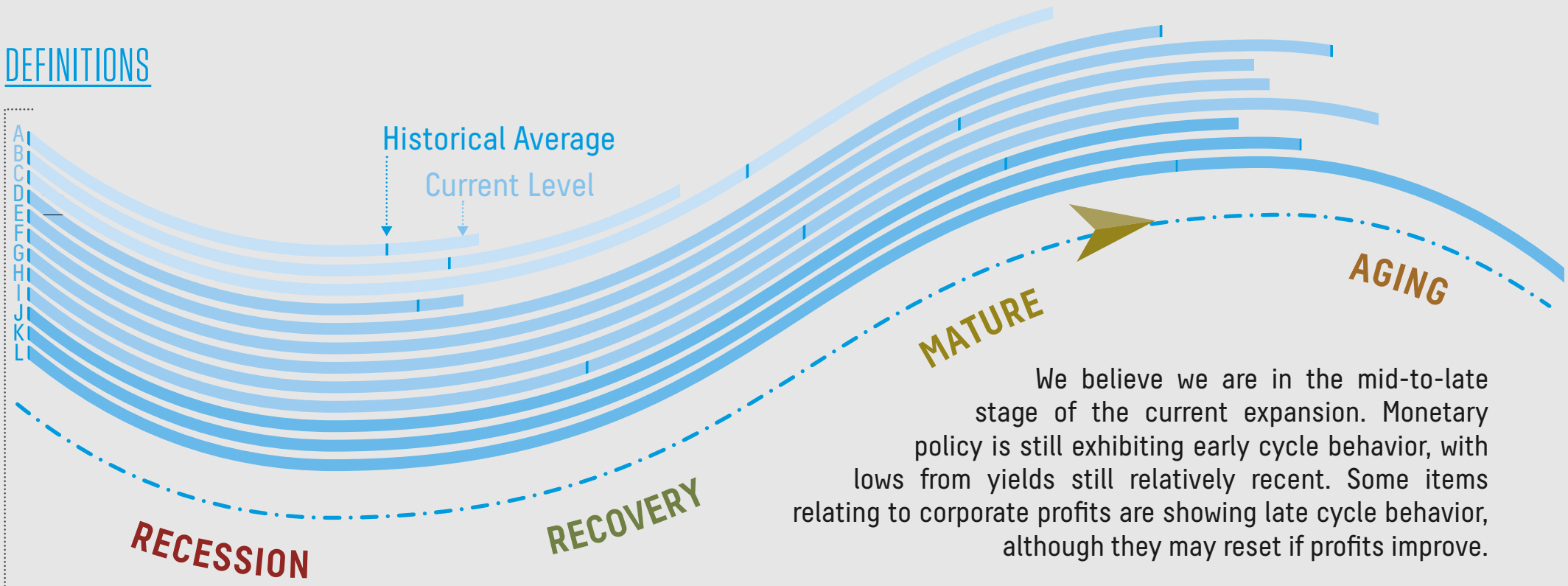
RECESSION WATCH Updated August 2017

LPL RESEARCH
RECESSION
WATCH
DASHBOARD

Our Recession Watch Dashboard is showing an overall low risk of recession starting within the next year.

Because data for the components of this dashboard are available with varying frequencies, some will be more current than others. In all cases, we have used the latest data available.

+ DEFINITIONS



We believe we are in the mid-to-late stage of the current expansion. Monetary policy is still exhibiting early 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.

A 3-Month Treasury Bill, Low	D 10-Year Treasury Yield, Low	G Commodity Prices, Low	J Profitability, Peak
B Civilian Employment, Passes Prior Peak	E Housing Starts, Expansion Total	H Yield Spread, BAA, 20-Year Treasury, Low	K Real S&P 500 Price Index, % Above Prior Peak
C CPI, Year-over-Year, Low	F GDP, % Above Prior Peak	I Average Hourly Earnings, Year-over-Year, Low	L Real Earnings Peak

Data for all series is as of August 11, 2017. 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.

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.

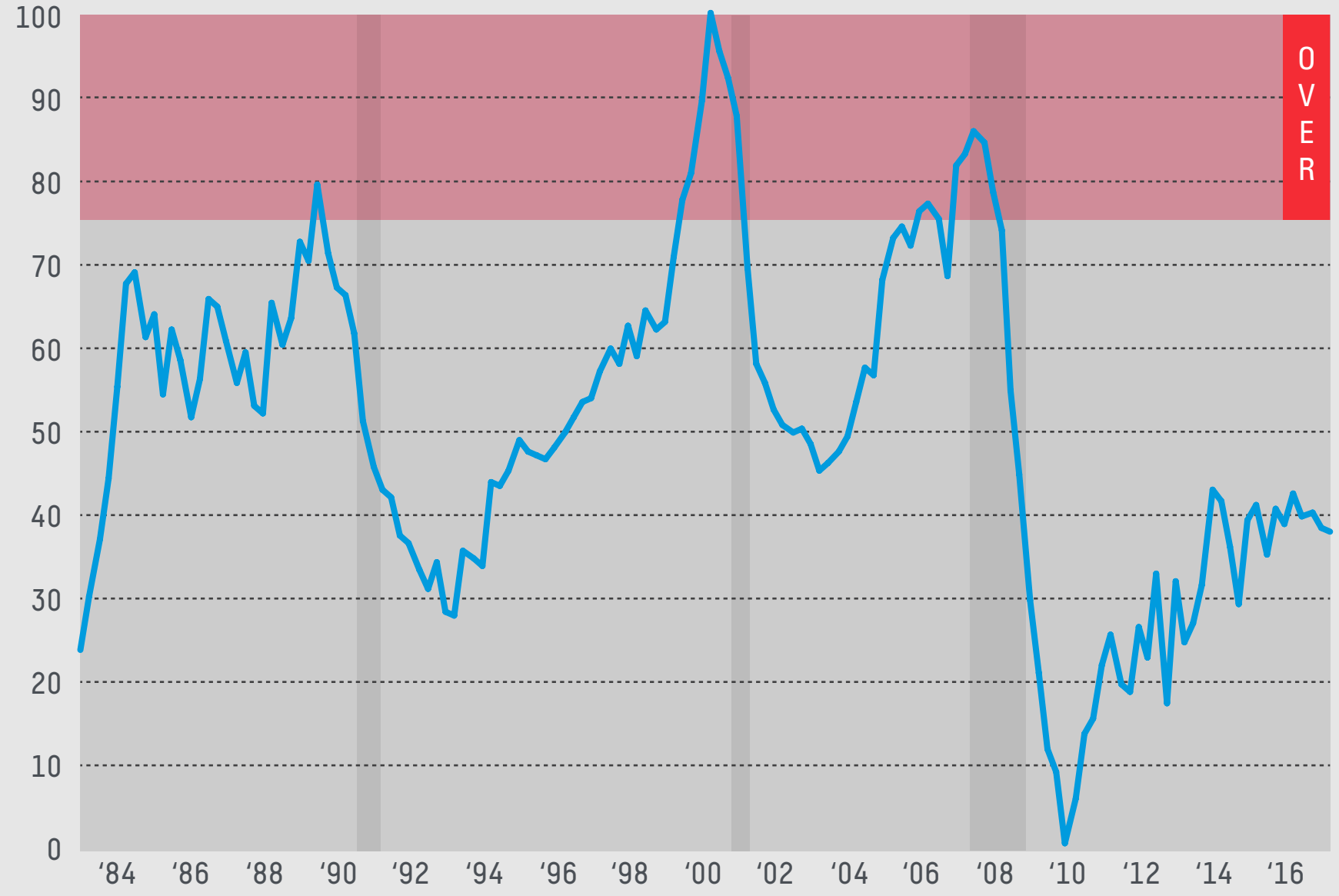
Sources: LPL Research, Federal Reserve, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, U.S. Bureau of the Census, Standard and Poor's, Robert Shiller, National Bureau of Economic Research, Haver Analytics, Thomson Reuters 08/11/17

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. All indexes are unmanaged and cannot be invested into directly.

For more details on any of the components of this dashboard, please see the links embedded within the graphic (marked with a + symbol).

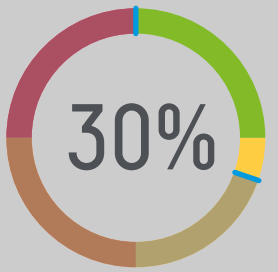
THE OVER INDEX



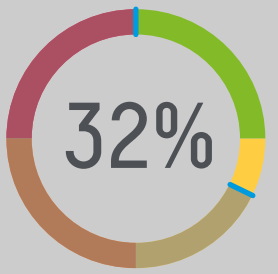
To complete the Over Index, LPL Research measures trends in three broad economic drivers: spending, borrowing, and confidence. For each of these three drivers, we found four diverse components that reflect the economic activity of that subindex from a different angle. The Over Index takes each of the subcomponents and uses a sophisticated statistical process to normalize and index each data series into an overall score for each of the three drivers. The combined aggregated data help to measure the likelihood that the economy is showing signs of overactivity and that we may be approaching a cyclical peak.

As of 08/21/17. Shaded areas indicate recession.

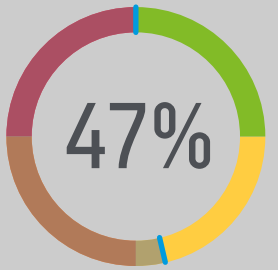
OVERSPENDING



OVERBORROWING



OVERCONFIDENCE



Spending is measured by the selected criteria: real home prices, big ticket purchases, business spending, and commodity prices

Borrowing is measured by the selected criteria: credit card debt, consumer debt payments, business debt, and commercial loan growth.

Confidence is measured by the selected criteria: consumer confidence, valuations, wage growth, and business leverage.

5 FORECASTERS:
LATE CYCLE WARNING?

There is no magic formula for predicting recessions and bear markets — every cycle is different. But we believe the Five Forecasters cover a variety of perspectives and help capture a more complete view of the economic and market environment. They are meant to be considered collectively, not individually.

The PE ratio (price-to-earnings ratio) is a valuation ratio of a company's current share price compared with its per-share earnings. A high PE suggests investors are expecting high earnings growth in the future, compared with companies with a lower PE.

The Standard & Poor's 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.

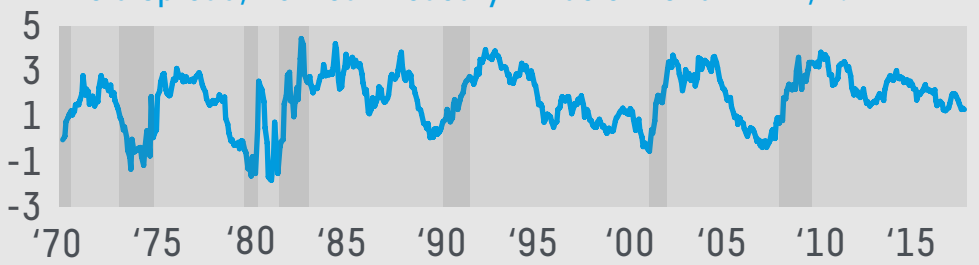
The Purchasing Managers' Index (PMI) is an indicator of the economic health of the manufacturing sector. The PMI is based on five major indicators: new orders, inventory levels, production, supplier deliveries, and the employment environment.

TREASURY YIELD CURVE

NO | ON WATCH | YES

As of 08/21/17. Shaded areas indicate recession.

Yield Spread, 10-Year Treasury Minus 3-Month T-Bill, %

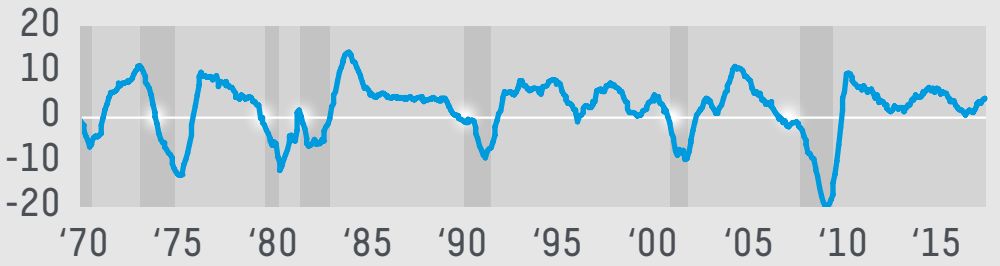


LEADING ECONOMIC INDICATORS

NO | ON WATCH | YES

As of 08/21/17. Shaded areas indicate recession.

Index of Leading Economic Indicators, Year-over-Year % Change



MARKET BREADTH

NO | ON WATCH | YES

As of 08/21/17. White arrows indicate trends. Divergences signal bear markets.

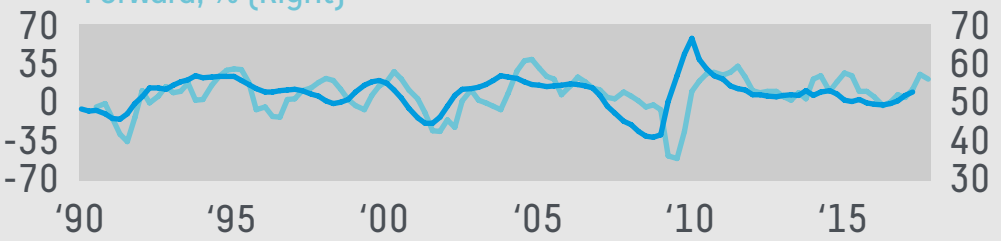
TREND CONFIRMATION: NYSE Composite Index (Left) and Cumulative Advance-Decline for NYSE Stocks (Right)

PURCHASING MANAGERS' SENTIMENT (PMI)

NO | ON WATCH | YES

As of 08/21/17. Clear peak in ISM PMI signals likely peak in earnings growth rate.

S&P 500 4-Qtr Year-over-Year Earnings Growth Rate, % (Left)
Institute for Supply Management (ISM) PMI Shifted 6 Months Forward, % (Right)



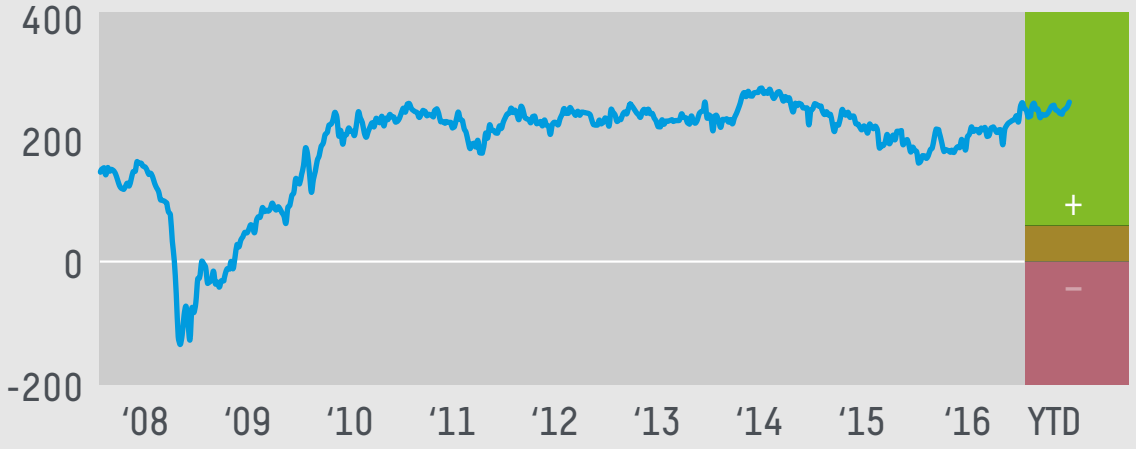
MARKET VALUATION

NO | ON WATCH | YES

As of 08/21/17. White bar indicates post-1980 average.

S&P 500 Trailing Price-to-Earnings Ratio and Post-1980 Average

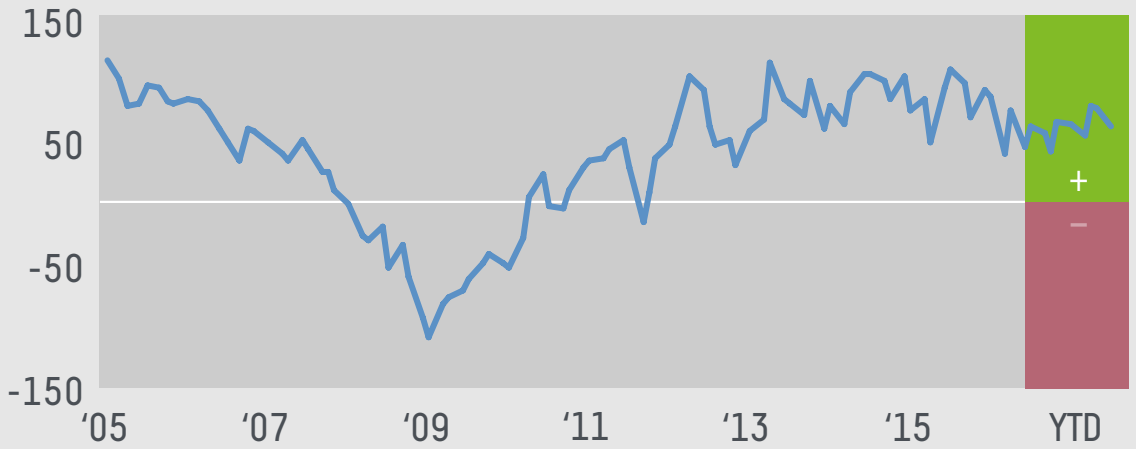
CURRENT CONDITIONS INDEX



As of 07/06/16. A CCI score of zero represents the baseline conditions in 2009, and subsequent CCI scores should be interpreted as a coincident measure of economic health in relation to this starting year.

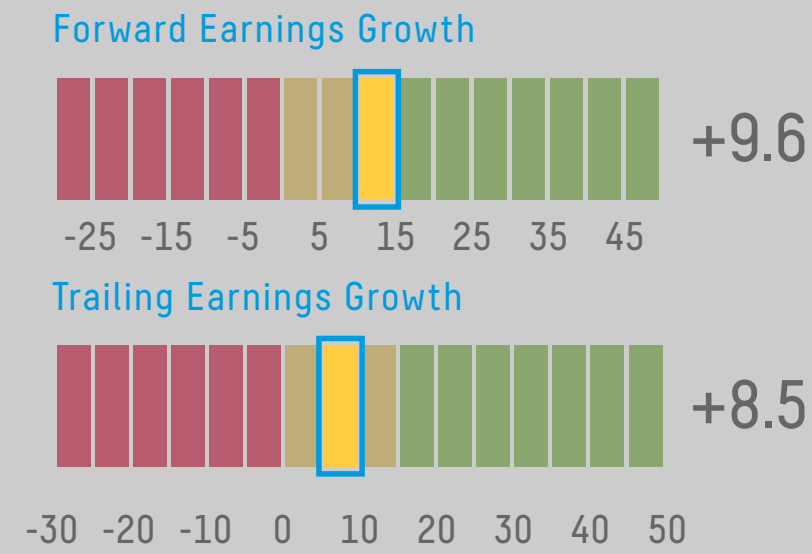
BEIGE BOOK BAROMETER

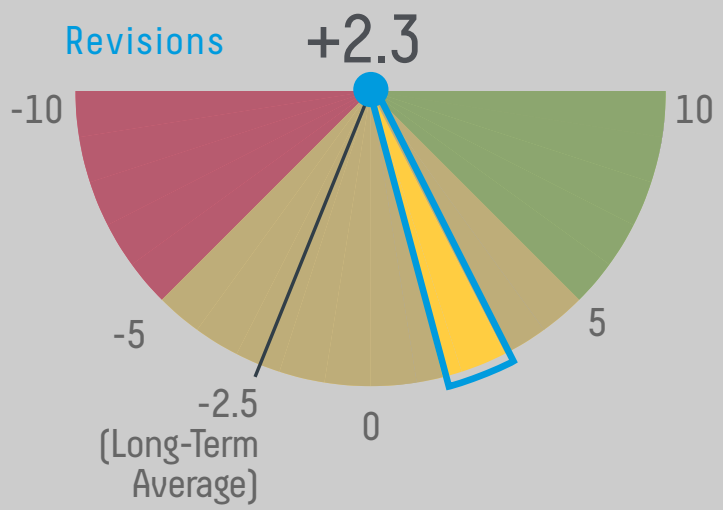
Mentions of "Strong" and Variations Minus "Weak" and Variations



As of 07/12/17; will be updated on next monthly edition. 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.

EARNINGS BAROMETER





As of 08/18/17. Earnings growth statistics are a blend of actual S&P 500 company results and consensus forecasts for S&P 500 companies yet to report. Trailing earnings cover the four quarters ending Q2 2017, while forward earnings cover the four quarters beginning Q3 2017. Revisions reflect 3-month estimate changes for forward four quarters estimates.

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.

NYSE Composite Index measures the performance of all stocks listed on the New York Stock Excange. The NYSE Composite Index includes more than 1,900 stocks, of which over 1,500 are U.S. companies.

This research material has been prepared by LPL Financial.

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