IPL RESEARCH PORTFOLIO COMPASS

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 Changes1
Macroeconomic Views2
What We're Watching3
Asset Class & Sector Top Picks4
Equity Asset Classes5
Equity Sectors6
Fixed Income7
Commodities & Alternative Asset Classes9

All performance referenced herein is as of January 16, 2018, unless otherwise noted.

*As noted in our *Outlook 2018: Return of the Business Cycle*, we expect the S&P 500 Index total return to be 8–10%, driven by 2.5% GDP growth, 8–10% S&P 500 earnings growth, and a target price-to-earnings ratio (PE) of 19.

January 17 2018

NAVIGATING THE MARKETS

COMPASS CHANGES

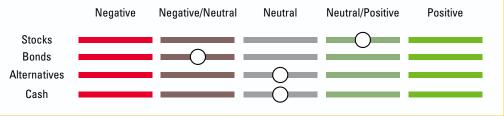
Increased short-term municipal bonds view to neutral/positive.

INVESTMENT TAKEAWAYS

- Our recently raised 2018 earnings forecast for S&P 500 Index companies is \$147.50 per share. Assuming a trailing 12-month price-to-earnings ratio (PE) of 19–20, we believe the S&P 500 would be fairly valued in the range of 2,850–2,900 by year-end 2018.
- We expect value to benefit from a more favorable interest rate environment for financials in 2018 and see a small cap boost from tax reform. Favored sectors are financials, industrials, and technology.
- Strong growth and attractive valuations to help emerging markets (EM) offset tighter global monetary policy.
- As noted in our Outlook 2018, rising levels of growth and inflation may put pressure on high-quality fixed income. For fixed income allocations, we emphasize a blend of high-quality intermediate bonds, with a preference for investment-grade corporates and mortgage-backed securities (MBS) over Treasuries, and a small allocation to less interest rate-sensitive sectors, such as bank loans or high-yield bonds, for suitable investors.
- Expected gradual Federal Reserve (Fed) rate hikes and moderate economic growth are supportive of bonds near term, though rising interest rates may be a headwind longer term.
- Balance sheet normalization isn't likely to impact Treasuries or MBS prices near term, but it is worth monitoring over time.
- From a technical perspective, the S&P 500 price continues to operate above its 200-day moving average, increasing the likelihood of a sustained long-term bullish trend.

BROAD ASSET CLASS VIEWS

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



LPL Financial

PC MACROECONOMIC VIEWS

	Economic Factor	Outlook	Investing Impact
	U.S. GDP Growth	We expect gross domestic product (GDP) of 2.75–3.0% in 2018.*	Absence of a recession would likely support equity markets.
	Consumer Spending	New tax law, a strong labor market, and stock gains may help.	Supports consumer cyclicals, but potential growth in business spending may be more important.
	Business Spending	New tax law and deregulation may help; watching trade policy.	Industrials would be most likely to benefit; upside for technology but some policy risks.
	Housing	Tight supply and years of underbuilding suggest upside, but higher rates are a potential headwind.	A stronger turnaround could support housing and financials stocks.
ECONOMY	Import/Export	Weaker dollar helps exports; service sector exports strong; uncertainty around trade.	May support technology and business services; some uncertainty for multinationals.
LUUNUMI	Labor Market	Steadily improving overall; early signs of wage pressure appearing.	May put modest pressure on margins.
	Inflation	Stubbornly low, but wages, economic growth, and policy agenda may raise expectations.	Interest rates likely to rise but only gradually. May help financials.
	Business Cycle	Still mid-cycle but have likely moved into latter third.	Equity markets may have room to run, but expect more volatility.
	Dollar	Weaker in 2017 as markets unwind some post-election policy assumptions and international growth improves.	Weakness starting to benefit earnings for U.S. multinationals.
	Global GDP Growth	Improvement likely in 2018, helped by potential fiscal stimulus. Trade uncertainty remains a risk.	Upside with risks for global multinationals; global diversification may provide benefits.
	Fiscal	New tax law will provide stimulus; infrastructure may be more challenging.	May provide a short-term economic lift, but government debt still a potential long- term headwind.
POLICY	Monetary	Cautious rate hike path likely to continue. Balance sheet normalization has begun.	May be a modest headwind for quality bonds.
	Government	Republicans have made progress on agenda but midterms loom.	May contribute to volatility; small caps could benefit from tax reform.
RISKS	Financial	Political environment may lead to looser credit standards and accelerate deregulation.	Net positives in the short term, but higher volatility would still be normal for this point in the business cycle.
	Geopolitical & Other	Monitoring Chinese economy, escalating North Korean tensions, Islamic State, and trade.	May contribute to higher stock volatility.
	Developed Overseas	Risks from European elections have declined; Brexit negotiation still presents challenges.	International equities may provide diversification benefits.
OVERSEAS	Emerging Markets	Economic growth may have peaked in China. Indian economy seems to be improving and Latin America is starting to rebound.	Faster growth excluding China may help lift low valuations.
FINANCIAL	Corporate Profits	Continued earnings growth expected in 2018 driven by U.S. growth, resilient profit margins, global economy.	May support stock market gains in 2018. Corporate tax cuts should help.
CONDITIONS	Main Street	Fed Beige Book supports positive outlook.	Supports cyclical sector performance.

Source: LPL Research, U.S. Department of Energy, Haver Analytics 01/16/18

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.

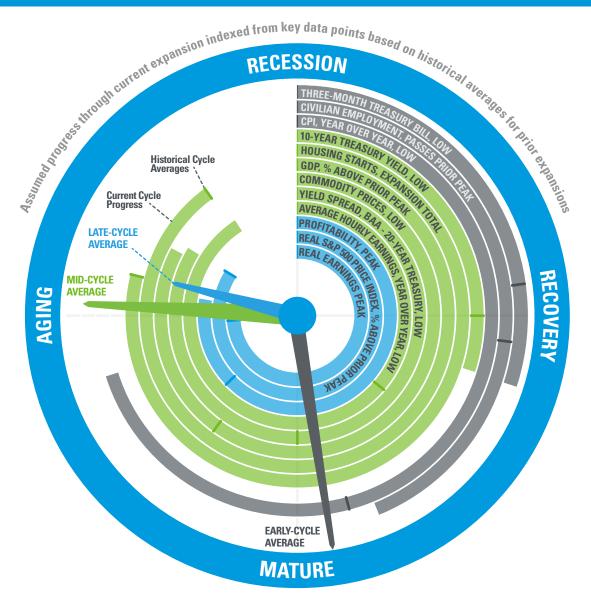
*Our forecast for GDP growth of 2.75–3.0% is based on the historical mid-cycle growth rate of the last fifty years; extra weight is given to the current cycle with a small upward adjustment due to the expected impact of the new tax law. Economic growth is affected by changes to inputs such as: business and consumer spending, housing, net exports, capital investments, and government spending. Potential delays in passing major fiscal policies introduce some risk to the downside.



WHAT WE'RE WATCHING

The Cycle Clock suggests we are in the mid-to-late stage of the current expansion. Monetary policy is still exhibiting mid-cycle behavior, with lows from yields still relatively recent. Some items relating to corporate profits are showing late-cycle behavior, although they may reset if profits improve.





Sources: LPL Research, Federal Reserve, U.S. Bureau of Economic Analysis (BEA), U.S. Bureau of Labor Statistics, U.S. Bureau of the Census, Standard & Poor's, Robert Shiller, National Bureau of Economic Research, Haver Analytics 01/16/18

The 10-year Treasury yield hit a new low for the current cycle in July 2016 (based on the daily average), shifting us to earlier in the cycle by that metric.

The Real Earnings Peak hit a new high for the current cycle in December 2017, shifting us to earlier in the cycle by that metric.

Data for all series are as of 01/16/18. Starting point for all series is June 1954 except housing starts (March 1961), hourly earnings (December 1970), and commodity prices (December 1970). Real prices and real earnings determined using the Consumer Price Index for all urban consumers (CPI-U). Commodity prices are based on the GSCI Total Return Index. Profitability is based on real profit per unit value added for non-financial corporate business based on current production as calculated by the BEA.

LPL Financial

PC

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 in subsequent pages.

Characteristics	EQUITY ASSET CLASSES	EQUITY SECTORS	FIXED INCOME	Characteristics	ALTERNATIVE ASSET CLASSES
BEST Overall Ideas	EM U.S. Stocks	Financials Industrials Technology	Bank Loans Investment-Grade Corporates MBS	BEST OVERALL IDEAS	Long/Short Equity
Fundamentals	Master Limited Partnerships (MLP) U.S. Small Caps U.S. Stocks	Financials Industrials Technology	Bank Loans Treasury Inflation-Protected Securities (TIPS) Municipal Bonds	Catalysts	Event Driven Global Macro Long/Short Equity
Technicals	EM U.S. Small Caps U.S. Stocks	Financials Industrials Technology	Bank Loans Investment-Grade Corporates Municipal Bonds	Trading Environment	Long/Short Equity
Valuations	EM Large Foreign	Healthcare Telecommunications	MBS	Volatility	Global Macro Long/Short Equity Managed Futures

READING THE PORTFOLIO COMPASS

RATING	ICON	Fundamental, technical, and valuation characteristics for each category are shown by their blue icons below, and displayed as colored squares.							
Negative	•	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.							
Negative/Neutral	•	Rationales for our views are provided on the right side.							
Neutral	•	Technicals Fundamentals							
Positive/Neutral	•	Sector F T V O O O Rationale							
Positive	•	Materials Image: China stimulus could help more, but technicals are negative and China's growth is stalling 3.2 China stimulus could help more, but technicals are negative and China's growth is stalling							
Previous Position	٠	Energy 8.2 Intriguing potential contrarian opportunity, but supply and technicals suggest caution; favor MLPs.							

Global macro strategy is a hedge fund strategy that selects it 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.

Member FINRA/SIPC

I LPL Financial

EQUITY ASSET CLASSES

We look for business investment and further gains in corporate earnings to power the economy and equity markets. Our recently raised 2018 earnings forecast for S&P 500 companies is \$147.50 per share. Assuming a trailing 12-month PE ratio of 19–20, we believe the S&P 500 would be fairly valued in the range of 2,850–2,900 by year-end 2018. We expect value to benefit from a more favorable interest rate environment for financials in 2018. Small caps may get a boost from the new tax law. Strong economic growth and attractive valuations may help EM equities offset tighter global monetary policy. We expect MLPs to benefit from strong domestic oil production and rich yields.

	Sector	F	т	v	Θ	0	œ	Rationale
	Large Growth							Large caps receive relatively less benefit from tax reform, creating a relative opportunity for smaller cap companies despite the age of the economic cycle and repatriated overseas cash by large cap companies. We expect improving economic
	Large Value							growth and better financials sector performance to help value reverse a decade of underperformance versus growth, based on the Russell indexes.
Style/Capitalization	Mid Growth							Mid cap valuations have become attractive relative to large caps and we may see more pro mid cap merger and acquisition activity following passage of the new tax
Style/Ca	Mid Value	•	•			•	_	law. Positive bias.
	Small Growth		•				-	Small caps benefit from a likely reduction in the corporate tax rate and may actually be helped by potential changes in U.S. trade policy. An aging business cycle is the
	Small Value							key risk.
	U.S. Stocks							Among developed markets, we remain U.S. focused and are monitoring U.S. trade policy, earnings, international elections, and currency movements to assess international opportunities. U.S. valuations are relatively high.
Region	Large Foreign		-			•		Though valuations are attractive, we continue to have structural concerns in Europe, where growth may be peaking. Our outlook for Japan is positive. Potential for
Re	Small Foreign					•		stronger U.S. dollar is a key risk.
	EM							We expect strong economic growth and attractive valuations to help EM equities offset tighter global monetary policy.
MLPs	MLPs							Strong oil production, rich yields, potential to play catch-up to oil, and deregulation indicate potential opportunity for suitable investors despite interest rate risk.

Investing in 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.

05

T LPL Financial

EQUITY SECTORS

We maintain our preference for cyclical sectors as the U.S. economic expansion continues. Industrials may benefit from improving global demand and strong defense spending, with a potential for an infrastructure boost in 2018. Financials remain positioned to benefit from deregulation that may free up capital for lending and dividends, as well as a potentially steeper yield curve and higher interest rates in 2018. Technology, which is relatively less of a tax reform beneficiary, may be due for a bit of a pause after such a strong 2017 even though earnings growth is strong and business investment is picking up.

	Sector	F	т	v	Θ	0	Ð	S&P*	Rationale
	Materials							3.0	Solid growth in China, infrastructure spending potential, and earnings rebound are supportive, but lack of inflation and trade and currency risks keep us neutral.
	Energy							6.2	OPEC/Russia production cuts, supply disruptions, and solid global demand help, but expected U.S. supply response to higher prices may cap oil's additional upside.
Cyclical	Industrials	•						10.5	Drivers include potentially stronger global growth in 2018, business spending pickup, strong defense spending, energy stability, and reasonable valuations; infrastructure spending is a wildcard.
Cycl	Consumer Discretionary							12.4	Earnings growth has slowed, e-commerce is disrupting retail, and we are entering the latter stages of the business cycle; tax reform and strong holiday shopping season temper pessimism.
	Technology						-	24.0	Solid earnings, business spending pickup, and productivity enabling role help offset higher valuations; after strong 2017, given less tax reform benefit, performance may moderate.
	Financials							14.8	Deregulation is supportive plus potential catalysts include steeper yield curve, higher interest rates, stronger loan demand, and tax reform.
	Utilities				•			2.7	Interest rates are rising and we favor cyclical sectors at this stage of the cycle; valuations have become more reasonable.
	Healthcare							13.9	Valuations are attractive, spending outlook is relatively stable, and demographics provide a tailwind, but political uncertainty remains high.
Defensive	Consumer Staples	•			•			7.9	We favor cyclical sectors, while defensive, dividend-oriented sectors may be hurt by rising interest rates; could provide some cushion in potential stock market correction.
	Telecommunications							1.9	Positive bias amid rich yields, low valuations, deregulation, and possible boost from expanded communications sector in 2018; still wary of lackluster growth and interest rate risk.
	Real Estate					•		2.7	Sector struggled with recent jump in interest rates; market pullback may be needed to reverse the trend, despite rich yields and mostly favorable real estate fundamentals.

* S&P 500 Weight (%)

06

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.

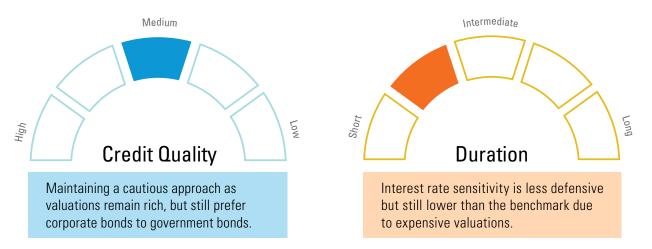
Because of its narrow focus, specialty sector investing, such as healthcare, financials, or energy, will be subject to greater volatility than investing more broadly across many sectors and companies.

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

T LPL Financial

FIXED INCOME

Municipal bonds (as measured by the Bloomberg Barclays Municipal Bond Index) returned 0.63% in December, even as tax reform drove additional supply into the market. This late-year surge in issuance is likely to mean less new supply over the next few months, a potential positive for prices in the near term. Municipal bonds' credit quality remains generally good; problem issuers remain isolated and have not impacted the broader market.



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	Ţ	v	Θ	0	Ð	Rationale
	Munis– Short-Term							Rising short-term rates have made yields more attractive over past few months, and valuations relative to Treasuries have also improved.
Bonds	Munis– Intermediate-Term							Valuations have richened over the past month, but we still believe yield is attractive relative to interest rate risk.
Tax-Free Bonds	Munis– Long-Term					•		Long-term yields are more attractive than short-term yields, though longer duration may be a headwind if rates rise.
	Munis– High-Yield							Valuations are on the expensive side of recent history, though additional yield remains a factor. Long duration may be a headwind if rates continue to rise.

(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 availably 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 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.

07

LPL Financial

FIXED INCOME (CONTINUED)

For fixed income allocations, we continue to emphasize a blend of high-quality intermediate bonds coupled with a small allocation to less interest rate-sensitive sectors such as bank loans or high-yield bonds for suitable investors. We remain concerned about rising rates putting pressure on fixed income in 2018, and the new tax law adds slightly to that concern, and may also lead to additional Treasury issuance in the near term. Improved consumer demand and business investment could help corporate profits, though inflationary pressures may offset these benefits for fixed income investors. We maintain a cautious approach with credit-sensitive areas of the market, but a "coupon-clipping" environment may still aid suitable investors.

	Sector	F	Ţ	v	Θ	0	Ð	Rationale
	Treasuries				•			Yield spreads to overseas alternatives remain elevated relative to history, which may continue to keep a lid on rates in the near term. However, rising levels of growth and inflation could be headwinds moving forward.
	TIPS		-			•		Breakeven inflation has moved higher over the past month, and is now slightly above the Fed's 2% target. Interest rate sensitivity remains a headwind.
– U.S.	MBS				_	•		Yield per unit of duration remains attractive relative to other high-quality options, but Fed balance sheet normalization remains a risk over time.
Taxable Bonds – U.S.	Investment-Grade Corporates					•		Spreads remain tight on a historical basis. However, we still find incremental value in corporate bonds.
Таха	Preferred Stocks					•		Fundamentals are firm for U.S. banks, but low yields, above-average valuations, and strong recent performance warrant caution. Post-election bond sell-off and subsequent recovery showed the sector's sensitivity to interest rates.
	High-Yield Corporates					•		Average yield spread has tightened to 3.2%. This is slightly more expensive than our estimate of fair value and leaves little room for error. Yields remain attractive. Oil price or equity market weakness could be negative drivers.
	Bank Loans							Floating rates may benefit holders if short-term rates continue to rise, though valuations are less attractive than they were last year and call risk is a concern in some areas of the sector. Less energy exposure compared with high yield.
Foreign	Foreign Bonds– Hedged					•		Fading easing bias of foreign central banks could lead to rising rates and pressure on performance.
Taxable Bonds – Foreign	Foreign Bonds– Unhedged				•			Potential currency volatility, low yields, and unattractive valuations are negatives.
Taxab	EMD					•		Spreads remain tight relative to history. Potential for protectionist trade policy remains a risk.

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.

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 (TIPS) help eliminate inflation risk to your portfolio, as the principal is adjusted semiannually for inflation based on the Consumer Price Index (CPI) — while providing a real rate of return guaranteed by the U.S. government. Investing in foreign and emerging markets 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.

Member FINRA/SIPC

I LPL Financial

COMMODITIES & ALTERNATIVE ASSET CLASSES

Still high U.S. production may make it hard for oil prices to sustain prices above the \$60 range in 2018, although global demand has firmed, Middle East tensions have escalated, and the Saudi/Russia production agreement has been extended through 2018. Industrial metals have gotten a China boost recently, while precious metals have struggled with the interest rate and currency environments in addition to the market's preference for riskier assets. Agriculture prices have broadly weakened recently on supply pressures, though cotton has been strong. We remain constructive on long/short equity strategies, which continue to benefit from low levels of internal correlation among stocks and sectors.

	Sector	F	Ţ	v	Θ	0	Ð	Rationale			
	Industrial Metals							Chinese demand has been providing some support in recent months for industrial metals. There may be upside potential to prices should the U.S. increase infrastructure spending. A potential rebound in the U.S. dollar presents a risk.			
Commodities	Precious Metals							Higher interest rates, lack of inflation fears, and the market's preference for riskier assets have all reduced gold's appeal, though Jerome Powell's Fed nomination and a weak U.S. dollar have helped. Negative bias.			
Comm	Energy					•		Still high U.S. production may make it hard for oil prices to sustain prices above \$60 range throughout 2018, although global demand has firmed, Middle East tensions have escalated, and the Saudi/Russia production agreement has been extended through 2018.			
	Agricultural							Grain prices have broadly weakened recently on supply pressures, though cotton has been strong.			
	Sector	T E	C T	v 0	Θ	0	œ	Rationale			
	Long/Short Equity						•	We continue to be cautious on more directional equity managers and favor those with conservative or variable net exposures and a history of generating alpha from their short positioning. The strategy continues to benefit from low levels of correlation between sectors and favorable sector positioning. We remain aware of underlying factor exposures, given the potential for rapid market rotation.			
Alternatives	Event Driven							The outlook within the event-driven space still appears promising, as tax reform and a more accommodative regulatory environment should improve the overall investment opportunity set. We prefer managers with the ability to hedge equity beta and focus solely on idiosyncratic risk.			
Alte	Managed Futures					•		A majority of the intermediate-term trend following industry maintains an overweight to the equity market, which is why we continue to favor either multi-managers or a combination of uncorrelated trading strategies to smooth and diversify return profiles. Recent performance has also been supported by an increase in oil prices.			
	Global Macro							We maintain a constructive view of the global macro investing environment, as the potential for shifts in fiscal policy, increasing global political uncertainty, and economic divergences are all constructive components of an attractive opportunity set.			
	CHARACTERISTICS	IC	CON	DEFINITION							
	Catalysts		C T		otential for vestment s		e macroeco	nomic and/or idiosyncratic market developments that may benefit the			
LEGEND	Trading Environment		T E	M	larket char	acteristic	s present s	sufficient investment opportunities for this investment style.			
	Volatility		v 0	TI	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 affect some of the strategies.

Stock and Pooled Investment Risks

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.

Alternative Risks

Currency risk is a form of risk that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk if their positions are not hedged.

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.

DEFINITIONS

The simple moving average is an arithmetic moving average that is calculated by adding the closing price of the security for a number of time periods and then dividing this total by the number of time periods. Short-term averages respond quickly to changes in the price of the underlying, while long-term averages are slow to react.

The Beige Book is a commonly used name for the Federal Reserve's (Fed) report called the Summary of Commentary on Current Economic Conditions by Federal Reserve District. It is published just before the Federal Open Market Committee (FOMC) meeting on interest rates and is used to inform the members on changes in the economy since the last meeting.

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.

Alpha measures the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by Beta. A positive (negative) Alpha indicates the portfolio has performed better (worse) than its Beta would predict.

Beta measures a portfolio's volatility relative to its benchmark. A Beta greater than 1 suggests the portfolio has historically been more volatile than its benchmark. A Beta less than 1 suggests the portfolio has historically been less volatile than its benchmark.

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.

INDEX DEFINITIONS

All indexes are unmanaged and cannot be invested into directly.

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.

The Bloomberg Barclays U.S. Municipal Bond Index covers the USD-denominated long-term tax-exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and prerefunded bonds.

This research material has been prepared by LPL Financial LLC.

To the extent you are receiving investment advice from a separately registered independent investment advisor, please note that LPL Financial LLC is not an affiliate of and makes no representation with respect to such entity.

Not FDIC or NCUA/NCUSIF Insured | No Bank or Credit Union Guarantee | May Lose Value | Not Guaranteed by Any Government Agency | Not a Bank/Credit Union Deposit

RES 7446 0118 | For Client Use | Tracking #1-688829 (Exp. 01/19)



PC