IOWA Department of REVENUE

Iowa Leading Indicators Index June 2009 Report

Tax Research and Program Analysis Section

The Iowa Leading Indicators Index (ILII) fell to 97.8 (100=1999) in June 2009 from 98.2 in May. The Iowa non-farm employment coincident index fell by -0.24 percent for the month, the eighth consecutive monthly decrease.

The ILII's value decreased 0.4 percent in June after decreasing 0.7 percent in May, 1.0 percent in April, and 1.1 percent in March. June's drop, the smallest since October 2008, continued the fifteen month streak of declines since reaching a peak of 108.4 in March 2008. During the six-month span through June, the ILII dropped 5.2 percent (a -10.4 percent annual rate). The six-month diffusion index (value of 12.5) reflects an increase of 0.5 percent or greater in the yield spread over the last half year, while the other seven components experienced a 0.5 percent or greater decrease.

In June, three of the eight Iowa Leading Indicators components increased. The positive contributors were the yield spread, the new orders index, and new residential building permits. Negative contributors were the agricultural futures price index, diesel fuel consumption, the Iowa stock market index, unemployment insurance claims (inverted), and average weekly manufacturing hours.

Figure 1. Iowa Leading Indicators Index and Iowa Non-Farm Employment Coincident Index: January 1999-June 2009

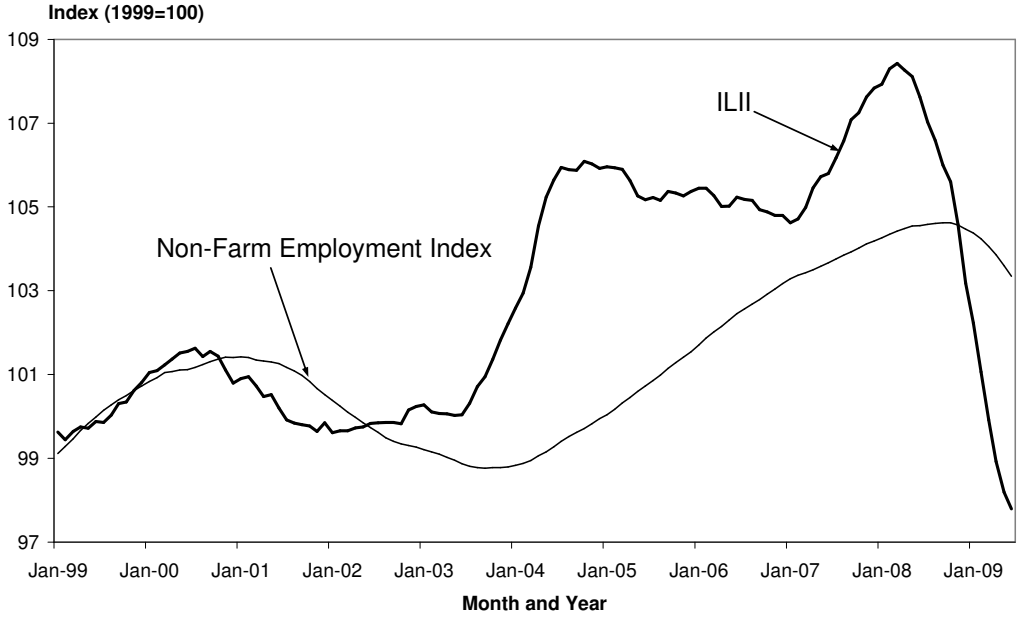

Table 1. Iowa Leading Indicators Index: Six Month Overview

Monthly Values	2009 January	February	March	April	May	June
ILII	102.2	101.1	99.9	98.9	98.2	97.8
Percentage Change[a]	-0.9%	-1.1%	-1.1%	-1.0%	-0.7%	-0.4%
Diffusion Index[b]	18.8	12.5	6.3	12.5	12.5	37.5

Six-Month Values	July to January	Aug to February	Sept to March	Oct to April	Nov to May	Dec to June
ILII						
Percentage Change	-4.5%	-5.2%	-5.7%	-6.3%	-6.1%	-5.2%
Annualized Percentage Change	-9.0%	-10.4%	-11.5%	-12.6%	-12.2%	-10.4%
Diffusion Index	18.8	12.5	12.5	0.0	0.0	12.5

Source: Tax Research and Program Analysis Section, Iowa Department of Revenue, produced July 28, 2009.
a. Percentage changes in the ILII do not always equal changes in the level of the ILII due to rounding.
b. A diffusion index measures the proportion of components that are rising based on the actual changes (not the standardized contributions to the ILII). Components experiencing increases greater than 0.05 percent are assigned a value of 1.0, components that experience changes less than an absolute value of 0.05 percent are assigned a value of 0.5, and components experiencing decreases greater than 0.05 percent are assigned a value of 0.0.

Table 2. Iowa Leading Indicators Index Components: Six Month Overview

Component Series Monthly Values[a]		2009 January	February	March	April	May	June
AFPI[b]	↓[c]						
Corn (cents per bushel)		533.1	519.9	505.3	487.8	472.7	448.0
Hog Profits (cents per pound)		12.7	12.8	13.3	13.1	11.8	10.7
Soybeans (cents per bushel)		1219.1	1179.4	1140.0	1113.7	1093.3	1055.7
Cattle Profits (cents per pound)		-8.5	-9.2	-9.5	-9.2	-9.2	-9.4
Iowa Stock Market Index (10=1984-86)	↓	57.35	55.00	52.59	50.58	49.36	48.28
Yield Spread (10-year less 3-month)	↑	2.39	2.57	2.60	2.77	3.11	3.54
Building Permits	↑	611	603	582	558	539	545
Average Weekly Unemployment Claims[d]	↓	5,385	5,789	6,273	6,648	6,964	7,114
Average Weekly Manufacturing Hours	↓	39.5	39.2	39.0	38.7	38.5	38.5
New Orders Index (percent)	↑	39.1	37.4	35.2	33.3	32.9	34.6
Diesel Fuel Consumption (mil gallons)	↓	55.25	54.50	53.94	53.65	53.24	52.69

Source: Tax Research and Program Analysis Section, Iowa Department of Revenue, produced July 28, 2009.
a. For all component series except for the yield spread (the only national series) the values represent 12-month backward moving averages.
b. The agricultural futures price index is computed as the sum of the standardized symmetric percent changes in the four series, each weighted by the commodity's annual share of Iowa cash farm income (updated August 15, 2008).
c. Arrows indicate the direction of the series' contribution to the ILII for the latest month.
d. Changes in unemployment claims are inverted when added to the ILII, thus a negative change in the series contributes positively to the index.

ILII Components

- **Yield spread:** Difference between the yield on 10-year Treasury bonds and 3-month Treasury notes. During June, the yield spread increased as the long-term rate jumped 43 basis points while the short-term rate remained flat. This component contributed 0.1 to the ILII.

- **New orders index:** Diffusion index measuring the share of purchasing managers in Iowa reporting increases in orders received for manufacturing output. Changes are calculated based on a 12-month moving average. In June 2008, the new orders index dropped to 35.7 as a result of the floods across the state. In June 2009, the index rose to 55.9, contributing a positive 0.09 to the ILII, the first positive contribution from this component since December 2007. However, an estimated two-thirds of that positive contribution can be attributed to the negative flood impacts experienced last year.

- **Building permits:** Number of total permits issued in Iowa for the construction of residential housing units. Changes are calculated based on a 12-month moving average. During June 2009 this component contributed 0.03 to the ILII value, the first positive contribution since October 2008. June permits were 9.9 percent higher than June 2008 permits, pushing the 12-month moving average up by 1.1 percent. June 2009 permits remained 47.9 percent below the monthly historical average, based on reports from 1998 through 2008.

- **Average weekly manufacturing hours:** Weekly average of hours worked in the manufacturing sector in Iowa. Changes are calculated based on a 12-month moving average. During June 2009 this component contributed -0.06 to the ILII value as June hours were 2.2 percent below the June 2008 report, nudging the 12-month moving average down by 0.2 percent.

- **Average weekly unemployment claims:** Weekly average of initial claims for unemployment insurance in Iowa. Changes are calculated based on a 12-month moving average and are inverted when added to the ILII. During June 2009 this component contributed -0.07 to the ILII value with unemployment claims 29.1 percent above June 2008 claims. In June 2008, unemployment claims rose 100 percent over the previous year, with at least one-quarter of the increase reflecting flood impacts. However, 2008 did not see a jump in claims during the week of the 4th of July, while this year temporary holiday layoffs pushed weekly claims in the last week of June to a level not seen since the week after Christmas 2008.

- **Iowa stock market index:** Capitalization-weighted index of 35 Iowa-based or Iowa-concentrated publicly-traded companies. Changes are calculated based on a 12-month moving average. During June, 20 of the 35 companies gained value including 6 of 15 financial-sector companies. The index contributed -0.13 to the ILII value.

- **Diesel fuel consumption:** Number of taxable gallons of diesel fuel sold in Iowa. Changes are calculated based on a 12-month moving average. During June 2009 this component's contribution to the ILII value was -0.18 as diesel fuel consumption for the month decreased 11.6 percent relative to the prior year.

- **Agricultural futures price index:** Composite measure of cattle, hogs, corn and soybeans futures prices weighted by the respective share of annual Iowa cash farm income. Changes are calculated based on a 12-month moving average of the futures price series, where the cattle and hogs series also incorporate estimates of break-even costs. During June, this component contributed -0.19 to the ILII value as the 12-month moving average of corn and soybean futures prices and expected cattle and hog profits all dropped.

Table 3. ILII Components and Standardization Factors for FY 2009

Iowa Leading Indicator Components	Standardization Factor
Agricultural Futures Price Index	0.117
Iowa Stock Market Index	0.060
Yield Spread	0.239
Building Permits	0.028
Unemployment Claims	0.032
Average Weekly Hours	0.300
New Orders Index	0.055
Diesel Fuel Consumption	0.168

Source: Tax Research and Program Analysis Section, Iowa Department of Revenue, produced August 15, 2008.
The standardization factors are the inverse of the standard deviation of the month-to-month changes in each component over the January 1999 to June 2008 period. These factors equalize the volatility of the contribution from each component and are normalized to one. The month-to-month changes are based on 12-month moving averages for all components except the yield spread, which is the only national series. The yield spread and new orders index changes are simple arithmetic changes; month-to-month changes for the rest of the components are computed as symmetric percentage changes. The factors are updated annually during the summer.

Comments

The Iowa Leading Indicators Index is designed to forecast the likely future direction of economic activity in the State of Iowa. The techniques used to build the ILII follow those used by The Conference Board to construct the national leading indicators index. A movement in the ILII for only one month does not produce a clear signal, rather it is necessary to consider the direction of the index over several consecutive months. The Conference Board considers a contraction signal in the national leading indicators index reliable when two conditions are met: 1. the index declines by at least two percent over a six month period (using an annual rate); and, 2. a majority of the individual components also decline over those six months (six-month diffusion index less than 50.0).

The Iowa Non-Farm Employment Coincident Index measures the change in non-farm employment of all workers in the State of Iowa. Changes are based on a 12-month moving average of employment and are computed as symmetric percentage changes. The index is designed to represent the current state of economic activity in Iowa.

The Employment Index and the ILII are constructed to have a value of 100 in the year 1999.