NOVEMBER 2022

GLOBAL Portfolio Strategy

LPL Research

AFTER THE DOW'S BEST MONTH SINCE 1976, NEXT UP IS THE MIDTERMS

LPL RESEARCH'S MONTHLY MARKET OUTLOOK

Key changes from October report:

 Downgrading real estate view from positive to neutral. After ending September with a 24% loss for the year, stocks surged in October as the S&P 500 returned 8.1%. That strong gain trailed the Dow Jones Industrial Average, which surged 14% for the month, its best month since 1976.

Speculation that the Federal Reserve (Fed) would soon signal a slower pace of rate hikes amid some additional evidence of cooling inflation pressures, seemed to be the primary catalyst for the rally. Extremely pessimistic sentiment, historical seasonal tailwinds, positioning ahead of the midterm elections, and well-received earnings results also played a role.

Core bonds, as measured by the Bloomberg Aggregate Bond index, lost 1.3% during the month as Treasury yields rose modestly in October. The market's expectation that the Fed may need to take rates higher and stay there longer than previously anticipated helped pushed Treasury yields higher.

The Strategic and Tactical Asset Allocation Committee's (STAAC) S&P 500 year-end fair value target of 4,000-4,100 is based on a price-to-earnings ratio of 17.5 times the STAAC's 2023 S&P 500 earnings per share forecast of \$230.

INVESTMENT TAKEAWAYS:

- The STAAC maintains its overweight equities recommendation relative to bonds.
- Inflation has remained stubbornly high, but seasonal tailwinds, historically strong rebounds from shallow bear markets and midterm election year lows, and the likelihood that the end of the Fed rate hike cycle may be less than five months away are supportive.
- While we wait for an improved macroeconomic environment to create a more favorable situation for the growth style, we suggest a slight tilt toward the value style in the short term due to high interest rates and high inflation.
- 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 has caused U.S. Treasury yields to move significantly higher this year. Our year-end 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

	Negative	Neutral	Positive
Stocks			
Bonds			
Cash			

OUR ASSET CLASS & SECTOR CHOICES

Equity Asset Classes	Equity Sectors	Fixed Income	Alternative Asset Classes
■ U.S. Equities	■ Healthcare	Mortgage-Backed SecuritiesShort Maturity High Quality	■ Low-Beta Alts (Event Driven,
	■ Energy	Corporates	Market Neutral, Multi-Strategy)

2022 MARKET FORECASTS

Look For Seasonal Tailwinds to Help Push the S&P 500 Over 4,000 by Year-End

	Previous	Current
10-Year U.S. Treasury Yield	2.75%-3.25%*	3.25% to 3.75%*
S&P 500 Index Earnings per Share	\$220	\$220
S&P 500 Index Fair Value	4,000-4,100	4,000-4,100**

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 2022 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 anticipated rebalancing into fixed income from equities.

**Our year-end 2022 fair-value target range for the S&P 500 of 4,000-4,100 is based on a price- to-earnings ratio (PE) of 17.5 and our S&P 500 earnings per share (EPS) forecast of \$230 in 2023.

2022 AND 2023 ECONOMIC FORECASTS

Downshift in Global Growth

GDP Growth (Y/Y%)	2022	2023
United States	0.9% to 1.5%	0.6% to 1.2%
Eurozone	1.3% to 1.9%	0.5% to 1.1%
Advanced Economies	1.7% to 2.3%	0.7% to 1.3%
Emerging Markets	2.8% to 3.4%	3.2% to 3.8%
Global	2.5% to 3.1%	2.3% to 2.9%

Source: LPL Research, Bloomberg

The economic forecasts may not develop as predicted.

All data, views, and forecasts herein are as of 10/31/22.



LPL RESEARCH STRATEGIC AND TACTICAL ASSET ALLOCATION COMMITTEE

LPL Research Tactical Asset Allocation as of 11/01/22

INVESTMENT OBJECTIVE

	Aggre	essive G	rowth		Growth	ı		owth wi Income			come wi erate Gr			e with C eservati	
	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	84.3%	76.0%	8.3%	73.1%	64.0%	9.1%	55.9%	48.0%	7.9%	38.7%	32.0%	6.7%	21.0%	16.0%	5.0%
Large Value	12.7%	10.3%	2.4%	11.0%	8.7%	2.3%	8.0%	6.5%	1.5%	5.5%	4.3%	1.1%	2.8%	2.2%	0.6%
Large Blend	19.8%	17.8%	1.9%	16.8%	15.0%	1.8%	12.1%	11.3%	0.8%	8.1%	7.5%	0.6%	3.9%	3.8%	0.2%
Large Growth	20.8%	19.9%	0.9%	17.6%	16.7%	0.8%	12.7%	12.6%	0.1%	8.4%	8.4%	0.1%	4.0%	4.2%	-0.1%
Small/Mid Value	9.9%	8.3%	1.6%	8.9%	7.0%	1.9%	7.3%	5.2%	2.1%	5.3%	3.5%	1.8%	3.2%	1.7%	1.5%
Small/Mid Blend	14.4%	13.0%	1.4%	12.8%	10.9%	1.9%	10.6%	8.2%	2.4%	7.6%	5.5%	2.2%	4.6%	2.7%	1.9%
Small/Mid Growth	6.7%	6.7%	0.0%	6.0%	5.7%	0.4%	5.2%	4.2%	1.0%	3.8%	2.8%	1.0%	2.4%	1.4%	1.0%
INTERNATIONAL EQUITY	13.7%	19.0%	-5.3%	11.9%	16.0%	-4.1%	9.1%	12.0%	-2.9%	6.3%	8.0%	-1.7%	4.0%	4.0%	0.0%
Developed (EAFE)	8.5%	12.0%	-3.5%	7.2%	10.0%	-2.8%	6.1%	8.0%	-1.9%	3.8%	5.0%	-1.2%	4.0%	4.0%	0.0%
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%	6.8%	-1.1%	14.4%	16.0%	-1.5%	23.2%	24.2%	-1.0%	31.9%	31.9%	0.0%
MBS	0.0%	0.0%	0.0%	4.0%	4.5%	-0.5%	10.2%	10.6%	-0.3%	16.4%	16.0%	0.4%	22.6%	21.1%	1.5%
IG Corporates	0.0%	0.0%	0.0%	2.8%	3.6%	-0.9%	7.0%	8.5%	-1.5%	11.3%	12.8%	-1.6%	15.5%	17.0%	-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%
TIPS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
International	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Preferred	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
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%
Bank Loans	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Emerging Markets	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
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

Maintaining U.S. Focus

Inflation has been slow to come down, but seasonal tailwinds, historically strong rebounds from shallow bear markets and midterm election year lows, and the likelihood that the end of the Fed rate hike cycle may be less than five months away, are supportive of equities. Key risks include a potentially overly aggressive Fed that drives the U.S. economy into a recession, a possible broader military conflict in Europe, and U.S-China tensions.

For now, the Committee believes a slight tilt toward the value style is prudent, although renewed confidence in economic and earnings growth and stable interest rates may soon set the stage for a growth turnaround. Small caps may benefit from valuation support and their U.S. focus as recession fears potentially abate. The energy crisis in Europe supports the Committee's preference for U.S. equities over developed international, while the STAAC's recent emerging market equities downgrade reflected earnings weakness, unrelenting US dollar strength, and weak technical analysis trends.

	Sector	Overall View	Relative Trend	Rationale
ion	Large Caps	-	-	Large caps, which generally perform better during periods of economic uncertainty, are better positioned to manage global supply chain disruptions than small caps but are more exposed to weakness in Europe and are more expensive.
Market Capitalization	Mid Caps	-	-	If markets regain confidence in the economic outlook, mid caps may benefit from their economic sensitivity. Mid cap stock valuations are near 20-year lows compared to large caps. Merger and acquisition environment has slowed as monetary conditions have tightened, removing a potential positive catalyst.
Mar	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 small caps such as those that make up the S&P 600 Index over the Russell 2000, which has a higher allocation to unprofitable companies.
Style	Growth	-	•	The growth style may soon benefit from stable economic growth, stable or falling interest rates, and superior earnings power. However, growth stocks are still relatively expensive and high inflation and rising interest rates favor value through year-end. Maintain patience.
Sty	Value	_		Tailwinds from the COVID-19 reopening and rising commodities prices have waned. If recession fears ebb, defensive value sectors such as consumer staples and utilities may garner less support. Still, growth stocks face more interest rate risk and value stocks remain attractively valued relative to growth, so for now we remain slightly biased toward the value side.
	United States			The energy crisis in Europe has strengthened our conviction in favoring U.S. equities over their developed international counterparts and delays the synchronized global expansion. The U.S. economy is better positioned than Europe to withstand higher energy costs, particularly Germany which is very reliant on Russian energy.
Region	Developed International	•	•	Our March 2022 downgrade of international equities reflected Europe's heavy reliance on Russian energy. Germany appears to be on the cusp of a recession. Currency headwinds are intensifying. May require a synchronized global expansion and weaker dollar to outperform.
	Emerging Markets	•	•	Earnings weakness, geopolitical tensions, persistent COVID-19 lockdowns in China, weak technical analysis trends, and a surging U.S. dollar more than offset China's stimulus, easing regulatory pressures and attractive valuations.

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

Stick with Energy and Healthcare, Maintain Patience With Technology

The STAAC continues to recommend a slight tilt toward defensive sectors amid elevated economic uncertainty and market volatility. The long-term energy uptrend remains intact and stocks may be pricing in an overly pessimistic supply-demand picture. We maintain our positive healthcare view despite the effects of drug price reform in the Inflation Reduction Act, which we believe are more than fully priced in. Our real estate downgrade reflected weakening technical analysis trends, though the sector may get a boost if interest rates fall. The macroeconomic outlook is starting to become more favorable for growth sectors, suggesting technology may be ripe for a potential upgrade in the short term.

	Sector	Overall View	Relative Trend	S&P Wgt	Rationale
	Materials			2.5	Infrastructure spending and inflation are supportive, while valuations are still reasonable. But technicals have weakened, China's economy is stalling, surging natural gas prices curb chemical company profits, and technical analysis is mixed.
	Energy			5.4	Remains in a long-term uptrend despite consolidating oil prices. Global supply likely to remain tight for some time. Increase in production to replace Russian oil in global marketplace will take time, though China's reopening has stalled.
_	Industrials	-		8.3	Solid capital expenditures growth, more infrastructure spending on the way, and technical analysis trends have turned positive. However, lackluster global economic growth and ongoing supply chain disruptions temper the outlook some.
Cyclical	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 are driving our negative view despite reasonable valuations.
	Consumer Discretionary	•		10.8	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	-		26.2	Sustained interest rate stability may be required for better growth style performance. Earnings are hanging in ok and sector valuations are broadly reasonable. A sector to watch for a potential upgrade.
	Financials	•		11.5	Lackluster economic growth, yield curve inversions, weakening European economies, and bearish technical analysis signals drove this month's downgrade. Valuations remain attractive.
	Utilities	-		3.0	Technical analysis drove the April upgrade. Green-energy spending may help. Recession may be needed to sustain outperformance and valuations are elevated but technical momentum is strong. Sector holding up well despite drag from surging interest rates.
Defensive	Healthcare			15.4	Maturing economic cycle, demographics, and valuations remain supportive, but drug price reform introduces some near-term headline risk and represents a modest long-term earnings hit.
Defe	Consumer Staples	•		7.0	Slow-growth staple companies are getting squeezed by higher costs and valuations are elevated. Even though interest rate risk may be lower, this defensive sector may lag if stocks add to October gains over the rest of the year.
	Real Estate	- • •		2.6	Our real estate downgrade reflected weakening technical analysis trends, though the sector with its income focus may get a boost if interest rates fall with its attractive yields.

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

Waiting on the Fed to Slow the Pace of Rate Hikes

The LPL Research STAAC recently increased its recommended interest rate exposure in its tactical allocation from underweight to neutral. Now that interest rates have moved substantially higher, we believe opportunities in fixed income have improved. However, until the Fed signals a slower pace of rate hikes is warranted, interest rate volatility is expected to remain elevated. From a sector perspective, 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 Mediu	n High	Rationale
ing	Credit Quality			Yields in many credit markets exceed their longer-term averages so prospects for future returns may have improved. We think the economic outlook remains supportive as well.
Positioning		Short Int.	Long	
Pos	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. Neutra	ıl Pos.	Rationale
	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.
Sectors	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 3 and 10 years, and short-term bonds are those with maturities of less than 3 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

Soft Commodities Outlook Supports Preference for Equities

The broad commodities index rose in October, as the Bloomberg Commodity Index gained 2% for the month. Broadly, gains were driven by West Texas Intermediate (WTI) crude oil, which jumped nearly 11% for the month amid continued tight global supplies and some signs that China's economy might soon reopen. A relatively stable U.S. dollar also helped provide support (commodities priced in dollars globally benefit from a weaker dollar). From a technical perspective, we are no longer seeing an upward trend despite trailing year gains, with the broad index basically flat since mid-March.

Our energy commodities view is neutral but with a negative bias. The technical setup looks slightly more positive compared to most industrial metals, especially on a long-term basis. While WTI crude oil is well off its March highs following the Russian invasion of Ukraine, futures remain in a long-term uptrend supported by tight supply. The demand side of the equation has largely counterbalanced any near-term supply catalysts. Aggressive Fed tightening has limited growth of the U.S. economy in the second half, and China's delayed reopening continues to weigh on the demand outlook. Natural gas prices have become extremely volatile as economic uncertainty competes with restricted supplies from Russia into Europe. Neither oil nor gas appear attractive right now on the long or short side given their high price volatility.

Lockdowns in China also continue to pressure copper prices, which experienced a major technical breakdown in June and early July. Copper and other industrial metals look broadly to have topped as the global economy braces for a potential recession in Europe and takes down expectations for economic growth in China and the U.S. Our industrial metals view is negative.

While precious metals look better to us than industrial, our precious metals view is also negative. Gold has traded sideways to lower over the past couple of years, making it difficult to have any conviction in a call in either direction from a technical perspective.

Meanwhile, interest rates are rising, the U.S. dollar continues to march higher, and inflation has started to come down, which are all working against gold and silver prices. Return prospects for equities look more favorable to us over the next six to 12 months.

ALTERNATIVE INVESTMENTS

Alternative Investments See Continued Strength

Alternative investment strategies delivered positive returns during the month but encountered difficulty keeping pace with the impressive 8.1% return of the S&P 500. Our preferred alternatives implementations, which include event driven, market neutral, and low-beta single and multi-manager strategies, continue to outperform traditional asset classes on a year to date basis. Looking forward, we continue to advocate for diversifying alternative investment exposure across several low-beta allocations 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 have been on display this year 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 <a href="legt-ref-

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.

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