APRIL 2022

GLOBAL Portfolio Strategy

LPL Research

RISK REWARD TRADE-OFF FOR STOCKS VERSUS BONDS EVENING OUT

LPL RESEARCH'S MONTHLY MARKET OUTLOOK

Key changes from March report

- Reduced S&P 500 yearend fair value target to 4,800 – 4,900.
- Slightly reduced equities overweight and fixed income underweight
- Increased yearend U.S. 10-year Treasury yield forecast to 2.25% - 2.5%.
- Upgrading healthcare view to positive
- Downgrading financials view to neutral from positive
- Upgrading consumer staples and utilities views from negative to neutral
- Downgrading consumer discretionary and industrials views to negative from neutral
- Upgrading High Yield corporates from negative to neutral

Stocks rebounded from down months in January and February as the S&P 500 Index returned a solid 3.7% in March. The gain, which came generally in the absence of good news, left the index down 4.6% year to date as of March 31.

- Little clear progress was made toward a ceasefire in Ukraine.
- Inflation surged and economic activity slowed.
- The 2-year/10-year yield curve inverted, a sign of increasing recession risk over the next year or two.
- During March the bond market priced in three additional quarter-point Federal Reserve rate hikes for 2022, bringing the total to eight.
- The 10-year U.S. Treasury yield spiked more than 50 basis points (0.5%) during the month.

Higher interest rates were a key factor in the decision by the Strategic and Tactical Asset Allocation Committee (STAAC) to reduce the year-end S&P 500 Index fair value target range to 4,800—4,900, based on a price-to-earnings ratio (PE) of 20—20.5 and our 2023 earnings per share (EPS) estimate of \$235. Higher inflation led to our increased 10-year Treasury yield target. The risk that high inflation trickles down to U.S. consumers, along with Russian energy disruption, drives our lowered GDP forecasts.

INVESTMENT TAKEAWAYS:

- We continue to recommend a slight overweight to equities versus bonds for suitable investors as still-solid fundamentals outweigh pressure on valuations.
- Our value and growth style views remain neutral, but slower economic growth, a flat yield curve, and earnings set up well for growth.
- As the economic cycle matures, we would expect large caps to resume leadership, though small caps valuations are attractive.
- We continue to recommend a slight underweight allocation to fixed income where suitable as higher rates may put additional pressure on bond returns.
- Although we've seen a meaningful move higher in yields this year, broadening inflationary pressures and the reduction of Federal Reserve (Fed) policy support may push yields still higher in the months ahead. We've increased our yearend target for the 10-year Treasury yield to 2.25% to 2.5%.
- Shorter maturity corporate credit and high yield bonds (for income-oriented investors) are starting to look more 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	HealthcareReal Estate	■ Mortgage-Backed Securities	■ Event Driven

2022 MARKET FORECASTS

Reduced S&P 500 Target, Increasing Yield Forecast

	Previous	Current
10-Year U.S. Treasury Yield	1.75%-2.0%	2.25%-2.5%*
S&P 500 Index Earnings per Share	\$220	\$220
S&P 500 Index Fair Value	5,000-5,100	4,800-4,900**

Source: LPL Research, FactSet, Bloomberg

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

*As noted in our <u>LPL Research blog</u> on 3/29/22, our year-end 2022 forecast for the U.S. 10-year Treasury yield is 2.25%-2.5%. 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.

**As also noted in our <u>Weekly Market Commentary</u> dated 3/28/22, our year-end 2022 fair-value target range for the S&P 500 of 4,800-4,900 is based on a price-to-earnings ratio (PE) of about 20.5 and our S&P 500 earnings per share (EPS) forecast of \$235 in 2023.

2022 ECONOMIC FORECASTS

Slower but Still Strong U.S. Growth Expected

	Previous	Current
United States	4.0% to 4.5%	2.7% to 3.2%
Developed ex-U.S.	3.5% to 4.0%	2.5% to 3.0%
Eurozone	N/A	2.4% to 2.9%
Emerging Markets	4.75% to 5.25%	3.8% to 4.3%
Global	4.25% to 4.75%	3% to 3.5%

Source: LPL Research, Bloomberg

The economic forecasts may not develop as predicted.

All data, views, and forecasts herein are as of 3/31/22.



LPL RESEARCH STRATEGIC AND TACTICAL ASSET ALLOCATION COMMITTEE

LPL Research Tactical Asset Allocation as of 4/1/2022

INVESTMENT OBJECTIVE

	Aggre	ssive G	rowth		Growth			owth wi Income			come wi erate Gr			ie with C eservati	
	ТАА	Benchmark	Difference	TAA	Benchmark	Difference	TAA	Benchmark	Difference	TAA	Benchmark	Difference	TAA	Benchmark	Difference
STOCKS	97.0%	95.0%	2.0%	82.0%	80.0%	2.0%	62.0%	60.0%	2.0%	42.0%	40.0%	2.0%	22.0%	20.0%	2.0%
U.S. EQUITY	79.5%	76.0%	3.5%	67.2%	64.0%	3.2%	50.8%	48.0%	2.8%	34.4%	32.0%	2.4%	18.0%	16.0%	2.0%
Large Value	11.3%	10.8%	0.5%	9.5%	9.1%	0.5%	7.2%	6.8%	0.4%	4.9%	4.5%	0.3%	2.6%	2.3%	0.3%
Large Blend	15.9%	15.2%	0.7%	13.5%	12.8%	0.6%	10.2%	9.6%	0.6%	6.9%	6.4%	0.5%	3.6%	3.2%	0.4%
Large Growth	22.9%	21.9%	1.0%	19.4%	18.4%	0.9%	14.7%	13.8%	0.8%	9.9%	9.2%	0.7%	5.2%	4.6%	0.6%
Small/Mid Value	9.7%	9.3%	0.4%	8.2%	7.8%	0.4%	6.2%	5.9%	0.3%	4.2%	3.9%	0.3%	2.2%	2.0%	0.2%
Small/Mid Blend	13.0%	12.4%	0.6%	11.0%	10.4%	0.5%	8.3%	7.8%	0.5%	5.6%	5.2%	0.4%	2.9%	2.6%	0.3%
Small/Mid Growth	6.7%	6.4%	0.3%	5.7%	5.4%	0.3%	4.3%	4.1%	0.2%	2.9%	2.7%	0.2%	1.5%	1.4%	0.2%
INTERNATIONAL EQUITY	17.5%	19.0%	-1.5%	14.8%	16.0%	-1.2%	11.2%	12.0%	-0.8%	7.6%	8.0%	-0.4%	4.0%	4.0%	0.0%
Developed (EAFE)	10.3%	12.0%	-1.7%	8.6%	10.0%	-1.4%	7.0%	8.0%	-1.0%	4.4%	5.0%	-0.6%	4.0%	4.0%	0.0%
Emerging Markets	7.1%	7.0%	0.1%	6.2%	6.0%	0.1%	4.1%	4.0%	0.1%	3.2%	3.0%	0.2%	0.0%	0.0%	0.0%
BONDS	0.0%	0.0%	0.0%	16.0%	15.0%	1.0%	36.0%	35.0%	1.0%	56.0%	53.0%	3.0%	76.0%	70.0%	6.0%
U.S. CORE	0.0%	0.0%	0.0%	15.4%	15.0%	0.4%	34.6%	35.0%	-0.4%	53.8%	53.0%	0.8%	73.0%	70.0%	3.0%
Treasuries	0.0%	0.0%	0.0%	6.9%	6.7%	0.2%	15.5%	15.7%	-0.2%	24.2%	23.8%	0.3%	32.8%	31.5%	1.3%
MBS	0.0%	0.0%	0.0%	4.9%	4.5%	0.4%	11.1%	10.5%	0.6%	17.2%	15.9%	1.3%	23.4%	21.0%	2.4%
IG Corporates	0.0%	0.0%	0.0%	3.5%	3.8%	-0.2%	8.0%	8.8%	-0.8%	12.4%	13.3%	-0.9%	16.8%	17.6%	-0.8%
NON-CORE	0.0%	0.0%	0.0%	0.6%	0.0%	0.6%	1.4%	0.0%	1.4%	2.2%	0.0%	2.2%	3.0%	0.0%	3.0%
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%	0.6%	0.0%	0.6%	1.4%	0.0%	1.4%	2.2%	0.0%	2.2%	3.0%	0.0%	3.0%
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	3.0%	5.0%	-2.0%	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 Barcalys 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 Slight Overweight to Stocks

The LPL Research STAAC continues to favor stocks over bonds as still-solid fundamentals outweigh pressure on valuations due to higher interest rates. The Committee continues to expect above-trend, though slower, economic growth and continued solid earnings to support stock market gains in 2022, though the possibility of a broader military conflict in Europe and stubbornly high inflation present sizable risks. The Committee's views on the value and growth styles remain neutral, though slower economic growth, a flat yield curve, and strong earnings set up well for growth later this year. As the economic cycle matures, large caps may sustain leadership, though small caps may benefit from valuation support near term. The economic impact of the Russia-Ukraine conflict should be greater in Europe than in the United States due to the continent's reliance on Russian energy, supporting the Committee's preference for U.S. equities over developed international and emerging markets.

	Sector	Overall View	Relative Trend	Rationale
tion	Large Caps			As the economic cycle matures in 2022, the environment may become more favorable for large cap companies as they typically perform better later in economic cycles. They are better positioned to manage global supply chain disruptions than small caps but are more exposed to weakness in Europe.
Market Capitalization	Mid Caps	-•-	•	As the economic cycle matures, mid caps may see less benefit from their early cycle characteristics. Mid cap stock valuations are just as attractive compared to large caps as they have been in over 20 years. Merger and acquisition environment remains fairly healthy.
Mar	Small Caps			Small cap stock valuations have become more attractive recently, merger activity remains healthy, and smaller companies are relatively more insulated from economic weakness in Europe than larger cap companies. However, small caps may struggle as the economic cycle matures.
Style	Growth	-	-	Slowing economic growth, a flatter yield curve, and earnings trends are bullish for the growth style, but growth stocks are relatively expensive and are unlikely to benefit as much from the economy's reopening or high inflation as value stocks.
St	Value	-		A flat yield curve creates difficult economic conditions for value stocks because of the pressure on financials. However, cyclical value stocks remain attractively valued and are benefiting from easing COVID-19 pressures and the ongoing commodities boom.
	United States	-	•	The Russia-Ukraine conflict strengthens 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 downgrade of international equities reflected Europe's heavy reliance on Russian energy. Germany appears to be on the cusp of a recession. Prior to the Russian invasion of Ukraine, the outlook for Europe and Japan had begun to improve. An eventual post-pandemic, synchronized global expansion could be supportive but has been delayed.
	Emerging Markets		•	Our decision to upgrade emerging market equities to neutral in February 2022 reflected our desire to balance out geographic exposure and take advantage of attractive valuations. China's monetary policy stimulus and fewer regulatory headlines added to the case, but the near-term outlook is muddled.

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 Consumer Staples, Utilities, and Healthcare to Emphasize Defensive Sectors

As the economic cycle matures and the economic expansion faces more threats, we believe a focus on defensive sectors is prudent. We maintain our positive real estate view, while our negative views now include two sectors negatively impacted by high inflation and a slowing economy: consumer discretionary and industrials. The STAAC decision to upgrade consumer staples, healthcare, and utilities reflects interest in achieving a tilt toward defensive sectors, as well as improving technical analysis trends. The rest of our sector views are neutral, though energy represents an interesting short-term idea for active traders as a hedge against potential additional disruption to Russian energy exports and over the intermediate term (3-12 months), the outlook for technology and growth sectors more broadly looks more appealing.

	Sector	Overall View	Relative Trend	S&P Wgt	Rationale
	Materials	-•-		2.6	Slower growth in China, a strong U.S. dollar, and delayed post-pandemic pickup in global growth offset benefits of infrastructure spending, higher metal prices, and inflation. Valuations are fair, not compelling.
	Energy	-		3.8	Russian supply disruptions further tighten an already tight global supply picture. Ukraine resolution could bring oil prices down further, while U.S. and Mideast production will likely rise in response to higher prices. Global demand is solid.
	Industrials	• •		7.8	Soft earnings estimate revisions and ongoing supply chain disruptions dampen the near-term outlook, though more infrastructure spending will eventually help. Much of reopening boost has likely occurred. Fair valuations. Technical analysis signals are negative.
Cyclical	Communication Services	•		9.4	A toughening regulatory environment for this digital media-heavy sector, below-average estimated earnings growth in 2022, and weak technical analysis trends offset increasingly attractive valuations and keep us at neutral.
	Consumer Discretionary	•	•	12.2	Consumer spending outlook remains healthy, but inflation is eroding purchasing power as oil surges, relative strength has deteriorated, and the sector is historically not a strong mid-cycle performer. Valuations are high despite solid earnings gains.
	Technology	•	-	28.2	Solid fundamentals and positive technical analysis picture help offset the risk that higher interest rates pressure growth-stock valuations or work-from-home stocks struggle post-pandemic. Interesting buy-the-dip candidate. Positive earnings revisions. Fair valuations.
	Financials	- ● ③		11.2	Expanding economy should help boost loan demand in 2022, though yield curve flattening and weaker European economies introduce risk. Watching technical analysis signals and interest rates closely. Valuations remain attractive.
	Utilities	•		2.7	Improved technical analysis trends drove the upgrade, though it is probably too early in the economic cycle for utilities to sustain outperformance. Green-energy spending may get a boost and interest rate risk has moderated, though valuations have gotten elevated.
Defensive	Healthcare		-	13.5	Maturing economic cycle, improving technical analysis trends, and diminishing policy risk as the Build Back Better plan stalls are supportive of the sector near-term. Demographic trends offer long-term support. Valuations are relatively attractive.
Defe	Consumer Staples	•		6.0	Outperformance in recent pullback was to be expected, but slow-growth staple companies are getting squeezed by higher costs. Valuations look fair given mid-cycle economy, though interest rate risk has moderated and technicals are positive.
	Real Estate	-		2.7	Benefits of reopening, the sector's tendency to effectively manage inflation, and healthy credit markets, are supportive. Neutral technical analysis trends. Defensive sectors have been attracting more interest recently. Interest rate risk moderating. Fair valuations.

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.

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

The Value Proposition for Fixed Income Broadly has Improved

With yields moving higher recently in most fixed income markets, future returns for fixed income investors have likely improved. We're seeing increasing investment opportunities in shorter maturity securities such as short maturity investment grade corporates. Also, higher yields (and still low default expectations) for lower rated corporate credit markets make this area interesting as well. While there's no guarantee that yields can't go higher, at current levels, which are above longer-term averages in most markets, valuations for many fixed income assets are starting to look interesting again.

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, **high yield municipal bonds** offer an attractive tax-equivalent yield. Fundamentals in both markets remain solid.

		Low Medium High	Rationale
ing	Credit Quality	-	Yields in many credit markets exceed their longer-term averages so prospects of future returns may have improved. We think the economic outlook remains supportive as well.
Positioning		Short Int. Long	
	Duration		We think marginally reducing the underweight to interest-rate sensitive assets makes sense at this point in the cycle.
		Neg. Neutral Pos.	Rationale
	U.S. Treasuries	•	Yields have traded meaningfully higher recently as the market has repriced the number of expected Fed rate hikes. We think yields could still move marginally higher from here, however, we think the big move higher in yields has already happened. Yield spreads to international sovereigns remain attractive. Inflation breakeven rates leave TIPS fully valued.
	MBS	-	The Fed has stopped new MBS purchases, and balance sheet runoff is a potential risk this year, which may put upward pressure on yields. Valuations remain full, but higher yields would likely attract additional yield buyers.
	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 are sound overall. Can be rate sensitive but may be able to tolerate gradual increases.
Sec	High-Yield Corporates		With total yields in high yield bonds approaching historical averages, though with arguably a higher-quality index disposition, the value proposition for high yield bonds has improved. Additionally, credit fundamentals remain sound.
	Bank Loans	•	Economic environment is supportive and better sector mix than high yield. Higher interest rates may support demand. 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		Rich valuations, interest-rate risk, and potential currency volatility are among the negatives.
	EM Debt	-	Central banks are becoming less accommodative as inflationary pressures in emerging markets are building, which 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, involves 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

Continue to Favor Industrial Metals over Precious Metals, While Oil Could Be Poised for another Run

Our view of **industrial metals** remains positive, as prospects for solid but slower economic growth in the U.S. in 2022 and more infrastructure spending help offset slowing demand from China. Additionally, the potential that U.S. dollar headwinds persists until the Russia-Ukraine conflict is resolved.

Our **precious metals** view is neutral, though we acknowledge the bullish technical analysis setup for gold amid heightened geopolitical threats and prefer gold to silver. Looking beyond the short term, though stubbornly high inflation may continue to be supportive, above-trend U.S. economic growth and higher interest rates present headwinds for defensive assets such as gold. We maintain our slight preference for industrial metals over their precious metal counterparts.

We are keeping our positive bias on **crude oil**, but between \$100 and \$105 there may be an opportunity for another move higher within a positive overall trend. Though oil is unlikely to return to the March highs around \$130 per barrel anytime soon, we see \$115 as a key resistance level to watch. We're also not dismissing the possibility of a breakout above that level in the short term as fighting in Ukraine continues and a ceasefire remains elusive. Meanwhile, global supply-demand balance remains tilted toward the demand side.

ALTERNATIVE INVESTMENTS

Mixed Results to End Quarter

Alternative investment strategy performance was mixed during March, as traditional long-only equity markets staged an impressive rally, while bonds continued to sell off. Our preferred alternatives implementation solution – event-driven– is being expanded to include other strategies with a similar risk/return profile. These include traditional market neutral strategies and low-beta single and multi-manager solutions. Given the potential for continued market volatility, we believe diversifying alternative investment exposure across several low-beta allocations to be 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 protect portfolios in the current environment and act as a source of ballast during periods of high volatility. In regards to the event driven industry, our three main tailwinds remain in place. These include high corporate cash balances, low borrowing rates, and the private equity industry's dry powder. Further diversification across market neutral and multi-strategy strategies will 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.

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