

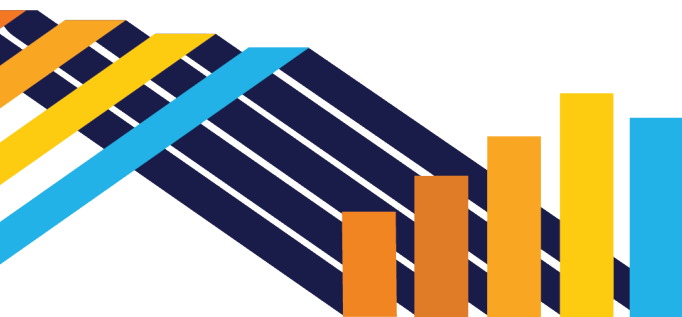
MARKET INSIGHT

Fourth Quarter 2022

NEWS & VIEWS FROM LPL RESEARCH

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LPL Research



Fourth Quarter 2022

MARKET INSIGHT QUARTERLY

Q4 2022 at a Glance

Sector	Q4 2022
Gross Domestic Product*	1.1%
S&P 500 Index	7.6%
Bloomberg Aggregate Bond Index	1.87%
Bloomberg Commodity Index	2.2%

Source: LPL Research, Bloomberg, FactSet, 12/30/2022

* Bloomberg consensus as of 12/30/2022

Figures for S&P 500 Index, Bloomberg Barclays Aggregate Bond Index, and Bloomberg Commodities Index are total returns from 10/01/2022 - 12/30/2022 (Q4)

All indexes are unmanaged and cannot be invested into directly. The returns do not reflect fees, sales charges, or expenses. The results don't reflect any particular investment.

Equities Pared 2022 Losses with Fourth Quarter Gains

The S&P 500 staged a solid fourth quarter rally, returning 7.6% including dividends. But the good news ends there because the index still lost a little over 18% for the year, the worst annual performance since 2008. The Dow Jones Industrial Average fared quite a bit better, gaining 16% in the fourth quarter and paring its 2022 loss to just 6.9% as more reasonably valued, high-quality “blue chips” remained generally favored by investors still looking to play some defense with their equity portfolios. The value style outpaced growth virtually the entire year, leaving the Nasdaq down 32.5% in 2022 after losing 0.8% in the fourth quarter.

Even though fears that an overly aggressive Federal Reserve (Fed) would cause a recession did not go away, markets appeared able to look beyond the rate hiking campaign and start to price in eventual cuts. Falling inflation firmed the consensus view that price increases had peaked, despite war in Eastern Europe and China's reopening, while helping keep long-term interest rates stable and stock valuations supported. Third quarter earnings reports in October and November offered little to write home about, but they did not get in the way of the broad market's move higher, even though expectations for 2023 earnings came down during reporting season.

The story of 2022 was all about the Fed and its aggressive interest rate hiking campaign to tame inflation. Resulting recession fears, exacerbated by a volatile geopolitical backdrop, led to a challenging and volatile year for equities. The S&P 500 lost 18.1% during the year, breaking its three-year winning streak.

Large Caps Outperformed in Q4 on Strength in Big Healthcare

Large and small cap stocks delivered solid gains in the fourth quarter, but large caps fared better on the back of strong performance from the large cap healthcare group. During the quarter, the large cap dominated Russell 1000 Index returned 7.2%, compared to 6.2% for the small cap Russell 2000 Index. Small caps had several advantages—relatively attractive valuations, less exposure to economic risks in Europe, and generally greater market sensitivity—none of which seemed to show up in fourth quarter or 2022 performance. The small cap

index did get a nice boost for the quarter from outperformance of its consumer discretionary companies. For the year, large caps lost 1.3 percentage points less than small caps, as smaller allocations to communication services and technology helped mitigate small cap underperformance.

Value Added to Commanding 2022 Lead in Q4

Value-style stocks far outpaced their growth counterparts during the fourth quarter, as the Russell 1000 Value Index gained 12.4%, compared to the 2.2% return for the Russell 1000 Growth Index. At a macro level, high inflation and rising rate fears generally create a more favorable environment for value-style stocks, while valuation concerns and earnings risk continue to plague key growth stocks. During the quarter, value got the biggest boost from its overweights in the financials and utilities sectors, an underweight and strong relative performance within the consumer discretionary sector, and an overweight and strong relative performance by the energy sector.

Energy and financials strength, coupled with consumer discretionary weakness, were the biggest drivers of value leadership in 2022, as the Russell 1000 Value Index outpaced its Growth Index counterpart by more than 20 percentage points for the year.

Unexpected Resilience in Europe Drives Solid International Gains

Developed international equities, as tracked by the MSCI EAFE Index, delivered strong fourth quarter performance to outpace emerging markets (MSCI EM Index) and U.S. equities (S&P 500 Index) by a sizable margin. International equities rallied 18.1% during the quarter, while EM and the U.S. gained 9.7% and 7.6%, respectively.

EAFE's strong quarter was attributable to several factors, including the weakening U.S. dollar, unexpected resilience of European economies, and its value tilt. Europe held up particularly well, notably France, the U.K., and Germany. In terms of sectors, most of the quarterly outperformance by international equities came from consumer discretionary, financials, and technology sectors.

International outperformance in 2022 came despite gains in the U.S. dollar over the 12 month period, the Russia-Ukraine conflict, and higher inflation than in the U.S. Weakness in big cap U.S. tech drove much of the international outperformance, though it's also noteworthy that international financials held up quite well. The MSCI EAFE Index slid 13.5% in 2022, while the MSCI EM Index lost 19.8%.

Positive Q4 Not Enough to Prevent Worst Year on Record for Core Bonds

Bond market returns were positive in the fourth quarter but the 1.87% return for the Bloomberg Aggregate Bond Index was not enough to offset previous 2022 losses and the index ended the year down 13%, the worst year on record. Treasury yields fell during the quarter with the expectation that the Fed was near the end of its aggressive rate hiking campaign. As such, the most interest rate sensitive sectors of the bond market (corporate and mortgage securities, in particular) outperformed. High quality municipals were up over 4% during the quarter and outperformed Treasuries by nearly 4% for the year.

High Yield Credit Outperforms

In a year in which many fixed income markets posted their worst year in over a decade (or since inception for core bonds), high yield credit outperformed. U.S. corporate high yield bonds outperformed both investment grade corporates as well

U.S. Treasuries may be considered "safe haven" investments but do carry some degree of risk including interest rate, credit, and market risk. They are guaranteed by the U.S. government as to the timely payment of principal and interest and, if held to maturity, offer a fixed rate of return and fixed principal value.

Please see our annual [Outlook 2023: Finding Balance](#) publication for additional descriptions and disclosures.

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as equities during the year (although all three suffered deep losses). For the quarter, high yield bonds were up over 4%, while the higher quality segment of the corporate credit market was up over 3.6%. The fundamental backdrop for corporate borrowers remains favorable despite the uncertain economic environment.

Commodities Snap Two-Quarter Losing Streak

Commodity markets climbed 1.2% in the fourth quarter, based on the Bloomberg Commodity Index. While the advance was welcomed after back-to-back quarterly losses, the percentage move was minimal based on the elevated volatility within the commodities complex and nearly 8% drop in the dollar. Signs of cooling inflation in the U.S., anticipation of a timely end to the Fed's tightening cycle, and hawkish policy shifts from the European Central Bank and Bank of Japan, created headwinds for the greenback that had been overbought from a technical analysis perspective.

Natural gas went from first to worst last quarter with a 35.1% decline, erasing its 24.7% third quarter rally. The majority of the losses occurred during the back half of December as warmer-than-expected weather across many parts of the globe reduced heating demand into what could be an oversupplied market. Crude oil finished up 1.0% during the quarter after facing an ongoing push and pull from China's economic reopening and their COVID-19 outbreak.

Metals were a bright spot during the fourth quarter, as the sector appeared more optimistic about China's reopening plans than the oil market. Part of the optimism stems from a significant increase in Chinese infrastructure spending aimed at

reviving their property sector. Industrial metals (+15.3%) outperformed against this backdrop, with nickel (+43.3%) leading the charge. Precious metals weren't far behind last quarter, gaining 12.2% as silver and platinum jumped over 20%. Gold, which rallied nearly 10%, benefited from continued buying by the People's Bank of China as they focus on diversifying away from their dollar holdings.

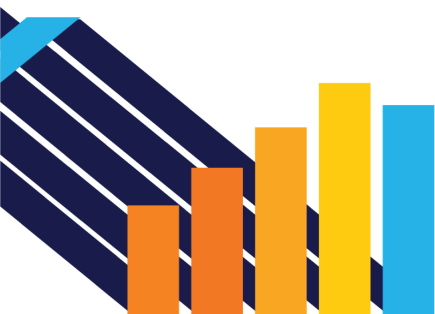
For the year, the energy-led commodities index gained 16.1%, far outpacing stock and bond benchmarks.

All commodities performance is based on Bloomberg commodity indexes.

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A LOOK AHEAD

Economy. The global economy will likely slow from the upper-2% range in 2022 down to the mid-1% range in 2023. Much depends on China's growth path. The divergence between domestic and international economies is most obvious in the inflation regime. Germany, for example, has still been experiencing accelerating rates of inflation in late 2022, whereas the U.S. has likely moved past the peak. The longer inflation is uncontained, the riskier the growth prospects.

Inflation. We entered 2023 with a slightly different trajectory for inflation, particularly services inflation. In recent months, durable goods prices have clearly decelerated—and in some cases, outright declined—but services prices have been stubbornly accelerating as rent prices and health services rose. We could potentially be entering a new regime as rents across the country are showing signs of abating. During this transition period for services prices, the coming year could be the time when inflation convincingly decelerates toward the Fed's long-run target of 2%.

Stocks. If stocks are going to go higher in 2023, a prompt end to the Fed's rate hiking campaign will likely be a key component. The timing of the last rate hike of this cycle is uncertain and won't be clear for a while, but our view is the Fed will pause during early spring of 2023 amid an improving inflation outlook and loosening job market. Should that occur, stocks would likely move higher, consistent with history. Also consider stocks have tended to produce solid gains after hiking cycles end. Our year-end 2023 fair value target range for the S&P 500 is 4,400–4,500, based on a price-to-earnings ratio of 18.5 and our 2024 S&P 500 earnings per share forecast of \$240.

Bonds. The path of interest rates will certainly be largely influenced by the Fed's behavior, which will be guided by economic growth and inflation data. Equally important is the level of non-U.S. developed government bond yields, as foreign investors are an important buyer of U.S. Treasuries. Higher foreign market yields, all else equal, generally dissuade foreign investment into our markets. There are a range of scenarios we think could play out over the next year. However, given our view that the U.S. economy could eke out slightly positive economic growth next year, we think 10-year Treasury yields could end the year around 3.5%.

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Past performance is not indicative of future results. The economic forecasts set forth in the presentation may not develop as predicted.

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FOURTH QUARTER DATA

Energy Tops Sector Rankings as Consumer Discretionary Struggles

S&P 500 sector performance, ranked by fourth quarter returns*

Sector	Q4 2022
Energy	22.8%
Industrials	19.2%
Materials	15.0%
Financials	13.6%
Healthcare	12.8%
Consumer Staples	12.7%
Utilities	8.6%
S&P 500	7.6%
Technology	4.7%
Real Estate	3.6%
Communication Services	-1.4%
Consumer Discretionary	-10.2%

**Sources: LPL Research, Bloomberg, FactSet as of 12/30/2022

*Sources: LPL Research, FactSet as of 12/30/2022

All data as of 12/30/2022

All indexes are unmanaged and cannot be invested into directly. The returns do not reflect fees, sales charges, or expenses. The results don't reflect any particular investment. Past performance is no guarantee of future results. The sectors are represented by the 11 S&P 500 Global Industry Classification Standard (GICS) indexes.

Asset classes are based on Russell 1000, Russell 3000 Growth and Value, Russell 2000, Russell Midcap, MSCI EAFE, and MSCI Emerging Markets indexes.

Asset class returns are represented by the returns of indexes and are not ranked on an annual total return basis. It is not possible to invest directly in an index so these are not actual results an investor would achieve.

Bond Market Asset Class Indexes: Foreign Bonds (hedged) – Citigroup Non-U.S. World Government Bond Index Hedged for Currency; Preferred Securities – Merrill Lynch Preferred Stock Hybrid Securities Index; Treasury – Bloomberg Barclays U.S. Treasury Index; Mortgage-Backed Securities – Bloomberg Barclays U.S. MBS Index; Investment-Grade Corporate – Bloomberg Barclays U.S. Corporate Bond Index; Municipal – Bloomberg Barclays Municipal Bond Index; Municipal High-Yield – Bloomberg Barclays Municipal High Yield Index; TIPS – Bloomberg Barclays Treasury Inflation-Protected Securities Index; Bank Loans – Bloomberg Barclays U.S. High Yield Loan Index; High-Yield – Bloomberg Barclays U.S. Corporate High Yield Index; Emerging Market Debt – JP Morgan Emerging Markets Global Index; Foreign Bonds (unhedged) – Citigroup Non-U.S. World Government Bond Index (unhedged)

Large Foreign and Large Value Led as All Asset Classes Posted Gains in Q4

Domestic and international asset class performance, ranked by fourth quarter returns**

Asset Class	Q4 2022
Large Foreign	17.4%
Large Value	12.4%
Mid Value	10.5%
Emerging Markets	9.8%
Small Value	8.4%
S&P 500	7.6%
Russell 3000	7.2%
Mid Growth	6.9%
Small Growth	4.1%
Large Growth	2.2%

Weaker Dollar Spurs EM Debt and Unhedged Foreign Bonds Leadership in Q4

Bond market performance, ranked by fourth quarter returns**

Sector	Q4 2022
EM Debt	7.4%
Foreign Bonds (Unhedged)	6.5%
High-Yield Corporates	4.2%
Munis	4.1%
Bank Loans	3.8%
Investment-Grade Corporates	3.4%
High-Yield Munis	3.5%
Bloomberg U.S. Agg	1.9%
MBS	2.1%
TIPS	2.0%
U.S. Treasuries	0.7%
Foreign Bonds (Hedged)	-1.0%
Preferred Stocks	-3.6%

IMPORTANT DISCLOSURES

Investing involves risks including possible loss of principal. No investment strategy or risk management technique can guarantee return or eliminate risk in all market environments.

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Gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period, though GDP is usually calculated on an annual basis. It includes all of private and public consumption, government outlays, investments, and exports less imports that occur within a defined territory.

Yield is the income return on an investment. This refers to the interest or dividends received from a security and are usually expressed annually as a percentage based on the investment's cost its current market value or its face value.

Earnings per share (EPS) is the portion of a company's profit allocated to each outstanding share of common stock. EPS serves as an indicator of a company's profitability. Earnings per share is generally considered to be the single most important variable in determining a share's price. It is also a major component used to calculate the price-to-earnings valuation ratio.

Small cap is a term used to classify companies with a relatively small market capitalization. The definition of small cap can vary, but it is generally a company with a market capitalization of between \$300 million and \$2 billion. The prices of small cap stocks are generally more volatile than large cap stocks.

The S&P 500 Index is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

For a list of descriptions of the indexes referenced in this publication, please visit our website at lplresearch.com/definitions.

The Bloomberg Global Aggregate Index measures the performance of global investment grade debt. The index includes treasury, corporate, and securitized fixed-rate bonds.

Investing in stock includes numerous specific risks including: the fluctuation of dividend, loss of principal and potential illiquidity of the investment in a falling market.

Bonds are subject to market and interest rate risk if sold prior to maturity. Bond values will decline as interest rates rise and bonds are subject to availability and change in price.

High yield/junk bonds (grade BB or below) are not investment grade securities, and are subject to higher interest rate, credit, and liquidity risks than those graded BBB and above. They generally should be part of a diversified portfolio for sophisticated investors.

Commodity-linked investments may be more volatile and less liquid than the underlying instruments or measures, and their value may be affected by the performance of the overall commodities baskets as well as weather, geopolitical events, and regulatory developments. The fast price swings in commodities and currencies will result in significant volatility in an investor's holdings.

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