ERIE

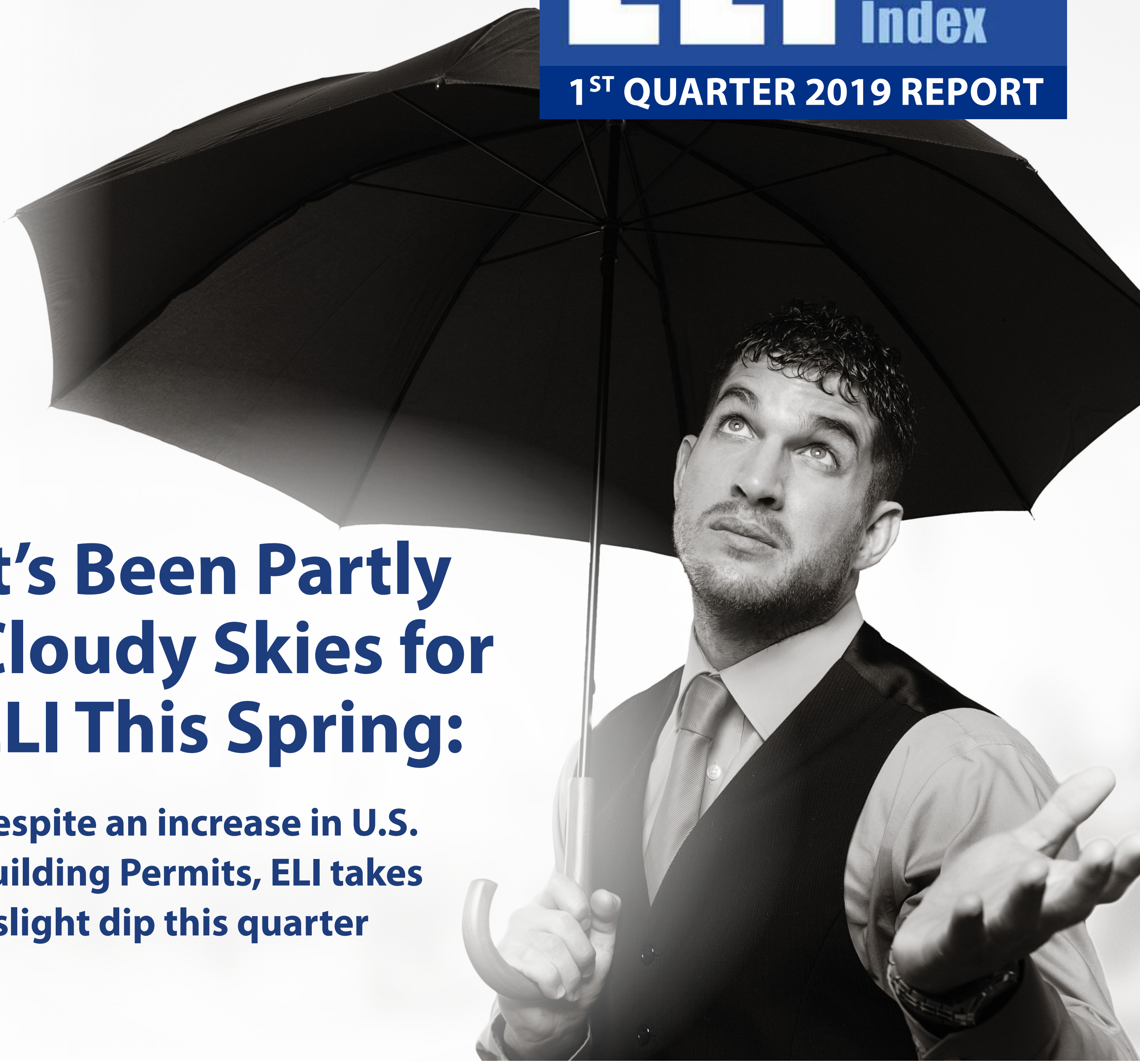
Economic Research Institute of Erie

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

ISSUE 31 | Spring 2019

ELI Erie Leading Index

1ST QUARTER 2019 REPORT



It's Been Partly Cloudy Skies for ELI This Spring:

Despite an increase in U.S. Building Permits, ELI takes a slight dip this quarter

Mpowered™ by Marquette Savings Bank

THE HOMETOWN BANK

MEMBER FDIC

Large Decreases in the Stock Market and the U.S. Interest Rate Spread Bring ELI Some Overcast in the Sunny Spring Weather

Springtime in Erie usually brings sunshine, longer days, and blooming flowers for the region. This spring, however, has not been all sunshine and daisies for the Erie Leading Index (ELI). After remaining stable last quarter, ELI has encountered partly cloudy skies, dipping slightly by four-tenths of one percent.

Although this represents a very modest decline in the index, it does reveal that the local economy is still somewhat lethargic. It's too early to sound any warnings about an impending recession, but ELI will be important to watch in the upcoming months because its movements provide important clues about the future state of the local economy.

The relative sluggishness of the local economy is reflected in the most recent statistics from the Pennsylvania Department of Labor and Industry. While total nonfarm employment in Erie did grow on a seasonally adjusted basis by 0.9% (1,100 jobs) year-over-year in April, this was lower than the rate of job growth in Pennsylvania (+1.0% or 58,300 jobs) and in the nation as a whole (+1.7% or 2.5 million jobs) during the same period.

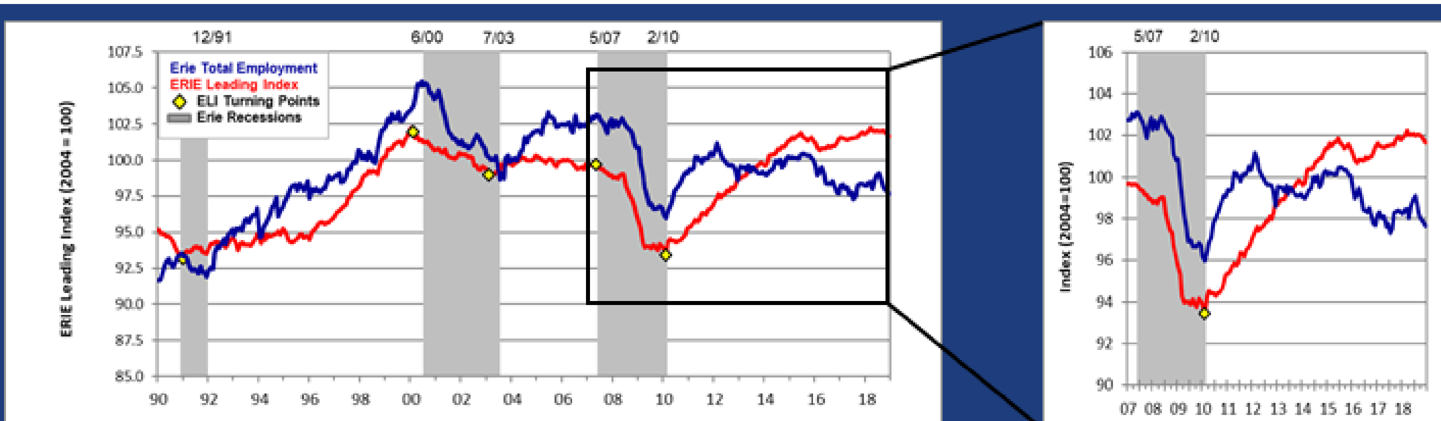
The most recent dip in ELI has partly been due to some unexpected turbulence in the national economy. While the U.S. economic expansion will (by July) become the longest in the nation's history, there are concerns over whether the expansion will continue unabated and whether recent global trade tensions will intensify. These concerns have introduced some uncertainty into U.S. stock markets, pulling down the S&P 500 Stock Index in the last few months of 2018, and again in May.

A second factor at the national level that has contributed to ELI's recent dip is the rather large (46.7%) decrease in the U.S. interest rate spread at the end of 2018. This perhaps also reflects uncertainty in the markets, with attendant negative effects on ELI.

The trends have not been entirely negative, however. As already noted, the local economy has experienced some modest job growth. Indeed, employment grew year-over-year in April in the following sectors: mining, logging, & construction (+5.1% or 200 jobs); transportation & utilities (+3.0% or 100 jobs); plastics & rubber products manufacturing (+2.3% or 100 jobs); education & health services (+2.0% or 600 jobs); professional & business services (+2.0% or 200 jobs); leisure & hospitality (+1.4% or 200 jobs); financial activities (+1.6% or 100 jobs); and local government (+1.0% or 100 jobs).

At the same time, job losses were experienced year-over-year in April in the following sectors: retail trade (–2.8% or –400 jobs); wholesale trade (–2.8% or –100 jobs); state government (–2.1% or –100 jobs); and manufacturing overall (–1.0% or –200 jobs);

Along with the recent modest job growth in the local economy, Erie's seasonally adjusted unemployment rate fell to 4.0% in April (compared to 4.8% a year ago). However, this was still slightly higher than the 3.8% rate for Pennsylvania, and the 3.6% rate for the nation as a whole.



*Data through December 2018

Components of ELI

Variable	Sept.	Oct.	Nov.	Dec.	Sept.-Dec.	% Change*	Weights
ERIE Leading Index	**102.04**	**101.94**	**101.81**	**101.67**	**-0.38**	**-0.37**	**1.000**
U.S. Interest Rate Spread (%)	1.1	1.0	0.9	0.6	-0.49	-46.67	0.303
U.S. Index of Coincident Indicators (2004=100)	104.8	105.0	105.2	105.6	0.80	0.76	0.269
U.S. Real Money Supply (M2) (bill of chained 2009 $)	13,098.5	13,096.8	13,113.8	13,208.2	109.70	0.84	0.182
PA Avg Weekly Hours in Manufacturing (hours)	41.1	41.0	40.6	41.0	-0.10	-0.24	0.073
Erie Manufacturing Employment (thou of jobs)	18.6	18.7	18.5	18.5	-0.12	-0.63	0.086
U.S. TS Freight Index (2000=100)	136.4	138.0	138.5	134.2	-2.20	-1.61	0.050
S&P 500 Stock Index (1941-43=10)	2,901.5	2,785.5	2,723.2	2,567.3	-334.19	-11.52	0.022
U.S. Building Permits (thou of units)	1,270	1,265	1,322	1,326	56.00	4.41	0.016

**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 ELI's eight components decreased last quarter, pulling the overall index down slightly by 0.4%.

The component that decreased most was again the U.S. Interest Rate Spread, measured as the difference between the 10-year Treasury bond yield and the short-term federal funds rate. The decrease (46.7%) was much larger than the 18.1% and 3.7% decrease seen in the previous two quarters, respectively.

This decline is key because a negative interest rate spread (called an "inversion of the yield curve," meaning short-term rates are higher than long-term rates) may signal an economic downturn.

In fact, such a yield curve inversion occurred in March, when the yield on 10-year U.S. Treasury notes fell below the yield on 3-month Treasury bills.

This caused quite a stir in the financial markets, since an inversion of the yield curve has helped predict U.S. economic recessions over the post-WWII period (though there is research ongoing about the best maturity-term spread to use as well as the importance of the magnitude and duration of the inversion.)

Even before March's yield curve inversion, the U.S. Federal Reserve had already changed its policy stance. After raising its benchmark federal funds rate four times in 2018, the Fed has left rates unchanged this year. If the Fed lowers rates in 2019, this may alleviate concerns over further yield curve inversion.

As noted, the turbulence in U.S. stock markets is another national factor that has contributed to ELI's recent dip. In addition, the U.S. Transportation Services Freight Index decreased by 1.6%.

Further downward pressure on ELI was exerted by two components reflecting state and local economic conditions: on a seasonally adjusted basis, Erie Manufacturing Employment fell by 0.6% (117 jobs) and PA Average Weekly Hours in Manufacturing declined by 0.2%.

While there were slight increases in U.S. Building Permits, U.S. Real Money Supply, and the U.S. Index of Coincident Indicators, this could not prevent ELI's modest decline.

So far, the U.S. economy is going strong, with U.S. real gross domestic product (GDP), a broad measure of aggregate production and output, growing at an annual rate of 3.1% in the first quarter and the national unemployment rate holding steady at 3.6% in May. That's good news because the national economy tends to lead the local economy.

Of course, there is uncertainty as to whether the U.S. economy will remain strong, begin to slow down, or even head into a recession. National job growth in May, for example, was lower than expected. Among the factors contributing to the uncertainty are the degree to which business, investor, and consumer confidence may start to weaken, especially in light of global issues such as turmoil within the European Union and ongoing trade tensions between the U.S. and China.

The Fed eases up on its monetary policy stance.

Trends and Implications for Different Sectors of the Erie Economy

Goods-Producing Sectors

Mining, Logging, and Construction:

Employment in this sector reached 4,500 in July 2018, but fell throughout the subsequent fall and winter. It now stands at 4,100, which is an increase of 5.1% (200 jobs) compared to a year ago. Changes in regulatory, environmental, and trade policy, including the new US-Mexico-Canada trade agreement (USMCA) and other new trade agreements, may affect this sector.

Manufacturing:

After reaching 19,900 in October 2018, manufacturing employment has fallen to 19,200, a decrease of 1.0% (200 jobs) compared to a year ago. A hopeful sign is the recent conclusion of the labor negotiations at Wabtec. Technology, globalization, and government policy will affect this sector, including the new USMCA and any new trade agreement with China.

Plastics & Rubber Products Mfg:

This sector has remained relatively stable. Employment currently stands at 4,500, a year-over-year increase of 2.3% (100 jobs). Just as for manufacturing overall, government policy technology, and globalization can affect this sector. The new Shell cracker plant is expected to boost employment in the long run.

Private Service-Providing Sectors

Wholesale Trade:

After remaining steady at 3,600 since July 2018, employment in this sector has fallen to 3,500, a decrease of 2.8% (100 jobs) compared to a year ago. Seasonal expenditure patterns can affect this sector, as can government fiscal, monetary, and trade policies that influence the global supply chain, such as the new USMCA and any new trade agreement with China.

Retail Trade:

Employment in this sector rose to 14,900 during the holiday season in November 2018. It now stands at 14,000, a year-over-year decrease of 2.8% (400 jobs). Government fiscal and monetary policies that affect household disposable incomes can influence this sector, as can growth in the popularity of internet commerce.

Transportation, Warehousing, Utilities:

Employment in this sector reached 3,600 in November 2018, but has fallen back to 3,400. However, this is still an increase of 3.0% (100 jobs) compared to a year ago. Seasonal factors, government fiscal, trade, and regulatory policies, as well as new technologies that affect the global supply chain can influence this sector.

Information:

This broad sector encompasses the following industries: publishing (including software, traditional, and Internet publishing), motion picture and sound recording, broadcasting (including traditional and Internet broadcasting), data processing, and information services. As of April, employment in this sector was 1,000, unchanged compared to a year ago. Changes in technology will continue to affect this sector.

Financial Activities:

This sector has been fairly stable with a current employment level of 6,500, which represents an increase of 1.6% (100 jobs) compared to a year ago. Innovations in the financial services industry as well as those in data and information processing will affect this sector, along with government fiscal, monetary, regulatory, and trade policies that affect household and corporate financial decisions.

Professional and Business Services:

Employment in this sector reached 10,700 in October 2018, but has fallen back to 10,400. However, this is still an increase of 2.0% (200 jobs) compared to a year ago. This sector can be affected by changes in government fiscal, monetary, regulatory, and trade policies, as well as structural changes in the local economy that alter the demand for professional services.

Education and Health Services:

Since January, employment in this sector has risen by 3.1% (900 jobs). Moreover, the current employment level of 30,000 represents a year-over-year increase of 2.0% (600 jobs). This continues to be the largest sector (by employment) in the local economy. Education and health care policy, educational and medical technology, and shifting demographics in the local region, are all likely to affect this sector.

Leisure and Hospitality:

With the warmer weather, employment in this sector has begun to pick up. Since January, employment has increased by 6.0% (800 jobs), and the current employment level of 14,200 represents a year-over-year increase of 1.4% (200 jobs). In addition to seasonal patterns, employment is likely to expand with the continued development of the Bayfront and other efforts to promote the Erie region.

Other Services:

Except for a slight dip at the end of 2018, employment in this sector has held steady at its current level of 6,000, which is unchanged compared to a year ago. Changes in the industrial structure of the local economy as well as government policies that affect household disposable incomes and consumption patterns will affect this sector.

Government Sector

As of April 2019, Erie employment in the government sector stood at 16,200, unchanged compared to a year ago. Federal government employment remained unchanged at 1,600 throughout 2018 and the first four months of 2019. Changes in state and local government employment normally occur over the course of the school year. State government employment fell by 10.9% (500 jobs) between December and January before rising back to its current level of 4,600 in April, though this is still a decrease of 2.1% (100 jobs) compared to a year ago. Local government employment also fluctuates during the year, falling during the summer months. The April employment level of 10,000 in local government represents an increase of 1.0% (100 jobs) compared to a year earlier. Federal as well as state education, fiscal, and regulatory policies may also affect government employment in the local area at all three levels.

PennState Behrend

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: Natalie Szalajko; nps5181@psu.edu

Mpowered™ by Marquette SAVINGS BANK

THE HOMETOWN BANK

MEMBER FDIC