# Weekly Economic Commentary



March 25, 2013

# John Canally, CFA

Economist LPL Financial

# Highlights

The "center of gravity" at the Federal Reserve (Fed) is still not seeing "substantial improvement" in the labor market.

The Fed is still unlikely to scale back quantitative easing 3 (QE3) in the near term.

If the Fed waits too long to remove the stimulus, higher inflation and higher interest rates could result.

Please see the LPL Financial Research Weekly Calendar on page 3

- 1 The Unemployment Rate Remains Well Above the Fed's "Threshold" of 6.5%, but Is Only One of Many Labor Market Indicators the Fed Is Watching
  - Civilian Unemployment Rate: 16-Year + Seasonally Adjusted



Source: Bureau of Labor Statistics, Haver Analytics 03/25/13 Shaded areas indicate recession.

# Watch What the Fed Watches

What constitutes a substantial improvement in the labor market?

On Wednesday, March 20, 2013, Federal Reserve (Fed) Chairman Ben Bernanke held the first of four press conferences scheduled for this year at the conclusion of the Federal Open Market Committee's (FOMC) meetings on March 20, June 19, September 18, and December 18, 2013. While Bernanke's Q&A session generated plenty of headlines (and tweets), he really did not say anything the market did not already know about the Fed's view on the economy, the fiscal situation, and more importantly, on monetary policy, and in particular, the latest round of bond purchases, quantitative easing (QE3).

Bernanke did, however, remind market participants of both the benefits:

 "...putting downward pressure on longer-term interest rates, including mortgage rates" which continues "to provide meaningful support to economic growth and job creation..."

### and the costs:

- "adverse implications of additional purchases for the functioning of securities markets..."
- "...the potential effects—under various scenarios—of a larger balance sheet on the Federal Reserve's earnings from its asset holdings and, hence, on its remittances to the Treasury."
- "...risks to financial stability, such as might arise if persistently low rates lead some market participants to take on excessive risk in a reach for yield."

of continuing QE3. In his prepared remarks just prior to answering reporters' questions, Bernanke also made a point of reminding markets that the thresholds the Fed has set up for eventually raising rates—unemployment rate below 6.5% and inflation not higher than 2.5%—were not triggers, suggesting that the Fed may wait a while after these thresholds are crossed before raising rates.

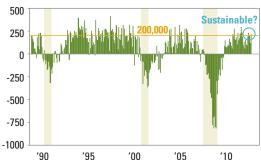
What the Fed Says	What the Fed Means	
Adverse implications of additional purchases for the functioning of securities markets	Fed is worried about owning too high a percentage of the Treasury market, and especially the mortgage-backed securities (MBS) market	
Potential effects of a larger balance sheet	Fed is worried about rates rising and losing money on their holdings of Treasuries and mortgages	
Risks to financial stability	Fed is worried about creating a bubble	



The Fed may wait until key thresholds are crossed before eventually raising rates.

# 2 The Private Sector Economy Has Created 200,000 or More Jobs in Four of the Past Five Months...but Will it Last?

Change in Total Private Employment Seasonally Adjusted, Thousands



Source: Bureau of Labor Statistics, Haver Analytics 03/25/13 Shaded areas indicate recession.

The "center of gravity" at the Fed are all saying the same thing.

## 3 Companies Are Reluctant to Lay off Staff...

JOLTS: Layoffs and Discharges Rate: Total
 3-Month Moving Average, Seasonally Adjusted



Source: Bureau of Labor Statistics, Haver Analytics 03/25/13 Shaded areas indicate recession. The first question asked of Bernanke was whether or not the FOMC had spent any time discussing thresholds for ending or changing the pace of QE3. Bernanke noted that the problem was "complex" but that the FOMC was:

"...looking for sustained improvement in a range of key labor market indicators, including obviously payrolls, unemployment rate, but also others like the hiring rate, the claims for unemployment insurance, quit rates, wage rates, and so on. We're looking for sustained improvement across a range of indicators and in a way that's taking place throughout the economy. And since we're looking at the outlook, we're looking at the prospects rather than the current state of the labor market, we'll also be looking at things like growth to try to understand whether there's sufficient momentum in the economy to provide demand for labor going forward."

The list of labor market indicators mentioned by Bernanke was basically the same list cited by Fed Vice Chairwoman Janet Yellen—who is a leading candidate to replace Bernanke when his term as Chairman ends on January 31, 2014—in a speech she gave in early March 2013 to the National Association of Business Economists in Washington, D.C. Yellen's list included:

- The unemployment rate;
- Payroll employment;
- The hiring rate;
- Layoffs/discharges as a share of total job separations;
- The "quit" rate as a share of total job separations; and
- Spending and growth in the economy.

Yellen noted specifically that:

"I also intend to consider my forecast of the overall pace of spending and growth in the economy. A decline in unemployment, when it is not accompanied by sufficiently strong growth, may not indicate a substantial improvement in the labor market outlook. Similarly, a convincing pickup in growth that is expected to be sustained could prompt a determination that the outlook for the labor market had substantially improved even absent any substantial decline at that point in the unemployment rate."

Essentially, Yellen (who along with being one of the leading candidates to replace Bernanke as Fed chairman, is also at the Fed's "center of gravity," with Bernanke and New York Fed President Bill Dudley) is saying that the FOMC will need to see strong performance of the labor market AND solid gross domestic product (GDP) growth before it begins to scale back or eliminate  $\Omega E$ .

Figures 1–5 show the labor market indicators mentioned by Bernanke last week and Yellen in early March. A quick review of the figures suggests that Yellen and Bernanke—two of the three FOMC members of the "center of gravity" at the Fed—are not yet ready to begin scaling back QE.

LPL Financial Member FINRA/SIPC Page 2 of 5

## LPL Financial Research Weekly Calendar

2013	U.S. Data	Fed boots	Global Notables
25 Mar	Dallas Fed Mfg. Index (Mar)	→ Dudley* → Bernanke*	Italy: Bond Auction
26 Mar	<ul> <li>Durable Goods Shipments and Orders (Feb)</li> <li>Case-Shiller Home Prices (Jan)</li> <li>Consumer Confidence (Mar)</li> <li>New Home Sales (Feb)</li> </ul>	<b>≯</b> Fisher	■ BRICs Leaders' Summit in South Africa
27 Mar	Pending Home Sales (Feb)	→ Rosengren* → Pianalto → Kocherlakota	<ul> <li>Italy: Bond Auction</li> <li>Eurozone: Consumer Confidence (Mar)</li> <li>Spain: CPI (Mar)</li> <li>BRICs Leaders' Summit in South Africa</li> </ul>
28 Mar	<ul> <li>GDP (Q4)</li> <li>Initial Claims (3/23)</li> <li>Chicago Area Purchasing Managers Index (Mar)</li> </ul>		<ul> <li>Germany: Employment (Mar)</li> <li>Germany: Retail Sales (Feb)</li> <li>OECD Releases Spring Economic Outlook</li> </ul>
29 Mar	<ul><li>Personal Income (Feb)</li><li>Personal Spending (Feb)</li><li>Consumer Sentiment (Mar)</li></ul>		China: PMI (Mar) Data due out on Sunday (3/31)



Hawks: Fed officials who favor the low inflation side of the Fed's dual mandate of low inflation and full employment



Doves: Fed officials who favor the full employment side of the Fed's dual mandate

Voting members of the Federal Open Market Committee (FOMC)

# The Fed does is unlikely to scale back QE anytime soon.

- ...But Also Remain Somewhat Reluctant to Hire More Staff, Either
  - JOLTS: Hires Rate: Total Private 3-Month Moving Average, Seasonally Adjusted



Source: Bureau of Labor Statistics, Haver Analytics 03/25/13 Shaded areas indicate recession.

- While down from the peaks seen during the Great Recession of 2008-2009, at 7.8%, the unemployment rate remains well above the 6.5% threshold for raising rates, and also well above the 5.5-5.75% rate the FOMC forecasts as the new normal unemployment rate.
- It is well documented that the private sector economy has created more than 200,000 jobs in four of the past five months. However, the labor market turned in a similar performance in late 2011 and early 2012, only to see a marked slowdown in job creation over the spring and summer of 2012. Bernanke mentioned this during his Q&A, noting, "So I think an important criterion would be not just the improvement (in the labor market) that we've seen, but is it going to be sustained for a number of months?"
- At 3.6%, the hiring rate—the level of new hiring as a percent of total employment measured from the JOLTS data (see box on page 5)—remains depressed, and well below the 4.5-5.0% hire rate seen prior to the onset of the Great Recession in 2007. In her March 4, 2013 speech, Yellen noted, "the hiring rate remains depressed. Therefore, going forward, I would look for an increase in the rate of hiring."
- In that same speech, Yellen noted "layoffs and discharges as a share of total employment have already returned to their pre-recession level". Indeed, Figure 3 shows that the discharge rate, at 1.2%, is very close to an all-time low. A good proxy for this metric is the level of initial claims

LPL Financial Member FINRA/SIPC Page 3 of 5

# 5 Workers Are Feeling More Confident About Their Own Prospects, and About the Labor Market in General

Job Quitters as a Percent of Total Job Separations
 3-Month Moving Average



Source: Haver Analytics 03/25/13 Shaded areas indicate recession.

- and the monthly Challenger layoff data, both of which continue to show that companies are reluctant to shed more workers at this point in the business cycle.
- The quit rate measures the percentage of people who leave their jobs voluntarily, presumably because they are confident enough in their own skills—or in the health of the economy—to find another job. In the three months ending in January 2013 (the latest data available), 53% of the people who were "separated" from their jobs (laid off, fired, retired, or left voluntarily) were job quitters. This was the highest reading on this metric since mid-2008, but remains well below its pre-Great Recession "normal" of 56–60%. Commenting on this metric in her March 4, 2013 speech, Yellen noted "a pickup in the quit rate, which also remains at a low level, would signal that workers perceive that their chances to be rehired are good—in other words, that labor demand has strengthened." The final metrics mentioned by Yellen—consumer spending and overall economic growth—both remain well below average, and indeed still point to an economy that is running at around two-thirds speed.

As this document was being prepared for publication on Monday, March 25, 2013, Bill Dudley, the third member of the "center of gravity" at the Fed also hinted at his reluctance to remove the stimulus too soon. On balance, Dudley's comments, along with last week's appearance from Ben Bernanke echoed comments made in early March 2013 by Fed Vice Chair Yellen, suggest that the "center of gravity" at the Fed is not yet convinced that there has been "substantial improvement" in the labor market or economy. This should give market participants comfort that the Fed is not likely to begin removing QE anytime soon, but also raises the risk that the Fed may wait too long to remove the stimulus, which could lead to higher inflation and higher interest rates in the future.

# About the JOLTS Report

Each month, market participants and the financial media obsess over the monthly employment report from the Bureau of Labor Statistics (BLS) that details how many jobs were added in the economy, in what industries the jobs were added, how much workers were paid, and why workers were unemployed. That report is typically released on the first Friday of every month. On the other hand, the monthly report on job openings and labor turnover (the JOLTS data), released by the same government agency—the BLS—that releases the monthly jobs report, is met with little, if any, fanfare from the financial markets or the financial media. The JOLTS report does not get a lot of attention, mainly because it is dated. For example, the market got detailed information on the labor market for February 2013 on March 8, 2013 when the monthly employment report was released. The JOLTS report for February 2013 isn't due out until April 9, 2013. The JOLTS data provide more insight into the inner workings of the labor market than the monthly employment report does. JOLTS provides data on:

- The number of job openings by economy-wide, by firm size, and by region;
- The number of new hires in a given month; and
- Job separations, and the various drivers of those separations (fired, laid off, retired, quit).

Please see our Weekly Economic Commentary from February 19, 2013 for more insights from the JOLTS report.

LPL Financial Member FINRA/SIPC Page 4 of 5

#### IMPORTANT DISCLOSURES

The opinions voiced in this material are for general information only and are not intended to provide specific advice or recommendations for any individual. To determine which investment(s) may be appropriate for you, consult your financial advisor prior to investing. All performance reference is historical and is no guarantee of future results. All indices are unmanaged and cannot be invested into directly.

The economic forecasts set forth in the presentation may not develop as predicted and there can be no guarantee that strategies promoted will be successful.

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.

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.

International investing involves special risks, such as currency fluctuation and political instability, and may not be suitable for all investors.

Mortgage Backed Securities 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.

Quantitative easing is a government monetary policy occasionally used to increase the money supply by buying government securities or other securities from the market. Quantitative easing increases the money supply by flooding financial institutions with capital in an effort to promote increased lending and liquidity.

The Federal Open Market Committee action known as Operation Twist began in 1961. The intent was to flatten the yield curve in order to promote capital inflows and strengthen the dollar. The Fed utilized open market operations to shorten the maturity of public debt in the open market. The action has subsequently been reexamined in isolation and found to have been more effective than originally thought. As a result of this reappraisal, similar action has been suggested as an alternative to quantitative easing by central banks.

The Federal Open Market Committee (FOMC), a committee within the Federal Reserve System, is charged under the United States law with overseeing the nation's open market operations (i.e., the Fed's buying and selling of United States Treasure securities).

Stock investing involves risk including loss of principal.

### INDEX DESCRIPTIONS

The Chicago Area Purchasing Managers' Index that is read on a monthly basis to gauge how manufacturing activity is performing. This index is a true snapshot of how manufacturing and corresponding businesses are performing for a given month. A reading of 50 or above is considered a positive reading. Anything below 50 is considered to indicate a decline in activity. Readings of the index have the ability to shift the day's trading session one way or another based on the results.

Job Openings and Labor Turnover Survey (JOLTS) is a survey done by the United States Bureau of Labor Statistics to help measure job vacancies. It collects data from employers including retailers, manufacturers and different offices each month. Respondents to the survey answer quantitative and qualitative questions about their businesses' employment, job openings, recruitment, hires and separations. The JOLTS data is published monthly and by region and industry.

This research material has been prepared by LPL Financial

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

Not FDIC/NCUA Insured | Not Bank/Credit Union Guaranteed | May Lose Value | Not Guaranteed by any Government Agency | Not a Bank/Credit Union Deposit



# Weekly Market Commentary



March 25, 2013

# Jeffrey Kleintop, CFA Chief Market Strategist LPL Financial

# Highlights

In each of the past three years, the stock market began a slide in the spring that lasted well into the summer months.

This week, we update the status of the 10 indicators we identified that foreshadowed the 10–19% declines in recent years.

On balance, the indicators do not yet point to a significant risk of a repeat of the 10–19% spring slide this year. But a more modest, 5–10% pullback is far from out of the question.

### 1 Economic Surprises and Market Performance

 Citigroup Economic Surprise Index G10 (Left Scale)
 3-Month Total Return of S&P 500 Index Less Barclays 7–10 Year Treasury Index (Right Scale)



Source: Bloomberg data, LPL Financial 03/25/13

These indexes are unmanaged indexes, which cannot be invested into directly. Past performance is no guarantee of future results.

# 10 Indicators to Watch for a Spring Slide in the Stock Market

One year ago, we provided our list of the 10 indicators to watch that seemed to precede the stock market declines in 2010 and 2011 and accurately warned of another spring slide in 2012.

We again look to these indicators for signs of a potential spring slide in the stock market this year.

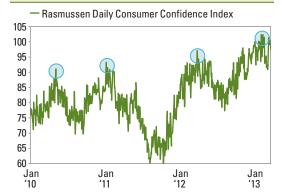
In early 2010, 2011, and 2012, run-ups in the stock market, similar to this year, pushed stocks up about 10% for the year as April began. Specifically, on April 23, 2010, April 29, 2011, and April 2, 2012, the S&P 500 made peaks that were followed by 10–19% losses that were not recouped for more than five months. This recurring phenomenon is often referred to by the old adage "sell in May and go away." Now that it is around the time the prior slides have begun, it is time to revisit the status of our indicators.

Currently, only two of the 10 indicators are waving a red flag, while three are yellow for caution, and the other five are green. On balance the indicators do not point to a significant risk of a repeat of the 10–19% spring slides in the stock market this year. However, a smaller decline of about 5% or so is far from out of the question and remains our most likely scenario, as presented in recent *Weekly Market Commentaries*. We will continue to monitor these indicators closely in the coming weeks.

- 1. Fed stimulus In 2010 and 2011, Federal Reserve (Fed) stimulus programs known as QE1 & QE2 came to an end in the spring or summer, and stocks began to slide until the next program was announced. Operation Twist was announced on September 12, 2011 and was scheduled to conclude at the end of June 2012, helping to prompt a market slide before it was extended at the end of June 2012. This year, the current program is unlikely to be slowed or stopped until much later this year. Therefore, this is unlikely to be a driver of a slide in stocks this spring.
- 2. Economic surprises The Citigroup Economic Surprise Index [Figure 1] measures how economic data fares compared with economists' expectations and has marked the spring peaks in both economic and market momentum in recent years. While the latest readings have not surged up near the 50-level that marked the peaks of recent years, the weakening trend does suggest expectations may have become too high. Turning points typically have coincided with a falling stock market relative to the safe haven of 10-year Treasuries.



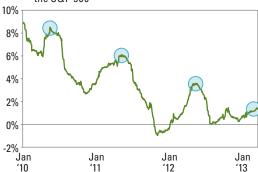
## 2 Consumer Confidence



Source: Bloomberg data, LPL Financial 03/25/13

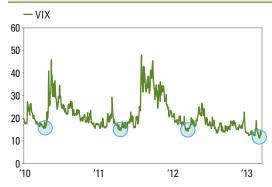
### 3 Annual Spring Slide in Earnings Expectations

 3-Month Change in the Wall Street Analysts' Consensus for S&P 500 Earnings per Share for the S&P 500



Source: FactSet data, LPL Financial 03/25/13

# 4 Investors May Be Too Complacent



Source: Bloomberg data, LPL Financial 03/25/13

The company names mentioned herein was for educational purposes only and was not a recommendation to buy or sell that company nor an endorsement for their product or service.



8. Consumer confidence – In the past few years, early in the year the daily tracking of consumer confidence measured by Rasmussen rose to highs just before the stock market collapse as the financial crisis erupted [Figure 2]. The peak in optimism gave way to a sell-off as buying faded. Investor net purchases of domestic equity mutual funds began to plunge and turned sharply negative in the following months. This measure of confidence is once again beginning to fall from the highs.



Earnings revisions – The earnings estimates moved higher heading into the first quarter earnings season of each of the past few years, only to begin a decline that lasted the remainder of the year as guidance disappointed analysts and investors. This year, earnings expectations have not risen as much as in prior years, which may limit the disappointment. In addition, last week saw disappointing reports from bellwethers such as Oracle and FedEx, among others. It is too early to say whether this indicator is flashing a warning sign. We will be watching to see if estimates begin to taper off.



Yield curve – In general, the greater the difference between the yield on the 2-year and the 10-year U.S. Treasury notes, the more growth the market is pricing into the economy. This yield spread, sometimes called the yield curve because of how steep or flat it looks when the yield for each maturity is plotted on a chart, peaked in February of 2010 and 2011, and March of 2012. Then the curve started to flatten, suggesting a gradually increasing concern about the economy, as the yield on the 10-year moved down. Although not as steep as in prior years, this year we will be watching to see if the yield curve flattens further after peaking in mid-March.



Energy prices – In 2010, 2011, and 2012, oil prices rose about \$15–20 from around the start of February, two months before the stock market began to decline. This year, oil prices rose to \$98 at the start of February and have eased slightly since then, suggesting less risk to consumers already struggling with higher taxes. However, the national average retail gasoline price has risen 50 cents this year, similar to the average rise from the beginning of the year through March over the past three years. With prices starting to ease along with crude oil the risk is fading, but a further surge in prices at the pump would make this indicator more worrisome.



The LPL Financial Current Conditions Index (CCI) – In 2010 and 2011, our index of 10 real-time economic and market conditions peaked around the 240–250 level in April and began to fall by over 50 points. It may still be early, but this year, the CCI recently reached 253—in line with the post-recession highs with no signs yet of weakening.



The VIX – In each of the past three years the VIX, an options-based measure of the forecast for volatility in the stock market, fell to the low of the year in the low-to-mid teens in April before ultimately spiking up over the summer. In recent weeks, the VIX has declined once again to the lows of the year. This suggests investors have again become complacent and risk being surprised by a negative event or data.

LPL Financial Member FINRA/SIPC



Initial jobless claims – It was evident that first-time filings for unemployment benefits had halted their improvement by early April 2010, and beginning in early April 2011, they deteriorated sharply. In 2012, April again led to deterioration in initial jobless claims as they jumped by about 30,000. While claims have fallen to post-recession lows this year as the labor market has improved, we will again be watching for a move higher in April that would echo the spike seen in recent years. (See this week's *Weekly Economic Commentary* for what the Fed is watching in the labor market.)



10. Inflation expectations – The University of Michigan consumer survey reflected a rise in inflation expectations in March or April of the past three years. In fact, in 2011, the one-year inflation outlook rose to 4.6% in both March and April from 3% at the start of the year. This year, there has been almost no rise in inflation expectations, as they remain about 3.3%.

The weakening economic data in Europe's core countries such as Germany and France combined with financial stresses in peripheral countries such as Cyprus pose a risk to global markets if too little is done to address the key issues.

Finally, one issue not addressed specifically in the indicators, but important in the markets, is the surge in European stresses—evident in the spring of each of the past few years. The weakening economic data in Europe's core countries such as Germany and France (seen most recently in last week's German manufacturing and sentiment data), combined with financial stresses in peripheral countries such as Cyprus pose a risk to global markets if too little is done to address the key issues. Europe continues to focus on capping banker bonuses and financial transactions taxes rather than core issues. This could risk a bond market sell-off that could negatively affect stocks here in the United States, similar to the spring slides in recent years.

Many of the most widely watched indicators of economic activity did not deteriorate ahead of the market decline, but along with it.

While this list may seem incomplete, it is notable that many of the most widely watched indicators of economic activity such as manufacturing (the Institute for Supply Management Purchasing Managers' Index known as the PMI or the ISM), job growth, and retail sales, among others, did not deteriorate *ahead* of the market decline, but *along with it.* It is not that they are not important; it is just that they did not serve as useful warnings of the slide to come, while the above indicators did.

# **Shorter Slide?**

While it is possible we will experience another spring slide this year, there are factors that may mitigate any decline short of the 10–19% seen in the past few years.

Looking back, in 2010 the negative environment that helped fuel the decline included the uncertainty around the impact of the Dodd-Frank legislation, the Eurozone debt problems and bailouts, central bank rate hikes, and the end of the homebuyer tax credit. In 2011, it was the Japan earthquake and nuclear disaster that disrupted global supply chains and pulled Japan into a recession, the Arab Spring erupted pushing up oil prices, the budget debacle and related downgrade of U.S. Treasuries, rising inflation, and central bank rate hikes that contributed to the decline. In 2012, the Eurozone debt problems coming to a head, China's slowdown, the

LPL Financial Member FINRA/SIPC Page 3 of 5

European recession, the election uncertainty, and anticipation of the 2013 budget bombshell of tax hikes and spending cuts weighed on markets.

Some of these challenges presented in prior years are repeated again this year—potential for flare-ups over European problems and the debt ceiling come to mind. However, there are some positives this year that may help offset some of the negatives making for a potential decline that may be less steep than those of recent years. First, job growth finally appears to be reaccelerating with three of the past four months posting more than 200,000 in net job creation. Second, the housing rebound is now well-entrenched, supporting economic activity and household confidence. Finally, business spending growth appears to be reaccelerating and likely to support manufacturing activity, which had fallen in May through July of the past few years and contributed to the market decline.

Given this year's nearly double-digit gain in the S&P 500 and the possibility of another spring slide for the stock market, investors may want to watch these indicators closely for signs of a pullback despite the current upward momentum in the stock market and solid economic growth. ■

### IMPORTANT DISCLOSURES

The opinions voiced in this material are for general information only and are not intended to provide specific advice or recommendations for any individual. To determine which investment(s) may be appropriate for you, consult your financial advisor prior to investing. All performance reference is historical and is no guarantee of future results. All indices are unmanaged and cannot be invested into directly.

The economic forecasts set forth in the presentation may not develop as predicted and there can be no guarantee that strategies promoted will be successful.

The company names mentioned herein was for educational purposes only and was not a recommendation to buy or sell that company nor an endorsement for their product or service.

Stock and mutual fund investing involve risk, including loss of principal.

International and emerging markets investing involves special risks, such as currency fluctuation and political instability, and may not be suitable for all investors.

The fast price swings in commodities and currencies will result in significant volatility in an investor's holdings.

Bonds are subject to market and interest rate risk if sold prior to maturity. Bond values and yields will decline as interest rates rise and bonds are subject to availability and change in price.

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.

The Federal Open Market Committee action known as Operation Twist began in 1961. The intent was to flatten the yield curve in order to promote capital inflows and strengthen the dollar. The Fed utilized open market operations to shorten the maturity of public debt in the open market. The action has subsequently been reexamined in isolation and found to have been more effective than originally thought. As a result of this reappraisal, similar action has been suggested as an alternative to quantitative easing by central banks.

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.

LPL Financial Member FINRA/SIPC Page 4 of 5

Quantitative easing is a government monetary policy occasionally used to increase the money supply by buying government securities or other securities from the market. Quantitative easing increases the money supply by flooding financial institutions with capital in an effort to promote increased lending and liquidity.

Operation Twist is the name given to a Federal Reserve monetary policy operation that involves the purchase and sale of bonds. "Operation Twist" describes a monetary process where the Fed buys and sells short-term and long-term bonds depending on their objective.

Yield curve is a line that plots the interest rates, at a set point in time, of bonds having equal credit quality, but differing maturity dates. The most frequently reported yield curve compares the three-month, two-year, five-year and 30-year U.S. Treasury debt. This yield curve is used as a benchmark for other debt in the market, such as mortgage rates or bank lending rates. The curve is also used to predict changes in economic output and growth.

#### INDEX DESCRIPTIONS

The Barclays U.S. 7-10 Year Treasury Bond Index includes all publicly issued, U.S. Treasury securities that have a remaining maturity of between 7 and 10 years, are non-convertible, are denominated in U.S. dollars, are rated (at least Baa3 by Moody's Investors Service or BBB- by S&P), are fixed rate, and have more than \$250 million par outstanding. The Index is weighted by the relative market value of all securities meeting the Index criteria.

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 Standard & Poor's 500 Index is an unmanaged index, which cannot be invested into directly. Past performance is no guarantee of future results.

Citigroup Economic Surprise Index (CESI) measures the variation in the gap between the expectations and the real economic data.

The VIX is a measure of the volatility implied in the prices of options contracts for the S&P 500. It is a market-based estimate of future volatility. When sentiment reaches one extreme or the other, the market typically reverses course. While this is not necessarily predictive it does measure the current degree of fear present in the stock market

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

The Rasmussen Consumer Index and Investor Indexes, measures the economic confidence of consumers on a daily basis. The Rasmussen Consumer Index and Investor Indexes are derived from nightly telephone surveys of 500 adults and reported on a three-day rolling average basis. The baseline for the Index was established at 100.0 in October 2001.

The Michigan Consumer Sentiment Index (MCSI) is a survey of consumer confidence conducted by the University of Michigan. The MCSI uses telephone surveys to gather information on consumer expectations regarding the overall economy.

This research material has been prepared by LPL Financial.

To the extent you are receiving investment advice from a separately registered independent investment advisor, please note that LPL Financial 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

