

Forward Looking Measures Still Don't Provide Evidence for a V-Shaped Recovery

William Hester, CFA

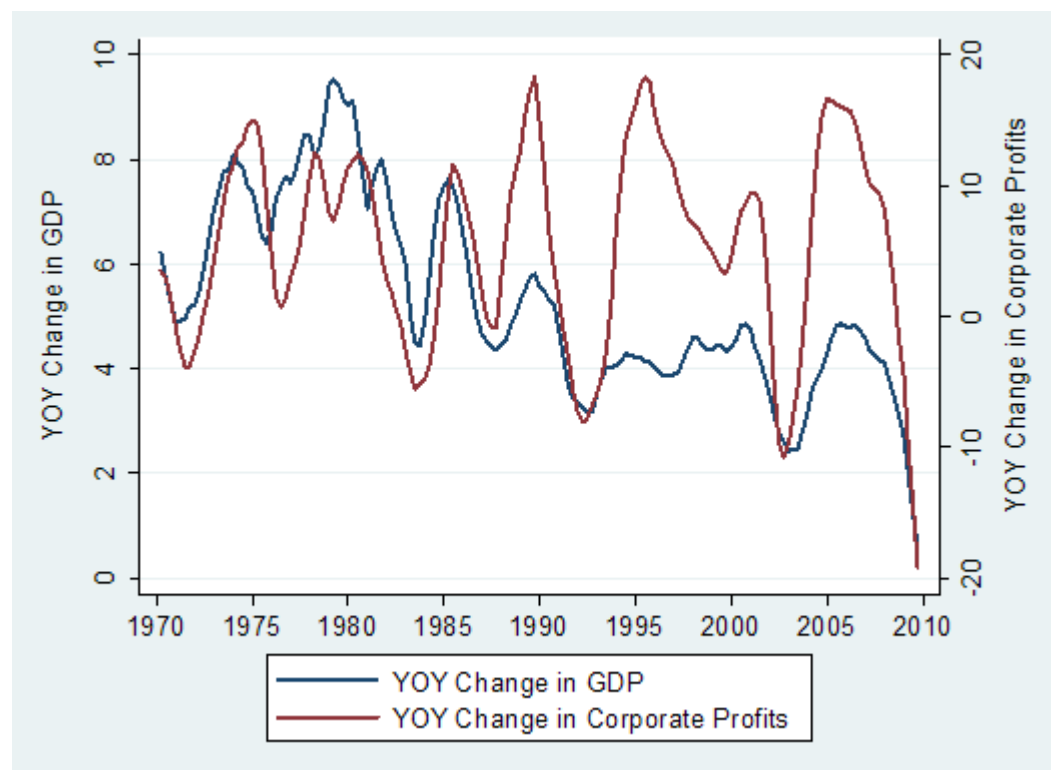
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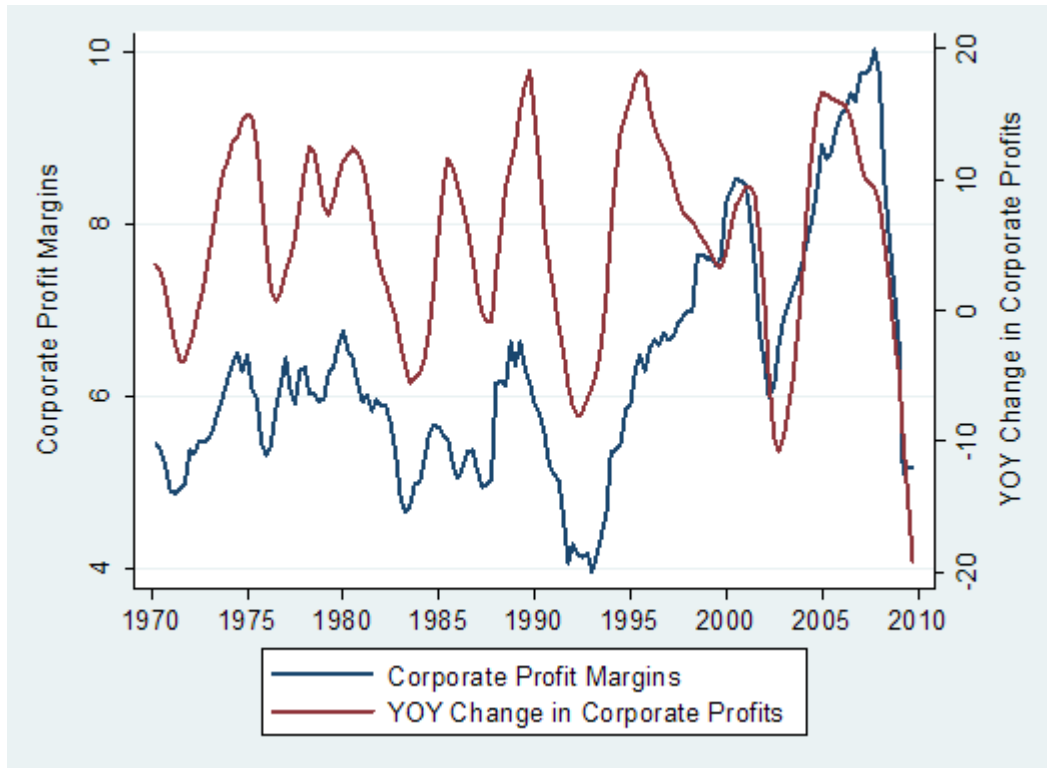
With Friday's employment report coming in somewhere between mixed and poor, much of the good economic news arrived earlier in the week. One of those pieces of data was in the government's report on productivity. Worker productivity grew at 9.5 percent at an annual rate, its fastest pace in six years. Following the report many analysts made the argument that corporate profits were sure to boom following such high periods of productivity. Let's take a look at whether the data supports that view.

First we'll look at two of the determinants of corporate profits, and then see how correlated they are with the changes in the level of worker productivity. The first graph below shows year-over-year changes in both GDP and corporate profits. To take out some of the volatility in each series, both are smoothed. What the graph shows is that during the 1970's and 1980's, relative changes in profits tracked changes in GDP fairly well. Strong periods of profit growth typically coincided with strong periods of economic growth. This relationship broke down beginning in the mid 1990's. During this more recent period, corporate profits boomed alongside more moderate nominal GDP growth.

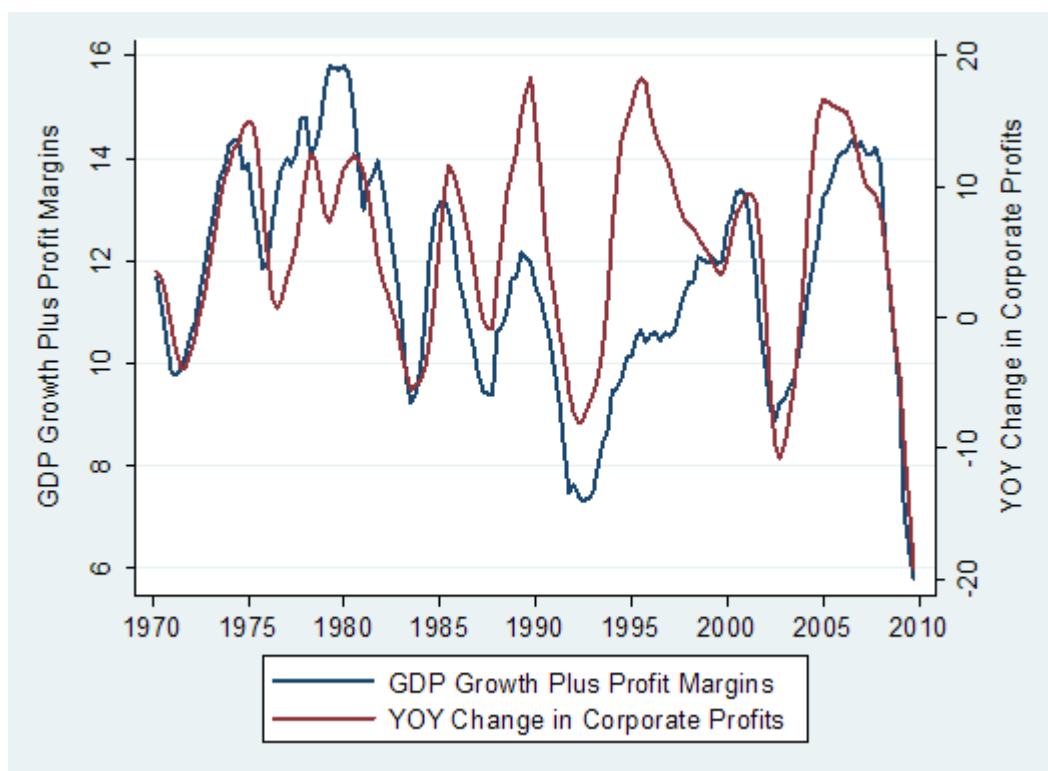


The next graph compares changes in corporate profits with changes in the level of corporate profit margins. The fit of the two lines is almost a mirror image of the first graph. The first half of the data shows that profit growth was much stronger than what could be explained by changes in profit margins during the 1970's and 1980's. Profit growth consistently outpaced the relative changes in profit margins during the early period. But since the late 1990's, the correlation of the relative changes in the two has tightened. The boom in profit

margins helped fuel the boom in corporate profits this decade – during a period where nominal GDP growth was more moderate.

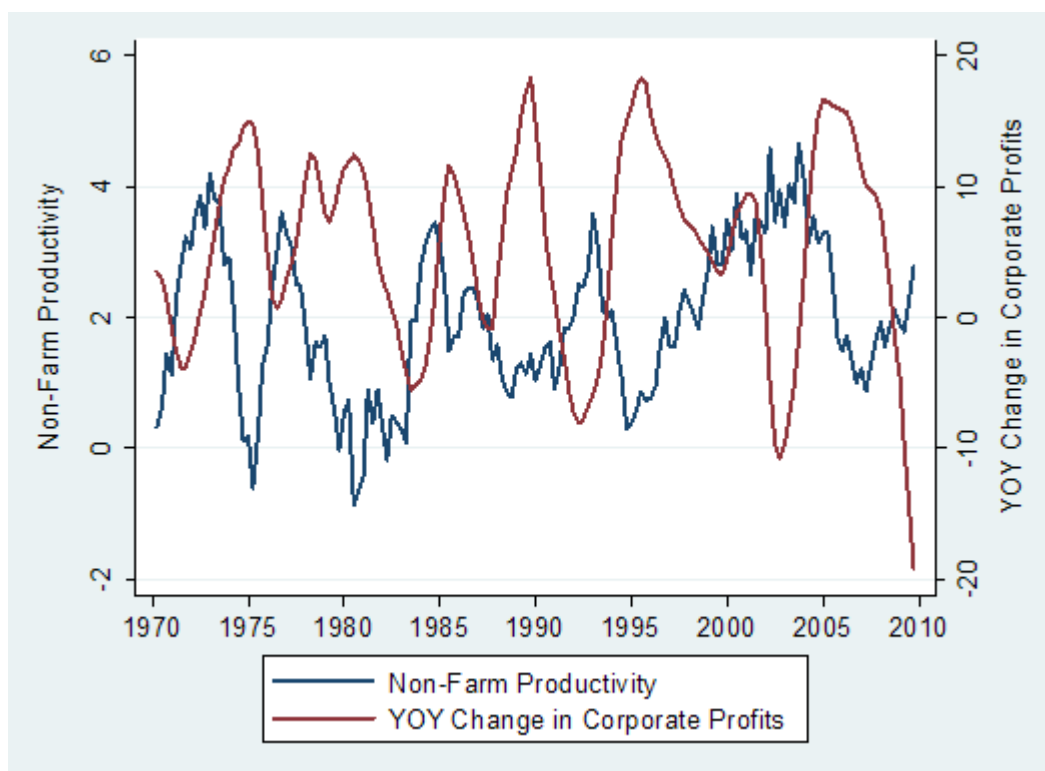


One would expect economic growth and changes in profit margins to go a long way toward explaining the changes in corporate profits. In the graph below I've summed the year-over-year changes in GDP growth and corporate profit margins against the changes in corporate earnings. The two clearly explain the variation in corporate profits better than each does individually.



This isn't very surprising. Changes in the sales-per-share of the S&P 500 have a relatively strong correlation with changes in GDP growth. This graph picks up that correlation, and simply confirms that earnings are a function of some combination of rising sales and rising profit margins. Nearly all of the periods where earnings grew quickly coincided with periods of very fast nominal GDP growth or near-record profit margins. As I've noted in recent research articles, forecasting very fast earnings growth over the next year or two is implicitly assuming that the economy is going to race ahead or profit margins are going to return to near-record levels.

Surprisingly, the historical data indicate that productivity has essentially no correlation with either overall economic output or changes in corporate profits. As a result, productivity hasn't been helpful in explaining or forecasting profit growth. This is the case even if you lag profit growth. The graph below compares changes in productivity with changes in corporate profit growth (both smoothed). The relationship between changes in the two over this time period is actually slightly negative.



It's fair to say that productivity typically rises at the end of recessions as employers continue to cut costs while the contraction in output begins to slow. It's also fair to say that productivity grew at persistently higher rates in the late 1990's and early 2000's as corporations invested heavily in technology. What's more difficult to argue is that strong earnings growth naturally follows periods of high productivity. That depends on the economic and corporate profitability environment. Strong profit rebounds typically coincide with some combination of three events: strong real economic growth, high inflation in the GDP price deflator, or quickly rising profit margins. To bet on strong earnings growth over the next couple of years relies on outlier forecasts for any or all of these economic measures.

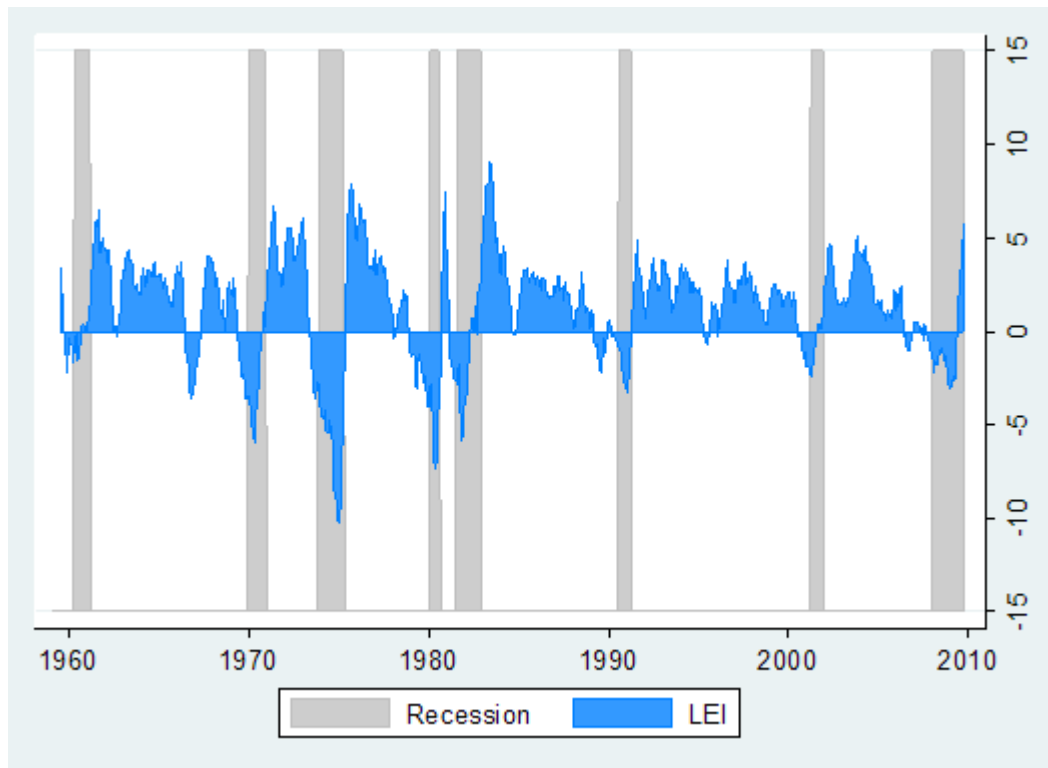
The Real Economy's LEI

Although the recent GDP report showed that the U.S. economy expanded in the third quarter, the first time the economy has grown since the second quarter of 2008, the bulk of the expansion was fueled by government-supported programs, like 'cash for clunkers' and the first-time home-buyer credit. Plus, it's a snapshot of recent history which doesn't offer much help in looking forward over the next few quarters. One of the better indexes for that task is the Conference Board's Leading Economic Indicator Index.

This month's release of the LEI was met with much excitement. The LEI Index has risen for sixth consecutive months, was up 1 percent from the previous month, and up almost 6 percent from six months earlier. But before investors decide that this provides firm evidence that the economy's rebounding and that the recovery will be robust, they should look at the components of the indicator that provide a view into the real economy. When you look under the hood at the real economy's LEI, the forecast for growth is much more mundane.

The graph below shows the rolling 6-month change in the LEI Index. The Index has gone through a couple of revisions since the Conference Board took over calculating it in mid 1990's. So the current history wasn't available in real time. But in its current format you can see that it's done a fairly good job of leading the economy, especially at important turning points. Although it issued a couple of false warnings prior to periods where the economy continued to expand, it turned negative around the onset of each recession going back to 1960. The index has also turned up prior to the end of each recession, and it typically correlates well with how robust the recovery eventually turns out to be. That's why enthusiasm is building for

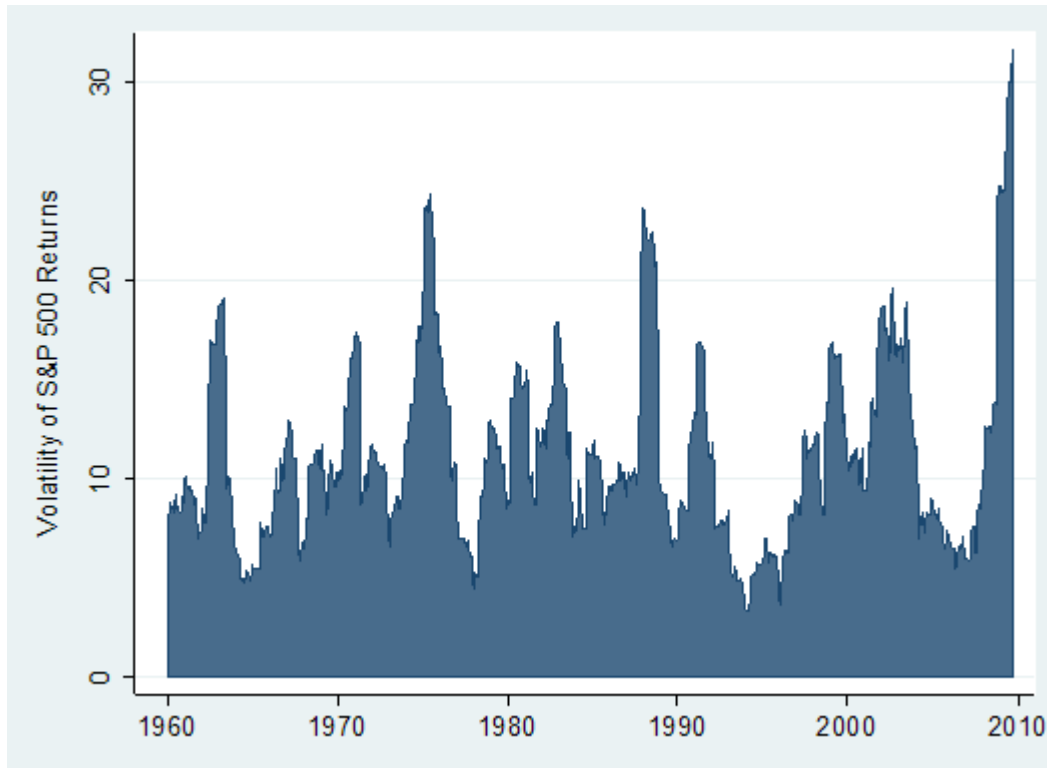
a robust, V-shaped recovery. The Economic Research Institute's Weekly Leading Index has also showed strong growth during the last few months.



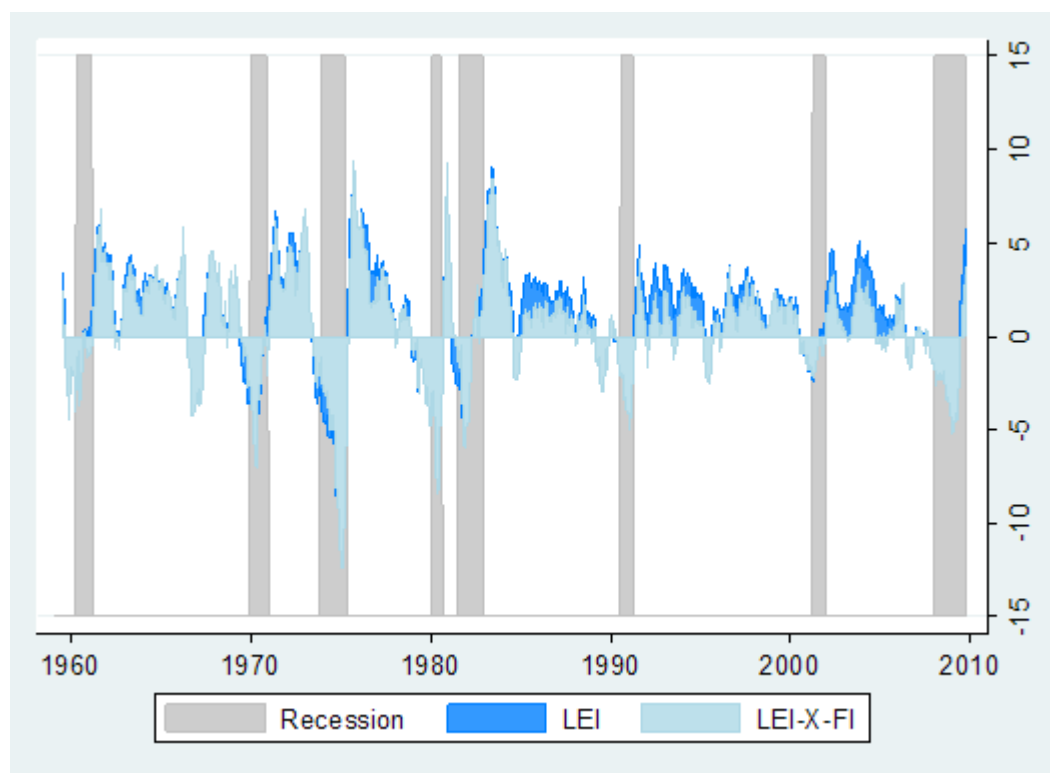
Before basing any investing decisions on leading indexes, it's probably best to know what's driving them, and to separate the components that track the real economy versus those that track financial indicators. A quick review of how the Conference Board calculates the LEI Index will help in this process. The indicator is made up of 10 components that typically lead the overall economy. The index includes jobless claims, average weekly hours, and new orders for consumer and capital goods, to name a few. The LEI Index also includes the views of financial market participants, by including the change in the stock market and the level of the spread between short and long rates.

Each month along with each component, the Conference Board releases a percentage figure. These are sometimes referred to as each components weight, but a more accurate description is that these are factors that attempt to standardize the volatility of each series. Since some components are more volatile than others, these factors help to smooth out each components month-to-month contribution. These factors are calculated from the long-term average volatility of each component.

Because the volatility of stock returns has been far above typical levels, while most of the other components have experienced more typical levels of volatility (outside of the money supply), we can assume that stocks are making a larger contribution to the volatility of the index. If factors were scaled based on more recent volatility, these factors would be smaller, making the overall index less sensitive to large month-to-month stock market changes. The graph below shows the annualized volatility of monthly returns for the S&P 500 Index since 1960.



The level of the spread between short and long rates is also above average. This spread is about 3.25, versus a long-term average of about 1. So we know that the financial market indicators are playing an important role in the performance of the overall LEI Index. The graph below attempts to give some perspective on the extent of this role. The dark blue area tracks the rolling six-month change in the overall LEI Index since 1960. The light blue area shades the 6-month change in the real economy's leading index on top of the six-month change in the overall LEI Index. The real economy's LEI index is an index we've created that tracks the changes in all of the components of the Leading Index except for the two financial markets components.



It may be difficult to see the last few data points. But the LEI Index is up almost 6 percent from six months earlier, while the real economy's LEI is up about 3.5 percent. So, clearly both measures of leading index components are recovering and rising. But the difference in their growth rates is important to note.

As the graph shows, it's not unprecedented to have the overall LEI Index race ahead of the real economy's LEI Index. This occurred in the mid 1980's, when stocks were rebounding from extremely low levels of valuation (some 40 percent below the valuation levels seen in March). More recently, the two diverged during the most recent cyclical bull market beginning in 2003, when stocks mostly outpaced the more moderately expanding real economy LEI Index.

There are a few data points that are worth highlighting. These include the recession of 1974 and the back-to-back recessions of the early 1980's. Both recessions forced stock market valuations to favorable levels, and both periods witnessed strong rallies following the end of each recession. Economic growth also rebounded strongly, even if just for a short period in some circumstances, following these recessions.

As the graph shows, each of those recessions was also followed by very strong rebounds in the LEI Index – typically by almost 10 percent in just 6 months. And not only was the overall index strong, but the underlying real economy's LEI Index was as strong. There is very little dark blue showing in the graphs during these periods. Currently, the growth rate in the real economy LEI Index is only at about a third of the peak in growth that typically follows deep recessions that are followed by strong recoveries. Over the next few months both the overall LEI Index and the real economy's LEI Index will be important to watch. A robust recovery will likely be lead by an impressive rebound in the overall LEI Index, and importantly, be confirmed by an equally strong expansion in the real economy's LEI Index.

There's still little evidence that the economy or corporate profits are heading for a V-shaped recovery. A robust recovery in profits will likely rely on a robust economic recovery. Currently, leading indicators of the real economy aren't consistent with that outcome.