These Aren't GDP Futures You're Trading

That the stock market and the economy should confirm one another, with stocks perhaps leading, is one of those truths we hold to be self-evident. But, all markets are not created equal.

I devote a lot of attention to linkages and causal relationships between markets, as well I should; the information content in a market that behaves as expected is quite low. We learn of impending changes only by studying why the truths we held to be self-evident were in fact not, and by incorporating into our models and thought processes the information gleaned from these previously unnoticed relationships.

It is a humbling task and quite possibly condemned to permanent frustration. George Bernard Shaw stated, "The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man." We can update this to trading and market analysis:

> Winners have no incentive to refine their analysis; losers study their past mistakes. All financial theory, therefore, is derived from the backward-looking attempts of unsuccessful traders to avoid the recurrence of an event within a situation which will never again exist.

All of this windup is to address three related developments at the end of the past week. The first was the declaration by the National Bureau of Economic Research that the recession ended in November 2001; a bit of an eyebrow-raiser, to be sure, but one which I will accept out of lack of a convincing argument otherwise. To return to Ronald Reagan's query, are you better off now than you were in November 2001? Many cannot answer in the affirmative.

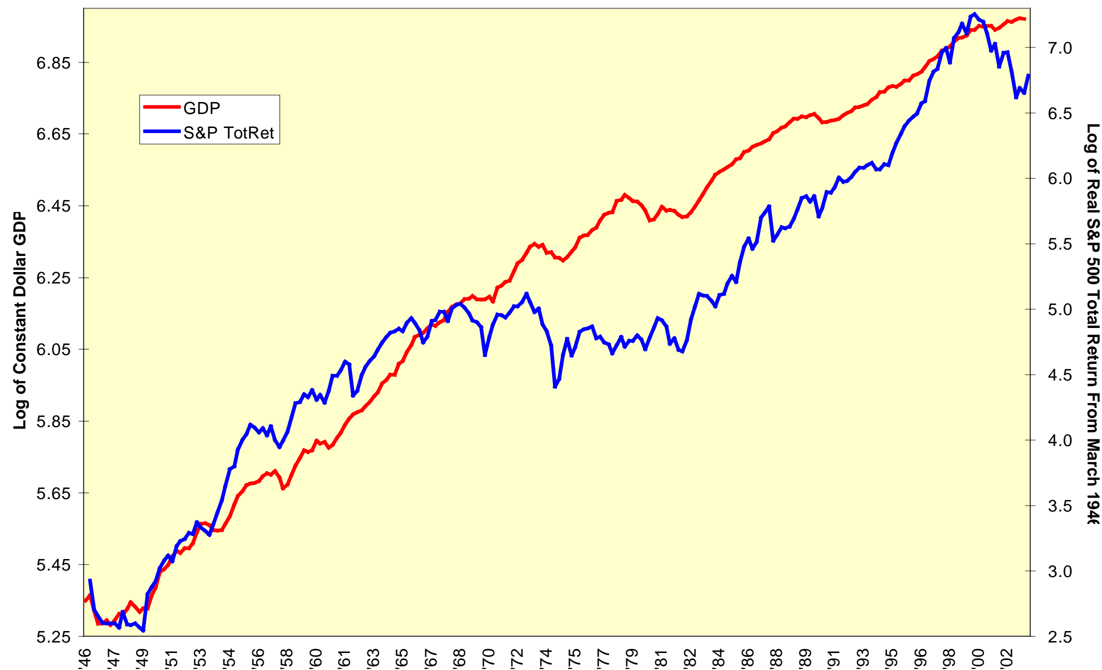
The second was that the smoothed growth rate of the Economic Cycle Research Institute's weekly leading index rose to its highest level since May 1987. ECRI's Anirvan Banerji, a RealMoney contributor, noted that it has been driven higher by "soaring growth in money supply plus mutual funds and near-record highs in mortgage applications for purchases." With all respect to ECRI, please consider both the money supply and the mortgage industry have been distorted by the Fed's rate cutting actions and as a result their roles within the economy of 2003 are likely to be quite different from their past roles. I would feel differently if the money supply were rising from a surge in commercial and industrial loans or if the rise in mortgage applications was driven by a surge in personal income.

The third was an e-mail from a RealMoney reader who asked, "How much can stocks go down while the economy is going up? Do present-day investors have a lack of experience with market-down, economy-up disconnect?"

Stocks And The Economy Are Codependent

Equities represent the discounted stream of future dividends. As dividends are generally but not necessarily paid out of earnings - there are many examples of firms borrowing to pay their dividend - we should expect stocks to rise if dividends are expected to grow by more than interest rates will rise. But, it does not always follow that earnings will rise as the economy strengthens: A strong economy attracts new investment into an industry, which often places downward pressure on operating margins. Nor does it follow that a weak economy is necessarily bad for any and all stocks: Just think back to the 1970s boom in oil stocks or even the recent strength in homebuilders.

S&P 500 And GDP Are Different



In addition, strong economies often are accompanied by rising interest rates. The short and violent bear markets of 1962 and 1987 both were precipitated by rapid increases in short-term interest rates. And, finally, to complete the matrix, a weak economy can launch a strong stock market if investors convince themselves that things are going to be getting much better soon. This last situation appears to describe the stock market since March reasonably well.

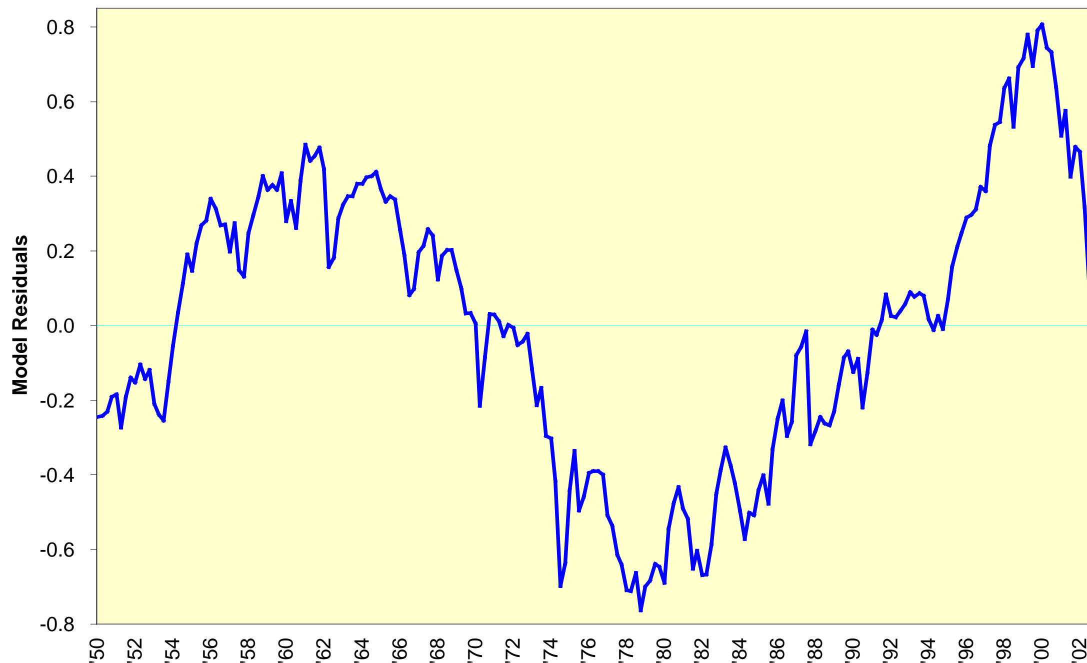
The chart above is striking in how few times the total return on the S&P 500 and the GDP parallel one another. During the two great bull phases of the postwar era, 1949-1966 and 1982-2000, the growth rate of total return far exceeded the growth rate of real GDP, and the opposite was true for the 1966-1982 trading range and for the post-2000 market.

In direct answer to the reader's question, we have seen several episodes of falling stocks in a growing economy: 1957, 1962, 1966, early 1984, 1987 and today. All previous episodes were characterized by rising short-term interest rates. Given today's weakly growing economy and the strong but qualified ECRI leading indicator, we might be forgiven for concluding that we will not see a rising economy / falling stocks scenario.

It Is Never That Simple Or Linear

Econometric analysis, the art and science of modeling data, is really the art of analyzing residuals, the error term left over after we get done explaining variable Y with some set of variable X's. These residuals should be a white noise, or completely random, process. If they contain a visible pattern or if they are correlated with each other, that is a sign that something is missing in the analysis. That appears to be the case if we try to explain the growth rate of deflated S&P 500 total return with the growth rate of deflated GDP.

Something Is Missing



These residuals are anything but a white noise process. They contain a huge and consistent turn downward during the 1966-1982 range and an equally huge and consistent turn higher from 1982-2000. We are in the midst of another too-consistent move right now. If the relationship between stocks and GDP was strong and predictive, none of these features should be visible.

The question now becomes what set of macroeconomic variables can account for the long periods wherein stocks either outperform or underperform the economy. I will endeavor to answer this next week. A few thoughts are in order, though. Several important variables, namely energy prices and currency exchange rates, did not trade in a free market until the early 1970s, and therefore will not be useful for longer-term analysis. The interest rate ceilings of Federal Reserve Regulation Q did not disappear until the early 1980s, and financial derivatives did not reach their current level of acceptance until then, either.

The answer to this question, if it can be found, will help us interpret the financial news a little better. Until then, remember that you are trading stocks and bonds, not GDP futures.