LPL 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.

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All performance referenced herein is as of January 15, 2019, unless otherwise noted.

*As noted in our *Outlook 2019*, we expect an 8–10% S&P 500 Index total return in 2019, driven by 2.5–2.75% gross domestic product (GDP) growth, 6–7% S&P 500 earnings growth, and a target price-to-earnings ratio (PE) of 17.5.

January 16 2019

NAVIGATING THE MARKETS

COMPASS CHANGES

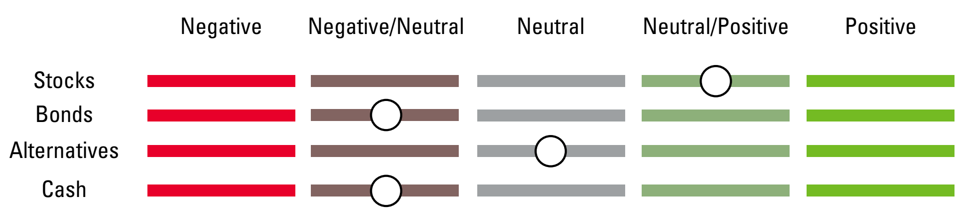
- No changes.

INVESTMENT TAKEAWAYS

- Expectations for solid but slower growth in the U.S. economy and corporate profits support our forecast of 8–10% returns for the S&P 500 Index in 2019*.
- We maintain our slight preference for value due to attractive relative valuations after a sustained period of growth outperformance.
- We expect a transition to large cap market leadership from large cap stocks in 2019 as the economic cycle ages and trade issues ease.
- We favor emerging markets (EM) equities over developed international for their solid economic growth trajectory, favorable demographics, attractive valuations, and prospects for a U.S.-China trade agreement.
- We emphasize a blend of high-quality intermediate bonds, with a preference for investment-grade corporates and mortgage-backed securities (MBS) over Treasuries.
- Yield per unit of duration remains attractive for MBS while valuations and economic growth are supportive of investment-grade corporates.
- Slower but still solid economic growth and modest inflationary pressure may be headwinds for fixed income. The Federal Reserve (Fed) is expected to pause at some point in 2019, further slowing its path of gradual rate hikes.
- The S&P 500 rebounded more than 10% from its late December lows, but remains largely trendless as indicated by its flat 200-day moving average. Going forward we want to see broad participation from stocks during rallies, as well as relief in macroeconomic indicators such as industrial metal prices and bond yields, to continue the bottoming process.

BROAD ASSET CLASS VIEWS

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



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MACROECONOMIC VIEWS

	Economic Factor	Outlook	Investing Impact
ECONOMY	U.S. GDP Growth	We expect GDP of 2.5–2.75% in 2019.*	Absence of a recession would likely support equity markets.
	Consumer Spending	Fiscal stimulus, a strong labor market, and stock gains may help.	Supports consumer cyclicals, but potential growth in business spending may be more important.
	Business Spending	Tax reform and deregulation are supportive; watching trade policy.	Industrials would be most likely to benefit; upside for technology but some policy risks.
	Housing	Higher rates, labor shortages have become a headwind despite years of underbuilding.	May not offer opportunities until the next cycle.
	Import/Export	Service sector exports strong; uncertainty around trade.	May support technology and business services; some uncertainty for multinationals.
	Labor Market	Unemployment near multidecade low; wage gains supporting consumer spending.	May soon pressure profit margins; Federal Reserve watching closely but not at worrisome levels.
	Inflation	Still well contained despite modest wage, input cost pressure.	Interest rates likely to rise further, but only gradually.
	Business Cycle	Some late cycle signs but economy not overheating.	Equity markets may have room to run, but volatility may continue.
	Dollar	Upward trend is moderating.	May no longer be a headwind for international equities.
	Global GDP Growth	Expected to hold near steady in 2019 despite recent slowing. Trade uncertainty remains a risk.	Potentially supportive of equities with risks for global multinationals.
POLICY	Fiscal	Tax reform and deregulation supporting growth.	May provide an economic lift, but government debt still a potential long-term headwind.
	Monetary	Gradual rate hike path likely to continue. Potential pause in 2019.	Monetary tightening could impact growth. May be a modest headwind for quality bonds.
	Government	Fiscal stimulus likely outweighs tariff impact. Shutdown impact should be small but may impact confidence.	May contribute to higher stock volatility.
RISKS	Financial	Political environment may lead to looser credit standards and accelerate deregulation.	Short term positive; longer term may enable economic and market excesses to build.
	Geopolitical & Other	China, trade, Brexit remain in focus.	May contribute to higher stock volatility.
OVERSEAS	Developed Overseas	Anti-Eurozone populism, Brexit uncertainty, slower growth are concerns.	Potential diversification benefits, but returns may lag U.S.
	Emerging Markets (EM)	Trade risk remains; there are pockets of stress, but EM growth outlook overall still looks good.	Low valuations and strong earnings offer EM upside potential once trade situation is resolved.
FINANCIAL CONDITIONS	Corporate Profits	We estimate 6–7% S&P 500 earnings growth in 2019.	S&P 500 may show appreciation consistent with earning gains.
	Main Street	Fed Beige Book supports positive outlook, although trade concerns increasing.	Supports cyclical sector performance.

Source: LPL Research, U.S. Department of Energy, Haver Analytics 01/15/19

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 2.5–2.75% is based on baseline potential GDP growth of 2.0%, using current trend growth and longer-term expected growth drivers, low probability of recession, and an upward adjustment due to the expected continued 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
BEST OVERALL IDEAS	Large Value Stocks U.S. Stocks	Industrials Technology	Investment-Grade Corporates MBS
Fundamentals	Large Value Stocks U.S. Stocks	Industrials Technology	Investment-Grade Corporates MBS
Technicals	U.S. Stocks	Healthcare Utilities	MBS
Valuations	EM Large Value Stocks Master Limited Partnerships (MLP)	Energy Financials Industrials	Investment-Grade Corporates

Characteristics	ALTERNATIVE ASSET CLASSES
BEST OVERALL IDEAS	Long/Short Equity
Catalysts	Event Driven Global Macro
Trading Environment	Long/Short Equity
Volatility	Global Macro Long/Short Equity Managed Futures

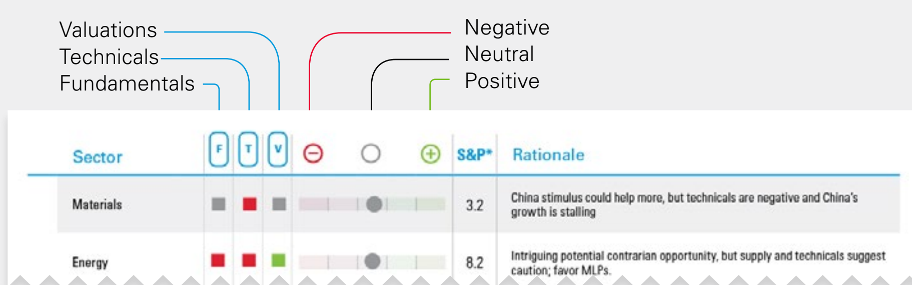
READING THE PORTFOLIO COMPASS

RATING	ICON	
Negative		
Negative/Neutral		
Neutral		
Positive/Neutral		
Positive		
Previous Position		

Fundamental, technical, and valuation characteristics for each category are shown by their blue icons below, and displayed as colored squares.

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.

Rationales for our views are provided on the right side.



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.

EQUITY ASSET CLASSES

Expectations for solid but slower growth in the U.S. economy and corporate profits support our forecast of 8–10% returns for the S&P 500 Index in 2019, as noted in our *Outlook 2019* publication, with December's market decline introducing potential upside. We expect attractive relative valuations compared with growth to help buoy value stocks. We expect a transition to market leadership from large cap stocks in 2019 as the economic cycle ages, trade issues ease, and the dollar's uptrend potentially hits resistance. Our positive emerging markets (EM) view is based on a solid economic growth trajectory, favorable demographics, attractive valuations, and a potential U.S.-China trade agreement.

	Sector	F	T	V	⊖ ○ ⊕	Rationale
Style/Capitalization	Large Growth	gray	gray	red		As trade issues potentially ease, the business cycle ages, and the dollar's uptrend potentially hits resistance, large caps may sustain market leadership. We maintain our slight preference for value due to attractive relative valuations after a sustained period of growth outperformance and our positive financials sector view.
	Large Value	green	gray	green		
	Mid Growth	gray	gray	gray		Mid cap valuations are attractive relative to large caps, and merger and acquisition activity has been robust, which is supportive. As with large caps, relative valuations point to value over growth.
	Mid Value	gray	red	green		
	Small Growth	red	gray	gray		As the economic cycle ages in 2019, small caps may lag. Rising interest rates and potentially tighter financial conditions may create challenges for small cap companies with higher costs of capital and a greater reliance on debt.
	Small Value	gray	red	green		
Region	U.S. Stocks	green	green	gray		Among developed markets, we remain U.S. focused, supported by superior economic and profit growth and fiscal stimulus.
	Large Foreign	red	red	green		Economic growth in Europe and Japan is lackluster and weakening. GDP growth in EM is likely to more than double the pace of developed international economies in 2019, and we believe policy uncertainty is actually higher in Europe, notably the U.K. and Italy, than in EM.
	Small Foreign	red	red	green		
	EM	gray	gray	green		Our positive EM view is based on a solid economic growth trajectory, favorable demographics, attractive valuations, and favorable prospects for a U.S.-China trade agreement, with a bias toward emerging Asia.
MLPs	MLPs	gray	gray	green		Good yields, strong U.S. production, acquisition activity, and dip in interest rates help; oil price volatility hurts. Positive bias.

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 as the U.S. economic expansion continues, as noted in our *Outlook 2019* publication. We expect industrials to benefit from solid global demand, a pickup in capital spending, and a potential trade deal with China. Though financial stocks have struggled in recent months with the flat yield curve, we still believe the sector is well positioned to benefit from deregulation, higher dividend payouts, and a potentially more favorable interest rate environment. Our biases toward potential near-term changes include energy (negative) and healthcare (positive).

	Sector	F	T	V	⊖ ○ ⊕	S&P*	Rationale
Cyclical	Materials					2.7	Strong earnings growth and potential infrastructure spending help, but slower China growth and trade tensions remain headwinds.
	Energy					5.5	Supply cuts overseas have helped get crude oil back closer to fair value, though U.S. supply overhang remains, capping potential upside in our view.
	Industrials					9.4	We expect a U.S.-China trade deal in early 2019, which should bolster business confidence and help spur capital investment; slower growth overseas is a headwind.
	Communication Services					10.3	No longer a defensive sector after 2018 revamp. Our cautious views on media and traditional telecom offset a strong growth outlook for former tech stocks.
	Consumer Discretionary					10.2	Valuations are high and the sector tends to do relatively worse late in business cycles.
	Technology					19.9	Our positive business spending outlook, the sector's productivity-enabling role, and steady earnings gains remain supportive.
	Financials					13.3	Valuations have become more attractive after a difficult 2018; deregulation, higher dividend payouts, and a potentially steeper yield curve may help in 2019.
Defensive	Utilities					3.2	The potential for higher interest rates and our preference for cyclical sectors drive caution, though recent plateau in interest rates should help.
	Healthcare					15.2	The healthcare spending outlook remains solid, demographics are positive, technicals look good, and policy uncertainty is clearing up; positive bias.
	Consumer Staples					7.3	We favor cyclical sectors, though market volatility helps the near-term outlook for defensive sectors; interest rate risk ebbing and technicals are positive.
	Real Estate					3.0	The group offers rich yields and fundamentals still look pretty good; still, we prefer more economically sensitive sectors.

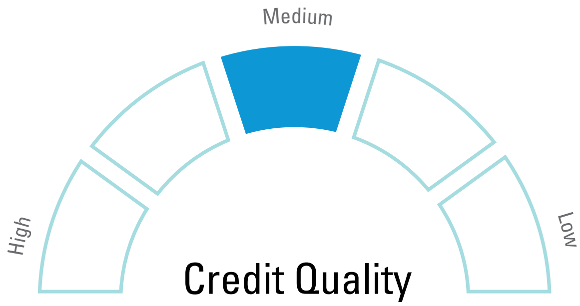
* S&P 500 Weight (%)

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.

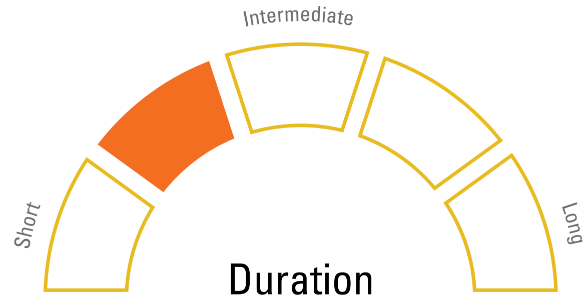
Because of its narrow focus, specialty sector investing, such as healthcare, financials, or energy, will be subject to greater volatility than investing more broadly across many sectors and companies.

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.



Interest rate sensitivity is less defensive but still lower than the benchmark due to expectations of gradually rising rates.

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
Tax-Free Bonds	Munis–Short-Term					Valuations relative to Treasuries remain expensive relative to history. Upcoming supply dynamics attractive.
Tax-Free Bonds	Munis–Intermediate-Term					Valuations relative to Treasuries remain on the expensive side. Upcoming supply dynamics attractive.
Tax-Free Bonds	Munis–Long-Term					Valuations remain attractive relative to long-dated Treasuries. Higher duration may be a headwind if rates rise. Upcoming supply dynamics attractive.
Tax-Free Bonds	Munis–High-Yield					Becoming more cautious as we move later cycle. Some long-term headwinds from pension obligations. Rate sensitivity may weigh if rates rise. Upcoming supply dynamics attractive.

(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)

For fixed income allocations, we continue to emphasize a blend of high-quality intermediate bonds in tactically oriented portfolios. We remain concerned about rising rates putting pressure on fixed income in 2019. Improving consumer demand and business investment could help corporate profits, but moderate inflationary pressure 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	T	V	⊖ ○ ⊕	Rationale
Taxable Bonds – U.S.	Treasuries					Yield spreads to overseas sovereigns remain elevated but hedging costs lower attractiveness. Supply, economic growth, and inflation normalization could be headwinds. Other options look more attractive.
	TIPS					Breakeven inflation has moved below Fed's 2% target. Interest rate sensitivity could be a headwind.
	MBS					Yield per unit of duration remains attractive relative to other high-quality options, but Fed balance sheet normalization remains a risk over time.
	Investment-Grade Corporates					We still find incremental value in corporate bonds due to the economic backdrop. Valuations have improved on wider credit spreads.
	Preferred Stocks					Fundamentals are firm for U.S. banks. Higher interest rate sensitivity remains a risk.
	High-Yield Corporates					Average yield spread in mid-4% range near fair value for later cycle. Yields remain attractive. Economy supportive, but potential volatility becoming less attractive for fixed income investors.
	Bank Loans					Weaker investor protections, high issuance a concern. Still offers some protection against rising rates and economy remains supportive.
Taxable Bonds – Foreign	Foreign Bonds–Hedged					Fading easing bias of foreign central banks could lead to rising rates and pressure on performance.
	Foreign Bonds–Unhedged					Potential currency volatility, low yields, and unattractive valuations are negatives.
	EMD					Spreads have widened, making valuations more attractive. Trade policy and geopolitical tensions remain 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, 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

Supply adjustment has boosted WTI Crude back to near fair value, though the U.S. supply overhang remains. Demand outlook remains generally positive for industrial metals, but trade tensions may persist and technicals are challenged. Tariffs are also weighing on crop prices, which have broken down technically. The event-driven investing outlook remains promising as tax reform, global growth, and healthy deal flow support the corporate activity opportunity set.

	Sector	F	T	V	−	○	+	Rationale
Commodities	Industrial Metals							Global demand outlook remains generally positive, and more U.S. infrastructure spending is still possible. Watching Chinese data, trade negotiations.
	Precious Metals							Market volatility and weaker U.S. dollar have boosted gold, but our preference for riskier assets and tepid inflation suggests caution.
	Energy							The market's supply adjustment has boosted WTI Crude back to near fair value, though the U.S. supply overhang remains, possibly capping further upside.
	Agricultural							Trade tensions are weighing on agriculture prices, which continue to exhibit downward price momentum from a technical analysis perspective.

	Sector	TE	CT	VO	−	○	+	Rationale
Alternatives	Long/Short Equity							We continue to favor strategies with a conservative or variable net exposure to global markets. Recent equity market volatility has led some strategies to implement more of a defensive tilt, while also moving away from crowded industry holdings.
	Event Driven							Deal flow remains healthy; however, global mergers requiring regulatory approval from multiple countries face additional risk due to the ongoing global trade negotiations. The strategies' low-beta profile has provided investors strong downside protection the past month.
	Managed Futures							We continue to favor either multimanagers or a combination of uncorrelated trading strategies to smooth and diversify return profiles. The recent rally in equity markets has led to weak performance for many strategies that remain short equity contracts across the globe.
	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.

LEGEND

CHARACTERISTICS	ICON	DEFINITION
Catalysts	CT	Potential for favorable macroeconomic and/or idiosyncratic market developments that may benefit the investment strategy.
Trading Environment	TE	Market characteristics present sufficient investment opportunities for this investment style.
Volatility	VO	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.

Value investments can perform differently from the market as a whole. They can remain undervalued by the market for long periods of 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.

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.

The Bloomberg Barclays U.S. Municipal Bond Index covers the U.S. dollar-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.

The Russell 1000 Growth Index measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values. Russell 1000 Value Index measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

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 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.

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.

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