these risks are related and continue to evolve together.

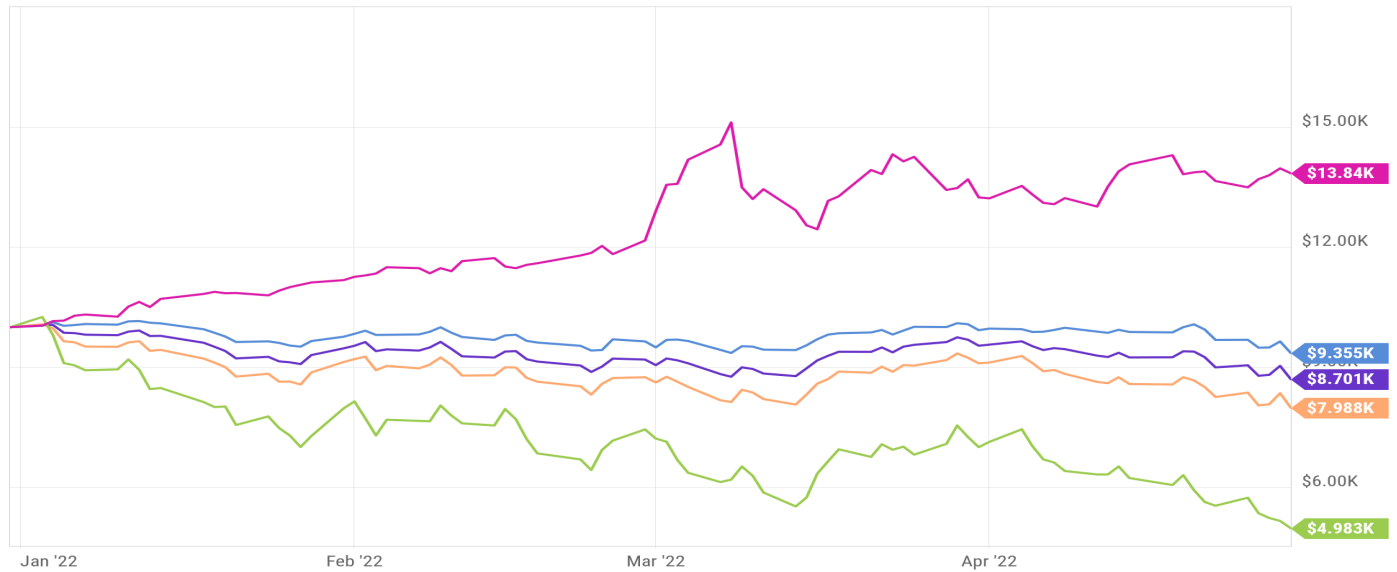
- **Valuation** – The sharp rally following the early days of the pandemic in March 2020 led to US stock and bond indices trading at above average valuations at the beginning of 2022 (higher than average price-to-earnings ratios for stocks, below average yields for bonds). A higher valuation starting point can leave market indices in a more precarious position should the outlook become cloudier (which it most certainly did).
- **Pandemic** – The COVID-19 pandemic is less of a concern for the average US citizen today, but it continues to create significant disruptions in other parts of the world, particularly China which introduced new lockdowns in April. These hangover effects from the pandemic continue to challenge global supply chains and are contributing to supply / demand imbalances and inflation.
- **Monetary Policy** – The US Federal Reserve has embarked on a path of normalizing monetary policy, which includes increases in short-term interest rates as well as a reduction in their holdings of fixed income securities. Both of these mechanisms serve to increase short and long-term interest rates, which is good for savers but bad for borrowers and tends to dampen demand for borrowing, spending, and investing.
- **Russia / Ukraine** – Beyond the horrific and shameful human toll of the war in Ukraine, the conflict has created additional supply gains in energy, materials, and agriculture that are contributing to higher costs for key inputs globally, in addition to the general anxiety around the potential for a larger conflict in Europe or beyond.
- **Inflation** – Supply chain disruptions, geopolitical conflicts, and aggressive stimulus during the pandemic have all led to supply / demand imbalances that are driving prices higher at a pace not seen in decades. Higher costs have already led to a steep decline in household sentiment, which could spill into a slowdown in spending.

Implications for Portfolio Management

These risks are obviously daunting, but they are just as ubiquitous and widely discussed in financial media and investor letters like this one. Both household and investor sentiment have become very negative relative to long-term averages, a phenomena which have often foreshadowed higher future returns in equity markets. We believe that these risks and resulting market volatility have created attractive opportunities in specific securities and asset classes, perhaps the most salient point that we could offer investors today is simply to focus on your long-term investing goals and attempt to look beyond shorter-term fluctuations.

2022 Has Been Challenging For Most Asset Classes

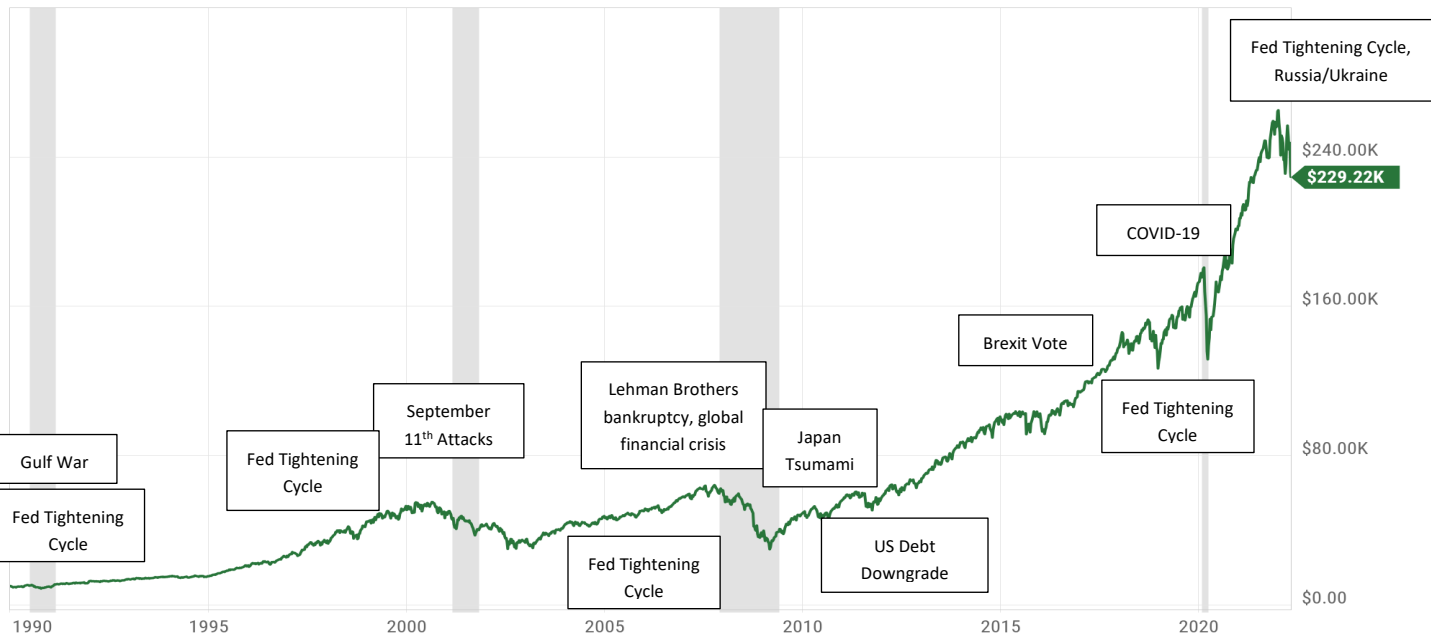
- SPDR® S&P 500 ETF Trust Total Return Growth
- iShares Russell 1000 Growth ETF Total Return Growth
- iShares Russell 1000 Value ETF Total Return Growth
- ARK Innovation ETF Total Return Growth
- iShares S&P GSCI Commodity-Indexed Trust Total Return Growth



Date Range: 12/31/2021 - 04/29/2022

Big Events are Common on the Long-Term Path for Growth

- S&P 500 Total Return Level Growth
- Hypothetical Growth of \$10,000**



Date Range: 12/29/1989 - 04/29/2022



Economy

- Labor
- Earnings
- Sentiment
- Inflation
- Financial Conditions



Valuations

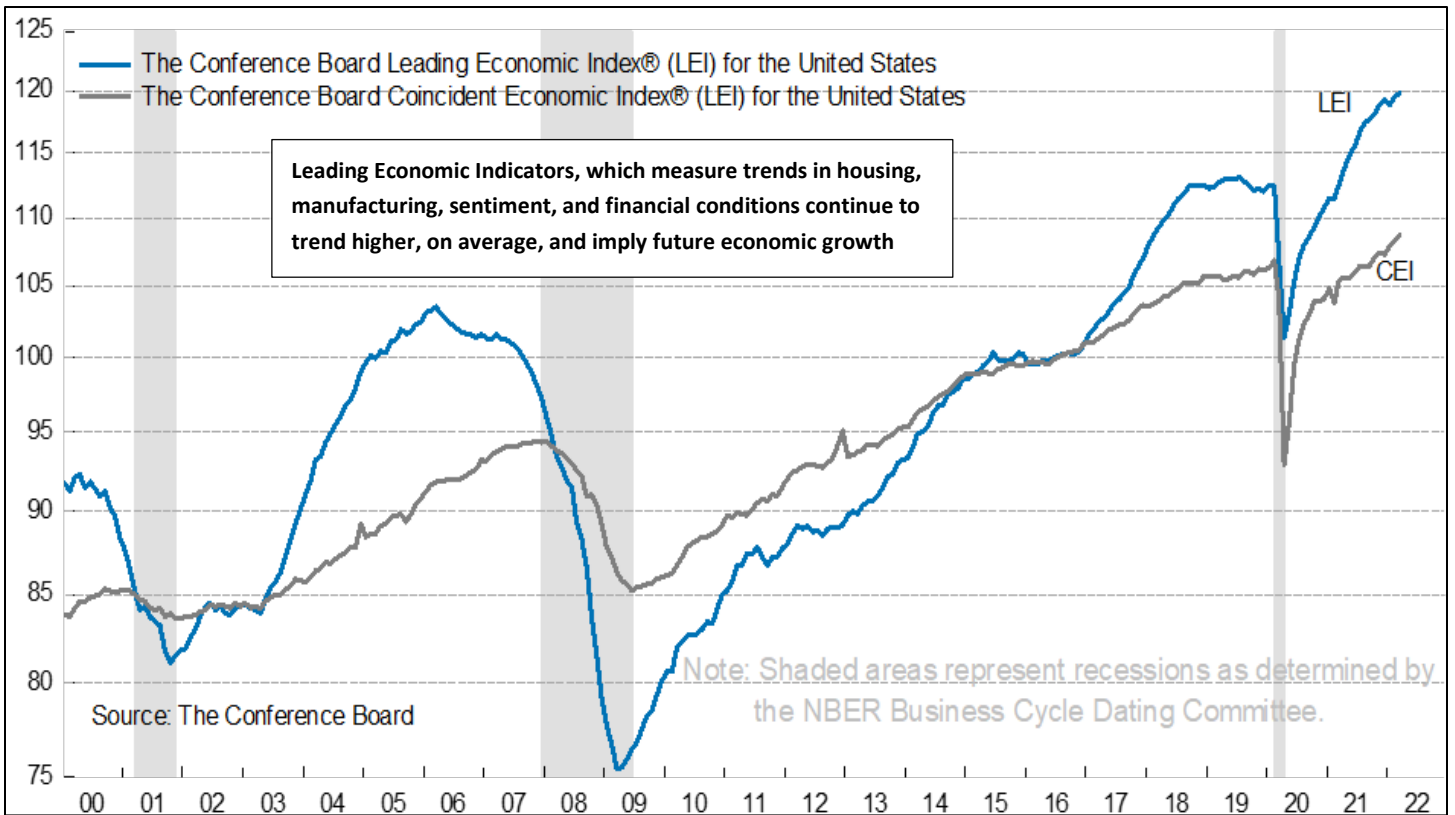
- Equity
- Credit



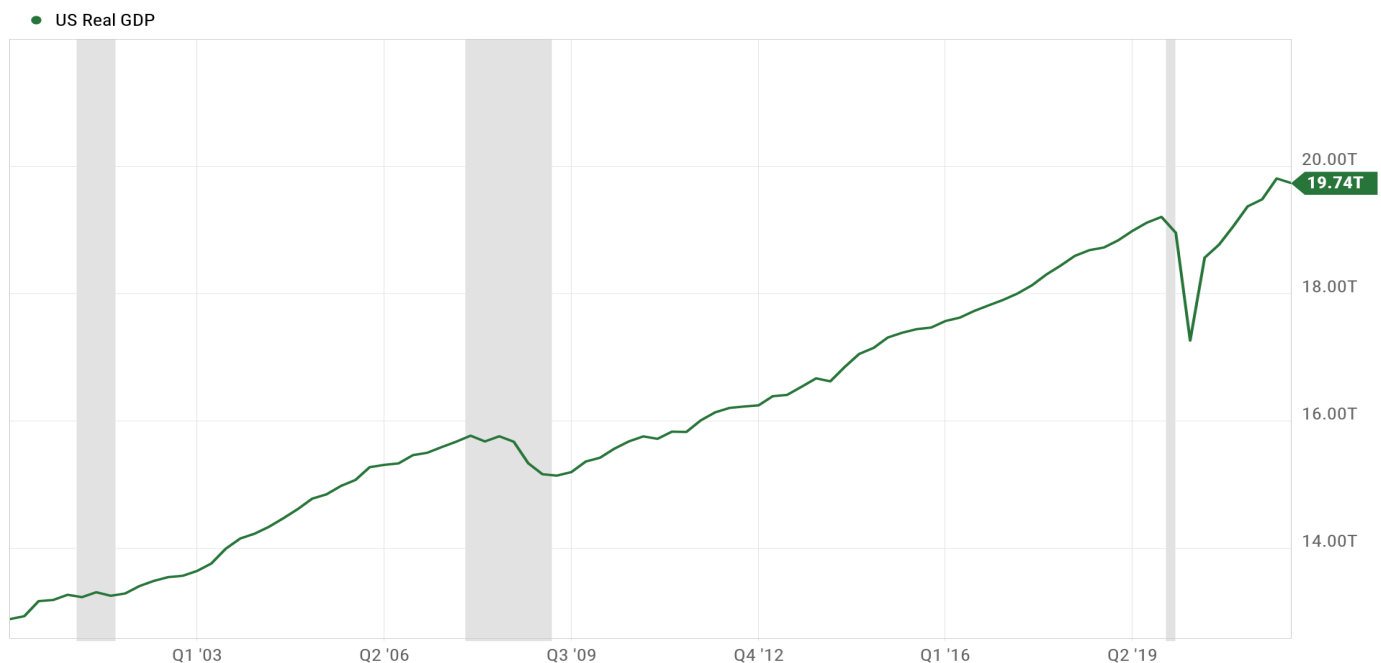
Technical

- Trend
- Sentiment

- The US economy remains on solid footing despite inflation.
- The labor market is robust but running out of room for significant advancement from here.
- Higher food, energy, and housing prices have caused households to be more negative / cautious.
- The US Federal Reserve is seeking to normalize monetary policy at an aggressive pace in order to combat inflation, which may also slow economic growth.
- Broad equity and credit indices near long-term average valuation.
- Market technical signals remain mixed as multiple parts of the US equity market are near or in bearish trends, but investor sentiment is very bearish (historically a contrarian buying opportunity)

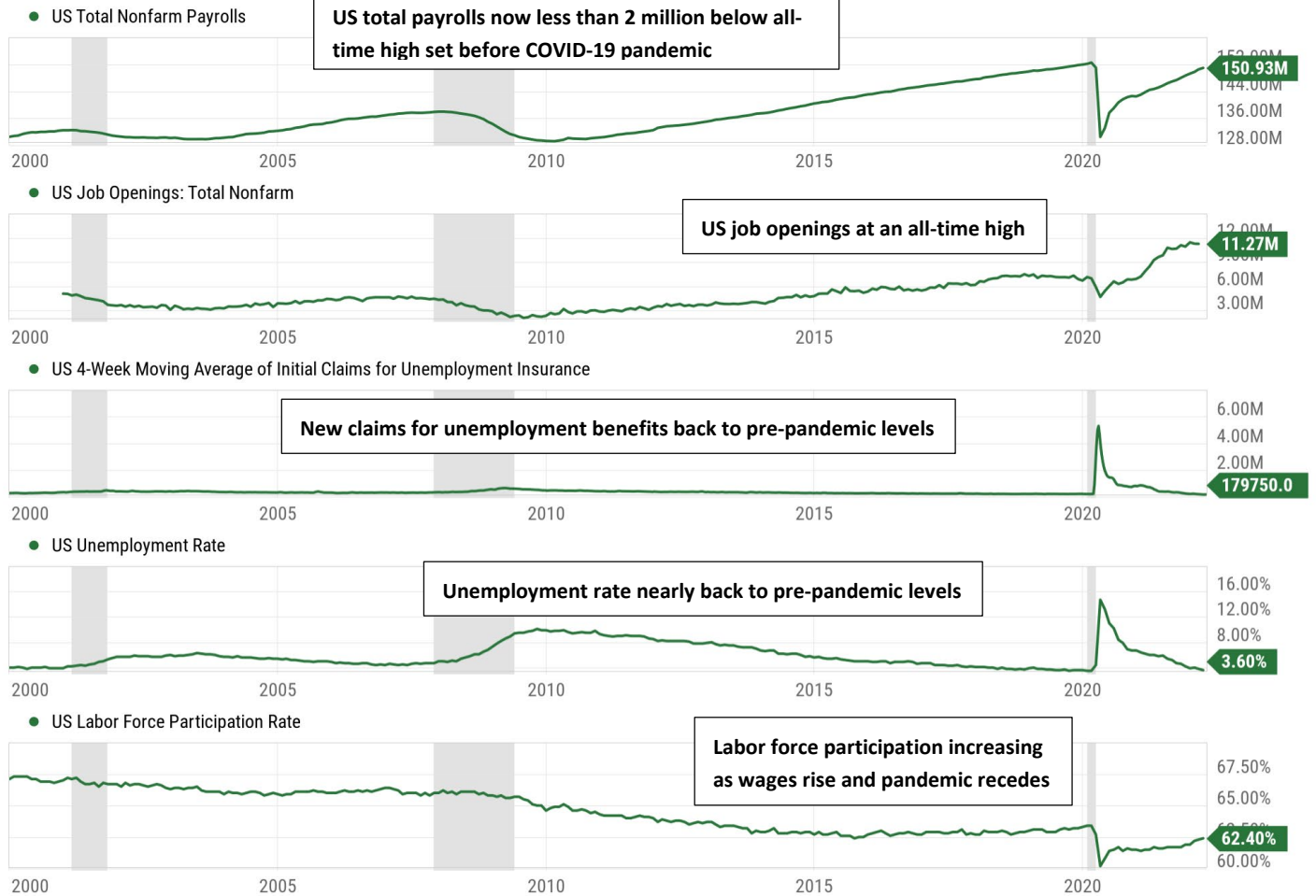


Inflation-Adjusted US Economic Output Contracted in Q1 2022 for the First Time Since Early 2020



Date Range: 12/31/1999 - 03/31/2022

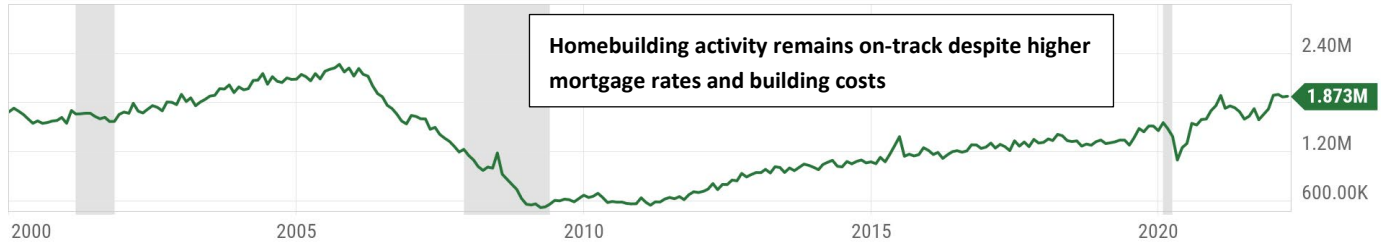
US Labor Market



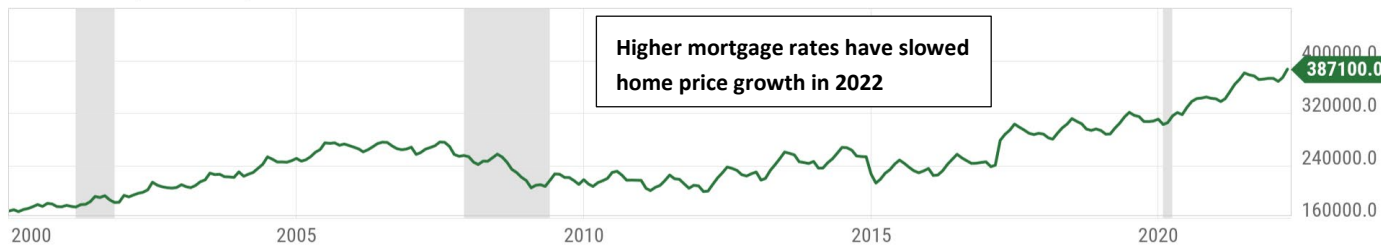
Date Range: 12/31/1999 - 04/23/2022

US Housing

● US Building Permits



● US Existing Home Average Sales Price

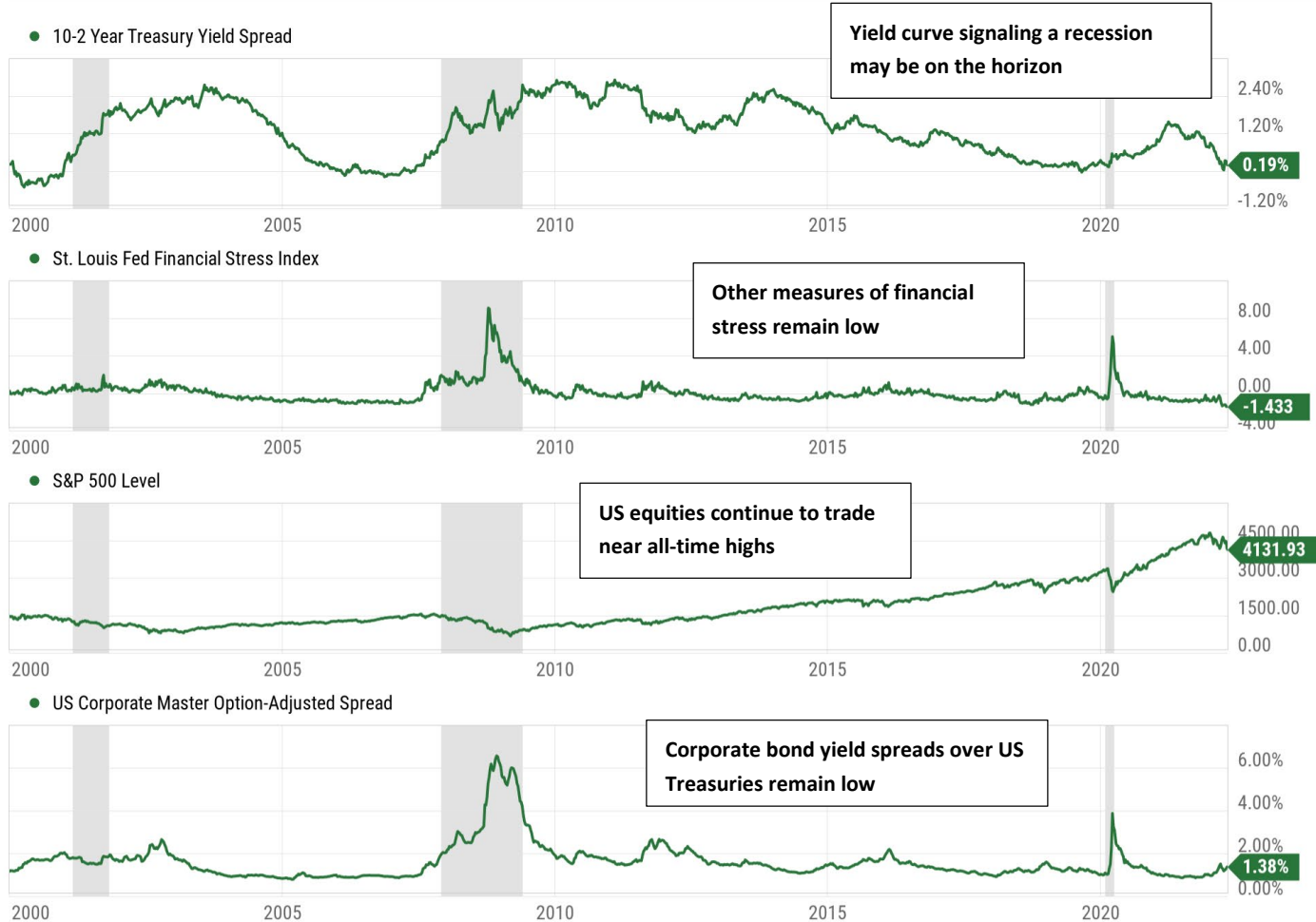


● 30 Year Mortgage Rate



Date Range: 12/31/1999 - 04/21/2022

US Financial Conditions



Date Range: 12/31/1999 - 04/29/2022

US Households

● US Total Net Worth - Balance Sheet of Households and Nonprofit Organizations



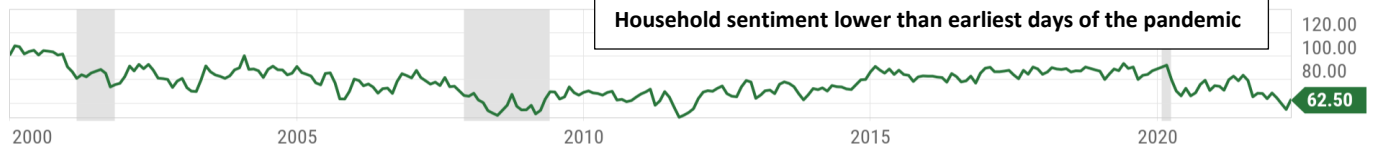
● US Household Debt Service as Percent of Disposable Income



● US Money Market Fund Shares - Assets - Balance Sheet of Households and Nonprofit Organizations



● US Index of Consumer Expectations

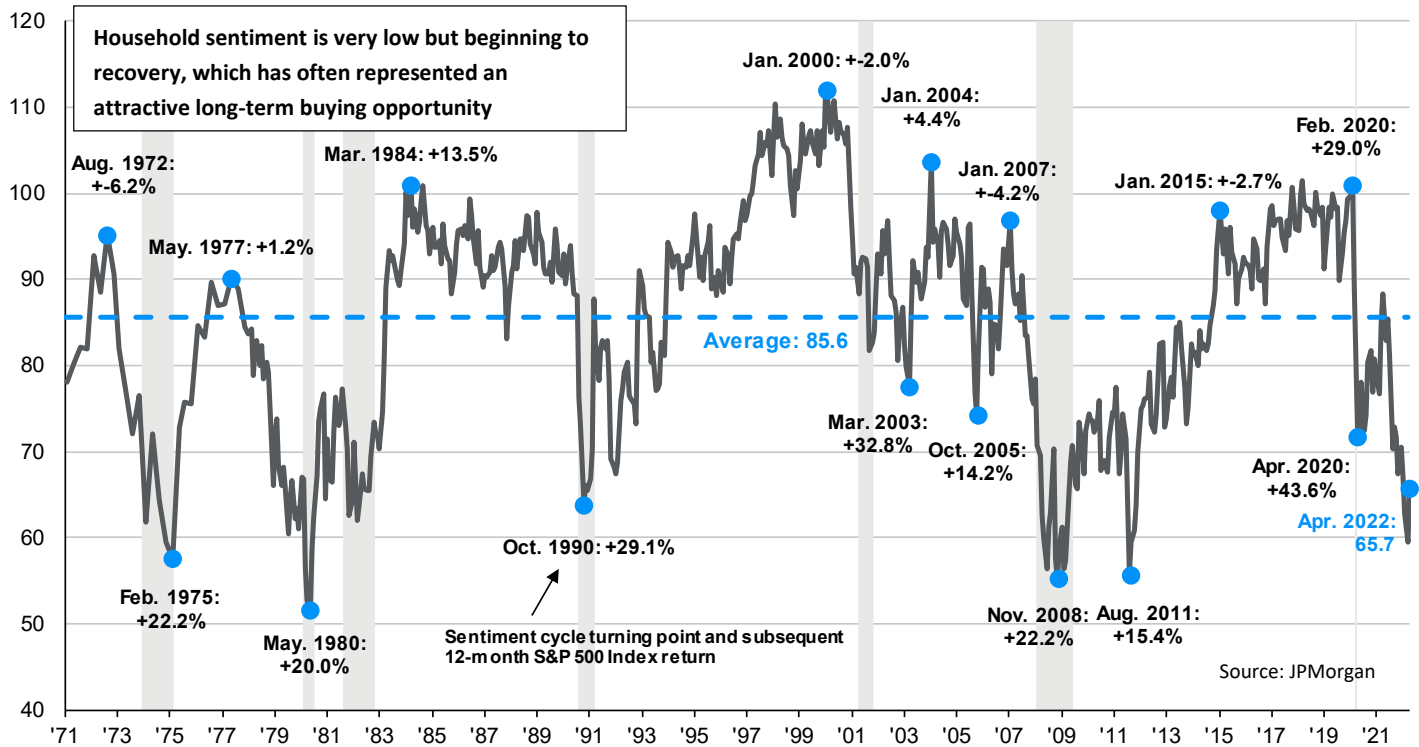


● US Real Retail Sales YoY



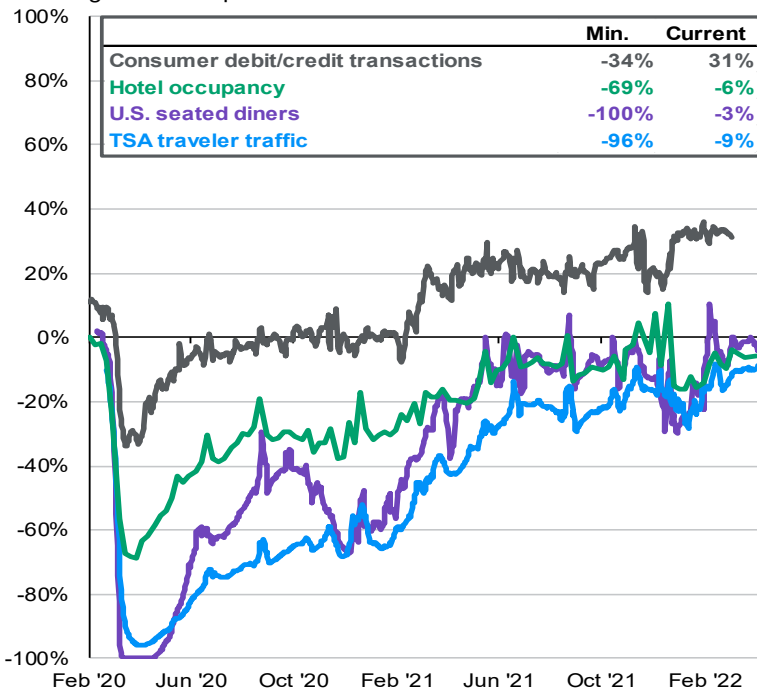
Date Range: 12/31/1999 - 04/30/2022

Consumer Sentiment Index and subsequent 12-month S&P 500 returns



High-frequency data

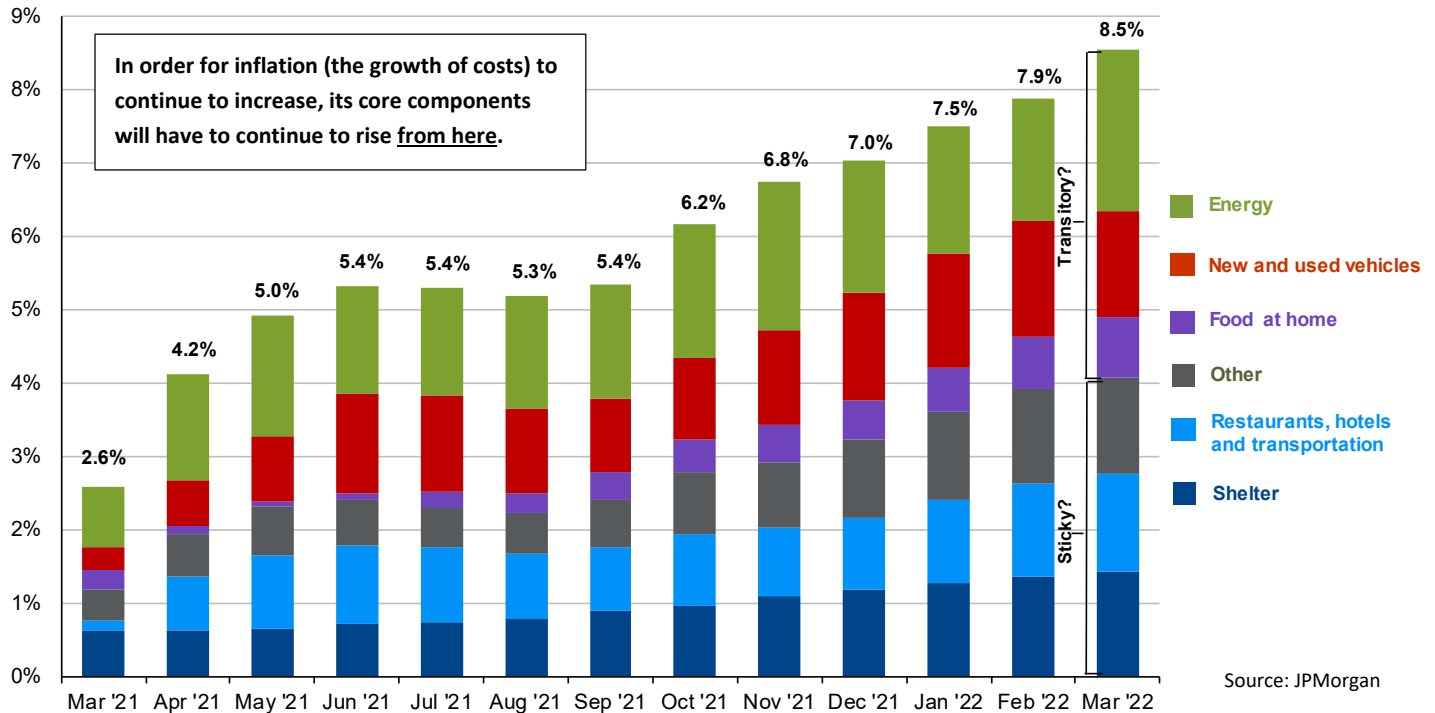
% change from comparable week in 2019



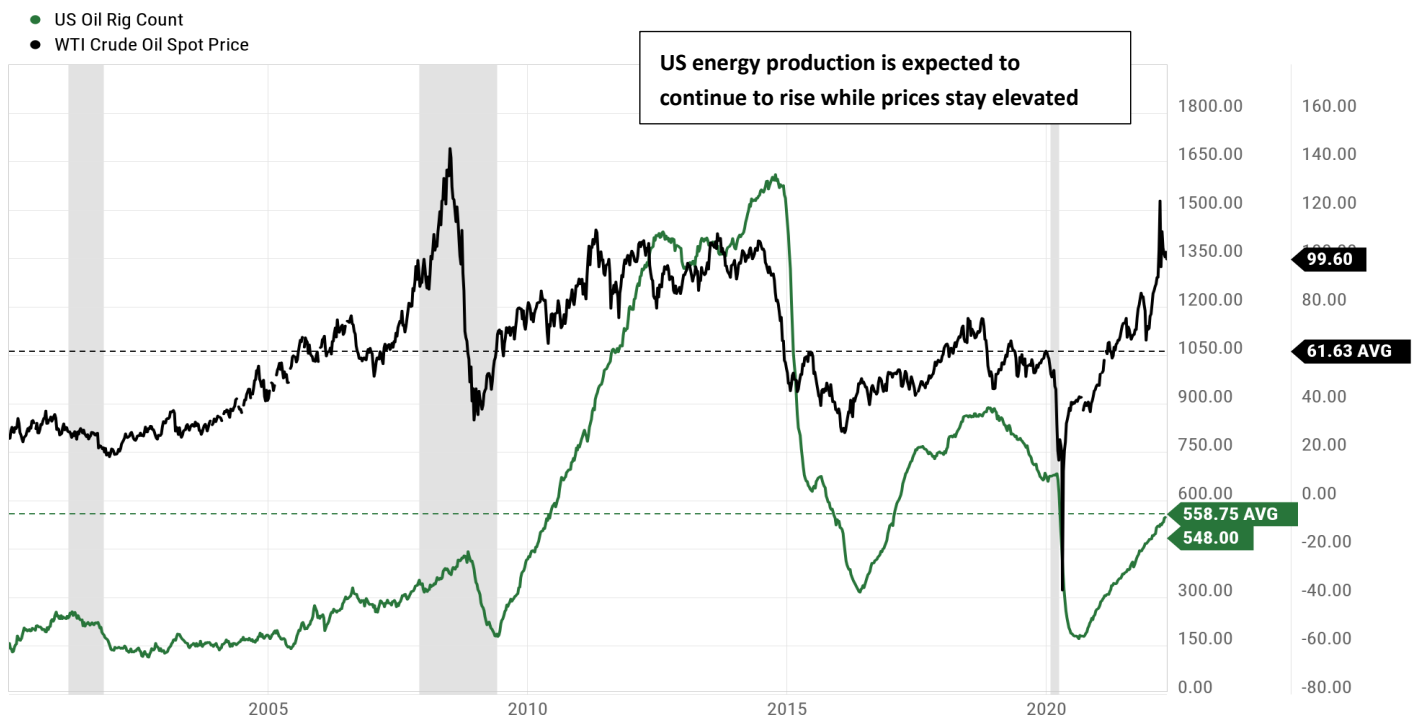
Household spending activity on credit card transactions, hotel occupancy, US seated diners, TSA traveler traffic are at or above pre-pandemic levels.

Contributors to headline inflation

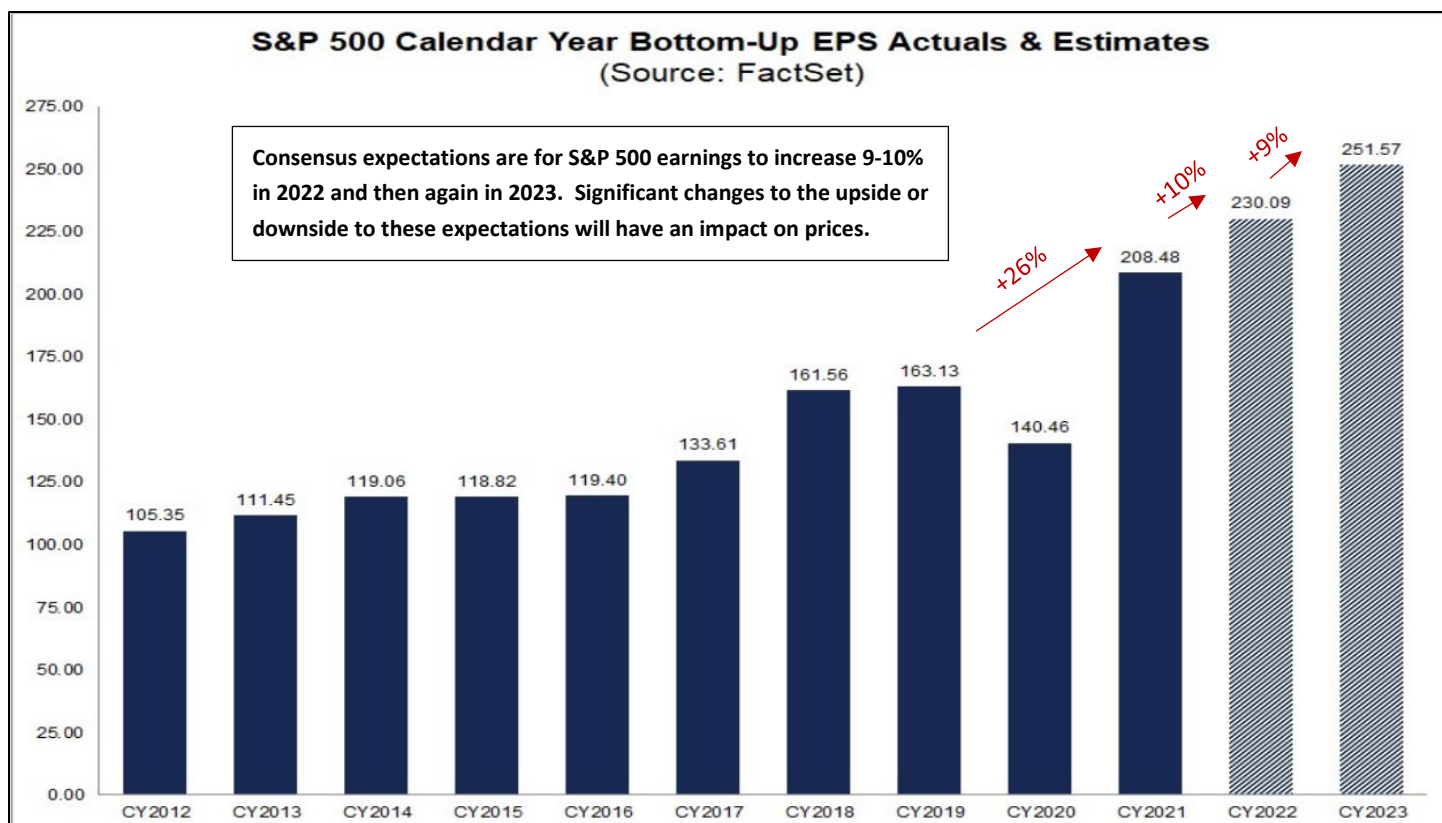
Contribution to y/y % change in CPI, non seasonally adjusted



US Oil Rig Count Has Begun to Respond to Higher Oil Prices

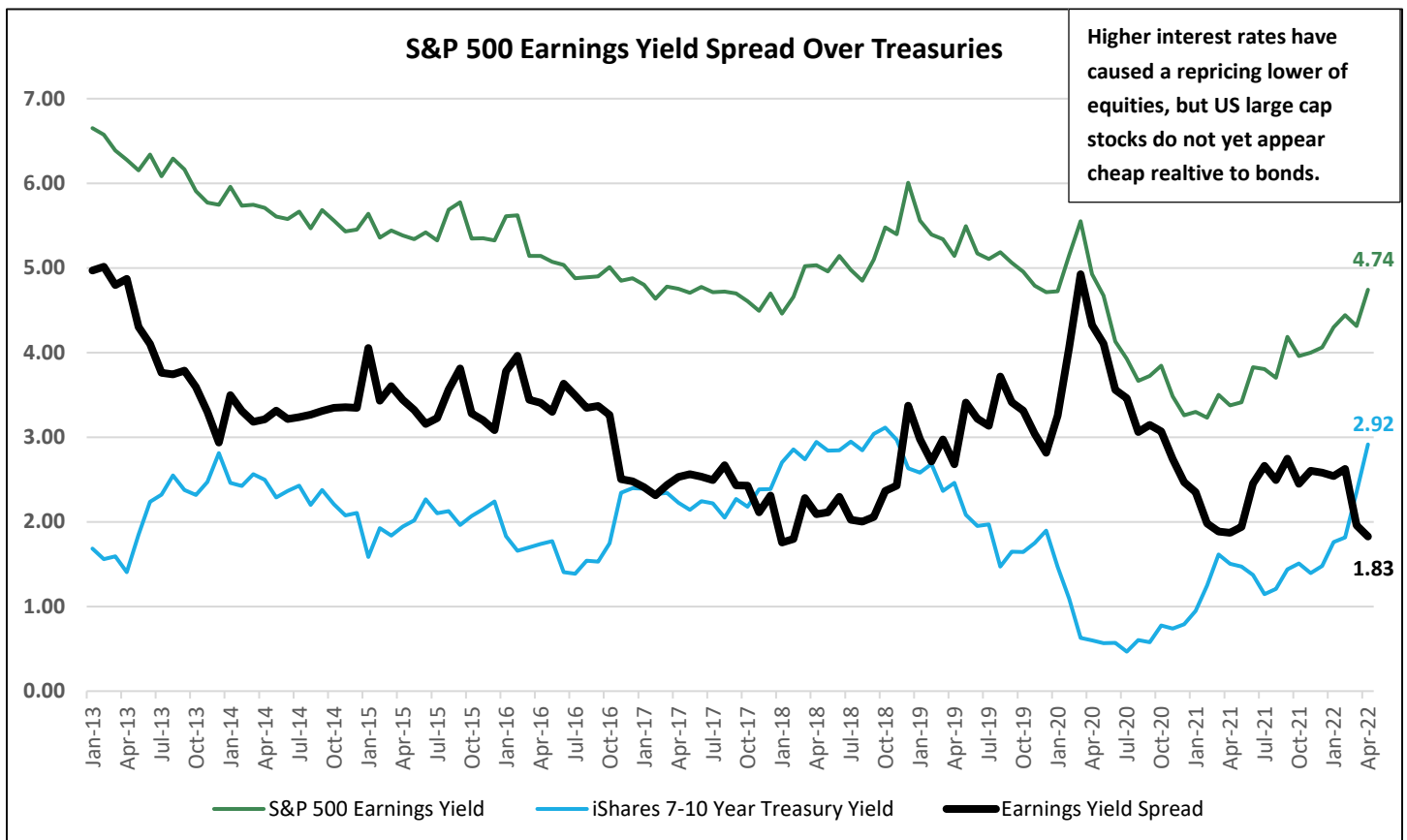


Date Range: 01/04/2000 - 04/25/2022



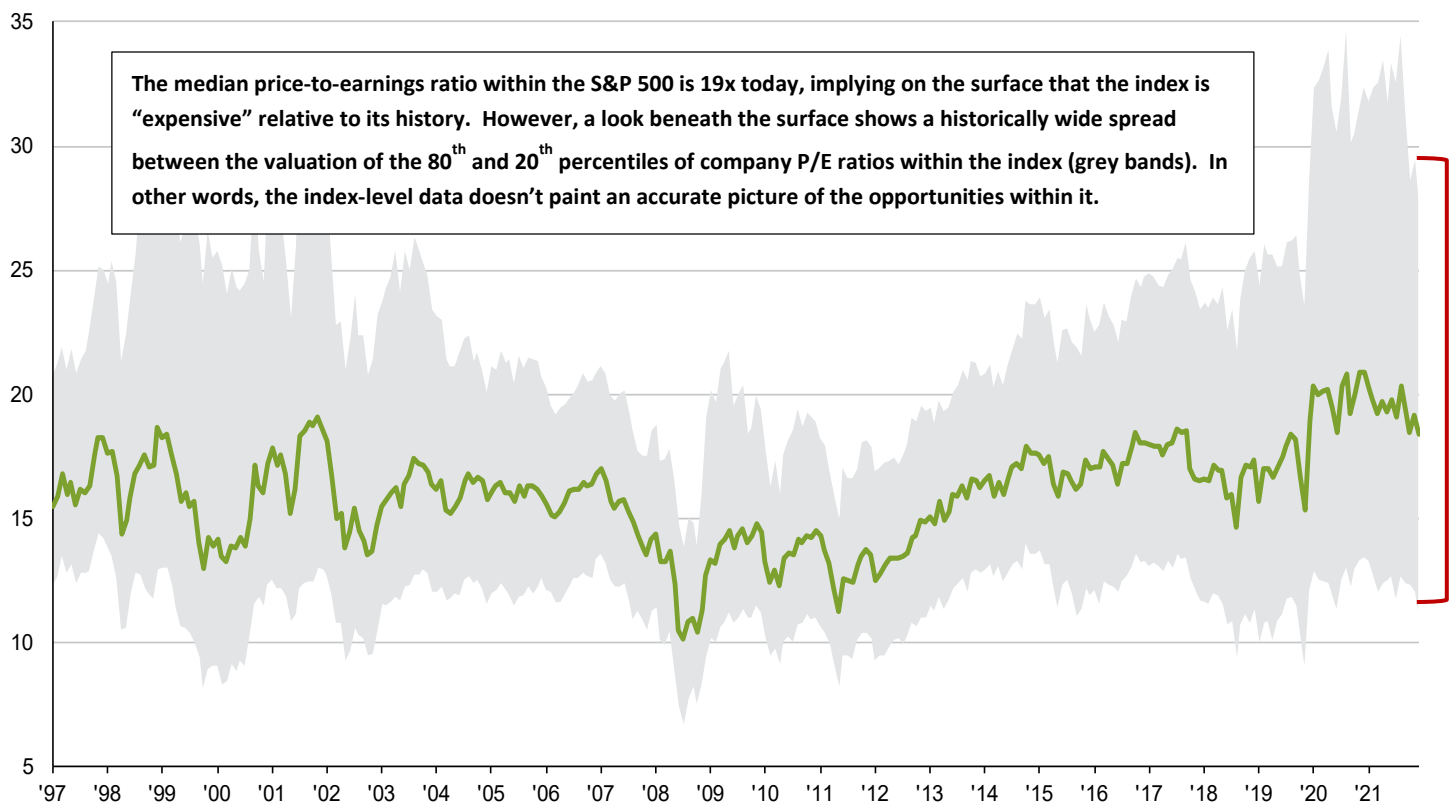
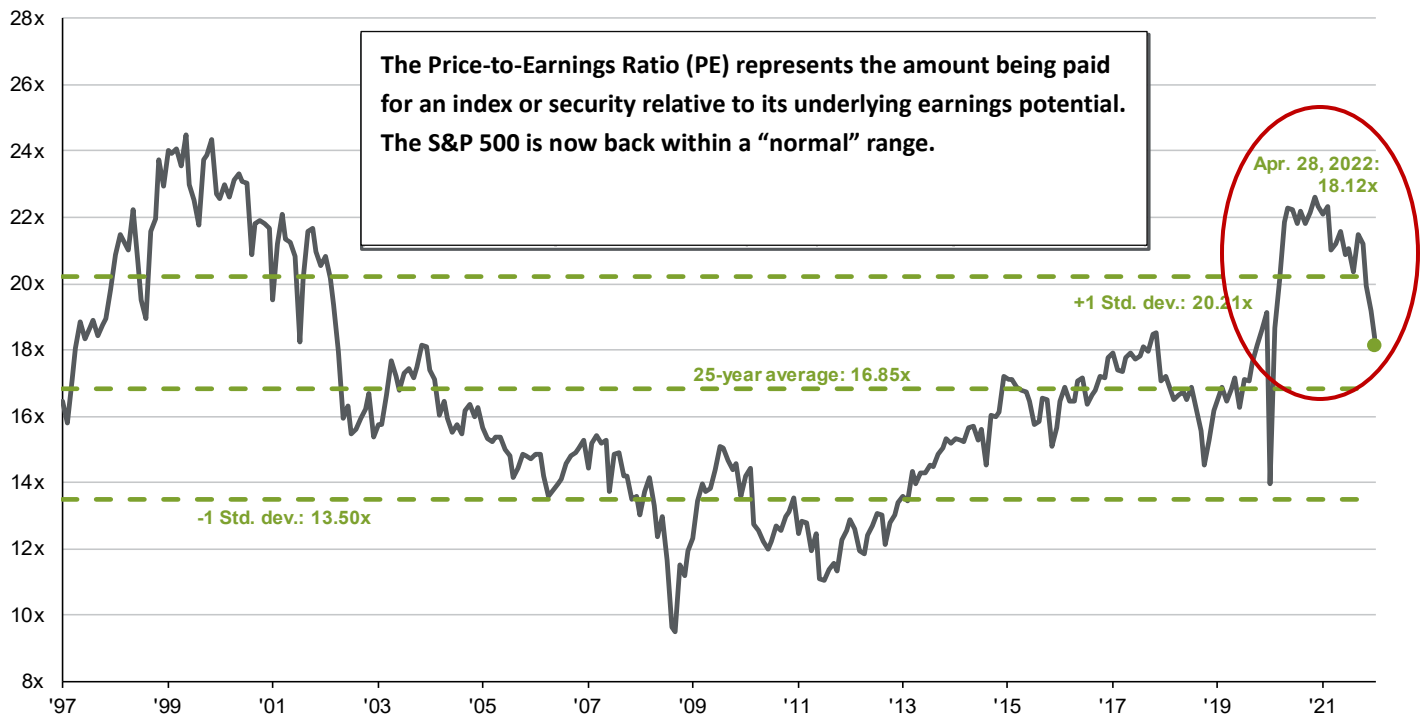
Valuation

The declines in stocks in 2022 have brought most indices back into more normal valuation ranges relative to long-term averages. In addition to the risks facing equity markets (e.g., inflation, geopolitical), the pure movement higher in US Treasuries has likely been a very direct driver in the repricing lower of many stocks. The first chart below highlights the relationship between the earnings yield of the S&P 500 in green (earnings yield being the net profit earned by investors divided by the price of the index) and the yield on 7-10 year US Treasury notes (blue line). The black line represents the spread between these two, with a higher spread offering a more compelling relative value for equities compared to bonds.



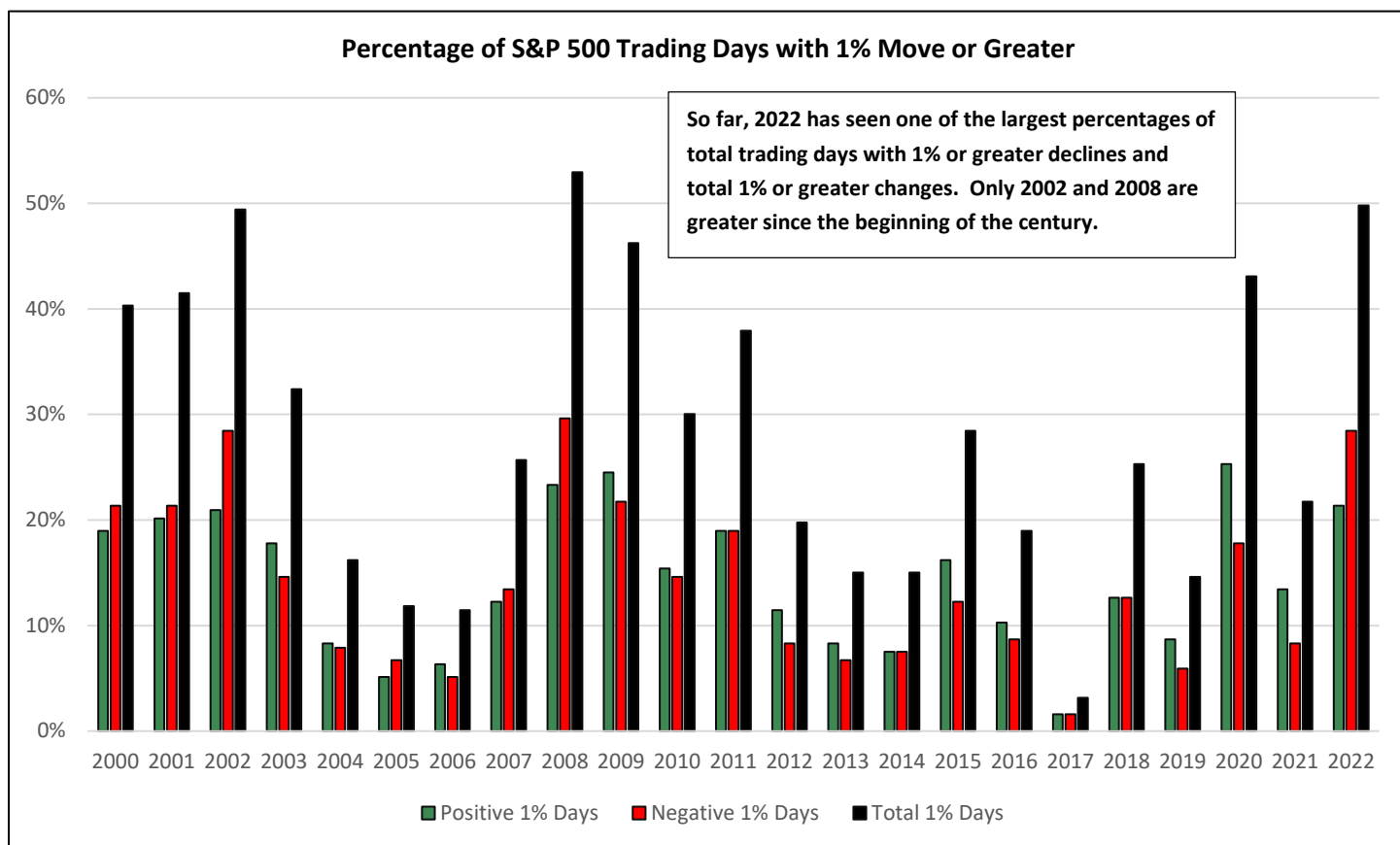
Source: Bloomberg

S&P 500 Price-to-Expected Earnings



Technical

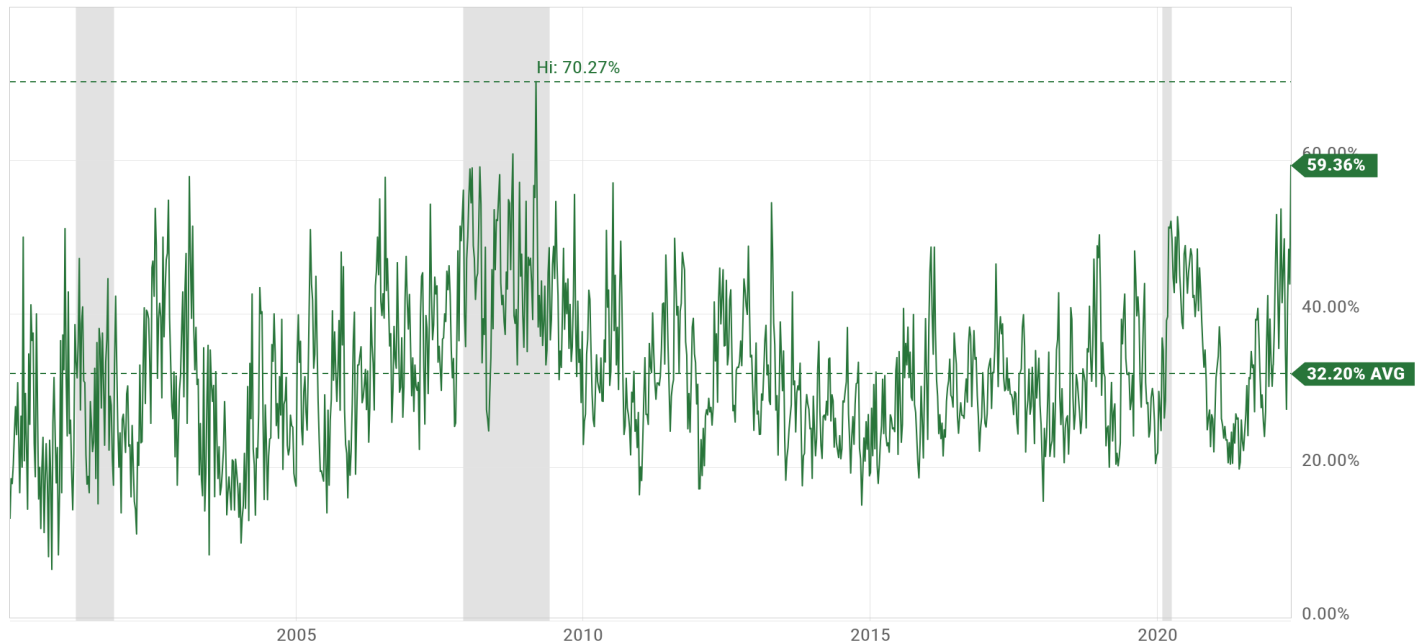
The confluence of risks facing investors today has led to the highest percentage of bears in the market since 2009. Historically, these periods of extreme pessimism have been attractive buying opportunities for long-term investors. However, we have yet to see confirming signs of a market bottoming process, and in fact, the overall trend of the S&P 500 continues to degrade. The various risks have led to 2022 being one of the most volatile years over the last two decades.



Source: Bloomberg

Highest Level of Bearishness Since 2009

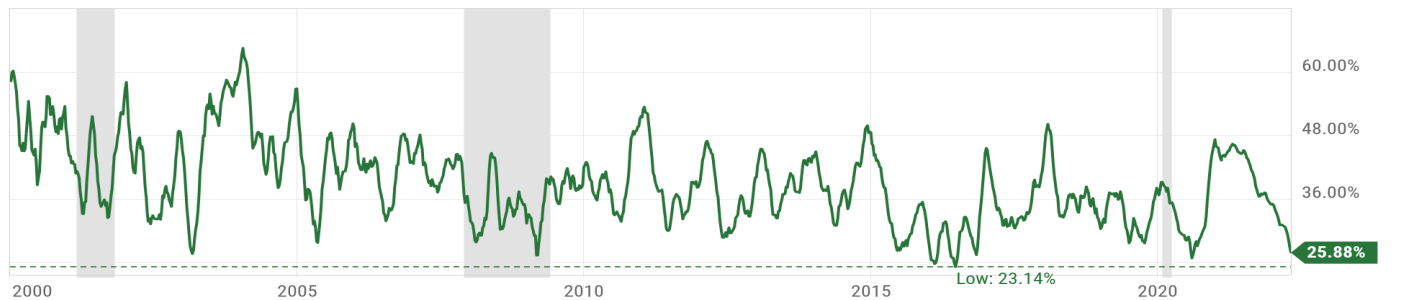
● US Investor Sentiment, % Bearish



Date Range: 01/06/2000 - 04/28/2022

Very Negative Investor Sentiment Has Historically Preceded Higher Future Returns

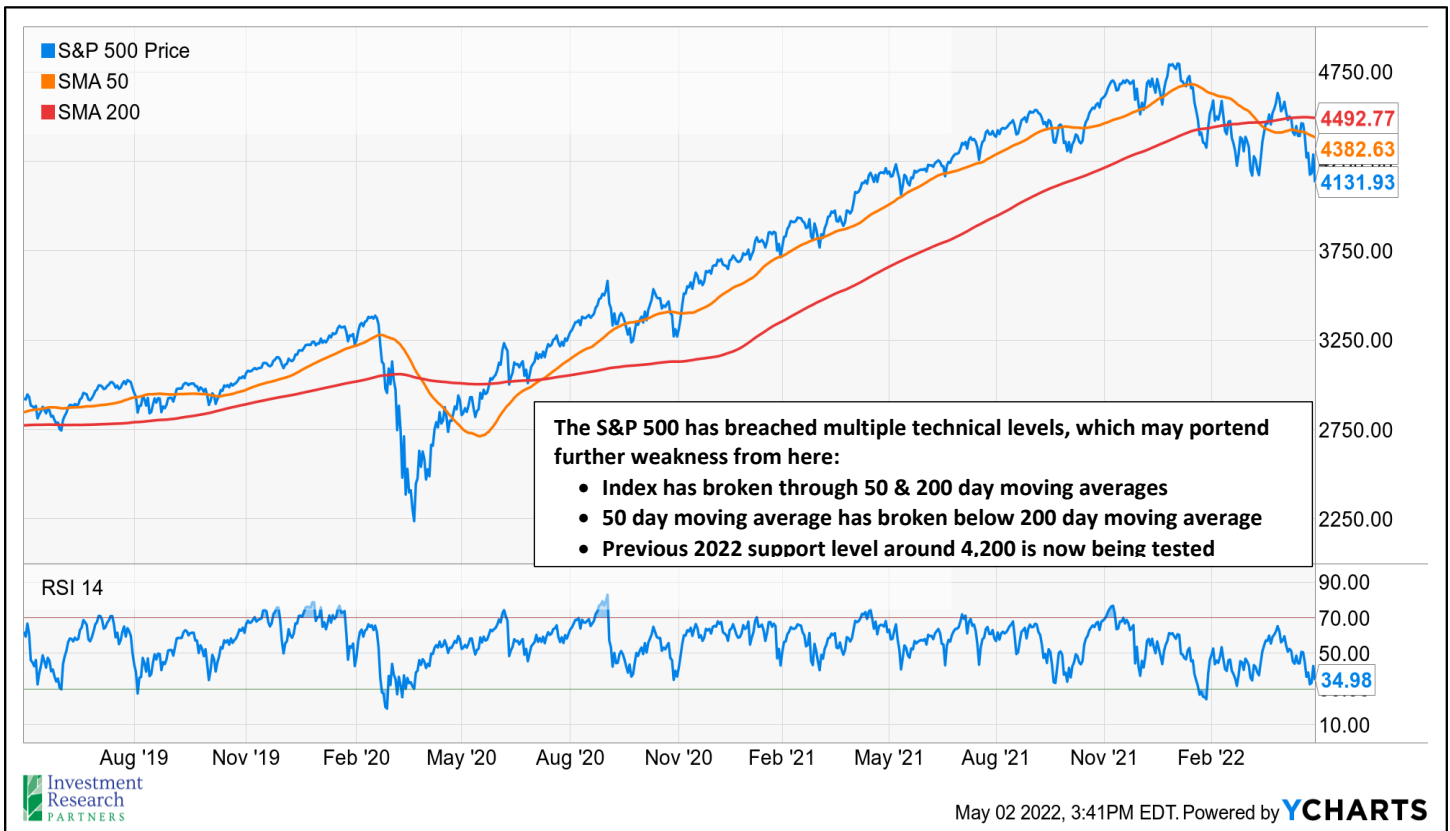
● US Investor Sentiment, % Bullish 8 Week Moving Average



● S&P 500 1 Year Return



Date Range: 12/31/1999 - 04/28/2022



Prices & Interest Rates

Representative Index	April 2022	Year-End 2021
Crude Oil (US WTI)	\$104.69	\$75.21
Gold	\$1,909	\$1,828
US Dollar	102.96	95.97
2 Year Treasury	2.70%	0.73%
10 Year Treasury	2.89%	1.52%
30 Year Treasury	2.96%	1.90%

Source: Morningstar, YCharts, and US Treasury as of April 30, 2022

Asset Class Returns

Category	Representative Index	April 2022	YTD 2022
Global Equity	MSCI All-Country World	-8.0%	-12.9%
Global Equity	MSCI All-Country World ESG Leaders	-7.9%	-13.7%
US Large Cap Equity	S&P 500	-8.7%	-12.9%
US Large Cap Equity	Dow Jones Industrial Average	-5.8%	-7.4%
US All Cap Equity	Russell 3000 Growth	-12.1%	-20.2%
US All Cap Equity	Russell 3000 Value	-5.8%	-6.6%
US Small Cap Equity	Russell 2000	-9.9%	-16.7%
Foreign Developed Equity	MSCI EAFE	-6.5%	-12.0%
Emerging Market Equity	MSCI Emerging Markets	-5.6%	-12.2%
US Fixed Income	Bloomberg Barclays Municipal Bond	-2.8%	-8.8%
US Fixed Income	Bloomberg Barclays US Agg Bond	-3.8%	-9.5%
Global Fixed Income	Bloomberg Barclays Global Agg. Bond	-5.5%	-11.3%

Source: YCharts as of April 30, 2022

Past performance may not be representative of future results. All investments are subject to loss. Forecasts regarding the market or economy are subject to a wide range of possible outcomes. The views presented in this market update may prove to be inaccurate for a variety of factors. These views are as of the date listed above and are subject to change based on changes in fundamental economic or market-related data. Please contact your Advisor in order to complete an updated risk assessment to ensure that your investment allocation is appropriate.