

SPRING 2020 OVERVIEW

REGIONAL ECONOMIC INDICATORS FORUM

The Regional Economic Indicators Forum (REIF), sponsored by the National Bank of Commerce, focuses on the current economic performance of a 15-county region that includes Northeastern Minnesota and



Northwestern Wisconsin. As part of this forum, the College of St. Scholastica (CSS), University of Minnesota-Duluth (UMD) and University of Wisconsin-Superior (UWS) collect and monitor data related to county-level economic performance, business and consumer confidence, and regional stock performance.

THE GOAL OF THE FORUM IS TO

- Support business owners in their business decisions by gathering key local economic indicators and trend information
- Develop specific economic indicators for this region that are not readily available to decision makers
- Develop tools to assess our progress in economic growth, prepare baseline measures that will allow comparison with other regions, and measure future progress of the region
- Track the region's participation in the "new economy" and development in the high-tech arena
- Collect and monitor data related to county-level economic performance, business and consumer confidence and regional stock performance
- Bring professionals together with business owners for discussion about the local economy and related critical issues in a collaborative, non-political environment
- Create a business recruitment and retention tool by publishing the information



DUE TO THE COVID-19 (NOVEL CORONAVIRUS) PANDEMIC, THE SPRING 2020 REIF BREAKFAST WAS CANCELED TO HELP SUPPORT COMMUNITY HEALTH MANAGEMENT EFFORTS.

Slated for you to enjoy was a student poster session, networking, and breakfast. Students from the University of Minnesota Duluth, the University of Wisconsin Superior, and the College of St. Scholastica would have then each taken the stage to inform attendees on the health of the regional economy, consumer confidence indicators, regional equity index, and business confidence indicators. Having student presenters share insight on our regional economy is an integral part of each REIF breakfast. Trends are being tracked by the students to provide an ongoing economic picture of the region.

Keynote speaker, Ron Wirtz, Director of Regional Outreach at the Federal Reserve Bank of Minneapolis, had also planned a presentation on the health and trajectory of the REIF region and our Minnesota and Wisconsin economies. His talk would have shown more comprehensive details than those in the students' presentations. Highlights were to have focused on a review of trends in recent economic activity, annual output, job growth, hiring demand, and other economic metrics along with the role of labor supply on future growth. Uniquely, Ron planned to implement an interactive survey to conference attendees to capture their viewpoints that moment on firm performance and the 2020 outlook. We hope to invite Ron back to be a future speaker

Although the spring 2020 REIF was canceled, we hope this executive summary will still provide the useful information that you're used to receiving at the event. We look forward to seeing you in the fall.

EXECUTIVE SUMMARY

Twice each year, students from the University of Minnesota-Duluth (UMD), the University of Wisconsin-Superior (UWS), and the College of St. Scholastica (CSS) join efforts to conduct research on the economic performance of the 15-county region surrounding the Twin Ports (the REIF region). This summary provides information on the results of the three schools' research, including a special focus on the workforce of the Twin Ports region, a glimpse into local consumer confidence, an analysis of regional stock performance, and survey results on business confidence and hiring practices.

UMD's research team analyzed secondary data on the gross regional product (GRP), labor force, and population of the Duluth-Superior Metropolitan Statistical Area (MSA) to learn more about the area's economic performance. The research team compared growth in GRP, population, and labor force participation for the Duluth-Superior MSA from 2008 to 2018. In 2008, the GRP of the Duluth-Superior MSA was roughly \$11.5 billion. By 2018, the region's GRP had grown to more than \$15.8 billion (37.2% increase). Over the past decade, the Duluth-Superior MSA has experienced periods of slow or negative growth but has been able to overcome those difficult periods. And in the past three years, the area has experienced rapid growth (21.2% growth since 2015). In terms of the labor force, the Duluth-Superior MSA has seen a decline in the number of labor force participants over the past decade. The current labor force is roughly 143,000 participants compared with 145,000 in 2008. The decline in labor force combined with the region's growing GRP has led to an increase in the value of GRP per labor force member (a measure of productivity per worker). That measure has risen from nearly \$80,000 per member in 2008 to \$110,000 in 2018 (Figure 3).

Two UWS student research teams conducted research for the forum. The first team, consisting of 17 students, surveyed randomly chosen households in the 15-county REIF region. Surveys were collected via telephone (120 in spring 2020) and via email to previous REIF participants (52 in spring 2020). Using survey responses, three indices were computed: Index of Consumer Sentiment (ICS), Index of Current Conditions (ICC), and Index of Consumer Expectations (ICE). Survey results in spring 2020 show that compared to spring 2019, the general public and REIF participants overall had strong positive outlook about the current condition of the regional economy. There is mixed sentiments and expectations about the future of the economy. However, it should be noted that the majority of the data for spring 2020 was collected before March 9, 2020 (the date of the 2020 stock market crash associated with COVID-19).

The second UWS research team tracked the equity performance of companies of local interest in the 15-county region to create a Regional Equity Index (REI). The selection of the firms for the Regional Equity Index (REI) is based on the firms' substantial presence in the REIF region as indicated by the number of employees hired locally or by the significance of the firms' regional activities to the REIF regional economy. Using these selection criteria, 15 firms are included in the index. The findings show that the REI outperformed the benchmark index and that investors have mixed expectations for the majority of the stocks. Between March 2018 and March 2020, the REI trended somewhat downward with the market, but it has significantly outperformed relative to the S&P 400 during the period. According to the Value Line® short-term expectations of future performance, most of the 15 stocks in the REI are expected to perform similarly to the overall stock market. Long term, five of the stocks are expected to outperform the market, eight expected to mirror the market, and two are expected to underperform the market.

The research team at CSS distributed surveys to local Chambers of Commerce members to develop a better understanding of business confidence in the regional economy. In total, 180 businesses completed the survey. In line with trends from recent years, businesses were optimistic regarding improvement. Of the respondents, 59% reported improved business activity during the last six months, and only 16% reported decreased activity. Despite continuing difficulty in finding skilled and qualified employees, businesses remain confident in their overall business activities. Looking forward, 51% were confident that business activity would improve in the next six months, and only 12% expected decreases in activity. However, the timeframe of the survey was late January through March 4, 2020. As such, the immense changes due to the COVID-19 outbreak are not represented.



STUDENT PRESENTERS

Krista Heller is a senior at The College of Saint Scholastica (CSS), pursuing a degree in accounting and a minor in data analytics. She joined the REIF to further her knowledge of data analytics and the local economy. She is an office assistant for the Stender School of Business and Technology at CSS. When not busy with classes or work, Krista enjoys spending time with her family, playing piano, and machine embroidery.



Matthew Hockert is a UMD senior economics and political science double major and one of the university's Bureau of Business and Economic Research's (BBER) current undergraduate research assistants (UGRA). This past summer, Matthew interned in Washington, DC, with the Better Business Bureau and completed his senior honors capstone project entitled "Comparing U.S. Cities' Sustainability Strategies." As a BBER UGRA, Matthew has worked on a variety of projects related to regional economic development. He graduates in May, and with his interest in public policy, he hopes to apply his education in a position focused on solving urban issues.



Michael Huttner is an economics and history major. He was awarded the UWS Summer Undergraduate Research Fellowship in 2019 to work on the research project "Economics of Community Engagement: Non-Profit vs. For-Profit Hospitals." He has been working with the UWS REIF team since fall of 2018 and is currently seeking future employment for summer of 2020.



Angelica Remache Lopez is an international student from Ecuador, who will graduate in May 2020 with double major in economics and political science. Angelica is the Ecuador's Youth Ambassador at the Youth Assembly in New York. During 2019, she interned at the Office of the President of the United Nations General Assembly, where she co-founded "Youth for Global Change." Angelica also has published a book in Spanish. She has been working with the UWS REIF team for three years.



Ethan Rundquist is a senior at The College of Saint Scholastica, double majoring in finance and management. He is a member of the investment club on campus and is a fitness enthusiast. He joined the REIF team for the opportunity to further his experience and knowledge of our local economy. While in school, Ethan interned as a sales representative, and he would like to work in city administration and public service after graduation.

UNIVERSITY OF MINNESOTA - DULUTH HEALTH OF THE REGIONAL ECONOMY

Monica Haynes, M.S., Director of the Bureau of Business and Economic Research (BBER) Student Researcher: Matthew Hockert

To provide greater insight into the health of the regional economy, UMD analyzed secondary data sources on Gross Regional Product (GRP), population, and labor force for the region and compared the economic performance of the Duluth-Superior area with other similar areas. GRP represents the final value of all goods and services produced within an area in a certain time period. Labor force includes everyone in the region (16 years and older) who is employed or unemployed and actively seeking work.

While the REIF region includes the 15-county area surrounding Duluth-Superior, GRP data is only available at the metropolitan statistical area (MSA) level. Therefore, the data presented in this section of the report focuses on the Duluth-Superior MSA, which includes St. Louis and Carlton counties in Minnesota and Douglas County in Wisconsin. Four additional metropolitan areas, similar in size and geography, were also included for comparison. These areas include Green Bay, Wisconsin; Fargo, North Dakota; Rochester, Minnesota; and Appleton, Wisconsin.

Duluth-Superior's Gross Regional Product grew by roughly 37% between 2008 and 2018

Over the past decade, the GRP of the Duluth-Superior MSA has grown by roughly 37.2%. In 2008, the area's GRP was roughly \$11.5 billion, and by 2018, it had grown to nearly \$15.8 billion. Among the metropolitan areas included in the study, Duluth-Superior's GRP was the second largest in 2018 after Green Bay (\$20.6 billion) (Figure 1). This is an improvement from 2015 in which the Duluth-Superior MSA was ranked third among the five regions, behind both Green Bay and Fargo. In 2018, the Duluth-Superior MSA also had the second largest population (233,000 people) and the second largest labor force (143,000). However, with a very high working age population not in the labor force (90,000), Duluth-Superior's labor force participation rate was only 62%, the lowest of all of the compared metropolitan areas (Figure 2).

The size of Duluth-Superior's labor force has fallen by roughly 4,000 individuals (a 1.6% decline) since 2008. While this is a nation-wide trend caused by older employed persons who are beginning to retire in greater numbers, it is especially concerning for the Duluth-Superior MSA because of the area's already lower-than-average labor force participation rate.

Over the past decade, the area has experienced two major recessions. The first was the 2008 financial recession, which lowered GRP by roughly \$400 million dollars (a 2.8% decline). In 2015, the lesser-known industrial recession, which affected the energy, mining, and manufacturing sectors reduced the Duluth-Superior GRP by roughly \$1 billion (an 8.2% decline). It is interesting to note how much more significant the 2015 recession was to the Duluth-Superior region compared to the more well-known crisis of 2008-2009.

Over the past decade, the combination of the decline in the size of the labor force along with the growth in the area's GRP has led to an increase in GRP per labor force member in Duluth-Superior. This measure (GRP/ labor force) provides insight on how much additional value each person within the labor force is producing on average in a given year. In 2018, GRP per labor force member was roughly \$110,000 in Duluth-Superior, significantly higher than in 2008 when it was roughly \$80,000 (Figure 3).

Gross Regional Product of Duluth-Superior MSA, including Industrial Recession



FIGURE 1. The Industrial Recession reduced the Duluth-Superior GRP by roughly \$1 billion (an 8.2% decline)



FIGURE 2. The Duluth-Superior labor force participation rate was the lowest of all of the comparison metropolitan areas at 62% in 2018.

Gross Regional Product per Labor Force Member for all Five MSAs



FIGURE 3. In 2018, GRP per labor force member was roughly \$110,000 in Duluth-Superior, significantly higher than in 2008 when it was roughly \$80 thousand. **Source:** Bureau of Economic Analysis and Bureau of Labor Statistics, 2020

PAGE 5 | ©2020 REIF — NATIONAL BANK OF COMMERCE

UNIVERSITY OF WISCONSIN - SUPERIOR CONSUMER CONFIDENCE INDICATORS

Rubana Mahjabeen, Ph.D., Associate Professor of Economics, Praopan Pratoomchat, Ph.D., Assistant Professor of Economics

Student Researchers: Munkhtulga Amarsanaa, Jiratchaya Changtangtermpong, Hyun Jun Cho, Sajid Chowdhury, Rachel Engstrom, Zachary Farmakes, Kurumi Kanno, Samuel Myszka, Hung Nguyen, Kento Nomura, Angelica Remache, Mackenzie Reykdal, Ramesh Shrestha, Pontus Tavemark, Ismael Tounkara, Ryan Volz, Sam Waylee Jr.

To equip decision-makers with tools enabling them to anticipate the forthcoming fluctuations in the economy, economists developed consumer confidence indicators. These are composed of three indices: the Index of Consumer Sentiment (ICS), the Index of Current Conditions (ICC), and the Index of Consumer Expectations (ICE). Generally speaking, the ICS is designed to gauge consumers' attitudes towards the business environment, personal finances, and consumption spending. The ICC is designed to gauge the current state of the economy. The ICE is used for business cycle forecasting, as it reflects the consumers' outlook on future economic and financial conditions. To construct these indicators, the University of Wisconsin-Superior student research team surveyed households in the 15-county REIF region. Among randomly chosen households, 120 responded in spring 2020 via telephone surveys, while among previous REIF participants, 52 responded in spring 2020 via email surveys. For details on the methodology and survey questions go to the National Bank of Commerce website. (https://www.nbcbanking.com/NBofC/media/pdfs/FINAL-2017-Annual-REIF-Report.pdf)

Before analyzing the results, it should be mentioned that the majority of the data (76% for phone surveys and 98% of email surveys) for the spring 2020 survey was collected before March 9, 2020 (the date of the 2020 stock market crash). As such, most of these consumer surveys probably do not reflect the potential economic implications of COVID-19.

The results of the 15-county regional consumer confidence indices based on phone and email surveys are presented in Figure 4 and 5 respectively. These results show that in spring 2020 for randomly chosen households the ICC and ICS are strongly positive with the ICC experiencing a solid rise. However, the ICE is slightly down. Compared to spring 2019 random households displayed slightly negative sentiments about personal finance and consumption spending and pessimism about future economic conditions (Figure 4).

REIF participants and random households were reporting optimism about their current economic situation and about the future, but results are prior to the COVID-19 outbreak.

Similarly, REIF participants demonstrated a positive outlook on personal finances, business conditions, and consumption spending during this period. As shown in Figure 5, spring 2020 was the first time the ICS and ICC rose above the base year (fall 2014) value. REIF participants reported strong positive sentiments regarding the current state of the economy and predicted future expansion in economic and financial conditions. When compared to the year-to-year changes in national consumer confidence indicators reported by the University of Michigan, except for the ICS and ICE of randomly chosen households, the direction of index changes match with our findings on the regional consumer confidence indicators (Table 1).

In each round of consumer surveys, respondents are asked about a special topic. In spring 2020, the focus was on wages and prices. The majority of respondents in both consumer groups agreed that in the last 12 months, wages and prices had increased in the REIF region.



FIGURE 4. Among REIF households, the ICC and ICS are strongly positive, while the ICE is slightly down. Source: UWS Consumer Confidence Survey



FIGURE 5. REIF participants showed a positive outlook on personal finances, business conditions, and consumption spending. Source: UWS Consumer Confidence Survey

Consumer Confidence Indicators

Indicators	Random Public Phone Survey (Spring 2019-Spring 2020)	Past REIF Participants (Spring 2019-Spring 2020)	National Consumer Confidence Indicators (Feb 2019- Feb 2020)
Index of Consumer Sentiment	-0.75	4.59	7.57
Index of Current Conditions	1.82	7.41	4.88
Index of Consumer Expectations	-2.46	2.63	9.72

 TABLE 1. With the exception of the ICS and ICE of randomly chosen households, the direction of the regional consumer confidence indicators match national trends. Source: UWS Consumer Confidence Survey and Survey of Consumers by the University of Michigan.

 ©2020 REIF — NATIONAL BANK OF COMMERCE | PAGE 8

UNIVERSITY OF WISCONSIN - SUPERIOR REGIONAL EQUITY INDEX

Sakib Mahmud, Ph.D., Associate Professor of Sustainable Management and Economics, David Koslowsky, Ph.D., Assistant Professor of Finance **Student Researchers:** Michael Huttner, Hung Nguyen, Ramesh Shrestha, and Pontus Tavemark

For this portion of the research, UWS provides information and a financial analysis on the equity performance of companies of local interest in the REIF region. In all, 15 companies in the REIF region were selected to construct the Regional Equity Index (REI). Selection criteria of the companies are based on the companies' significant presence in the REIF region, as indicated by the number of local employees, or the companies' significance of operations in the REIF region. Currently, the 15 companies in the REI include Allete, Armstrong World Industries, Ascena Retail Group, Calumet, Canadian National Railway, Charter Communications, Cleveland-Cliffs, Enbridge Energy Partners, Husky Energy, Louisiana-Pacific, Marriott International, Morgan Stanley, Polymet, UnitedHealth, and U.S. Steel.

This ongoing research project tracks the companies' equity performance, creates an index of these local stocks to measure economic activity in the region, examines measures of future performance, and makes comparisons to industry averages and market indices. This REIF overview extends the timeframe to 3/02/2020. Therefore, it should be noted that the findings from this time period do not include the impacts to local companies resulting from COVID-19.

Of note, the REI outperforms the benchmark index, and investors are expecting majority of the stocks to mirror the market. Figure 6 illustrates the growth trend of a \$100 investment in the REI on January 2009 and held until March 2, 2020. This is compared to the trend of \$100 invested in the S&P 400 and the Crude Oil Futures over the same time period. Figure 6 shows that, during the two-year period between March 2, 2018 and March 2, 2020, the REI trended downward somewhat similar to commodities pricing such as oil, but it still outperformed relative to the S&P 400 over the longer-term. Comparing REI and S&P 400 values since the last report (October 1, 2019), the REI is down 1.23%; whereas, the S&P 400 is down by 1.27%. Considering the Crude Oil Futures, the REI has continued to show significant movement in step with changes in oil prices, which indicates that the REI is more sensitive to fluctuations in commodities pricing than the diversified S&P 400.

The REI has trended downward since 2018 but has still outperformed relative to the S&P 400 over the long term.

Short-term expectations of future performance for the majority of stocks in the REI, according to the Value Line[®] Measures, indicate that the stocks will perform similar to the overall stock market. Over the shorter term, the next 3-6 months, only United Health and Marriott International are expected to outperform the market. Allete, Canadian National Railway, Charter Communications, Cleveland-Cliffs, Husky Energy, Louisiana-Pacific, Morgan Stanley, Polymet, and U.S. Steel are expected to mirror the market. Armstrong World Industries, Calumet, and Enbridge are expected to underperform the market. Over the longer term, Armstrong World Industries, Canadian National Railway, Enbridge, Marriott International, and United Health are expected to outperform the market. In the next year, Allete, Louisiana-Pacific, Charter Communications, and Morgan Stanley are expected to mirror the market. Cleveland-Cliffs, Husky Energy, and U.S. Steel are expected to underperform the market. Stocks and Morgan Stanley are expected to mirror the market. Cleveland-Cliffs, Husky Energy, and U.S. Steel are expected to underperform the market. Cleveland-Cliffs, Husky Energy, and U.S. Steel are expected to underperform the market in the long-term.

The Morning Star[®] Measures show that the REI's Price-to-Earnings ratio is higher than last year, implying that investors are expecting higher earnings growth. However, a high Price-to-Earnings ratio can be the result of a high price or the result of low earnings per share. Of the companies that had data about the Forward Price-to-Earnings ratios, the majority's earnings are expected to grow. The Short Interest ratio shows that investors have lower short-term expectations of performance of the 15 REI index stocks. Six stocks have a Short Interest ratio less than five, an indication that investors believe stock prices will rise for these companies. However, the other stocks have a Short Interest ratio more than five, implying that investors expect stock prices will fall for these companies.





THE COLLEGE OF ST. SCHOLASTICA BUSINESS CONFIDENCE INDICATORS

Erica Henkel, Assistant Professor of Finance and Economics **Student Researchers:** Krista Heller and Ethan Rundquist

The College of St. Scholastica's research team distributed business confidence surveys to local Chambers of Commerce located throughout the 15-county REIF region. The survey's purpose was to develop a better understanding of local businesses and their confidence in the economy. The survey asked each business to indicate their sector, number of employees, recent and projected changes in business activity, and factors inhibiting growth. In addition, the survey asked targeted questions regarding reasons for unfilled job positions and changes to hiring practices.

The timeframe of the survey was late January through March 4, 2020. As such, the immense changes that may be coming due to the COVID-19 outbreak are not represented.

In total, 180 businesses completed the survey. According to the results, the most common sectors were professional and business services (n=35), education and health services (n=32), leisure and hospitality (n=39), and trade, transportation and utilities (n=23). More than half of those surveyed had fewer than 20 employees, while 8% of respondents reported 250 or more employees.

Businesses were asked to evaluate their general business activity over the previous six months (Figure 7). In line with trends from recent years, businesses were optimistic regarding improvement. Roughly 38% of respondents reported improved business activity during the last six months, and only 15% reported decreased activity. Despite continuing difficulty in finding skilled and qualified employees, businesses remain confident in their overall business activities.

After evaluating the previous six months, businesses were then asked to forecast activity for the next six months based on the same criteria (Figure 8). More than 50% were confident that business activity would improve in the next six months, and only 12% expected decreases in activity. Expectation of increasing profits continued a trend of optimism from last fall, with 38% predicting increasing profits and 45% expecting profits to remain the same. Fewer than 15% of respondents anticipated decreases in average hours worked or number of employees in the next six months, and more than a quarter of respondents reported expected increases in those indicators. Shortage of skilled labor was listed as the number one limiting factor in increasing business activity over the next six months.

Nearly half of respondents reported increasing wages and/or benefits to help alleviate hiring difficulties.

Regarding unfilled positions at areas businesses, nearly 40% agreed that lack of available qualified candidates was a cause of unfilled positions at their businesses, while 40% also reported that they faced a lack of willing or interested candidates. This is important, because it reflects not just a shortage of skills in applicants but an overall lack of interested applicants. Nearly half of respondents (n=88) reported increasing wages and/or benefits to help alleviate hiring difficulties (Figure 9). Over 40% allowed for flexible hours, while 30% reported making no changes to hiring practices to prevent or alleviate hiring difficulties.

General Business Confidence: Past Six Months



FIGURE 7. 38% of respondents reported improved business activity during the last six months Source: CSS Business Confidence Survey



FIGURE 8. More than half of respondents predicted that business activity would improve in the next six months Source: CSS Business Confidence Survey

Actions Taken to Prevent or Alleviate Hiring Difficulties



FIGURE 9. Nearly half of respondents reported increasing wages and/or benefits to help alleviate hiring difficulties Source: CSS Business Confidence Survey



FALL EVENT SAVE THE DATE 11.10.20

7-9:30 A.M. AT THE DECC IN THE HARBOR SIDE BALLROOM

PANEL:

Neela Mollgaard *Executive Director of Launch Minnesota*

Aaron Hagar VP, Entrepreneurship and Innovation and Sector Strategy Development



STEERING COMMITTEE

Steven Burgess President & CEO National Bank of Commerce sburgess@nbcbanking.com

Michael Colclough

Business Finance Director Northland Foundation michael@northlandfdn.org

Jeanine Dahl

Communication Director Northland Foundation jeanine@northlandfdn.org

Andy Donahue Director WI Small Business Development Center University of Wisconsin – Superior adonahue@uwsuper.edu

Gina Grensing

Editor/Writer Bureau of Business and Economic Research - UMD ggrensin@d.umn.edu

Brian Hanson

President & CEO APEX brian@apexgetsbusiness.com

Monica Haynes

Director Bureau of Business and Economic Research – UMD mrhaynes@d.umn.edu

Erica Henkel

Assistant Professor The College of St. Scholastica ehenkel@css.edu

Hannah Horman

Marketing Director National Bank of Commerce hhorman@nbcbanking.com

Rubana Mahjabeen

Associate Professor University of Wisconsin – Superior rmahjabe@uwsuper.edu

Sakib Mahmud

Associate Professor University of Wisconsin – Superior smahmud@uwsuper.edu

Claire Mayhew

Marketing Specialist National Bank of Commerce cmayhew@nbcbanking.com

Rick Revoir

Dean Stender School of Business and Technology rrevoir@css.edu

Bruce Thompson

Community Bank President National Bank of Commerce bthompson@nbcbanking.com

lan Vincent

Senior Business Developer APEX ian@apexgetsbusiness.com

Hans Wronka

Senior Environmental Consultant Barr Engineering hwronka@barr.com



PRESENTED BY



Member FDIC

WITH THE HELP OF





University of Minnesota Duluth Driven to Discover









For feedback, more information, to participate in the research, or to sponsor an event please email: **news@nbcbanking.com**

To view prior reports visit: https://nbcbanking.com/About-NBC/R-E-I-F/