

TURNING THE PAGE

LPL RESEARCH'S MONTHLY MARKET OUTLOOK

Key changes from December report:

- Upgraded industrials view to positive
- Upgraded consumer staples view to neutral from negative.
- Downgraded technology view from neutral to negative
- Downgraded real estate view to negative from neutral

A difficult 2022 for stocks did not end on a high note despite cooling inflation, as the S&P 500 slid 5.8% in December. The down month left the index down 18.1% for the year (total return including dividends), the index's worst performance since 2008. The Dow Jones Industrials fared better, losing just 4.1% for the month and 6.9% for the year. The value style outpaced growth virtually the entire year, leaving the Nasdaq down 32.5% for the year after losing 8.7% last month.

The Federal Reserve (Fed) sent a clear "higher for longer" message to markets about its plans for rates to fight inflation. Fears of recession and downside risk to earnings dominated, drowning out optimism surrounding peak inflation and the impending end of Fed rate hikes.

Core bonds, as measured by the Bloomberg Aggregate Bond index, were down 0.45% during the month, bringing the full year loss to -13%, making 2022 by far the worst year for core bonds since 1976. Treasury yields rose slightly during the month with China easing its COVID-19 lockdowns, which will likely add to inflationary pressures.

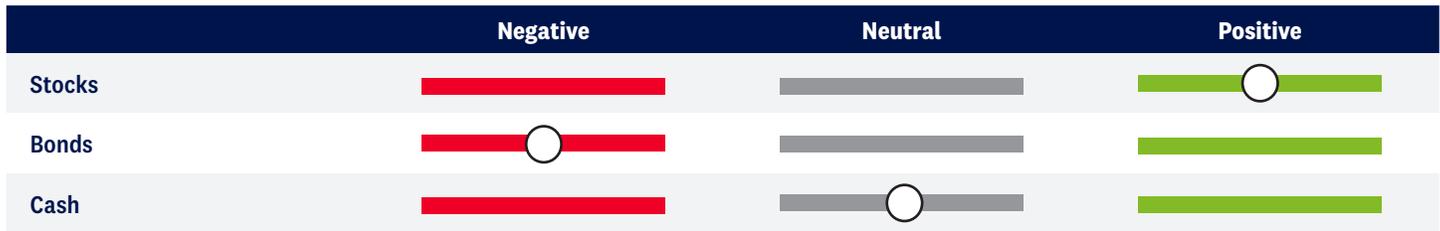
The Strategic and Tactical Asset Allocation Committee's (STAAC) S&P 500 year-end 2023 fair value target of 4,400-4,500 is based on a price-to-earnings ratio of 18.5 and 2024 S&P 500 earnings per share forecast of \$240.

INVESTMENT TAKEAWAYS:

- With 2023 underway, the STAAC maintains its overweight equities recommendation relative to bonds, supported by expectations of flattish growth or a mild recession in 2023 amid falling inflation and an expectation of stable market interest rates.
- Value-style stocks still look to have an edge on growth based on the still challenging inflation outlook, higher interest rates, and our positive view of the energy sector. More evidence of falling inflation and lower interest rates may be needed for growth to work.
- Strong recent performance of non-U.S. stocks, attractive valuations, and the powerful reversal lower in the U.S. dollar have narrowed the gap between U.S. and developed international equities despite economic challenges in Europe.
- We continue to recommend a slight underweight allocation to fixed income as higher rates may put additional pressure on bond returns.
- The Fed's determination to keep rates higher for longer caused U.S. Treasury yields to move significantly higher in 2022. Our year-end 2023 target for the 10-year Treasury yield is 3.25% to 3.75%.
- Shorter maturity corporate credit, mortgage-backed securities, and high yield bonds (for income-oriented investors) look attractive.

BROAD ASSET CLASS VIEWS

LPL Research's Views on Stocks, Bonds, and Cash



OUR ASSET CLASS & SECTOR CHOICES

Equity Asset Classes	Equity Sectors	Fixed Income	Alternative Asset Classes
<ul style="list-style-type: none"> U.S. Equities 	<ul style="list-style-type: none"> Healthcare Energy Industrials 	<ul style="list-style-type: none"> Mortgage-Backed Securities Short Maturity High Quality Corporates High Yield Bonds 	<ul style="list-style-type: none"> Low-Beta Alts (Event Driven, Market Neutral, Multi-Strategy)

2023 MARKET FORECASTS

Look For Stocks to Regain Balance in 2023, Setting Up Potential Double-Digit Gains

	Previous	Current
10-Year U.S. Treasury Yield	NA	3.25% to 3.75%*
S&P 500 Index Earnings per Share	\$230	\$220
S&P 500 Index Fair Value	NA	4,400-4,500**

Source: LPL Research, FactSet, Bloomberg

All indexes are unmanaged and cannot be invested into directly. The economic forecasts may not develop as predicted.

*Our year-end 2023 forecast for the U.S. 10-year Treasury yield is 3.25% to 3.75%. The forecast reflects above-trend inflation, reduced Fed policy support, an aging demographic in need of income, higher global debt levels, and the expected end to the Fed rate hiking campaign in 2023.

**Our year-end 2023 fair-value target range for the S&P 500 of 4,400-4,500 is based on a price- to-earnings ratio (PE) of 18.5 and our S&P 500 earnings per share (EPS) forecast of \$240 in 2024.

2023 ECONOMIC FORECASTS

Downshift in Global Growth

GDP Growth (Y/Y%)	2022	2023
United States	1.3% to 1.9%	0.2% to 0.8%
Eurozone	1.1% to 1.7%	-0.4% to 0.2%
Advanced Economies	1.4% to 2%	0.1% to 0.7%
Emerging Markets	2.6% to 3.2%	2.9% to 3.5%
Global	1.7% to 2.3%	1.3% to 1.9%

Source: LPL Research, Bloomberg

The economic forecasts may not develop as predicted.

All data, views, and forecasts herein are as of 01/01/23.

LPL RESEARCH STRATEGIC AND TACTICAL ASSET ALLOCATION COMMITTEE

LPL Research Tactical Asset Allocation as of 1/01/23

INVESTMENT OBJECTIVE

	Aggressive Growth			Growth			Growth with Income			Income with Moderate Growth			Income with Capital Preservation		
	TAA	Benchmark	Difference	TAA	Benchmark	Difference	TAA	Benchmark	Difference	TAA	Benchmark	Difference	TAA	Benchmark	Difference
STOCKS	98.0%	95.0%	3.0%	85.0%	80.0%	5.0%	65.0%	60.0%	5.0%	45.0%	40.0%	5.0%	25.0%	20.0%	5.0%
U.S. EQUITY	82.3%	76.0%	6.3%	71.4%	64.0%	7.4%	54.6%	48.0%	6.6%	37.8%	32.0%	5.8%	20.5%	16.0%	4.5%
Large Value	11.4%	9.9%	1.4%	9.7%	8.4%	1.3%	7.0%	6.3%	0.7%	4.7%	4.2%	0.5%	2.3%	2.1%	0.2%
Large Blend	17.0%	16.7%	0.3%	14.3%	14.0%	0.3%	10.1%	10.5%	-0.4%	6.7%	7.0%	-0.4%	3.1%	3.5%	-0.4%
Large Growth	21.3%	21.8%	-0.4%	17.9%	18.3%	-0.4%	12.8%	13.7%	-0.9%	8.5%	9.2%	-0.7%	4.0%	4.6%	-0.6%
Small/Mid Value	11.3%	9.1%	2.2%	10.1%	7.7%	2.5%	8.4%	5.8%	2.6%	6.1%	3.8%	2.2%	3.7%	1.9%	1.8%
Small/Mid Blend	14.8%	12.7%	2.1%	13.3%	10.7%	2.6%	11.0%	8.0%	2.9%	8.0%	5.4%	2.6%	4.9%	2.7%	2.2%
Small/Mid Growth	6.5%	5.8%	0.7%	6.0%	4.9%	1.1%	5.3%	3.7%	1.6%	3.9%	2.4%	1.5%	2.6%	1.2%	1.4%
INTERNATIONAL EQUITY	15.7%	19.0%	-3.3%	13.6%	16.0%	-2.4%	10.4%	12.0%	-1.6%	7.2%	8.0%	-0.8%	4.5%	4.0%	0.5%
Developed (EAFE)	10.4%	12.0%	-1.6%	8.9%	10.0%	-1.1%	7.4%	8.0%	-0.6%	4.7%	5.0%	-0.3%	4.5%	4.0%	0.5%
Emerging Markets	5.3%	7.0%	-1.7%	4.7%	6.0%	-1.3%	3.0%	4.0%	-1.0%	2.5%	3.0%	-0.5%	0.0%	0.0%	0.0%
BONDS	0.0%	0.0%	0.0%	13.0%	15.0%	-2.0%	33.0%	35.0%	-2.0%	53.0%	53.0%	0.0%	73.0%	70.0%	3.0%
U.S. CORE	0.0%	0.0%	0.0%	12.5%	15.0%	-2.5%	31.7%	35.0%	-3.3%	50.9%	53.0%	-2.1%	70.1%	70.0%	0.1%
Treasuries	0.0%	0.0%	0.0%	5.7%	6.9%	-1.2%	14.6%	16.1%	-1.5%	23.4%	24.4%	-1.0%	32.2%	32.2%	0.0%
MBS	0.0%	0.0%	0.0%	4.0%	4.5%	-0.5%	10.1%	10.5%	-0.3%	16.3%	15.8%	0.4%	22.4%	20.9%	1.5%
IG Corporates	0.0%	0.0%	0.0%	2.8%	3.6%	-0.9%	7.0%	8.5%	-1.5%	11.2%	12.8%	-1.6%	15.5%	16.9%	-1.4%
NON-CORE	0.0%	0.0%	0.0%	0.5%	0.0%	0.5%	1.3%	0.0%	1.3%	2.1%	0.0%	2.1%	2.9%	0.0%	2.9%
High-Yield Corporates	0.0%	0.0%	0.0%	0.5%	0.0%	0.5%	1.3%	0.0%	1.3%	2.1%	0.0%	2.1%	2.9%	0.0%	2.9%
CASH	2.0%	5.0%	-3.0%	2.0%	5.0%	-3.0%	2.0%	5.0%	-3.0%	2.0%	7.0%	-5.0%	2.0%	10.0%	-8.0%

For investors who have their own benchmarks, we would recommend emphasizing underweights or overweights relative to the individual benchmark at the most similar overall risk level.

Equity benchmark style box allocations are based on lookthrough analysis of the domestic equity indexes used in our benchmark. While the indexes stay constant, style box allocations may drift over time.

Bond benchmark sector allocations are based on a look-through analysis of the major sector components of the Bloomberg US Aggregate Bond Index.

Treasuries include other government related debt. MBS includes other securitized debt.

Abbreviations: TAA - tactical asset allocation; MBS - mortgage-backed securities; IG corporates - investment-grade corporates; TIPS - Treasury inflation-protected securities.

Style box allocations only include domestic allocations.

EQUITY ASSET CLASSES

Gap Between U.S. and International Has Narrowed While Value Outlook Has Strengthened

The STAAC maintains its overweight equities recommendation relative to bonds. This is supported by expectations of flattish growth or a mild recession in 2023 amid falling inflation and an expectation of stable market interest rates. Value-style stocks still look to have an edge on growth based on the still challenging inflation outlook, higher interest rates, and our positive view of the energy sector. More evidence of falling inflation and lower interest rates may be needed for growth to work. Strong recent performance of non-U.S. stocks, attractive valuations, and the powerful reversal in the U.S. dollar have narrowed the gap between U.S. and developed international equities despite economic challenges in Europe.

STAAC maintains a cautious outlook for emerging market equities due to soft earnings and geopolitical uncertainty—though U.S. dollar weakness helped non-U.S. equities recently, and the group may have more left in it as a short-term trade. Key risks include a potentially overly aggressive Fed, a significant recession, a broader military conflict in Europe, U.S-China tensions, and a disruptive COVID-19 wave in China.

	Sector	Overall View	Relative Trend	Rationale
Market Capitalization	Large Caps			Large caps generally perform better during periods of economic uncertainty with stronger balance sheets, but they are more exposed to weakness in Europe, are more expensive, and may lag in early stages of next bull market.
	Mid Caps			Likely beneficiary of eventual improving economic outlook though halted merger and acquisition activity, largely amid tighter financial conditions, removes a potential positive catalyst. Midcap valuations are near 20-year lows versus large caps and technical analysis trends have improved.
	Small Caps			Attractive valuations, improving technical analysis trends, and relative insulation from economic risks in Europe are supportive of small caps. If recession fears calm, small caps may sustain outperformance. We would favor higher quality S&P 600 Index over the Russell 2000.
Style	Growth			The growth style may benefit from better economic conditions and superior earnings power in the first half of 2023. However, patience is prudent as we wait for a more favorable economic environment for growth, including lower inflation and greater interest rate stability.
	Value			Value-style stocks appear to maintain their edge on growth as 2023 begins based on the still challenging inflation outlook, higher interest rates, and our positive view of the energy sector. Technical analysis points toward value.
Region	United States			Our outlook calls for the U.S. economy to outperform Europe's in 2023, though Europe's economic resilience in the face of its severe energy crisis has helped improve the outlook for developed international equities. The U.S. economy is well positioned to win its battle against inflation, in our view, and generate superior earnings growth over the next 12 to 18 months.
	Developed International			Strong recent performance of non-U.S. stocks, attractive valuations, and the powerful reversal in the U.S. dollar have narrowed the gap between U.S. and developed international equities despite economic challenges in Europe, leading to the STAAC's modest increase in developed international in its latest asset allocation. Positive bias.
	Emerging Markets			We maintain our cautious outlook for emerging market equities due to soft earnings and geopolitical uncertainty—though U.S. dollar weakness helped non-U.S. equities recently and the group may have more left in it as a short-term trade given the amount of pessimism reflected in valuations. Watching China's reopening. Group may have more upside on U.S. dollar weakness.

Relative trend is an assessment of the intermediate term price trend and performance between various asset classes and sectors. For regions and styles the relative trends are compared to each other.

EQUITY SECTORS

Upgrading Industrials and Consumer Staples, Downgrading Real Estate and Technology

The STAAC has upgraded its view of industrials based on resilient capital investment activity and positive technical analysis trends. Although consumer staples is likely to lag the broad market when the next bull market begins and valuations are elevated, recent relative strength suggests a neutral view is prudent. The macroeconomic outlook will likely become more favorable for growth sectors in the first half of 2023, but we urge patience toward technology and consumer discretionary until the macroeconomic environment and performance improve. Meanwhile, our energy view remains positive based on the favorable supply-demand backdrop and long term price uptrend. Our healthcare view remains positive based on a favorable track record of performance late in economic cycles, earnings stability, and demographics.

	Sector	Overall View	Relative Trend	S&P Wgt	Rationale
Cyclical	Materials			2.7	Support from infrastructure spending, China’s reopening, and recent weakening U.S. dollar. And falling natural gas prices are helping chemical company profits. However, technicals, though improved, are mixed. Reasonable valuations.
	Energy			5.2	Top 2022 sector performer by wide margin. Remains in a long-term uptrend despite consolidating oil prices. Global supply remains tight. China’s reopening may soon provide a boost. Further U.S. dollar weakness may help oil. Valuations still reasonable.
	Industrials			8.7	Solid capital expenditures growth, infrastructure spending, strong defense spending, and technical analysis trends are supportive. Upgrade driven more by technical analysis than anything else and comes despite lackluster global growth and airline difficulties.
	Communication Services			7.3	A toughening regulatory environment for this digital media-heavy sector, an expected earnings decline in 2022, weak earnings revisions, and negative technical analysis trends drive our negative view despite reasonable valuations.
	Consumer Discretionary			9.8	Inflation is eroding purchasing power, the sector is historically not a strong mid-to-late cycle performer, retailers’ profit margins are challenged, and valuations are elevated.
	Technology			25.7	Despite prospects for a more favorable macro environment in 2023, neither earnings nor valuations justify optimism. Recommend only a modest underweight at this point until technical analysis trends improve. Needed downgrade to offset upgrade.
	Financials			11.7	December upgrade primarily driven by technical analysis. Near-term outlook for loan growth and capital markets activity is constrained while yield curve is inverted and recession risk is high. Attractive valuations. Earnings growth likely return in early 2023.
Defensive	Utilities			3.2	Recent dip in interest rates, green-energy spending trends, and still elevated recession risk are supportive. Can overlook valuations given manageable interest rate risk, relative strength, and late cycle economy. One of only two sectors to deliver a gain in 2022.
	Healthcare			15.8	Maturing economic cycle, earnings stability, and demographics are supportive. Valuations are no longer compelling but fair, in our view. The sector’s relative strength trend remains positive. Among best sector performers in 2022 with just a 2% decline.
	Consumer Staples			7.2	Although consumer staples companies are likely to lag the broad market when the next bull market begins and valuations are elevated, recent relative strength suggests a neutral view is prudent. Lower inflation could help ease margin pressures in coming quarters.
	Real Estate			2.7	Our real estate downgrade reflects weakening technical analysis trends. Recent performance as interest rates have fallen is disappointing, likely related to the sector’s exposure to technology and communication industries.

Because of its narrow focus, specialty sector investing, such as healthcare, financials, or energy, will be subject to greater volatility than investing more broadly across many sectors and companies. Relative trend is an assessment of the intermediate term price trend and performance between various asset classes and sectors. For sectors each sector’s relative trend is versus the S&P 500.

FIXED INCOME

After a Historically Bad Year for Bonds, Opportunities Abound

Now that interest rates have moved substantially higher—with total yields for many fixed income markets at generationally high levels—we believe opportunities in fixed income have improved. Shorter maturity investment grade corporates and Agency mortgage-backed securities (MBS) look attractive. Also, higher yields (and still low default expectations) for lower rated corporate credit markets make this area interesting as well.

We favor **municipal bonds** as a high-quality option for taxable accounts and given the recent rate-driven selloff, valuations relative to Treasuries have improved. Additionally, for appropriate investors, we believe **high yield municipal bonds** offer an attractive tax-equivalent yield, however we would expect additional volatility as economic growth concerns increase. Fundamentals in both markets remain solid though.

		Low	Medium	High	Rationale
Positioning	Credit Quality				Yields in many credit markets exceed their longer-term averages so prospects for future returns may have improved. While credit spreads could widen due to an economic slowdown, current high yields should help offset losses.
	Duration				With higher yields and, we think, the improved diversification benefits of bonds, we've upgraded our view of duration to "neutral" relative to our index.
		Neg.	Neutral	Pos.	Rationale
Sectors	U.S. Treasuries				Yields have traded meaningfully higher this year as the market has repriced the number of expected Fed rate hikes. Volatility is likely to remain elevated though as the Fed continues to reduce Treasury reinvestments. Yield spreads to international sovereigns remain attractive but have recently narrowed. Inflation breakeven rates leave Treasury Inflation- Protected Security (TIPS) fully valued, particularly for longer-maturity securities.
	MBS				Despite what looks like a downgrade, we remain constructive on Agency MBS. With yields and spreads at multi-year highs, we think MBS remain an attractive investment opportunity. The Fed has stopped new MBS purchases and balance sheet runoff is a potential risk though.
	Investment-Grade Corporates				The recent sell-off in corporate credit has impacted shorter maturity corporates disproportionately, so we think there is currently an opportunity to add to this area of the market without taking on elevated levels of interest rate or credit risk. Fundamentals remain solid.
	Preferred Stocks				Higher credit quality among the riskier fixed income options. Bank fundamentals sound overall. Can be rate sensitive but may be able to tolerate gradual increases. Valuations have improved recently. European banks likely to stay under pressure as the European Central Bank (ECB) hikes rates.
	High-Yield Corporates				With total yields in high yield bonds above historical averages, though with arguably a higher-quality index disposition, the value proposition for high yield bonds has improved. Additionally, credit fundamentals remain sound, while volatility is likely to remain elevated.
	Bank Loans				Economic environment is supportive and better sector mix than high yield. Given the variable rate debt though, higher interest rates may make repayment more challenging for some issuers. Fewer investor protections and illiquidity of individual loans remain concerns. While we're still constructive on bank loans, the relative value proposition favors high yield bonds, in our view.
	Foreign Bonds				Valuations have improved but potential currency volatility still remains a challenge.
	EM Debt				Central banks are tightening aggressively as inflationary pressures remain stubbornly high and a strong dollar provides a headwind to prices. Valuations are relatively attractive but idiosyncratic risks remain. Liquidity can be an added risk during periods of stress.

Yield spread is the difference between yields on differing debt instruments, calculated by deducting the yield of one instrument from another. The higher the yield spread, the greater the difference between the yields offered by each instrument. The spread can be measured between debt instruments of differing maturities, credit ratings, and risk. Bank loans are loans issued by below investment-grade companies for short-term funding purposes with higher yield than short-term debt and involve risk. For the purposes of this publication, intermediate-term bonds have maturities between three and 10 years, and short-term bonds are those with maturities of less than three years.

All bonds are subject to market and interest rate risk if sold prior to maturity. Bond values will decline as interest rates rise and are subject to availability and change in price. Corporate bonds are considered higher risk than government bonds but normally offer a higher yield and are subject to market, interest rate, and credit risk, as well as additional risks based on the quality of issuer, coupon rate price, yield, maturity, and redemption features. Investing in foreign and emerging market debt (EMD) securities involves special additional risks. These risks include, but are not limited to, currency risk, geopolitical and regulatory risk, and risk associated with varying settlement standards. High-yield/junk bonds are not investment-grade securities, involve substantial risks, and generally should be part of the diversified portfolio of sophisticated investors. Municipal bonds are subject to availability, price, and market and interest rate risk if sold prior to maturity. Bond values will decline as interest rates rise. Interest income may be subject to the alternative minimum tax. Federally tax-free but other state and local taxes may apply. Mortgage-backed securities (MBS) are subject to credit, default, prepayment risk that acts much like call risk when you get your principal back sooner than the stated maturity, extension risk, the opposite of prepayment risk, market, and interest rate risk.

COMMODITIES

Metals Continue to Shine Across the Commodities Complex

A weaker U.S. dollar against the currencies of the country’s major trading partners helped underpin strength in the broad metals complex. In addition, as China officially moves towards reopening and bolstering its economy, a broad spectrum of metals, including gold, silver, and platinum, have seen prices climb higher. In particular, the People’s Bank of China has been a significant buyer of gold, as the bank seeks to diversify its dollar holdings. Platinum has been an important metal in China’s aerospace and defense industries, prioritized sectors for China’s leadership. Technically, gold, silver, and platinum have cleared key resistance off summer highs with momentum measures implying more upside ahead. We maintain our positive view on **precious metals**. **Industrial metals** have also benefited from this backdrop, including copper, which rose 2.2% in December. However, most industrial metals are still establishing potential bottom formations, leaving us with a neutral view on the space.

Our **energy** commodities view is neutral with a negative bias. Both natural gas and oil have edged lower amid concerns over a global economic slowdown. Still, with plausible prospects for China’s reopening, oil prices could climb higher. China, the world’s second largest economy, is the largest importer of oil globally. With Russia facing sanctions over its oil exports and threatening to cut off exports to any country abiding by the price cap imposed by the European Union, the volatile oil market faces supply constraints that could help support prices. However, there is insufficient technical evidence to confirm a bottom in oil, while downside risk in natural gas appears elevated as futures continue to break down from a top formation.

	Neg. Neutral Pos.	Relative Trend	Rationale
Energy			Supply dynamics appear constructive for oil, while demand will be heavily influenced by China’s reopening. Oil prices have recently bounced off oversold levels but there is insufficient evidence to confirm a bottom has been set. Natural gas remains technically weak as futures have yet to find support amid their current sell-off. We maintain our neutral view on energy commodities with a negative bias.
Precious Metals			Gold, silver, and platinum have broken out above key resistance levels with bullish momentum. We suspect more upside lies ahead and maintain our positive view on precious metals.
Industrial Metals			Industrial metals remain supported by a weaker dollar and the prospect of China reopening, including increased infrastructure spending. Most metals have formed potential bottoms but have not entered confirmed uptrends, leaving us with a neutral view on the space.
Agriculture (Ag) & Livestock			Livestock continues to outperform ag as increased Chinese demand helped drive cattle futures near record highs. Grains are improving as corn, soybeans, and wheat rebounded last month, though technical progress has been limited. Based on this backdrop, we remain neutral on ag and livestock.

ALTERNATIVE INVESTMENTS

Strong Month to Close Out 2022

Alternative investment strategies ended the year on a strong note and delivered one of their most attractive years of outperformance versus traditional equity and bond markets since 2008. Looking forward, we continue to advocate for diversifying alternative investment exposure across several low-beta allocations: Event driven, market neutral, and low-beta single and multi-manager strategies, as an appropriate implementation method. While all of these strategies have their own characteristics, at their core they exhibit limited equity market and interest rate sensitivity. We believe these allocations may help preserve portfolios in the current environment and act as a source of ballast during potential periods of high volatility. These characteristics were on display in 2022 and reinforced the benefit of these strategies within the context of a broader portfolio.

In regards to the event-driven industry, we're closely watching how the increase in interest rates will further impact the merger and acquisition backdrop. To date, we've seen a significant decrease in announced deals. Due to this environment, we believe further diversification across market neutral and multi-strategy strategies may provide additional sources of uncorrelated returns and the potential to mitigate traditional equity and bond market risks.

IMPORTANT DISCLOSURES

This material has been prepared for informational purposes only, and is not intended as specific advice or recommendations for any individual. There is no assurance that the views or strategies discussed are suitable for all investors and they do not take into account the particular needs, investment objectives, tax and financial condition of any specific person. To determine which investment(s) may be appropriate for you, please consult your financial professional prior to investing. Any economic forecasts set forth may not develop as predicted and are subject to change.

Stock investing involves risk including loss of principal. Because of their narrow focus, sector investing will be subject to greater volatility than investing more broadly across many sectors and companies. Value investments can perform differently from the market as a whole and can remain undervalued by the market for long periods of time. The prices of small and mid-cap stocks are generally more volatile than large cap stocks. 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. Corporate bonds are considered higher risk than government bonds. Municipal bonds are subject to availability and change in price. Interest income may be subject to the alternative minimum tax. Municipal bonds are federally tax-free but other state and local taxes may apply. If sold prior to maturity, capital gains tax could apply. U.S. Treasuries may be considered “safe haven” investments but do carry some degree of risk including interest rate, credit, and market risk. Bond yields are subject to change. Certain call or special redemption features may exist which could impact yield. Mortgage-backed securities are subject to credit, default, prepayment, extension, market and interest rate risk.

Credit Quality is one of the principal criteria for judging the investment quality of a bond or bond mutual fund. Credit ratings are published rankings based on detailed financial analyses by a credit bureau specifically as it relates to the bond issue’s ability to meet debt obligations. The highest rating is AAA, and the lowest is D. Securities with credit ratings of BBB and above are considered investment grade. Duration is a measure of the sensitivity of the price (the value of principal) of a fixed-income investment to a change in interest rates. It is expressed as a number of years.

Alternative investments may not be suitable for all investors and should be considered as an investment for the risk capital portion of the investor’s portfolio. The strategies employed in the management of alternative investments may accelerate the velocity of potential losses.

Event driven strategies, such as merger arbitrage, consist of buying shares of the target company in a proposed merger and fully or partially hedging the exposure to the acquirer by shorting the stock of the acquiring company or other means. This strategy involves significant risk as events may not occur as planned and disruptions to a planned merger may result in significant loss to a hedged position.

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.

Investing in foreign and emerging markets securities involves special additional risks. These risks include, but are not limited to, currency risk, geopolitical risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks. All information is believed to be from reliable sources; however, LPL Financial makes no representation as to its completeness or accuracy.

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.

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.

All index data from FactSet.

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

Managed futures are speculative, use significant leverage, may carry substantial charges, and should only be considered suitable for the risk capital portion of an investor’s portfolio.

Securities and advisory services offered through LPL Financial (LPL), a registered investment advisor and broker/dealer (member FINRA/SIPC). Insurance products are offered through LPL or its licensed affiliates. To the extent you are receiving investment advice from a separately registered independent investment advisor that is not an LPL Financial affiliate, please note LPL Financial makes no representation with respect to such entity.

Not Insured by FDIC/NCUA or Any Other Government Agency	Not Bank/Credit Union Guaranteed	Not Bank/Credit Union Deposits or Obligations	May Lose Value
--	---	--	-----------------------