CBER-DETR Nevada Coincident and Leading Employment Indexes

Sailing in the Doldrums

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 2011. Figure 1 encompasses four recessions in employment, including the most recent Great Recession. The peak of the last employment cycle in Nevada occurred in December 2006. The coincident index then regressed steadily through October 2009, where the coincident index appeared to reach a bottom. The coincident index, after rising in the first four months in 2011, fell in the last four. 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. After reaching an apparent bottom in May 2009, the leading index first rose and then fell again, reaching a slightly lower low in November 2010. The leading index began a series of starts and stops in January 2011 that cumulatively moved the leading index upward, where July and August saw slight downward ticks. We continue to show the coincident and leading indexes reached troughs in October and May 2009, respectively, ending the Great Recession.

The August release of seasonally adjusted data conveys a mixed story for the coincident index. Nonfarm employment and household employment moved in a positive direction and the unemployment rate (inverted) and the insured unemployment rate (inverted) moved in a negative direction. The same release also shows mixed evidence for the leading index. The real Moody’s Baa bond rate (inverted) and construction employment moved in a positive direction, whereas initial claims for unemployment insurance (inverted), housing permits, commercial permits, and the short-duration unemployment rate (inverted) moved in a negative direction.

Economic activity does not portend a breakout either in a positive or a negative direction. We continue to monitor events closely to provide an initial call of recovery or a double dip recession.
Figure 1: CBER-DETR Nevada Coincident Employment Index

Figure 2: CBER-DETR Nevada Leading Employment Index
Sources: 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.

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.