CBER-DETR Nevada Coincident and Leading Employment Indexes

The Nevada Employment Recession Continues: Will the Leading Index Bottom Soon?

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 October 2009. Figure 1 encompasses four recessions in employment, including the current recession. The peak of the last employment cycle in Nevada occurred in November 2006. Since then, the coincident index regressed steadily through October 2009, although the October number turned up slightly (see below). 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 May 2006, six months before the coincident index reached its peak.

In sum, this employment recession continues, but now begins to show some small signs of change. Based on seasonally adjusted data, the unemployment rate (inverted) and the insured unemployment rate (inverted) in the coincident index moved in a positive direction whereas household employment and nonfarm employment continued to move in a negative direction. Overall the coincident rose slightly in October. The decrease in the two unemployment rates, however, largely reflected a decrease in the labor force, as workers either gave up looking for work or moved out of state. Over the last five months, the leading index has bounced around first rising and then falling by small amounts, suggesting the possibility of a possible bottom. Of course, a bottoming and recovery in the leading index will signal a future bottoming and recovery in the coincident index. In October, the components of the leading index experienced the following changes -- initial claims for unemployment insurance (inverted), the short-duration unemployment rate (inverted), commercial permits, and the real Moody’s Baa bond rate (inverted) moved in a positive direction, whereas housing permits and construction employment moved in a negative direction. The leading index moved slightly higher in the last two months and exceeds its level in May 2009. But such upward movement remains small and it is too early to call a bottom in the leading index.
Figure 1:  CBER-DETR Nevada Coincident Employment Index

Figure 2:  CBER-DETR Nevada Leading Employment Index
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.

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.