South Dakota Economy and Agricultural Conditions

Division of Insurance and Research

Kansas City Regional Operations Branch

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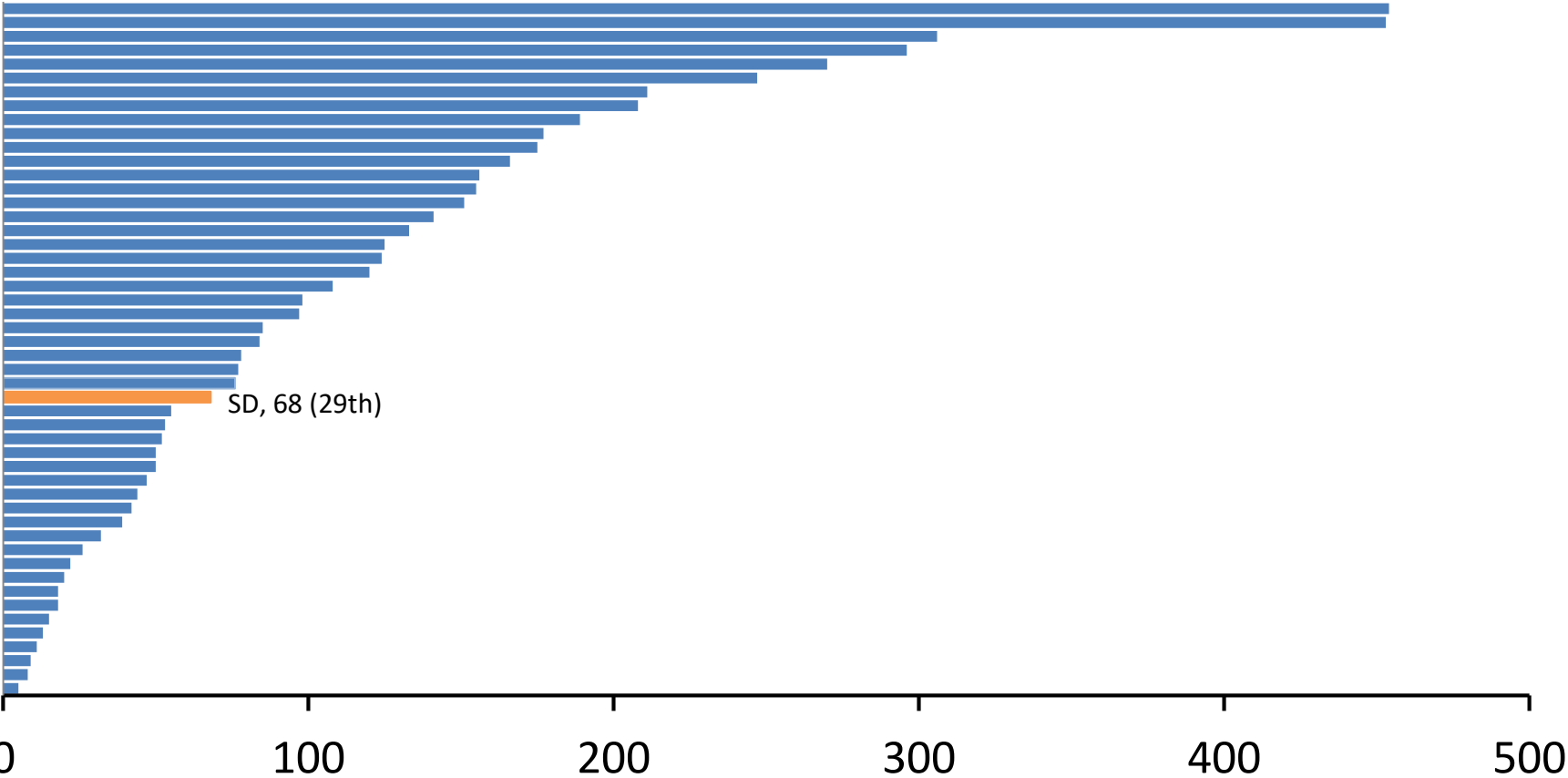
Presentation Agenda

- High-level overview of bank conditions
- Agricultural economy and farm bank conditions
- South Dakota and Sioux Falls economies

# South Dakota Banking Profile 30,000-Ft. Elevation

South Dakota ranks 29th among all states by number of FDIC-insured institutions.

Number of FDIC-Insured Institutions

SD, 68 (29th)

Source: FDIC, 4Q2017.

South Dakota is characterized by a large share of rural community banks concentrated in ag lending.

Percent of Banks Considered Farm Banks

Percent of Banks With Total Assets Under $100 Million
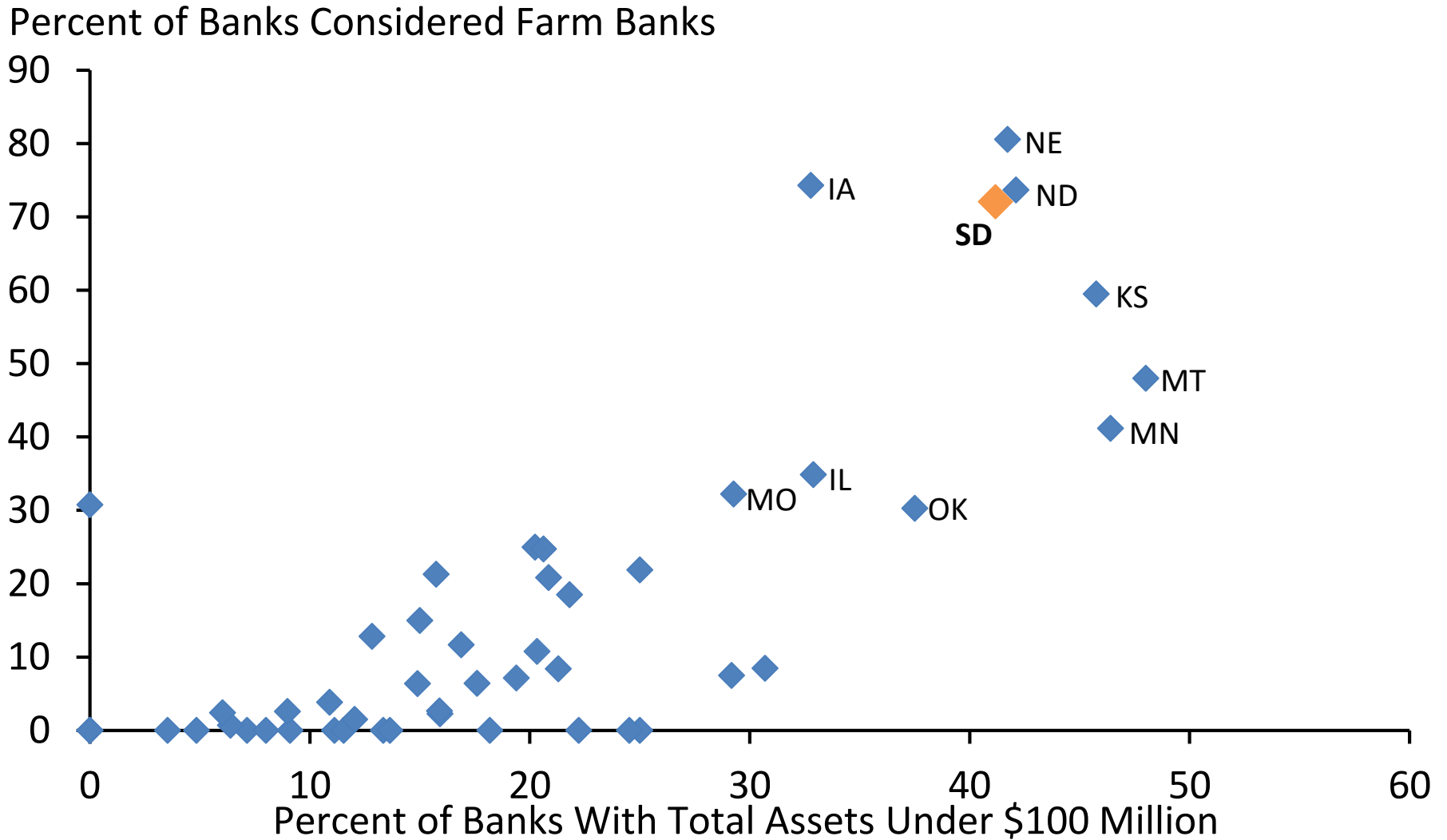
Source: FDIC, 4Q2017, all insured institutions by state.

South Dakota banks have strong earnings and capital, but also higher agricultural and wholesale funding exposures.

	Pretax Return on Assets	Net Interest Margin	Tier 1 Leverage Capital	Loans to Assets	Ag Loans to Total Risk-Based Capital	Wholesale Funds to Total Assets
South Dakota	1.45	3.89	10.96	72.7	265.8	16.81
U.S.	1.18	3.69	10.51	68.8	27.4	14.27
SD Ranking	5	15	7	14	3	10

Source: FDIC, 4Q2017.

Notes: Ratios are median values for South Dakota and U.S.

South Dakota ranking is based on states ordered highest to lowest (descending order).

Agriculture

These primary takeaways from my December 2016 visit remain relevant nearly 2.5 years later.
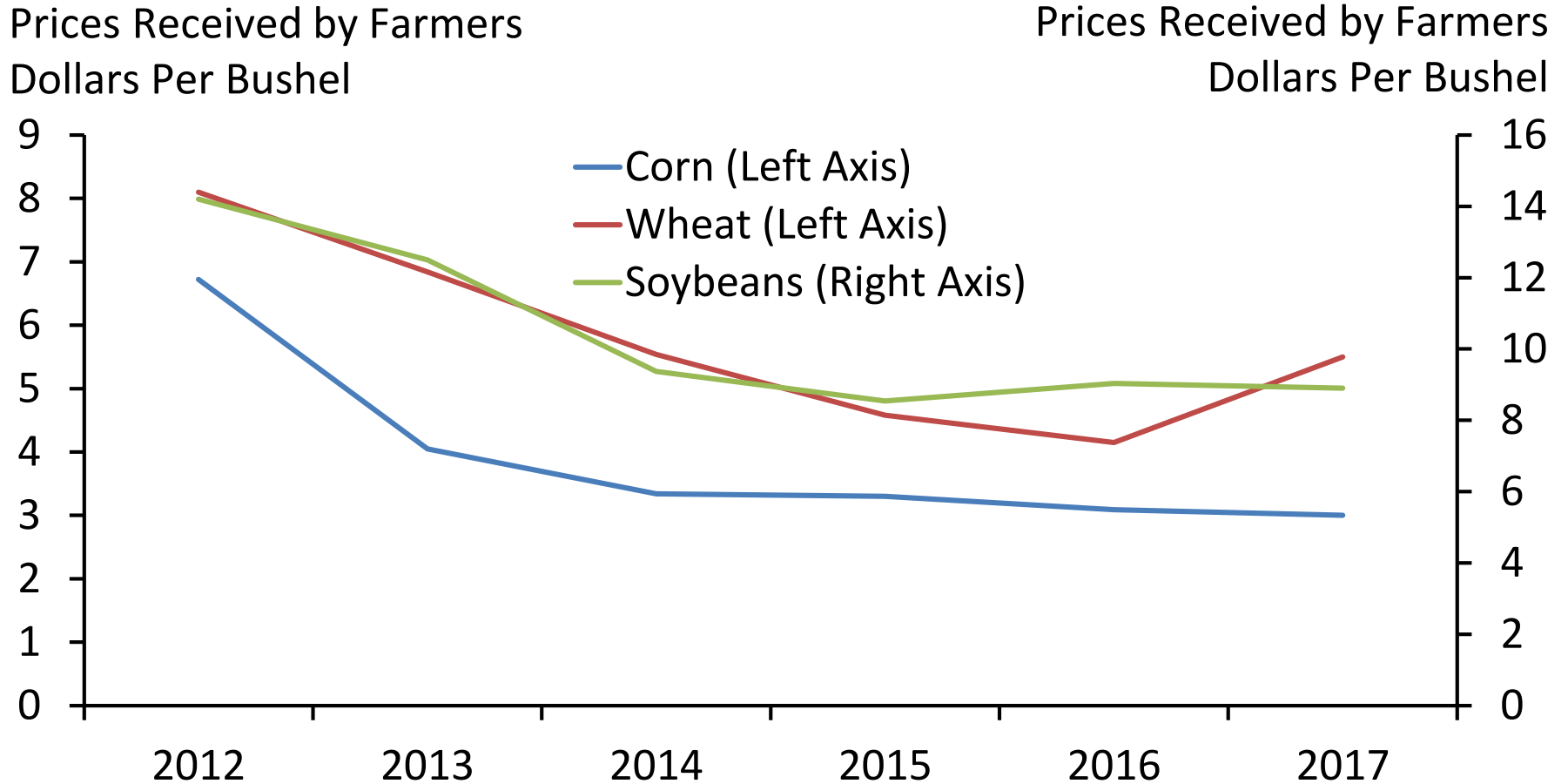
- Coming off a decade of high returns, the U.S. agricultural sector has been weak since 2014, and conditions are expected to remain that way for the next few years.

- Farm bank asset quality is starting to weaken from historically strong levels, but the transmission mechanism can be slow.

- Persistently weak agricultural conditions may result in problems for some farm banks, but a repeat of the agricultural crisis of the 1980s is unlikely.

2018 is forecast to be the fifth year of this ag down-cycle with the lowest net farm income since 2006.
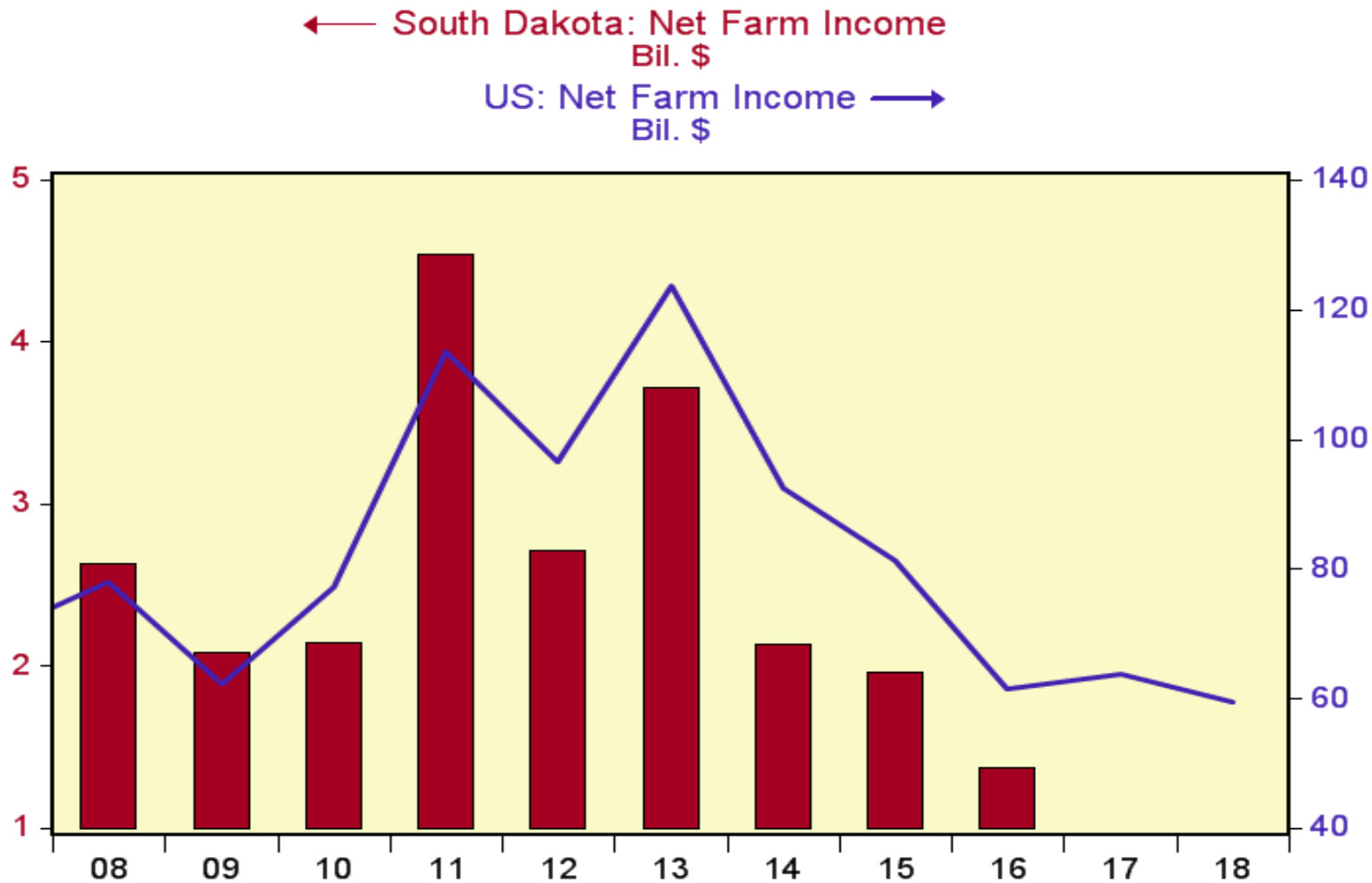
Source: United States Department of Agriculture/Haver Analytics

Corn and soybean prices received by South Dakota farmers have been flat; wheat increased in 2017.

Prices Received by Farmers
Dollars Per Bushel

Prices Received by Farmers
Dollars Per Bushel

— Corn (Left Axis)
— Wheat (Left Axis)
— Soybeans (Right Axis)

Source: USDA.
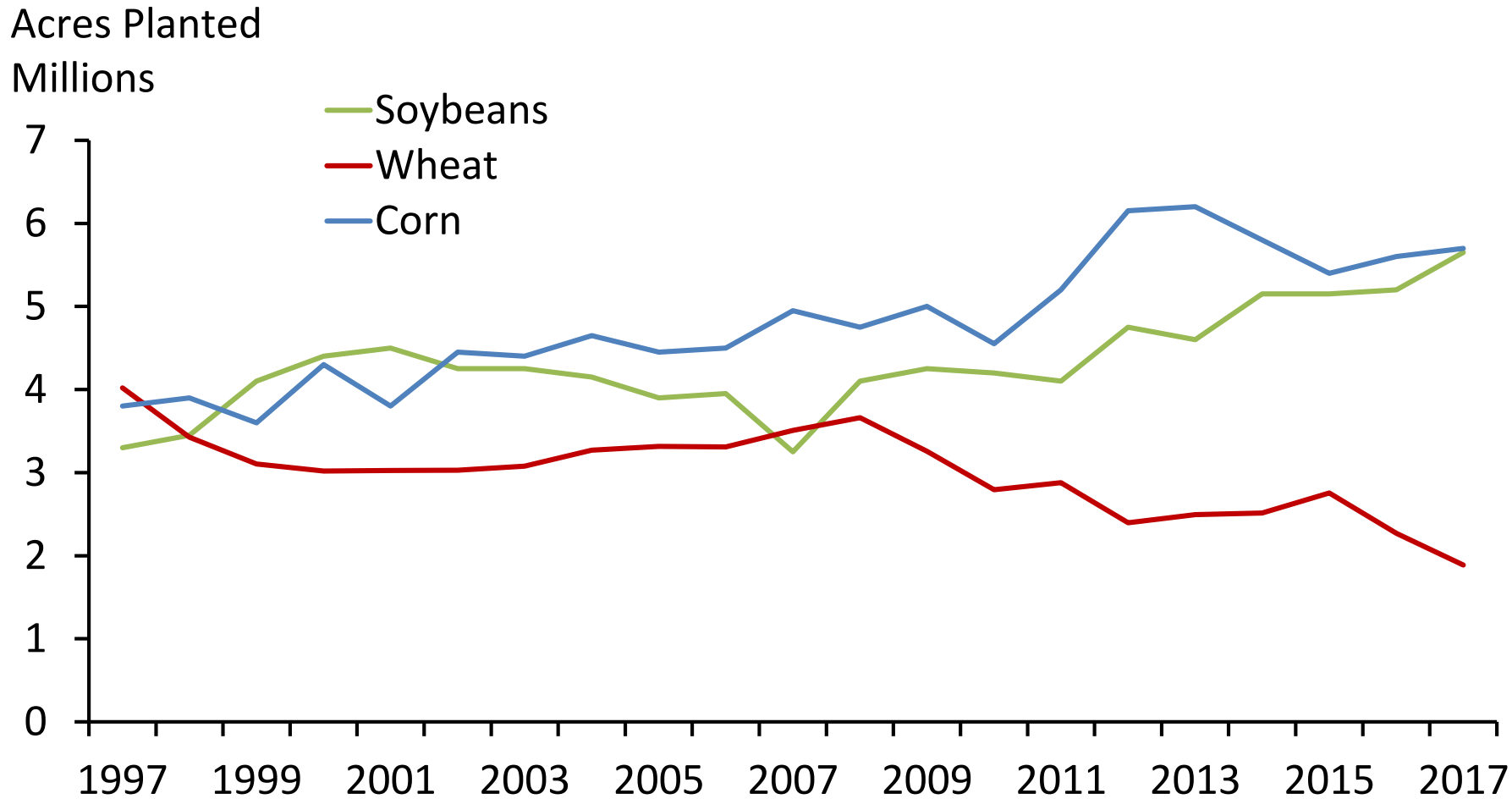Note: Marketing years

Corn and soybean production has been strong but wheat suffered on drought conditions in 2017.

Production, Millions of Bushels
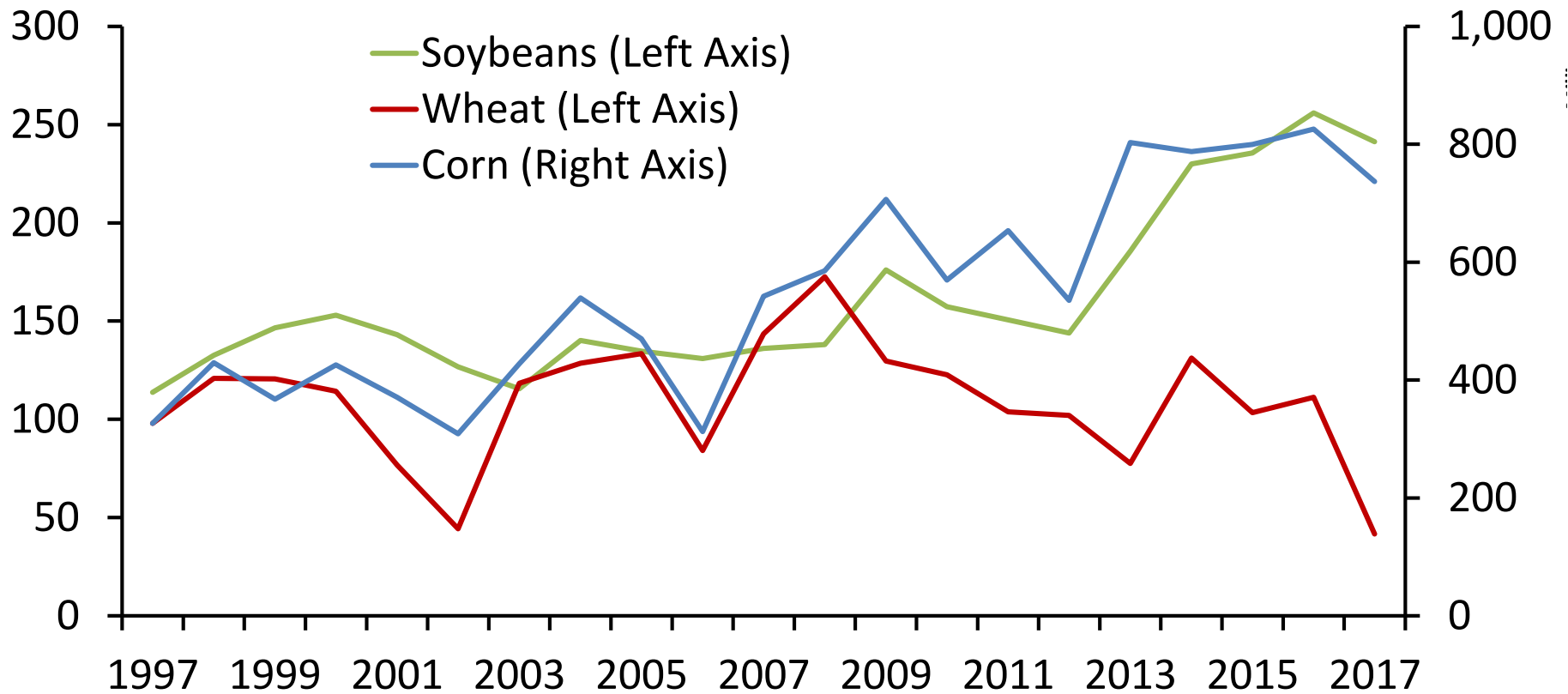
Source: USDA.

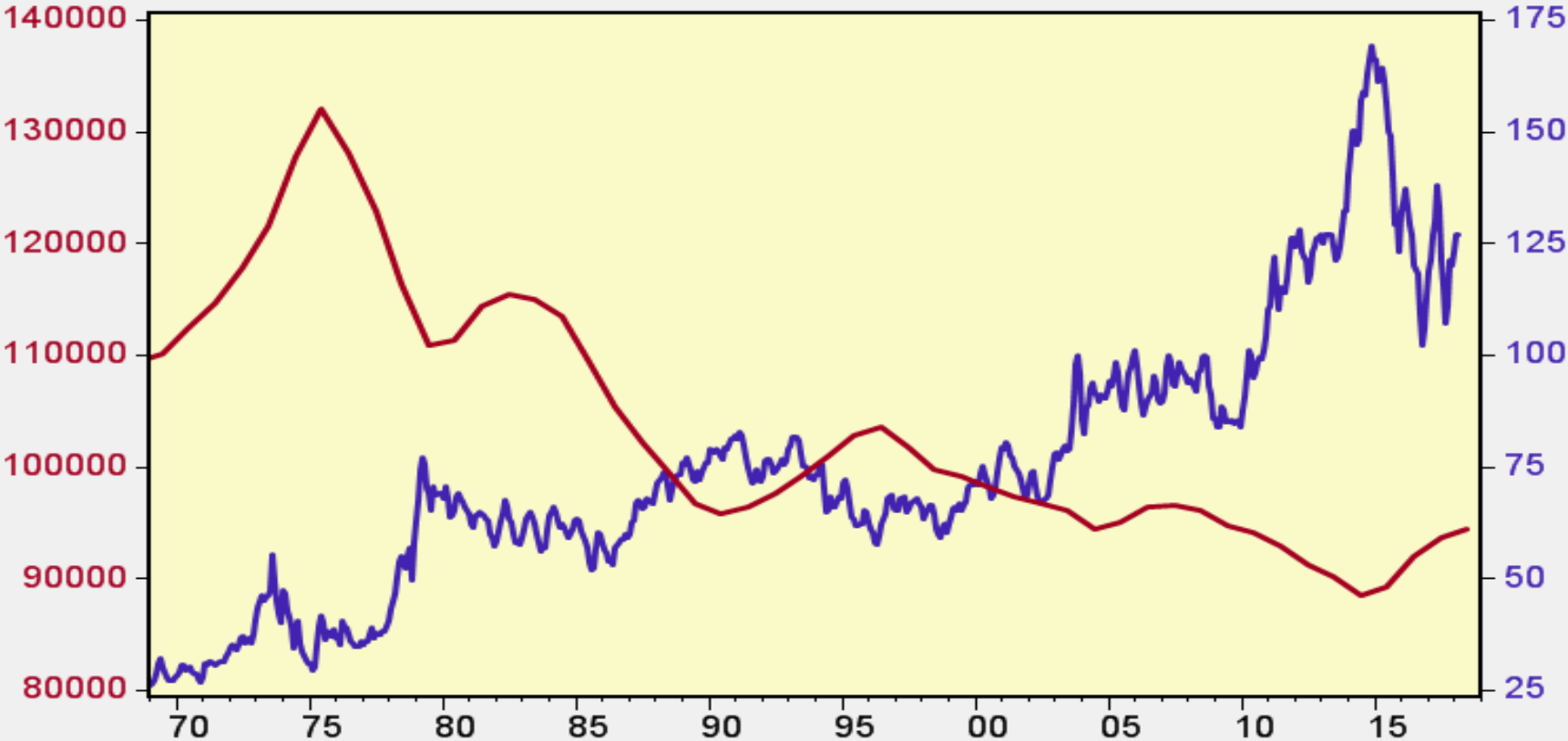# Wheat acreage is at an all-time low as South Dakota farmers increase corn and soybean acreage.

Acres Planted
Millions

Source: USDA.

The U.S. cattle herd is expanding at its fastest pace in decades, pressuring prices.

Source: United States Department of Agriculture/Haver Analytics

South Dakota farmers have received nearly $750 million in crop program payments the last three years.

Crop Program Payments
Dollars (Millions)

Legend:
- Fixed Direct Payments
- Price Loss Coverage (PLC) Payments
- Agricultural Revenue Coverage (ARC) Payments
- Total PLC+ARC

Source: USDA.

FDIC
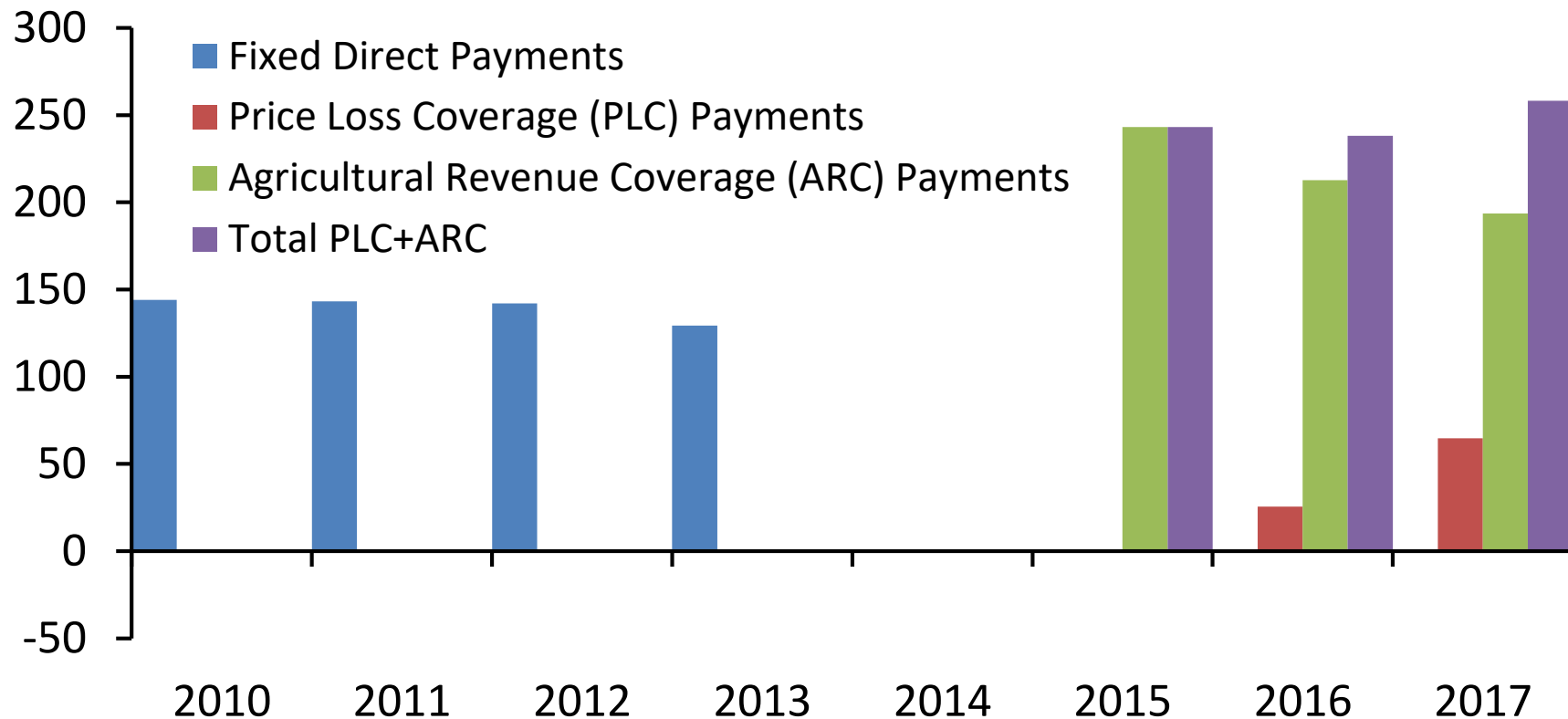
Drought conditions in the Northern Plains have subsided but have intensified in the Southwest.
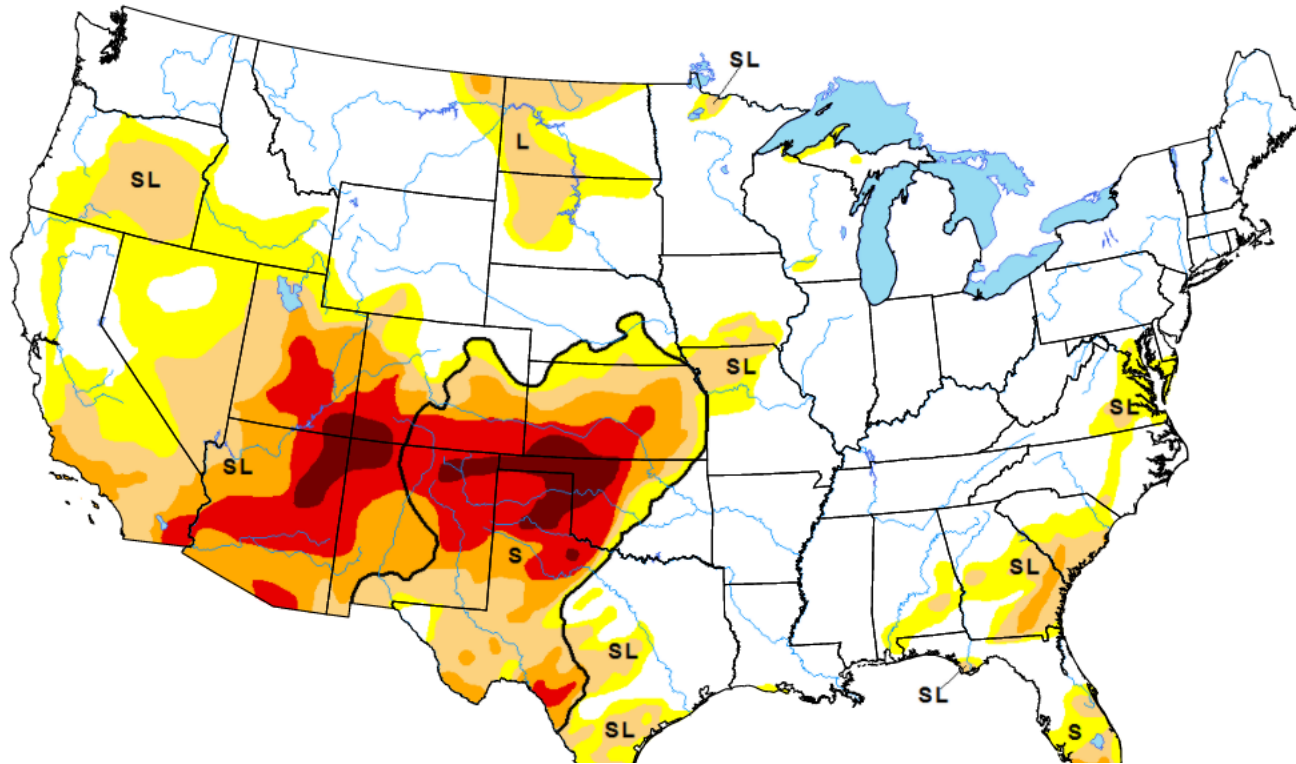
Intensity and Impacts

None	
D0 (Abnormally Dry)	
D1 (Moderate Drought)	
D2 (Severe Drought)	
D3 (Extreme Drought)	
D4 (Exceptional Drought)	

- Delineates dominant impacts

S - Short-Term impacts, typically less than 6 months (e.g. agriculture, grasslands)

L - Long-Term impacts, typically greater than 6 months (e.g. hydrology, ecology)

Source: The National Drought Mitigation Center
University of Nebraska-Lincoln

The summer weather outlook for South Dakota is for average temperatures and precipitation.
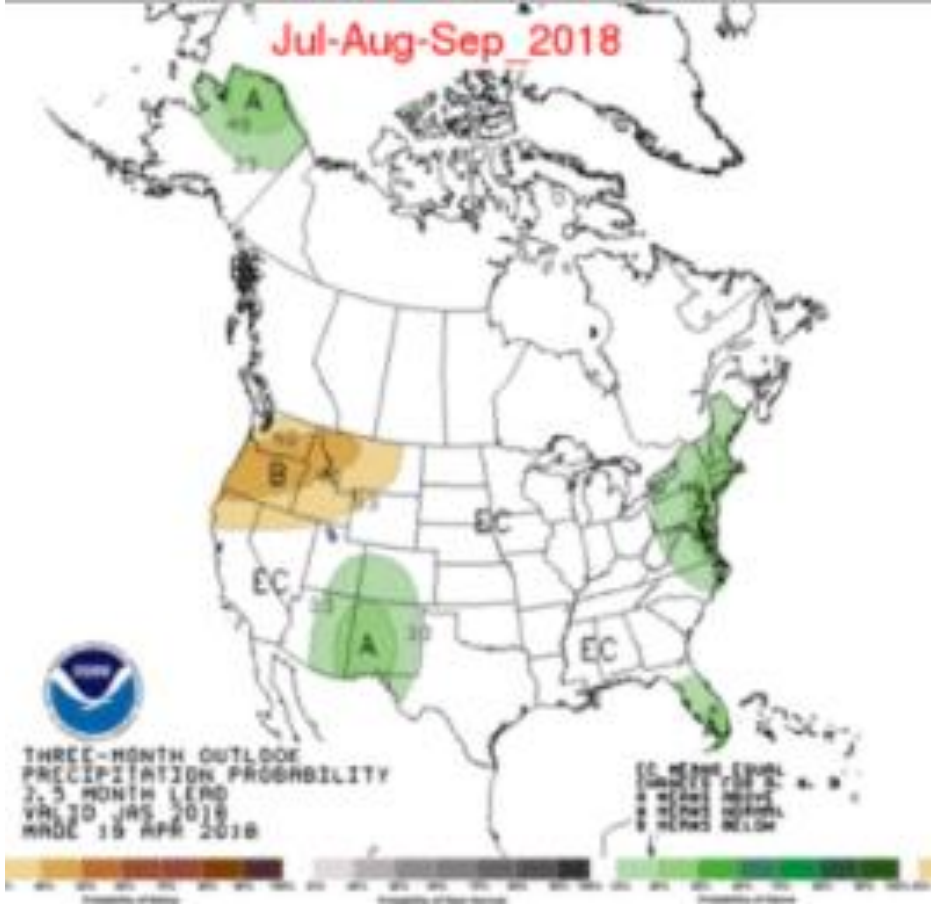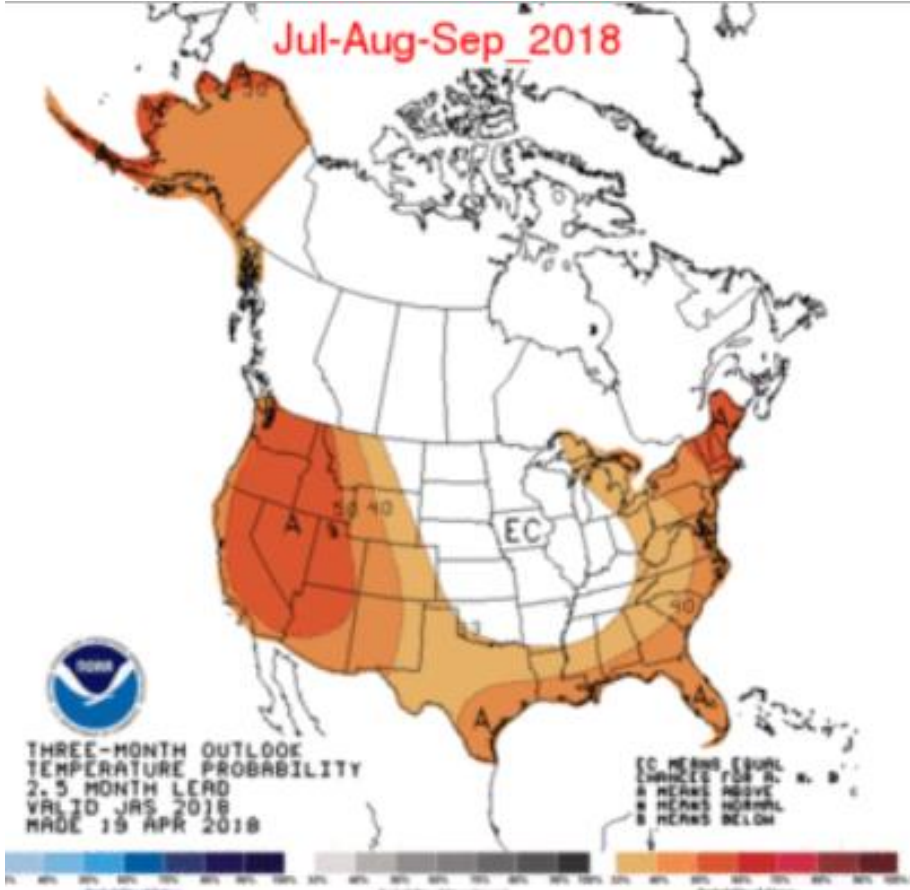
Source: The National Drought Mitigation Center
University of Nebraska-Lincoln

FDIC

South Dakota led all states in farmland price appreciation between 2004 to 2014.
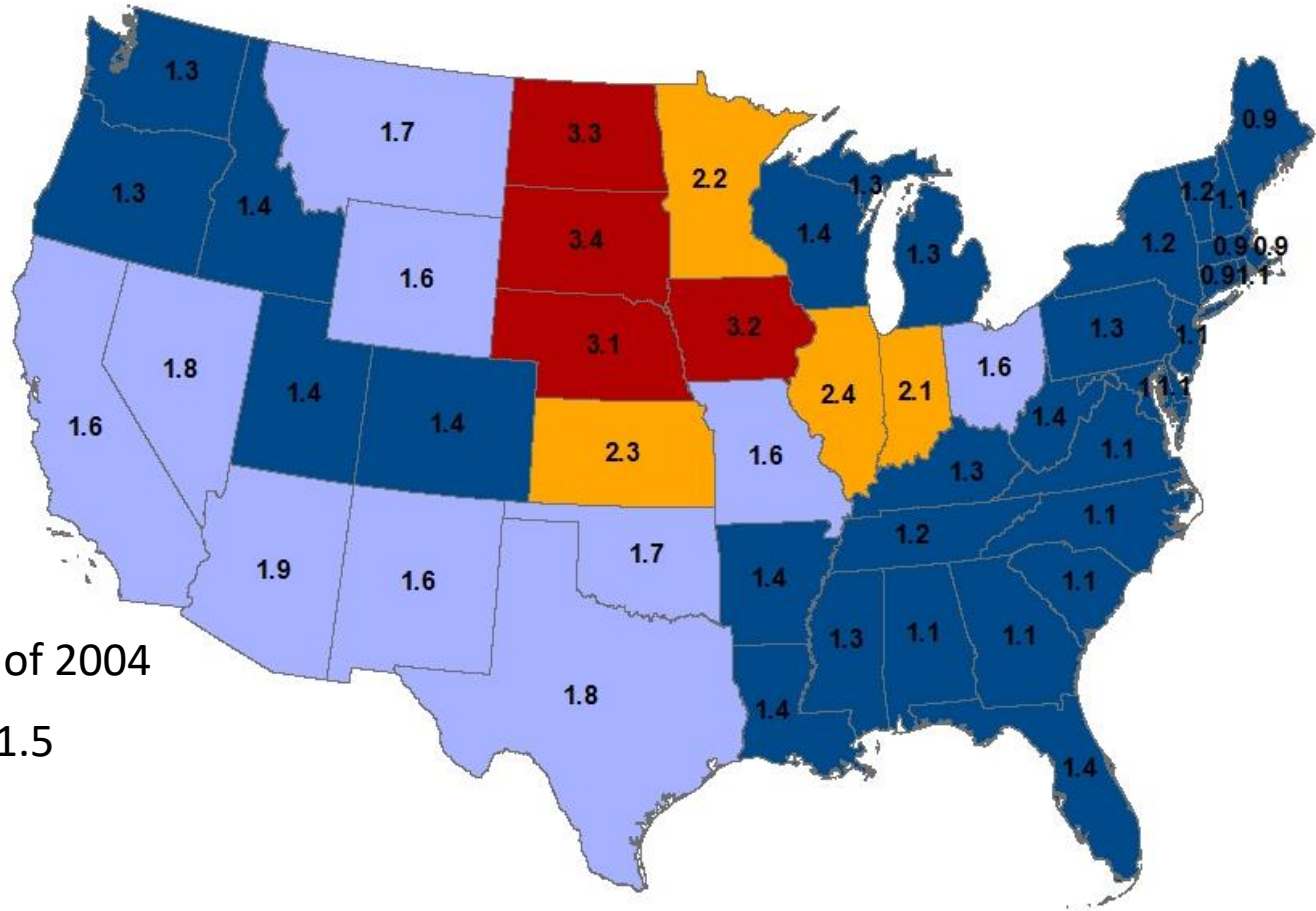
Average Value of
Farm Real Estate
2014 As a Multiple of 2004

- Less Than 1.5
- 1.5 to 2.0
- 2.0 to 3.0
- Greater than 3.0

Source: USDA (Haver Analytics).
Note: Inflation adjusted values.

After years of strong gains, farmland values have fallen only modestly.

Percent
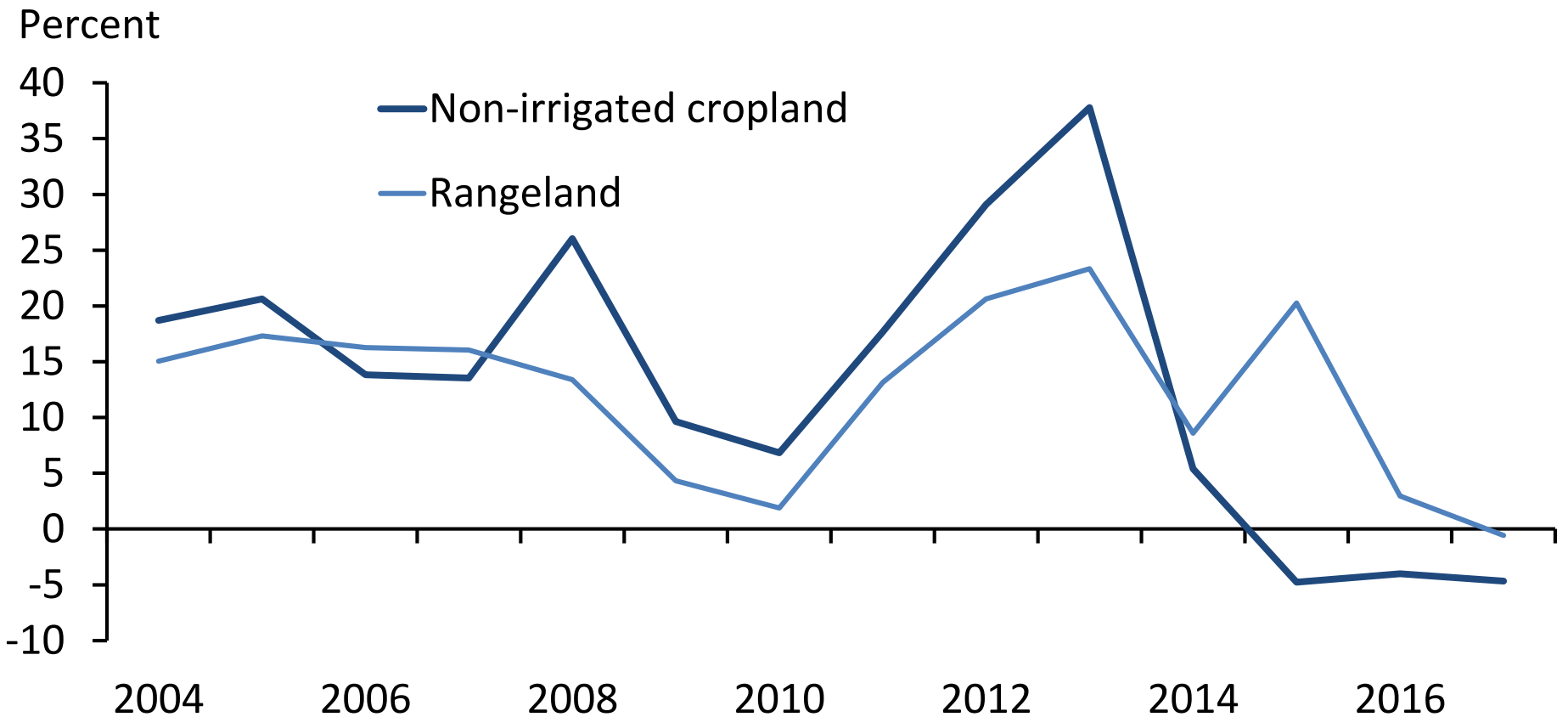
Source: South Dakota State University.

Farmland sales activity remains low, supporting land values.

Chart 3: Volume of Farmland Sales
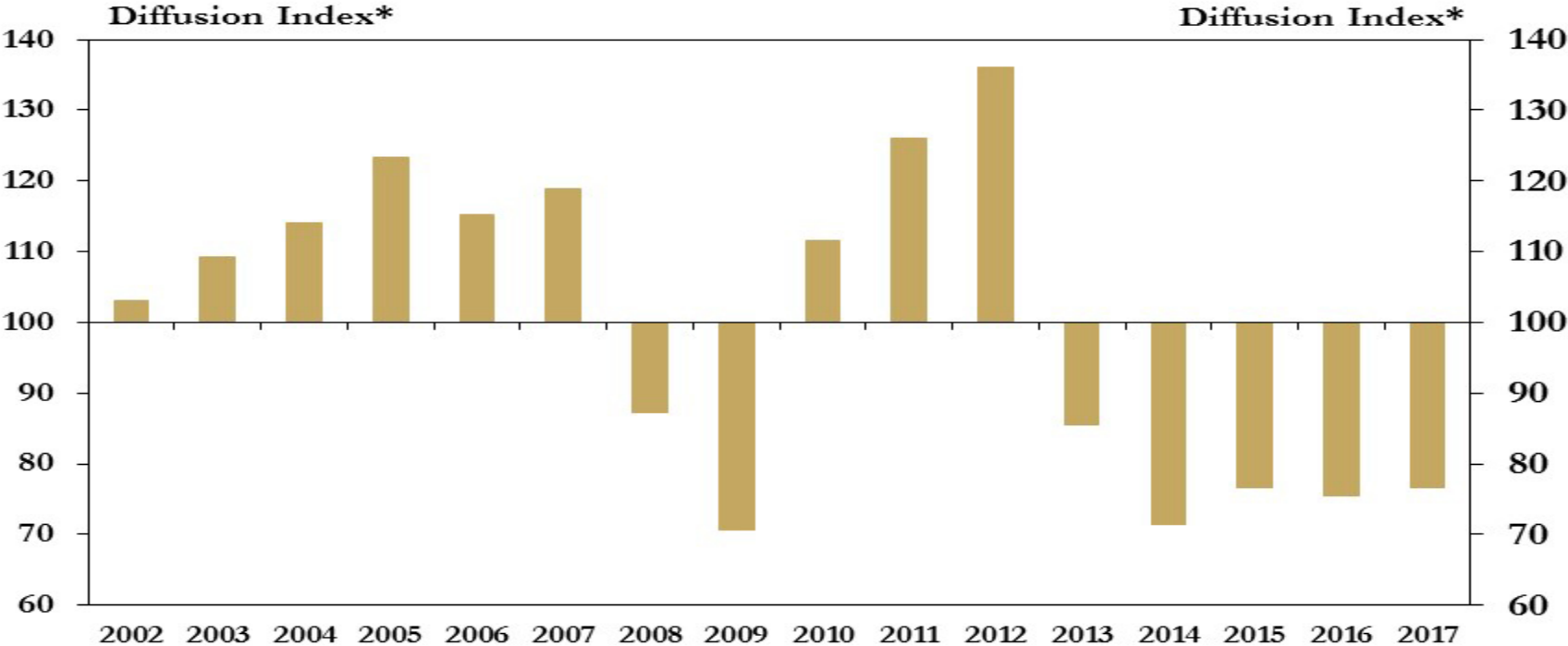
*Bankers responded to each item by indicating whether the volume of land sales increased, decreased, or remain the same. The index numbers are computed by subtracting the percentage of bankers who responded "decreased" from the percentage who responded "increased" and adding 100.

Source: Federal Reserve Bank of Kansas City.

One-third of respondents in 2017 SDSU land values report indicated liquidity/financial stress as reasons for selling.

Graph 2. The Most Important Reasons Among Buyers for Purchasing Land in the Area 2017

- 33% Expansion
- 35% Location
- 26% Investment
- 6% Other

Legend:
- ■ Expansion
- ■ Location
- ■ Investment
- ■ Other
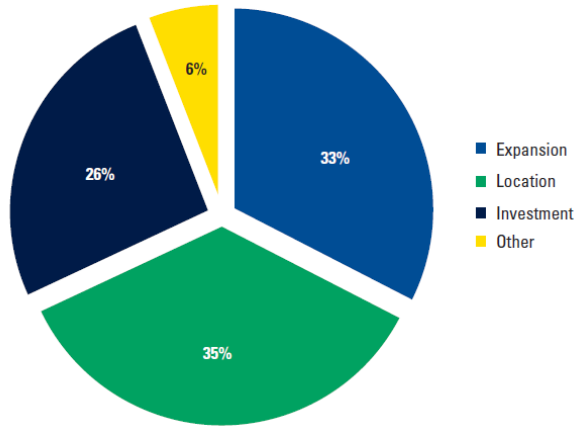
Graph 3. The Most Important Reasons for Sellers Offering Land for Sale in the Area 2017

- 12% Retirement
- 44% Estate Sales
- 8% High Land Values
- 32% Increased Liquidity/Reduce Financial Stress
- 4% Other

Legend:
- ■ Retirement
- ■ Estate Sales
- ■ High Land Values
- ■ Increased Liquidity/Reduce Financial Stress
- ■ Other
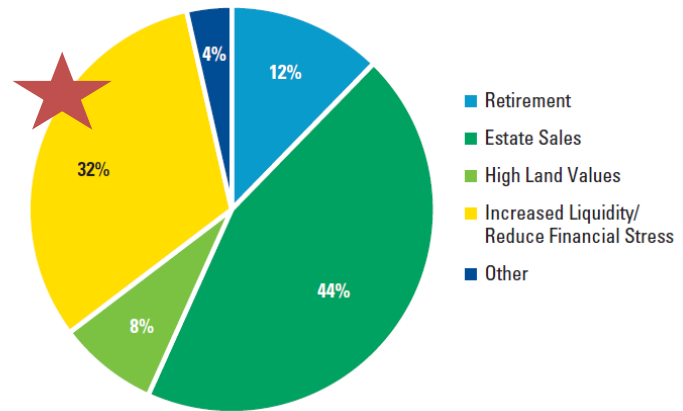
Fig 5. Reasons for buying farmland

- Other 8%
- Commodity prices 15%
- Ag Profit/Farming 10%
- Hunting/Recreation 3%
- Low Interest Rate 8%
- Investment 18%
- Expansion 38%
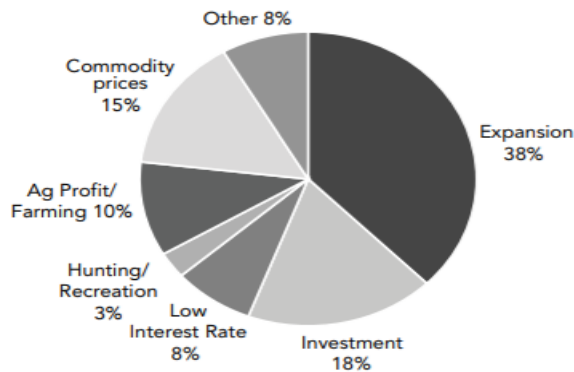
Fig 6. Reasons for selling farmland

- Other 5%
- Seller Market/Cap Gain 6%
- Debt & Cash Flow 5%
- Estate 24%
- High Land Price 31%
- Retire/Farmer Exit 29%

13
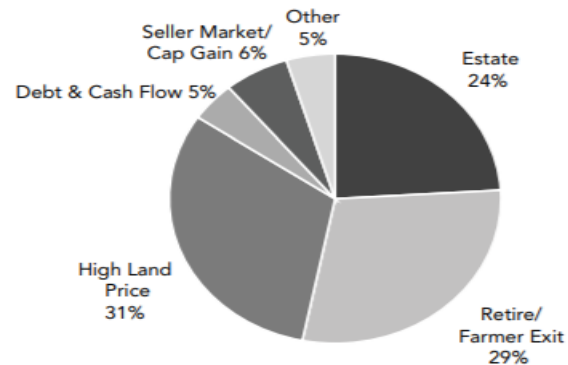
A sizeable share of farms have insufficient cash-flow to service debt.

Term Debt Coverage (Times)

TDC < 1 indicates insufficient current cash-flow to service intermediate and long-term debt payments.

Net Farm Income Percentile

2012

Net Farm Income Percentile

2016
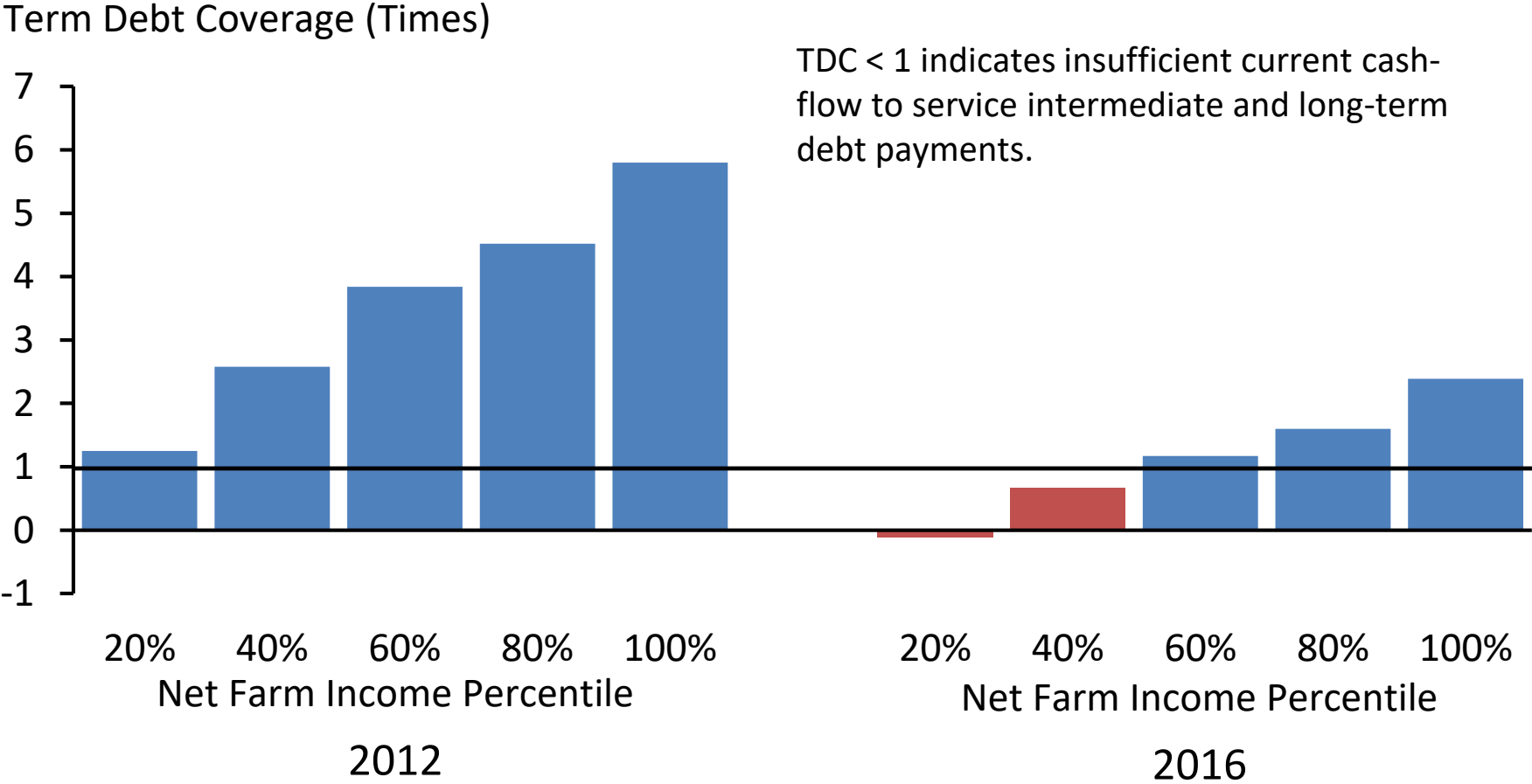
Source: FINBIN database, University of Minnesota.
Note: States limited to Illinois, Minnesota, Nebraska, North Dakota, and South Dakota.

The share of South Dakota farm banks reporting ag loan delinquencies/charge-offs has risen.

Share of Farm Banks
Percent

Reporting Agricultural Loan Delinquencies
Reporting Agricultural Loan Charge-Offs
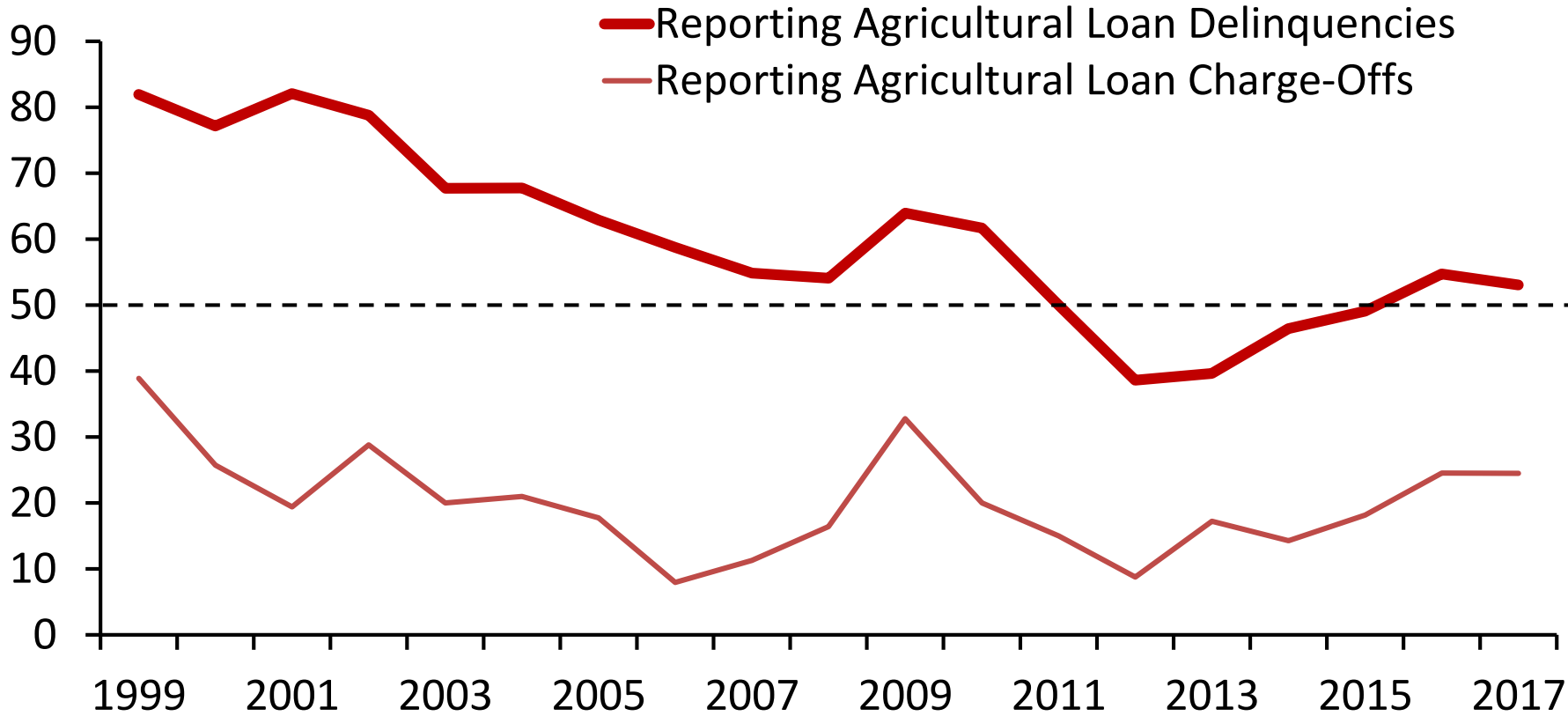
Source: FDIC, 4Q2017, South Dakota.

Agricultural past-due loan ratios have increased sharply but are still low by historical measure.

Median Ratio
Percent

— Median Past-Due & Nonaccrual Agricultural Loan Ratio
— Median Agricultural Loan Annual Charge-Off Rate
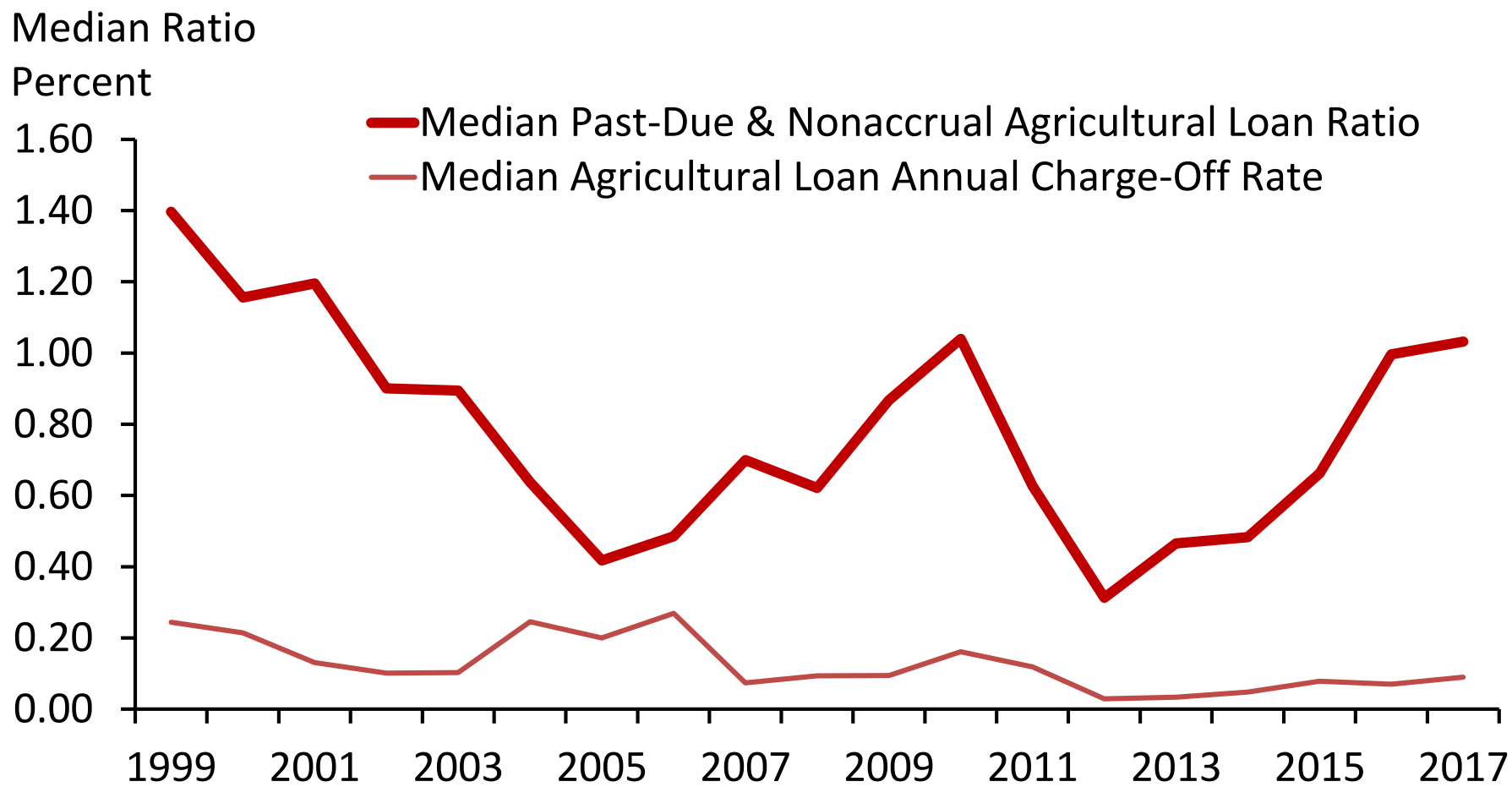
Source: FDIC, 4Q2017, South Dakota, only farm banks reporting delinquent & charged-off ag loans.

Why have we not seen ACI and past-due ratios increase more than they have at farm banks?
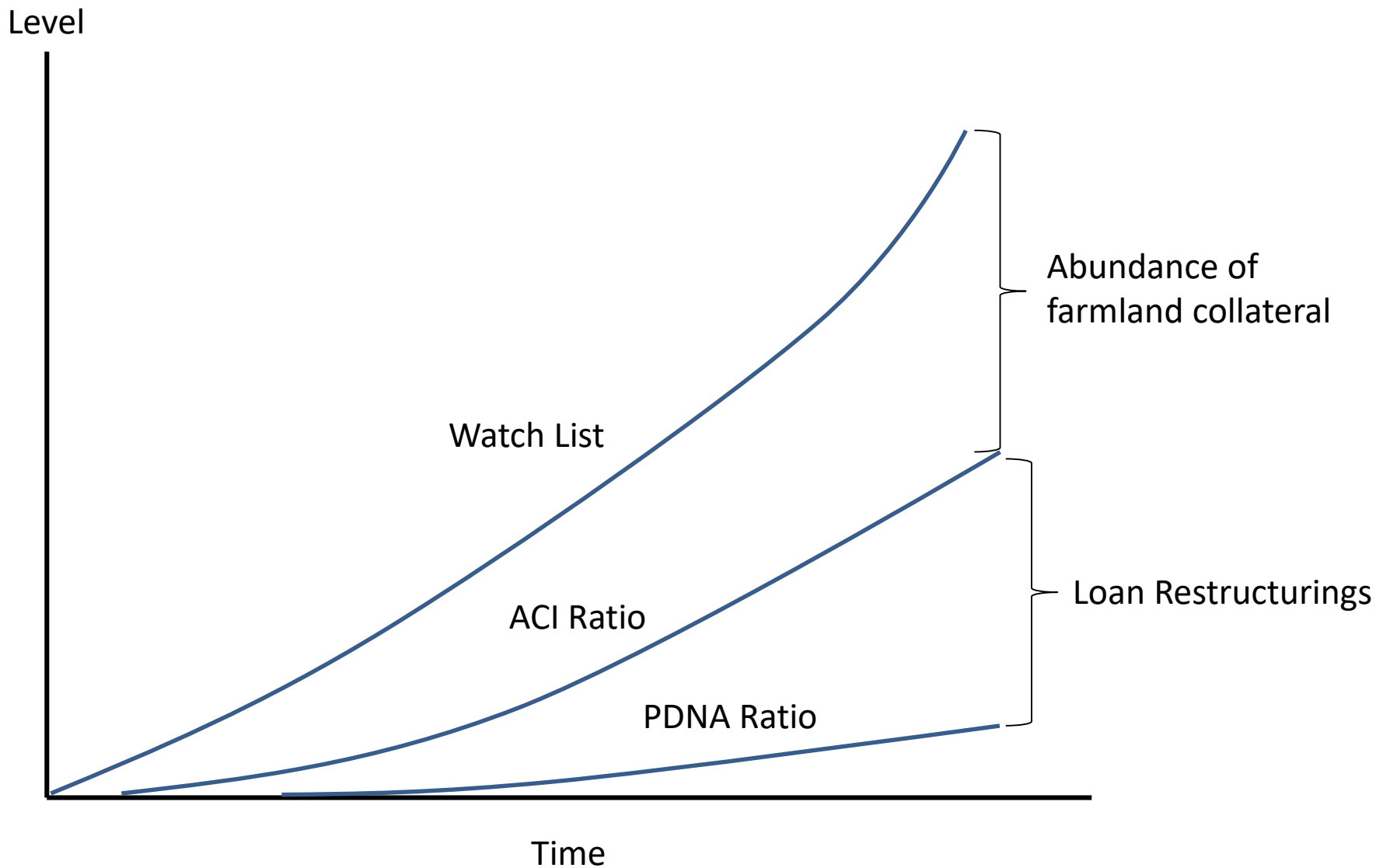
When does collateral protection cease being abundant?

FDIC

Increase In Loan Balance	Decline in Farmland Value										
	0%	-5%	-10%	-15%	-20%	-25%	-30%	-35%	-40%	-45%	-50%
0%	50%	53%	56%	59%	63%	67%	71%	77%	83%	91%	100%
5%	53%	55%	58%	62%	66%	70%	75%	81%	88%	95%	105%
10%	55%	58%	61%	65%	69%	73%	79%	85%	92%	100%	110%
15%	58%	61%	64%	68%	72%	77%	82%	88%	96%	105%	115%
20%	60%	63%	67%	71%	75%	80%	86%	92%	100%	109%	120%
25%	63%	66%	69%	74%	78%	83%	89%	96%	104%	114%	125%
30%	65%	68%	72%	76%	81%	87%	93%	100%	108%	118%	130%
35%	68%	71%	75%	79%	84%	90%	96%	104%	113%	123%	135%
40%	70%	74%	78%	82%	88%	93%	100%	108%	117%	127%	140%
45%	73%	76%	81%	85%	91%	97%	104%	112%	121%	132%	145%
50%	75%	79%	83%	88%	94%	100%	107%	115%	125%	136%	150%

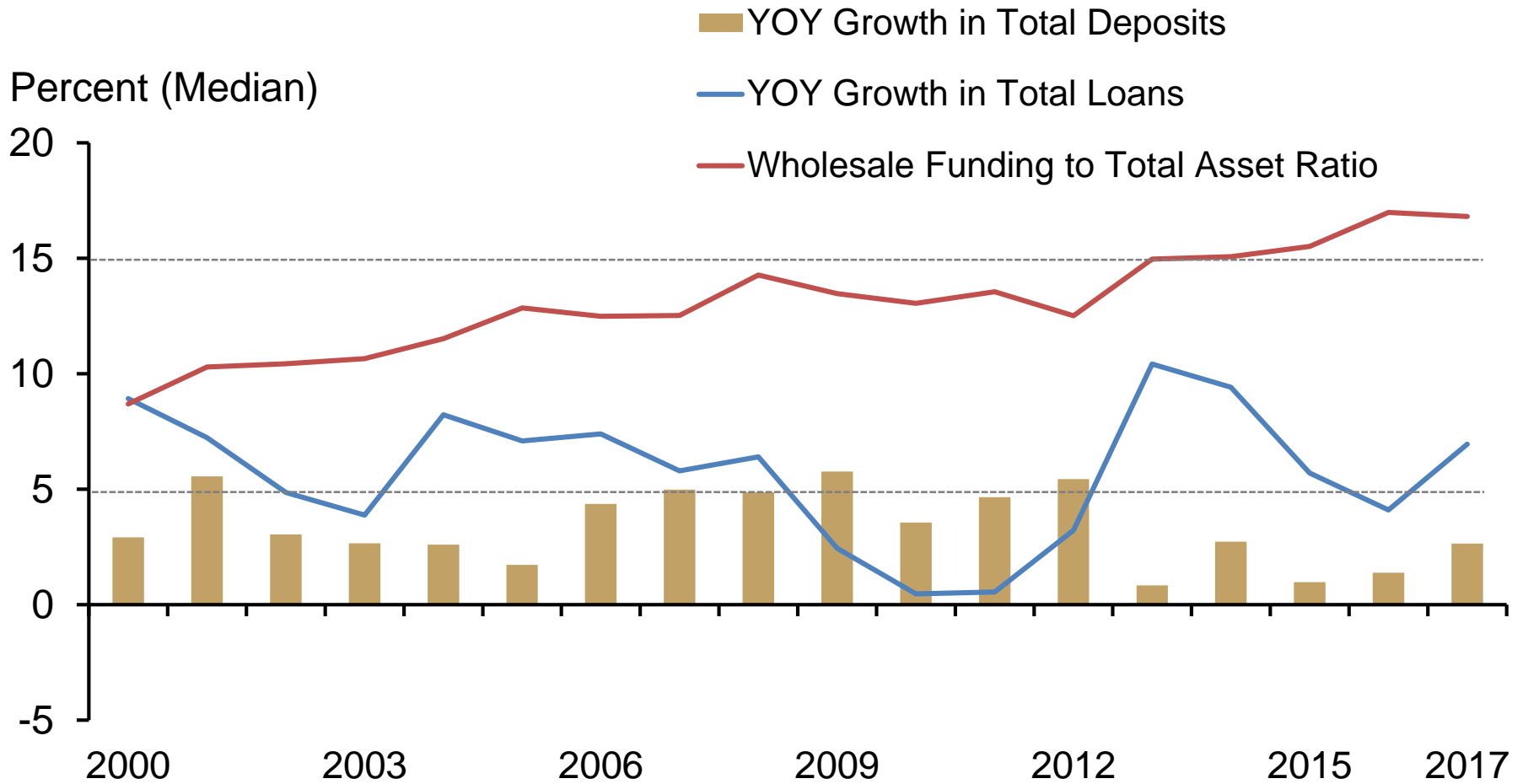| Increase In Loan Balance	Decline in Farmland Value										
	0%	-5%	-10%	-15%	-20%	-25%	-30%	-35%	-40%	-45%	-50%
0%	65%	68%	72%	76%	81%	87%	93%	100%	108%	118%	130%
5%	68%	72%	76%	80%	85%	91%	98%	105%	114%	124%	137%
10%	72%	75%	79%	84%	89%	95%	102%	110%	119%	130%	143%
15%	75%	79%	83%	88%	93%	100%	107%	115%	125%	136%	150%
20%	78%	82%	87%	92%	98%	104%	111%	120%	130%	142%	156%
25%	81%	86%	90%	96%	102%	108%	116%	125%	135%	148%	163%
30%	85%	89%	94%	99%	106%	113%	121%	130%	141%	154%	169%
35%	88%	92%	98%	103%	110%	117%	125%	135%	146%	160%	176%
40%	91%	96%	101%	107%	114%	121%	130%	140%	152%	165%	182%
45%	94%	99%	105%	111%	118%	126%	135%	145%	157%	171%	189%
50%	98%	103%	108%	115%	122%	130%	139%	150%	163%	177%	195%

Liquidity and funds management are becoming an increasing challenge for farm banks.

FDIC

Legend:
- YOY Growth in Total Deposits
- YOY Growth in Total Loans
- Wholesale Funding to Total Asset Ratio

Percent (Median)

Y-axis: 20, 15, 10, 5, 0, -5

X-axis: 2000, 2003, 2006, 2009, 2012, 2015, 2017

Source: FDIC, 4Q data, all banks in headquarterd in South Dakota.

$1 Trillion – total value of U.S. ag exports 2009 - 2016, the strongest period for U.S. ag exports in history.

Top Products

Product	Value
Soybeans & Soybean Products	$25.4 billion
Corn	$9.2 billion
Tree Nuts	$7.6 billion
Beef & Beef Products	$6.1 billion
Prepared Food	$6.1 billion
Fresh & Processed Fruit	$6.1 billion
Pork & Pork Products	$5.6 billion
Wheat	$5.1 billion
Dairy Products	$4.6 billion
Poultry Meat & Products (Excludes eggs)	$3.8 billion
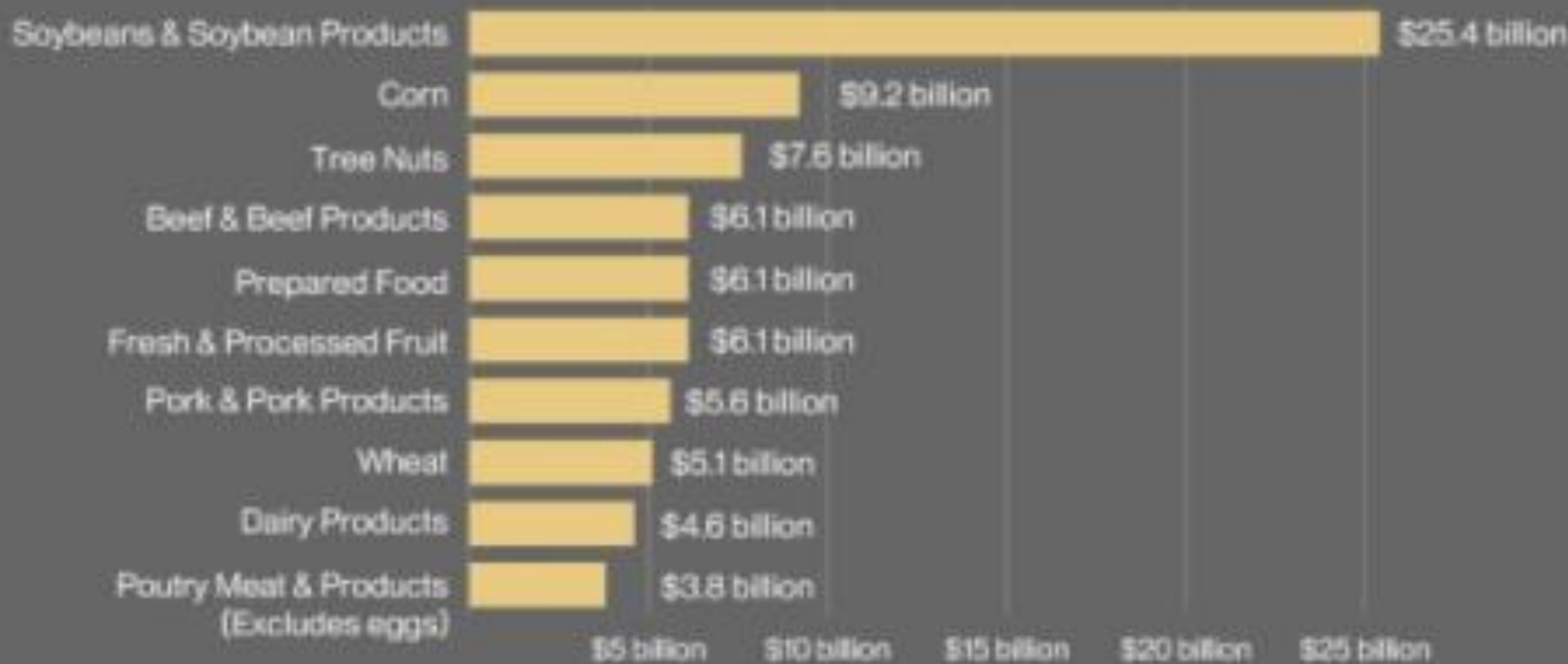
Source: USDA/Foreign Agricultural Service.

NAFTA trading partners are largest importers of U.S. agricultural products, followed by China.

FY 2016

Top Destinations

1 Canada
$20.3 billion
15.7% of total ag exports

2 China
$19.2 billion
14.8% of total ag exports

3 Mexico
$17.7 billion
13.6% of total ag exports

4 European Union
$11.6 billion
9.0% of total ag exports

5 Japan
$10.6 billion
8.2% of total ag exports

Source: USDA/Foreign Agricultural Service.

South Dakota Agricultural Export Value, 2016.

	Value of Exports	Total Value of All Agricultural Production	Total Value of Commodity Production
	$ Thous.	Share (%)	Share (%)
Soybeans	1,307.0	12.74	56.56
Corn	502.6	4.90	19.69
Feeds and other feed grains	405.4	3.95	
Wheat	272.4	2.66	59.68
Beef and veal	242.2	2.36	12.71
Soybean meal	233.9	2.28	
Other oilseeds and products	222.7	2.17	
Vegetable oils	178.7	1.74	
Grain products, processed	169.7	1.65	
Pork	140.3	1.37	35.09
Hides and skins	66.8	0.65	
Dairy products	60.8	0.59	13.57
All Other Commodities	125.1	1.22	
Total agricultural exports	3,927.6	38.29	

Source: USDA.

Nearly three-fourths of South Dakota agricultural exports are sent to Mexico and Canada.

Figure 1. Share of Total Agricultural Exports to NAFTA, 2016
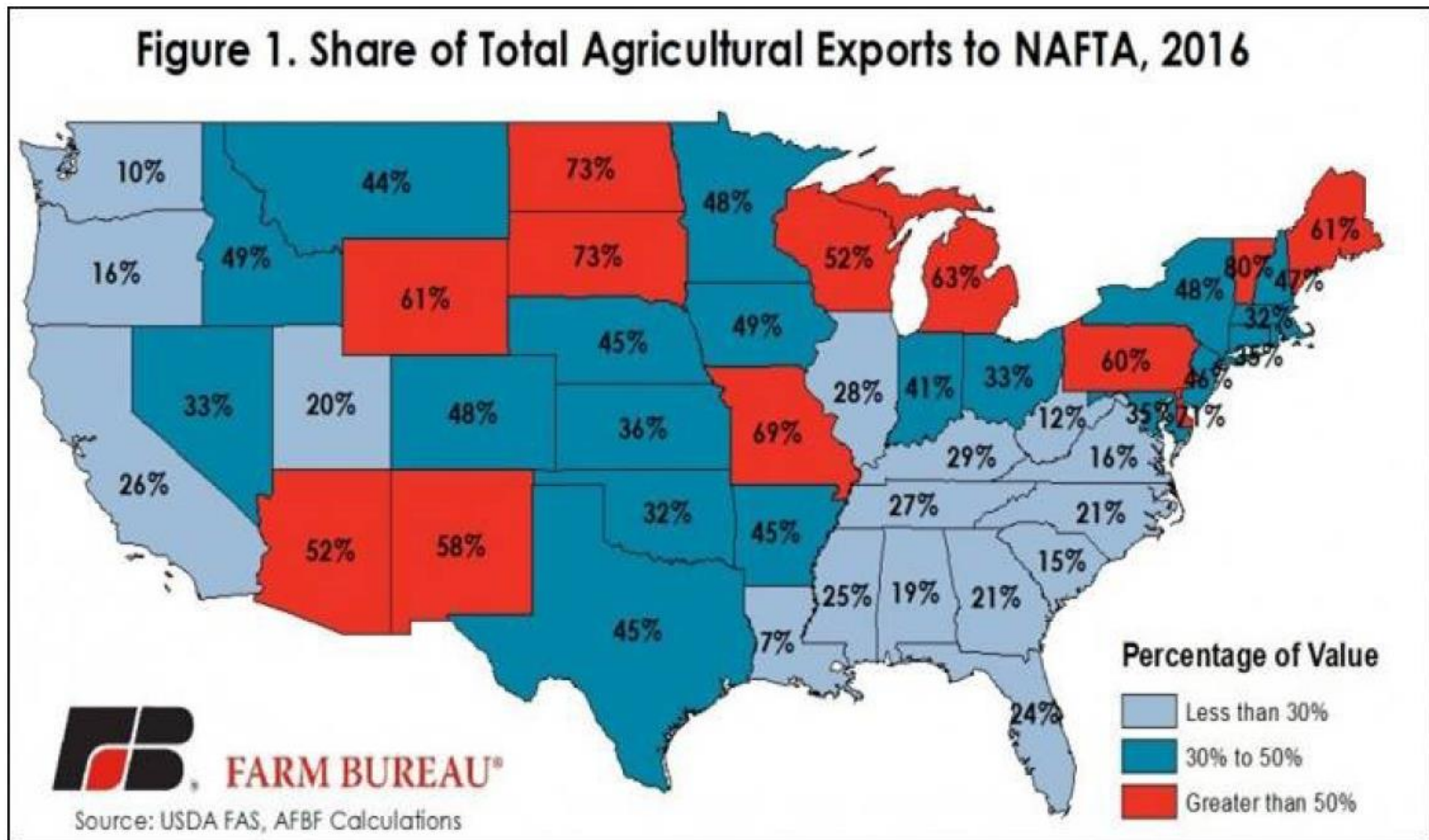
Chinese tariffs on U.S. soybeans could reshuffle global soybean trade.

| Argentina, Brazil, and U.S. Produce Nearly 90 Percent of Global Soybean Exports, and China Consumes More Than Two-Thirds of Their Shipments			
Producer Nation	Nation's Share of Global Soybean Production, by Volume	Nation's Share of Global Soybean Exports, by Volume	Nation's Share of China's Imports of Soybeans, by Value	Share of Nation's Soybean Exports That Is Sent to China, by Value
Argentina	16	5	10	86
Brazil	33	43	46	76
United States	33	40	41	64
Total	82	88	97	70
Sources: USDA (Haver Analytics), The Observatory of Economic Complexity.				

The 2018 farm bill – a big unknown.

- Major sticking point – SNAP.
- Minor adjustments to ARC and PLC.
- Conservation programs condensed.
- Milk and cotton were addressed in the February spending bill.
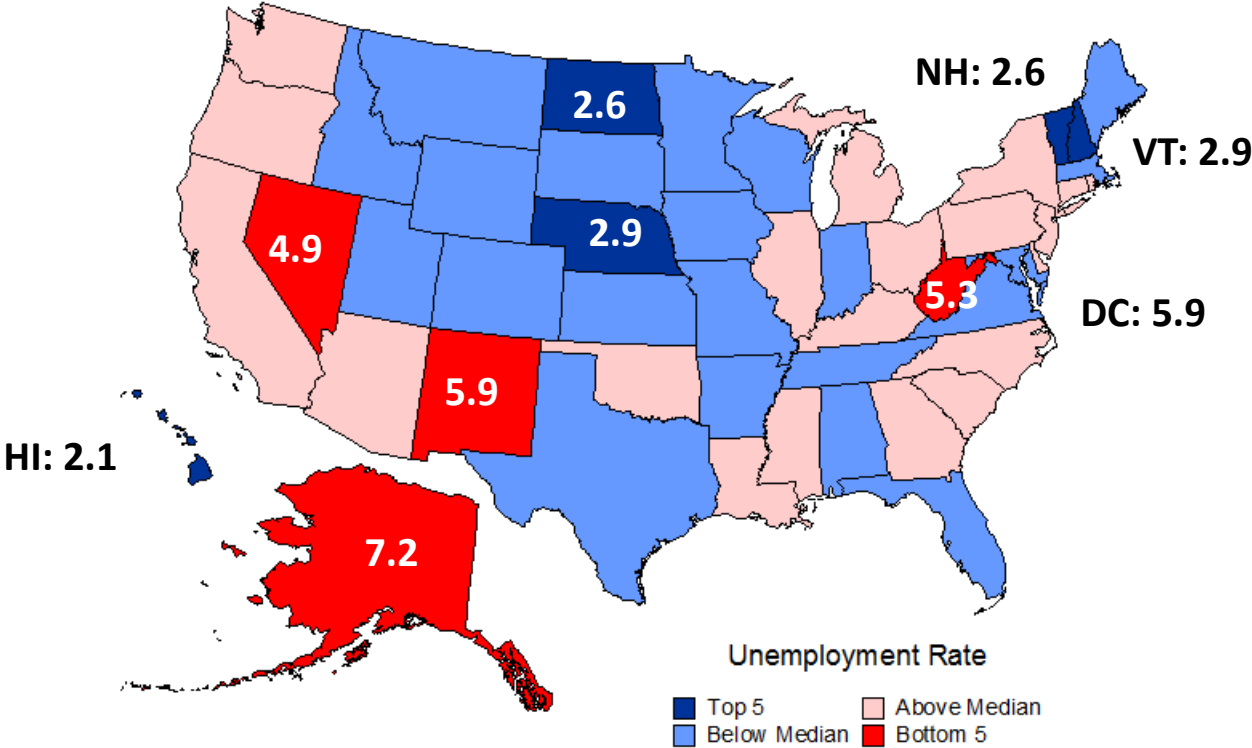
South Dakota Economy

South Dakota employment growth has rebounded the past year, converging with the U.S. growth rate.

Year-Over-Year Change
Percent

Legend: U.S. — ND — MN — NE — IA — SD
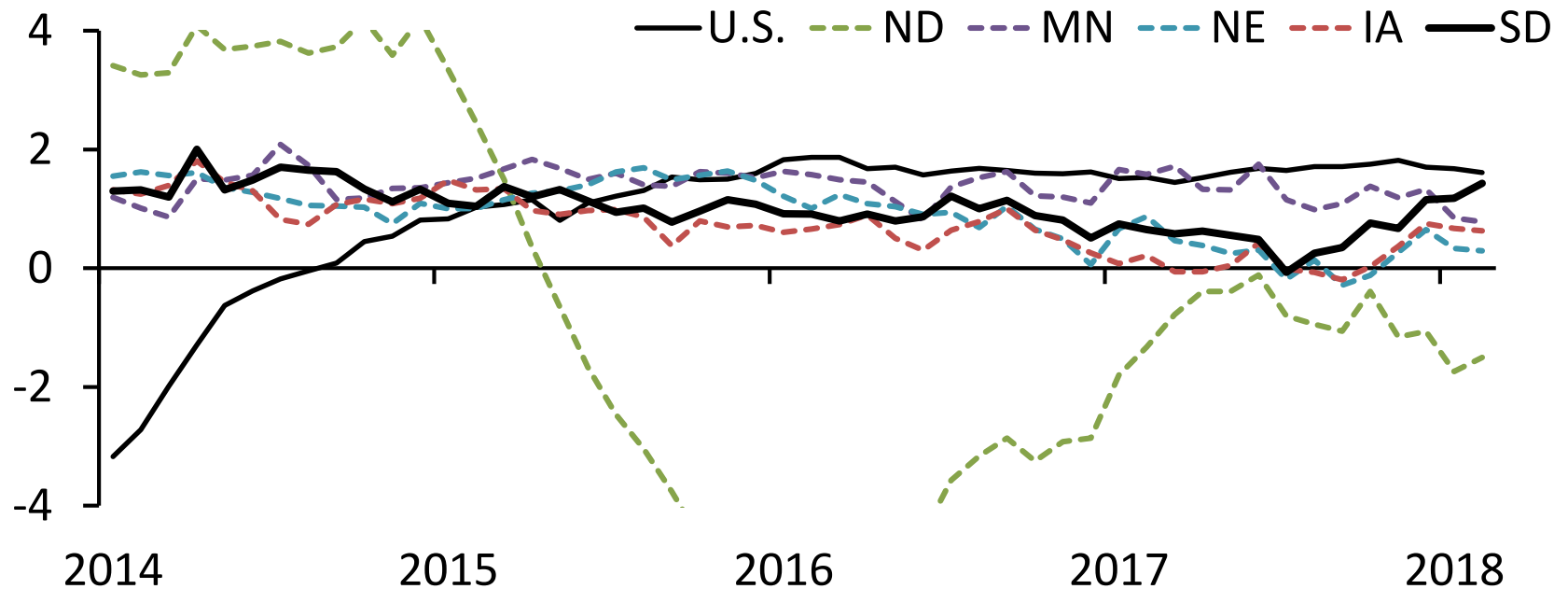
Source: Bureau of Labor Statistics (Haver Analytics).
Note: Seasonally-adjusted monthly data.

FDIC

South Dakota's unemployment rate of 3.4 percent is the 14th lowest among the 50 states.

NH: 2.6

VT: 2.9

2.6

2.9

4.9

5.3

DC: 5.9

5.9

HI: 2.1

7.2

Unemployment Rate

■ Top 5 □ Above Median
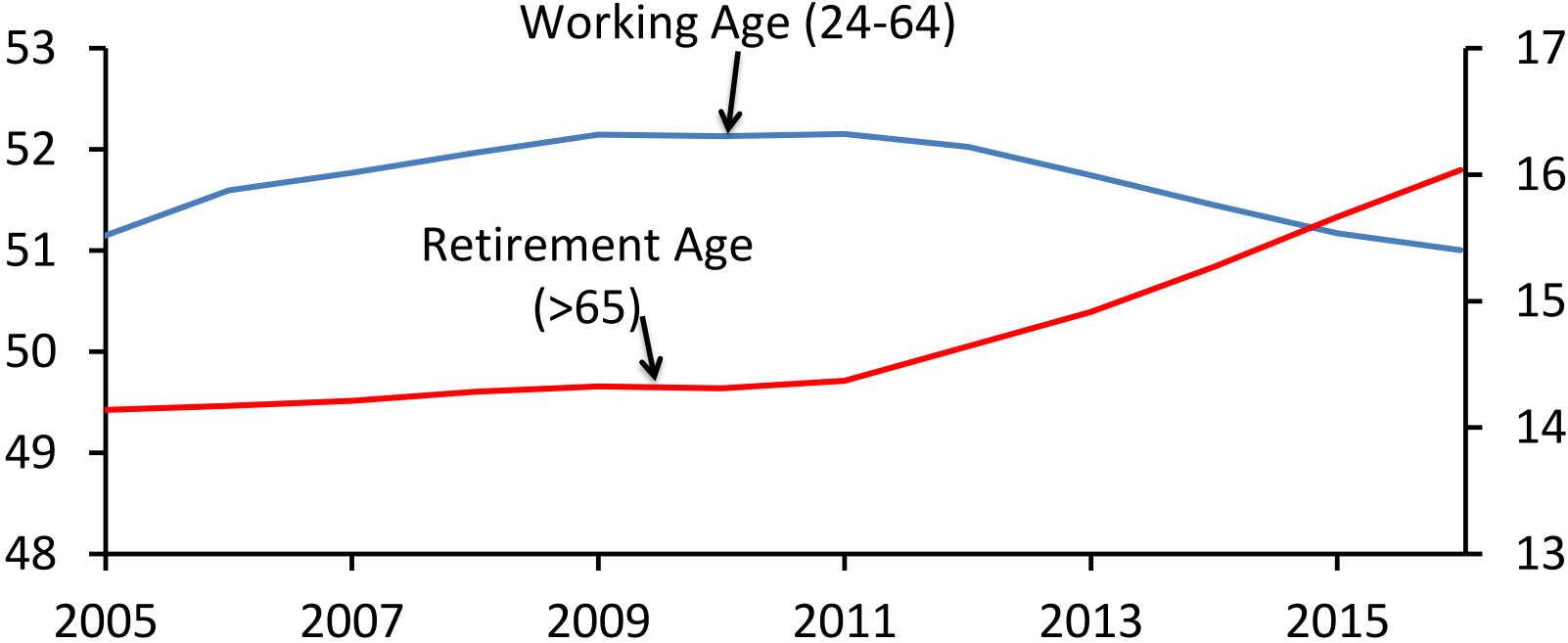□ Below Median ■ Bottom 5

Source: Bureau of Labor Statistics (Haver Analytics).
Note: Three-month moving average ending March, 2017; U.S. 50 states and District of Columbia.

An aging population will challenge future job growth in South Dakota.

Working Age Population
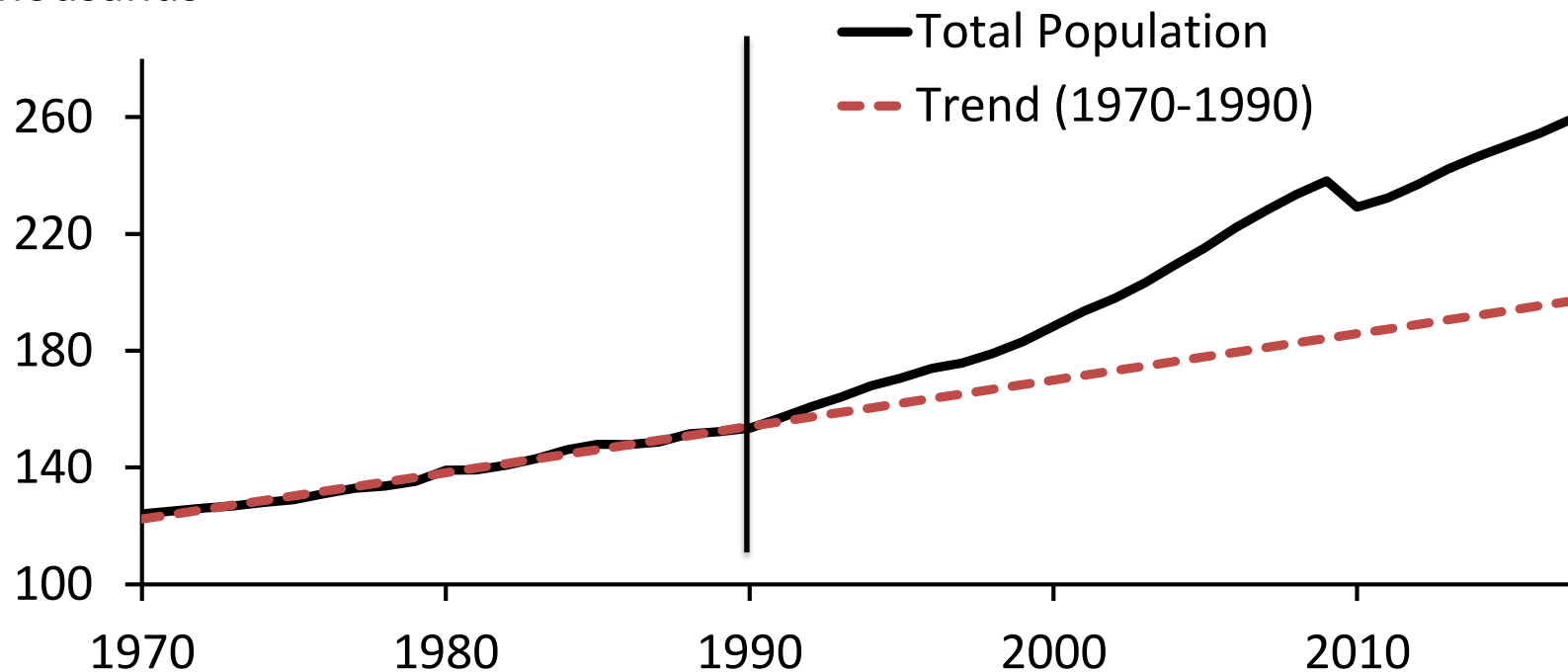
Retirement Age Population
Percent of total

Working Age (24-64)

Retirement Age (>65)

Source: U.S. Census Bureau/American Community Survey (Haver Analytics).

Sioux Falls Economy

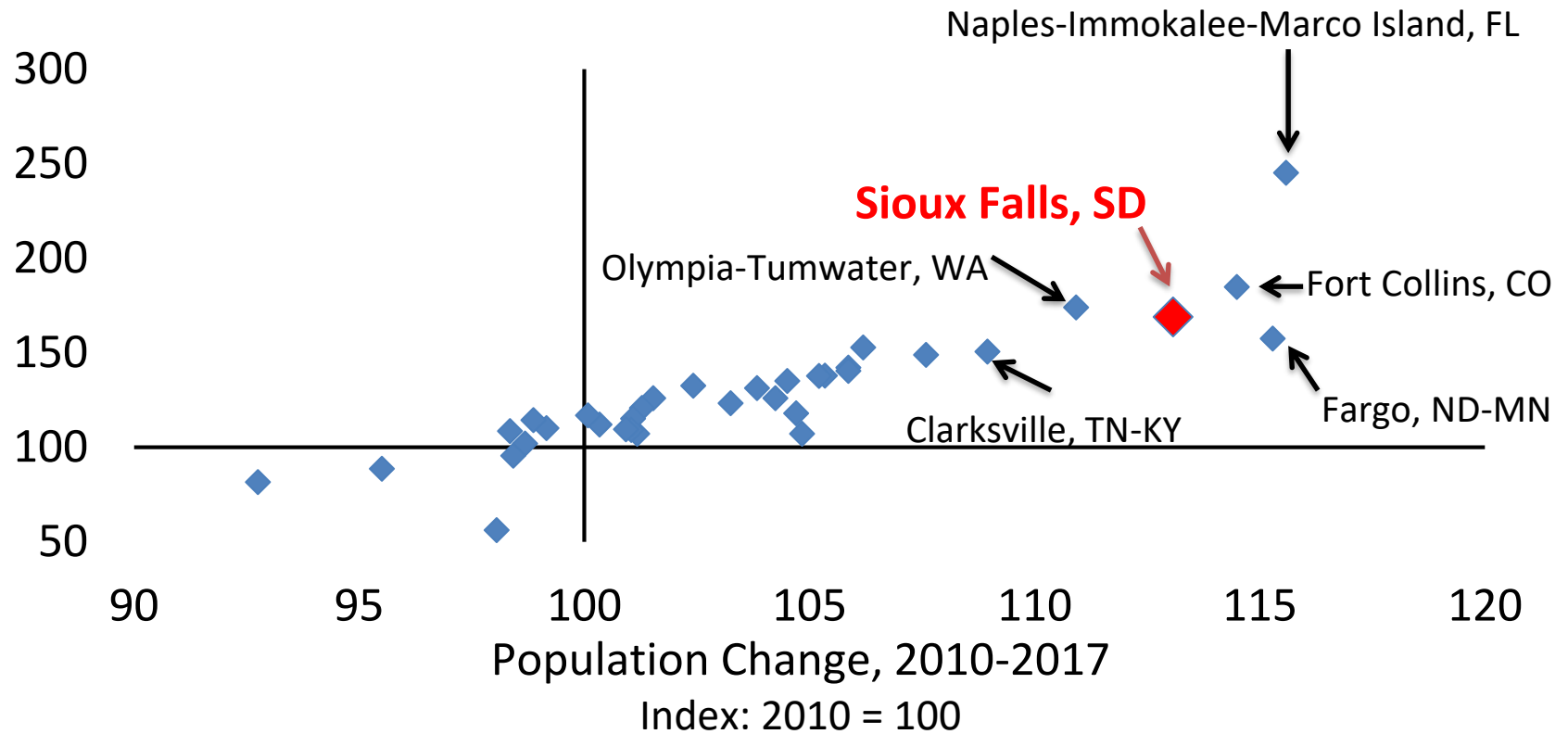**Sioux Falls has sustained a long, strong trend in population growth.**

Population, Thousands

Source: U.S. Census Bureau (Haver Analytics).

FDIC

Sioux Falls is among one of the fastest growing same-sized metropolitan areas.

Population Change, 1990-2017

Naples-Immokalee-Marco Island, FL

Sioux Falls, SD

Olympia-Tumwater, WA → Fort Collins, CO

Clarksville, TN-KY

Fargo, ND-MN

300

250

200

150

100

50

90   95   100   105   110   115   120

Population Change, 2010-2017
Index: 2010 = 100

Source: U.S. Census Bureau (Haver Analytics).

Sioux Falls has seen strong home price appreciation.

FDIC

Indexed Home Values 1Q2000 = 100 Indexed
- ■ Value/QQ:YY as of 4Q:17
- ■ Value/QQ:YY as of 4Q:07

City	
Bakersfield, CA	2006Q2
Las Vegas, NV	2006Q1
Minneapolis	2006 Q1
Rapid City	
Bismarck	
Grand Forks	
Fargo	
St. Louis	
Springfield	
Sioux Falls	
Rochester	
Des Moines	
Wichita	
Kansas City	
Lincoln	
Sioux City	
Omaha	
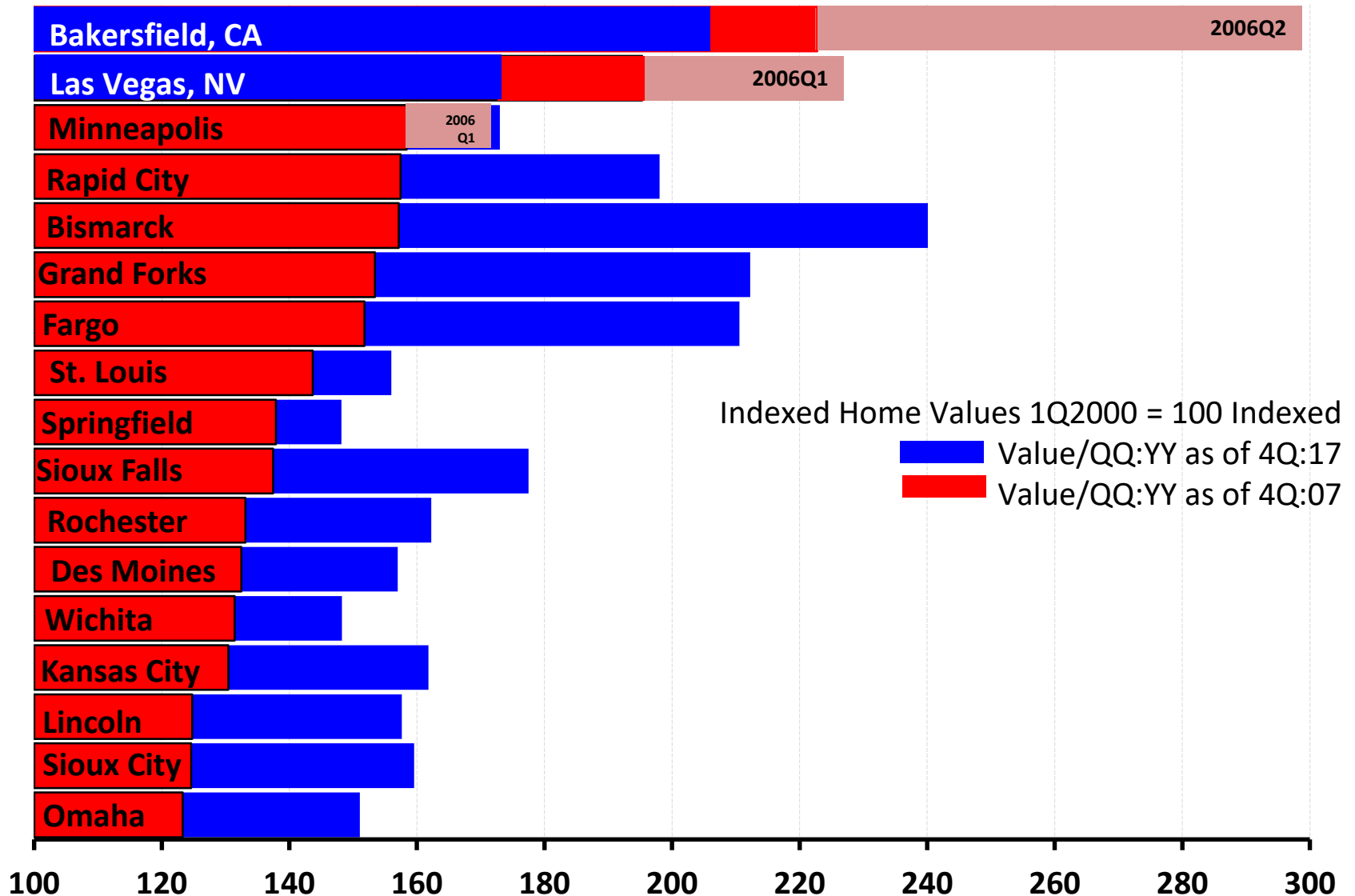
Source: Moody's Data Buffet, Core Logic, Case-Shiller Home Price Index.

After declining in 2012 and 2013, housing affordability in Sioux Falls has been steady.

Sioux Falls, SD

Fargo, ND-MN

Minneapolis-St. Paul-Bloomington, MN-WI
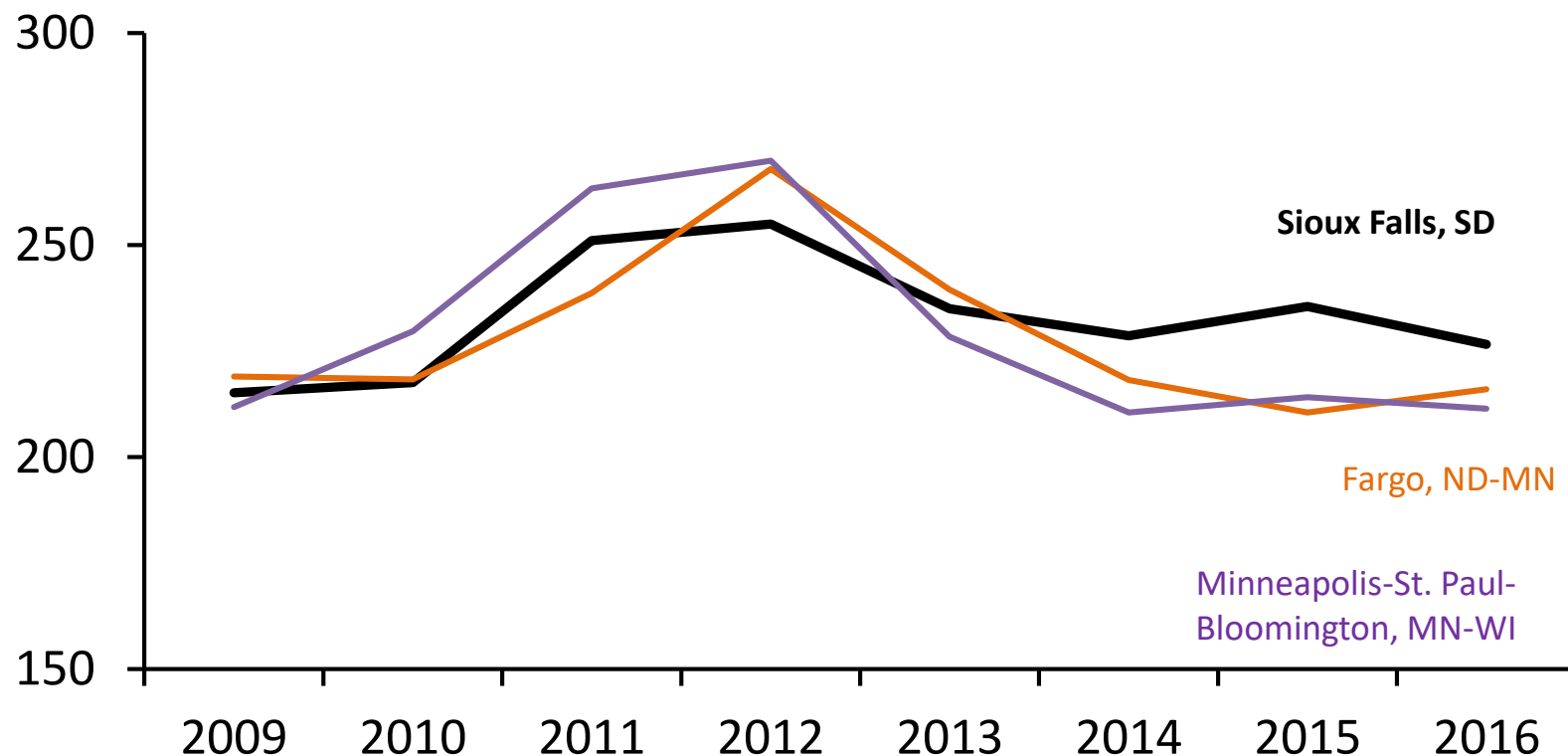
Source: National Association of Realtors (Haver Analytics).
Note: Annual data. The Index equals 100 when the median family income is sufficient to purchase a median priced house. A reading over 100 indicates the percentage by which median family income is in excess of income necessary to purchase a median priced house.

Any Final Questions or Comments?

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