CBER-DETR Nevada Coincident and Leading Employment Indexes[1]

Coincident and Leading Indexes Both Declined Last Month

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.[2]

Figures 1 and 2 depict the coincident and leading indexes with data through August 2015. 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 it bottomed out. 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 January 2006, eleven months before the coincident index reached its peak, and reached a bottom in May 2009, five months before the coincident index reached its bottom.

The August release conveys a positive story for the coincident index and a mixed story for the leading index on a year-over-year basis. For the coincident index, the unemployment rate (inverted), household employment, nonfarm employment, and the insured unemployment rate (inverted) all moved in a positive direction. For the leading index, initial claims for unemployment insurance (inverted), the short-duration unemployment rate (inverted),

Figure 1. CBER-DETR Nevada Coincident Employment Index

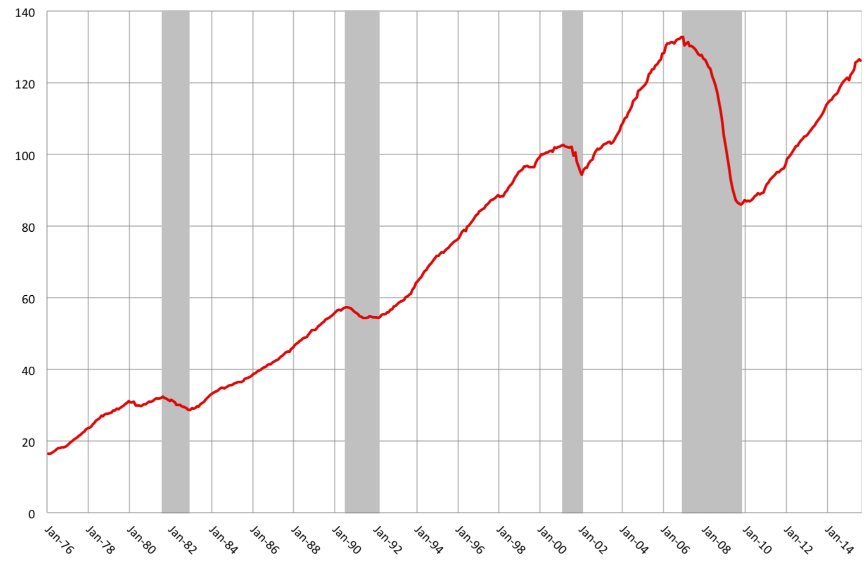
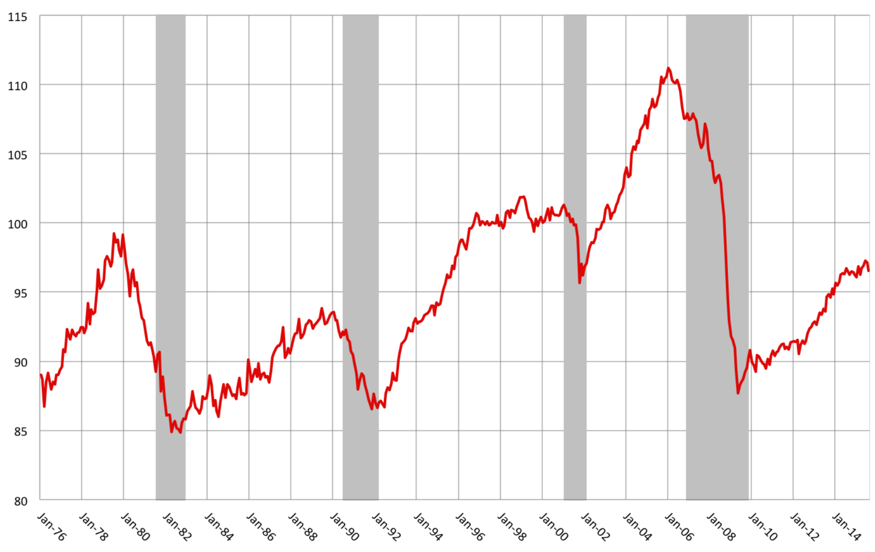


Figure 2. CBER-DETR Nevada Leading Employment Index



and construction employment moved in a positive direction, while the real Moody's Baa bond rate (inverted), housing permits, and commercial permits moved in a negative direction.

On a month-over-month basis, the coincident and leading indexes both tell a largely negative story. That is, for the coincident index, nonfarm employment, the insured unemployment rate (inverted), household employment, and the unemployment rate (inverted) moved in a negative direction. For the leading index, initial claims for unemployment insurance (inverted), the short-duration unemployment rate (inverted), the real Moody's Baa bond rate (inverted), housing permits, and construction employment moved in a negative direction, while commercial permits moved in a positive direction.

Overall, the coincident and leading indexes rose on a year-over-year basis, although the leading index barely exceeds its August 2014 value and falls just below its July 2014 value. See Figures 1 and 2. The coincident index has recovered 86 percent of its loss from its prior peak, whereas the leading index has recovered 38 percent of its loss.

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[1] Source: Center for Business and Economic Research ([CBER], 702-895-3191) in the Lee Business School at the University of Nevada, Las Vegas and the Department of Employment Training and Rehabilitation (DETR). Developed by Stephen M. Miller (director of CBER and professor of economics, 702-895-3969) and Mustafa Gunaydin (former graduate student in economics). DETR provided a former 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 begin 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.

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