CBER-DETR Nevada Coincident and Leading Employment Indexes

Did the Nevada Employment Recession End?
The Indexes Signal Caution in Declaring the Recession Over

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 March 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. 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 its trough in May 2009. The leading index also showed decreases in February and March of 2010 after reaching its high value in January.

In sum, this employment recession may still have ended. The releases of the last three months show a pause in the recovery. The coincident index fell ever so slightly in February and March 2010. The leading index fell in these two months, but rose by a small amount in March. 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, the unemployment rate (inverted), the household employment, and nonfarm employment moved in a negative direction with the March release. The other component -- insured unemployment rate (inverted) -- moved in a positive direction. Even though the coincident index fell the last two months, it still remains significantly above its current bottom in October 2009. In March, the components of the leading index experienced the following changes -- initial claims for unemployment insurance (inverted), housing permits, the real Moody’s Baa bond rate (inverted), and the short-duration unemployment rate (inverted) moved in a positive direction. The remaining variables -- commercial permits and construction employment -- moved in a negative direction. Thus, the leading index rose between March and April 2010. Overall, the leading indexed moved slightly higher in five of the last seven months and exceeds its current bottom in May 2009.
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.

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.