

ERIE is a research center of the Black School of Business at Penn State Behrend



Autumn Leaves
May Soon Begin to
Fall, But ELI Rises As
It Celebrates Its
6<sup>th</sup> Birthday

U.S. Monetary Policy, the Stock Market, Building Permits, and Freight Shipments All Contributed to Giving ELI a Boost



# Despite the Improvement in ELI, Manufacturing Employment Continued to Fall, Though at a Slower Pace

The Erie Leading Index (ELI) has recently taken a dramatic turn for the better. ELI registered a slight gain in every month of the 2nd quarter and rose by 0.6% overall between March and June. While modest, this increase is a significant improvement compared to the 1.1% tumble that ELI took in the previous quarter. This is a much welcome, albeit slight, increase in the index and represents a timely birthday present for ELI, which turns six years old this quarter!

The latest statistics from the Pennsylvania Department of Labor and Industry indicate that the total number of nonfarm jobs in Erie stood at 130,000 on a seasonally adjusted basis in August, up 500 from July.

However, manufacturing jobs continued to shrink in the 2nd quarter, falling by 1.4% (300 jobs) on a seasonally adjusted basis between March and June. While job growth would have been much preferred over job contraction, this represents a tapering off in the rate of

manufacturing job losses in the Erie economy. In the first three months of the year alone, jobs in the local manufacturing sector had fallen by a much larger 4.2% (900 jobs), causing the local unemployment rate to rise to 6.8% in April. But it appears that the bulk of the layoffs announced late last year by several local companies including GE Transportation and LORD Corporation are now close to being fully implemented.

Assuming no other major job cuts are looming and the positive trends in the national economy (described in the next section) continue unabated, ELI should remain steady and perhaps even continue to increase, even if modestly, in the coming months.

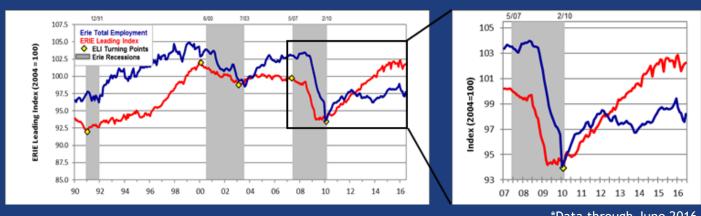
Since ELI signals turning points in the Erie economy, its continued upward trajectory would be welcome news because it would suggest that we are not headed for a recession in the near term.

Another bit of good news is that the recent manufacturing job losses

have been somewhat offset by job gains during the 2nd quarter in other sectors of the local economy, including mining, logging, and construction; retail trade; financial activities; professional and business services; and leisure and hospitality. These trends reflect Erie's gradual but continued transition toward being more of a service-providing economy. In August, service-providing sectors accounted for 80.4% of total nonfarm jobs in Erie, up from 79.3% a year earlier.

Despite the job gains in those other sectors, however, the total number of nonfarm jobs in Erie as of August was still 0.5% (600 jobs) lower on a seasonally adjusted basis compared to a year ago.

And despite ELI's recovery, the local labor market remains weak. Erie's seasonally adjusted unemployment rate rose to 6.9% in August, up from 6.7% in July. This was higher than the August unemployment rate for Pennsylvania (5.7%) and the U.S. as a whole (4.9%).



# **Components of ELI**

Variable	March	April	May	June	Mar-June	% Change*	Weights
ERIE Leading Index	101.10	101.45	101.68	101.73	0.63	0.62	1.000
U.S. Interest Rate Spread (%)	1.5	1.4	1.4	1.3	-0.27	-17.65	0.331
U.S. Index of Coincident Indicators (2004=100)	113.2	113.4	113.3	113.5	0.30	0.27	0.247
U.S. Real Money Supply (M2) (bill of chained 2009 \$)	11,430.8	11,467.4	11,519.7	11,577.3	146.50	1.28	0.149
PA Avg Weekly Hours in Manufacturing (hours)	41.0	41.2	41.2	41.1	0.02	0.04	0.083
Erie Manufacturing Employment (thou of jobs)	20.8	20.6	20.6	20.5	-0.30	-1.44	0.093
U.S. TS Freight Index (2000=100)	119.7	121.5	121.6	122.3	2.60	2.17	0.056
S&P 500 Stock Index (1941-43=10)	2,022.0	2,075.5	2,065.6	2,083.9	61.94	3.06	0.024
U.S. Building Permits (thou of units)	1,077	1,130	1,136	1,153	76.00	7.06	0.017

<sup>\*</sup>Symmetric % change, using the average value of the series in the last quarter as the base. \*Changes may differ from hand calculations due to rounding.

Though autumn leaves will soon turn red, six out of the eight ELI components are staying green. The positive changes in these six components helped boost ELI by 0.6% from March to June. Hopefully, like the harvest moon, ELI will continue to rise and remain bright through the fall and beyond.

Other than the 1.4% drop in Erie
Manufacturing Employment, the only
other component of ELI to decrease
during the 2nd quarter was the U.S.
Interest Rate Spread, which measures the
difference between the 10-year Treasury
bond yield and the short-term Federal
Funds rate. Continuing a trend that has
occurred for the past two quarters, the
interest rate spread shrank by another
17.7% in the 2nd quarter. This is a
concern because past trends suggest
that, when the interest rate spread
becomes negative, it may indicate an
impending recession.

Offsetting the negative movements in these two ELI components were several positive developments in other ELI

components that reflect improvements in the U.S. national economy. All of the following developments contributed to lifting ELI in the 2nd quarter:

The number of U.S. Building Permits increased by 7.1%, partially reversing the 10.3% decline in the 1st quarter.

The stock market seems to have recovered somewhat after hitting a rough patch earlier in the year, with the S&P 500 Stock Index bouncing back by almost 62 points (3.1%) between March and June after falling by 1.6% in the 1st quarter.

After declining by 1.2% in the 1st quarter, the U.S. Transportation Services Freight Index increased by 2.2%.

In addition to these positive national trends, there was a modest (0.04%) increase in Pennsylvania Average Weekly Hours in Manufacturing, which gave a further boost to ELI.

Complementing these positive developments was a U.S. monetary

policy that continued to be modestly expansionary. After rising by almost 2% in the 1st quarter, the U.S. Real Money Supply increased by 1.3% in the 2nd quarter. Also, amid public discussion and speculation regarding changes in its official monetary policy stance, the Fed has (including at the most recent September meeting of its Federal Open Market Committee) decided to keep its benchmark federal funds interest rate unchanged. While acknowledging that the national economy has improved, the Fed expressed a desire to see continued progress and noted that inflation is below its target of 2%.

To the extent that this accommodative monetary policy stance will continue to strengthen the overall U.S. economy, and since the U.S. economy tends to lead the Erie economy, this may contribute to the upward momentum of ELI and provide a boost to the Erie economy.

6 out of the 8
ELI components increased during the 2nd quarter.

# **Trends and Implications for Different Sectors of the Erie Economy**

# **Goods-Producing Sectors**

## Mining, Logging, and Construction:

Due to its seasonal nature, employment in this sector fell between November and March, but has increased to 4,700 jobs in August. This represents an increase of 2.2% (100 jobs) compared to June. With its distinctive seasonal pattern, however, we can expect employment to fall once again when the harsh Erie winter rolls around.

#### **Manufacturing:**

The Erie economy continues to shed manufacturing jobs. Employment in this sector fell by 8.0% (1,800 jobs) year-on-year in August, with 200 jobs lost between June and July. Erie manufacturing employment is one component of ELI, and given its many linkages to other sectors, these job losses are expected to have a negative ripple effect on the local economy.

#### **Plastics & Rubber Products Mfg:**

After having risen in comparison to 2013 and 2014, employment in this sector has remained fairly stable since then. The number of jobs hovered at 4,300 from January to April of this year, and then increased by 2.3% (100 jobs) in May. Employment has remained at 4,400 between May and August, the same level as in July 2015.

# **Private Service-Providing Sectors**

#### Wholesale Trade:

Much like the Plastics & Rubber Products Manufacturing sector, the Wholesale Trade sector has also experienced little change in employment. Except for a slight dip down to 3,800 jobs in February, the number of jobs in this sector has held steady at 3,900 since January of this year, the same level as in July 2015. But similar to the Retail Trade sector, this sector may eventually also be affected by the recent manufacturing job losses.

#### Information:

Employment in this sector, which includes newspaper publishing as well as radio and television broadcasting, remained at 1,200 throughout 2015, but dropped by 8.3% (100 jobs) in December and has continued to hover at 1,100 in 2016. Given the changes in technology that influence how data and information are gathered, processed, and disseminated, this sector is likely to become more volatile.

### **Education and Health Services:**

Employment in this sector grew by 4.7% (1,300 jobs) between January and April, although this was partially offset by a decline of 0.7% (200 jobs) between June and July. With 28,700 jobs as of August, this is the largest sector (by employment) in the local economy, so net job growth will add to this sector's influence in the region. This sector saw the largest job gain (5.5% or 1,500 jobs) year-on-year in August compared to other sectors.

#### **Retail Trade:**

Despite an increase of 3.6% (500 jobs) between March and July, this sector experienced a year-on-year decline in employment by 3.9% (600 jobs) in the month of August. In light of the recent manufacturing job losses and corresponding reductions in household disposable income, the Retail Trade sector may continue to be challenged by decreases in consumer spending, although the holiday shopping season may provide a respite.

#### **Financial Activities:**

After remaining steady with an employment level that hovered at 6,200 beginning in January of this year, this sector has seen a slight increase in employment by 1.6% (100 jobs) between May and June, and another increase of 1.6% (100 jobs) between June and July, remaining at 6,400 in August. Year-on-year in August, employment in this sector grew by 1.6% (100 jobs).

### **Leisure and Hospitality:**

As expected, employment in this sector increased along with nicer weather during the summer tourist season, reaching 16,000 jobs by July. Employment increased by 3.9% (600 jobs) between May and July, and by 4.6% (700 jobs) year-on-year in July. However, employment fell by 0.6% (100 jobs) between July and August and may decline further as the summer season ends.

#### **Transportation, Warehousing, Utilities:**

Employment in this sector remained relatively stable throughout 2015. Even in 2016, employment remained steady at 3,300 jobs from January to May. However, the number of jobs in this sector declined by 9.1% (300 jobs) between May and August. And year-on-year in August, employment in this sector fell by 3.2% (100 jobs), and currently stands at 3,000.

#### **Professional and Business Services:**

This sector continues to experience employment volatility. After falling below 10,000 jobs at the beginning of the year, employment in this sector rebounded to remain above that level since May and stands at 10,100 as of August. However, this represents a slight decline in employment of 1.0% (100 jobs) compared to June, as well as a 4.7% decline (500 jobs) compared to August 2015.

#### **Other Services:**

Employment in the Other Services sector remained relatively stable, staying between 6,000 and 6,200 jobs throughout 2015. This relative stability continued into 2016, with an employment level of 6,100 in July, which is the same number of jobs in the sector a year earlier. However, employment in this sector has fallen by 1.6% (100 jobs) between July and August.

#### **Government Sector**

As of August 2016, total Erie employment in the government sector stood at 14,200. This was down by 5.3% (800 jobs) compared to the month of June. All of the recent jobs lost between June and August were from the local government (1,000 jobs, or 10.1% of local government employment). As is normal during these same months each year, many of these jobs are related to dismissal for summer break at area public schools. During the same period, employment with the state government increased by 5.6% (200 jobs) while federal government employment remained the same at 1,500. Year-on year in August, there was no net change in total employment in the government sector in Erie.



Black School of Business

Economic Research Institute of Erie Black School of Business Penn State Erie, The Behrend College

5101 Jordan Road • Erie, PA 16563 814-898-7150 • ERIEdata.org

Director: Dr. Kenneth Louie; klouie@psu.edu Graduate Research Assistant: Dylan Rossi; ddr5115@psu.edu



