Working At Employment

Certain dates and times are seared into the memory. Elections take place on the first Tuesday after the first Monday in November. The Supreme Court reconvenes on the first Monday in October. And at 7:30 AM on the first Friday of the month, the Bureau of Labor Statistics drops a bomb called the Employment Situation Report into the markets. As Carly Simon sang in her soppy 1977 track to "The Spy Who Loved Me," nobody does it better.

Beyond the fact this is the first report available for the preceding month, why the jobs report should be of such importance is unclear. First and foremost, no evidence whatsoever exists that the nation's economists can hit the broadside of a barn with their forecasts for this number. Consider the wide range of estimates against the initial estimate; with more than 20 years of data in the sample, the standard deviation of the economists' error is 119,007 jobs each month. The average monthly addition to nonfarm payrolls over this period was 139,417 jobs, meaning the standard deviation of estimate was 85.36%.



Not An Enviable Forecasting Record

In fairness, we are being a bit harsh here on the practitioners of the dismal science. First, the number released is a survey subject to revision; evidence exists that the economists do a far better job of forecasting the revised releases than the initial release. Of course, the initial headline number commands more attention. Second, the BLS uses seasonal adjustment methodologies and statistical inferences for the creation and destruction of business, the so-called birth-death estimates. Forecasting the impact of someone else's statistical adjustments is difficult. Finally, we really should compare the error term to the entire labor force, not to the monthly changes in nonfarm payrolls. If we use this measure, the average absolute error term drops to .07956% with a standard deviation of .06683%.

Two Surveys, Two Results

The BLS conducts two different employment surveys each month. The headline nonfarm payrolls number is generated from a mail survey of 400,000 business establishments. A separate phone survey of 60,000 households is conducted as well. The two surveys can differ markedly. How should they be reconciled?



Is The BLS The Bureau of Missing Persons?

An initial and naïve comparison of the two employment measures might conclude the household survey is systematically higher than its establishment counterpart, and that that the discrepancy between the two measures is fairly consistent. If, however, we display the establishment survey as a percentage of the household survey, a pattern emerges. The percentage increased and increased rapidly during times of economic boom such as the Korean War in the early 1950s, the Vietnam Was in the late 1960s, and the late 1990s technology bubble. Conversely, the percentage fell during periods of slow growth and recession, including the post-2000 period.

The macroeconomic logic behind this is straightforward. During periods of economic strength establishments are able to raise wages and bid workers away from self-employment or even unemployment. During periods of economic weakness, workers opt for self-employment. Interestingly enough, the secular trend over the past six decades, as marked by the channel lines, has been away from entrepreneurship and self-employment.

Is It Different This Time?

The present downturn in the establishment/household ratio is occurring in an environment with some major structural differences from the past. Businesses at all levels have grown more efficient at replacing labor with technology, and this immediately injects an element of bias into the establishment survey. The BLS has no formal restrictions on a firm's number of employees or for how long a business has been in operation. In practice, however, the 400,000-firm survey unsurprisingly samples easier to locate firms more than new firms. This may exclude new small businesses which are now capable of getting by with far fewer employees than might have been required a decade ago.

A second factor, made possible in part by technology and in larger measure by economic developments elsewhere, is the importation of labor. This can come either in the form of cheaper goods from, say, China, or the outsourcing of the position to, say, India.

A third factor, purely domestic in origin, and that is the incentive of firms to remain below certain thresholds for legal and regulatory reasons. Many workplace rules for health and safety or for the provision of benefits do not apply to small businesses as they do to large corporations.

A fourth factor, whose ultimate disposition will remain unknown for a long time, is the transformation of the workplace from the large corporations characteristic of industrial economies to entrepreneurship and selfemployment. Accompanying this devolution of work to smaller enterprises is the creation of very large merged corporations. Industries as disparate as integrated petroleum and banking have seen waves of mergers eliminate once giant integrated oil firms and money center banks from the landscape. Workers displaced thereby often have no choice other than to move their careers to firms too young and small to be counted in the establishment survey.

Impact On Financial Markets

None of the monthly economic reports can produce trading discontinuities - and that's the polite way of describing it - like the employment situation report. The presumption must be some combination of higher employment levels producing greater credit demands, higher inflation and a policy response from the Federal Reserve. In addition to the nonfarm payroll addition number, the one now underlying contracts on various online betting parlors, the monthly report includes data on unemployment, hours worked, employment costs, discouraged workers and other measures. Do any of these measures really predict the future direction of interest rates?

The impact of the unemployment rate on interest rates is, like so many other aspects related to monetary policy, long and variable. In the near-term, the relationship between unemployment, a lagging indicator of the economy, and constant maturity one-year notes appears random. If we lag the unemployment rate by two and one-half years, 30 months, we see a fairly tight correlation to one-year note yields. Restated, weak employment data today reflects previously weak economic conditions and will be followed by a stronger economy and higher interest rates two and one-half years from now. If you know of any traders who keep this relationship on the front of their minds you know some extraordinary individuals indeed.



What about changes in inflation, then? Some still cling to the hoary tradeoff posited by A.W. Phillips in 1958 of a tradeoff between inflation and unemployment. The Phillips Curve was adopted eagerly by politicians who feared rising unemployment more than rising inflation. In practice, however, the Phillips Curve has been observed only slightly more often than Sasquatch; the 1970s were characterized by a combination of high inflation and high unemployment, while the 1990s were characterized by falling inflation and unemployment. Any theory capable of missing entire decades of economic data is best consigned to the likes of the International Monetary Fund, which, come to think of it, ensconces the discredited notion in the advice peddled to various Third World deadbeats. In the U.S., changes in employment lead changes in inflation on the order of four years. Once again, the notion this should move markets in the short-term defies credulity.



Employment Leads Consumer Inflation... By Four Years

Real Is As Real Does

We could fill several articles with data debunking those who insist on trading each and every employment report. But where is the money in that? The simple fact is each employment report creates the distinct probability of vastly expanded trading range and trend reversals; this is the consequence of our surprise that economists once again got it wrong and that the Federal Reserve might try to combat statistical error with changes in monetary policy.