



**Economic Research
Institute of Erie**

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Black School of Business at Penn State Behrend

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ELI Erie
Leading
Index

4TH QUARTER 2016 REPORT

**We've Compiled the ELI,
Checked It Twice . . .
It Hasn't Been Naughty.
In Fact, It's a Little Bit Nice!**

**ELI Spreads Some Holiday
Cheer by Increasing Modestly
for the Second Straight
Quarter; But the Local Labor
Market Remains Weak**



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ELI Increases Modestly for the Second Straight Quarter Amid Continued Weakness in the Local Labor Market

The Erie Leading Index (ELI) has increased for the second consecutive quarter. Although it inched slightly downward after peaking at 103.05 in July, ELI still managed to rise by a modest 0.3% in the 3rd quarter after having risen by 0.6% in the 2nd quarter. Let's hope this trend continues, and with even greater upward momentum, for many more quarters to come.

Although we would like to see a more robust advance by ELI, the recent gentle increases in the index are still to be celebrated, especially in light of the rather large number of manufacturing job losses that the Erie economy suffered at the beginning of the year. The resilience of ELI, which signals turning points in the local economy, in some sense reflects Erie's resilience in adapting to ongoing economic challenges posed by demographic, global, and technological changes. ELI's stability suggests that Erie is not likely to experience a recession in the near term.

These slight improvements in ELI over the past two quarters are a nice complement to some other much

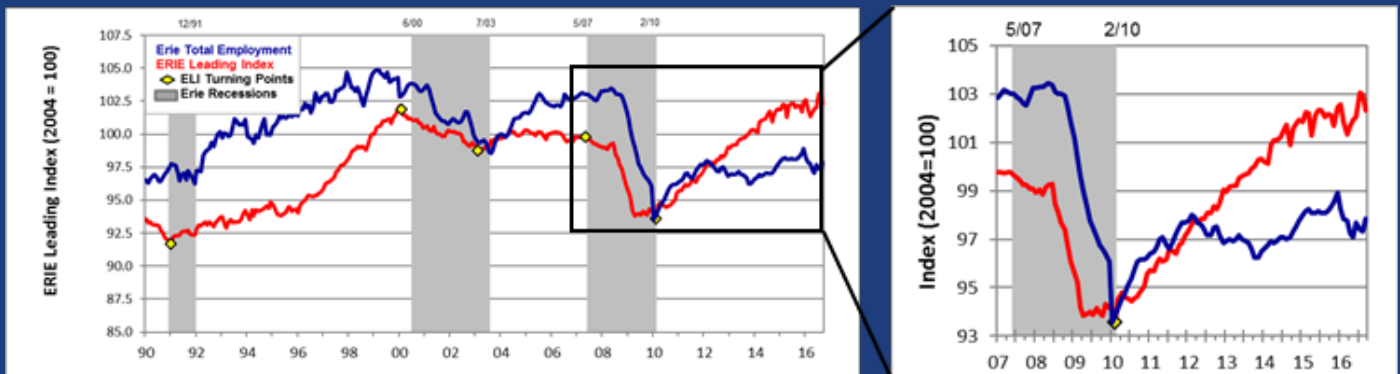
welcomed good news delivered recently by the U.S. Bureau of Economic Analysis: Per capita personal income in Erie County grew by 4.1% in 2015, faster than the 3.7% increase for Pennsylvania as a whole [although it is still lower in Erie County (\$40,425) than in the Commonwealth (\$49,745)]. Since inflation has been relatively tame in recent years (the Consumer Price Index for All Urban Consumers increased by only 1.4% between January 2015 and January 2016), this means that last year, Erie County residents, on average, enjoyed an increase in real purchasing power (before taxes).

Unfortunately, this surge in local average income is likely to be attenuated going forward, given the large-scale manufacturing job losses that occurred at the end of 2015 and in early 2016, which have caused a spike in the local unemployment rate.

In fact, ELI's rather lethargic upward climb in 2016 is consistent with the ongoing weakness that we have been seeing in the local labor market after the recent bout of layoffs. According to the

latest statistics from the Pennsylvania Department of Labor and Industry, total nonfarm jobs in Erie stood at 129,600 on a seasonally adjusted basis in October, a decline of 0.8% (1,000 jobs) from a year earlier. Although some sectors (e.g., education and health services; leisure and hospitality; financial activities; and mining, logging and construction) did experience job gains year-on-year in October, these were not sufficient to offset fully the job losses in other sectors. Employment in the manufacturing sector alone declined by 8.6% (1,900 jobs) over the course of the year. Erie's seasonally adjusted unemployment rate rose to 7.1% in October, almost 2 percentage points higher than it was a year ago and higher than the rate in Pennsylvania (5.8%) and the U.S. as a whole (4.9%).

The potential silver lining is that the job losses in the local manufacturing sector appear to be tapering off, with the number of jobs holding steady at 20,300 between September and October. A continued improvement in local labor market conditions would be a timely gift for the region.



*Data through September 2016

Components of ELI

Variable	June	July	August	Sept.	June-Sept.	% Change*	Weights
ERIE Leading Index	102.03	103.05	102.97	102.31	0.28	0.28	1.000
U.S. Interest Rate Spread (%)	1.3	1.1	1.2	1.2	-0.03	-2.38	0.332
U.S. Index of Coincident Indicators (2004=100)	113.7	114.0	114.0	114.2	0.50	0.44	0.252
U.S. Real Money Supply (M2) (bill of chained 2009 \$)	11,569.7	11,631.4	11,710.7	11,752.3	182.60	1.58	0.149
PA Avg Weekly Hours in Manufacturing (hours)	41.1	41.3	41.2	41.4	0.37	0.90	0.084
Erie Manufacturing Employment (thou of jobs)	20.5	20.4	20.4	20.2	-0.27	-1.33	0.086
U.S. TS Freight Index (2000=100)	122.4	124.7	122.2	121.5	-0.90	-0.74	0.056
S&P 500 Stock Index (1941-43=10)	2,083.9	2,148.9	2,177.5	2,157.7	73.80	3.54	0.024
U.S. Building Permits (thou of units)	1,153	1,144	1,152	1,225	72.00	6.24	0.017

*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.

Five of the eight components that make up ELI increased between June and September, enabling the index to grow for two consecutive quarters, albeit by a modest 0.3%. If the national economy is spurred by strong consumer spending during the holidays, ELI may receive another boost during the final quarter.

The ELI component with the largest increase in the 3rd quarter was the number of U.S. Building Permits, up by 6.2%. While it was less than the 7.1% increase in the 2nd quarter, it is still an improvement over the 10.3% decline experienced in the 1st quarter.

Also helping to lift ELI in the 3rd quarter was the S&P 500 Stock Index, which rose by 3.5%. U.S. stock markets rallied in the weeks after the presidential election (with the Dow, Nasdaq, and S&P 500 all reaching record highs). If it continues, it could help sustain ELI's upward trajectory. So it will be key to see how the markets perform during the transition to President Trump.

U.S. monetary policy remained modestly expansionary in the 3rd quarter, helping ELI's rise. However, it is expected that the Fed will start to nudge up its benchmark federal funds interest rate this month, especially since the U.S. Commerce Department has reported that the U.S. economy grew at an annual rate of 3.2% in the 3rd quarter, the strongest rate in two years. To the extent that this gradual monetary tightening (intended to avoid an overheated economy with higher inflation) will dampen U.S. economic growth, and since the U.S. economy tends to lead the Erie economy, this could halt ELI's continued rise.

In addition to these national trends, there was a small (0.9%) increase in PA Average Weekly Hours in Manufacturing, which gave an additional boost to ELI. Three components of ELI pulled in the opposite direction during the 3rd quarter, preventing the index from rising even faster. As in several Christmases past, the U.S. Interest Rate Spread remains the Ebenezer Scrooge that has

slowed ELI's advance. This is the difference between the 10-year Treasury bond yield and the short term federal funds rate, and it shrank by another 2.4% in the 3rd quarter, following the 17.7% decline in the 2nd quarter. This was the 5th consecutive quarterly decline, so this is important to watch because past trends suggest that, when the interest rate spread becomes negative, it may be an indicator of an impending recession.

Along with Erie Manufacturing Employment, the U.S. Transportation Services Freight Index fell in the 3rd quarter, contributing to the restraint on ELI's growth. We're hoping that, as Santa delivers all those packages during the holiday season, the freight index will start to pick back up and help nudge ELI in the right direction.

Santa's Elves aren't the only ones working hard; PA average weekly hours in manufacturing have also edged upward!

Trends and Implications for Different Sectors of the Erie Economy

Goods-Producing Sectors

Mining, Logging, and Construction:

Given the seasonal nature of this sector and as we make our way into another Erie winter, employment has started dropping off and is likely to decrease until spring. As of October, this sector is down to 4,500 jobs. This is 200 jobs fewer than in August, though still 2.3% (100 jobs) more than a year ago.

Manufacturing:

This sector has had a very rough year. Employment fell by 8.6% (1,900 jobs) year-on-year in October. These job losses also have negative spillover effects on the rest of the local economy. A bit of welcome news is that the number of jobs remained stable at 20,300 between September and October.

Plastics & Rubber Products Mfg:

Employment in this sector continues to be somewhat stagnant, with no growth during the past year. The number of jobs remained steady at 4,400 in October, exactly the same level as a year ago. However, this sector continues to be an important part of the local economy.

Private Service-Providing Sectors

Wholesale Trade:

This sector has experienced relatively little change in employment. After a slight and temporary dip in February, the number of jobs in this sector held steady at 3,900 from March to September. However, employment in this sector fell by 2.5% (100 jobs) from September to October, and is now at the same level compared to a year ago. The holiday shopping season, however, may provide a little boost to this sector in the 4th quarter.

Information:

This sector, which includes newspaper publishing plus radio and television broadcasting, has remained remarkably stable in terms of the number of jobs. Throughout 2016, the number of jobs in this sector held steady at 1,100. It remains to be seen whether this sector will become more volatile, given the technological changes that affect how information is gathered, processed, and disseminated.

Education and Health Services:

After declining slightly by 0.7% (200 jobs) between June and July, employment in this sector grew by 1.7% (500 jobs) in the 3rd quarter, and by another 0.7% (200 jobs) between September and October. With 29,600 jobs as of October, this is both the largest sector (by employment) in the local economy and the sector that saw the largest job gain (3.1% or 900 jobs) year-on-year in October.

Retail Trade:

This sector has shown some recent growth, with the number of jobs rising by 200 in the 3rd quarter, and by another 200 between September and October. However, the current number of jobs (14,800) is still 2.6% (400 jobs) below where it was a year ago, probably due in part to the negative effects on household disposable income of the recent manufacturing job losses. But the holiday season is expected to give this sector a boost.

Financial Activities:

The number of jobs in this sector fell by 100 from August to September, but has stayed at 6,300 since. Compared to a year ago, employment in this sector rose by 1.6% (100 jobs). This sector may grow more as the country and region adapt to changes in government fiscal and regulatory policies by the new presidential administration that are likely to affect individual and corporate financial decisions.

Leisure and Hospitality:

With the end of the summer vacation season, the number of jobs in this sector has been decreasing from the peak level of 16,100 in July to 14,300 in October (an 11.2% decline). However, the current number of jobs is still 2.9% (400 jobs) higher compared to a year ago. With the continued development of the Bayfront and other initiatives to promote the region, this sector is likely to grow.

Transportation, Warehousing, Utilities:

This sector has also experienced some recent growth. The number of jobs increased, on net, by 100 in the 3rd quarter, and by another 100 between September and October. However, the current number of jobs (3,300) is still 2.9% (100 jobs) below where it was in October 2015. Like the Wholesale and Retail Trade sectors, however, the holiday shopping season may provide a boost.

Professional and Business Services:

This sector continues to be somewhat volatile. After falling below 10,000 jobs at the beginning of the year, employment in this sector has fluctuated and then rebounded back up in October to 10,300, which is still 2.8% (300 jobs) below the level from a year ago. Like the Financial Activities sector, this sector may also experience some growth due to changes in government fiscal and regulatory policies.

Other Services:

Employment in the Other Services sector has been relatively stable, hovering between 6,000 and 6,200 jobs throughout 2015. After falling by 100 between July and August this year, the number of jobs has again remained unchanged at 6,000, the same level where it was in October 2015.

Government Sector

As expected, starting in August, jobs in the state and local government sectors rose with the end of summer break at schools in the region. Between July and October, employment increased by 33.3% (1,200 jobs) in state government and by 17.2% (1,500 jobs) in local government, while jobs with the federal government remained unchanged. Remarkably, the level of employment at all three levels of government in the region remained unchanged compared to a year ago, with the number of federal government jobs at 1,500; state government jobs at 4,800; and local government jobs at 10,200.



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