

Do Employment Reports Matter?

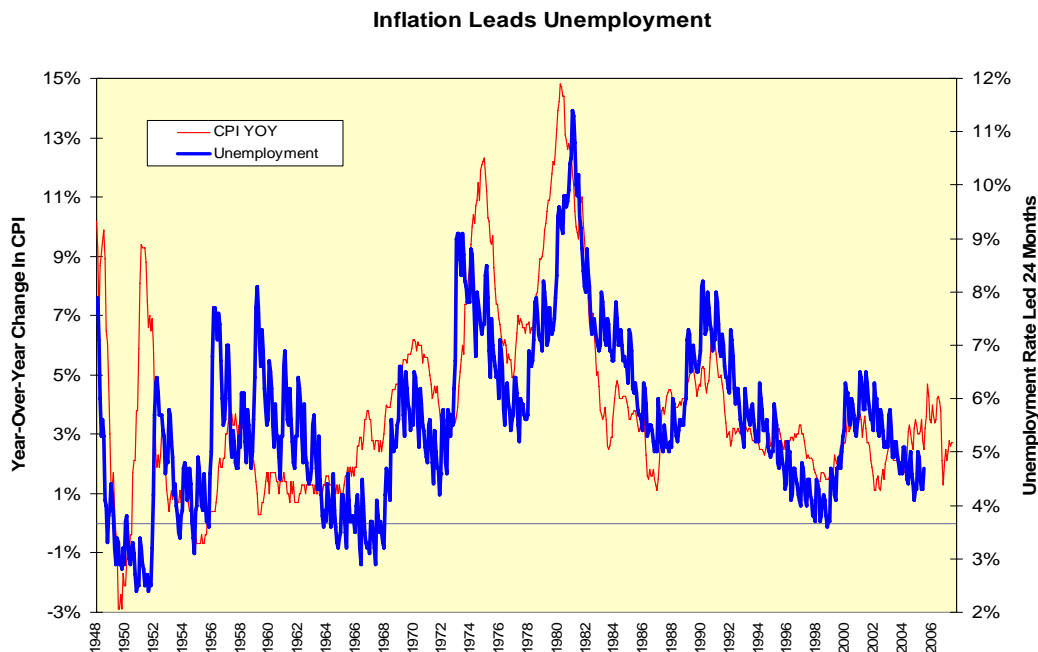
When life hands you a lemon, make lemonade. When *Columnist Conversation* hands you a good setup, as it did between Adam Oliensis and myself last [Tuesday](#), write a column. As an aside, when people ask me where I get ideas, my response invariably is people suggest them to me, whether they realize it or not. Listening and reading can be much more important than speaking and writing, and while the Internet in all its manifestations has made expressing opinions easier to do, our culture seems to be devaluing listening.

I claimed to reject the connection between employment and inflation; all one ever has to do is watch how financial markets trade upon the release of nonfarm payroll data on the first Friday of each month to know someone, somewhere either accepts this connection or some others. Markets do not move like that when traders are bored.

Who Is Leading Whom?

Let's revisit the [Phillips Curve](#), which posits a tradeoff between the rate of inflation and the unemployment rate. The concept is simple; a fall in unemployment levels leads to an increase in wage levels as employers have to pay more to get workers. The Phillips Curve has spun off other concepts such as NAIRU, the non-accelerating inflation rate of unemployment. At the risk of over-simplification, it is a central precept of Keynesian economics. It was challenged by two Nobel Laureates, the Milton Friedman and Edmund Phelps, who argued that a policy tradeoff between higher inflation and lower unemployment would fail because workers demand compensation for expected increases in inflation and raise their wage demands accordingly.

Well, this is all fine and dandy and can provide fodder for all manner of PhD theses, but what impact does it have in practice? Let's map the year-over-year changes in the consumer price index led 24 months against the unemployment rate. That's right, "led." The best statistical relationship is neither contemporaneous correlation nor does inflation respond to unemployment. Higher inflation leads higher unemployment by two years on average. This should lead us to suspect there is a policy response to higher inflation that leads to higher unemployment down the road.



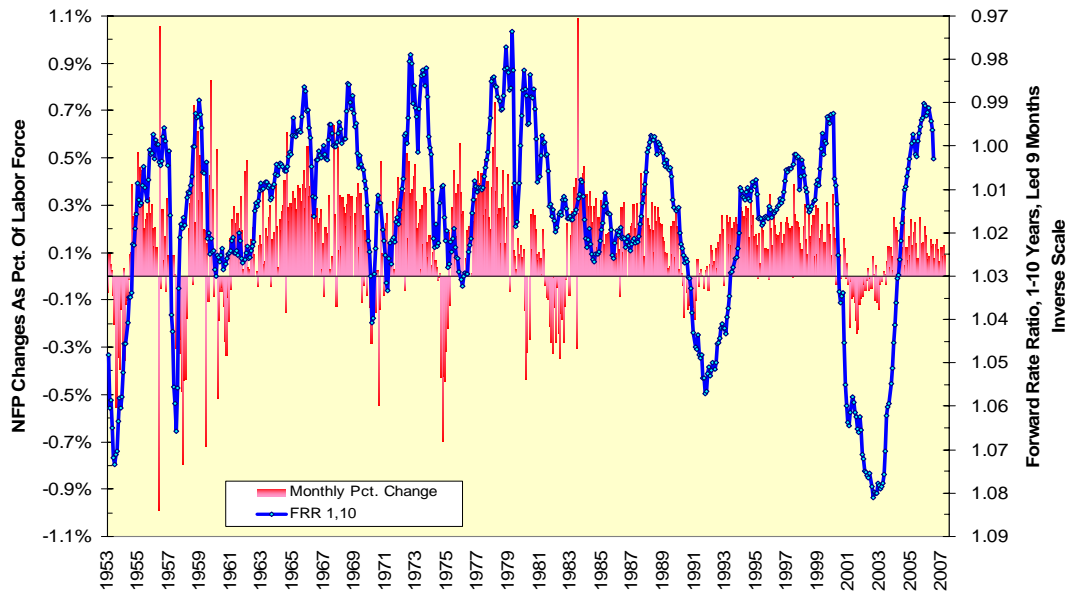
Changes In Monetary Policy

In the immortal words of Inspector Harry Callahan, I know what you're thinking. That policy response must be tighter credit from the Federal Reserve. And you would be right. Let's move away from the rate of unemployment, which is buffeted about by discouraged workers, new entrants into the labor force and the like and use a normalized measure, the ratio of monthly nonfarm payroll changes (the "headline number" that sets all the bobbleheads in motion each month) to the size of the civilian labor force.

This measure leads changes in the forward rate ratio from one to ten years, the rate at which you can lock in borrowing for nine years starting one year from now divided by the ten-year rate itself, by 9 months on average. A FRR greater than 1.00 indicates a positively sloped yield curve; the measure on the chart is plotted inversely.

When the Federal Reserve sees the employment additions-to-labor force ratio fall, as it did in the early 1990s and in 2001-2002, it turns stimulative in about 9 months time. When the measure rises and stays high, as it did in the late 1990s and in 2004-2005, the Federal Reserve tightens in about 9 months. The ratio at present is weakly positive and stable, which argues for steady hand on the monetary till.

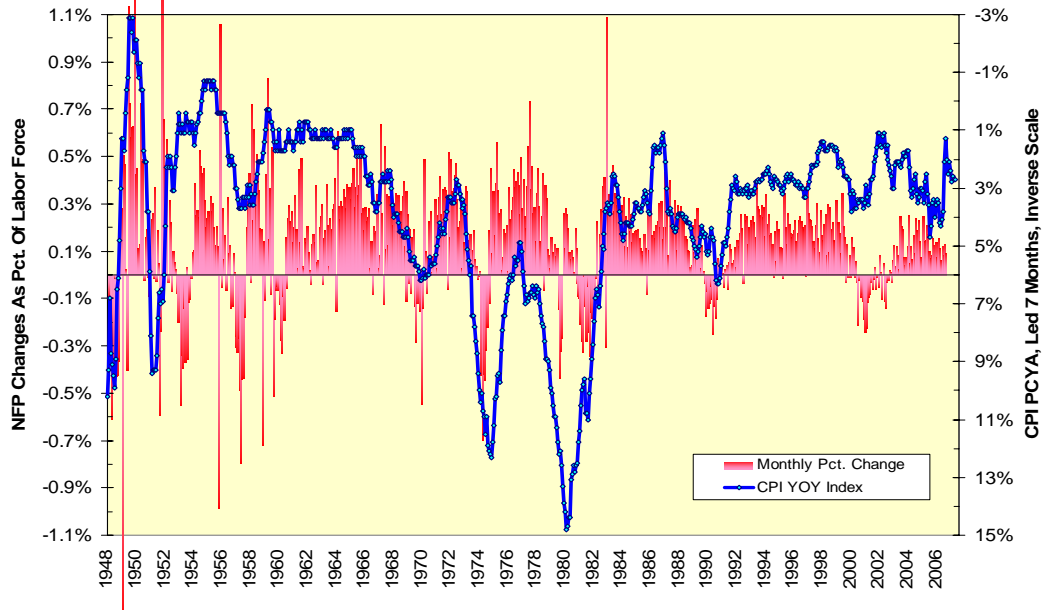
Yield Curve Responds To Changes In Labor Force



Employment And Inflation

Now let's shift the scope of the analysis a little and ask what the relationship is between the payroll additions number and the CPI. It is exactly what Friedman and Phelps would have expected: Year-over-year changes in the CPI, here plotted inversely, lead changes in normalized payroll additions by seven months on average. Employers respond to higher inflation by reducing their demand for labor – or by shifting production overseas or by replacing labor with capital – not by increasing it as posited by the Keynesian Phillips Curve.

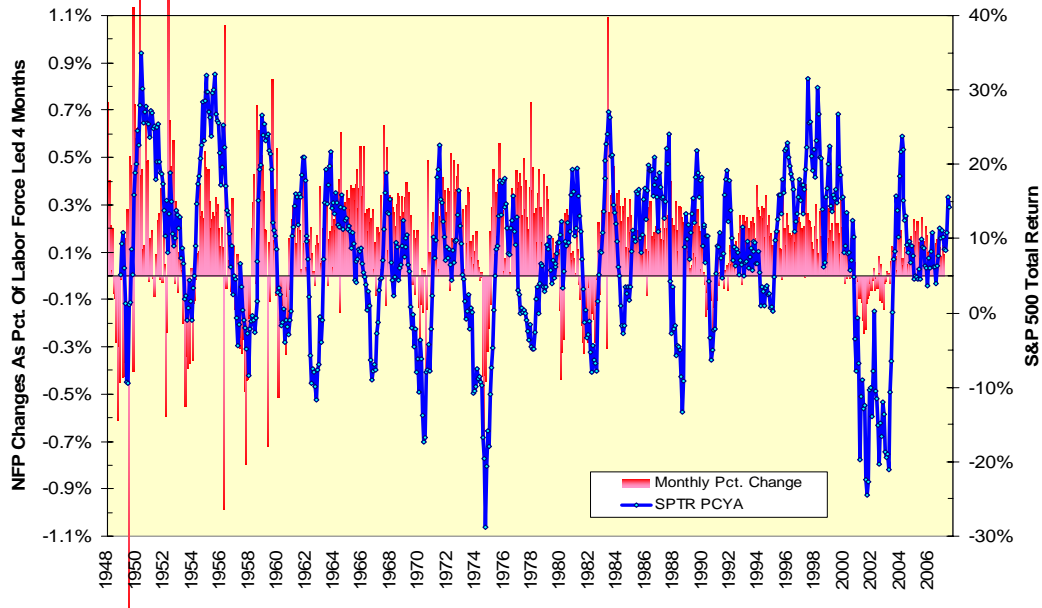
Changes In CPI Lead Changes In Nonfarm Payrolls



Employment And Stocks

Are any of those knee-jerk responses to the employment data correct? As one potential future First Husband might say, “Depends on what the meaning of correct is.” The stock market is alleged to be a discounting mechanism, and here it appears to be one. Year-over-year changes in the S&P 500’s total return lead the normalized payroll additions number by four months on average. While stocks are not GDP futures, they do appear to anticipate changes in the labor force correctly.

Stocks Lead Changes In Nonfarm Payrolls



The one relationship we cannot find in the data is the one posited by traders each month, and that is employment causes inflation. Does this mean a larger-than-expected payroll number will lead to a bond rally anytime soon? No, and please do not trade that way. Understanding economic relationships is one thing, making money in the market is a very different thing altogether.