

Wisconsin's Changing Rural Landscape

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Wisconsin Energy Institute
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Goal

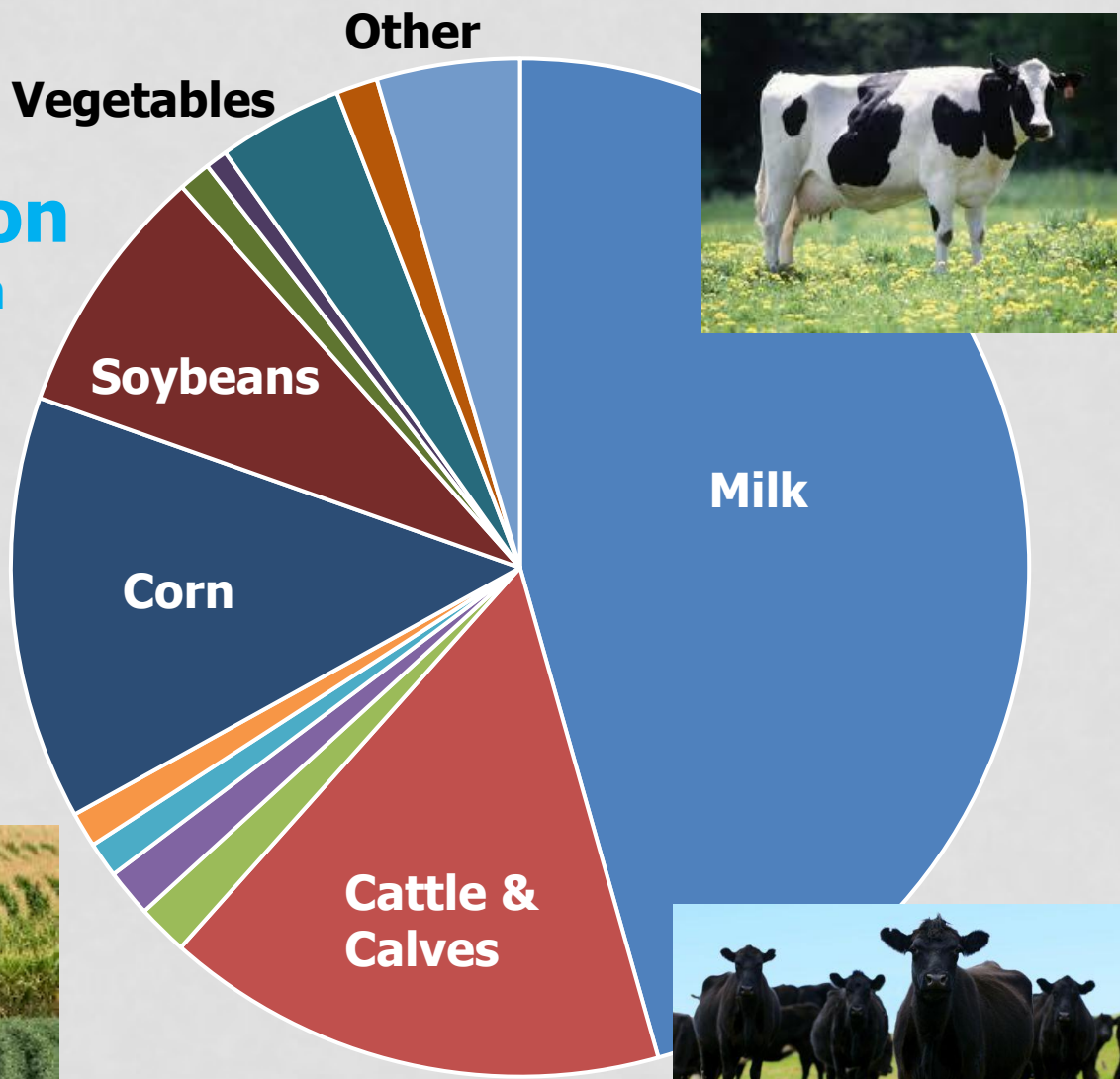
- Overview the food supply chain in Wisconsin to get a sense of where farmers and the rural landscape fit in
- Talk about how farmers are doing
- Set the stage for others to talk about the potential for Wisconsin's Bioeconomy

Share of Wisconsin Farm Cash Receipts by Commodity Category 2010-2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total (\$B)	\$9.0	\$11.3	\$12.0	\$12.1	\$12.9	\$11.3	\$10.7	\$11.3	\$11.0	\$11.3
Livestock	64%	64%	61%	66%	73%	70%	67%	69%	67%	70%
Dairy	46%	46%	44%	46%	52%	45%	47%	48%	46%	50%
Crops	36%	36%	39%	34%	27%	30%	33%	31%	33%	30%
Grains	25%	25%	29%	24%	18%	19%	22%	20%	23%	19%
Vegetables	4%	4%	4%	5%	4%	4%	4%	4%	4%	4%
Fruits	2%	2%	2%	2%	1%	2%	2%	2%	1%	1%

Wisconsin Farmer Cash Receipts by Commodity (2018)

\$11.0 Billion
Ranked 9th

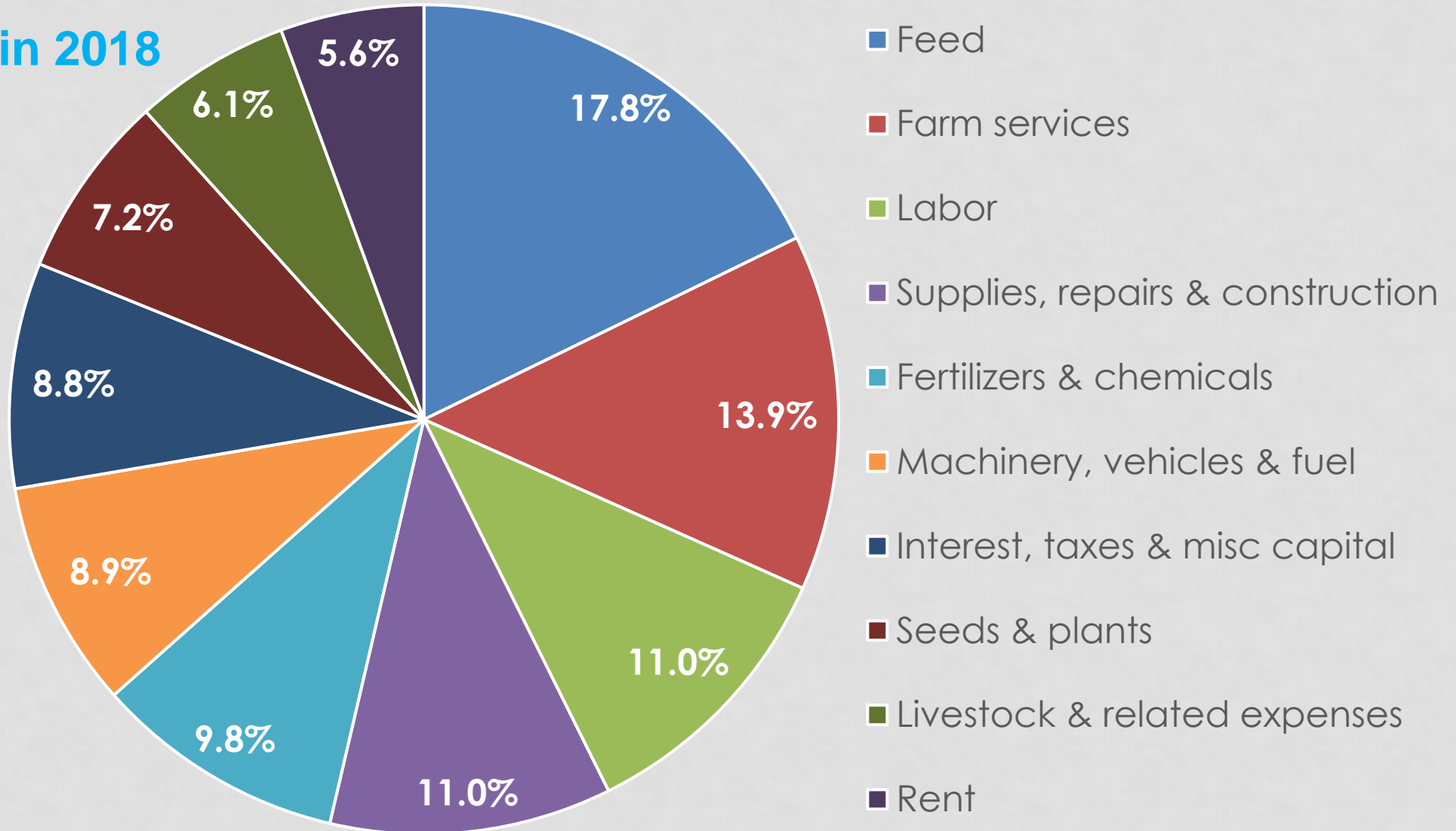


- Milk
- Cattle & calves
- Eggs
- Poultry
- Hogs
- Other Livestock
- Corn
- Soybeans
- Hay
- Other grains
- Vegetables
- Fruit
- Other Crops

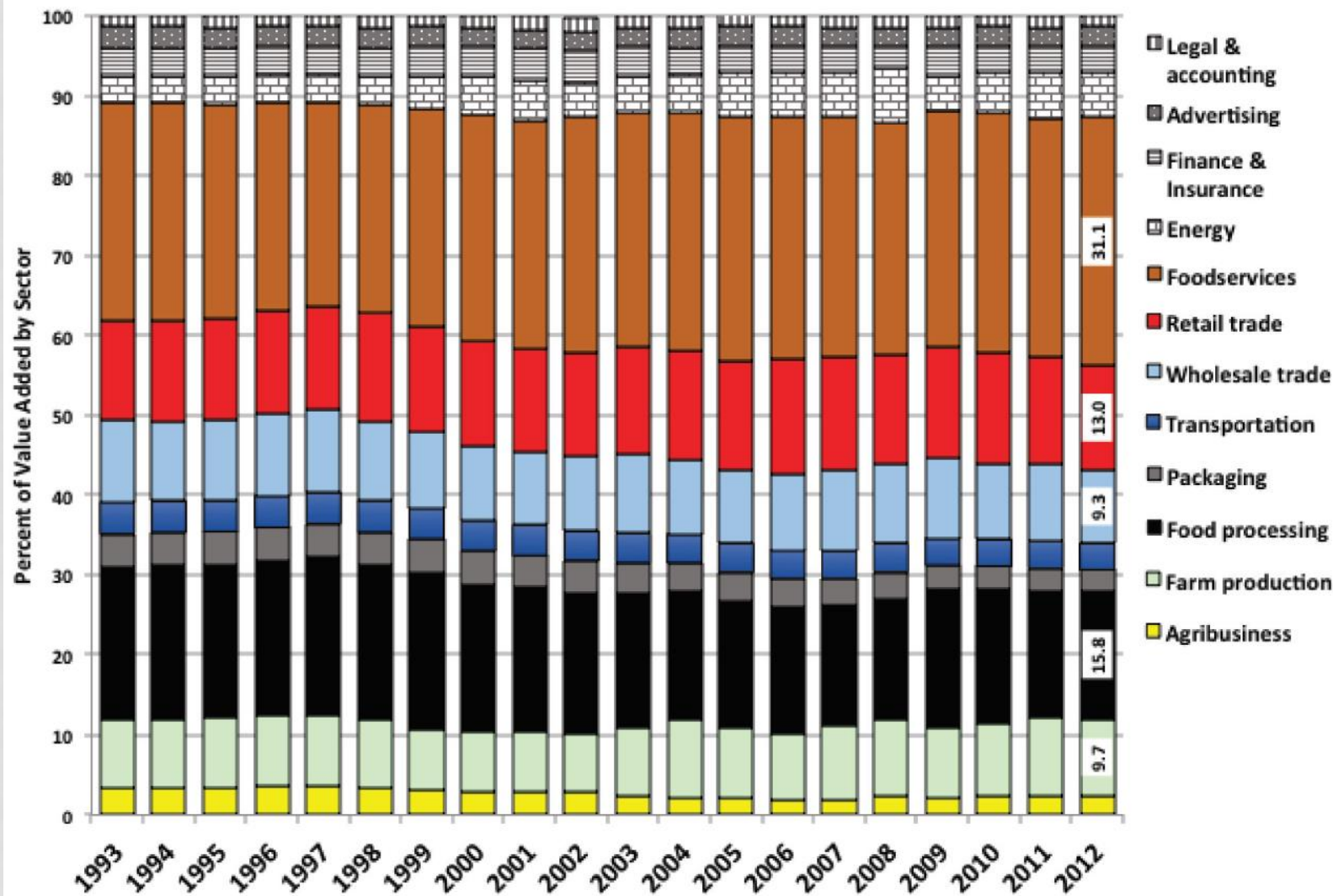


Wisconsin Farm Production Expenditures in 2018 by Category

\$10 Billion in 2018



Where is the Value Generated?

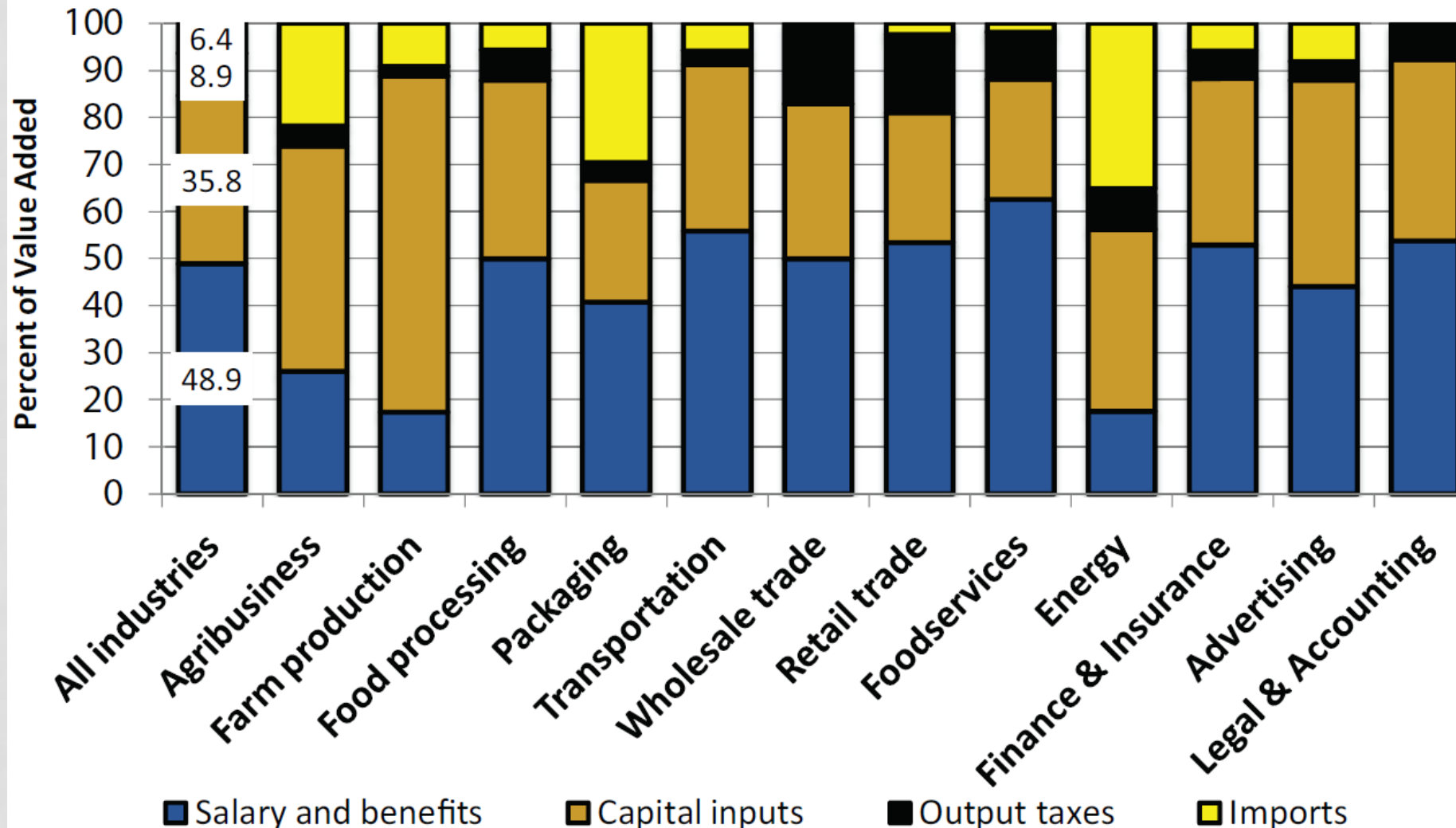


Distribution of value added across subsectors of the US food supply chain 1993-2012

Source: Nesheim et al. (2015) Figure 2.6

Where Does the Value Go?

Labor? Capital? Tax Base? Imports?



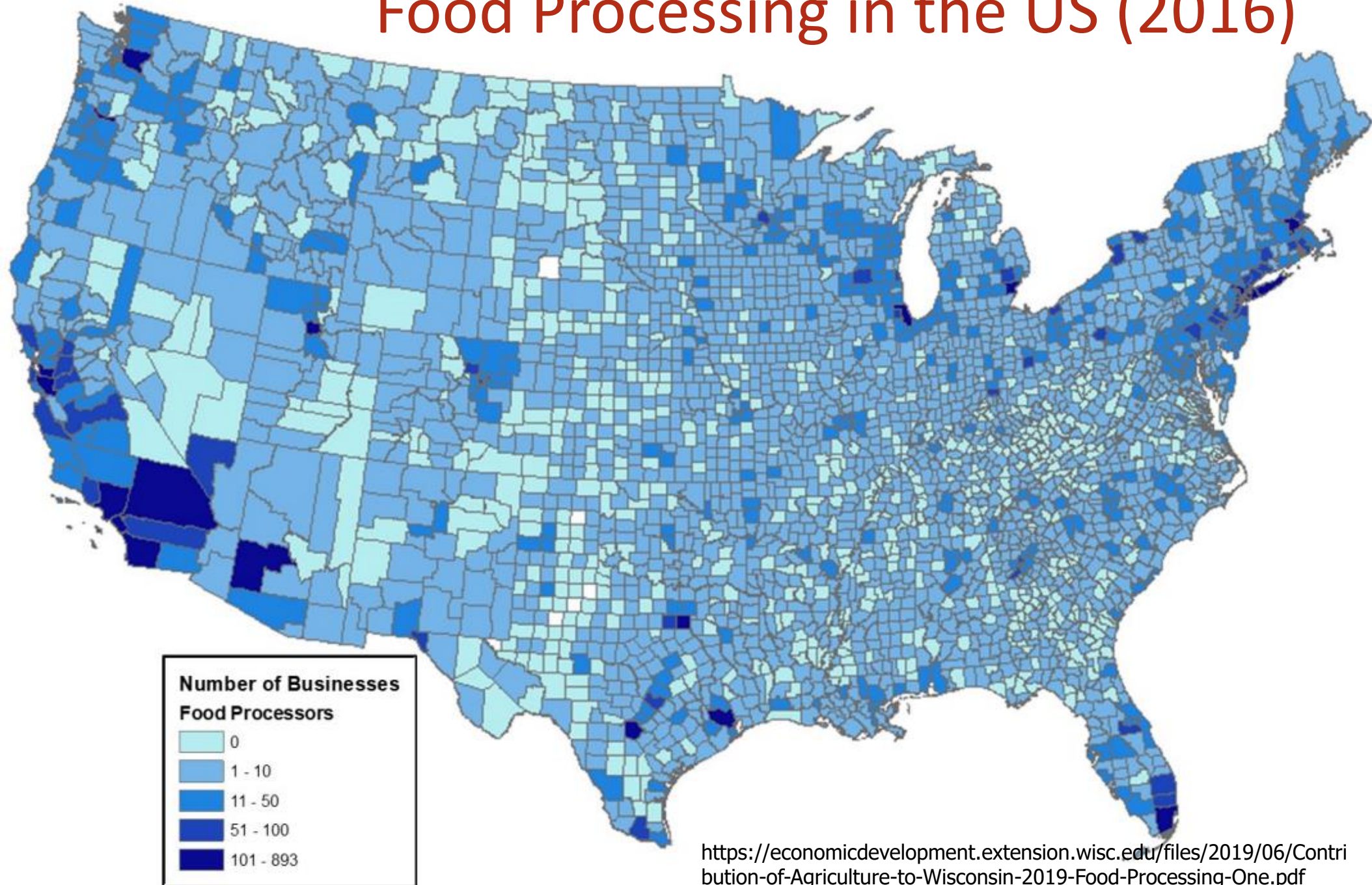
Distribution of value added by factor of production across US subsectors, 2012

Contribution of Agriculture to the Wisconsin Economy

Deller (2019): <https://go.wisc.edu/i6947n>

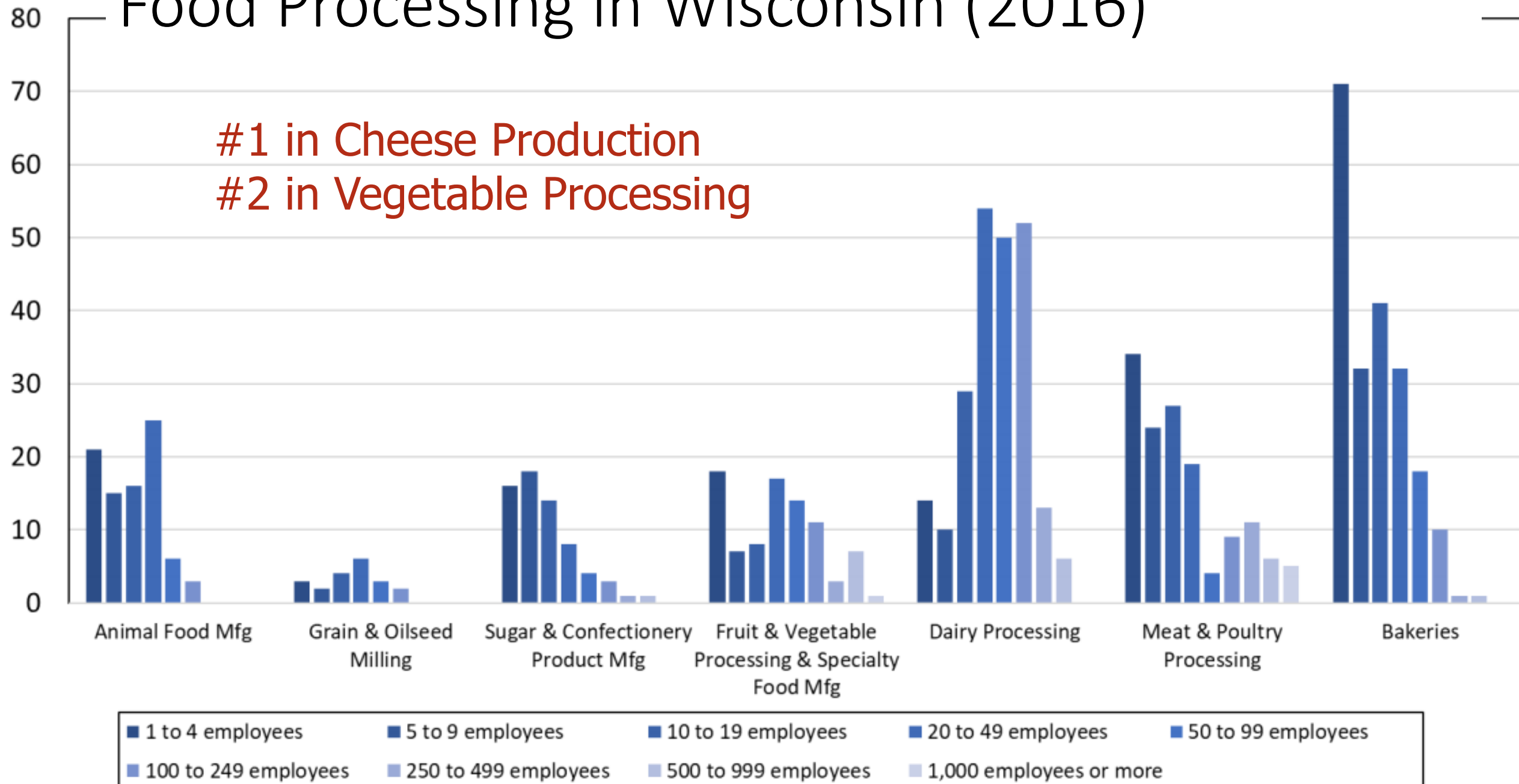
- Agriculture in WI = \$105 billion
 - 16% of all sales, 12% of jobs, 12% of income in 2017
- On-Farm (21%)
 - \$22 billion, 4% of jobs, 3% of income
- Processing (79%)
 - \$83 billion, 8% of jobs, 9% of income
- Dairy (farm & processing)
 - \$46 billion, 4% jobs, 5% income

Food Processing in the US (2016)



Food Processing in Wisconsin (2016)

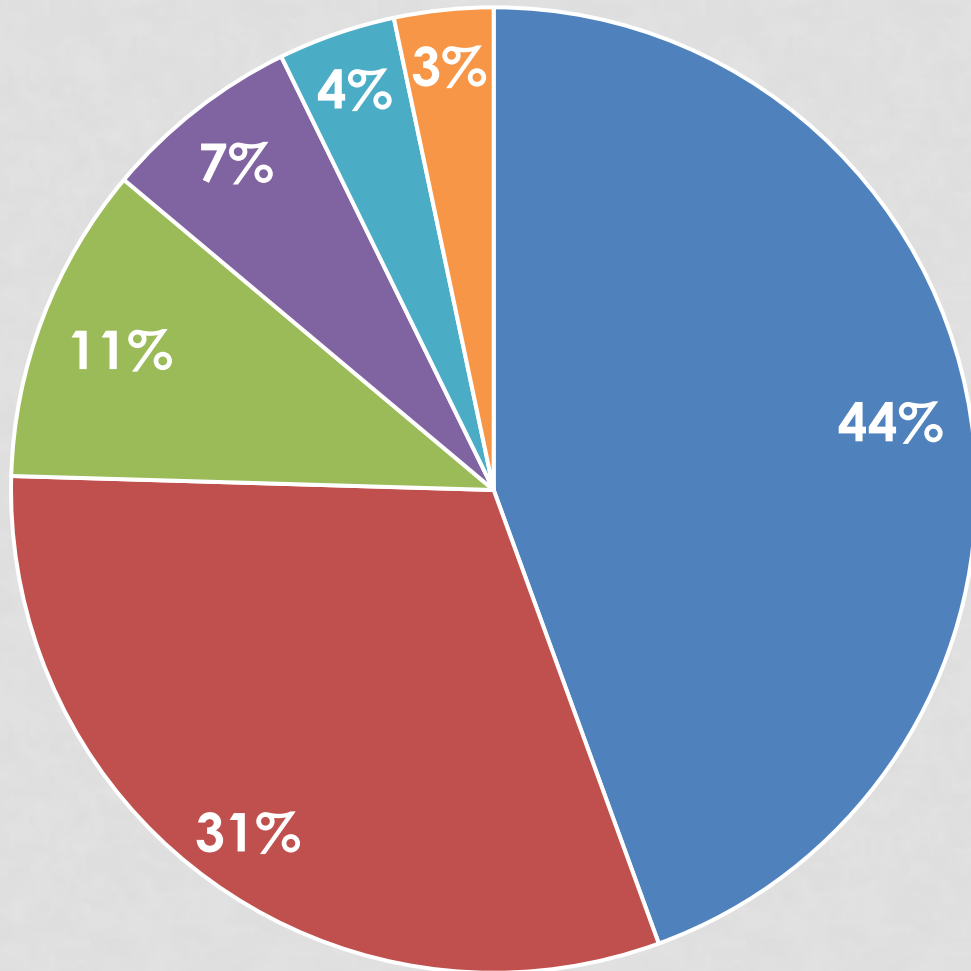
#1 in Cheese Production
#2 in Vegetable Processing



Rural Landscape for the Bioeconomy

- Wisconsin has a diverse agriculture
- Food manufacturing (and manufacturing in general) are important in the state
- Food manufacturing is distributed around the state including in rural areas
- Farms are obviously important, but most of the economic impact of agriculture (income, jobs, and tax base) is generated after the farm
- How are farms doing?

% of WI Farms by Sales Category



Annual Sales

■ \$1,000-\$9,999

■ \$10,000-\$99,999

■ \$100,000-\$249,999

■ \$250,000-\$499,999

■ \$500,000-\$999,999

■ > \$1,000,000

**75% of WI Farms
sell < \$100,000**

Sales	Farms
\$1,000-\$9,999	28,800
\$10,000-\$99,999	20,100
\$100,000-\$249,999	6,900
\$250,000-\$499,999	4,300
\$500,000-\$999,999	2,550
> \$1,000,000	2,150
Total for WI	64,800

Small	Midsize	Large-scale	
GCFI < \$350,000	GCFI \$350,000- \$999,999	Large GCFI \$1,000,000 - \$4,999,999	Very large GCFI ≥ \$5,000,000
89.9%	123,000 6.0%	53,800 2.6%	6,500 0.3%

Non-Family Farms
25,000 1.2%

Small Family Farms (GCFI less than \$350,000)

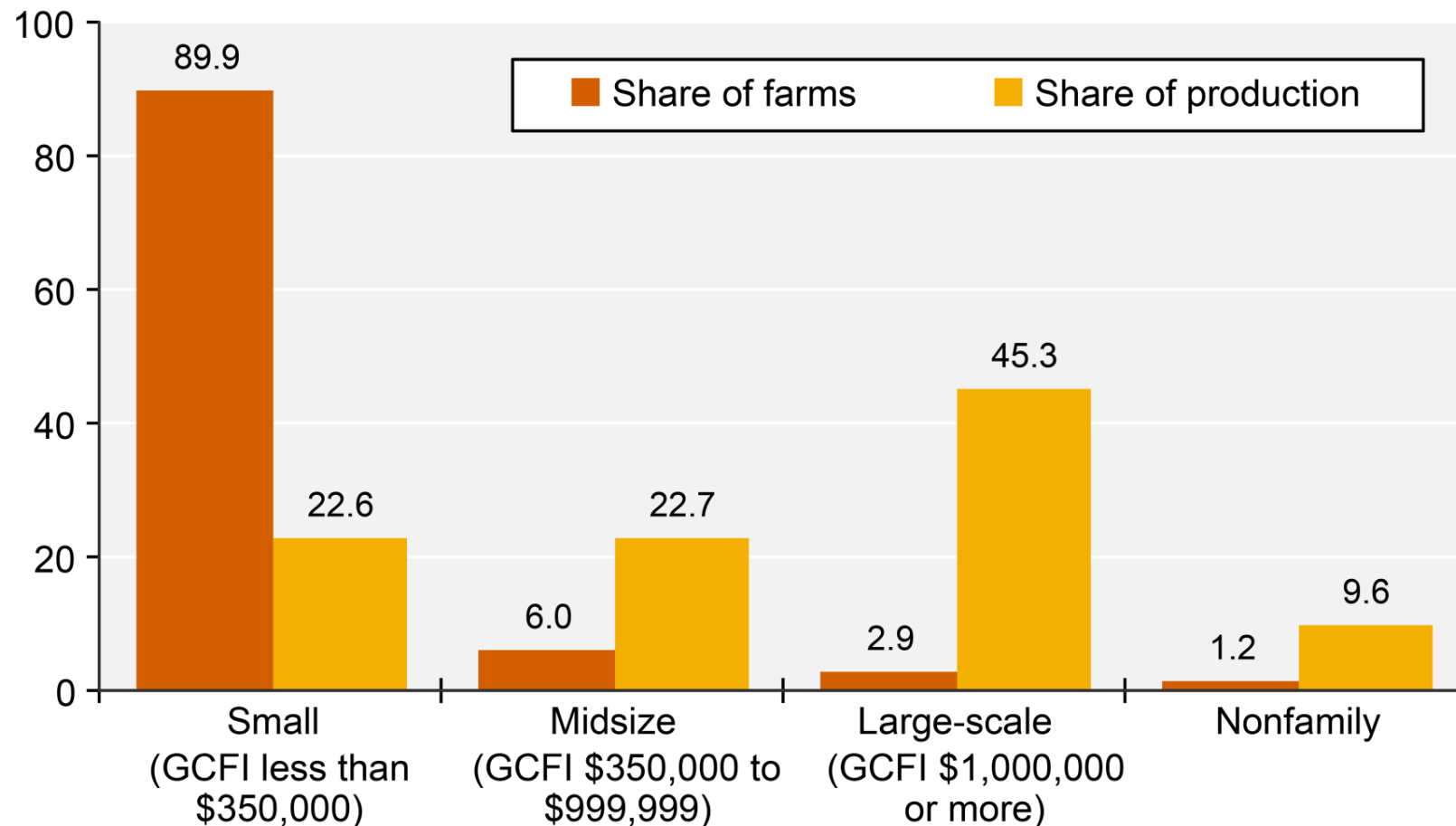
- **Retirement farms.** Small farms whose principal operators report they are retired, although they continue to farm on a small scale (366,812 farms; 17.9% of U.S. farms in 2016).
- **Off-farm occupation farms.** Small farms whose principal operators report a major occupation other than farming (860,739 farms; 41.9% of U.S. farms).
- **Farming-occupation farms.** Small farms whose principal operators report farming as their major occupation.
 - **Low-sales.** GCFI less than \$150,000 (506,001 farms; 24.7% of U.S. farms).
 - **Moderate-sales.** GCFI between \$150,000 and \$349,999 (110,524 farms; 5.4% of U.S. farms).

National
Level
Data

Source:
<https://www.ers.usda.gov/webdocs/publications/86198/eib-185.pdf>

Farms and their value of production by ERS farm type, 2016

Percent of U.S. farms or production



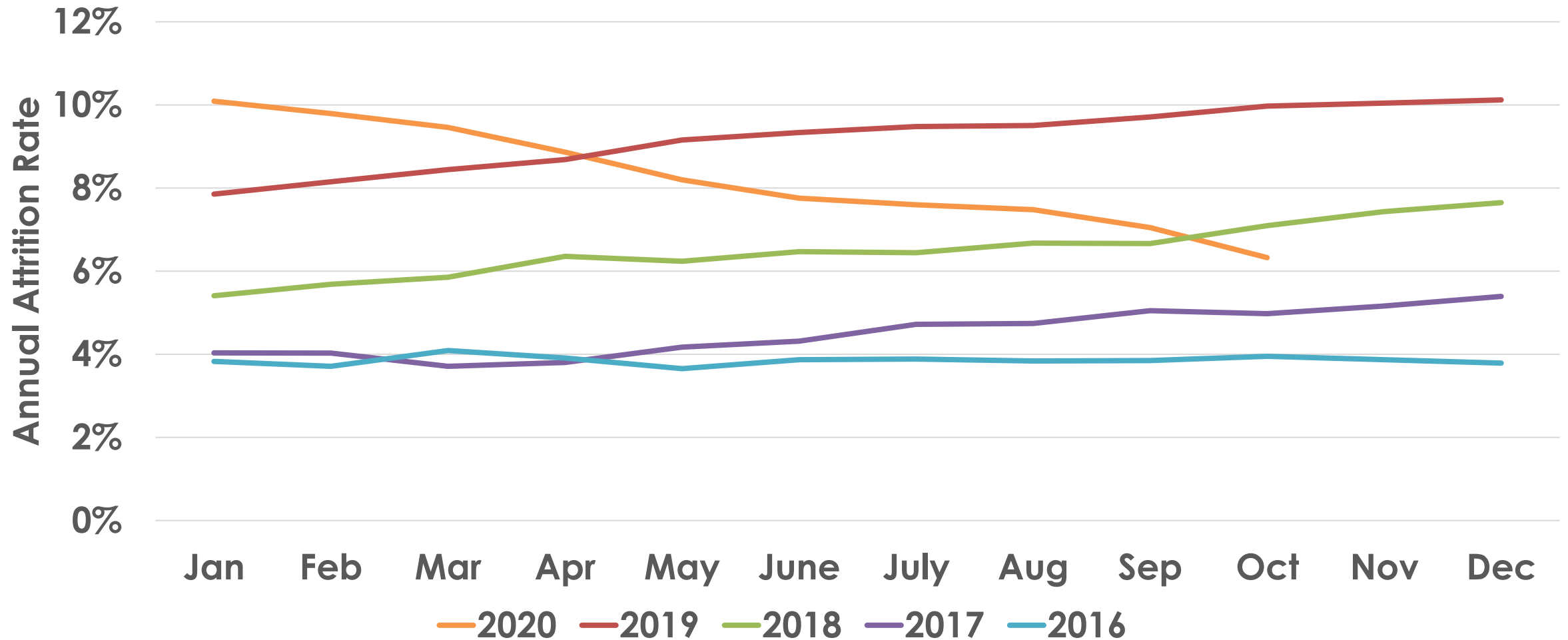
National Level Data

- **10.1% (208,000) farms produce 77% of ag production on 49% of ag land**
- **4.1% (85,000) farms produce 55% of ag production on 28% of ag land**

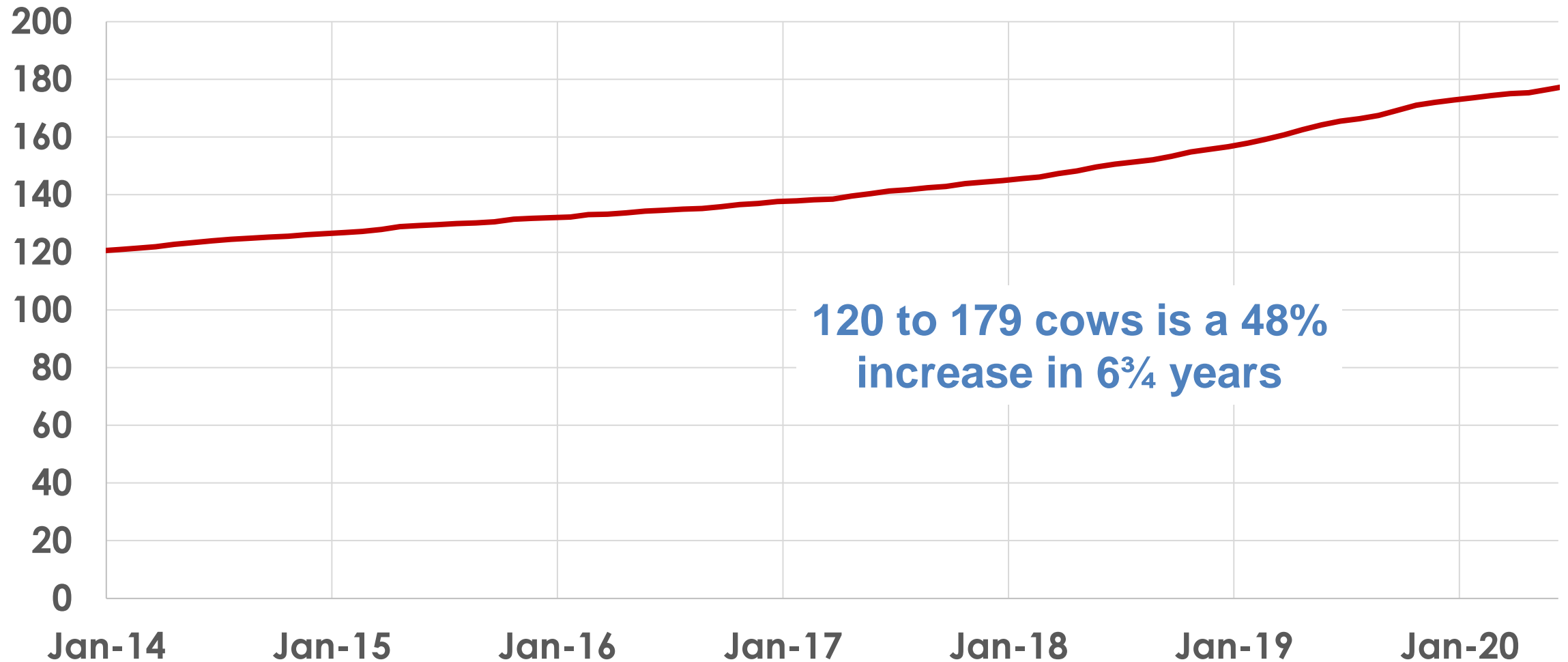
Note: GCFI refers to annual gross cash farm income before expenses; ERS refers to Economic Research Service. Nonfamily farms are those where neither the principal operator, nor individuals related to the operator, own a majority of the farm business.

Source: USDA, Economic Research Service and National Agricultural Statistics Service, Agricultural Resource Management Survey. Data as of November 29, 2017.

WI Annual Dairy Herd Attrition Rate by Month (Jan 2016 to Oct 2020)

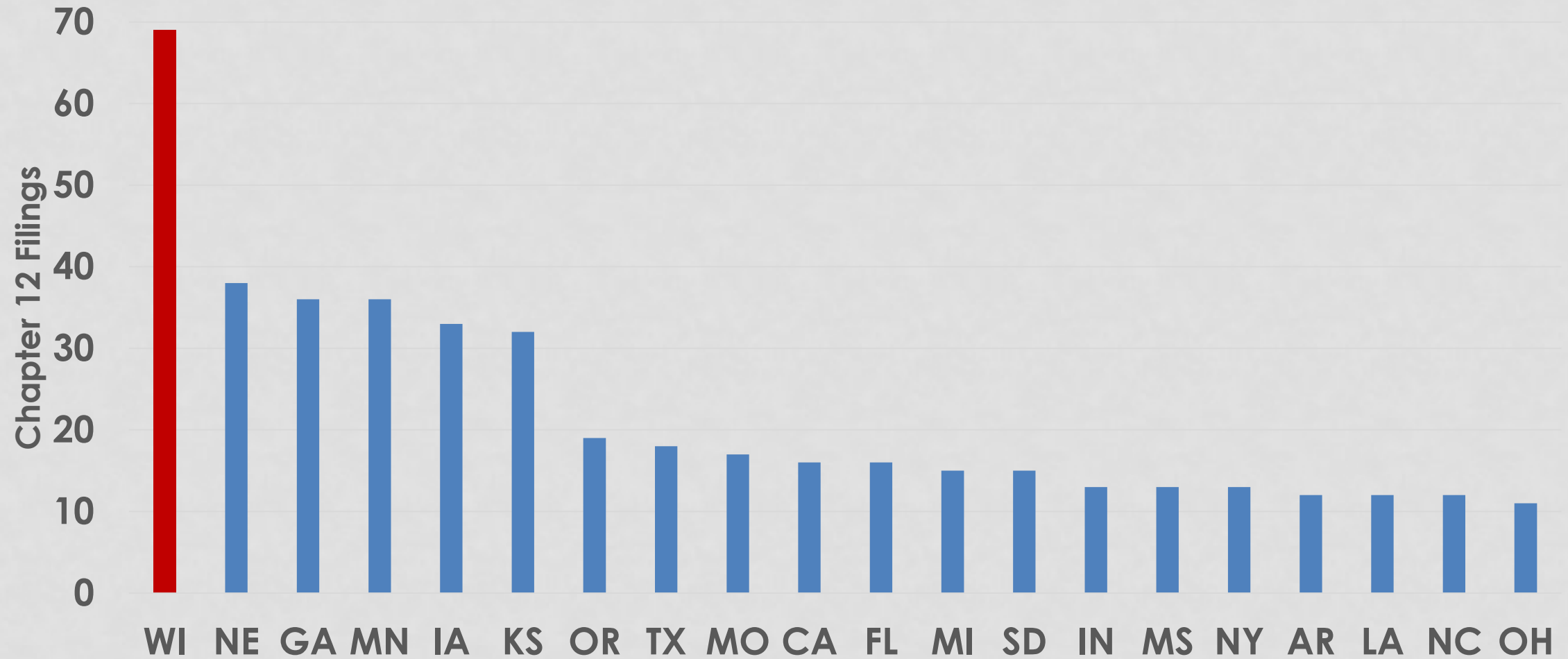


Average Number of Cows per Herd in WI Jan 2014 to Sep 2020



Chapter 12 Farm Bankruptcy Filings by State

Jul 1, 2019 to Jun 30, 2020



% Change in WI Farms 2014 to 2018

Gross Sales (\$1,000's)	Number of Farms	Average Acres/Farm
\$1 - \$10	-3.7%	-6.0%
\$10 - \$100	-2.4%	2.1%
\$100 - \$250	-5.5%	10.9%
\$250 - \$500	-8.5%	9.2%
\$500 - \$1,000	-8.9%	4.3%
> \$1,000	-2.3%	2.3%
All	-4.0%	2.8%

- The number of farms in WI declined 4% and they become almost 3% larger on average
- The number of mid-sized farms in WI declined faster and increased in size faster than for small and large farms

Summary of Trends: What's Happening?

- Farmers have been going through some tough years, especially in dairy, but not only dairy
- Losing a lot of farms and dairy herds, but not losing a lot of cows
- Farming becoming more consolidated, the trend for decades
- Farmers and Rural Communities would like some good news: Is it the Bioeconomy?



Thanks for your Attention!

Questions? Comments?

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