

January 14, 2020

# NAVIGATING THE MARKETS

## COMPASS CHANGES

- Upgraded financials view to neutral/positive from neutral
- Upgraded industrial metals view to neutral from negative/neutral

## INVESTMENT TAKEAWAYS

- Our S&P 500 Index year-end 2020 fair value target range of 3,250–3,300 is based on a price-to-earnings (P/E) ratio of 18.75 and our 2020 S&P 500 earnings forecast of \$175 per share. With stocks at our year-end fair value target, the magnitude of a potential stock market advance in 2020 may be limited.
- We favor large cap stocks as the business cycle ages and recommend balanced exposure between the growth and value styles in equity allocations.
- Attractive valuations, solid economic growth may favor emerging markets over foreign developed markets. Trade deal with China may be supportive though trade risk remains.
- Our upgraded financials sector view reflects an improved interest rate environment while valuations remain attractive.
- Slower but still solid economic growth and modest inflation may put upward pressure on yields, but trade uncertainty and the global appetite for U.S. Treasuries increase the likelihood they remain range bound.
- We emphasize a blend of high-quality intermediate bonds, with an emphasis on mortgage-backed securities (MBS) and underweight exposure to U.S. Treasuries in suitable strategies. MBS could provide a diversifying source of yield within the investment-grade space that may tolerate modestly rising rates better than other options.
- High-yield corporates could be an attractive alternative to equities on a risk-adjusted basis.
- While economic growth is supportive of investment-grade corporates, tight credit spreads and declining credit quality lead to our neutral view.
- The global stock rally continues to be buoyed by strong participation; however, with overly optimistic sentiment becoming a tactical risk, we see technical support near 3,030 on the S&P 500 Index.

The *Portfolio Compass* provides a snapshot of LPL Research’s views on equity, equity sectors, fixed income, and alternative asset classes. This monthly publication illustrates our current views and will change as needed over a 3- to 12-month time horizon.

The top down is an important part of our asset allocation process. As a result, we have a macro section including our views of the global economy and key drivers of those views, and a section on what we are watching that might change those views.

## CONTENTS

Compass Changes .....1

Macroeconomic Views.....2

Asset Class & Sector Top Picks .....3

Equity Asset Classes.....4

Equity Sectors .....5

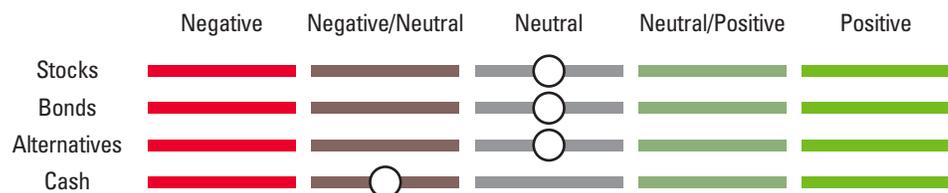
Fixed Income.....6

Commodities & Alternative Asset Classes ...8

All performance referenced herein is as of January 13, 2020, unless otherwise noted.

## BROAD ASSET CLASS VIEWS

LPL Research’s views on stocks, bonds, cash, and alternatives are illustrated below.



# MACROECONOMIC VIEWS

	Economic Factor	Outlook	Investing Impact
ECONOMY	<b>U.S. GDP Growth</b>	Our GDP forecast for 2020 is 1.75%.*	Absence of a recession would likely support equity markets despite slower growth.
	<b>Consumer Spending</b>	A strong labor market and stock gains may help.	Consumer spending remains a growth driver during business spending soft patch.
	<b>Business Spending</b>	Some support from fiscal stimulus still in place, but trade uncertainty an offset.	May improve with some progress on trade, with industrials the potential beneficiary.
	<b>Housing</b>	Lower rates, growing inventory are helping, but home prices limiting upside.	Demographic pressures building, but full rebound may be delayed until next cycle.
	<b>Import/Export</b>	Service sector exports strong; uncertainty around trade.	May support technology and business services; some uncertainty for multinationals.
	<b>Labor Market</b>	Unemployment near multidecade low; wage gains support consumer spending.	Wages may start to pressure profit margins; Fed watching closely but not at worrisome levels.
	<b>Inflation</b>	Still contained despite modest wage pressure.	May rise if trade picture clears up, but likely only gradually.
	<b>Business Cycle</b>	Some late cycle signs but economy not overheating.	Equity markets may have room to run, but volatility may continue.
	<b>Dollar</b>	Increasing signs of flattening.	A flat to lower dollar would support international equity and bond returns for U.S. investors.
	<b>Global GDP Growth</b>	Signs of stabilization, but trade uncertainty remains a risk.	May contribute to equity volatility but potential opportunities for global multinationals.
POLICY	<b>Fiscal</b>	Impact of tax reform and deregulation limited by trade policy.	Fiscal policy still market friendly, but expecting continued bouts of volatility.
	<b>Monetary</b>	"Insurance" rate cuts were supportive, but Fed on pause for now.	May support markets as long as inflation remains contained, making a return to hikes unlikely.
	<b>Government</b>	Potential for monetary or fiscal policy mistake increasing as economy slows.	Markets may have room to run, but important to monitor target risk levels.
RISKS	<b>Financial</b>	Targeted deregulation reasonable with systematic risk lower than prior cycle.	Short term positive; longer term may enable economic and market excesses to build.
	<b>Geopolitical &amp; Other</b>	China, trade, Middle East tensions remain in focus.	May contribute to higher stock volatility.
OVERSEAS	<b>Developed Overseas</b>	Signs of stabilization, but slow growth path remains a concern.	Potential diversification benefits, but returns may lag United States.
	<b>Emerging Markets</b>	Trade risk remains; there are pockets of stress, but emerging markets growth outlook overall still looks good.	Low valuations and strong growth offer emerging markets upside potential once trade situation is resolved.
FINANCIAL CONDITIONS	<b>Corporate Profits</b>	Modest gains in 2020.	We see S&P 500 appreciation consistent with earnings gains in 2020.
	<b>Main Street</b>	Policy uncertainty impacting sentiment, but may be starting to rebound.	Supports cyclical sector performance.

Source: LPL Research

The opinions voiced in this material are for general information only and are not intended to provide or be construed as providing specific investment advice or recommendations for your clients. Any economic forecasts set forth in the presentation may not develop as predicted and there can be no guarantee that strategies promoted will be successful.

\*Our forecast of GDP growth of near 1.75% is slightly below our long-term baseline, which is based on labor force and productivity trends, due to the frictional impact of trade policy uncertainty, slower global growth, and the waning impact of fiscal stimulus. Economic growth is affected by changes to inputs such as business and consumer spending, housing, net exports, capital investments, and government spending.

## ASSET CLASS & SECTOR TOP PICKS

Below we provide our top overall ideas across the various asset classes and sectors covered in this publication, as well as our best ideas within the three disciplines of our investment process: fundamentals, technicals, and valuations. More details on these and other investment ideas can be found on subsequent pages.

Characteristics	EQUITY ASSET CLASSES	EQUITY SECTORS	FIXED INCOME	Characteristics	ALTERNATIVE ASSET CLASSES
<b>BEST OVERALL IDEAS</b>	Emerging Markets Equities Large Cap Equities	Financials Industrials Technology	Mortgage-Backed Securities	<b>BEST OVERALL IDEAS</b>	Event Driven
<b>Fundamentals</b>	Large Cap Equities	Financials Industrials Technology	Mortgage-Backed Securities	<b>Catalysts</b>	Event Driven Global Macro
<b>Technicals</b>	U.S. Equities	Financials Technology	Investment-Grade Corporate	<b>Trading Environment</b>	Long/Short Equity
<b>Valuations</b>	Emerging Markets Equities Large Value Equities	Financials Healthcare Industrials	Emerging Markets Debt	<b>Volatility</b>	Global Macro Long/Short Equity

## READING THE PORTFOLIO COMPASS

RATING	ICON	DESCRIPTION
Negative	Red square, Red circle	Fundamental, technical, and valuation characteristics for each category are shown by their blue icons below, and displayed as colored squares.
Negative/Neutral	Red square, Red circle with outline	Negative, neutral, or positive views are illustrated as a colored circle positioned over the scale, whereas an outlined black circle with an arrow indicates change, and shows the previous view.
Neutral	Grey square, Grey circle	Rationales for our views are provided on the right side.
Positive/Neutral	Green square, Green circle	
Positive	Green square, Green circle	
Previous Position	Circle with arrow	

The diagram shows three scales: Valuations (blue), Technicals (blue), and Fundamentals (blue). For Materials, Valuations is Neutral (grey circle), Technicals is Negative (red circle), and Fundamentals is Neutral (grey circle). For Energy, Valuations is Positive (green circle), Technicals is Negative (red circle), and Fundamentals is Positive (green circle). A legend indicates: Valuations (blue), Technicals (blue), Fundamentals (blue), Negative (red), Neutral (grey), Positive (green). Below the scales is a table:

Sector	F	T	V	Scale	S&P*	Rationale
Materials	Grey	Red	Grey	Grey circle	3.2	China stimulus could help more, but technicals are negative and China's growth is stalling
Energy	Red	Red	Green	Green circle	8.2	Intriguing potential contrarian opportunity, but supply and technicals suggest caution; favor MLPs.

Global macro strategy is a hedge fund strategy that selects its holdings primarily on the macroeconomic and political views of various countries, and is subject to numerous risks such as: geopolitical, derivative, commodity, volatility, currency, and regulatory.

Long/short equity strategies are subject to normal alternative investment risks, including potentially higher fees, while there is additional management risk, as the manager is attempting to accurately anticipate the likely movement of both their long and short holdings. There is also the risk of "beta-mismatch," in which long positions could lose more than short positions during falling markets.

## EQUITY ASSET CLASSES

Our S&P 500 Index year-end 2020 fair value target range of 3,250–3,000 is based on a P/E ratio of 18.75 and our 2020 S&P 500 earnings forecast of \$175 per share. With stocks at our year-end fair value target, the magnitude of a potential stock market advance in 2020 may be limited. We favor large caps as the business cycle ages. We recommend balanced exposure between the growth and value styles amid various crosscurrents. Relative valuations favor value stocks, but the interest-rate environment and slowing economic growth may favor growth. Our positive emerging markets view is based on solid economic growth, favorable demographics, and attractive valuations, with potential upside from additional progress on trade with China following the phase-one agreement.

	Asset Class	F	T	V	⊖	○	⊕	Rationale
Style/Capitalization	Large Growth	■	■	■				We favor large caps over small as the business cycle ages. The latest de-escalation of U.S.-China trade tensions may help large caps. Relative valuations favor value stocks, but the interest-rate environment and sub-par economic growth may favor growth.
	Large Value	■	■	■				
	Mid Growth	■	■	■				Mid cap valuations are attractive relative to large caps, but earnings growth doesn't stand out. Sub-par economic growth and the interest-rate environment favor growth, but valuations favor value.
	Mid Value	■	■	■				
	Small Growth	■	■	■				As the economic cycle ages in 2020 and financial conditions potentially tighten, small caps may struggle to keep up with large cap stocks. Further progress on trade following the phase-one agreement with China may benefit larger cap companies.
	Small Value	■	■	■				
Region	United States	■	■	■				Among developed markets, we remain U.S. focused, supported by stronger but slowing economic growth, low inflation, modest earnings growth, and Fed rate cuts.
	Large Foreign	■	■	■				Our concerns about global policies, economies, and interest rates translate into our preference for emerging-markets stocks over international developed-market stocks. Fiscal deficits, populism, and exhausted monetary policies could weigh on sentiment, spending, and investment in Europe. Structural reforms and the recent consumer tax hike may pressure sentiment in Japan.
	Small Foreign	■	■	■				
	Emerging Markets	■	■	■				Attractive valuations and solid economic growth favor emerging markets over developed foreign markets. The phase-one trade deal with China is supportive, even though we acknowledge the risk of re-escalation in trade tensions likely will remain elevated throughout 2020.
MLPs	Master Limited Partnerships	■	■	■				Pockets of fundamental weakness and year-end tax-related selling pressure have outweighed attractive yields and strong U.S. energy production.

Investing in master limited partnerships (MLPs) involves additional risks as compared with the risks of investing in common stock, including risks related to cash flow, dilution, and voting rights. MLPs may trade less frequently than larger companies due to their smaller capitalizations, which may result in erratic price movement or difficulty in buying or selling. MLPs are subject to significant regulation and may be adversely affected by changes in the regulatory environment, including the risk that an MLP could lose its tax status as a partnership. Additional management fees and other expenses are associated with investing in MLP funds.

## EQUITY SECTORS

We continue to prefer cyclical sectors for the U.S. economic expansion, which we expect will continue through 2020. Our upgraded view of financials primarily reflects an improved interest rate environment while valuations remain attractive in our view. Technology continues to lead this bull market. We expect industrials to benefit from the U.S.-China trade deal and a potential pickup in capital spending. The healthcare sector is on watch for a potential upgrade given the solid healthcare spending outlook, favorable demographic trends, and attractive stock valuations.

	Sector	F	T	V	⊖	○	+	S&P*	Rationale
Cyclical	Materials	■	■	■	●	○	●	2.7	The U.S.-China trade deal, stabilizing global growth, weaker U.S. dollar, and rising copper prices have our attention, but we would like to see better performance.
	Energy	■	■	■	●	○	●	4.4	Near \$60 per barrel, oil's upside may be limited by U.S. supply and limited responses to recent shocks, although the U.S.-China trade deal and weaker U.S. dollar may help.
	Industrials	■	■	■	●	○	●	9.3	Positive drivers include the U.S.-China trade deal, stabilizing global economic growth, and prospects for more business investment. Valuations remain very reasonable.
	Communication Services	■	■	■	●	○	●	10.4	High valuations, regulatory risk for internet companies, and defensive telecom exposure keep us neutral despite a strong earnings outlook and economic sensitivity.
	Consumer Discretionary	■	■	■	●	○	●	10.2	Though valuations are rich, robust consumer spending and still-low interest rates are beneficial.
	Technology	■	■	■	●	○	●	22.3	Solid spending in areas targeting productivity enhancements, focusing on mobile, cloud computing, automation, and artificial intelligence (AI). Earnings lull may be temporary.
	Financials	■	■	■	●	○	●	12.8	Our upgraded view reflects an improved interest rate environment while valuations remain attractive, in our view.
Defensive	Utilities	■	■	■	●	○	●	3.5	We continue to favor cyclical sectors, valuations are high, and we expect interest rates to rise, albeit gradually.
	Healthcare	■	■	■	●	○	●	13.6	Ebbing policy fears gave the sector a lift in Q4. Positive bias driven by a solid healthcare spending outlook, favorable demographics, and attractive valuations.
	Consumer Staples	■	■	■	●	○	●	7.6	Our preference for cyclical sectors, sluggish growth, and rich valuations offset attractive yields.
	Real Estate	■	■	■	●	○	●	3.2	Sound fundamentals and rich yields, but interest-rate sensitivity and our preference for cyclical sectors lead to our neutral view.

\* S&P 500 Weight (%)

Investing in real estate/REITs involves special risks such as potential illiquidity and may not be suitable for all investors. There is no assurance that the investment objectives of this program will be attained.

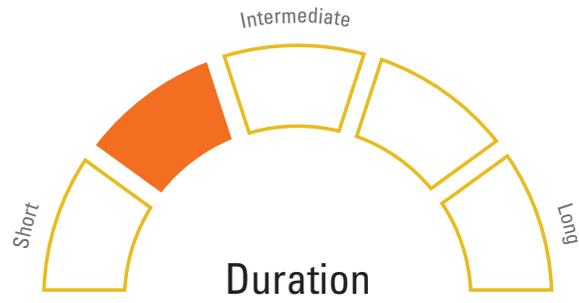
Because of its narrow focus, specialty sector investing, such as healthcare, financials, or energy, will be subject to greater volatility than investing more broadly across many sectors and companies.

There is no guarantee that a diversified portfolio will enhance overall returns or outperform a nondiversified portfolio. Diversification does not ensure against market risk.

# FIXED INCOME



Maintaining a more cautious approach as we move later cycle, but still prefer corporate bonds to government bonds.



Recommended interest rate sensitivity is still lower than the benchmark due to a modest bias toward rates rising, relatively attractive shorter-term yields.

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.

Sector	F	T	V	⊖	○	⊕	Rationale
Munis–Short-Term	■	■	■	—●—			Supply dynamics attractive. Less volatile than longer maturity, but potential diversification benefits are more limited.
Munis–Intermediate-Term	■	■	■	—●—			Supply dynamics still look attractive. Valuations relative to Treasuries lean expensive.
Munis–Long-Term	■	■	■	—●—			Higher rate sensitivity may be a headwind if rates rise. Supply dynamics remain attractive.
Munis–High-Yield	■	■	■	—●—			Remaining more cautious as we move later cycle. Some long-term headwinds from pension obligations. Supply dynamics remain attractive. Low yields for sector on an absolute basis.

(Continued on next page)

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. 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. 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.

## FIXED INCOME (CONTINUED)

We continue to emphasize a blend of high-quality intermediate bonds in tactically oriented portfolios with an emphasis on MBS. We expect modest rate pressure in 2020 helped by stabilizing growth, but inflation remains contained. Compensation for longer maturity bonds remains unattractive. Growth still sufficient to support corporate profits, and interest coverage remains solid, but valuations appear less attractive as credit spreads narrow. We maintain a cautious approach with credit-sensitive areas of the market, but a “coupon-clipping” environment may still aid suitable investors.

Asset Class	F	T	V	⊖	○	⊕	Rationale
Taxable Bonds – U.S.	Treasuries	■	■	■	●		Yield spreads to international sovereigns remain elevated but hedging costs lower attractiveness. Supply, economic growth, and inflation normalization could be headwinds. Other options look more attractive.
	TIPS	■	■	■		●	Break-even inflation rates still appear modestly attractive, but slower growth, low yield limit upside.
	Mortgage-Backed Security	■	■	■		●	Diversifying source of yield among high-quality options.
	Investment-Grade Corporates	■	■	■		●	We still find incremental value in corporate bonds due to the economic backdrop. Tight credit spreads and overall credit quality a concern.
	Preferred Stocks	■	■	■		●	Fundamentals are firm for U.S. banks. Higher interest-rate sensitivity remains a risk. Valuations a concern.
	High-Yield Corporates	■	■	■		●	Yields remain attractive and economy supportive, but a less effective diversifier than higher-quality options. Credit spreads have tightened.
	Bank Loans	■	■	■	●		Weaker investor protections and end of rate hikes for now decrease attractiveness. Economy remains supportive.
Taxable Bonds – Foreign	Foreign Bonds–Hedged	■	■	■	●		Rich valuations, risk from rising rates may pressure performance.
	Foreign Bonds–Unhedged	■	■	■	●		Potential currency volatility, low yields, and unattractive valuations are negatives.
	Emerging Markets Debt	■	■	■		●	Dovish central banks improve the valuation picture. Trade policy and geopolitical tensions remain risks.

Investing in foreign and emerging market debt 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.

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.

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.

Treasury Inflation-Protected Securities, or TIPS, are subject to market risk and significant interest rate risk as their longer duration makes them more sensitive to price declines associated with higher interest rates.

## COMMODITIES & ALTERNATIVE ASSET CLASSES

Slowing global growth has been a drag, but U.S.-China trade progress has helped industrial metals' performance show signs of life recently. Potential drivers of precious metals are dissipating, including possible Fed rate cuts, trade uncertainty, and Mideast conflict. It's difficult to envision a new near-term positive catalyst for oil prices after the Saudi production disruption and U.S.-Iran conflict had limited sustained impact. The event-driven investing outlook remains promising as healthy deal flow, low tax rates, and available private equity support the strategy.

	Asset Class	F	T	V	⊖	○	⊕	Rationale
Commodities	Industrial Metals	■	■					Stabilizing global growth and trade progress support an upgrade to neutral, but odds of a U.S. infrastructure bill are near zero, and technical analysis trends are still mixed.
	Precious Metals	■	■					U.S. dollar weakness is a potential positive catalyst, but Fed policy, U.S.-China trade tensions, and the Iran conflict are fading as possible drivers of upside. Negative bias.
	Energy	■	■					It's difficult to envision a new near-term positive catalyst for oil prices after September's Saudi production disruption and the latest escalation in the U.S.-Iran conflict had limited sustained impact.
	Agricultural	■	■					The phase-one trade deal with China, including substantial increases in planned purchases of U.S. agriculture, has helped stem declines.

	Sector	T	C	V	⊖	○	⊕	Rationale
Alternatives	Long/Short Equity	■	■	■				Over the past month, strategies have benefited from marginally adding to their long equity exposure, specifically within cyclical sectors. We continue to prefer strategies with balanced risk profiles, as well as those that have flexible net exposure mandates to capitalize on market volatility.
	Event Driven	■	■	■				Merger arbitrage continues to provide attractive risk-adjusted returns with limited equity exposure. Deal flow remains healthy, while low interest rates and significant private equity available for deployment support the strategy.
	Managed Futures	■	■	■				Recent performance has been supported by long equity exposure, with mixed performance in fixed income as yields remain range-bound. We favor multi-managers or combinations of uncorrelated trading strategies to smooth, diversify return profiles.
	Global Macro	■	■	■				Global macro strategies continue to provide diverse exposure sets and have provided attractive downside protection during equity sell-offs. Shifts in fiscal policy, global political uncertainty, and economic divergences provide an attractive opportunity set.

	CHARACTERISTICS	ICON	DEFINITION
LEGEND	Catalysts		Potential for favorable macroeconomic and/or idiosyncratic market developments that may benefit the investment strategy.
	Trading Environment		Market characteristics present sufficient investment opportunities for this investment style.
	Volatility		The current volatility regime provides a constructive environment that an investment of this style can capitalize on.

Alternative strategies 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.

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.

## IMPORTANT DISCLOSURES

All performance referenced is historical and is no guarantee of future results.

There is no assurance that the techniques and strategies discussed are suitable for all investors or will yield positive outcomes. The purchase of certain securities may be required to effect some of the strategies.

All indexes are unmanaged and cannot be invested into directly. Unmanaged index returns do not reflect fees, expenses, or sales charges. Index performance is not indicative of the performance of any investment.

### Stock and Pooled Investment Risks

The payment of dividends is not guaranteed. Companies may reduce or eliminate the payment of dividends at any given time.

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

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.

The prices of small and mid cap stocks are generally more volatile than large cap stocks.

### Bond and Debt Equity Risks

Government bonds and Treasury bills are guaranteed by the U.S. government as to the timely payment of principal and interest and, if held to maturity, offer a fixed rate of return and fixed principal value. However, the value of fund shares is not guaranteed and will fluctuate.

Bond yields are subject to change. Certain call or special redemption features may exist which could impact yield.

### Alternative Risks

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.

Managed futures strategies use systematic quantitative programs to find and invest in positive and negative trends in the futures markets for financials and commodities. Futures and forward trading is speculative, includes a high degree of risk that the anticipated market outcome may not occur, and may not be suitable for all investors.

## INDEX DEFINITIONS

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

## DEFINITIONS

A cyclical stock is an equity security whose price is affected by ups and downs in the overall economy. Cyclical stocks typically relate to companies that sell discretionary items that consumers can afford to buy more of in a booming economy and will cut back on during a recession.

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. Rising interest rates mean falling bond prices, while declining interest rates mean rising bond prices. The bigger the duration number, the greater the interest rate risk or reward for bond prices.

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.

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.

Technical analysis is a methodology for evaluating securities based on statistics generated by market activity, such as past prices, volume and momentum, and is not intended to be used as the sole mechanism for trading decisions. Technical analysts do not attempt to measure a security's intrinsic value, but instead use charts and other tools to identify patterns and trends. Technical analysis carries inherent risk, chief amongst which is that past performance is not indicative of future results. Technical analysis should be used in conjunction with Fundamental analysis within the decision-making process and shall include but not be limited to the following considerations: investment thesis, suitability, expected time horizon, and operational factors, such as trading costs are examples.

The PE ratio (price-to-earnings ratio) is a measure of the price paid for a share relative to the annual net income or profit earned by the firm per share. It is a financial ratio used for valuation: a higher PE ratio means that investors are paying more for each unit of net income, so the stock is more expensive compared to one with lower PE ratio.

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.

Idiosyncratic risk can be thought of as the factors that affect an asset such as a stock and its underlying company at the microeconomic level. Idiosyncratic risk has little or no correlation with market risk, and can therefore be substantially mitigated or eliminated from a portfolio by using adequate diversification.

This Research material was prepared by LPL Financial, LLC.

### 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 affiliate, please note LPL makes no representation with respect to such entity.

If your advisor is located at a bank or credit union, please note that the bank/credit union is not registered as a broker-dealer or investment advisor. Registered representatives of LPL may also be employees of the bank/credit union. These products and services are being offered through LPL or its affiliates, which are separate entities from, and not affiliates of, the bank/credit union. Securities and insurance offered through LPL or its affiliates are:

**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**

RES-50722-0121 | For Public Use | Tracking #1-938538