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ERIE
Economic Research Institute of Erie

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

ELI Erie Leading Index

1ST QUARTER 2017 REPORT

Just in Time for Spring, ELI Sees Green.

Looking for Gold at the End of the Rainbow, ELI Increases for the Third Straight Quarter

ELI Continues Gradual Ascent for the Third Straight Quarter As the Region Adapts to Recent Job Losses

While this time of year usually brings warmth and good cheer with the arrival of spring and the wearin' of the green to commemorate St. Patrick, there is another reason to celebrate: The Erie Leading Index (ELI) has increased for the third consecutive quarter! Since our past research has shown that the direction of movement in ELI signals turning points in the local economy, the continued rise of the index suggests that a recession is not on the immediate horizon.

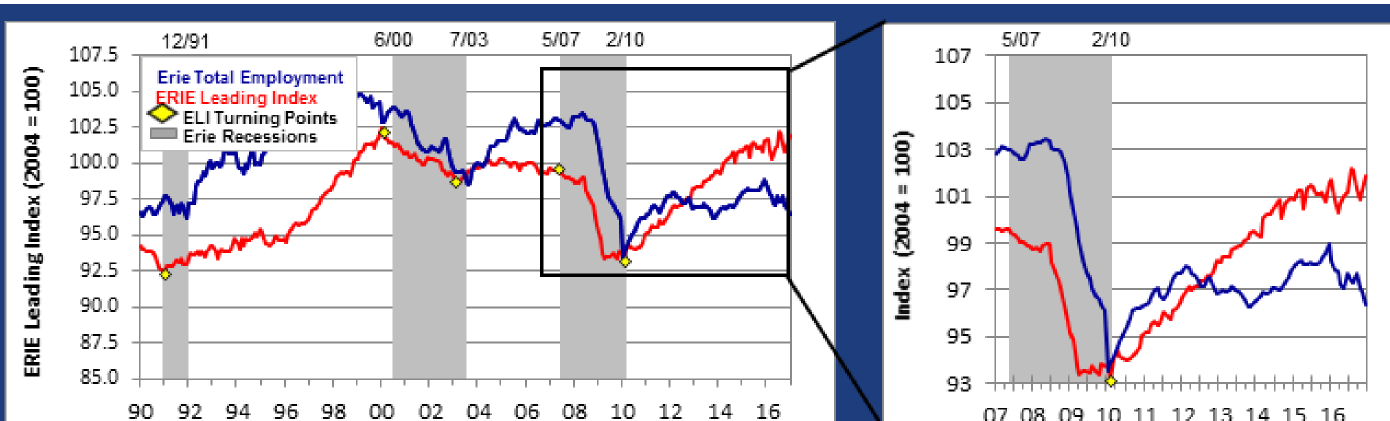
Though it was still quite modest, the 0.6% increase in ELI during the 4th quarter of 2016 was double the rate of increase in the previous quarter. Let's hope the luck of the Irish continues to provide momentum for ELI's ascent throughout 2017 and beyond.

The positive performance of ELI during the 4th quarter is consistent with the latest statistics released by the Pennsylvania Department of Labor and Industry, which indicate that total nonfarm employment in Erie County increased, on a seasonally adjusted basis, by 600 jobs to 128,300 from December to January. Although this is a very small percentage (0.5%) monthly increase, it is still much welcomed news in light of the region's manufacturing job losses during the early part of 2016 and the overall decline in total employment of 0.8% (1,000 jobs) year-on-year in January.

The continued, albeit very gradual, ascent of ELI reflects the Erie region's ongoing and modestly successful efforts thus far to adapt to significant economic and technological changes that have been occurring at the global, national, and local levels. Although the difficult process of adapting to these structural shifts can potentially help the local economy become stronger in the long run, unfortunately, it can generate substantial short-run challenges in the form of employment and income losses.

An example of this structural adjustment process in the local economy is the gradual contraction of the region's goods-producing sectors, which suffered an employment decline of 7.6% (1,600 jobs), all of them in manufacturing, year-on-year in January. In contrast, the region's private service-producing sectors saw employment gains, but only by 0.5% (400 jobs) during the same period. Within that sector, professional and business services experienced the strongest net job growth this past year, adding 300 jobs. This was followed by leisure and hospitality (200 jobs), financial activities (100 jobs), and education and health services (100 jobs). Given the asymmetry between the relatively large job losses in one part of the local economy and the relatively small job gains in the other, the local labor market remains weak in comparison to the state and national economies.

The latest statistics indicate that Erie's seasonally adjusted unemployment rate fell to 6.0% in January from 6.6% in December, but it was still almost a full percentage point higher than it was a year prior. In contrast, the January seasonally adjusted unemployment rate was lower both in Pennsylvania (5.2%) and in the nation as whole (4.8%).



*Data through December 2016

Components of ELI

Variable	Sept.	Oct.	Nov.	Dec.	Sept.-Dec.	% Change*	Weights
ERIE Leading Index	**101.30**	**100.85**	**101.25**	**101.91**	**0.61**	**0.60**	**1.000**
U.S. Interest Rate Spread (%)	1.2	1.4	1.7	2.0	0.72	58.54	0.333
U.S. Index of Coincident Indicators (2004=100)	113.8	114.0	114.0	114.3	0.50	0.44	0.262
U.S. Real Money Supply (M2) (bill of chained 2009 $)	11,752.6	11,791.7	11,862.1	11,866.6	114.00	0.97	0.142
PA Avg Weekly Hours in Manufacturing (hours)	41.4	41.1	41.6	41.6	0.14	0.33	0.086
Erie Manufacturing Employment (thou of jobs)	20.2	20.2	20.1	20.4	0.12	0.61	0.080
U.S. TS Freight Index (2000=100)	122.4	124.7	122.2	124.7	3.50	2.89	0.057
S&P 500 Stock Index (1941-43=10)	2,157.7	2,143.0	2,165.0	2,246.6	88.94	4.12	0.025
U.S. Building Permits (thou of units)	1,225	1,260	1,212	1,210	-15.00	-1.22	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.*

Seven of the eight components that make up ELI grew between September and December, allowing the composite index to increase for a third straight quarter, though by a modest 0.6%.

The largest factor contributing to ELI's rise was the increase in the U.S. Interest Rate Spread, the index's most heavily weighted component. After shrinking in each of the previous five consecutive quarters, it widened by 58.5% in the 4th quarter, the largest such increase in ELI's history. This is good news because past trends suggest that, when the interest rate spread (which measures the difference between the 10-year Treasury bond yield and the short-term federal funds rate) becomes negative, it may indicate an impending recession.

However, recent moves by the Fed, which raised its benchmark federal funds interest rate in December and again in March, may lead to a narrowing of the U.S. Interest Rate Spread at a later date. While monetary policy remained slightly expansionary, the U.S. Real Money Supply, another component of ELI, increased at a slower pace (less than 1% in the 4th quarter) compared to the recent past, reflecting a gradual tightening of monetary policy by the Fed amid expectations of continued strength in the national economy.

Moreover, if the Fed continues to pursue a contractionary monetary policy (as many analysts expect) to try to prevent inflation from rising above the 2% target, this could limit U.S. economic growth and generate negative repercussions locally. These circumstances could then affect ELI's rise. Thus, it will be important to watch upcoming Fed monetary policy to gauge its impact in Erie.

Also helping to boost ELI in the 4th quarter was the advance of the S&P 500 Stock Index, which rose by 4.1% . The record highs that stock markets reached in the weeks after the presidential election have continued into the new year. This has sustained ELI's rise, but it will be important to watch how the expected changes in tax, spending, trade, and regulatory policies affect the markets in the coming months.

ELI was further boosted by the U.S. Transportation Services Freight Index, which rose by 2.9%. This no doubt reflects the increased freight activity leading up to the holiday shopping season.

Another reason for ELI's 4th-quarter rise is that, based on statistics through December 2016, there was a slight (1.0%) increase in Erie Manufacturing Employment (although these figures have since been revised downward). There was also a slight (0.3%) increase in Pennsylvania Average Weekly Hours in Manufacturing.

The only ELI component that decreased this quarter was the number of U.S. Building permits, which fell by 1.2%.

Seven of ELI's eight components increased this quarter!

Erie continues to search for that Pot O' Gold.

Trends and Implications for Different Sectors of the Erie Economy

Goods-Producing Sectors

Mining, Logging, and Construction:

Since the latest statistics include the winter months, employment in this sector is still down. The latest figures indicate that, as of January 2017, employment stood at 3,600 jobs. This is 500 fewer jobs compared to November 2016, but is at the same level compared to a year ago. An increase is not expected until the warmer months. Changes in U.S. regulatory and environmental policy may also affect this sector.

Manufacturing:

This sector continues to struggle and adapt to the job losses in early 2016. Employment fell by 7.6% (1,600 jobs) year-on-year in January 2017, and by 0.5% (100 jobs) between December 2016 and January 2017. As we have noted before, these job losses also have potential negative spillover effects on the rest of the local economy. Technological changes as well as U.S. fiscal, trade, and regulatory policy changes are likely to affect this sector.

Plastics & Rubber Products Mfg:

Employment in this sector continues to be relatively stable, with no growth during the past year. The number of jobs remained steady at 4,400 from October to December, but fell by 2.3% (100 jobs) between December and January. Technological changes as well as changes in U.S. fiscal and trade policy that affect household disposable incomes are likely to affect this sector.

Private Service-Providing Sectors

Wholesale Trade:

This sector has experienced little change in employment recently, but could be affected by seasonal variations in economic activity. The level of employment fell by 2.6% (100 jobs) year-on-year in January, but has held steady at 3,700 in December and January. Changes in U.S. fiscal policy that affect household disposable incomes may also affect this sector. More subtly, possible changes in U.S. trade policy that will affect the global supply chain may also affect this sector.

Retail Trade:

This sector has exhibited its usual seasonal pattern, with employment rising to 15,800 at the peak of the Christmas shopping season in December. But this has fallen back down to 15,000 in January, the same level compared to a year ago. This sector may also be adversely affected if there are additional job losses in local manufacturing. In addition, changes in U.S. fiscal and trade policy affecting household disposable incomes are very likely to affect this sector.

Transportation, Warehousing, Utilities:

Like the Wholesale and Retail Trade sectors, this sector is also likely to be affected by seasonal variations in economic activity. Employment in this sector fell by 5.7% (200 jobs) between December and January, but has remained at the same level of 3,300 jobs compared to a year ago. Changes in U.S. regulatory and environmental policy, as well as changes in U.S. fiscal and trade policy are likely to affect this sector.

Information:

This sector, which includes newspaper publishing and broadcasting, continues to display stability in terms of the number of jobs. Throughout the 4th quarter of 2016 and into January 2017, employment held steady at 1,100 jobs, the same level as a year ago. It remains to be seen whether this sector will become more volatile, given how technology influences how information is disseminated.

Financial Activities:

This sector grew slightly this past year, with employment increasing by 1.6% (100 jobs) year-on-year in January and remaining unchanged at 6,300 between December and January. This sector may experience additional growth as we adapt to changes in government fiscal and regulatory policies by the new presidential administration that are likely to affect individual, household, and corporate financial decisions.

Professional and Business Services:

This sector has been somewhat volatile. Employment stood at 10,300 in November 2016, but fell by 2.9% (300 jobs) between November and December, and by another 2.0% (200 jobs) the next month. However, the January employment level of 9,800 jobs represents a year-on-year increase of 3.2% (300 jobs). This sector may experience growth due to changes in government fiscal and regulatory policies.

Education and Health Services:

Employment in this sector declined by 3.1% (900 jobs) between November 2016 and January 2017. However, the January employment level of 28,600 still represents a slight year-on-year increase of 0.4% (100 jobs). Despite the recent employment decline, this continues to be the largest sector (by employment) in the local economy. Possible changes in U.S. education policy may affect this sector.

Leisure and Hospitality:

As expected, due to seasonal factors, employment in this sector fell between November and January, declining by 4.3% (600 jobs). However, the current level of employment in this sector is still 1.5% (200 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.

Other Services:

Employment in the Other Services sector has declined, falling by 3.4% (200 jobs) between November and January as well as by the same magnitude compared to a year ago. Currently, employment in this sector stands at 5,700. As with many other sectors, changes in U.S. fiscal and trade policy affecting household disposable incomes may also affect this sector.

Government Sector

State government employment fell by 2.4% (100 jobs) year-on-year in January and stood at 4,000 jobs, while local government employment increased by 1.0% (100 jobs) during the same period and stood at 10,100 jobs. Federal government employment remained unchanged at 1,500 compared to a year ago. Changes in U.S. fiscal, education, and regulatory policy may affect the government sector at all three levels.

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