Agriculture and the Wisconsin Economy

Western District Agricultural Lenders Conference

Steven Deller

Center for Community and Economic Development
Economic Development Administration University Center
Department of Agricultural and Applied Economics
University of Wisconsin-Madison



- Contribution of Agriculture to the Wisconsin Economy
- General Agricultural Trends: On-Farm Production & Food Processing Value Added
- Trends in Farm Financing
- Economic Outlook for National Economy



'You have this burden that you carry': For dairy farmers struggling to hold on, depression can take hold

This year alone, about 800 dairy farmers in Wisconsin quit or were forced out of the business. They are at risk for depression, despair, even suicide.

Rick Barrett, Milwaukee Journal Sentinel

Updated 8:49 p.m. CST Dec. 31, 2019



Weathering the storm: Difficult growing season, dairy farm losses named top stories from 2019

By The Country Today Dec 30, 2019



Wisconsin Farmers Expected To Take On More Debt Despite Improved Income

National Farm Debt Forecast To Reach Highest Level Since 1982

By Hope Kirwan Published: Friday, March 8, 2019, 5:35am Food Production Industry Is Strong Amid Farm Troubles, Report States

Ag Report Shows Jobs, Revenue Increased Among Food Producers

By Elizabeth Dohms Published: Friday, August 16, 2019, 10:30am

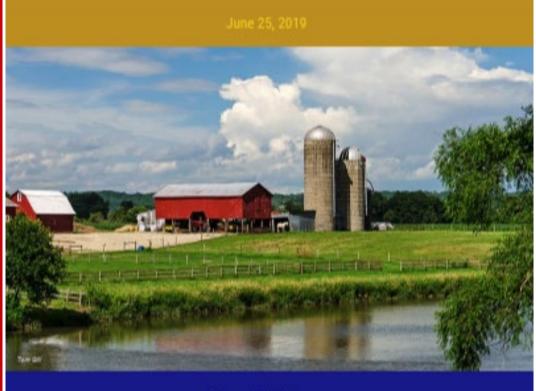








The Contribution of Agriculture to the Wisconsin Economy: An Update for 2017



Steven C. Deller

Department of Agricultural and Applied Economics Center for Community Economic Development University of Wisconsin-Madison to Wisconsin

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Agriculture's Contribution to The Wisconsin Economy 2017

Agriculture has historically been considered a backbone of the Wisconsin economy. Over time, however, other components, such as the service producing sectors including tourism-

'isconsin

Food Processing and the Wisconsin Economy: Small or Large Businesses

The recent update of the Contribution of Agriculture to the Wisconsin Economy revealed that

or. owt

Agriculture's Contribution to The Wisconsin Economy: Fruit and Vegetable Farming

While Wisconsin is worthy of being called the "Dairy State", one of the strengths of

Wisconsin

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Agriculture's Contribution to The Wisconsin Economy 2017 Breweries, Wineries and Distilleries

One of the fasting growing agricultural sectors in Wisconsin is the producers of alcoholic beverages (breweries, wineries and distilleries). As recently as 2012 there were only 73 such businesses in Wisconsin, four short years (2016) latter

the number of has increased to 129 (Figure 1). Part of this growth can be attributed to

Figure 1: Growth in Alcoholic Beverage Producers: 2012-20

- "All agriculture", combined on-farm and food processing, contributes \$104.8 billion to industrial revenues (16.4% of the state total), 435,700 jobs (11.8%), \$22.5 billion to labor income (11.3%), and \$37.6 billion to total income (11.6%).
- On-farm activity contributes \$22.0 billion to industrial sales or revenue (3.5% of the state total), **154,000 jobs** (4.1%), \$5.8 billion to labor income (2.9%), and \$9.8 billion to total income (3.0%).
- <u>Food processing</u> activity contributes **\$82.7 billion** to industrial sales (13.0% of the state total), **282,000** jobs (7.6%), **\$22.5 billion** to labor income (8.4%), and **\$37.6 billion** to total income (8.6%).
- The economic activity supported by agriculture results in <u>state and local</u> government tax revenues of **\$2.9 billion**, which is roughly 7.4% of "own source revenues".



• <u>Dairy</u>, combining both on-farm and dairy processing, contributes **\$45.6 billion** to industrial revenues (7.1% of the state total), **157,100** jobs (4.2%), **\$9.0 billion** to labor income (4.5%) and **\$15.1 billion** to total income (4.7%). <u>Dairy processing accounts for roughly two-thirds of this contribution</u>.

- The bulk of the growth in the contribution of agriculture to the Wisconsin economy between 2012 and 2017 is growth in the food processing sectors.
- Wisconsin agriculture is extremely diverse.

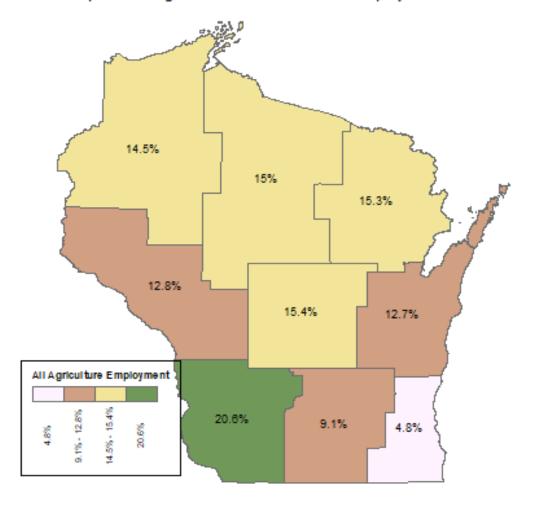




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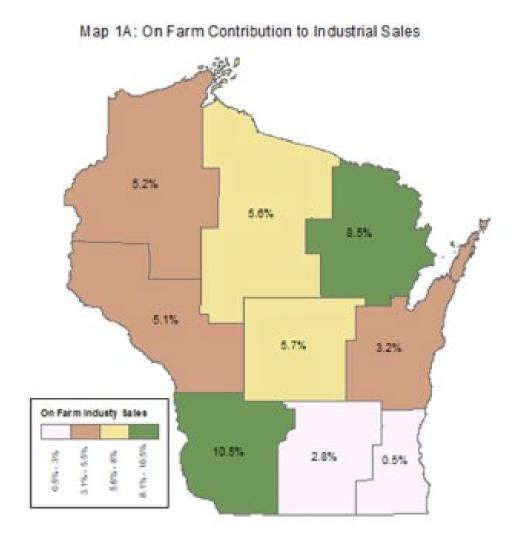
Map 1C: All Agriculture Contribution to Industrial Sales 19.3% 21.8% 21% 19.6% 22% 18.6% All Agriculture Industry Sales 27.9% 13.7% 7.2%

Map 2C: All Agriculture Contribution to Employment





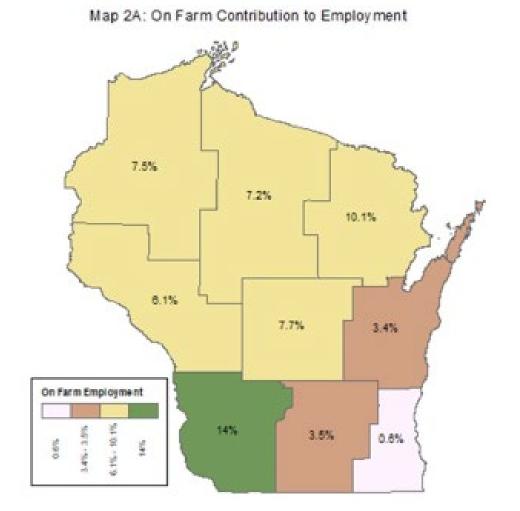
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Map 1B: Food Processing Contribution to Industrial Sales 14,1% 18.2% 12.5% 14.5% 18.3% 15,4% Food Processing Industry Same 17.4% 10.9% 0.7%



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Map 2B: Food Processing Contribution to Employment 7.7% 5.2% 7.7% 9.3% Food Processing Employhment

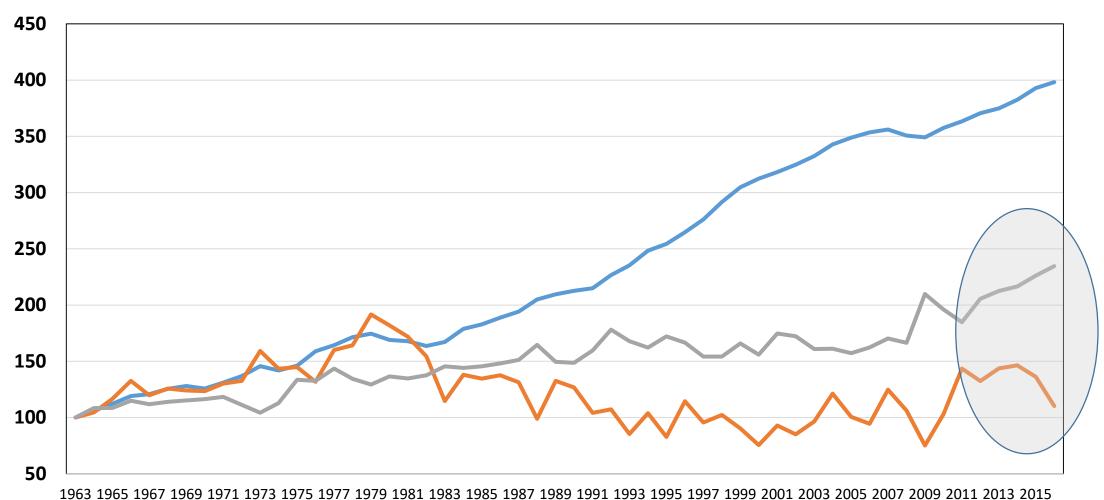
6.6%

5.6%

4.2%



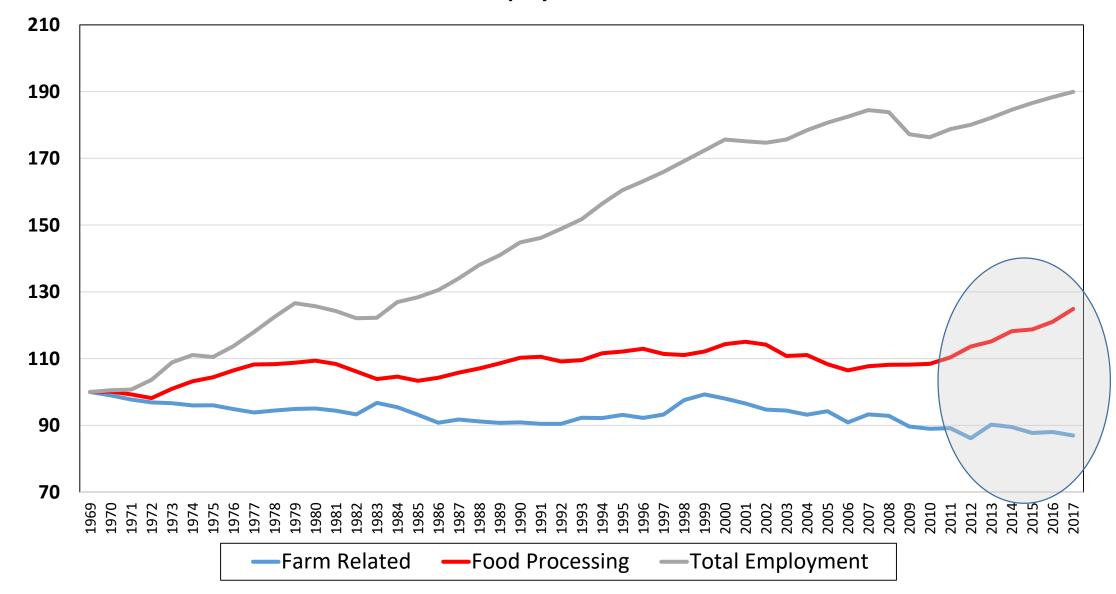
Wisconsin Gross State Product Growth Index (Real 2016 Dollars)



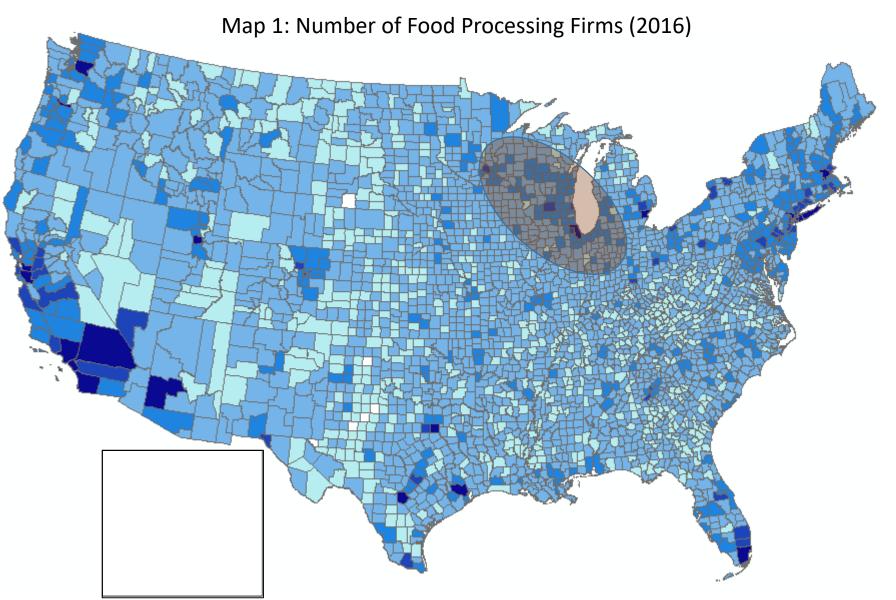
—All Industries —Farm —Food Processing



Wisconsin Employment Growth Index



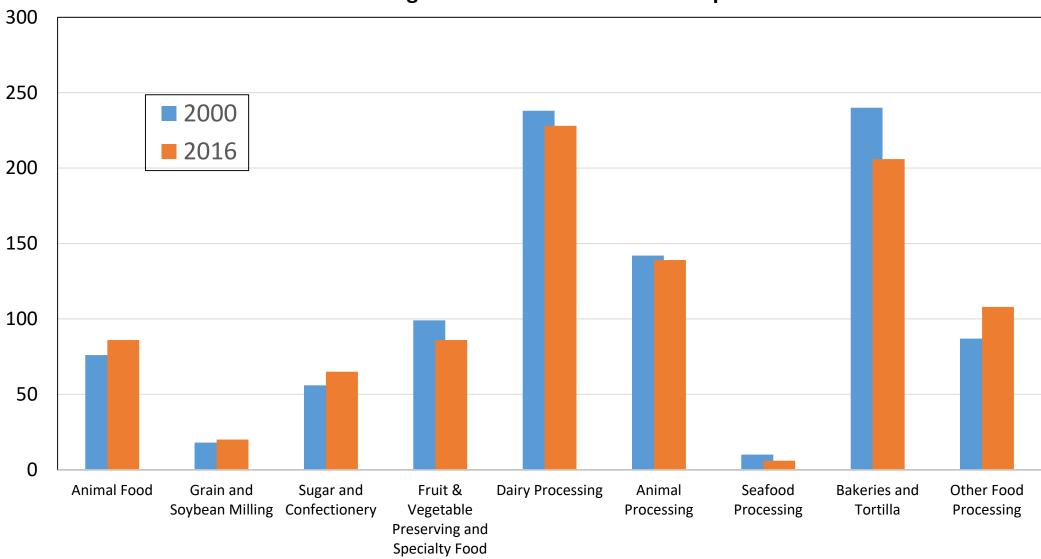




Note higher concentration of food processing firms in urban areas. Implication is that "agriculture" is not just a rural industry.

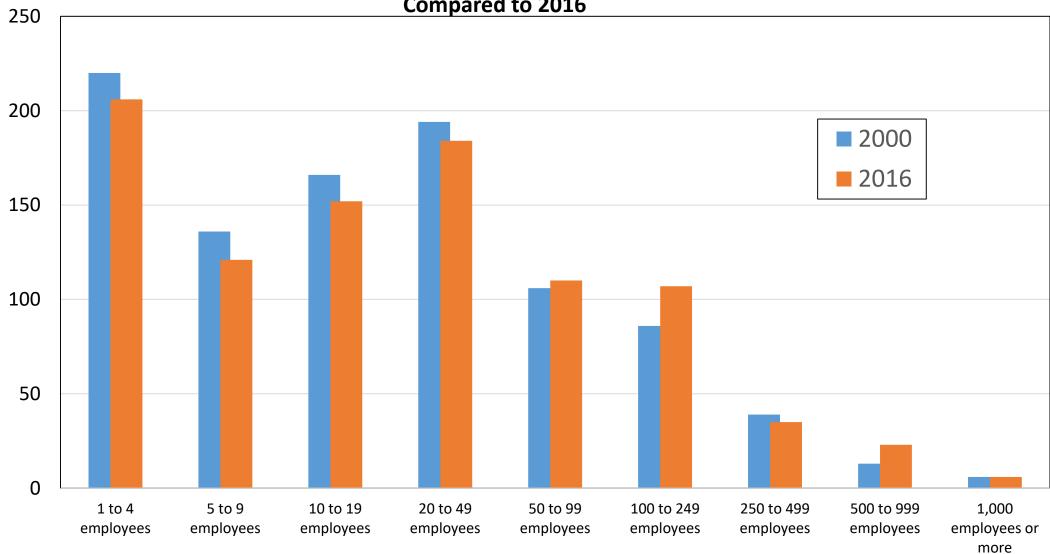


Number of Food Processing Firms in Wisconsin 2000 Compared to 2016





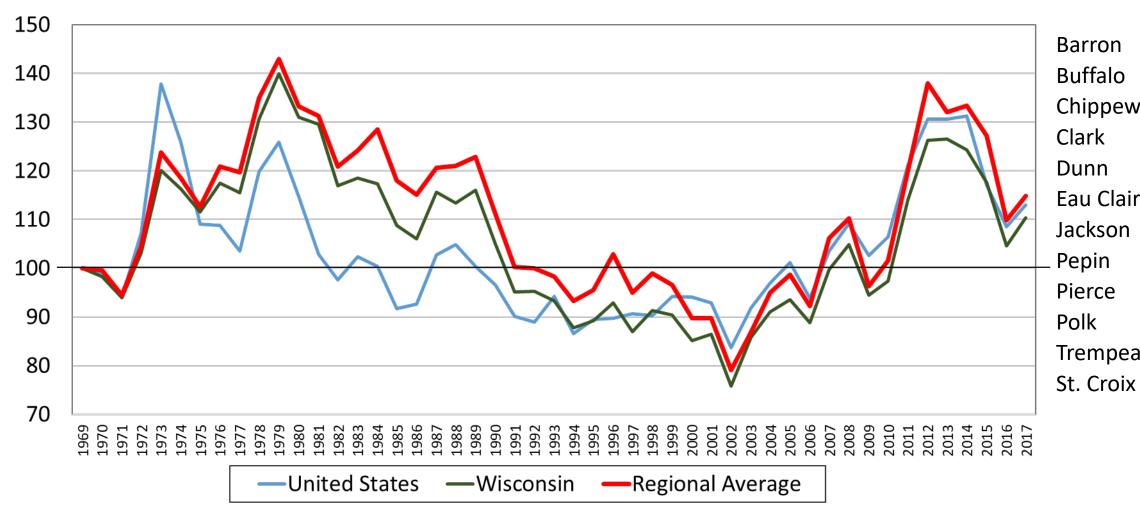
Number of Food Processing Firms in Wisconsin by Employment Size Wisconsin 2000 Compared to 2016





Total Revenue Index

(Constant 2017 Dollars) (Base Year 1969)

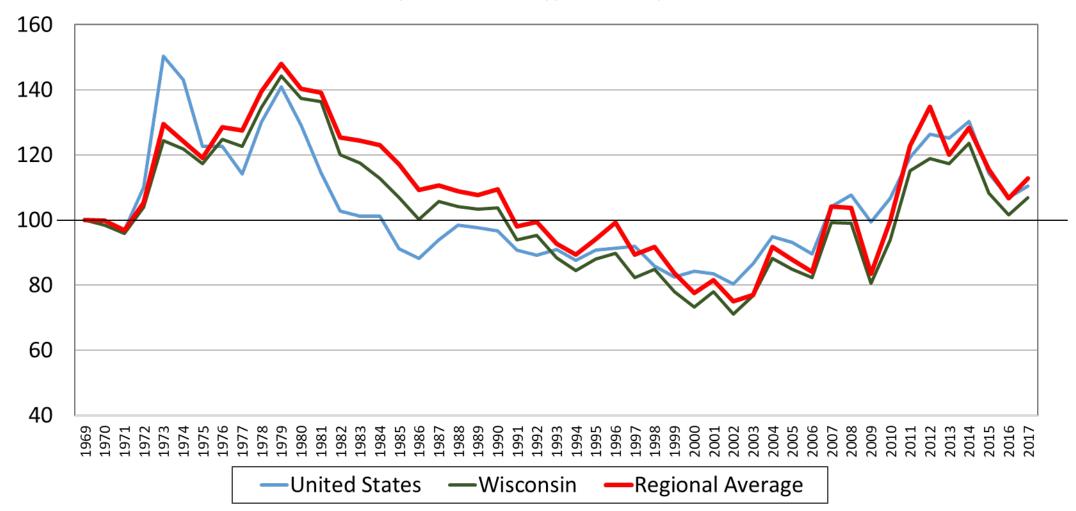


Barron Buffalo Chippewa Clark Dunn Eau Claire Jackson Pepin Pierce Polk Trempealeau



Total Cash Receipts from Marketings Index

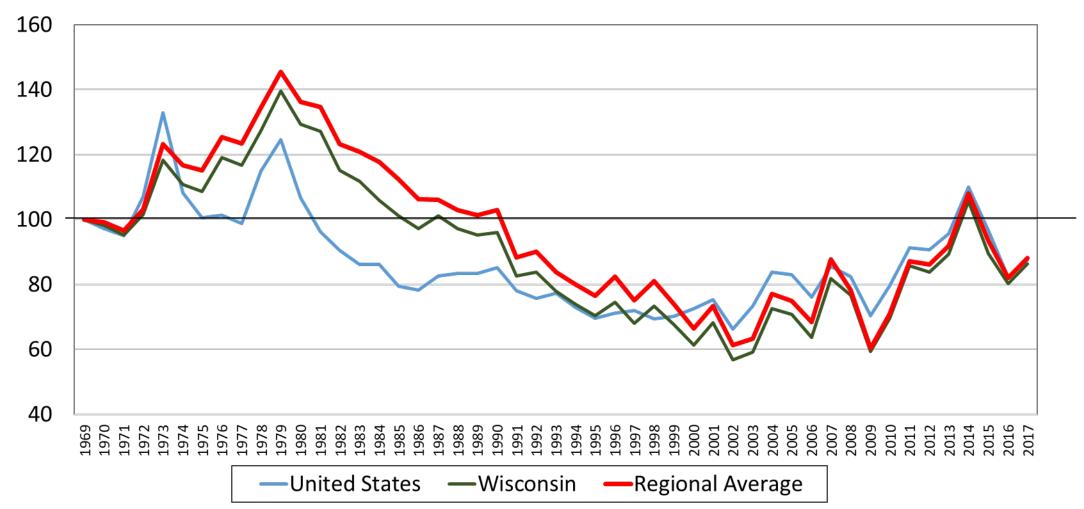
(Constant 2017 Dollars) (Base Year 1969)





Cash Receipts: Livestock and Products Index

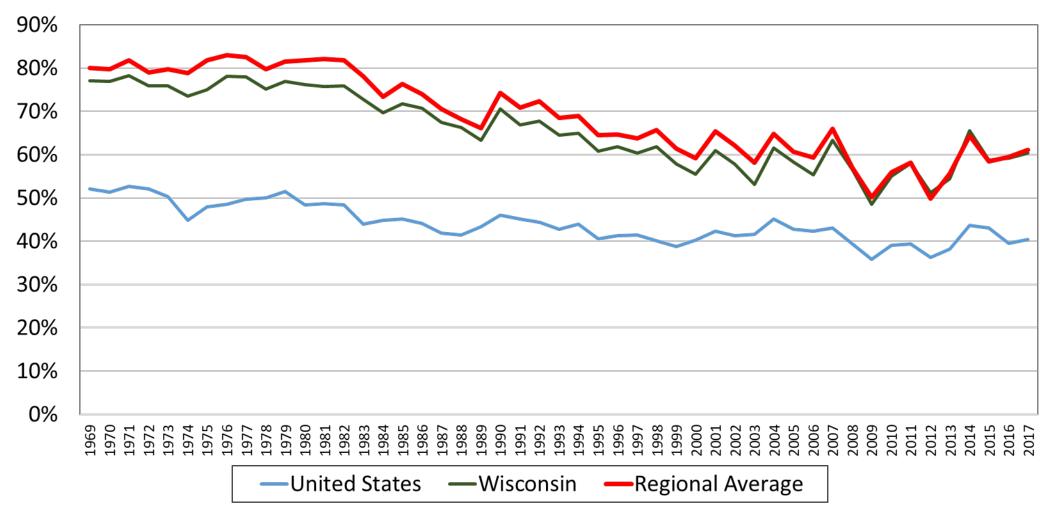
(Constant 2017 Dollars) (Base Year 1969)





Percent of Total Revenue from Livestock Marketing

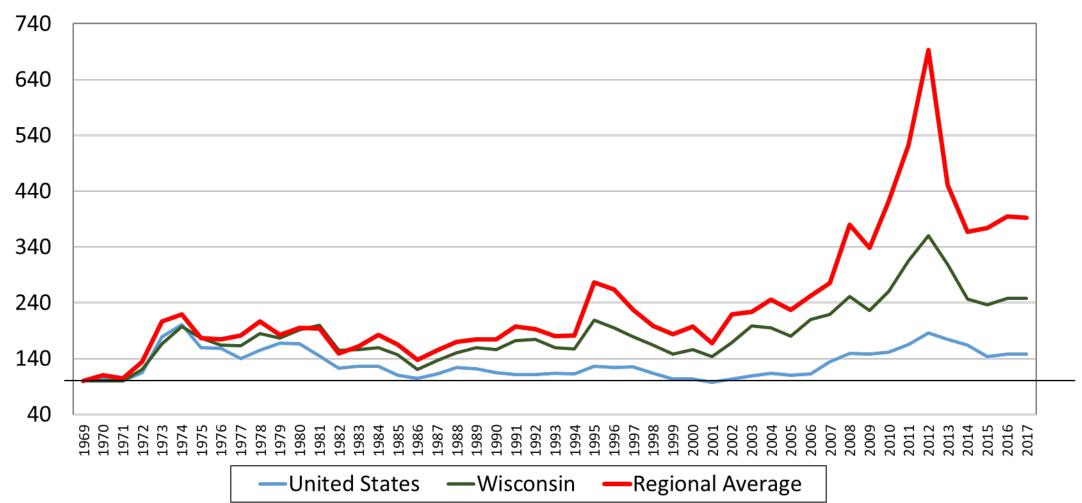
(Constant 2017 Dollars)





Cash Receipts: Crops Index

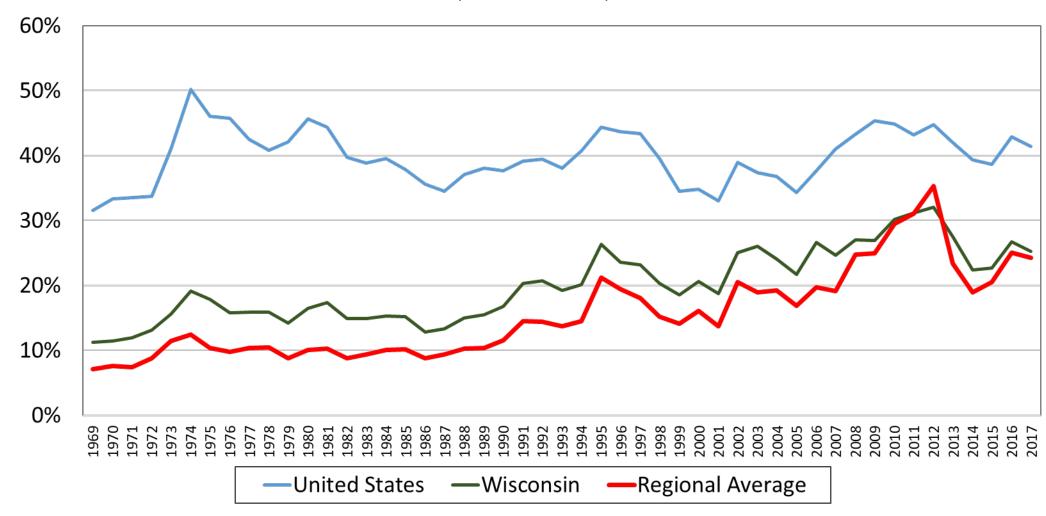
(Constant 2017 Dollars) (Base Year 1969)





Percent of Total Revenue from Crop Marketing

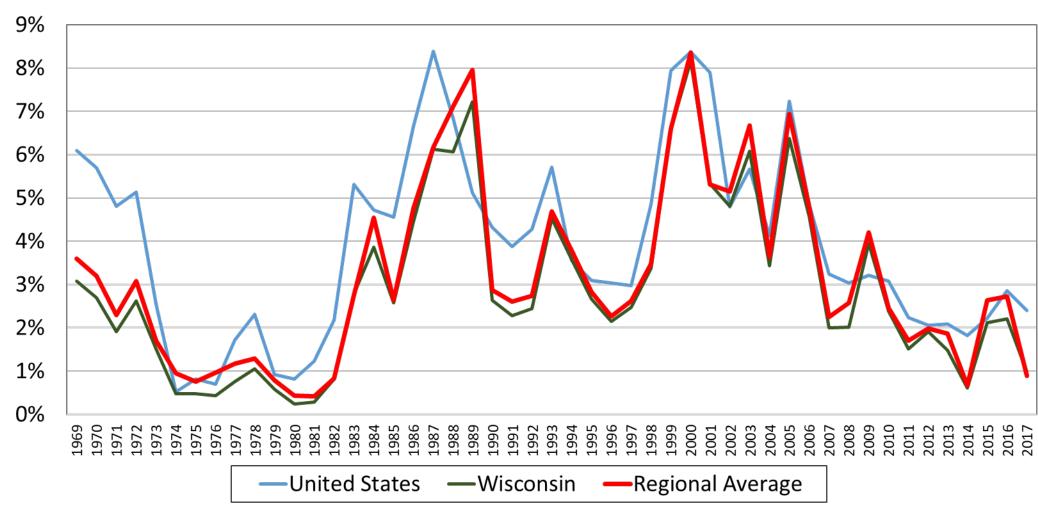
(Constant 2017 Dollars)





Percent of Total Revenue from Government Payments

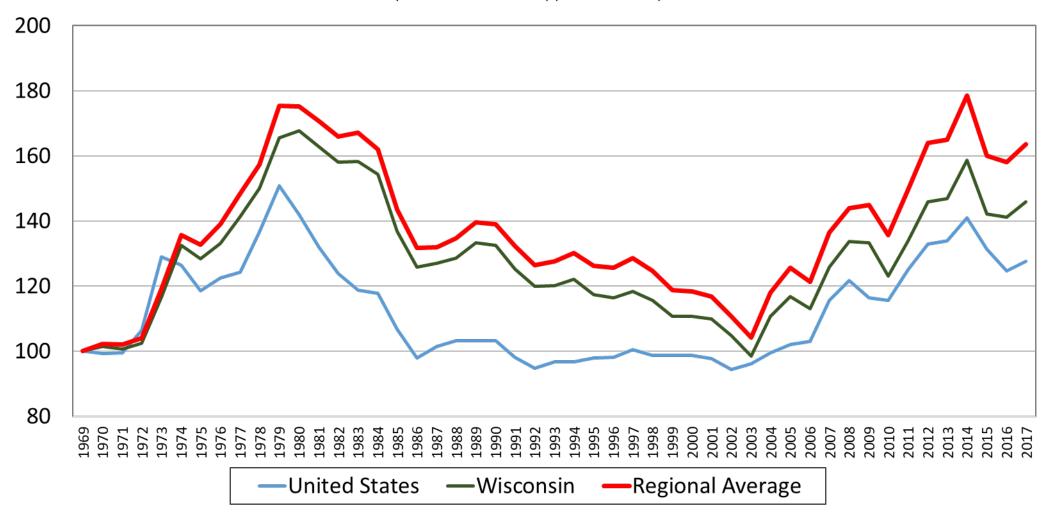
(Constant 2017 Dollars)





Total Production Expenses Index

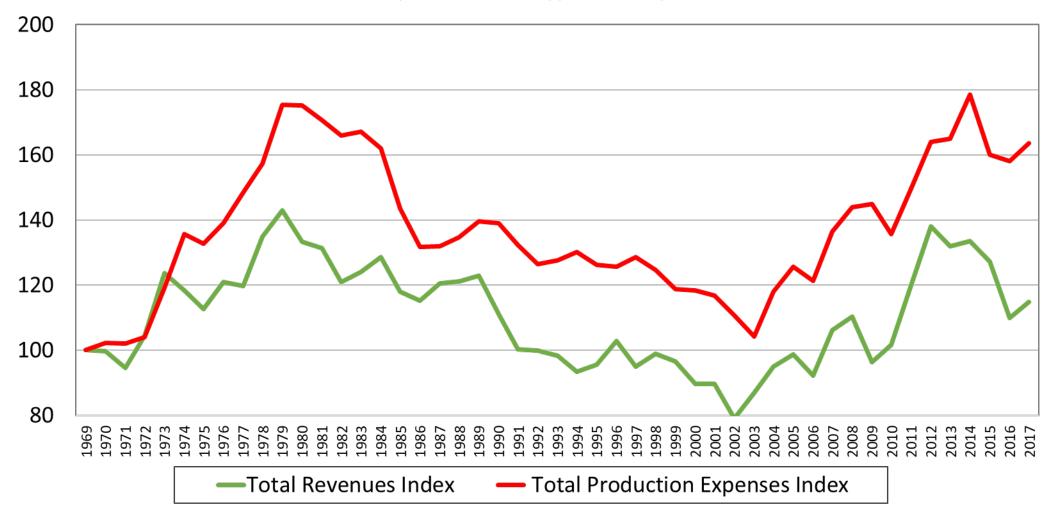
(Constant 2017 Dollars) (Base Year 1969)





Total Production Expenses and Total Revenues Index (Western District Region)

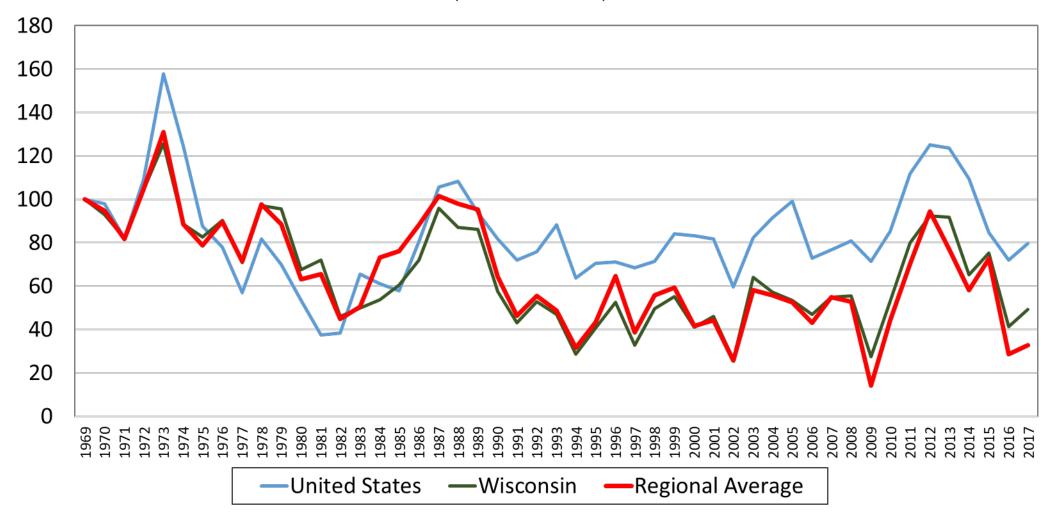
(Constant 2017 Dollars) (Base Year 1969)





Net Income Index

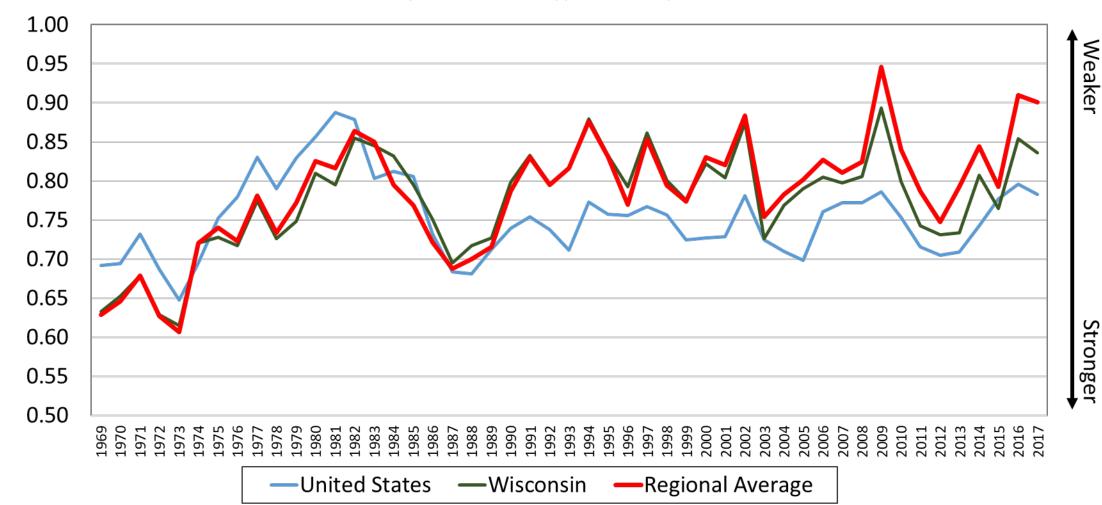
(Constant 2017 Dollars)





Operating Efficiency (Operating Expenses/Total Revenues)

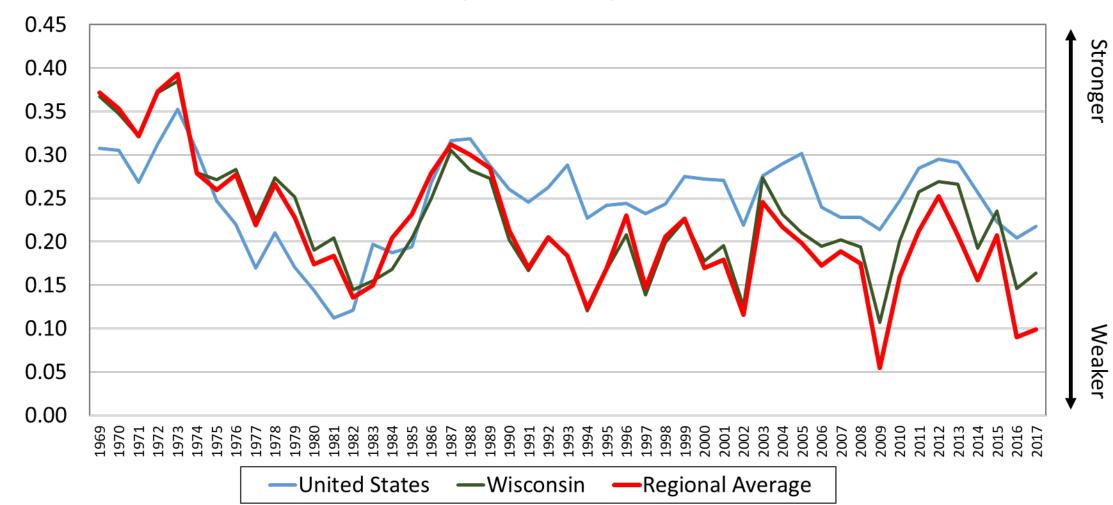
(Constant 2017 Dollars) (Base Year 1969)





Profit Margin (Net Income/Total Revenue))

(Constant 2017 Dollars)





What Would We Do Without Experts? U.S. job growth continues to beat expectations.

Freeman, James. Wall Street Journal (Online); New York, N.Y. [New York, N.Y]06 Dec 2019.

THE WALL STREET JOURNAL

Will Recession Strike in 2020? Even the best indicators of downturns are unreliable, but investors can take steps to prepare either way.

Malkiel, Burton G; Saha, Atanu. Wall Street Journal (Online); New York, N.Y. [New York, N.Y]31 Dec 2019.

THE WALL STREET JOURNAL.

Global Economy Shows Signs of Regained Footing; Growth steadies as prospects rise in U.S. and China; Europe remains a weak spot

Morath, Eric; Hannon, Paul. Wall Street Journal (Online); New York, N.Y. [New York, N.Y]16 Dec 2019.

THE WALL STREET JOURNAL.





Forecast Edition: December 2019

Grading the Fed Chairman

How would you grade the performance of Jerome Powell as Federal Reserve chair?

The New Nafta & Growth

How will the new USMCA affect potential GDP growth rate?

The New Nafta & Jobs

How will USMCA impact U.S. manufacturing employment?

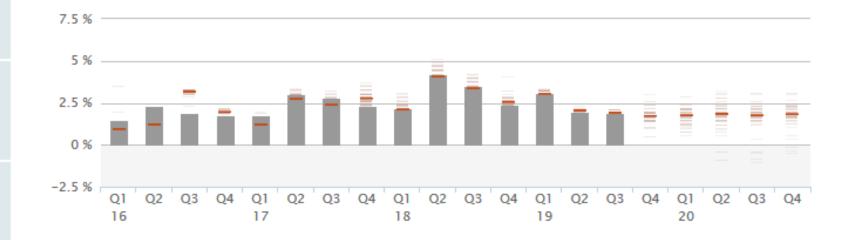
□ Economic Indicators

GDP (quarterly)

GDP (annual)

GDP (quarterly)



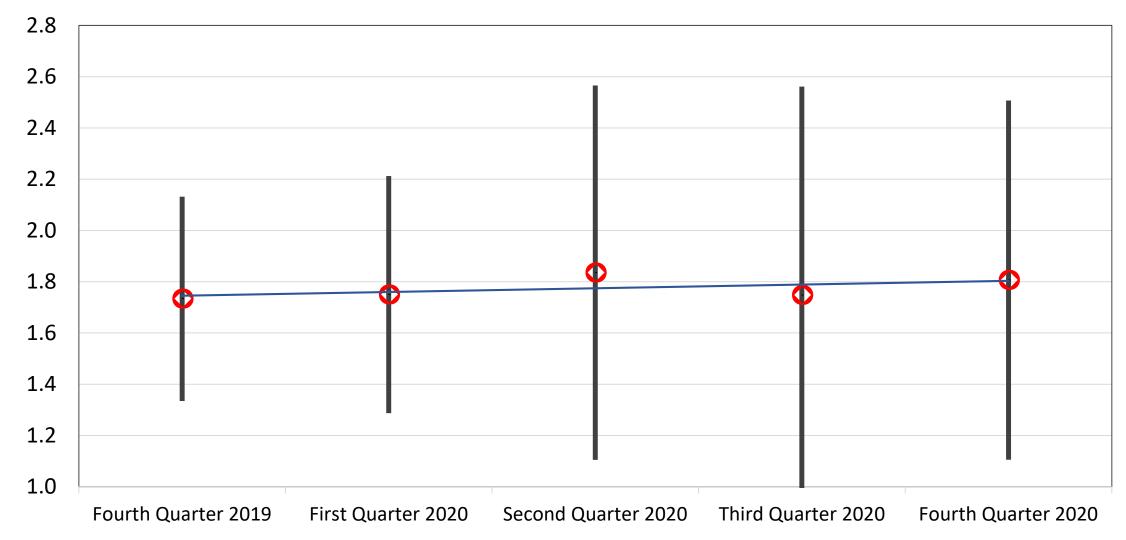


GDP (quarterly)

Actual (Q3 2019) 1.9%	Projected: Q4 2019 1.7% ▼	Projected: Q1 2020 1.8%	Projected: Q2 2020 1.8%	4	۲

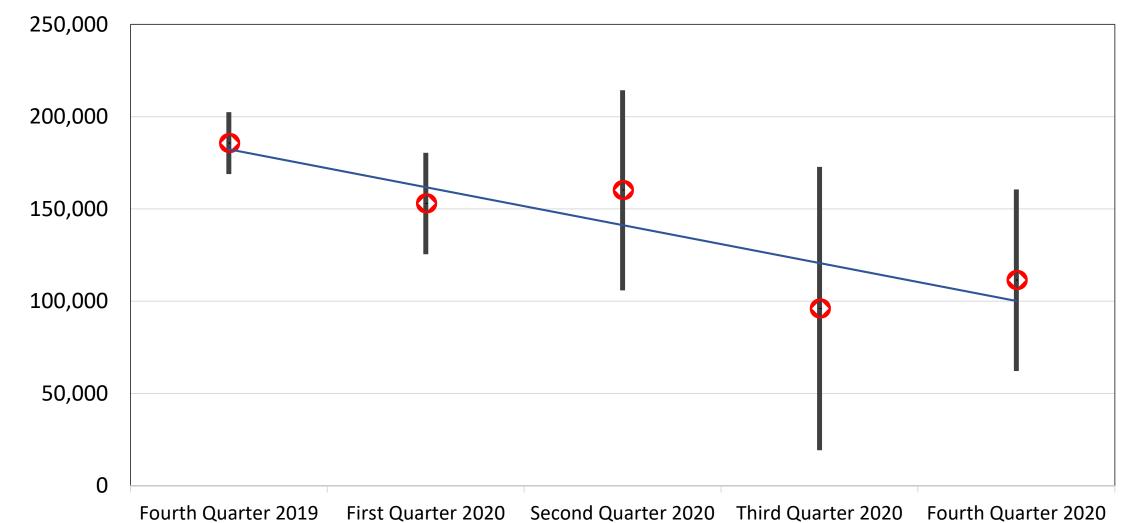


Forecasted Economic Growth: Gross Domestic Product (GDP)



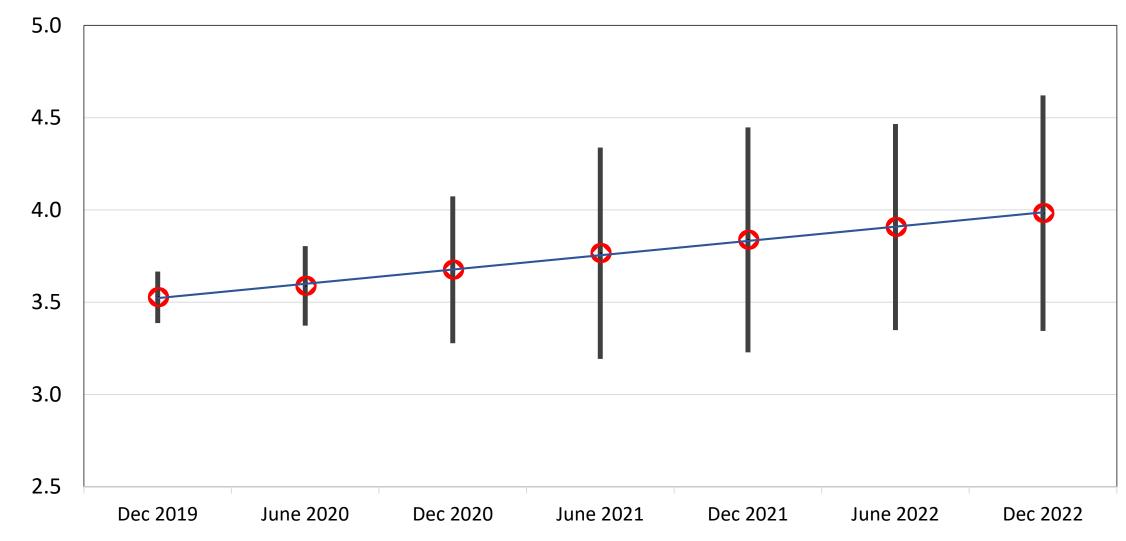


Forecasted Economic Growth: Monthly Employment Growth



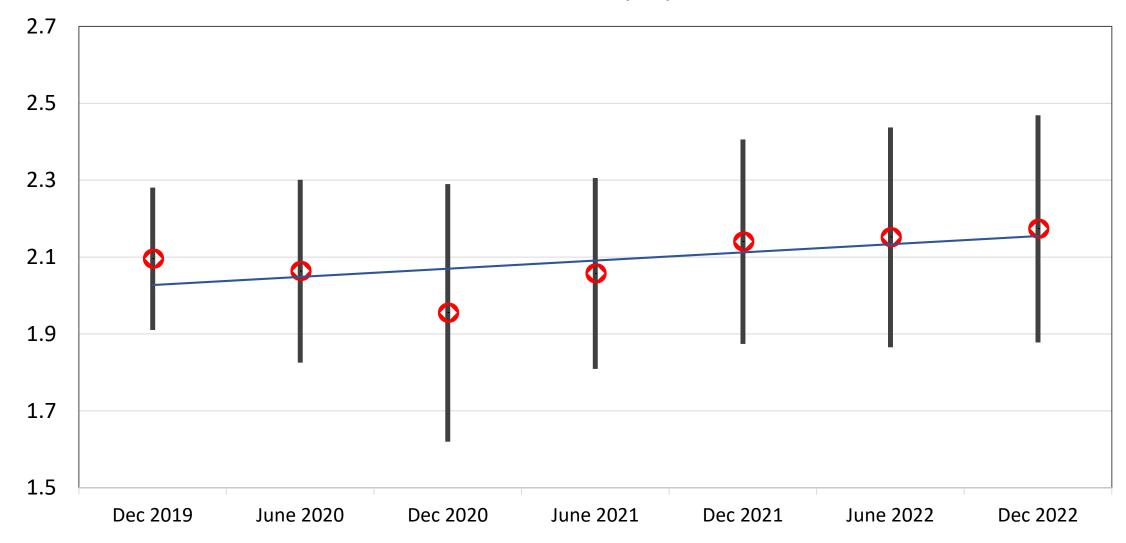


Forecasted Economic Growth: Unemployment Rate



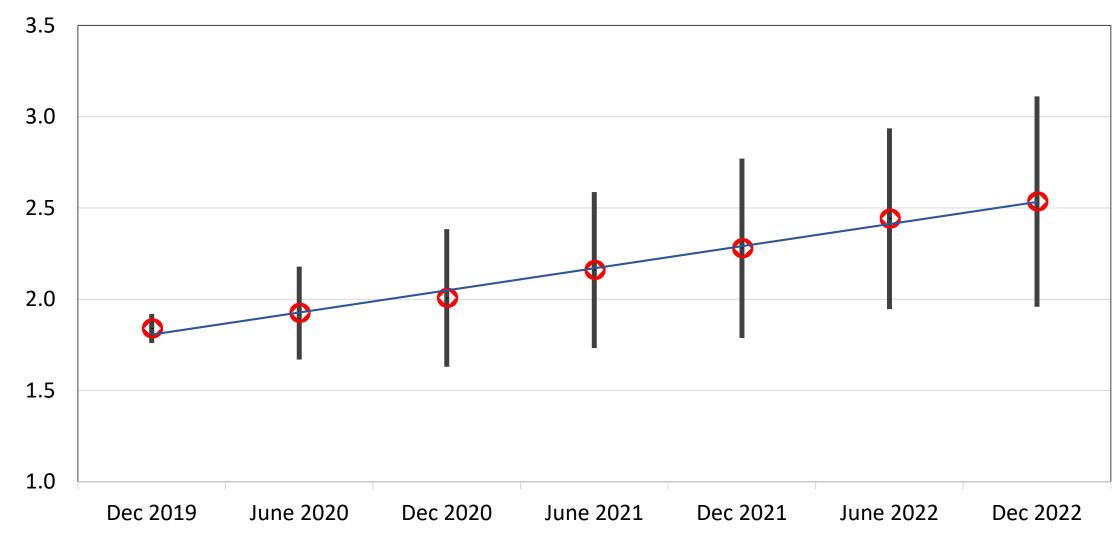


Forecasted Economic Growth: Inflation Rate (CPI)



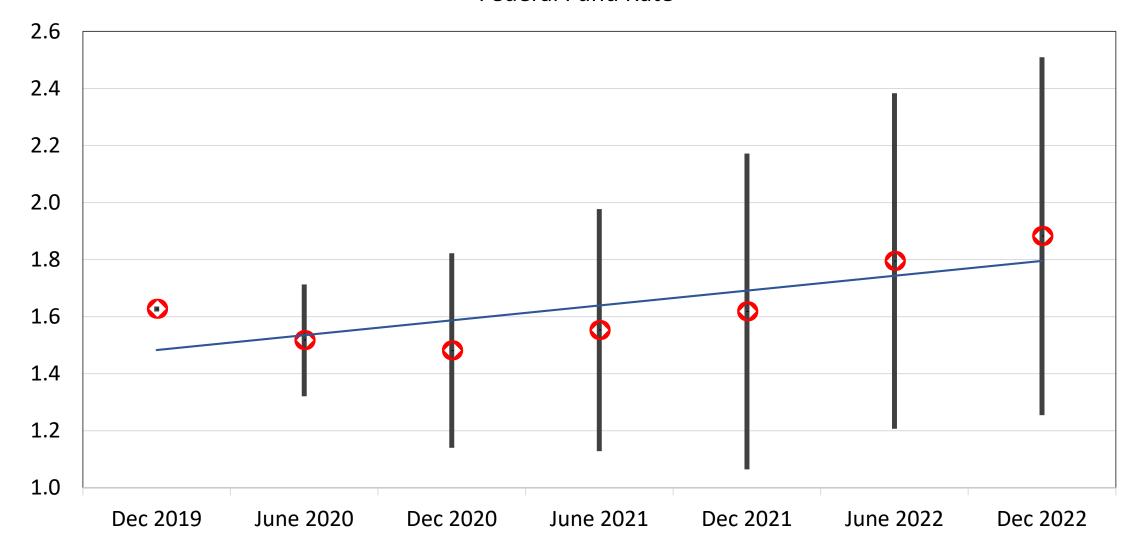


Forecasted Economic Growth: Bond Rate (10 Year Treasury Note)



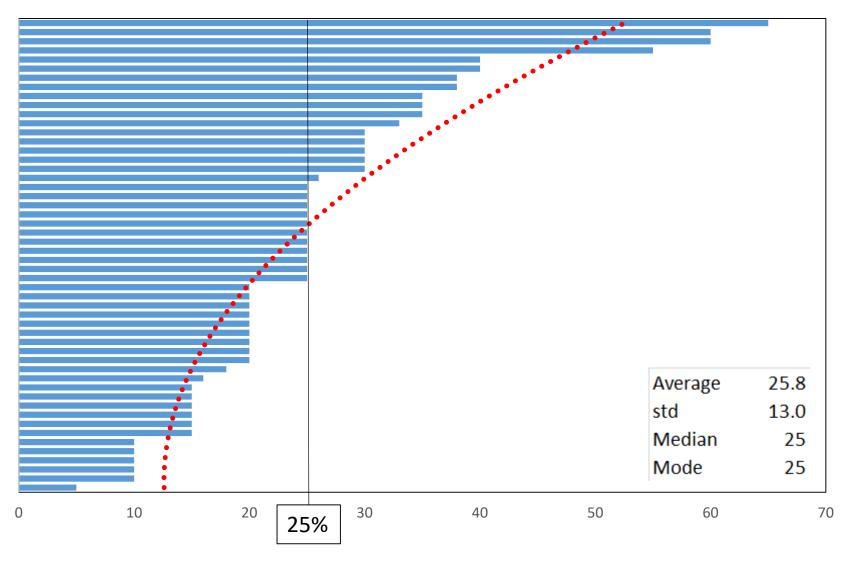


Forecasted Economic Growth: Federal Fund Rate





Probability of a Recession in Next 12 Months





- Wisconsin agriculture is extremely diverse which helps buffer the industry from shocks.
- We would have to return to the farm crisis of the early 1980s to see similar patterns, but the farm crisis today is "minor" compared to the early 1980s.
- The overall economy will continue to growth, but at an extremely modest pace.
- Prior economic forecasts proved to be overly pessimistic which is calling into question our confidence in future forecasts.



Thank you!

scdeller@wisc.edu





