

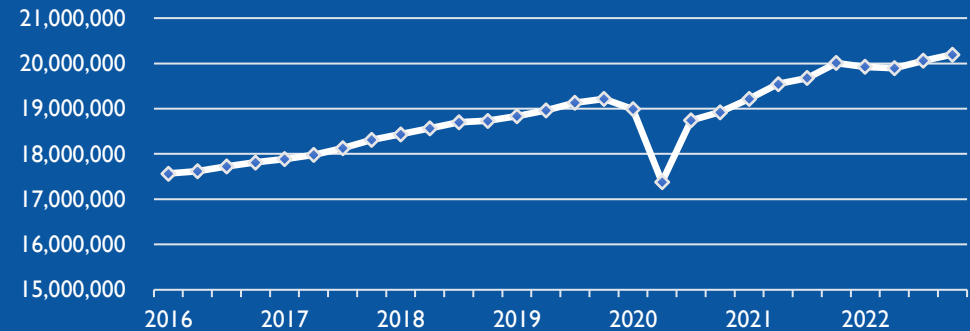
Economic Commentary

As of December 31, 2022

Other Indicators

	CPI	Unemployment	Sentiment	Crude Oil
Q4: 2021	7.1%	3.9%	70.6	\$77
Q3: 2022	8.2%	3.5%	58.6	\$89
Q4: 2022	6.4%	3.5%	59.7	\$83

Real GDP in Dollars*



*Billions

Recession or Inflation?

- Inflation is starting to subside; according to the Bureau of Labor Statistics' Consumer Price Index, prices are up just 0.9% over the past three months, the lowest such increase since January 2021. The PCE Price Index—the Federal Reserve's preferred measure of inflation—is currently showing its lowest annual price increase since October 2021.
- The housing market has been frozen solid by rapid interest rate increases.
- Gas prices are now at their lowest level since July 2021, international shipping costs have come down more than 80% from the peak in September 2021, and the Federal Reserve's Global Supply Chain Pressure Index, a measure of supply chain disruptions, is down more than 70% since the peak in November 2021.
- The demand side of the U.S. economy is weakening while supply side conditions continue to improve. That's exactly what the Federal Reserve wants to see as it continues to raise interest rates in an effort to bring inflation back to the 2% target.
- The tech sector announced 97,171 job cuts in 2022, up 649% compared to the previous year, according to consulting firm Challenger, Gray & Christmas Inc.
- Federal Reserve officials are sending mixed messages on future rate hikes. However, according to Bloomberg, investors and economists continue to doubt Fed forecasts that rates will rise to above 5% from their current level just below 4.5%.
- Wage pressures persisted as businesses reported being at a breaking point on increasing wages as they cannot pass through costs anymore to consumers.
- The unemployment rate fell to 3.5% in December from 3.6% in November. December job gains were led by leisure and hospitality, healthcare and construction.



Fourth Quarter Market Review



U.S. stocks rose overall in the fourth quarter, after declining in each of the first three quarters of 2022. The S&P 500 Index closed at 3839, up from 3586 on September 30. The index rose 8.1% in October, rose 5.6% in November, and fell 5.8% in December.

In the U.S., value outperformed growth, and larger capitalizations outperformed smaller.

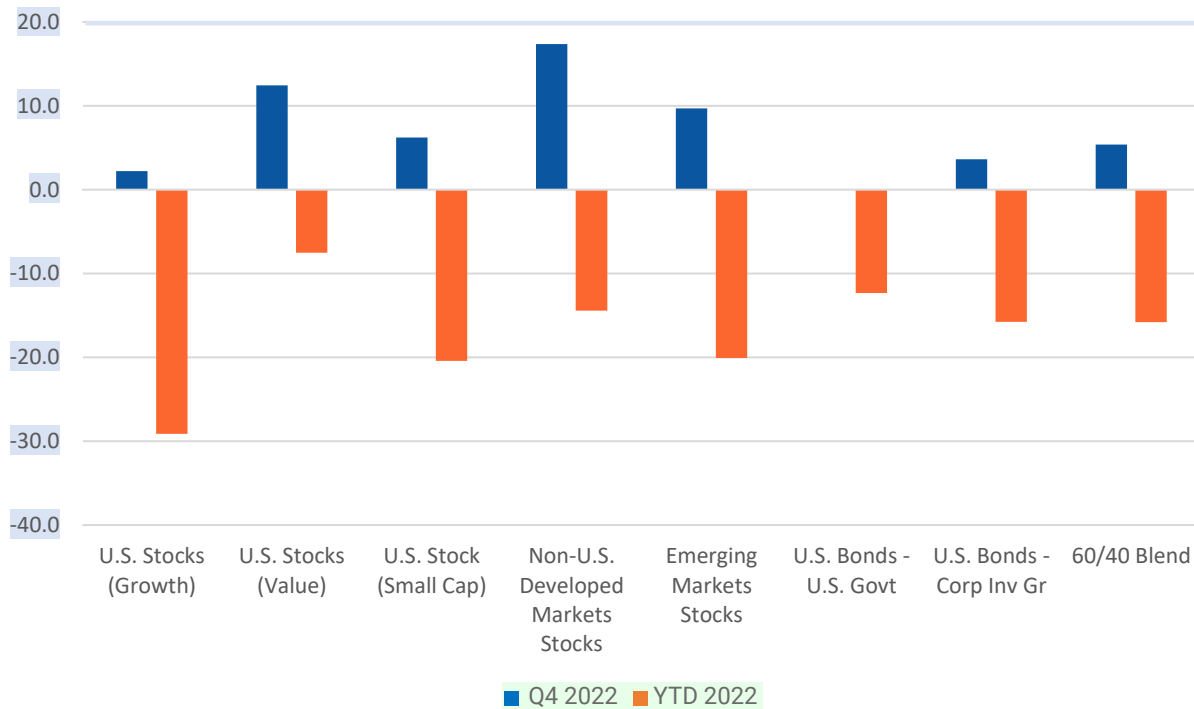
The best performing sectors of the S&P 500 were Energy (+22.9%) and Industrials (+19.2%). Two sectors had negative returns – Consumer Discretionary (dominated by Amazon) and Communications Services.

The top contributors to the index return included large energy, financial, and pharmaceutical companies – Exxon Mobil, JP Morgan Chase, Berkshire Hathaway, Chevron, and Merck. This helped drive the outperformance of large value. The major technology-related companies were mixed. Tesla (-53.6%) was the largest detractor, followed by Amazon, Apple, and Alphabet (Google). NVIDIA and Microsoft were top 10 contributors.

In the U.S., stocks rebounded from the first three quarters, but finished with negative returns for the year.

Outside the U.S., developed markets were a top performer, helped by currency. Within the emerging markets, the Hong Kong-based China 50 Index rose 12.7%.

Within U.S. fixed income markets, interest rates on U.S. Treasury bonds moderated across the yield curve. The US Aggregate Index rose 1.9%. Despite this, the index had its worst return ever in 2022.



Asset class returns are represented by the following indexes: Russell 1000 Growth and Value, and Russell 2000 Index (U.S. Stocks), MSCI EAFE Index (Non-U.S. Developed Stocks), MSCI Emerging Markets Index (Emerging Market Stocks), Bloomberg Barclays U.S. Government Index (U.S. Bonds - Govt), and Bloomberg Barclays US Corporate Bond Index (U.S. Bonds – Corp IG). The Blend is 60% S&P 500/40% US Aggregate.



Drivers of Capital Markets Returns

- ▶ Fixed income investments are debt instruments typically issued by governments and corporations. They generally pay a periodic fixed amount of interest until maturity, at which time the principal is repaid. Investors in fixed-income instruments are **lenders**.
- ▶ Corporations can also raise capital by selling shares, also known as equity. Equity investors share in a company's success or failures over time. Investors in equity are **owners**.

The price of the S&P 500 Index as of December 31, 2022, was 3,839.50.

Returns to Lenders

Inflation ↓ 6.4%

December's CPI was 6.4% above the month a year ago. Energy prices contributed 0.6% of the increase (1.6% in 3Q; 3.6% in 2Q). The core rate was lower at 5.7%.

Interest Rates ➡ 0.08%

The yield of a 10-year U.S. Treasury bond rose from 3.80% on September 30 to 3.88% on December 31. The rate for a 2-year note rose 19 bps.

Credit Spreads ↓ 0.49%

The yield spread of a generic A/BBB-rated corporate bond contracted by 49 basis points to 189 basis points. The yield spread measures the yield of 10 – 15-year corporate debt compared to U.S. Treasury Bonds of equivalent maturity.

Returns to Owners

Growth (GDP)

3Q 2022	4Q 2022E
3.2%	2.9%*

The BEA estimates that positive real growth of GDP continued in the fourth quarter. Employment supported real growth of personal expenditures. Residential investment continued to decline and was a detractor.

Profitability

2022E	2023E	%Change23E
\$220.56	\$230.57	4.5%

The consensus estimate of 2023 earnings for the S&P 500 *declined* by 4.4% during the third quarter. The estimate for 2023 was 4.5% above 2022.

Valuation

2022E P/E	2023E P/E
17.4	16.6

On December 30, the price of the S&P 500 was 16.6x its estimated 2023 earnings. The multiple increased as the price rose, and the earnings estimate fell.

*January 26, 2023 – Bureau of Economic Analysis Advance Estimate