The NAIC Capital Markets Bureau monitors global capital markets developments and analyzes their potential impact on the investment portfolios of U.S. insurance companies. Previously published NAIC Capital Markets Bureau Special Reports are available via its web page and the NAIC archives (for reports published prior to 2016).

Year-End 2022 Capital Markets Update

December 2022
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Executive Summary

- Concerns about the strength of the global economy amid heightened geopolitical risk, an oil price shock, supply chain disruptions, and inflationary pressures dominated the financial markets in 2022.
- The Federal Reserve (the Fed) raised rates seven times throughout the year, including four consecutive 75 basis points (bps) increases and moderating to a 50 bps increase in December, for a total increase of 425 bps in 2022.
- Inflation has begun to ease after reaching a four-decade high in June.
- The 10-year U.S. government bond yield reached a high of 4.25% in October, its highest level since 2008, given the Fed's aggressive and hawkish stance during the year.
- The Treasury yield curve has shifted higher and inverted following the Fed's aggressive rate hikes and as recession concerns rise.
- Credit spreads widened amid concerns of pressures on profitability and credit quality stemming from higher borrowing costs and the prospects of a recession.
- Global stocks have declined significantly; in the U.S., the Standard & Poor's 500 index (S&P 500) entered bear market territory mid-year but recovered modestly to end with a negative year-to-date (YTD) return of 18% in mid-December.
- The price of oil has declined to $73 per barrel from its eight-year high of $123 per barrel in March amid concerns of slowing global economic growth and resulting lower demand for oil and fuel.

Weak Global Growth Amid Rising Interest Rates

In 2022, concerns about the strength of the global economy surfaced amid heightened geopolitical risk, an oil price shock, supply chain disruptions, and inflationary pressures. Central banks have been raising interest rates, in some cases aggressively, to tame elevated and persistent inflation, and this has led to

fears of a recession. These factors have resulted in significant pressures and instability in the financial markets.

According to the International Monetary Fund (IMF) World Economic Outlook dated October 2022, global growth is expected to decrease to 3.2% in 2022 from 6% in 2021. This is the weakest profile since 2001, with the exception of the global financial crisis and the acute phase of the COVID-19 pandemic. The significant decrease is mainly a reflection of a slowdown in the world's three largest economies—the U.S., China, and the euro area. In the U.S., gross domestic product (GDP) was 5.7% at year-end 2021, and the IMF forecasts it to decrease to 1.6% in 2022. (Refer to Table 1.) For China and the euro area, the IMF predicts GDP to be 3.2% and 3.1%, respectively, for 2022 down from 8.1% and 0.2% in 2021. This trend is due to tightening financial conditions as interest rates steeply increase, extended lockdowns in China due to COVID-19 along with a property market crisis, and the continued impact of Russia's war on Ukraine.

Table 1: The IMF's Global and Regional Growth Forecasts (% Change)

Overview of the *World Economic Outlook* Projections
(Percent change, unless noted otherwise)

		Projections		Difference from July 2022 WEO *Update*[1]		Difference from April 2022 WEO[1]	
	2021	2022	2023	2022	2023	2022	2023
World Output	**6.0**	**3.2**	**2.7**	**0.0**	**–0.2**	**–0.4**	**–0.9**
Advanced Economies	**5.2**	**2.4**	**1.1**	**–0.1**	**–0.3**	**–0.9**	**–1.3**
United States	5.7	1.6	1.0	–0.7	0.0	–2.1	–1.3
Euro Area	5.2	3.1	0.5	0.5	–0.7	0.3	–1.8
Germany	2.6	1.5	–0.3	0.3	–1.1	–0.6	–3.0
France	6.8	2.5	0.7	0.2	–0.3	–0.4	–0.7
Italy	6.7	3.2	–0.2	0.2	–0.9	0.9	–1.9
Spain	5.1	4.3	1.2	0.3	–0.8	–0.5	–2.1
Japan	1.7	1.7	1.6	0.0	–0.1	–0.7	–0.7
United Kingdom[2]	7.4	3.6	0.3	0.4	–0.2	–0.1	–0.9
Canada	4.5	3.3	1.5	–0.1	–0.3	–0.6	–1.3
Other Advanced Economies[3]	5.3	2.8	2.3	–0.1	–0.4	–0.3	–0.7

[1]Difference based on rounded figures for the current, July 2022 WEO *Update*, and April 2022 WEO forecasts.
[2]See the country-specific note for the United Kingdom in the "Country Notes" section of the Statistical Appendix.
[3]Excludes the Group of Seven (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and euro area countries.
Source: IMF WEO, October 2022.

To tame inflation, central banks are tightening monetary policies and aggressively raising interest rates. In the U.S., in March 2022, the Fed raised the federal funds rate by 25 bps for the first time since 2018, followed by a 50 bps hike in May. This was followed by four consecutive 75 bps increases in June, July, September, and November—the largest interest rate increases since 1994. The Fed moderated to a 50 bps increase mid-December, such that the benchmark federal funds rate is currently between 4.25% and 4.5%—the highest range since early 2008. The Fed signaled the peak rate could be above 5% and indicated it expects to maintain rates at these higher levels through next year, with no reductions anticipated until 2024 at the earliest. In addition, the Fed has initiated a reduction in the $8.8 trillion asset portfolio by passively reducing its holdings by up to $95 billion per month as the securities mature, decreasing stimulus.

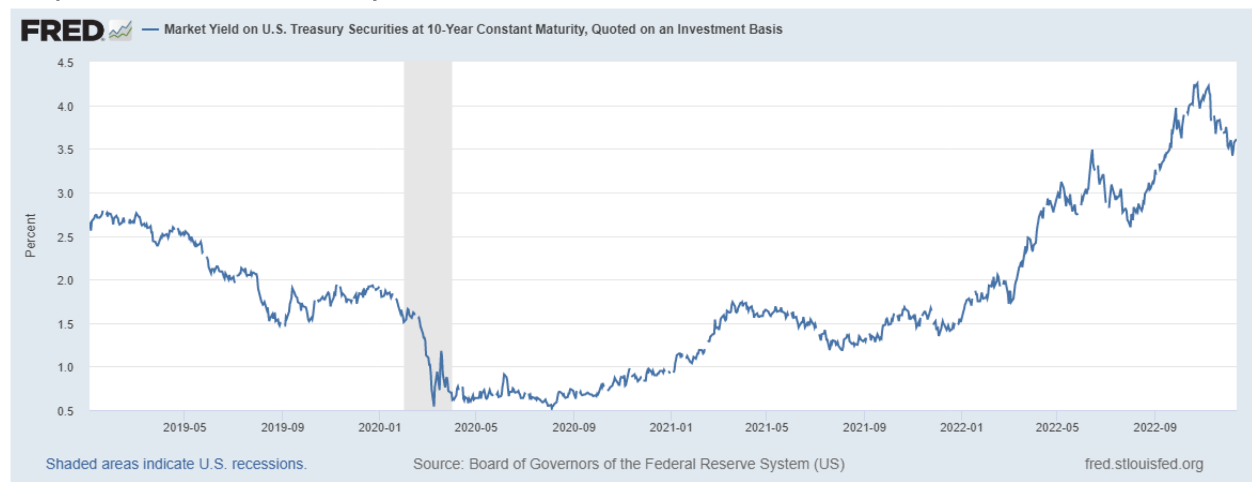
As the global economy continues to be affected by the aforementioned economic and geopolitical issues, investors are concerned about the impact of steeply rising rates. As a result, the financial markets have been volatile, evidenced by stock markets with YTD negative returns and an extreme yield curve inversion.

U.S. Treasury Yields Rise, and the Yield Curve Inverts

U.S. Treasuries are considered a safe haven by investors, and they are attractive during times of economic stress. However, bond yields have been rising, and prices have fallen significantly following the Fed's successive and aggressive federal funds rate hikes.

The 10-year U.S. Treasury yield began 2022 at about 1.6% and climbed steadily (refer to Graph 1) as the markets priced in successive and aggressive Fed rate hikes with high inflation persisting. On Oct. 24, it reached its highest level since June 2008, or 4.25%, following the Fed's hawkish stance and significant market volatility. However, treasuries rallied thereafter, closing at 3.51% on Dec. 13, amid positive economic data in the U.S., including a long-awaited slowdown of inflation.

Graph 1: U.S. 10-Year Treasury Yields, 2019 – mid-December 2022



Source: Federal Reserve Bank of St. Louis, Board of Governors of the Federal Reserve System (U.S.).

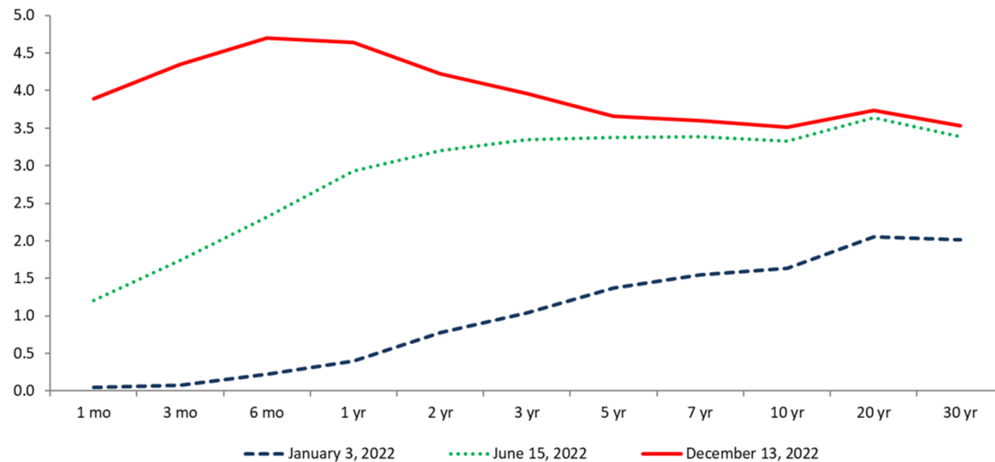
The consumer price index (CPI) rose 7.1% in November from a year ago, down sharply from 7.7% in October and building on a trend of moderating price increases since June's 9.1% peak. The core CPI, which excludes energy and food prices, rose 6% in November from a year ago, easing from a 6.3% gain in October.

U.S. mortgage rates are closely tied to the U.S. 10-year Treasury yield. The 30-year fixed U.S. mortgage rate was 6.61% at the end of November—the highest in over a decade and more than double what it was in October 2021.

The shape of the Treasury yield curve generally provides insight into the market's expectations for interest rates and economic activity. In June, the yield curve shifted higher and flattened compared to

the beginning of the year. (Refer to Graph 2.) The Fed's aggressive actions resulted in the higher Treasury rates and a flattening of the yield curve, as many investors expect the higher rates will push the U.S. economy into a recession. Since June, the yield curve has been inverted, viewed by market participants as a recession signal, with short-term rates generally higher than long-term rates. As of Dec. 13, the yield on the two-year Treasury was 4.22%, and the yield on the 10-year Treasury was 3.51%. This is a difference of 71 bps—the largest inversion since 1981.

Graph 2: U.S. Treasury Yield Curve, January 2022 – December 2022



Source: U.S. Department of the Treasury (Treasury Department).

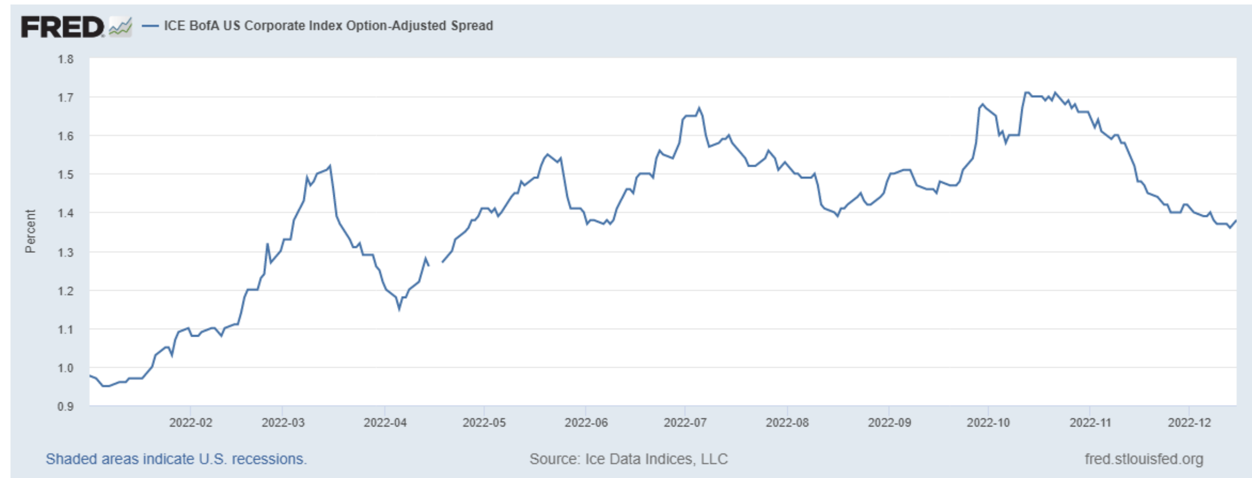
As of year-end 2021, U.S. insurers had exposure to about $316.3 billion, or approximately 6% of total cash and invested assets, in U.S. government bonds across various maturities. This was an increase from $280.6 billion at year-end 2020, but it was unchanged as a percentage of total cash and invested assets.

Credit Market Headwinds Pressure Bond Spreads

The credit market is experiencing several challenges, including persistent inflationary pressures, higher interest rates, and the prospect of lower economic growth. These factors, among others, have pressured credit quality, and corporate bond spreads have trended wider since early 2022.

Investment grade spreads began the year at 98 bps and trended higher over the year. (Refer to Graph 3.) Following the Russian invasion of Ukraine, investment grade spreads climbed to 152 bps in mid-March but recovered to 115 bps by early April. However, with the U.S. equity markets in turmoil and in bear market territory in June, they gapped out again in late May and June. Investment grade spreads then peaked at more than 170 bps in October—the widest level since June 2020, when the world was in the midst of the COVID-19 pandemic—following investor concerns about inflation and fears of a recession. Spreads have retreated from that high, however, closing at 138 bps on Dec. 15, or 40 bps wider since the beginning of the year.

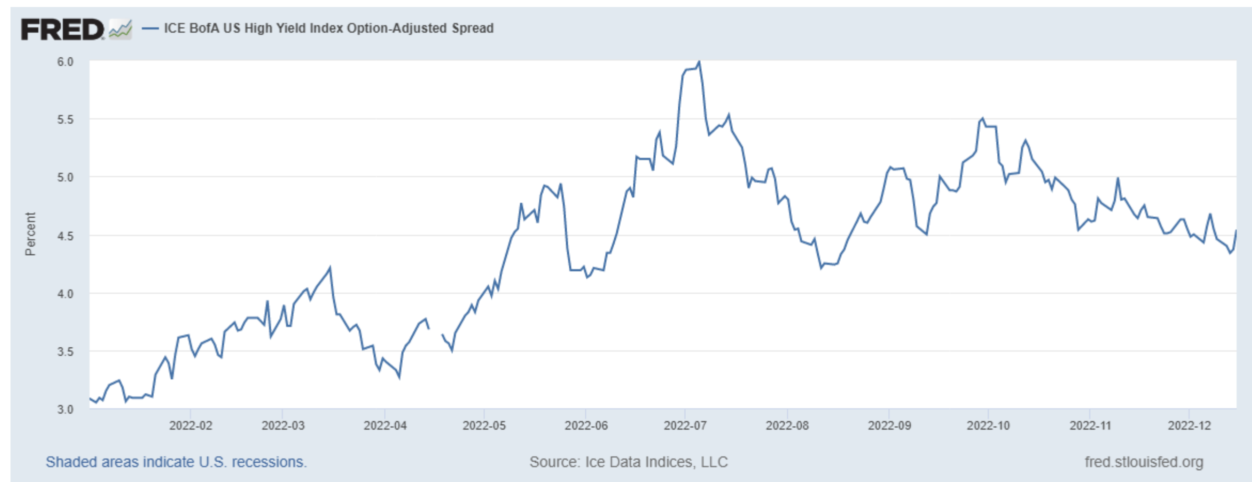
Graph 3: Investment Grade Corporate Credit Spreads, January 2022 – Mid-December 2022



Source: Federal Reserve Bank of St. Louis, Board of Governors of the Federal Reserve System (U.S.).

High-yield spreads have also been under pressure as investors have shied away from risky assets in the volatile market environment. They began 2022 near 300 bps, significantly below the average pre-pandemic levels of approximately 350 bps. They then widened during the first half of the year following the onset of the Russia-Ukraine war and as equities continued to sell off into a bear market. (Refer to Graph 4.) High-yield spreads peaked at almost 600 bps in July amid widespread recession concerns. In the second half of 2022, they have recovered modestly from that YTD peak as inflation has begun to moderate and expectations grow for less aggressive rate hikes. Spreads closed on Dec. 15 at 454 bps, or 144 bps wider than the beginning of the year.

Graph 4: High-Yield Corporate Credit Spreads, January 2022 – Mid-December 2022



Source: Federal Reserve Bank of St. Louis, Board of Governors of the Federal Reserve System (U.S.).

Note that despite modest recoveries in spreads in recent weeks, current IG and HY spreads are both above pre-pandemic levels.

While many companies have been able to pass along higher costs to consumers, the ability to do so going forward could fade as consumers' wallets continue to be strained with wage growth lagging inflation; this could pressure margins. In addition, the prospects of a recession and a pullback in consumer spending could hit companies' top line. Furthermore, higher borrowing costs will increase expenses and could result in financing challenges for many, particularly high-yield companies or those with near-term refinancing needs.

These credit challenges will increasingly pressure credit quality as the expected recession unfolds in 2023. Rating downgrades could accelerate as these challenges persist, and credit defaults may rise. Under its base case scenario, S&P Global Ratings expects the U.S. trailing-12-month speculative-grade corporate default rate to reach 3.75% by September 2023, from 1.6% in September 2022.[1]

The U.S. insurance industry's exposure to corporate bonds totaled $2.8 trillion, or 35% of total cash and invested assets, as of year-end 2021. High-yield bonds, or those with reported NAIC 3 designations and below, decreased marginally to 6% of total bond exposure in 2021 from 6.1% in 2020. Investment grade bonds, or those with reported NAIC 1 or NAIC 2 designations, accounted for 94% of total bonds, relatively unchanged from 93.9% at year-end 2020.

Volatility and Bears Take Over the Equity Markets

Volatility returned to the equity markets in 2022. Globally, stock markets experienced volatility due to persistently high inflation, the effects of the Russia-Ukraine war, supply chain issues, and larger-than-usual interest rate hikes. The S&P 500, in particular, entered a bear market in June—the first time since 2020— and dipped back into that territory in October after recovering modestly from its initial decline.

While they have all declined in value since the beginning of the year, performance has varied among the three major stock market indices. The S&P 500 YTD return through Dec. 15 was negative 18.3% (refer to Graph 5) after having experienced a 26.6% gain in 2021. It has recovered modestly, as it had been down as much as 25% in mid-October. The Dow Jones Industrial Average (DJIA) has returned negative 8.6% on a YTD basis through mid-December and was down as much as 21% in late September. The NASDAQ has been the hardest hit, having declined 30.9% on a YTD basis and as much as 34% in early November.

[1] S&P Global Ratings, *Default, Transition, and Recovery: The U.S. Speculative-Grade Corporate Default Rate Could Reach 3.75% by September 2023*, Nov. 21, 2022

Graph 5: U.S. Equity Market Indices Performance, YTD mid-December 2022, % Returns

Source: The Wall Street Journal.

In terms of S&P 500 sectors, all but two of the 11 experienced negative returns YTD as of Dec. 12; energy and utilities achieved YTD returns of 52.6% and 0.6%, respectively. The largest three sector contractions were communication services (-38.2%), consumer discretionary (-32.7%), and information technology (-23.7%).

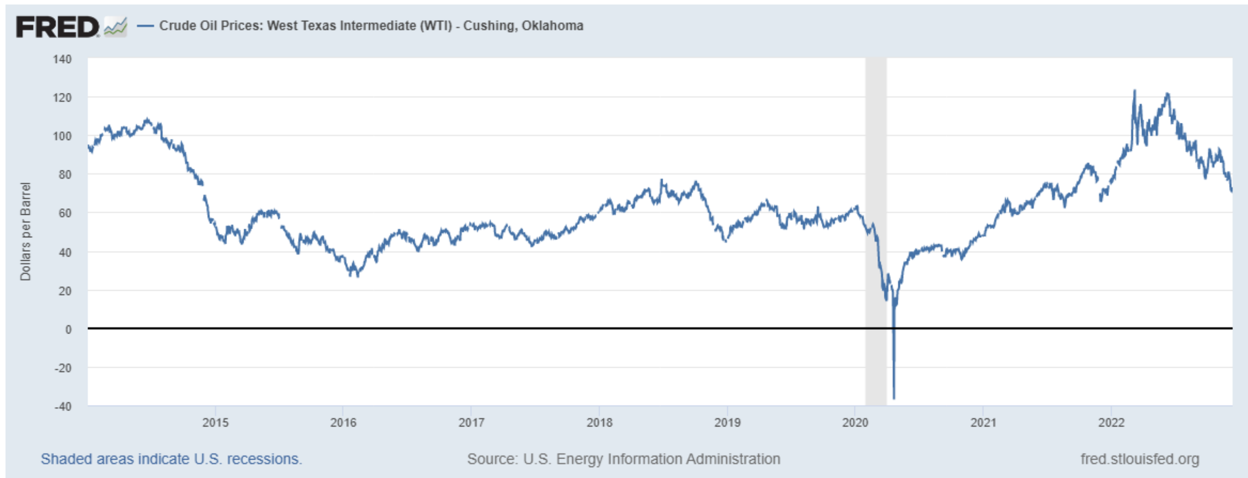
As of year-end 2021, U.S. insurers' exposure to common stock was $1.1 trillion. U.S. insurers' unaffiliated publicly traded common stock holdings experienced a weighted average YTD decrease of 11.44%[2] through November 2022 compared to -14.39% for the S&P 500 over the same period.

Oil Prices Retreat from Record Levels

Oil prices reached new highs following the Russian invasion of Ukraine in February, as Russia is one of the world's largest oil and gas exporters. The price of West Texas Intermediate (WTI) crude oil began 2022 at approximately $77 per barrel and surged to $123 per barrel in early March, the highest level since 2018. (Refer to Graph 6.) The price of WTI remained at elevated levels into mid-June. However, oil prices have declined in the latter half of the year amid concerns that central banks' aggressive efforts to fight inflation will slow global economic growth and lower demand for oil and fuel. The price of WTI crude oil closed at $73 per barrel on Dec. 12.

[2] For state insurance regulators only, U.S. insurer equities' monthly total returns may be accessed via StateNet.

Graph 6: Crude Oil Prices – West Texas Intermediate, 2014 – Mid-December 2022



Source: Federal Reserve Bank of St. Louis, Board of Governors of the Federal Reserve System (U.S.).

The U.S. insurance industry's exposure to oil and gas companies totaled $89 billion in bonds and $13 billion in common stock as of year-end 2021. The $102 billion in oil and gas-related exposure is a decline from $111 billion in exposure as of year-end 2020 and represents less than 2% of the industry's cash and invested assets.

The Capital Markets Bureau will continue to monitor trends in the capital markets and report on any developments as deemed appropriate.

Questions and comments are always welcome. Please contact the Capital Markets Bureau at CapitalMarkets@naic.org.

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