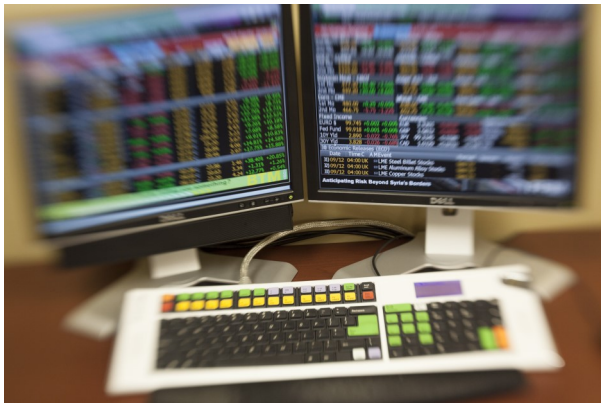
Wallington
ASSET MANAGEMENT

QUARTERLY NEWSLETTER

2022: FIRST QUARTER 133RD EDITION



"The near-term effects on the U.S. economy of the invasion of Ukraine, the ongoing war, the sanctions, and of events to come, remain highly uncertain. Making appropriate monetary policy in this environment requires a recognition that the economy evolves in unexpected ways. We will need to be nimble in responding to incoming data and the evolving outlook."

~Fed Chairman Jerome Powell

Our thoughts and sympathies are with all the innocent people in Ukraine who have been so devastated by the Russian invasion. It is inexplicable how someone could choose to force such hardship on so many innocent people.

~Wallington Asset Management

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CAPITAL MARKETS SCOREBOARD

Equities					
Indices	1Q22 Total Return (%)	2021 Total Return (%)	Index Characteristics		
Domestic			NTM P/E	P/B	Div. Yld. (%)
S&P 500	-4.6	28.7	19.6	4.5	1.3
DJIA	-4.1	20.9	17.8	4.5	1.8
NASDAQ	-8.9	22.2	28.1	5.8	0.7
Russell 1000 Growth	-9.0	27.6	26.8	12.6	0.7
Russell 1000 Value	-0.7	25.2	15.3	2.5	1.9
Russell 2000	-7.5	14.8	21.0	2.3	1.0
International*					
MSCI EAFE	-5.8	11.8	13.7	1.8	2.5
MSCI Emerging Markets	-6.9	-2.2	11.9	1.9	2.0
MSCI United Kingdom	1.8	18.5	11.3	1.8	3.3
MSCI France	-8.6	20.6	13.6	1.8	2.2
MSCI Germany	-12.8	5.9	11.6	1.5	2.4
MSCI Japan	-6.4	2.0	13.3	1.3	2.2

Fixed Income		
Indices**	1Q22 Total Return (%)	2021 Total Return (%)
Domestic		
U.S. Corp - Gov (1-3 Years)	-2.6	-0.4
U.S. Corp - Gov (3-5 Years)	-4.8	-1.5
U.S. Corp - Gov (10+ Years)	-10.9	-2.8
U.S. Treasuries Master	-5.6	-2.4
U.S. Corporates Master	-7.7	-1.0
U.S. Municipals Master	-6.2	1.8
U.S. High Yield Master	-4.5	5.4
International*		
Developed Markets Sov Bond	-6.5	-6.9

Commodities		
Resource	1Q22 Total Return (%)	2021 Total Return (%)
Precious Metals		
Gold	6.7	-3.5
Silver	7.5	-12.8
Industrial Metals		
Copper	6.5	26.8
Aluminum	24.8	41.9
Energy		
Brent Crude Oil	38.9	50.8
WTI Crude Oil	33.5	55.8
Natural Gas	51.3	46.9

Key Rates				
Rates	3/31/2022	12/31/2021	3/31/2021	12/31/2020
U.S. Target Fed Funds Rate	0.50	0.25	0.25	0.25
2-Year U.S. Treasury	2.28	0.73	0.16	0.13
10-Year U.S. Treasury	2.32	1.52	1.74	0.93
30-Year U.S. Treasury	2.44	1.90	2.41	1.65
10-Year German Bund	0.55	-0.18	-0.30	-0.58
10-Year Japanese Bond	0.22	0.07	0.09	0.02
30-Year Fixed Mortgage	4.17	3.10	3.08	2.68

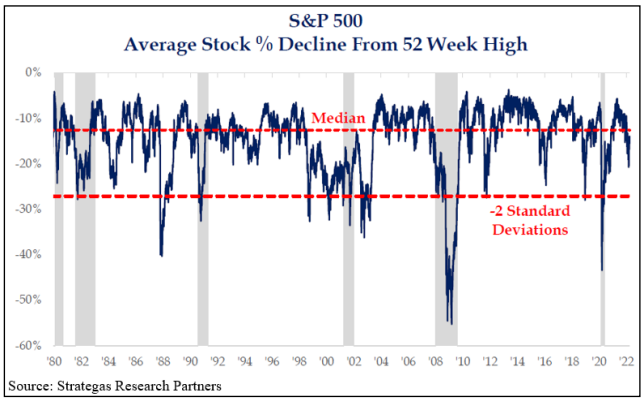
Currencies				
Indices/ Exchange Rates	3/31/2022	12/31/2021	3/31/2021	12/31/2020
ICE U.S. Dollar Index	98.31	95.97	93.23	89.94
USD per EUR	1.11	1.14	1.18	1.22
USD per GBP	1.32	1.35	1.38	1.37
JPY per USD	121.38	115.16	110.50	103.25
CAD per USD	1.25	1.26	1.26	1.27

*Returns denominated in U.S. dollars

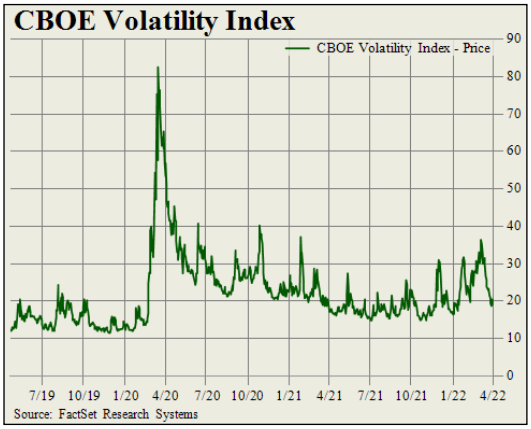
**ICE Bank of America Merrill Lynch (BofA-ML) indices

EQUITIES

- The year's first quarter was marked by broad "risk-off" sentiment in equity markets. The Standard & Poor's 500 (S&P 500) index notched an all-time closing high on January 3, then moved quickly into correction territory (a 10% decline) after just 16 trading sessions based on intraday prices. From peak to trough, the index declined more than 13% as investors' attention turned to inflationary pressures and Ukraine-Russia turmoil. The S&P 500 recovered most of its losses in late March, posting a -4.6% total return (price appreciation plus dividends) for the quarter. For the first time since the COVID decline, the average stock reached bear territory (a 20% decline) from its 52-week high. The NASDAQ Composite Index (NASDAQ), which is more heavily weighted to technology stocks, also reached bear territory in the first quarter. In mid-March, the NASDAQ had declined 21.5% from its November 2021 peak, but also rallied late to return -8.9% for the quarter. Further, more volatile small cap stocks declined 7.5% as measured by Russell indices.

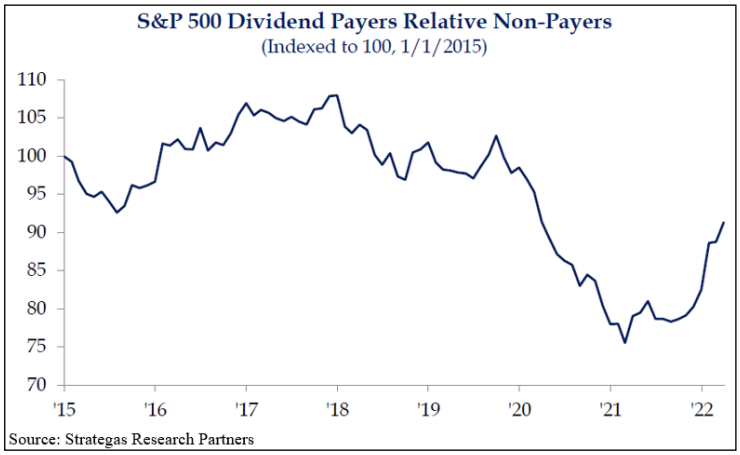


- Volatility returned in the first quarter after a mild 2021. The Chicago Board Options Exchange (CBOE) Volatility Index (VIX), also called the "fear gauge," reached its highest level in more than a year. Company-specific volatility on earnings reports surged for some of the largest, most concentrated names in the S&P 500. As an example, Amazon's stock price spiked 13.5% on announcement, a single-day market value increase of more than $190 billion.



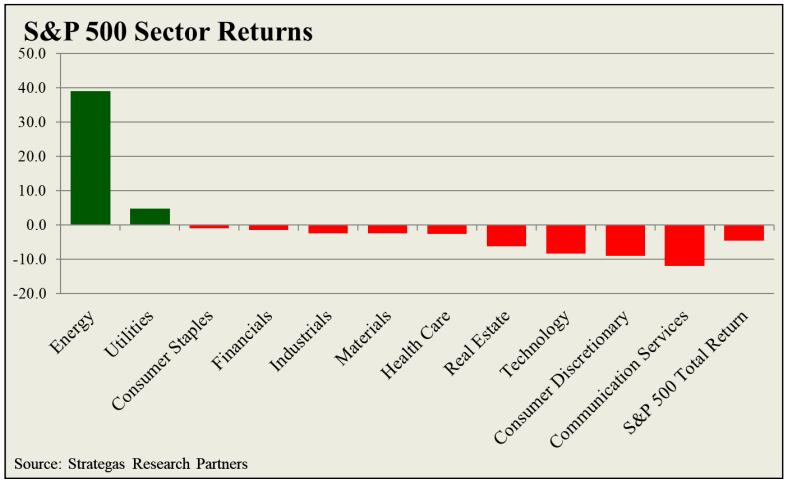
- International indices underperformed domestic stocks for the quarter when denominated in U.S. dollars. The MSCI Europe, Australasia, and Far East (EAFE) Index, which tracks international developed markets stocks, declined 5.9% while the MSCI Emerging Markets Index declined 6.9%. Of note, the EAFE Index marginally outperformed the S&P 500 when denominated in local currencies but was dragged down more than 2% in currency-adjusted terms due to continued strengthening of the dollar.

- Value stocks significantly outpaced their growth counterparts in the first quarter. The Russell 1000 Growth Index declined 9.0% while the Russell 1000 Value Index was off just 0.7%. Earnings of value-classified companies are generally more sensitive to economic growth, with some even benefitting from inflation in commodity prices. The first quarter brought both strong economic growth and dramatic price increases for many commodities. Rising interest rates also caused growth stock prices to decline more than value stocks since growth stock earnings are more sensitive to changes in rates. Additionally, rising rates drove negative fixed income performance and a subsequent exodus of capital from global bond funds. Higher dividend-paying value stocks were a benefactor. U.S. dividend fund inflows in January were the largest since October 2006 as investors seeking safety and income looked for alternative sources of yield.

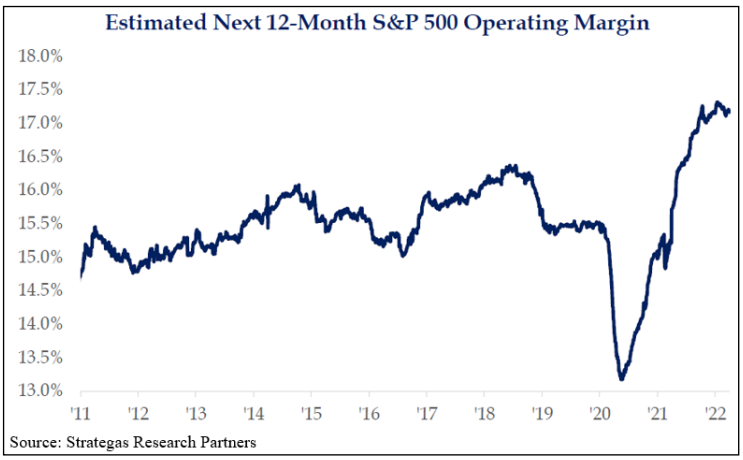


EQUITIES

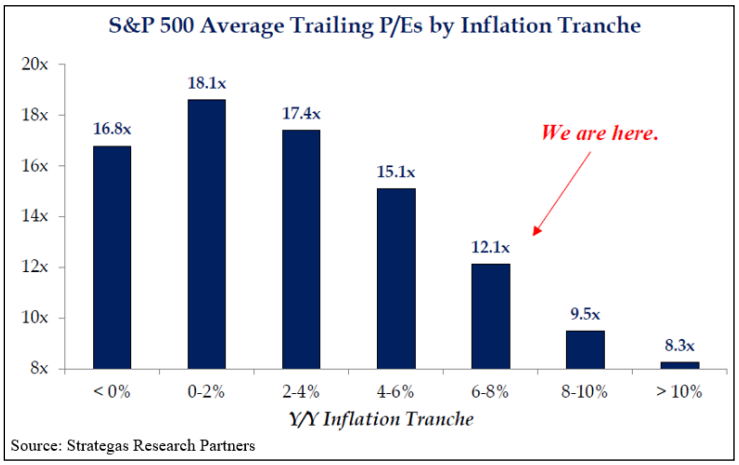
- After posting the highest return in 2021, Energy Sector stocks (up 39.0%) lapped the field in the first quarter as geopolitical events exacerbated supply chain constraints, pushing fuel and gas prices higher. The defensive Utilities Sector (up 4.8%) was the only other positive segment in the quarter. The Communication Services (-11.9%), Consumer Discretionary (-9.0%), and Technology (-8.4%) Sectors, which have the three highest weights in the index to interest rate-sensitive growth stocks according to Morningstar classifications, led all decliners.



- Analysts estimate year-over-year (YOY) S&P 500 earnings growth of 4.7% in the first quarter. Positive estimates are broad-based, but 4.7% would mark the lowest growth rate since the fourth quarter of 2020. Revenues remained strong, and while net S&P 500 profit margins contracted from 12.4% last quarter, they were resilient at 12.1%. The anticipated persistence of input cost inflation, however, drove the narrative. Thus far, companies have been able to pass most cost increases through to consumers, but they have issued negative forward guidance at a growing rate due to ongoing inflationary pressures. For all companies issuing guidance in the quarter, 70% were negative versus a five-year average of 60%. Investors will be well-served to monitor whether companies can continue to pass rising costs through to consumers in the face of persistent inflation.

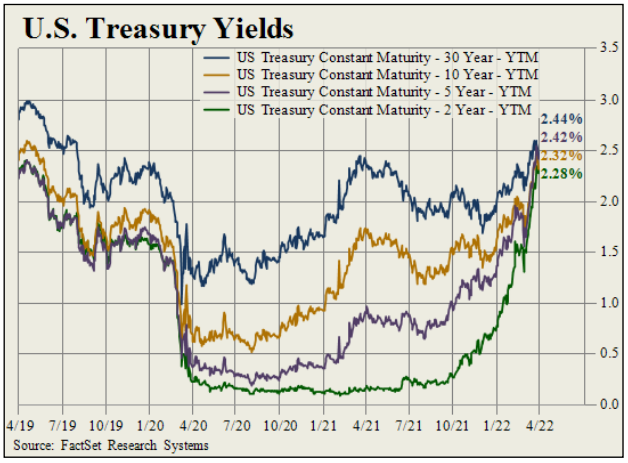


- While profits grew in the first quarter, the earnings multiple investors were willing to pay for those profits declined. The next twelve months (NTM) S&P 500 price-to-earnings (P/E) ratio ended the quarter at 19.6x, down from 21.5x to start the year. Growth stock valuations were impacted the most. The further into the future earnings occur, the less valuable they become in present terms when the discount rate applied to them increases.



FIXED INCOME

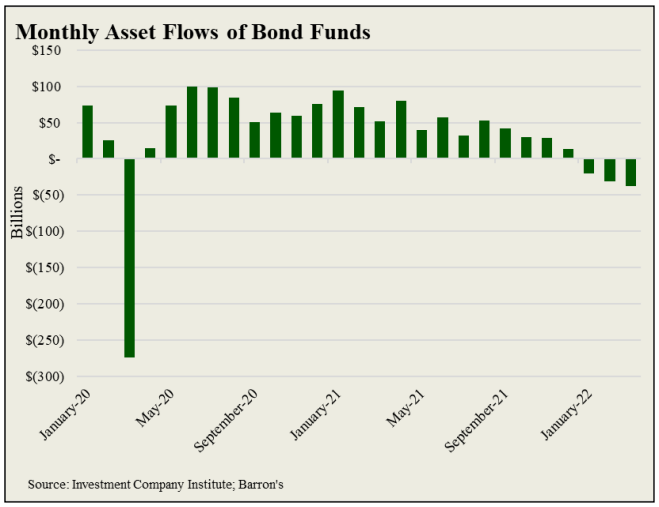
- With U.S. Treasury (UST) yields increasing across the yield curve, USTs in aggregate provided a total return of -5.6% over the first quarter as measured by BofA-ML indices, their worst return in over 40 years. 10-year yields rose from 1.52% to 2.32% over the course of the quarter, causing U.S. corporate and government bonds with over ten years until maturity to lose 10.9%. 2-year UST yields rose from 0.73% at the end of 2021 to 2.28% at the end of March, the largest quarterly increase since 1984. While short-term bonds provide more protection from interest rate fluctuations than their longer-term counterparts, this dramatic move in short-term rates still caused U.S. corporate and government bonds with one-to-three years until maturity to lose 2.6% for the quarter.



- U.S. Government bonds have little risk of default due to the ability to generate revenue through taxation. Fixed income investors closely monitor credit spreads (roughly the yield differential between government bonds and corporate bonds) which are subject to default risk. Volatile credit spreads contributed to investment grade corporate bonds underperforming USTs with a -7.7% return. Similarly, municipal bonds underperformed and lost 6.2% through the first quarter. High-yield (or "junk") bonds returned -4.5% as trailing twelve-month default rates for high-yield issuers remained near all-time lows. Although volatile, high-yield spreads remained contained which enabled the segment's lower sensitivity to interest rate fluctuations to drive its outperformance.

- Developed market sovereign bonds, which is debt issued by foreign governments, lost 6.5% for the quarter when denominated in U.S. dollars and 4.8% when denominated in their local currencies. Increases in sovereign yields, particularly for German bunds and Japanese bonds, caused the aggregate amount of negative yielding debt globally to decrease to $3.0 trillion at the end of the first quarter. This was down from $11.3 trillion at the end of 2021 and an all-time high of $17.8 trillion at the end of 2020. The upward shift in global rates created tumult for the Bank of Japan's attempts at yield curve control, and it was compelled to launch an unlimited bond purchase program to contain the yield on their 10-year bonds. They launched this unprecedented program as the 10-year yield approached their self-imposed cap of 0.25%, the first time the bonds have increased to this level since January 2016.

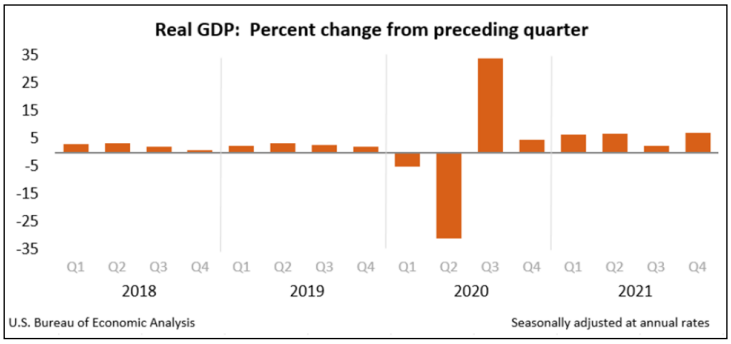
- Given weak performance in fixed income markets, it was not surprising bond mutual and exchange-traded funds (ETFs) faced net outflows of $87 billion in the first quarter. This represented the first quarterly outflow from fixed income funds since the first quarter of 2020. The net outflow occurred despite U.S. government debt ETFs seeing over $11 billion in inflows in March, as economic and geopolitical concerns caused investors to seek safety in government debt.



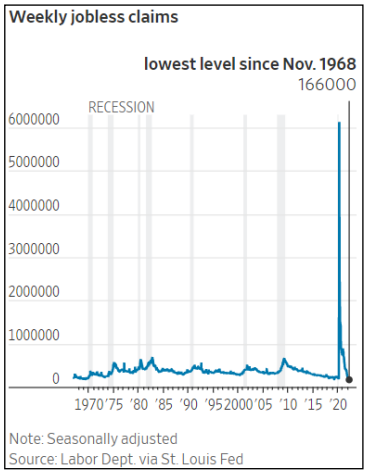
- In early March, the Federal Reserve (Fed) ended its bond-buying program. The Fed purchased almost $6 trillion of USTs and mortgage-backed securities in an effort to support the economy over the last two years, bringing the amount of securities it holds outright to over $8.4 trillion. During the March meeting, the Federal Open Market Committee (FOMC) also opted to increase the fed funds rate for the first time since 2018 and signaled plans to begin reducing the Fed's balance sheet by $95 billion per month in May.

ECONOMICS

- The U.S. economy grew at a rapid 6.9% annual rate in the fourth quarter of 2021, up from 2.3% in the third quarter. Rebuilding depleted inventories and increased consumer spending on services accounted for the entirety of fourth-quarter GDP growth. For the year, real (inflation-adjusted), GDP increased at a rate of 5.5%, marking the fastest annual growth since 1984. Economic output had fallen 2.3% in 2020. Global and U.S. economic growth is expected to be slower in 2022 because of central banks tightening, the fading of fiscal stimulus spending, and the Russian invasion of Ukraine. The International Monetary Fund expects global economic growth of 4.4% in 2022 and U.S. growth of 4%. For the U.S., this will still be an improvement over the average 2.3% growth in the prior decade.

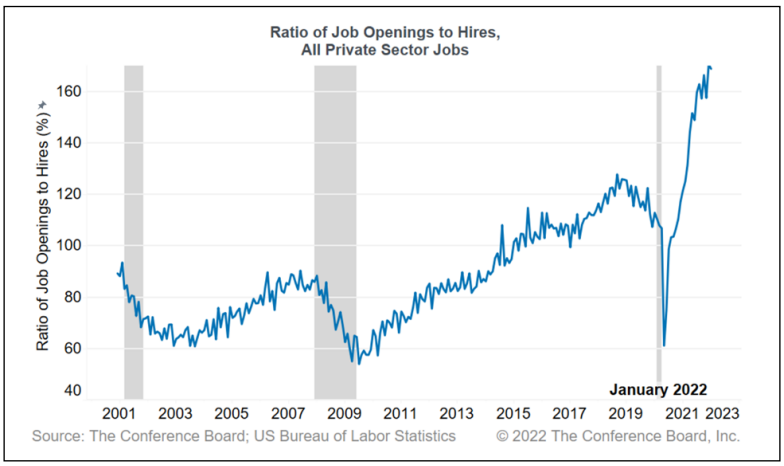


- The U.S. jobs market remains strong; 491,000 jobs were added in March, marking 11 straight months of at least 400,000 new jobs. Monthly job growth averaged 561,007 in the first three months of 2022. The unemployment rate was 3.6% in March, not far from the 50-year low of 3.5% set in February 2020. Initial jobless claims fell to 166,000 in March, the lowest since 1968, and continuing claims decreased to 1.35 million in March, the lowest since 1970.



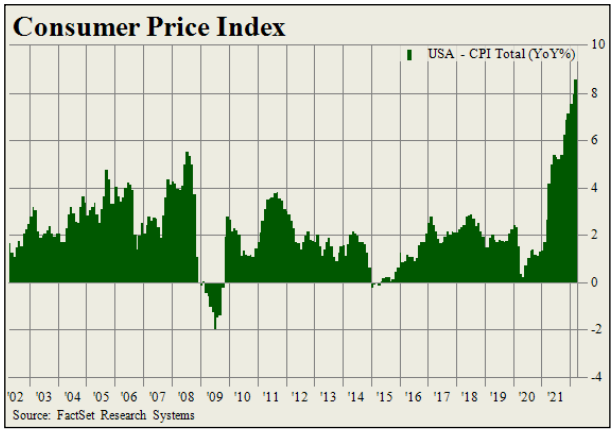
- The labor force participation rate inched up to 62.4% in March but remains below the 63.4% level reached pre-pandemic. There are still 1.6 million fewer workers in the labor force than in February 2020. Workers joining or rejoining the workforce were primarily women (324,000) and retirees. The Labor Department estimates that 2.6 million workers retired earlier than expected during the pandemic, and, like Tom Brady, many are coming back to the workforce. An estimated 3% of retirees reentered the workforce in recent months. At the end of February, there were 11.3 million job openings, 1.8 jobs for each unemployed worker.

- The strong job market is reflected in workers' compensation. The U.S. employment cost index showed that employees' compensation, wages, and benefits rose 4% in 2021, the highest in 21 years. Moving into 2022, average hourly earnings increased 5.6% for the 12 months ending in March. This growth in hourly earnings was eroded by inflation of 7.9% over the same period which means real wages were a negative 2.3% for the period. Historically, workers have not fared well during periods of high inflation. Real wage growth has been positive, though, in the leisure and hospitality industries, as nominal wages increased 11.8%. There are still 1.3 million fewer workers in these industries and the quit rate remains at a near-record 3%.



ECONOMICS

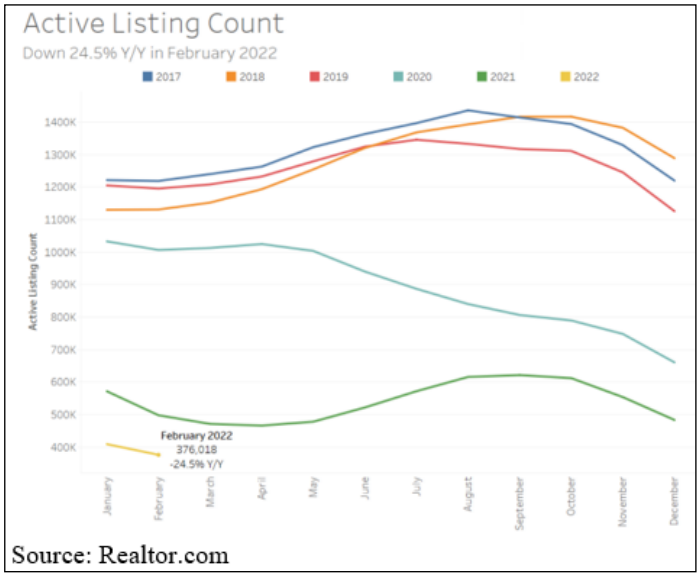
- Inflation is running at the highest levels in 40 years. The Consumer Price Index (CPI) increased at an 8.5% annual rate for the 12 months ending in March. It has been broad-based, including food, energy, goods, and services. Moody's Analytics estimates that households over the past 12 months are spending, on average, $327 more per month because of inflation. Core CPI, which excludes food and energy, was up 6.5% over the same period. The surge in inflation was global as the Eurozone reported record annual inflation of 7.5% in March. The recent increase has been referred to as the Putin inflation, but U.S. inflation was running at 7% at the end of 2021, well before Russia invaded Ukraine. Instead, the San Francisco Fed has pointed to excessive federal spending as a primary driver. In fiscal 2019, the federal government spent $4.4 trillion which increased by 55% to $6.8 trillion in fiscal 2021.



- Inflation is often considered a tax on society due to the higher costs of goods and services and it is especially pernicious for the lower- and middle-income earners. There are also real tax implications with inflation. For the first five months of fiscal 2022 ending in February, federal government receipts were up 26%, and individual tax receipts rose 38%. In fiscal 2021, government receipts were up 18% and individual tax receipts increased 27%. While some of the tax monies will be spent on behalf of the lower and middle classes, recent inflation trends may ultimately serve to undermine the benefits of additional government support.

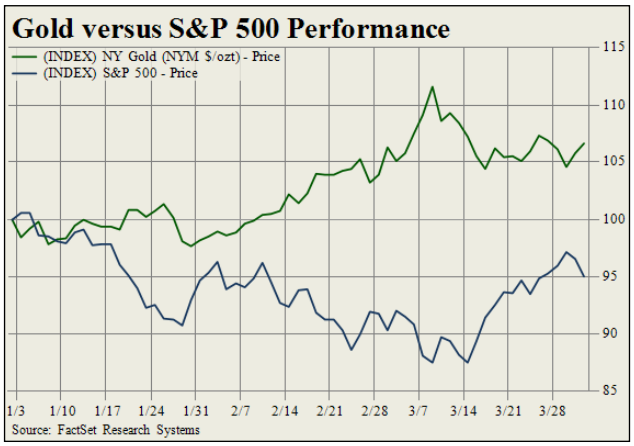
- In March, the University of Michigan's Consumers Sentiment Index fell to its lowest level since 2011. While the April report reflected an increase in sentiment, the index is still well below pre-pandemic levels. When asked to explain changes in their finances, more consumers mentioned reduced living standards due to rising inflation. Consumer spending rose a modest 0.2% in February from the prior month. However, real personal spending fell by 0.4% in February, adjusting for inflation. Real spending on goods fell 2.1%, but real services spending rose by 0.6%. Inflation has started to impact consumer spending and economic growth.

- Home price growth remained high for the 12 months ending in January as the supply of homes for sale fell to a new low. The S&P Core Logic Case-Shiller National Home Price Index, which measures average home price increases in major metropolitan areas, rose 19.2%. Zillow data showed the average home value increased by $52,667 in 2021, higher than median U.S. full-time gross income of about $50,000. This is the first time home value growth has exceeded personal pre-tax incomes since records began in 1999. At the end of January, the inventory of homes for sale fell to its lowest level since the National Association of Realtors began tracking existing home inventories in 1999. There is a 1.6-month supply of homes for sale at the current sales rate versus a standard 6-month supply. With demand outpacing supply, buyers' competition has led to bidding wars, and many homes are selling above their list price. The highest mortgage rates in four years and lower affordability have initiated some demand pullback, as pending home sales have come down recently and mortgage applications are 40% lower than a year earlier.



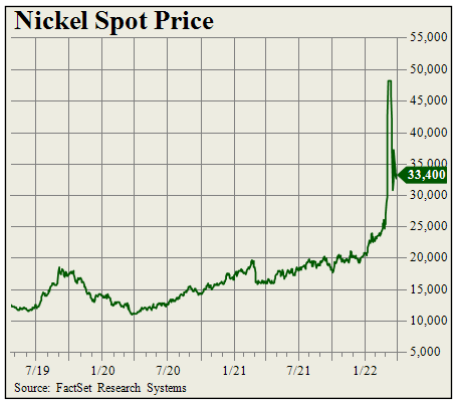
COMMODITIES/CRYPTO

- After a negative 2021, gold had a positive first quarter, finishing up 6.7%. Twelve of the last fourteen quarters have been positive for the precious metal. Its historical negative correlation to equities has made it a popular holding in portfolios. The correlation of gold to the S&P 500 went positive following the COVID market lows. Following Russia's offensive into Ukraine, the daily correlation has steeply dropped off, moving back towards zero and eventually turning negative. As the S&P 500 sold off 13.1% during the first two and a half months of the quarter, gold prices were up as high as 13.4%, highlighting the flight to safety experienced as markets digested new geopolitical risk.



- The Russia and Ukraine war has exacerbated global supply chain issues, as the two countries represent a significant portion of global commodity production. Energy sanctions will have indirect consequences for European countries, as the continent sources more than 40% of its natural gas and 30% of its oil from Russia. The pain has extended across the Atlantic, as the national average price per gallon of gas rose from $3.41 in December 2021 to more than $4.30 in March. In response, President Biden announced the release of 1 million barrels of oil per day for six months from the nation's Strategic Petroleum Reserves.

- In addition to oil and gas, Russia and Ukraine represent one-third of global wheat, barley, and potash exports, with Russia exporting 11.2 million more tons of wheat than any other country in 2020. The countries are also meaningful producers of various metals, including cobalt, vanadium, tungsten, copper, titanium, aluminum, and nickel. The threat of sanctions on Russian nickel exports alone created major market dislocations. The price of nickel rose an unprecedented 250% and forced a halt of trading on the London Metal Exchange.

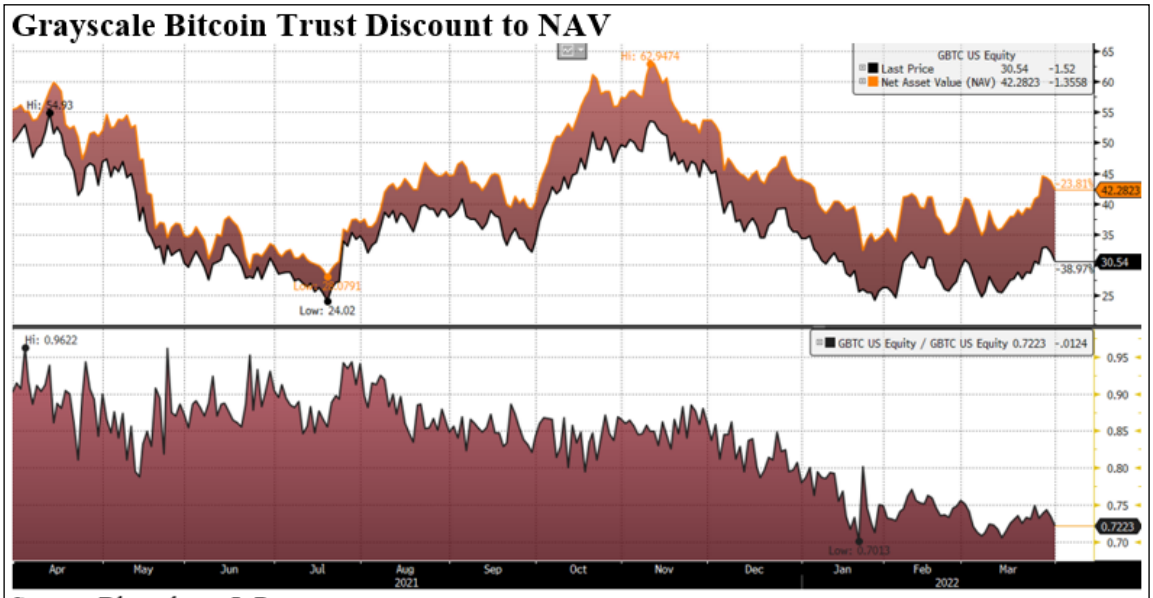


- President Joe Biden signed an executive order in March calling for federal agencies to examine the risks and benefits of cryptocurrencies. The order focuses on six key areas: consumer and investor protection, financial stability, illicit activity, U.S. competitiveness on a global stage, financial inclusion, and responsible innovation. To date, cryptocurrencies have not been formally classified as securities by the Securities and Exchange Commission (SEC). While this independence appeals to some, it drives increased volatility, susceptibility to fraud, and lack of investor protection. SEC Chairman Gary Gensler has also called for increased crypto exchange regulation in 2022, reiterating there are still "real vulnerabilities" with exchanges. The SEC's future consideration of cryptocurrencies as securities is widely thought of more as a "when" than an "if."

- The relationship between Decentralized Finance (DeFi) & traditional finance took a significant step forward in the first quarter as the world's largest money manager, BlackRock Inc., announced a strategic partnership with Boston-based peer-to-peer payments firm Circle. In conjunction with a syndicate that includes Fidelity Management and Research, BlackRock has committed to raising $400 million in capital and assisting in the management of Circle's flagship product, the stablecoin U.S. Dollar Coin (USDC). Stablecoins earn their nomenclature due to their prices being pegged to the value of an underlying low-volatility asset such as the U.S. dollar. The partnership represents a rotation in thinking by BlackRock CEO Larry Fink, who once referred to bitcoin as "an index of money laundering."

- Bitcoin finished the first quarter at $45,413.47, down 2.1% from its 2021 end-of-year price. Within the quarter, bitcoin dipped to $36,724.54, its lowest price since July 2021. In early January, the weekly correlation of bitcoin to the NASDAQ reached an all-time high of 0.47. Investors seek negative and near-zero correlation for portfolio diversification, meaning the jury is still out on whether crypto is "digital gold." The Russia and Ukraine war has presented both the positive and negative cases for DeFi. On one hand, citizens of both countries have turned to DeFi to evade cash limitations imposed by their governments. DeFi has also been used for funding, with Ukraine raising more than $60 million through cryptocurrency donations. However, economic sanctions such as those imposed against Russia are easier to circumvent, and much less impactful as a result, in a DeFi environment.

- Grayscale Bitcoin Trust (ticker: GBTC), the world's largest bitcoin fund, was down 10.8% in the first quarter compared to bitcoin's 2.1% drop. On January 21, the fund's discount to net asset value (NAV), the ratio of the trust's assets less its liabilities to the trust's outstanding shares, fell to the lowest in its history, reaching -29.9%. At the time, the fund was trading at a price of $25.59 despite the NAV of its bitcoin holdings being priced at $36.49 per share. GBTC traded at a premium to NAV from its inception in September 2013 until February 2021. GBTC trades at a discount due to the closed-end structure of the fund. A closed-end fund has a fixed number of shares, a feature that keeps exchange-traded fund (ETF) prices tighter to their respective NAV. For comparison, ProShares Bitcoin Strategy ETF (ticker: BITO) closed the first quarter trading at a 0.1% discount. GBTC offers direct exposure to bitcoin, unlike BITO which offers exposure through futures contracts. GBTC could close the discount if it were successful in its conversion to an ETF, but the SEC has denied GBTC and others' attempts to convert for years and has shown no indication of changing its mind. The SEC's decision on GBTC's spot ETF is due July 6, with analysts expecting another denial.

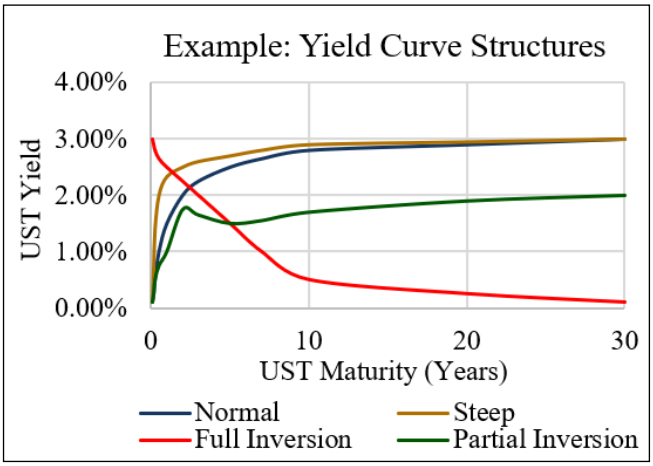


Is a Recession Imminent?

If you have followed the financial news lately, even sporadically, you have likely heard about the yield curve and its recent "inversion." The media has been very vocal about the inversion and its potential ramifications for both the economy and the financial markets. This is understandable given the history of yield curve inversions and the importance placed on an inverted curve. In the last 50 years, all seven recessions have been preceded by an inverted yield curve using 2-year and 10-year USTs. As a result, we thought it would be helpful to share some insight on this highly discussed topic. Specifically, what is the yield curve, what an inversion represents, and the potential impact it may prospectively have on consumers and investors.

What is the Yield Curve?

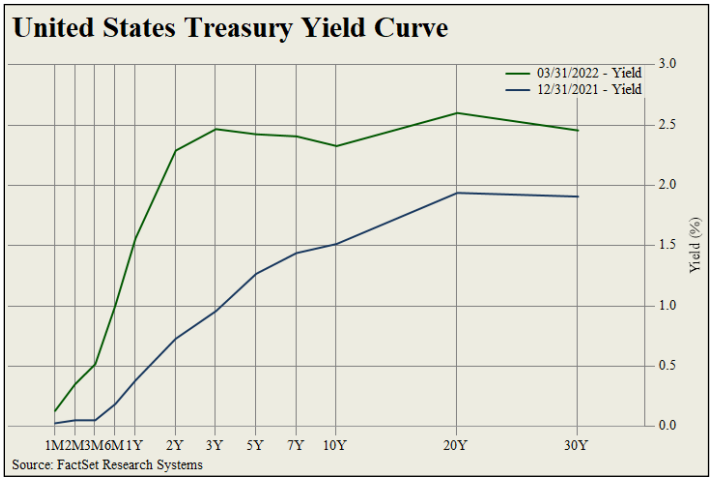
The yield curve, also referred to as the term structure of interest rates, illustrates the relationship between UST security interest rates (yields) and their time until maturity. It is shown as a line that plots the yields of the UST securities with differing maturity dates ranging from 1 month to 30 years. Investors generally require a higher yield on longer-dated debt to be compensated for the increased uncertainty and risk which comes with longer-term investments. Therefore, the yield on a 3-month security should be less than the yield on a 2-year security, which should be less than the yield on a 10-year security. This creates a "normal" yield curve with an upward slope as yields increase in conjunction with time to maturity. The slope normally decreases farther out in the maturity range as the yield differential decreases between maturities, thereby creating the curve. A normal yield curve implies more stable economic conditions. A steep yield curve looks like a normal curve with a steeper slope and reflects high expectations for strong economic growth, which is often associated with higher inflation.



What is a Yield Curve Inversion?

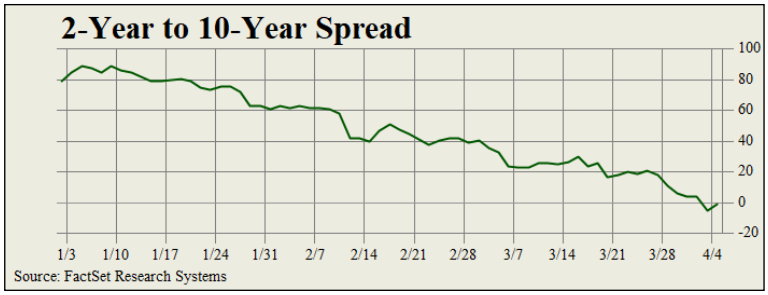
The yield curve inverts when short-term yields are higher than longer-term yields. The whole yield curve can be inverted or only parts of it. For example, 2-year yields can be higher than 10-year yields while 3-month yields are lower than 10-year yields.

When discussing inversions, investors, economists, and market commentators often focus on the spread between the 2-year UST yield and the 10-year UST yield. The 2-year yield is highly influenced by the Fed and the market's expectations for near-term increases in the fed funds rate, while the 10-year yield is seen as a better reflection of prospective economic strength and historically has been controlled by investor expectations and capital. This segment of the curve inverted on an intraday basis several times in the last week of March and then closed inverted on April 1 and April 4 before uninverting. On April 1, the 2-year UST ended trading yielding 2.44% while the 10-year UST yield closed at 2.39%. Since 1973, there have been more than 30 inversions, but those inversions occurred within seven structural periods of inversions.



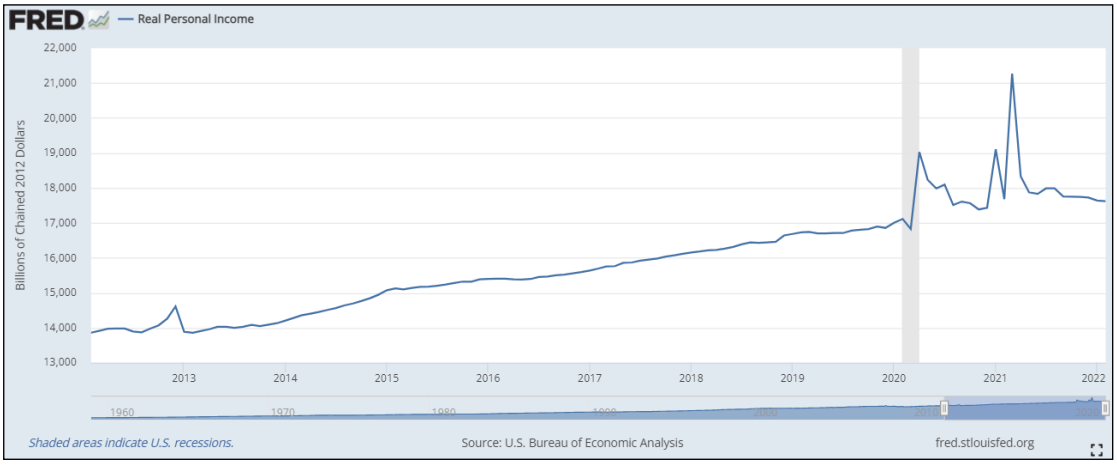
What Creates a Yield Curve Inversion?

Usually, the yield curve inverts after the Fed has raised short-term interest rates several times; however, the most recent inversion occurred after only one 0.25% hike in March. This is due to the widespread view that the Fed has no choice but to aggressively increase the fed funds rate over the next several meetings to fight inflation. Thus, 2-year yields reflect an aggressive path of tightening by the Fed. The Fed has a challenging job of bringing inflation down to its 2% target without causing a recession; a so-called "soft landing." Historically, their success in engineering a soft landing has been limited. When 10-year yields were trading below 2-year yields, the market was reflecting anticipation of the Fed tightening monetary conditions to the point where the economy slows down significantly, which would ultimately force the Fed to move to either avoid or fight a recession.



Why Does the Yield Curve Matter for Consumers?

Given the strong economic recovery and fiscal support in response to COVID, wages have increased, which would normally bode well for consumers. However, recent wage increases have led to higher inflation expectations, an important contributor to higher inflation. With higher inflation, real "inflation-adjusted" incomes have fallen for six straight months, effectively reducing the quality of life for many Americans who previously felt relatively well-off financially due to economic stimulus. To benefit from higher wages, workers need inflation to normalize without a recession. When certain sections of the yield curve have inverted, it has historically been a strong signal of a slowing economy and/or a recession.

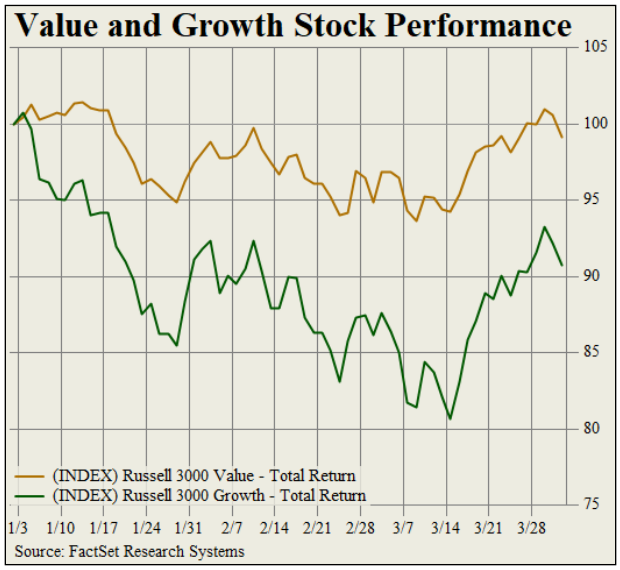


Also, an inverted yield curve not only reflects pessimistic expectations but can cause economic dislocations. Consumers are often exposed to short-term rates through a multitude of debt channels. Credit card rates, auto financing, and variable rate debt structures often move quickly off fed funds rate increases, increasing the cost of debt for many consumers. Small businesses without access to public equity and debt markets are more exposed to shorter-term and variable rate debt than larger companies. They also provide employment for nearly half of the workers in the U.S. These dynamics can cause the flow of capital to increasingly favor well-funded companies, institutions, and individuals over the public at large, and lead to greater income and wealth inequality during and in the aftermath of recessions.

Why Does the Yield Curve Matter for Equity Investors?

While the inverted yield curve has been promoted as a sign of impending stress in the stock market, it has not been a good market-timing tool for equities. On average, it has taken over a year for the S&P 500 to peak after the first yield curve inversion. In 1973, the S&P 500 peaked two months before the yield curve inversion. In the six other structural periods, though, the stock market continued to rise after an initial inversion. Following the 1998 and 2005 inversions, the stock market rose for 22 months. Further, five of these six inversions produced double-digit gains for the S&P 500, with two inversions preceding market gains of over 30%. Ultimately, the seven structural inversion periods led to equity declines since stocks generally do not perform well in the face of economic recessions, but the wide variance in performance and timing due to circumstances surrounding the inversion call into question some of the "certainty" promulgated by much of the media reports on the future performance of this asset class.

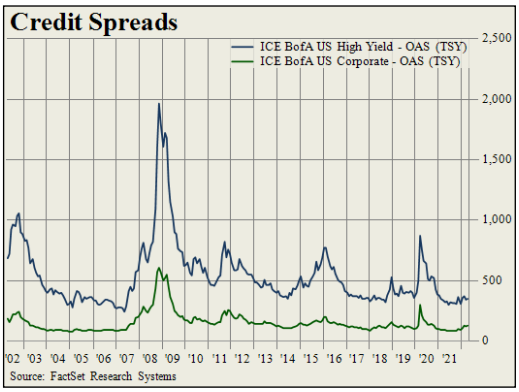
Looking deeper into equities, the yield curve is often associated with a disparity in the performance of equity styles, sectors, and industries. The dynamics between growth and value stocks are highly dependent on the Fed's path forward. The low-interest rate, low-inflation world that largely persisted in the decade-plus since the Great Financial Crisis heavily rewarded growth stock investors. In a low-interest rate environment, investors are more willing to allocate capital to stocks exhibiting strong revenue growth as they can afford to be patient while these companies attempt to translate revenue into profits. Prior to the NASDAQ's first quarter drawdown, price-to-earnings multiples for growth stocks, in general, reached levels not seen since the end of the Internet Bubble. The growth in technology stock representation in the S&P 500 has led to a very concentrated index, of which many investors are likely unaware. Conversely, value stocks such as those found in the Energy and Materials Sectors often perform well in inflationary environments, as the assets they own, process, and sell increase in value. However, they are particularly vulnerable to a slowing economy. As the Fed attempts to walk the tightrope of lowering inflation without creating a recession, the outcome of which is highly uncertain, the divergence between growth and value stocks, and various sectors within the S&P 500, will likely lead to bouts of heightened volatility.



Why Does the Yield Curve Matter for Fixed Income Investors?

Bond yields have already risen because of a strong economy, high inflation, and the anticipation of higher fed funds rates. Bond prices fall as bond yields rise (interest rate risk), so rising yields have a negative impact on bond returns. Long-duration bonds will decline in price more than shorter-duration bonds for a given equivalent rise in yields. Even though the Fed only raised short-term interest rates by 0.25% for the first time in March, the Bloomberg U.S. Aggregate Bond Index fell 6.0% in the first quarter of 2022, the worst one-quarter performance in more than 40 years. Following an inversion, however, the bond market outlook tends to change. After three of the four previous inversions, the 10-year UST yield decreased over the year following the inversion, aiding bond market performance.

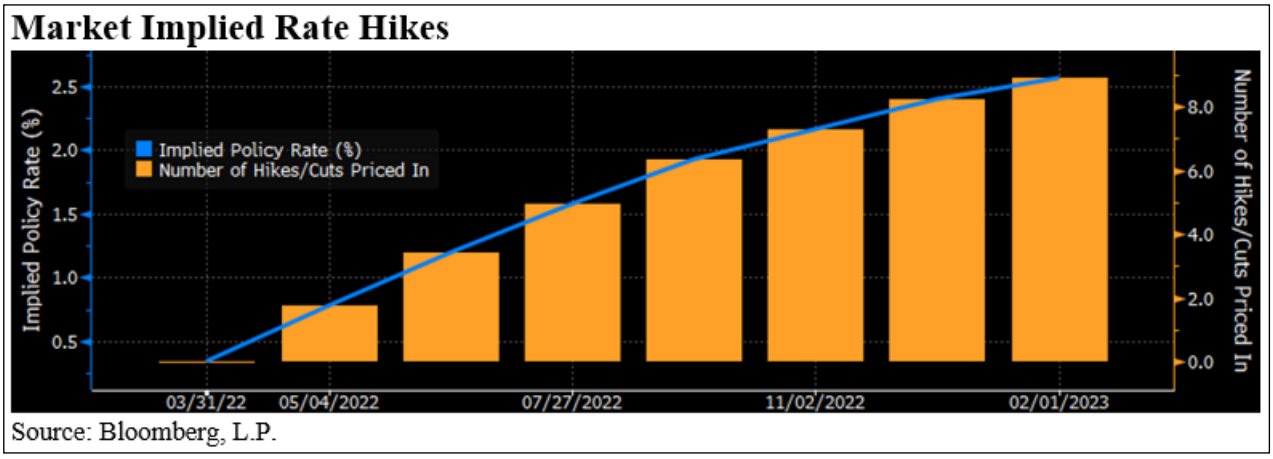
In terms of credit (default) risk, corporate bonds tend to underperform in recessionary periods, especially in the earlier days, when concerns over solvency override interest rate risks. For example, in the third and fourth quarters of 2008, UST bonds in aggregate provided a 2.3% and 9.0% positive return, respectively. Investment grade corporate bonds underperformed USTs, losing 7.5% in the third quarter before regaining 1.6% in the fourth. Similarly, in the first quarter of 2020 as the economy entered the short-lived COVID recession, USTs provided an 8.8% return, while investment grade bonds lost 4.1%. However, during the less *economically* damaging recession following the Dot-Com Bubble, investment grade corporate bonds had only one quarter with negative returns (-0.7%). Concerns about defaults exacerbated losses in these same periods for high-yield bonds, which are not as creditworthy as investment grade bonds. Another significant uncertainty for the fixed income markets is how quickly the Fed will reduce its nearly $9 trillion balance sheet and the impact their selling of bonds will have on longer-term interest rates. As with equities, the path for bond performance will depend highly on the Fed's chosen path and success or failure in mitigating a recession.



Is This Time Different?

The seven economic recessions of the last 50 years have started on average 17 months after the inversion date; the range of times varied from 7 months in 2020 to 34 months in 2001. However, correlation does not equal causation. The yield curve inverted in 1998 very briefly, yet it took 34 months for the 2001 recession to occur. Thus, the inversion could be deemed as a false signal given the length of time and circumstances involved. For the record, another inversion did occur prior to the stock market peak in 2000. Similarly, the Arab oil embargo caused the 1973 recession and the COVID pandemic caused the 2020 recession. It is doubtful that the yield curve forecast either of these exogenous shocks. There may have been recessions in 1973 and 2020, but perhaps not without these events.

For now, the latest yield curve inversion is considered to be transitory since it reverted two trading days after inverting. This does not mean the curve will not invert again, but a persistent inversion would be a stronger recession signal. Some economists, including Fed Chair Powell, pay more attention to the spread between the 3-month UST yield and the 10-year UST yield. This segment of the yield curve has not yet inverted. The Fed has only raised the fed funds rate once, to 0.50%, so the front end of the segment is anchored, at least for now. As noted in the accompanying chart, expectations are very high for future rate increases. While the increases may materialize, the lack of inversion for this segment indicates there is an opportunity for inflation to decelerate and the Fed to adjust its path. Others argue this time is different, feeling that the yield curve inversion based upon the 2-year and 10-year USTs does not provide the strong



signal it used to because the Fed owns 25% of publicly traded USTs and foreign investors, primarily foreign central banks and governments, own another 35%. They argue this excess demand has suppressed the 10-year UST yield making it less reflective of domestic growth and inflation than it has been historically. Famed investor John Templeton once said in his *16 Rules for Investment Success* published in 1933, "The investor who says, 'This time is different' when in fact it's virtually a repeat of an earlier situation, has uttered among the four most costly words in the annals of investing." This time it indeed may be different, though, with COVID being considered a once-in-a-century pandemic, the high degree of uncertainty surrounding the Russia and Ukraine war, and unprecedented fiscal and monetary policy actions globally. Some or all may have truly decreased the predictive power of the yield curve. Still, from an investor perspective, paying a significant amount of attention to the term structure of interest rates is always an important component in managing wealth. It becomes even more important when the curve has inverted. While the circumstances now require maintaining a more open mind than history suggests and the media sometimes portrays, managing wealth in a disciplined and prudent manner has taken on an even higher level of importance. Not just in managing downside risk but also in investing capital where the long-term prospects provide an attractive risk versus return tradeoff. Inflation is problematic when excessive for many reasons, but history shows when in the 2-4% range, the stock market has had a positive bias. Maintaining an appropriate time horizon, though, has been an integral component to that success.

"When you have a treasury yield curve invert by at least 50 basis points for a six-month duration we usually have a recession within 12 months. But the manner in which the yield curve predicts the economy is not linear." **~John Lonski**