

Peaks and Troughs in the Unemployment Rate vs. Timing of the S&P500 Bottom A Historic Overview, 1970 To-Date

Looking at the S&P 500 and the Unemployment Rate over the period January 1970 to-date, several observations that can be made:

1. Growth in the unemployment rate from trough to peak ranged from a minimum of 22 months in duration (Dec 1973 to Oct 1975) to a maximum of 32 months in duration (Jan 2001 to Sept 2003), with an average of 28 months over the period. In comparison, the current trend in higher unemployment started in July 2007 and is 16 months old at this time.
2. The first sustained increase in the unemployment rate following a downtrend of the unemployment rate tends to coincide with a peak in the S&P500. This coincident relationship is more easily seen using a 12-period (monthly) simple moving average of both the unemployment rate and the S&P 500, where the crossovers of each data series with its respective moving average tend to occur within 1-3 months of each other. See the arrows and the crossover points on the charts below.
3. Market bottoms tend to precede the peak in unemployment by 8 months (with a range of 7 to 9 months).
4. These patterns do not hold up as well during the very strong bull market of the 1990's.

Observing that the unemployment rate recently started to climb in July 2007, and based on the historic observations of trough-to-peak ranges, we can anticipate a peak after 28 months (average), based on the historic sample. This would mark a peak in the unemployment rate around November 2009, with a minimum (22 months) of May 2009 and a maximum (32 months) of April 2010.

Anticipating a bottom in the S&P500 about 8 months prior would mark a bottom in the equity index around March 2009, using the average 28-month term of unemployment rate growth. We believe that any bottoming process we see being attempted now or through year-end 2008 is likely a short-term bottom that will be preceded by another bottom likely in 2009.

As for the severity of this bear market, we can look to the past as reference. Of the bear markets analyzed, the average loss (peak to trough) in the S&P 500 was 38%. The current bear market is at a loss of about 45%. The 2001-2003 bear market saw unemployment increase only 2.2 percentage points (3.9% to 6.1%) for its 44% market decline. There was a much sharper unemployment rate climb in the October 1973 through June 1975 period, 4.2 percentage points (from 4.6% to 8.8%), coinciding with a 46% decline in the S&P 500. During the current downtrend, the unemployment rate has risen 1.8 percentage points (from 4.7% to 6.5%). Perhaps a reasonable target (based on history) might be a 3-4 percentage point increase in the unemployment rate similar to that experienced in the 1970's. That would take us from the 4.7% trough to an 8-9 percent unemployment rate. Given the severity of the global financial crisis, is a 50% to 60% decline in the S&P 500 a reasonable target (given that the S&P 500 has already declined by 45%? A 57% decline from its peak would settle at a 61.8% (Fibonacci) retracement from the breakout following the 1970's bear market, and an S&P 500 closing price of 670.

In summary, taking lessons from the past, it is likely that a market bottom may arrive in Q2 to Q3 2009, and may take the S&P 500 another 15% to 20% lower than the lows made at the October bottom. The wildcards in this scenario are the differences in the global economy today versus the 1970's through 1990's. The increased

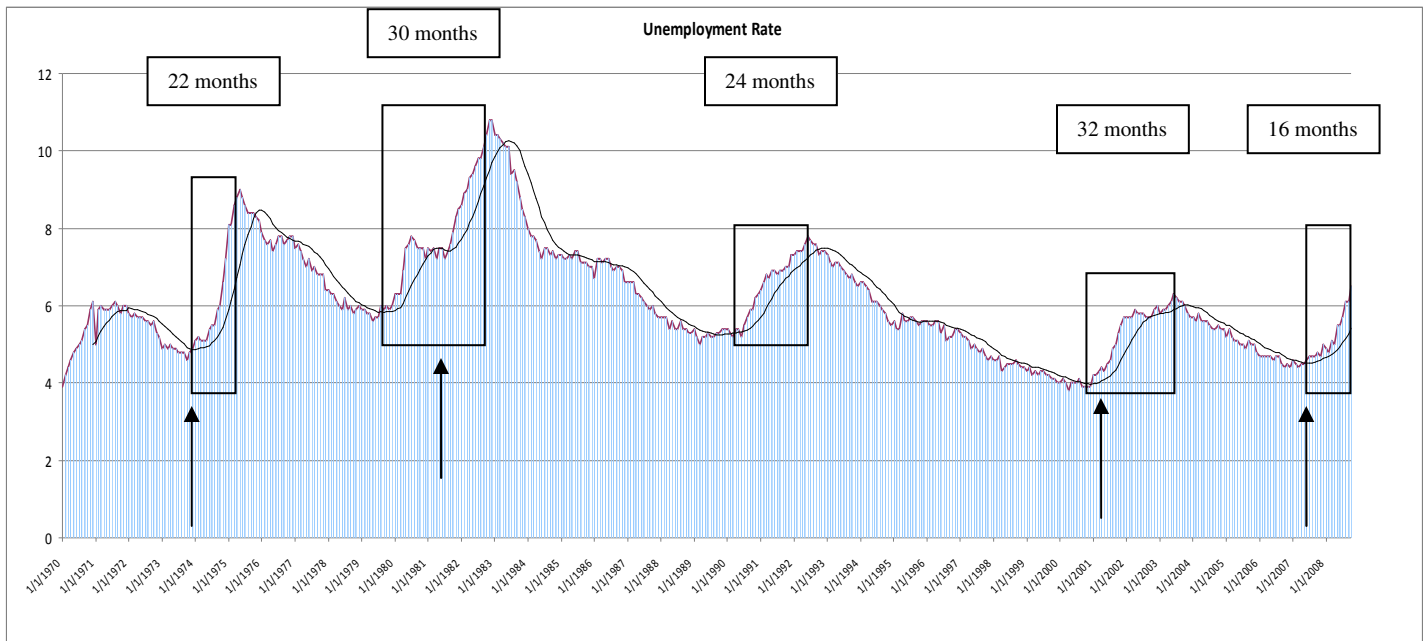
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inter-twinning of global economies, a vast increase in complex financial instruments, and the Internet economy (real-time, speedy movement of news and trading) may alter the historic lessons of the past 30-plus years.

Unemployment Rate



Note that the strongest patterns occurred in the 73-75, 80-82 and 01-03 timeframes. The smooth line is a 12-period (monthly) moving average of the respective data.

S&P 500

