



## Stability for Composite Index in First Quarter 2016

Little overall change was found for the Composite Index of Business and Economic Indicators of the Peoria-Pekin Metropolitan Statistical Area (MSA; Peoria, Tazewell, Woodford, Stark and Marshall counties) during the first quarter, with declines in some areas offsetting increases in others.

The Composite Index for the Peoria-Pekin MSA reflects business activity on a seasonally adjusted basis, with an Index score of 100 corresponding to local business conditions in the first quarter of 2000.

The Center for Business and Economic Research (CBER) is part of the Foster College of Business of Bradley University, and reviews over 30 diverse business indicators in its quarterly assessments.

The Peoria *Journal Star* funds maintenance of this business indicator database. A detailed analysis of these data appears below. Data reported are adjusted for normal seasonal variation, unless specified otherwise.

## Background

Business indicator data reported are adjusted for normal seasonal variation, except where indicated otherwise.

The CBER relies on SPSS for seasonal adjustment. The seasonal adjustment procedure removes the impact of seasonal components, i.e., the predictable seasonal variations of the data, so that any underlying trend in the data series can be discerned.

The "Composite Peoria-Pekin MSA Index" consists of the average of 14 key standardized, seasonally adjusted economic indicators. Indicators are standardized using a z transformation. A value of 100 corresponds to the Index value in the first quarter of 2000.

The "Single Family Building Permits" Index includes activity authorized by local building permits issued by the City of Peoria, Marshall County, Peoria County, Stark County, Tazewell County and Woodford County. The building permit activity authorized by these six governments in 2000 reflected over 80% of the nearly 1000 single family building permits issued by all governments in the five county MSA during the base year of 2000.

The "Job Opening Index" reflects an a weighted average of new help wanted postings for the Peoria MSA, with an Index value of 100 corresponding to the average quarter's five-county help wanted postings in 2012.

The "New Unemployment Claims Index" refers to the seasonally adjusted number of new weekly unemployment claims in the five-county Peoria-Pekin MSA, with an Index value of 100 reflecting the average weekly number of new unemployment claims in 2000.

The CBER uses a regression model to estimate the most recent quarter's taxable retail sales. The Inflation Adjusted Retail Sales Index reflects estimated taxable retail spending in the Peoria-Pekin MSA, adjusted for inflation and for normal seasonal variation in retail sales. A score of 100 represents the inflation adjusted, seasonally adjusted retail sales during the first quarter of 2000.

The CBER uses a regression model to estimate the number of jobs in area health care.

The CBER's "Hospital Revenue Index" reflects estimated total area hospital revenues.

The five-county seasonally adjusted Index of available homes for sale is computed relative to the score of 100 in the base year of 2000. The CBER estimate of the seasonally adjusted Index of Price of Homes Sold is computed relative to a score of 100 in the base year of 2000.

US government statistics compiled with seasonal adjustment include Illinois and US unemployment rates, the average number of hours worked/week by production and non-supervisory workers, average number of hours of overtime worked/week in durable goods manufacturing, the Midwest Urban Consumer Price Index (CPI; computed monthly for the Midwest region by the Bureau of Labor Statistics), the Midwest quit rate, Value of U.S. Dollar Index," and the Gross Domestic Product.

The Quit Rate is the number of quits during the month, divided by the number of employees who worked at that time.