CBER-DETR Nevada Coincident and Leading Employment Indexes

Nevada Recession Rumbles On

The Nevada Coincident Employment Index measures the ups and downs of the Nevada economy using an index of employment variables. The Nevada Leading Employment Index also measures the ups and downs of the Nevada economy, providing a signal about the future direction of the coincident index. The coincident index provides the benchmark series that defines the employment cycle or reference cycle in Nevada. The leading index then tracks the economy relative to that reference cycle. A good leading index will provide signals about the future path of the reference cycle.

Figures 1 and 2 depict the coincident and leading indexes with data through August 2010. Figure 1 encompasses four recessions in employment, including the current recession. The peak of the last employment cycle in Nevada occurred in December 2006. Since then, the coincident index regressed steadily through October 2009. Previous reports raised the question as to whether we saw a bottom to the coincident index. The chart still identifies that bottom tentatively as October 2009. But since reaching its most recent high value in January 2010, the coincident index fell each month through April. May and June each rose ever so slightly. July and August each fell again by small amounts. Figure 2 shows the leading index and its movements relative to the recessions in the Nevada employment cycle captured by the coincident index. For the current employment recession, the leading index provided a clear signal by peaking in March 2006, nine months before the coincident index reached its peak. Based on current data, the leading indexed reached a trough in August 2009. After reaching its most recent high in January 2010, the leading index fell in six of the last seven months, tracing its way back to just below its August 2009 low in July and August 2010.

Although the National Bureau of Economic Research Business Cycle Dating Committee just called an end to the national recession in June 2009, the evidence that the current Nevada employment recession has ended gets shakier each month. Nevada’s economy remains the worst among the states. At best, the releases of the last six months show a pause in the recovery. Future data releases will provide further information that will allow us to identify the bottom or to continue to wait. Based on our seasonally adjusted data, household employment, nonfarm employment, and the unemployment rate (inverted) moved in a negative direction while the insured unemployment rate (inverted) moved in a positive direction with the August release. In July, the components of the leading index experienced the following changes -- commercial permits and the short-duration unemployment rate (inverted) moved in a positive direction. The remaining variables – initial claims for unemployment insurance (inverted), the real Moody’s Baa bond rate (inverted), housing permits, and construction employment – moved in a negative direction. Thus, the leading index fell in six of the last seven months. The last two months the leading indexed broke through its prior trough in August 2009.
1 Source: Center for Business and Economic research (CBER, 702-895-3191) in the College of Business at the University of Nevada, Las Vegas and the Department of Employment Training and Rehabilitation (DETR). Developed by Stephen M. Miller (Professor and Chair of Economics, 702-895-3969) and Mustafa Gunaydin (Graduate Student in Economics). DETR provided a grant to support Mr. Gunaydin’s research during the development of the indexes.

2 All series are initially not seasonally adjusted and then seasonally adjusted using Census X12. In some instances, our seasonally adjusted series differ from the seasonally adjusted data reported by the Bureau of Labor Statistics. The Nevada Coincident Employment Index includes four employment measures – household employment, nonfarm employment, the unemployment rate (inverted, since an upward movement in the jobless rate is a “negative”), and the insured unemployment rate (inverted). The Nevada Leading Employment Index includes six employment related measures – initial claims for unemployment insurance (inverted), the real Moody’s Baa bond rate (inverted), housing permits, commercial permits, construction employment, and the short-duration unemployment rate (inverted). While not employment variables, housing and commercial permits, as well as the Moody’s Baa bond rate, closely relate to construction activity and construction employment. All data are seasonally adjusted and come from DETR, CBER, and the Federal Reserve Bank of St. Louis FRED® data. The description of the construction method is posted at http://cber.unlv.edu/nvindices.pdf. Data availability restricts our coverage in the two indexes to monthly series beginning in January 1976. The data series for household employment, nonfarm employment, the unemployment rate, initial claims, and the real Moody’s Baa bond rate all begin in January 1976. Housing permits and the insured unemployment rate begins in January 1980 and March 1987, respectively. Commercial permits, construction employment, and the short-duration unemployment rate begin in January 1988, January 1990, and January 2001, respectively. Thus, the coincident index uses three series through March 1987, when we add the insured unemployment rate. The leading index begins with two series and adds housing permits in January 1980, commercial permits in January 1988, construction employment in January 1990, and finally, the short-duration unemployment rate in January 2001.