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Presents

ECONOMIC INDICATORS

An update for the 7 Rivers Region



February 28, 2019

Economic Indicators and Trends

Taggart J. Brooks, Ph.D.

UW-La Crosse Economics Department



Economic Indicators
February 28, 2019

Economic Indicators

Economic Indicators: An Update for the 7 Rivers Region reports on a long-term study of regional economic indicators. The research is ongoing and spans a period of time to enable us to understand and report trends. This project is expected to continuously build on a base of economic information and provide decision makers with valuable tools for strategic planning. The information will also provide a basis for comparison with other regions and a measure of our progress.

State Bank Financial sponsors this research project in collaboration with the University of Wisconsin-La Crosse College of Business Administration and the *La Crosse Tribune*. These programs will continuously build on a base of information and provide decision makers like you with valuable tools for strategic planning.

Specific goals of this project are:

- 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.
- Bring professionals together with business owners for discussion about the local economy and related critical issues.
- Create a business recruitment and retention tool by publishing the information.

Core economic indicators cover the following areas:

- Employment
- Income
- Cost of Living
- Consumer Attitude and Behavior
- Real Estate and Housing
- Interest Rates
- Equity Performance

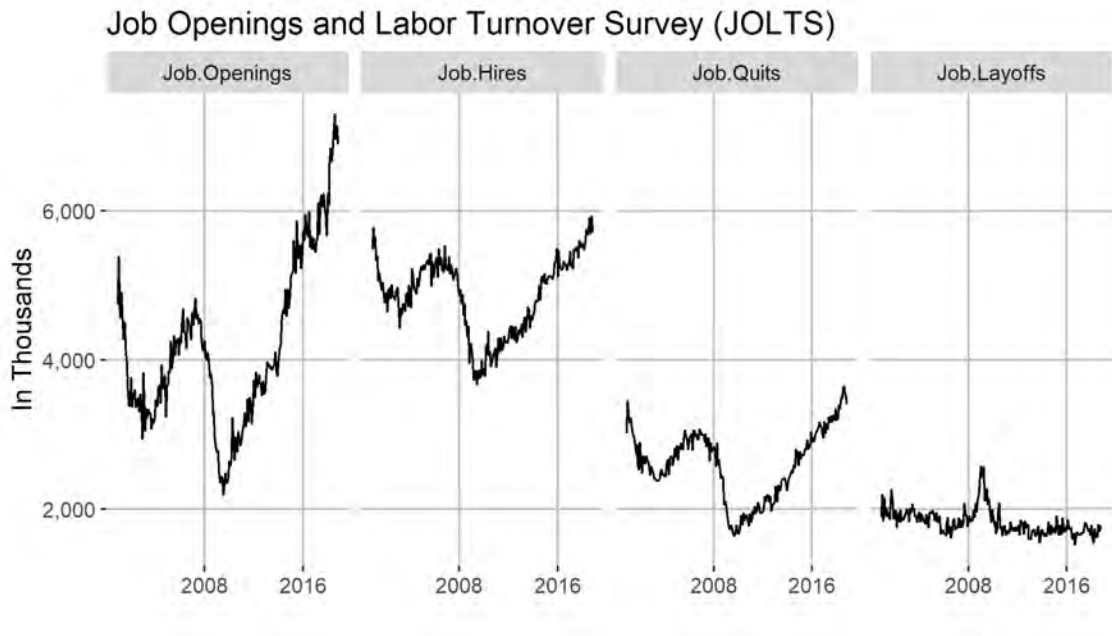
Economic Indicators and Trends

Taggart J. Brooks, Ph.D., UW-La Crosse Department of Economics

February 2019:

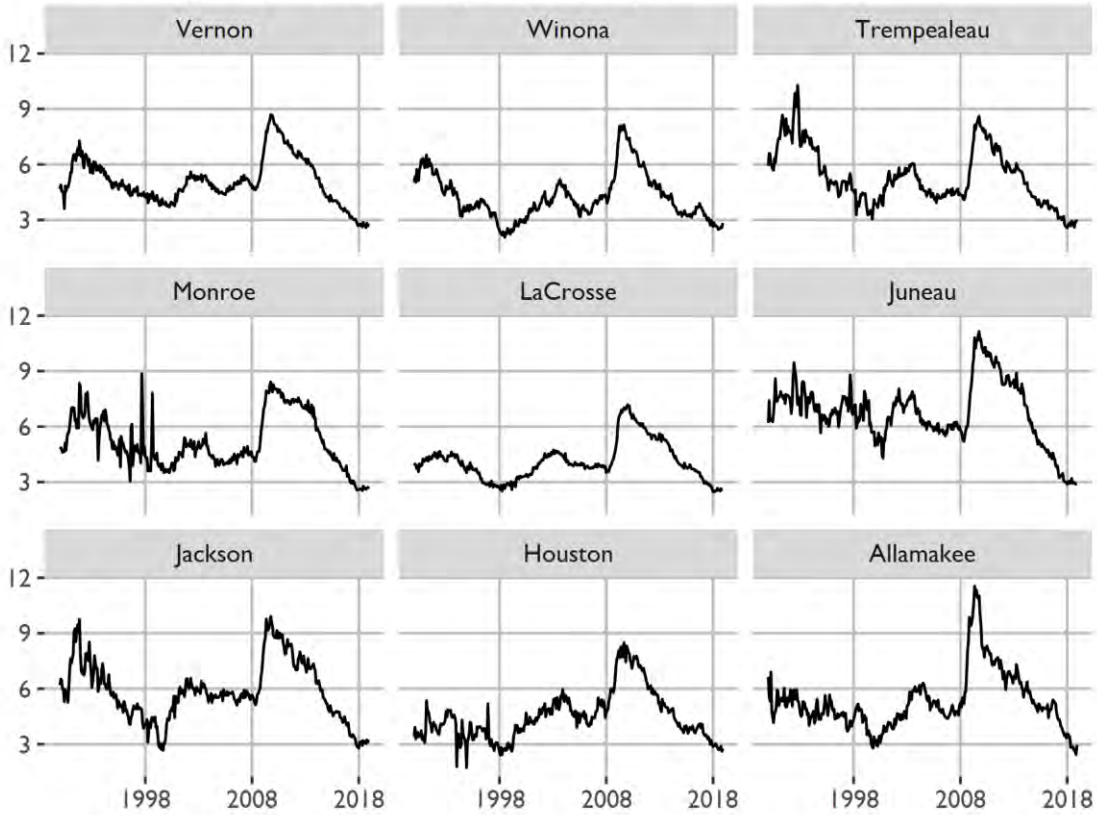
Labor Market

The labor market continues its solid performance, with the Job Openings series from the JOLTS data reaching a series high of 7.3 million in December. Meanwhile, measures of turnover - Hires and Separations - were little changed at 5.9 million and 5.5 million, respectively.



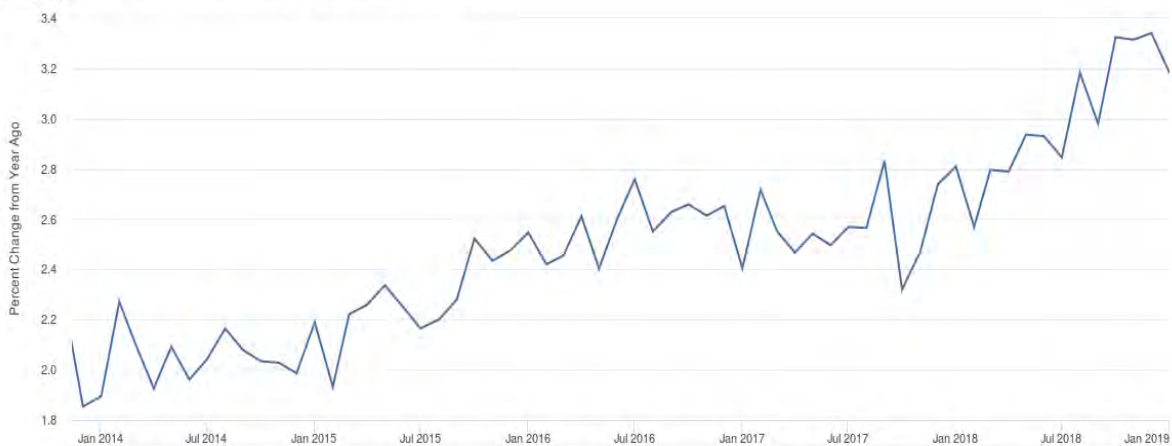
Locally the county level unemployment rates have continued to remain at 30 year historic lows, even if they have stopped falling further. However, wages have until very recently been quite stubborn. Economists have attributed this to several factors, one of which has been the number of people out of the labor force, that have been slowly coming back in, helping to dampen wage increases. The last year has finally started to see a pickup in average hourly earnings, rising over 3% last year, from the previous year's just over 2% increase.

Seasonally Adjusted County Unemployment Rates



Source: U.S. Bureau of Labor Statistics

FRED — Average Hourly Earnings of All Employees: Total Private



Shaded areas indicate U.S. recessions

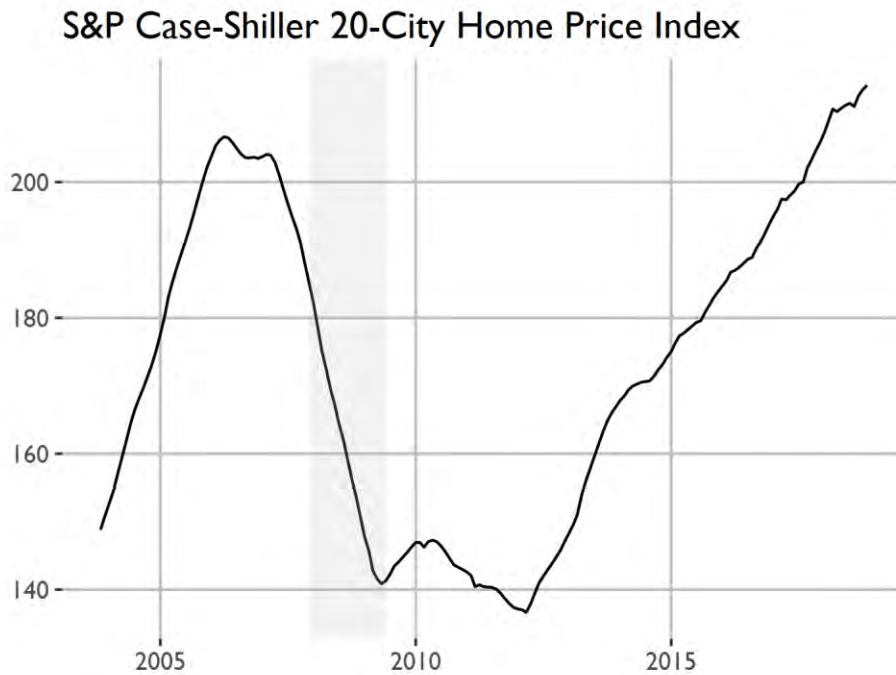
Source: U.S. Bureau of Labor Statistics

myf.red/g/n0AN

If this trend continues I would expect to see the Federal Reserve resume their rate hikes, in anticipation of rising inflation from employee costs passing through to prices.

Housing

The national housing market appears to have begun cooling, even as the overall economy continues to expand. The S&P CoreLogic Case-Shiller U.S. National Home Price NSA Index saw only very modest gains in the most recent month (graph below), while the 20 city and 10 city indices saw declines.¹



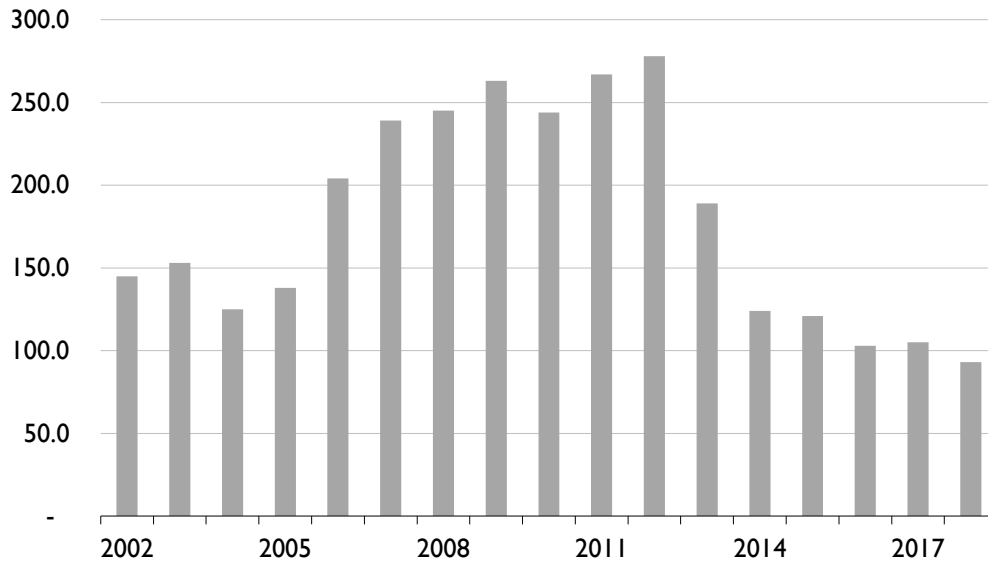
Source: Standard and Poor's

According to the National Realtors Association² the number of existing home sales fell by 6.4% in December. The median existing-home price in December was \$253,600 continuing the gains seen over the last 80 plus months. Meanwhile, locally the decline in the number of foreclosures has continued, but at a decreasing rate. The mean price for a home sold through MLS in La Crosse county computed with data provided by WRA was \$187,058. The 12 month moving average of sales during the previous twelve months stayed pretty consistently around 125 listing per month.

¹ <https://us.spindices.com/indices/real-estate/sp-corelogic-case-shiller-us-national-home-price-nsa-index>

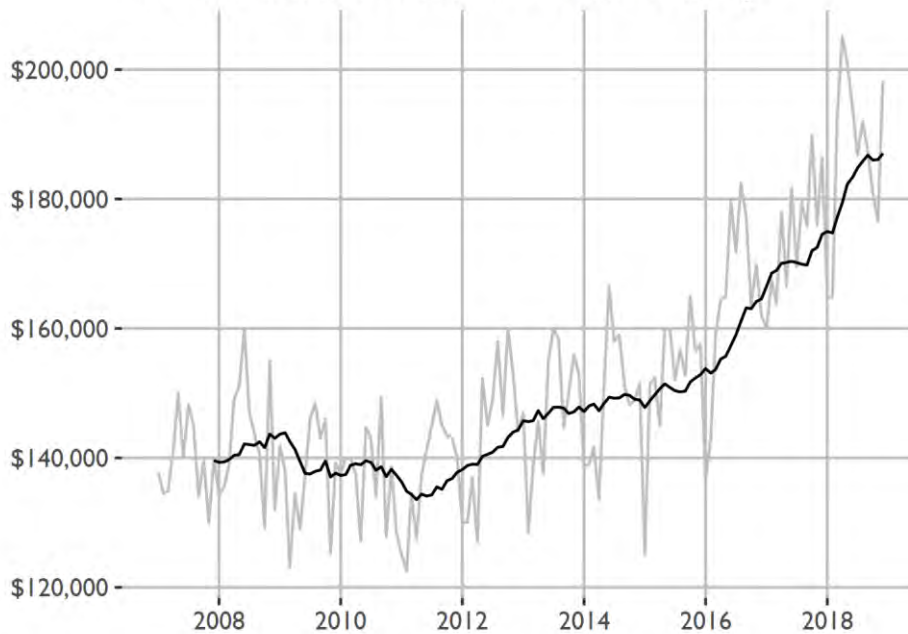
² <https://www.nar.realtor/research-and-statistics/housing-statistics/existing-home-sales>

La Crosse Foreclosures Filed



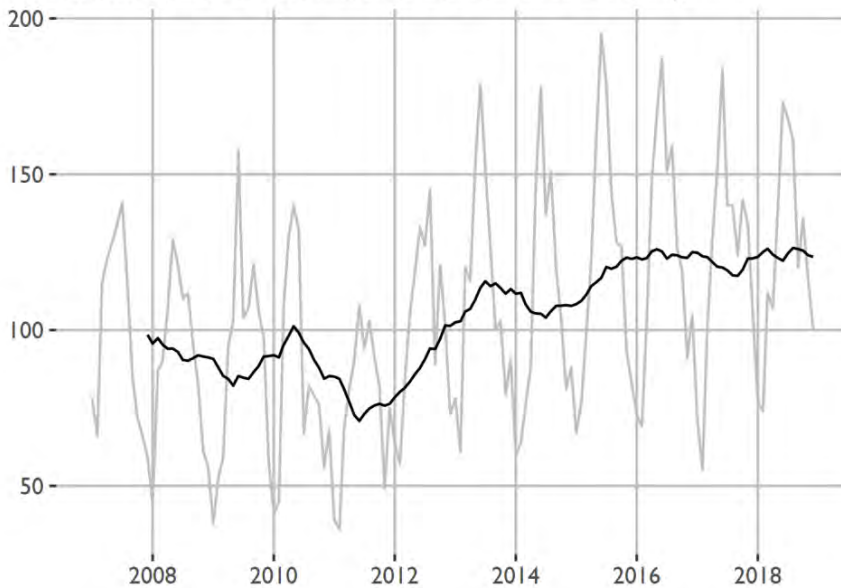
Source: WI Circuit Courts

Median Home Prices: La Crosse County



Source: Wisconsin REALTORS® Association

Number of Home Sales: La Crosse County



Source: Wisconsin REALTORS® Association

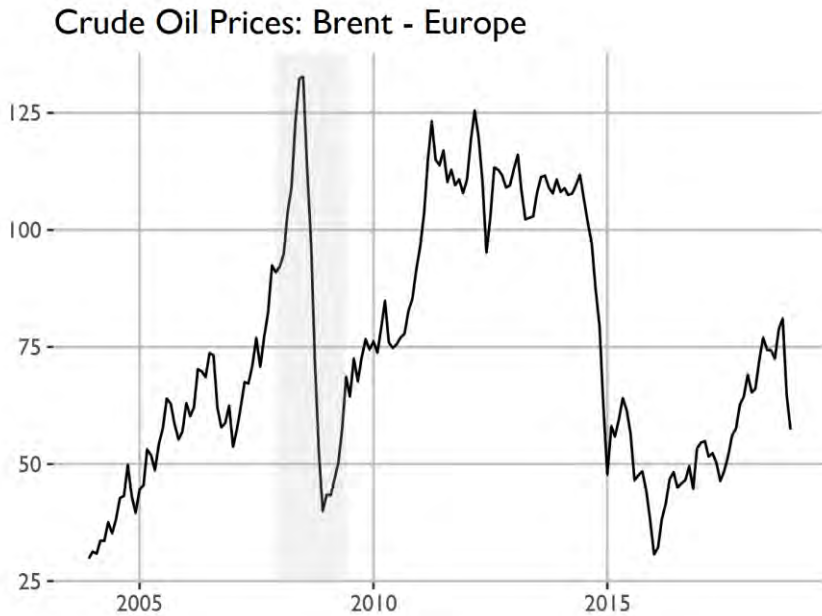
The housing market has continued to be supported by relatively low long term interest rates. Even reaching their local peak at just under 5% still puts them well below the levels before the housing crisis.

30-Year Fixed Rate Mortgage Average in the United States



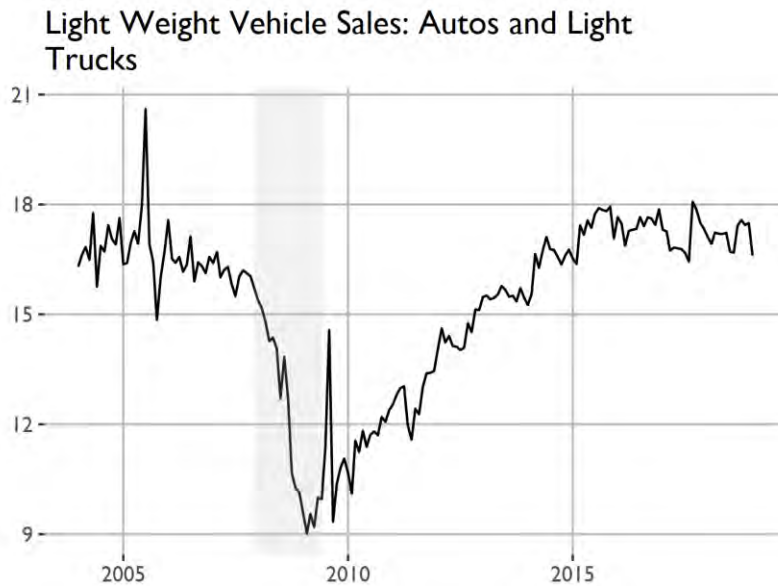
Source: Freddie Mac

Another factor besides low, long-term interest rates which continues to support the economic expansion is oil prices. Generally staying below \$75 per barrel has kept them from slowing the economy through increased transportation costs.



Source: Board of Governors of the Federal Reserve System

Finally, auto sales have slowed after having been a key source of economic support during the early parts of the recovery from the recession that began in 2009.



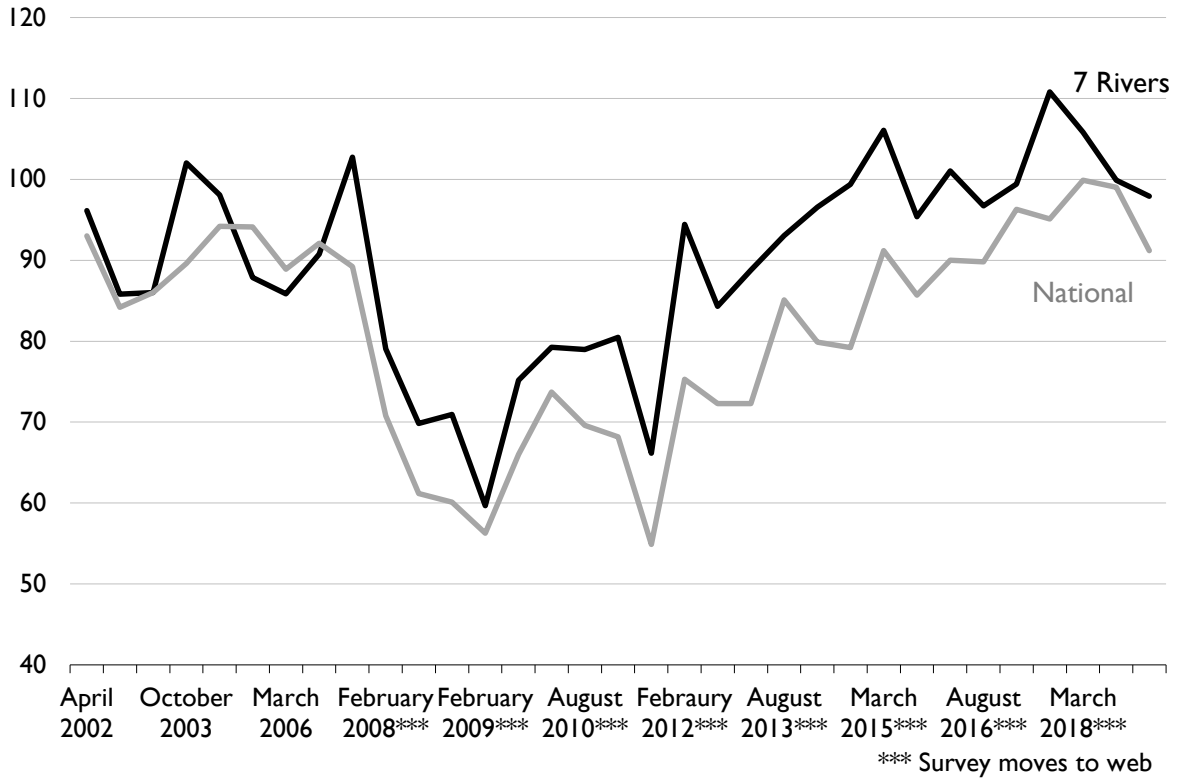
Source: Bureau of Economic Analysis

Consumer Sentiment Index

During the week of February 3, 2019, I distributed, via email, the biannual consumer sentiment survey to approximately 1,400 past participants in programs related to the 7 Rivers Region. The following data is based on results from the initial 100 responses received. A table with all the data since the inception of the regional survey is available below. We see from the most recent data the regional overall consumer sentiment index has fallen from its peak in October 2017.

Looking at the breakdown of the index in the tables we can see the differences between the region and the rest of the nation on the two sub components – current conditions and expectations. It is clear that regionally we have had a larger drop off in the current conditions perceptions of respondents, while we have actually seen an increase in future expectations locally contra the national index.

7 Rivers Consumer Sentiment Index





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Consumer Sentiment Index Data

	Consumer Sentiment		Current Conditions		Consumer Expectations	
	7 Rivers	National	7 Rivers	National	7 Rivers	National
April 2002	96.1	93	94.7	99.2	97.1	89.1
November 2002	85.8	84.2	97.0	93.1	78.6	78.5
April 2003	86.0	86	94.4	96.4	80.6	79.3
October 2003	102.0	89.6	104.6	99.9	100.4	83.0
April 2004	98.1	94.2	102.9	105	95.0	87.3
February 2005	87.9	94.1	100.7	109.2	79.6	84.4
March 2006	85.9	88.9	107.6	109.1	71.9	76.0
November 2006	90.8	92.1	96.7	106	86.9	83.2
April 2007***	102.7	89.2	113.7	111.1	95.7	75.1
February 2008***	79.1	70.8	91.3	83.8	71.2	62.4
August 2008***	69.9	61.2	76.5	73.1	65.6	53.5
December 2008***	70.9	60.1	87.0	69.5	60.6	57.8
February 2009***	59.7	56.3	75.9	65.5	49.2	50.5
July 2009***	75.2	66	83.7	70.5	69.7	63.2
February 2010***	79.2	73.7	91.8	84.1	71.2	66.9
August 2010***	79.0	69.6	91.5	69.0	70.9	64.1
April 2011***	80.5	68.2	88.2	83.6	75.5	58.3
August 2011***	66.2	54.9	80.8	69.3	56.8	45.7
February 2012***	94.4	75.3	102.4	83.0	89.3	70.3
August 2012***	84.3	72.3	96.8	82.7	76.3	65.6
April 2013***	88.8	72.3	99.9	84.8	81.6	64.2
August 2013***	93.0	85.1	103.3	98.6	86.4	76.5
March 2014***-	96.6	79.9	108.4	96.1	89.0	69.4
August 2014***-	99.4	79.2	106.8	99.6	94.6	66.2
March 2015***	106.0	91.2	115.3	103.0	100.1	83.7
September 2015***	95.4	85.7	108.8	100.3	86.7	76.4
March 2016***	101.0	90.0	117.8	105.6	90.2	80.0
September 2016***	96.7	89.8	111.6	107.0	87.2	78.7
March 2017***	99.4	96.3	111.5	111.5	91.6	86.5
October 2017***	110.7	95.1	119.5	111.7	105.1	84.4
March 2018***	105.8	99.9	114.7	115.1	100	90.2
October 2018***	99.9	99.0	119.8	114.4	87.2	89.1
February 2019***	97.9	91.2	109.0	108.8	90.9	79.9

*** Survey moved to the web. Data for February 2019 preliminary at time of publication

Big Data

The focus of the breakfast this time is “Big Data.” As a matter of professional interest, I follow several leading statisticians and data scientists on Twitter. Several are famous for their work in the area of data visualization. Most of them lament the popularity of the term “Big Data.” Stephen Few says in a post entitled [Basta, Big Data: It’s Time to Say Arrivederci](#)³

Most of the definitions are so vague or ambiguous that they cannot be used to determine, one way or the other, if a particular set of data or use of data qualifies as Big Data.

That said, according to SAS⁴ one of the pioneers in statistical software for data analysis on large datasets defines it like this:

Big Data History and Current Considerations

While the term “big data” is relatively new, the act of gathering and storing large amounts of information for eventual analysis is ages old. The concept gained momentum in the early 2000s when industry analyst Doug Laney articulated the now-mainstream definition of big data as the three Vs:

Volume. Organizations collect data from a variety of sources, including business transactions, social media and information from sensor or machine-to-machine data. In the past, storing it would’ve been a problem – but new technologies (such as Hadoop) have eased the burden.

Velocity. Data streams in at an unprecedented speed and must be dealt with in a timely manner. RFID tags, sensors and smart metering are driving the need to deal with torrents of data in near-real time.

Variety. Data comes in all types of formats – from structured, numeric data in traditional databases to unstructured text documents, email, video, audio, stock ticker data and financial transactions.

At SAS, we consider two additional dimensions when it comes to big data:

Variability. In addition to the increasing velocities and varieties of data, data flows can be highly inconsistent with periodic peaks. Is something trending in social media? Daily, seasonal and event-triggered peak data loads can be challenging to manage. Even more so with unstructured data.

³ <https://www.perceptualedge.com/blog/?p=2670>

⁴ https://www.sas.com/en_us/insights/big-data/what-is-big-data.html

Complexity. Today's data comes from multiple sources, which makes it difficult to link, match, cleanse and transform data across systems. However, it's necessary to connect and correlate relationships, hierarchies and multiple data linkages or your data can quickly spiral out of control.

Regardless of the definition of Big Data, it is important to understand how data has changed the labor market. I think this extended quote from Google's Chief Economist Hal Varian⁵ is insightful. He was asked what jobs he would recommend to a young person with an interest, and maybe a bachelor's degree, in economics?

A: If you are looking for a career where your services will be in high demand, you should find something where you provide a scarce, complementary service to something that is getting ubiquitous and cheap.

So what's getting ubiquitous and cheap? Data. And what is complementary to data?

Analysis.

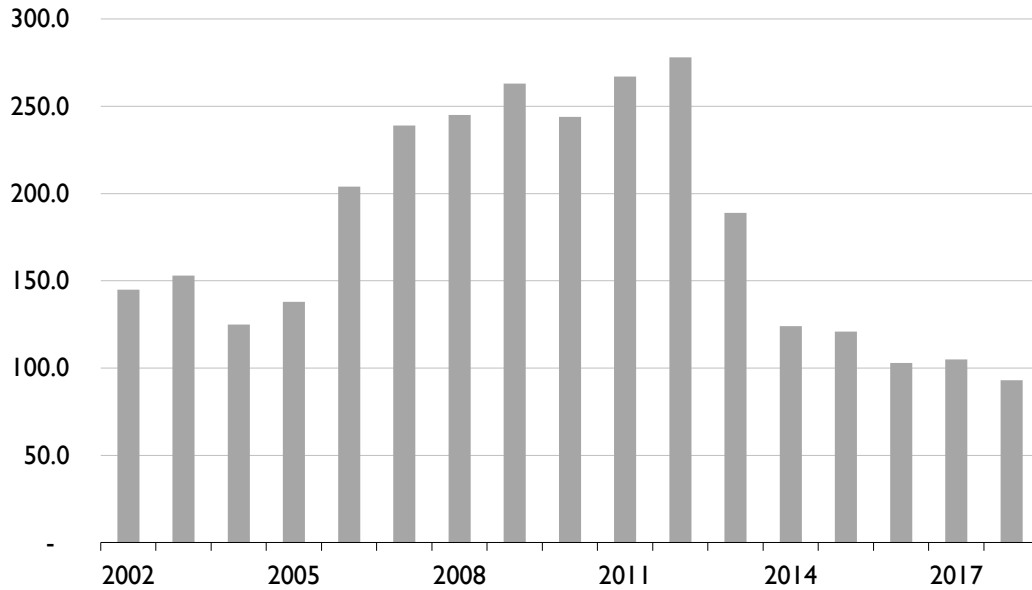
So my recommendation is to take lots of courses about how to manipulate and analyze data: databases, machine learning, econometrics, statistics, visualization, and so on.

The panel will be dedicated to helping us understand some of the business cases where Big Data is making its mark.

⁵ <https://www.aei.org/publication/google-chief-economist-hal-varian-on-data-analysis/>

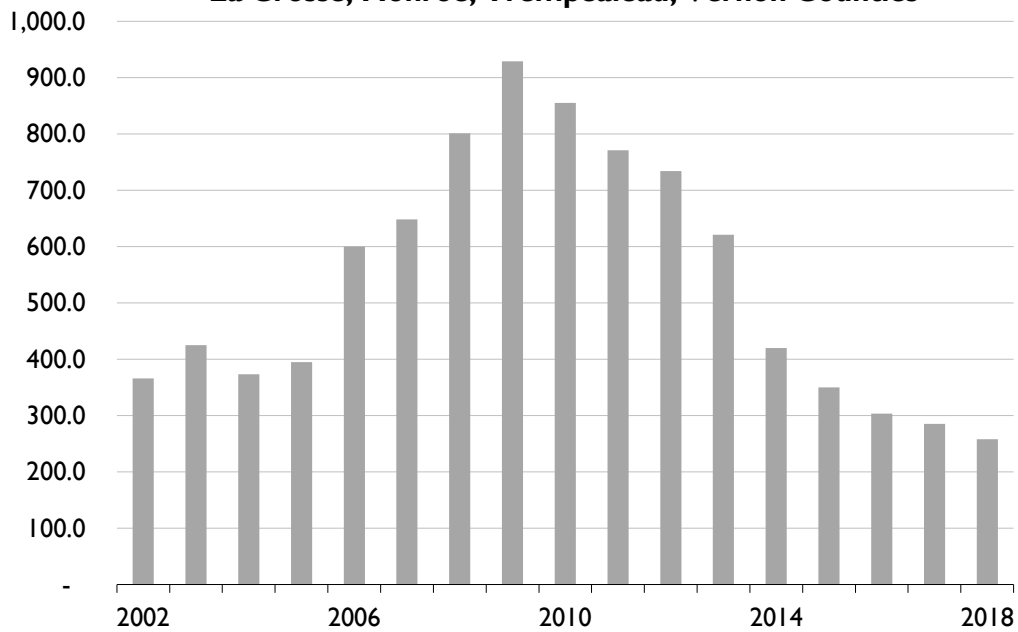
Appendix

La Crosse Foreclosures Filed



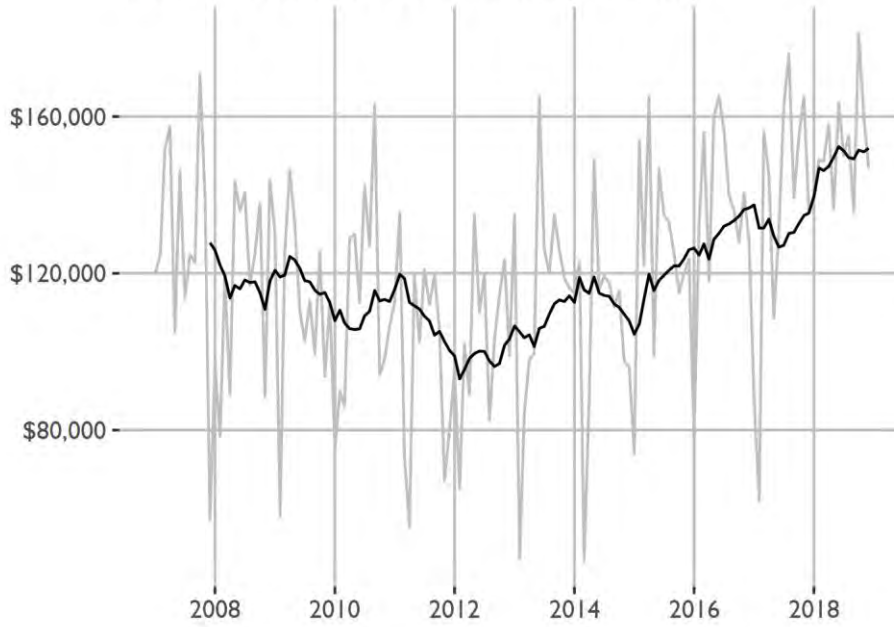
Source: WI Circuit Courts

Total Number of Foreclosures Filed in Jackson, Juneau, La Crosse, Monroe, Trempealeau, Vernon Counties



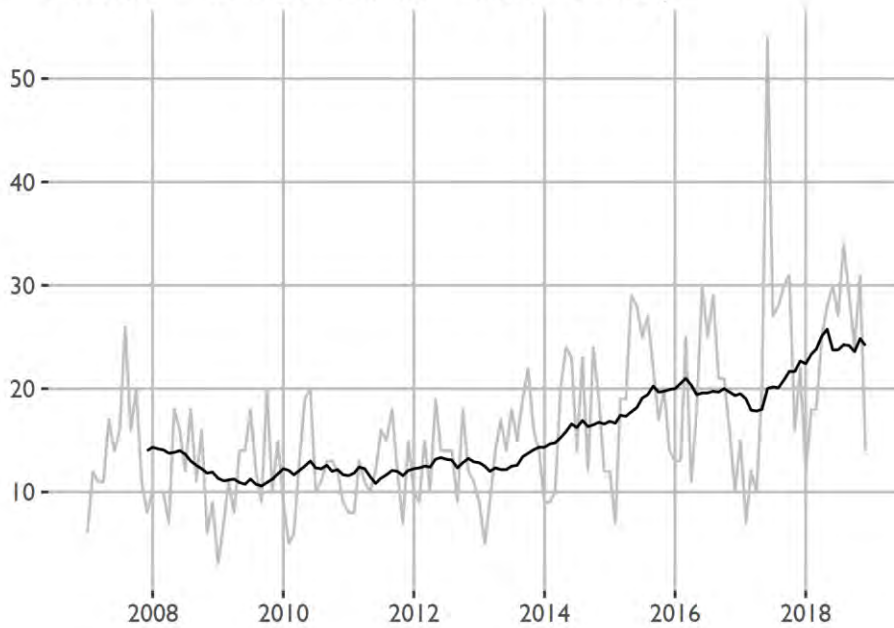
Source: WI Circuit Courts

Median Home Prices: Vernon County



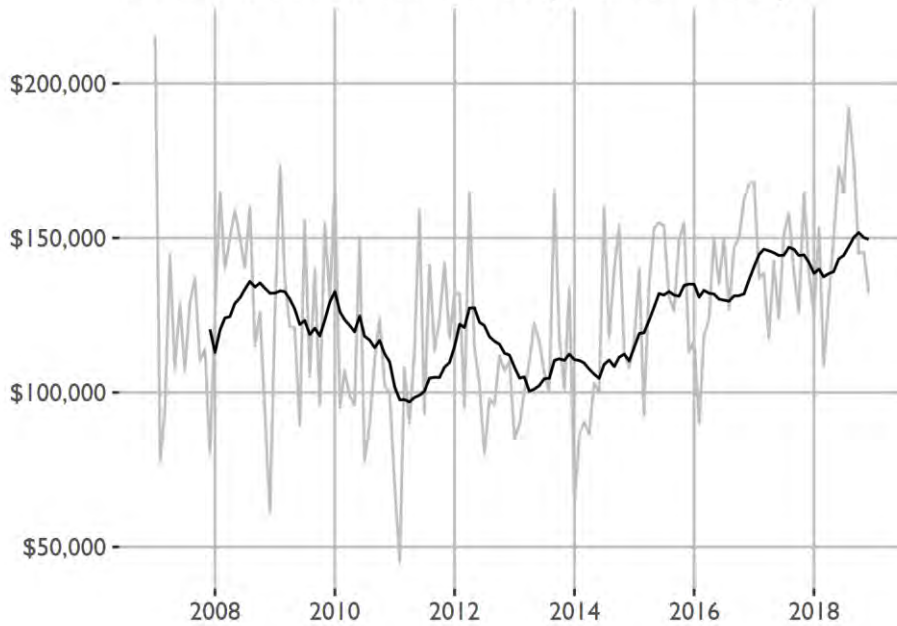
Source: Wisconsin REALTORS® Association

Number of Home Sales: Vernon County



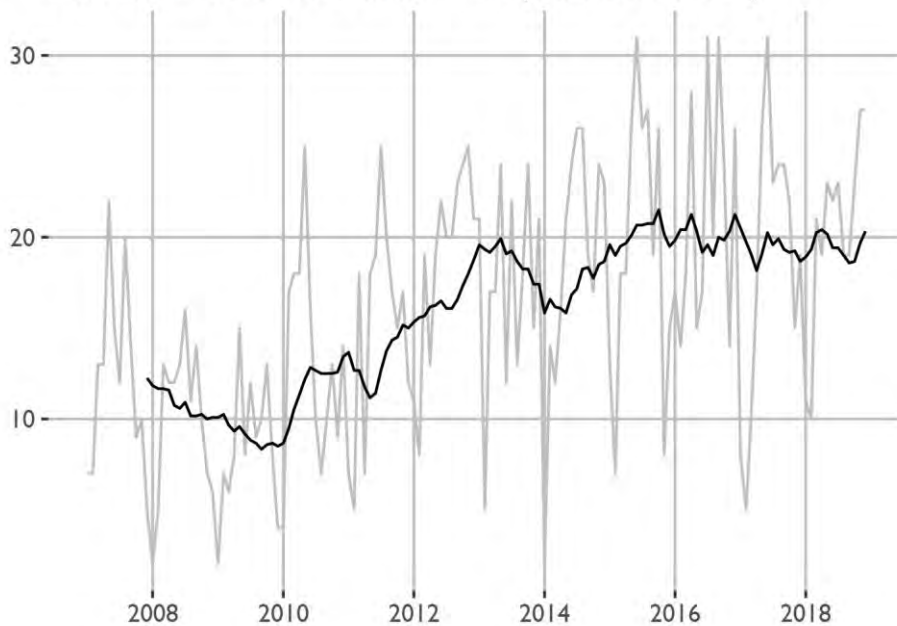
Source: Wisconsin REALTORS® Association

Median Home Prices: Trempealeau County



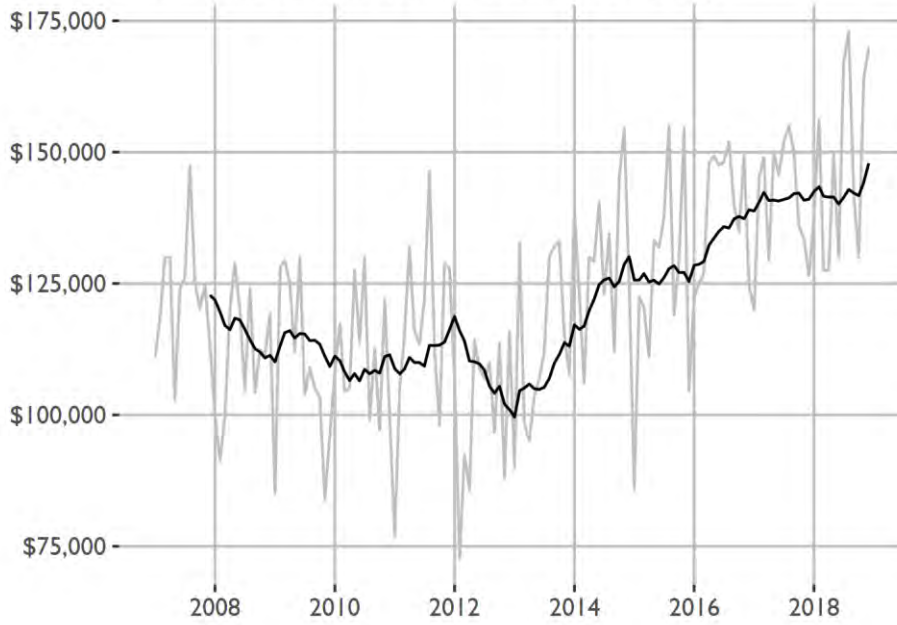
Source: Wisconsin REALTORS® Association

Number of Home Sales: Trempealeau County



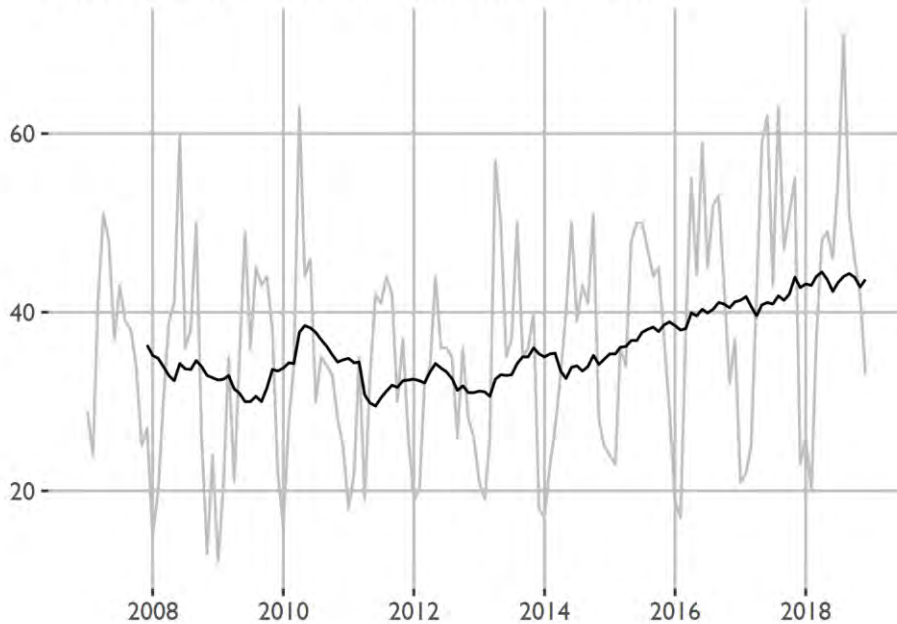
Source: Wisconsin REALTORS® Association

Median Home Prices: Monroe County



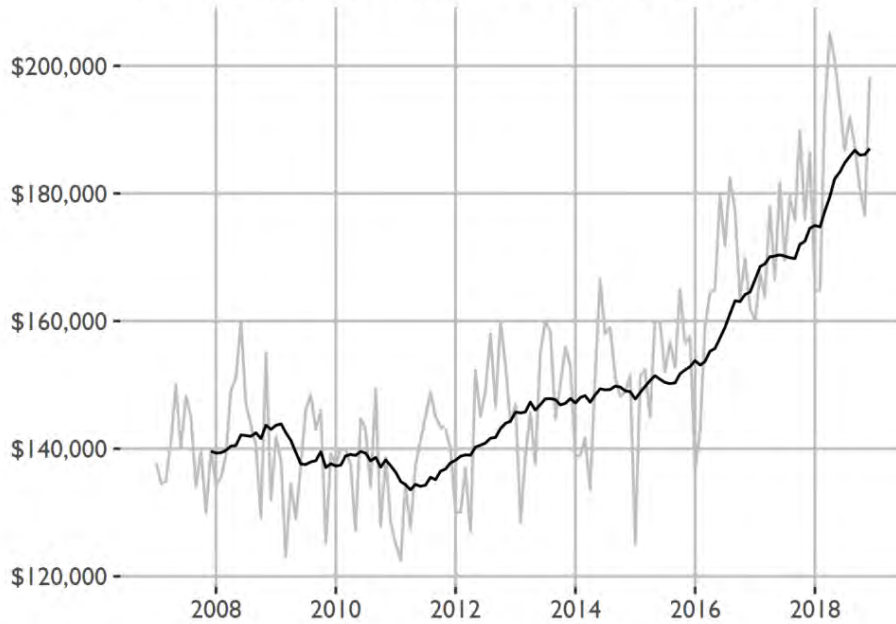
Source: Wisconsin REALTORS® Association

Number of Home Sales: Monroe County



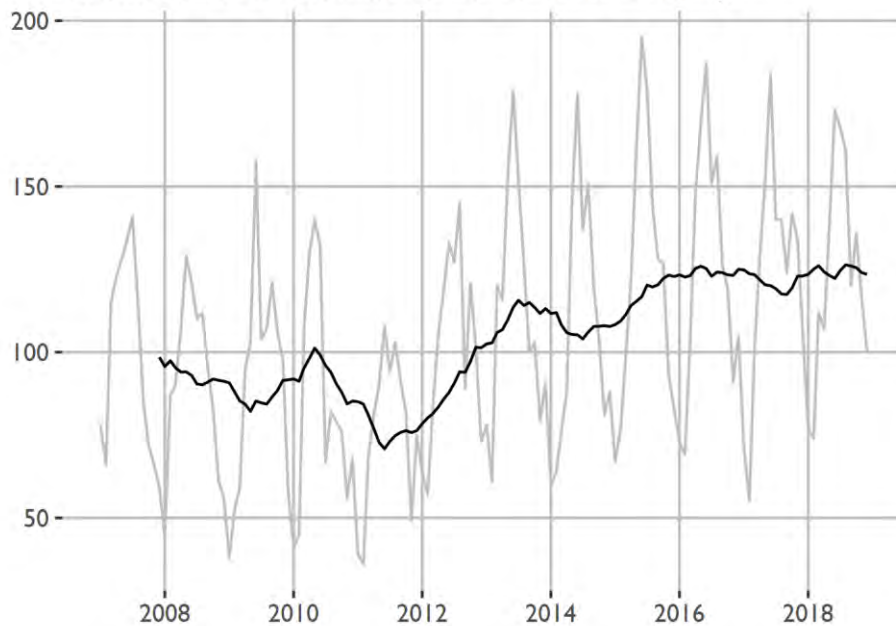
Source: Wisconsin REALTORS® Association

Median Home Prices: La Crosse County



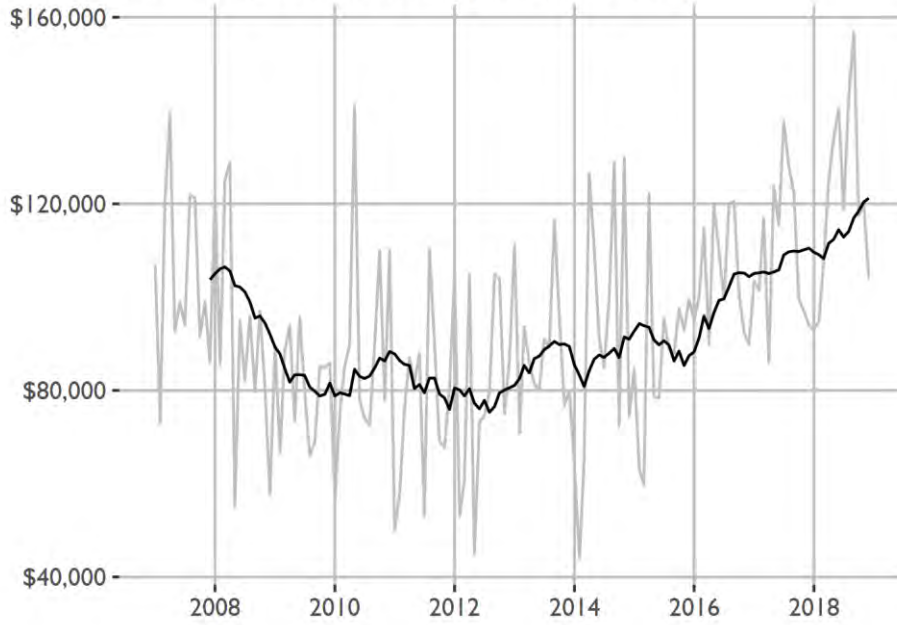
Source: Wisconsin REALTORS® Association

Number of Home Sales: La Crosse County



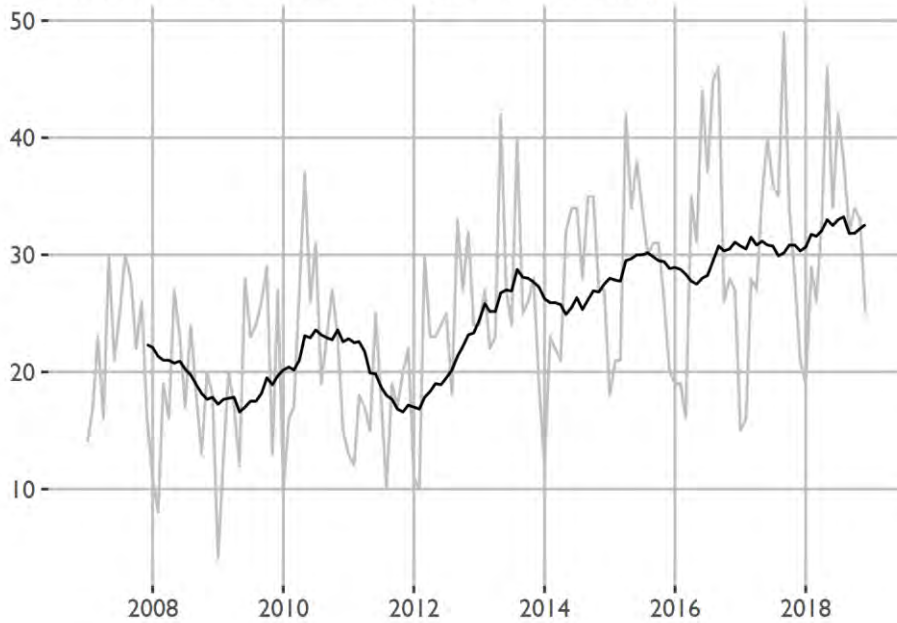
Source: Wisconsin REALTORS® Association

Median Home Prices: Juneau County



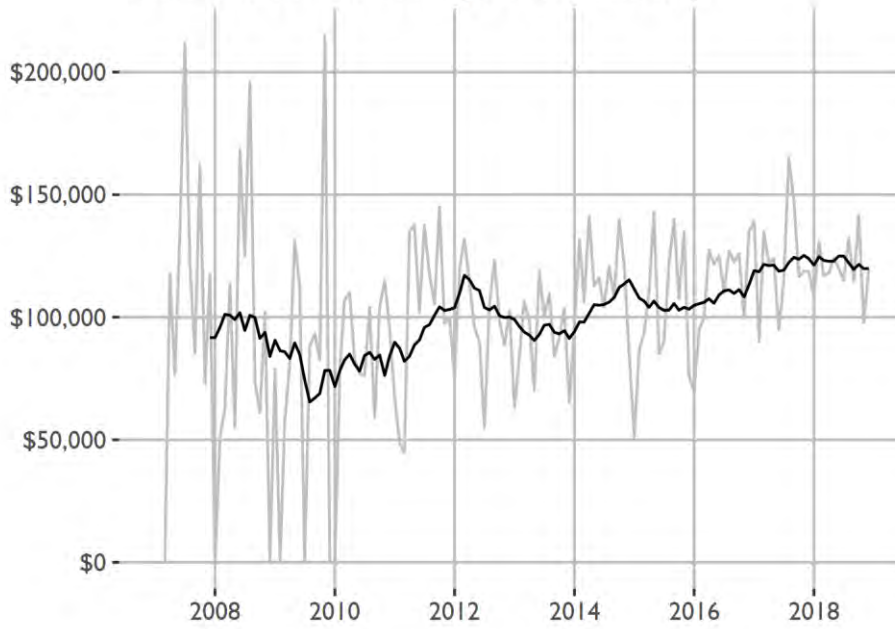
Source: Wisconsin REALTORS® Association

Number of Home Sales: Juneau County



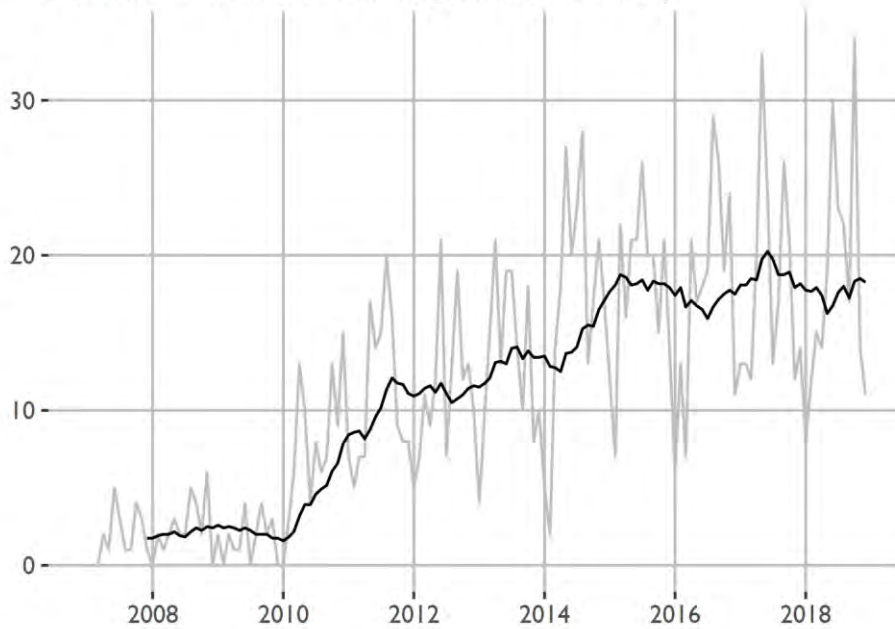
Source: Wisconsin REALTORS® Association

Median Home Prices: Jackson County



Source: Wisconsin REALTORS® Association

Number of Home Sales: Jackson County



Source: Wisconsin REALTORS® Association

S&P Case-Shiller Home Price Index for Minneapolis, Minnesota



Source: Standard and Poor's

S&P Case-Shiller 20-City Home Price Index



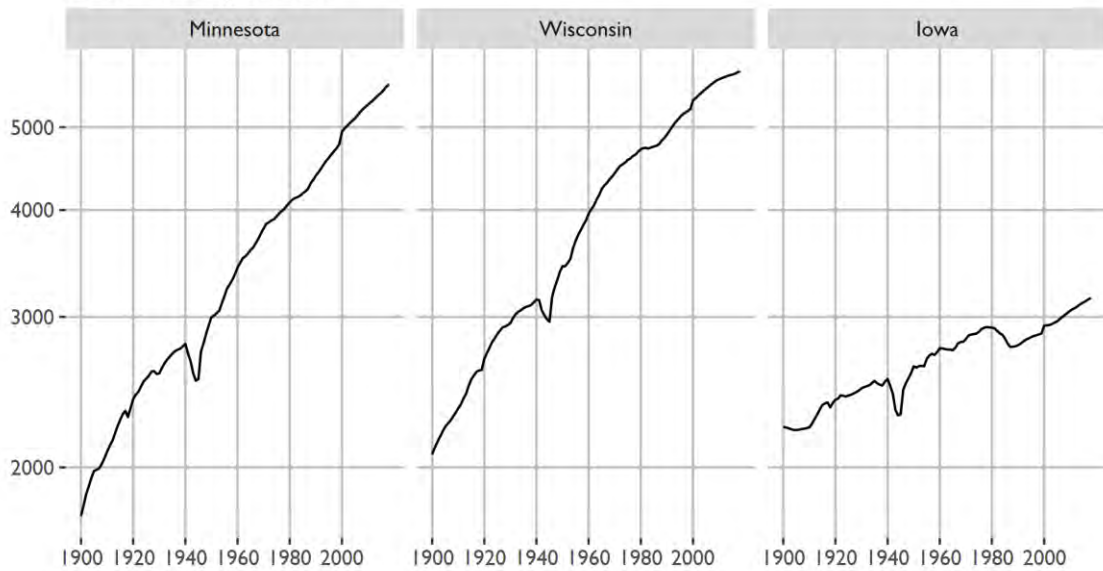
Source: Standard and Poor's

Rental Vacancy Rate for the United States



Source: Census Bureau

Resident Population



Employment-Population Ratio (US)



Source: Board of Governors of the Federal Reserve System

Civilian Labor Force Participation Rate



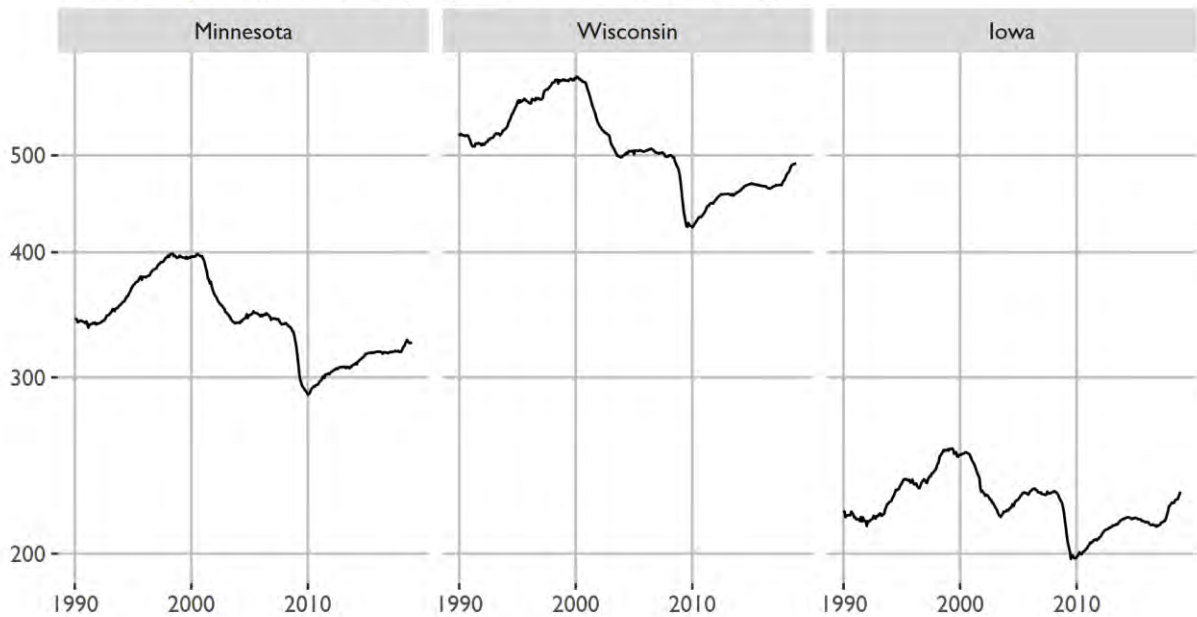
Source: Bureau of Labor Statistics

Civilian Labor Force Participation Rate - 25 to 54 years

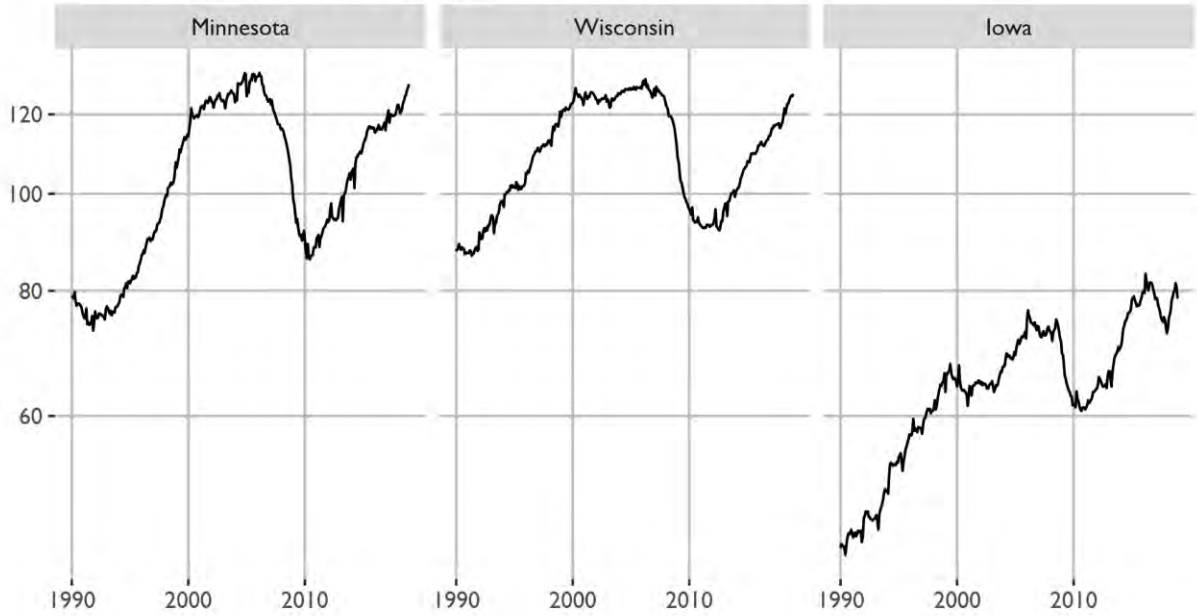


Source: Bureau of Labor Statistics

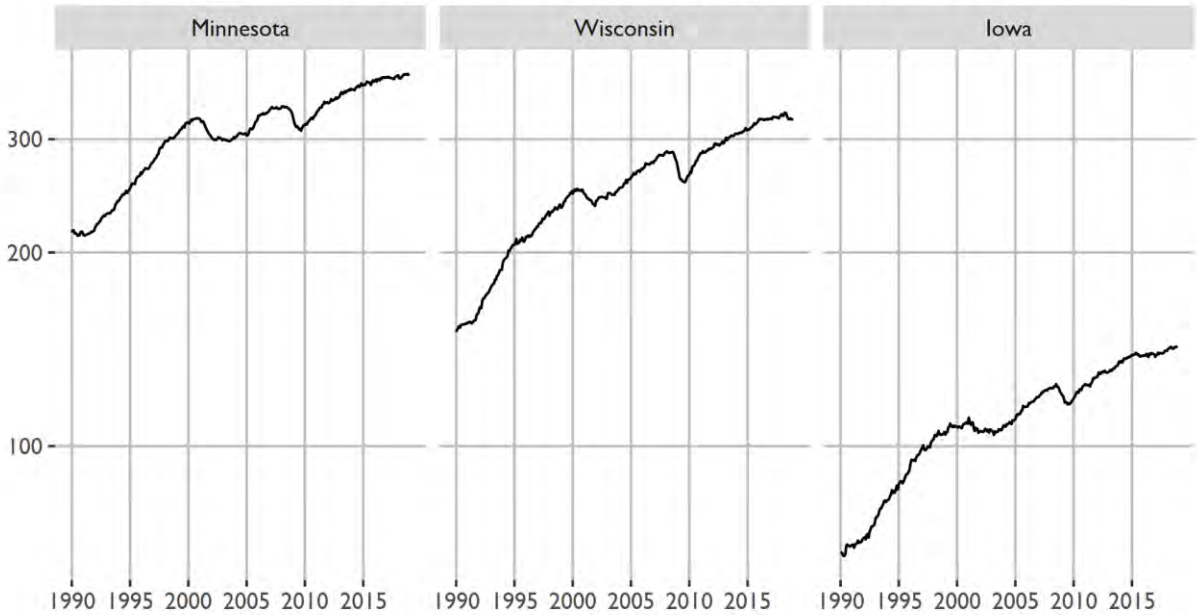
Seasonally Adjusted, Employment - Manufacturing



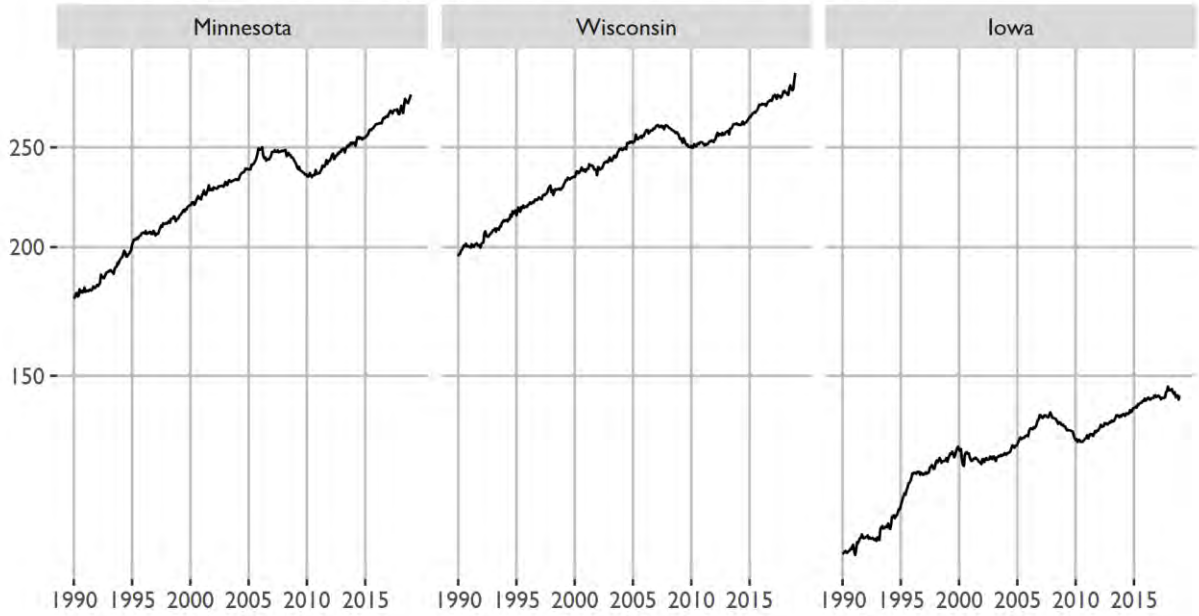
Seasonally Adjusted, Employment - Construction



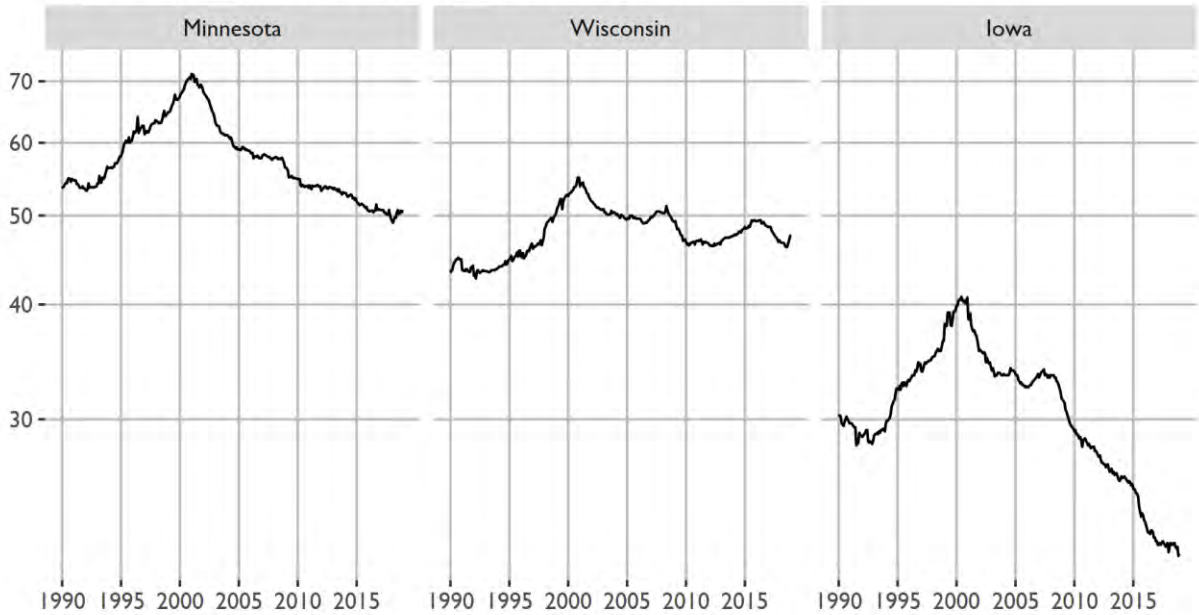
Seasonally Adjusted, Employment - Trade, Transportation and Utilities



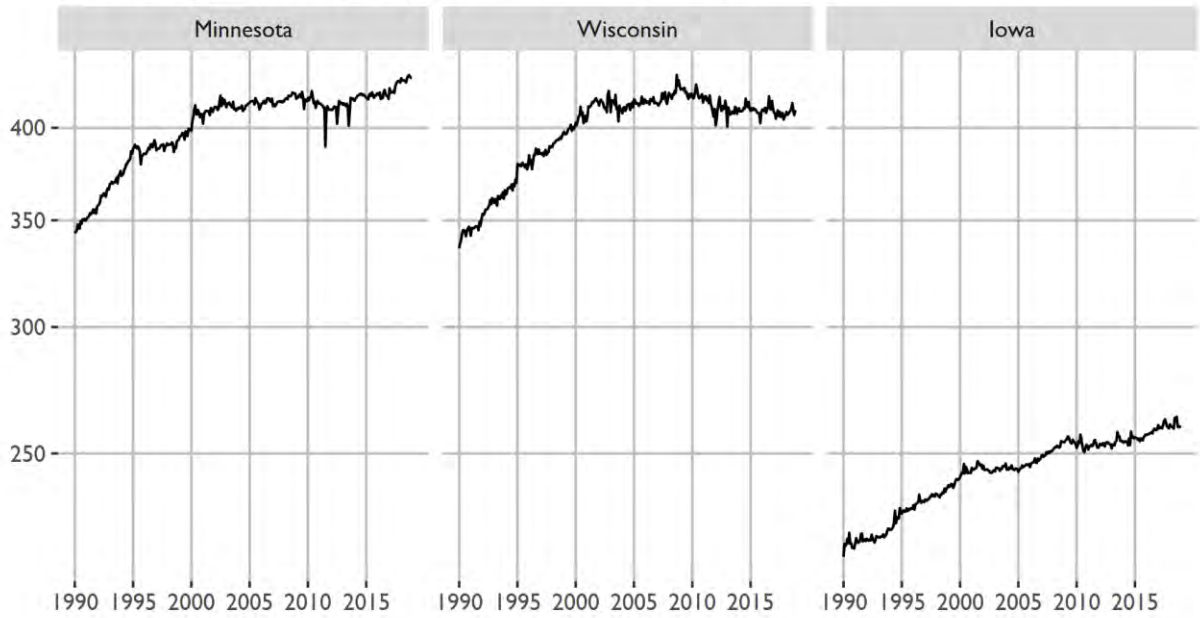
Seasonally Adjusted, Employment - Leisure and Hospitality



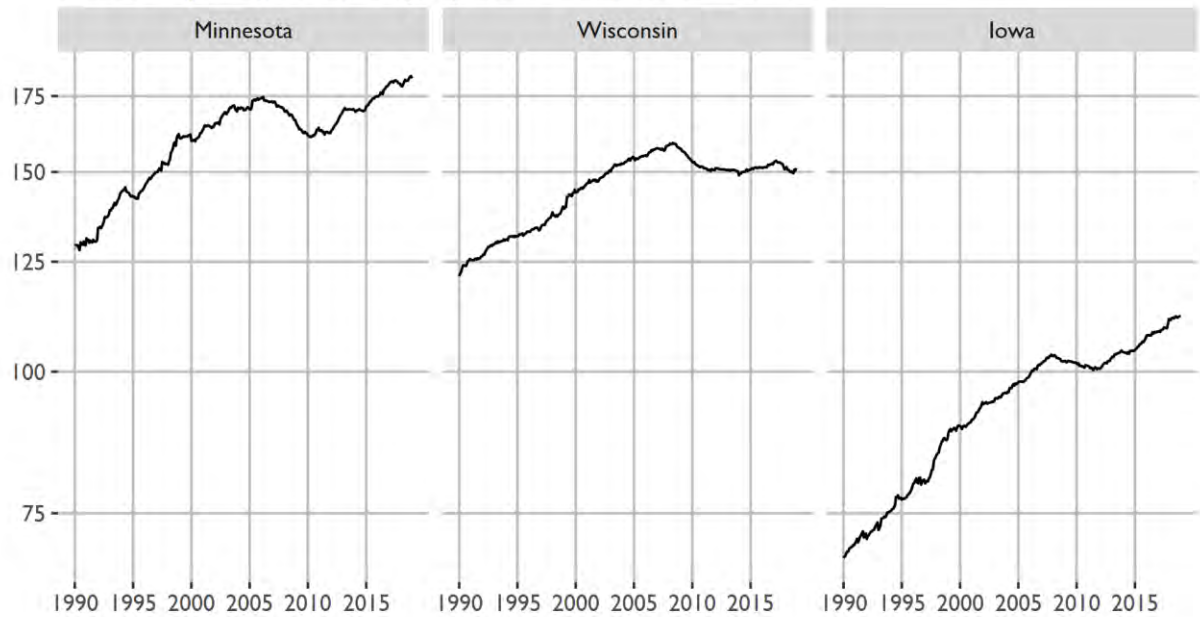
Seasonally Adjusted, Employment - Information



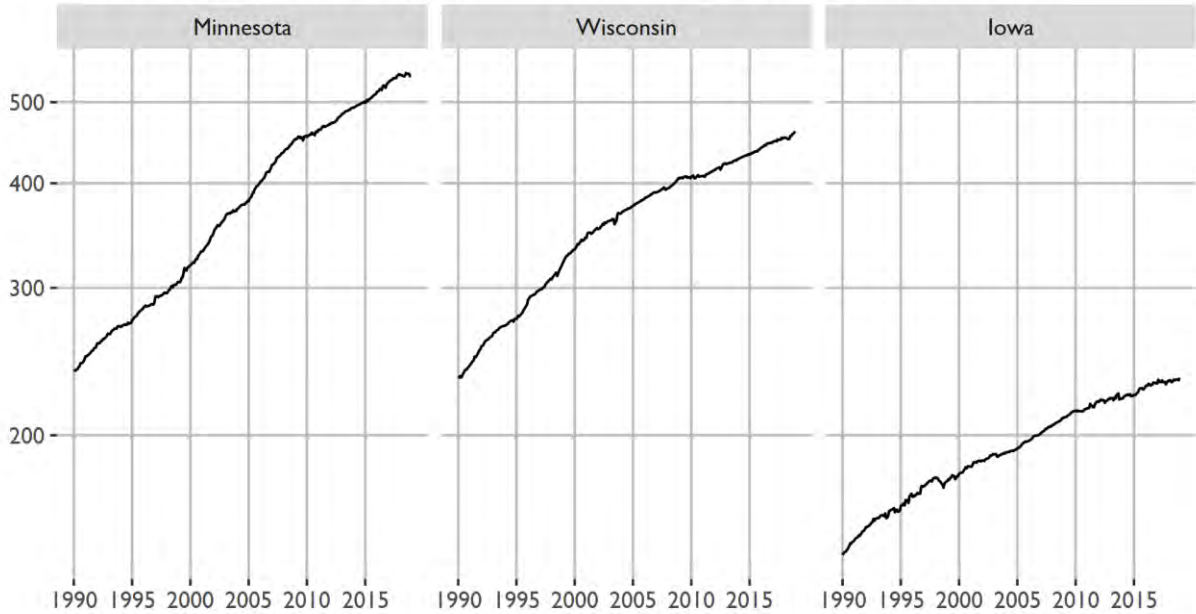
Seasonally Adjusted, Employment - Government



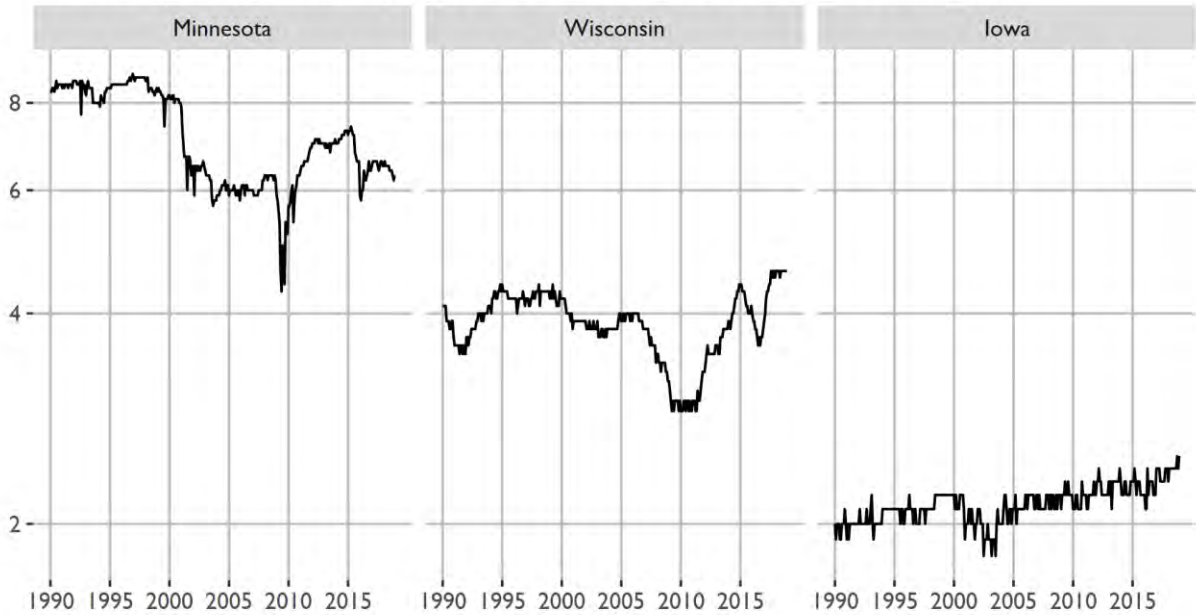
Seasonally Adjusted, Employment - Financial Activities



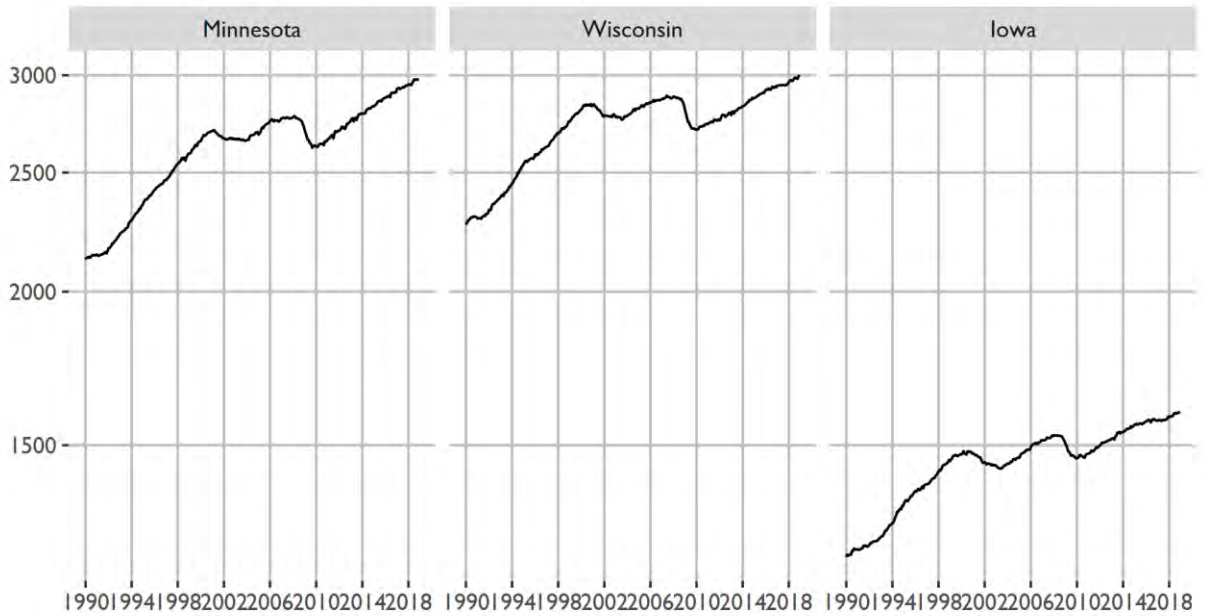
Seasonally Adjusted, Employment - Educational and Health Services



Seasonally Adjusted, Employment - Natural Resources and Mining



Seasonally Adjusted, Non-Farm Employment



Civilian Labor Force in Allamakee County, IA



Source: Board of Governors of the Federal Reserve System

Civilian Labor Force in Houston County, MN



Source: S&P Dow Jones Indices LLC

Civilian Labor Force in Jackson County, WI



Source: S&P Dow Jones Indices LLC

Civilian Labor Force in Juneau County, WI



Source: Board of Governors of the Federal Reserve System

Civilian Labor Force in La Crosse County, WI



Source: Board of Governors of the Federal Reserve System

Civilian Labor Force in La Crosse, WI-MN (MSA)



Source: Census Bureau

Civilian Labor Force in Monroe County, WI



Source: Board of Governors of the Federal Reserve System

Civilian Labor Force in Trempealeau County, WI



Source: Board of Governors of the Federal Reserve System

Civilian Labor Force in Vernon County, WI



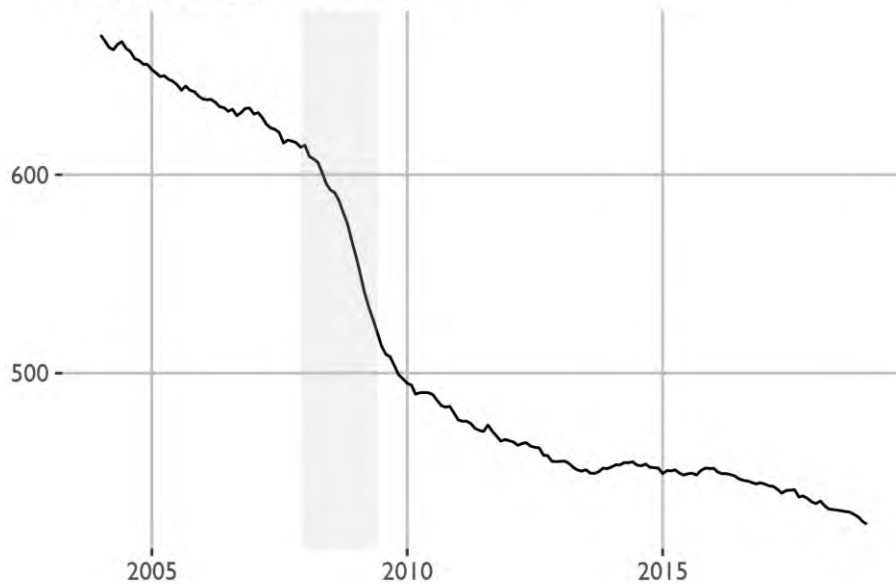
Source: Board of Governors of the Federal Reserve System

Civilian Labor Force in Winona County, MN



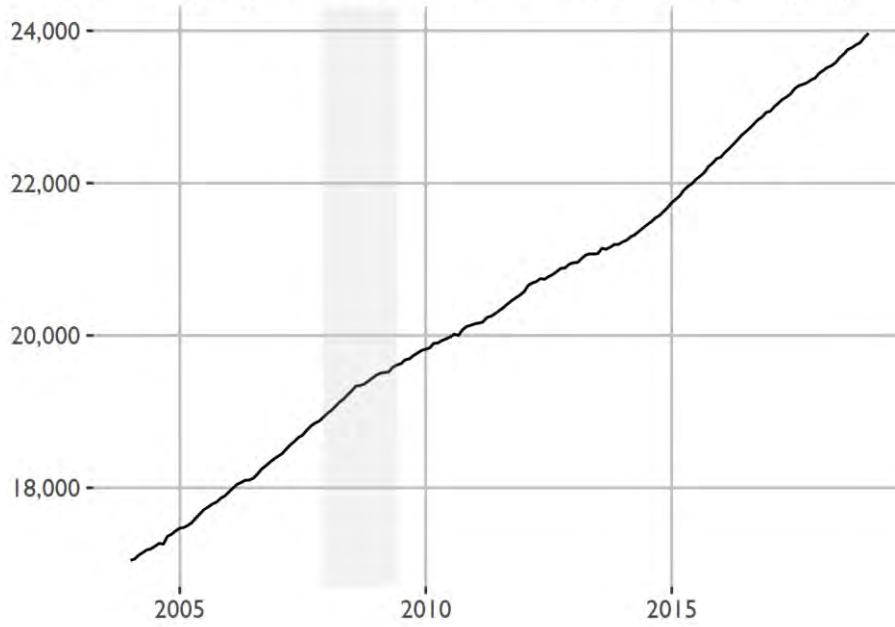
Source: Board of Governors of the Federal Reserve System

All Employees: Nondurable Goods: Printing and Related Support Activities



Source: Bureau of Labor Statistics

All Employees: Education & Health Services (US)



Source: Bureau of Labor Statistics

All Employees: Government (US)



Source: Bureau of Labor Statistics