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CONTINUED MONITORING*

COVID-19'S IMPACT ON THE ERIE ECONOMY: How Severe Has It Been, How Quickly Are We Recovering?

Jobs Are Slowly Returning, But Employment Is Still Below Pre-Pandemic Levels



*With gratitude, we continue to dedicate the Erie Leading Index to all those courageous individuals who work tirelessly every day to ensure the health and safety of our community and the smooth functioning of our economy. And we remember and honor those who have lost their lives to the pandemic.



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ELI Reaches 10-Year Milestone, With A Possible Turning Point

This issue of the **Erie Leading Index (ELI)** marks its 10th anniversary. Under more normal circumstances, this would be cause for celebration. Indeed, we cannot let this occasion go by without recognizing the first two directors of the Economic Research Institute of Erie, Dr. Barry Weller and Dr. James Kurre, for all their efforts in launching ELI, which continues to be an important resource for our community. Our faculty research associates and student assistants through the years also deserve much credit for their dedication and service.

Alas, on a much more somber note, ELI has fallen in the midst of the COVID-19 pandemic. As in previous ELI releases, the charts at the bottom of this page and the table at the top of the next page show the most recent trends. Five of ELI's eight components declined between March and June, causing the overall Index to fall by 0.3%.

Perhaps even more alarmingly, ELI signaled for the first time since the Index was introduced in 2010 that it may have experienced a turning point, or a significant change in the direction of its trajectory. While ELI may fluctuate from month to month or quarter to quarter due to short-term changes in the local economy, it generally does not signal a turning point unless there are significant economic events that alter the direction of the Index over a protracted period. Of course, those significant events came in the form of the COVID-19 pandemic during the first half of the year.

How Severe Has Been the Impact of the Pandemic?

Figures 1 and 2 show the employment levels (and corresponding job losses) in Erie and the U.S. as a whole during the Great Recession of 2007-09 versus during the





first eight months of this year. It is clear that the COVID-19 pandemic has had a more devastating impact than the Great Recession in terms of job losses, both locally and nationally. In terms of national output, U.S. real gross domestic product (GDP) plummeted at an annual rate of nearly 32% in the second quarter following a five percent decline in the first quarter. (Statistics on real GDP for the local economy during the pandemic are not yet available, but will likely reflect the national trend.)



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Components of ELI

Variable	March	April	May	June	March-June	% Change*	Weights
ERIE Leading Index	97.07	93.63	95.67	96.74	-0.33	-0.34	1.000
U.S. Interest Rate Spread (%)	0.2	0.6	0.6	0.7	0.43	195.45	0.303
U.S. Index of Coincident Indicators (2016=100)	105.2	92.8	94.3	96.7	-8.50	-8.08	0.270
U.S. Real Money Supply (M2) (bill of chained 2009 \$)	14,545.2	15,596.9	16,364.7	16,587.0	2,041.80	14.04	0.182
PA Avg Weekly Hours in Manufacturing (hours)	40.5	38.3	39.7	40.0	-0.50	-1.24	0.071
Erie Manufacturing Employment (thou of jobs)	19.0	18.1	18.6	18.7	-0.29	-1.51	0.086
U.S. TS Freight Index (2000=100)	135.6	125.3	127.1	128.3	-7.30	-5.38	0.051
S&P 500 Stock Index (1941-43=10)	2,652.4	2,762.0	2,919.6	3,104.7	452.27	17.05	0.022
U.S. Building Permits (thou of units)	1,356	1,066	1,216	1,241	-115.00	-8.48	0.015

*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.

A Possible Turning Point?

Previous research by ERIE suggests that a turning point in ELI tends to occur when certain conditions are met, such as: (1) when there has been a turning point in the U.S. economy, since the national economy tends to lead the local economy; (2) when the three-month moving average for ELI declines for five consecutive months; and (3) when a formal statistical turningpoint model based on the latest economic data indicates a turning point has occurred.

The first and second conditions have been met: the National Bureau of Economic Research has declared that the U.S. economy reached a peak (and therefore entered into recession) in February,



Professional

and Business

Services

Retail Trade

Mining,

Logging, and

Construction

Manufacturing

Figure 3: Pace of Job Recovery in Erie

August. For all sectors, as well as for the local economy as a whole, employment has been rising gradually, but has yet to reach pre-pandemic levels. Figure 4 shows corresponding statistics for the U.S. While the overall patterns of employment change appear to be similar in the local and national economies, note that the pace of job recovery (in terms of the percentage of total jobs lost that have been added back) is slower in Erie than in the nation as a whole.

Expectations for the Near and Medium Term?

Much uncertainty remains regarding the strength and timing of an economic recovery, which will depend to a large extent on developments in medical science.

and the three-month moving average for ELI has fallen in each month from January to June. Although the formal statistical model did not indicate a turning point, the other two conditions provide some evidence to suggest that ELI may have experienced a turning point during the first six months of the year.

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Total Nonfarm Leisure and

isted. Source: U.S. Bureau of Labor Statistics

Hospitality

-25.000

If ELI did experience a turning point, this suggests the Erie economy may encounter a downturn in the foreseeable future. Therefore, we will be carefully monitoring ELI's movements in the months ahead.

How Quickly Are We Adding Back Jobs That Were Lost?

Figure 3 shows the five sectors in the Erie economy that suffered the greatest number of job losses between January and April, and the jobs that have been added in each sector between April and The latest (September) median projections by the Federal Reserve are for U.S. real GDP to grow by 4.0% in 2021, tapering off to 3.0% in 2022 and 2.5% in 2023. Unemployment is projected to be 5.5% in 2021, 4.6% in 2022, and 4.0% in 2023. The Fed has also indicated that its "projected appropriate policy path" for interest rates remains at near-zero levels until at least 2023 in order to support stronger growth in the economy. On the fiscal side, Congress has not yet been able to agree on additional stimulus measures to help boost household incomes. Fed chairman Jerome Powell has summarized the situation succinctly: "The current economic downturn is the most severe in our lifetimes. It will take a while to get back to the levels of economic activity and employment that prevailed at the beginning of this year, and it may take continued support from both monetary and fiscal policy to achieve that."

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Trends and Implications for Different Sectors of the Erie Economy

Note: The COVID-19 pandemic may continue to create additional employment effects in most sectors of the economy.

Goods-Producing Sectors

Mining, Logging, and Construction:

Employment in this sector fell from 3,700 in January to 2,400 in April, a dramatic drop of 35.1% (1,300 jobs). Employment has recovered since, rising to 3,700 in August. However, this is still 17.8% (800 jobs) below where it was a year ago. In addition to the usual seasonal factors, COVID-19 has affected this sector. Government fiscal, monetary, regulatory, and environmental policy will also continue to play a role.

Private Service-Providing Sectors

Wholesale Trade:

The wholesale trade sector has remained relatively stable, with employment staying between 3,400 and 3,600 throughout the first eight months of the year. However, the August employment level of 3,500 is 2.8% (100 jobs) below where it was a year ago. This sector can be affected by government fiscal, monetary, and trade policies as well as by events that affect the global supply chain.

Information:

This broad sector encompasses publishing (including software, traditional, and Internet publishing), motion picture and sound recording, broadcasting (including traditional and Internet broadcasting), data processing, and information services. Employment in August is at 900, down by 10% (100 jobs) since January and down by 18.2% (200 jobs) compared with a year ago. This sector will continue to be affected by rapid changes in technology.

Education and Health Services:

Employment in this sector fell from its March peak of 29,800 to its August level of 28,600. The current level still represents a slight increase of 1.1% (300 jobs) compared with a year ago. This continues to be the largest sector (by employment) in the local economy. COVID-19 will likely continue to have significant effects on this sector, as will education and health-care policy, technology, and demographics shifts.

Government Sector

Manufacturing:

Erie manufacturing employment fell from 19,300 in January to 18,000 in April, a decline of 6.7% (1,300 jobs). Although employment grew in May and June, it fell to 18,100 in August, a drop of 8.6% (1,700 jobs) compared with a year ago. In addition to the reduction in consumer and industrial demand due to COVID-19, technology, automation, and government policy will continue to affect this sector.

Plastics & Rubber Products Mfg:

This sector has not seen employment declines during the pandemic. Employment held steady at 4,500 between January and April, and even increased to 4,800 in June. The August employment level of 4,600 is an increase of 2.2% (100 jobs) compared with a year ago. Changes in technology, globalization, and government policy can affect this sector.

Retail Trade:

The COVID-19 pandemic has had a relatively big effect on this sector. Employment fell from 14,200 in January to 10,300 in April, a drop of 27.5% (3,900 jobs). Although employment is slowly recovering, the August level of 11,600 represents a year-over-year decline of 19.4% (2,800 jobs). COVID-19 as well as government policies that affect household disposable incomes will influence this sector.

Financial Activities:

Employment in this sector fell from 6,500 in January to 6,300 in April, a decline of 3.1% (200 jobs). It rose to 6,400 in August, but this is 3.0% (200 jobs) below where it was a year ago. In addition to possible disruptions due to COVID-19, this sector will also be affected by innovations in financial services, and by government fiscal, monetary, banking, regulatory, and trade policies that influence household and corporate financial decisions.

Leisure and Hospitality:

This sector has experienced the most employment losses from the pandemic. Employment fell from 13,300 in January to 4,000 in April, a stunning drop of 69.9%. The August employment level of 9,300 is still 38.4% (5,800 jobs) below where it was a year ago. In addition to seasonal factors and local economic development initiatives, this sector could continue to be affected by COVID-19.

Transportation, Warehousing, Utilities:

Employment in this sector fell from 3,300 in January to 2,900 in April, a drop of 12.1% (400 jobs). It has recovered slightly to 3,000 in August, but this is still 6.3% (200 jobs) below where it was a year ago. In addition to COVID-19 disruptions and the usual seasonal factors, government policies that affect the global supply chain can influence this sector.

Professional and Business Services:

Employment in this sector fell from 9,700 in January to 8,000 in April, a drop of 17.5% (1,700 jobs). Though it is slowly recovering, the August employment level of 8,600 still represents a year-over-year decline of 15.7% (1,600 jobs). In addition to disruptions due to COVID-19, this sector can be affected by government policy as well as by structural and demographic changes in the local economy.

Other Services:

Employment in this sector fell from 5,800 in January to 4,600 in April, a drop of 20.7% (1,200 jobs). Although employment is slowly recovering, the August level of 5,400 still represents a year-over-year decline of 11.5% (700 jobs). COVID-19 as well as government policy and economic events that affect disposable incomes will influence this sector.

As of August, Erie employment in the government sector stood at 15,400, down 6.1% (1,000 jobs) compared with February, but up 6.2% (900 jobs) compared with a year ago. Federal government employment is at 1,800, up 5.9% (100 jobs) compared with February and also up 5.9% (100 jobs) compared with a year ago. State government employment is at 4,200, down 6.7% (300 jobs) since February but up 13.5% (500 jobs) compared with a year ago. Local government employment is at 9,400, down 7.8% (800 jobs) since February but up 3.3% (300 jobs) compared with a year ago. Federal as well as state education, fiscal, and regulatory policies will affect local government employment at all three levels. The COVID-19 pandemic is also likely to continue to have effects on the government sector.



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