

# **Farm Income, Land Values and Rent, and Farm Financial Stress: Outlook 2017**

**Ani Katchova**

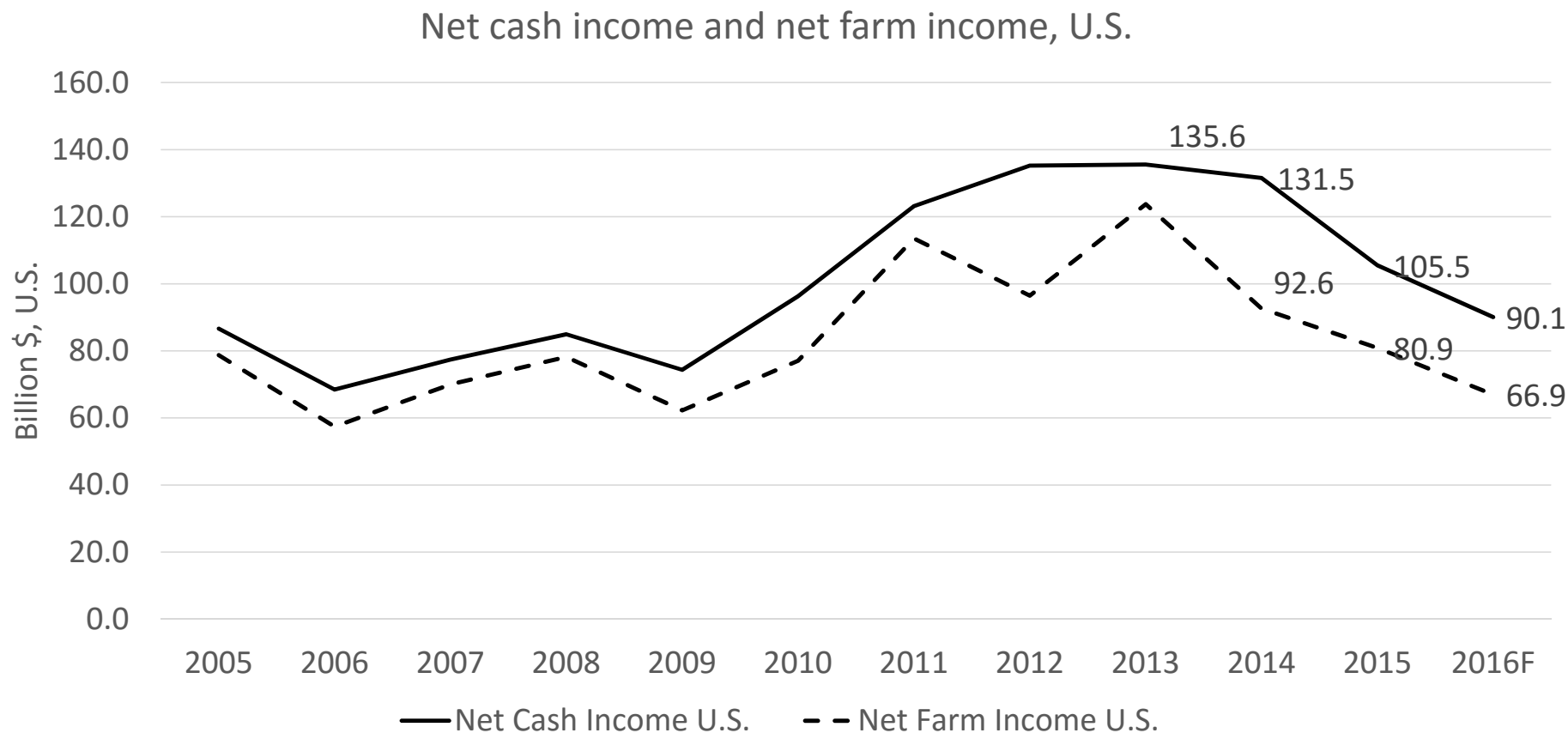
Associate Professor  
Farm Income Enhancement Chair  
Department of Agricultural, Environmental, and Development Economics  
The Ohio State University

Agricultural Policy and Outlook Meeting  
December 1, 2016

# Outlook themes

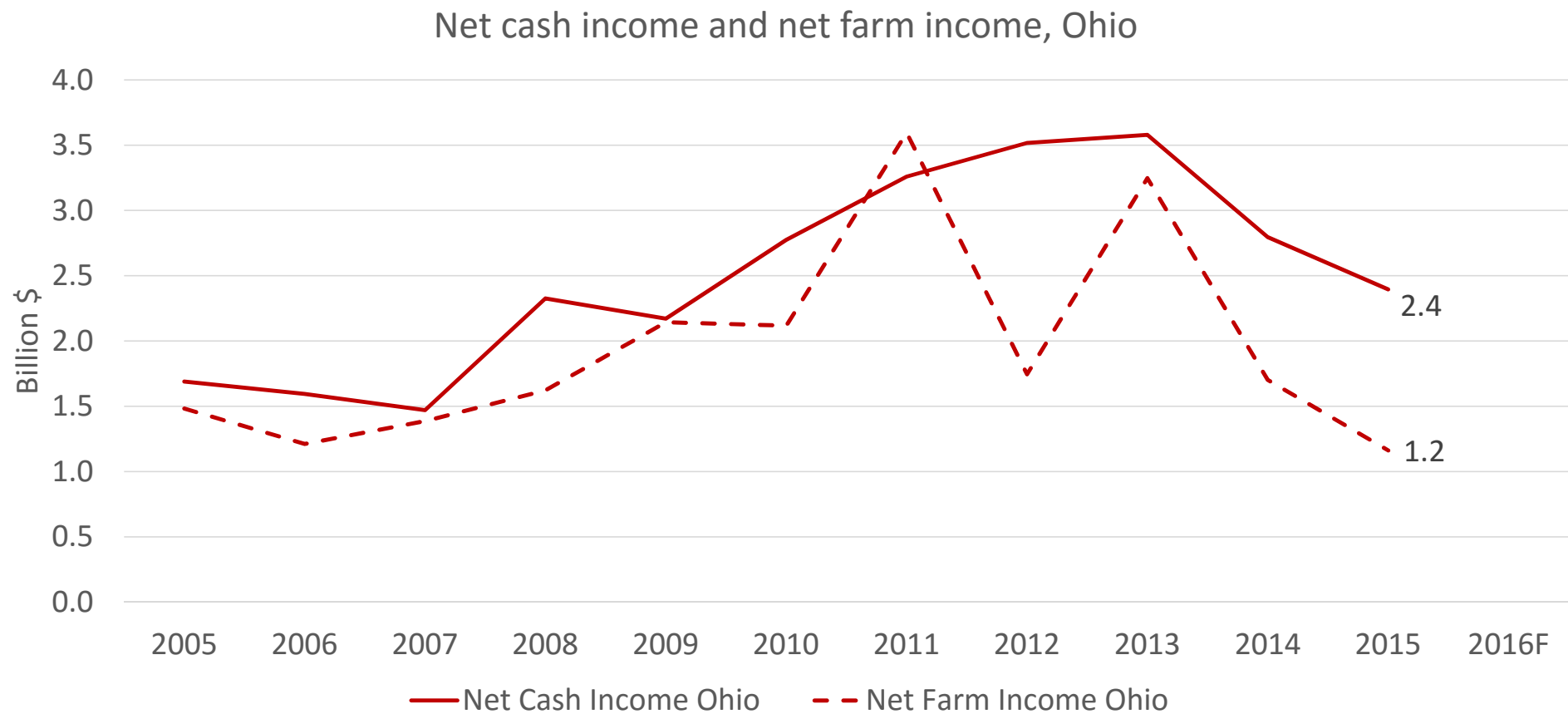
- **Farm income and finance:** further decline in farm income, low commodity prices, poor cash flow, reduced working capital, and deteriorating financial performance.
- **Farmland markets:** negative growth in land values and rents nationwide and in Ohio.
- **Ag lenders:** heightened loan demand and slower repayment rates, but bankruptcy rates are still low.
- **Outlook:** liquidity challenges have not led to widespread solvency problems so far. What might the outlook for 2017 or 2020 look like?

# Net cash income (\$90.1B) and net farm income (\$66.9B) forecast to decline for the third consecutive year



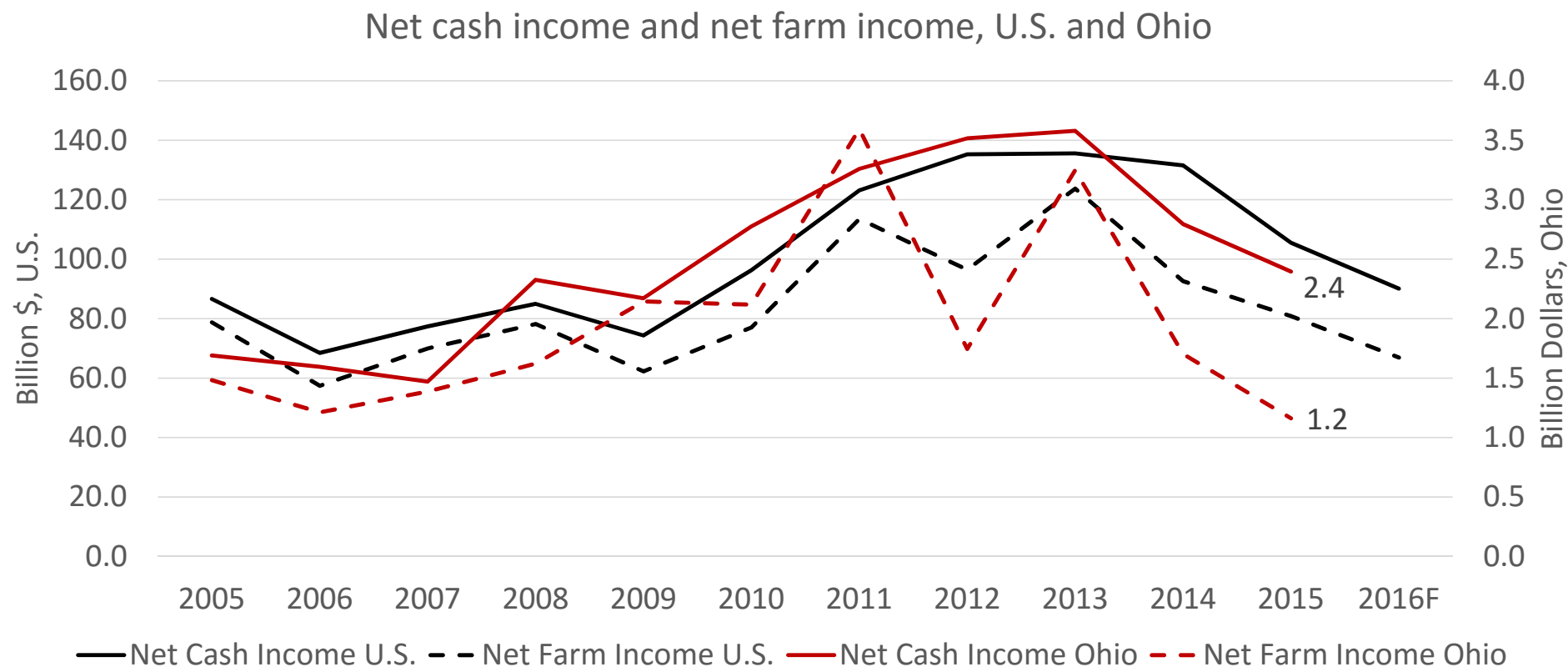
Source: USDA, ERS, Farm Income and Wealth Statistics.

# Ohio net cash income (\$2.4B) and Ohio net farm income (\$1.2B) also declined in 2015



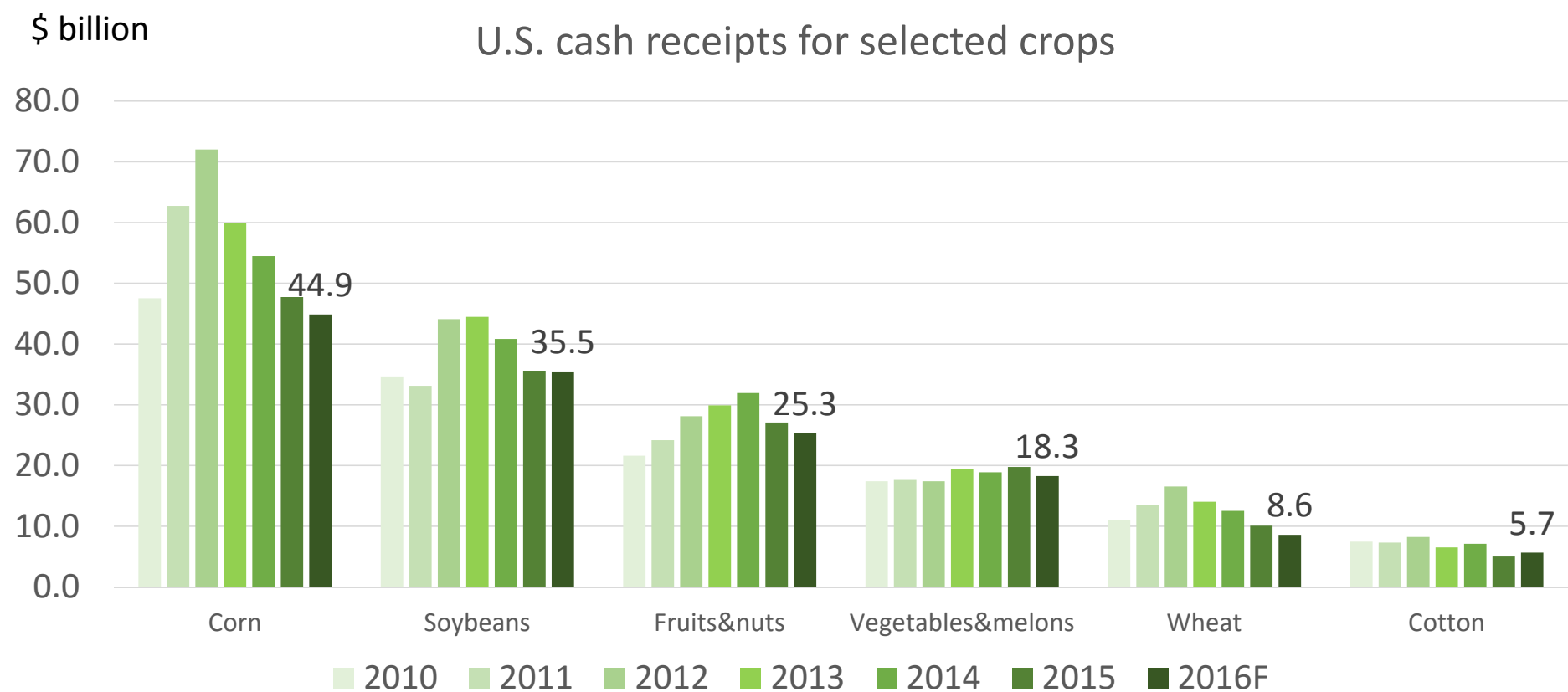
Source: USDA, ERS, Farm Income and Wealth Statistics.

Ohio farm income is about 2.4-2.5% of the U.S. farm income but show more relative variability



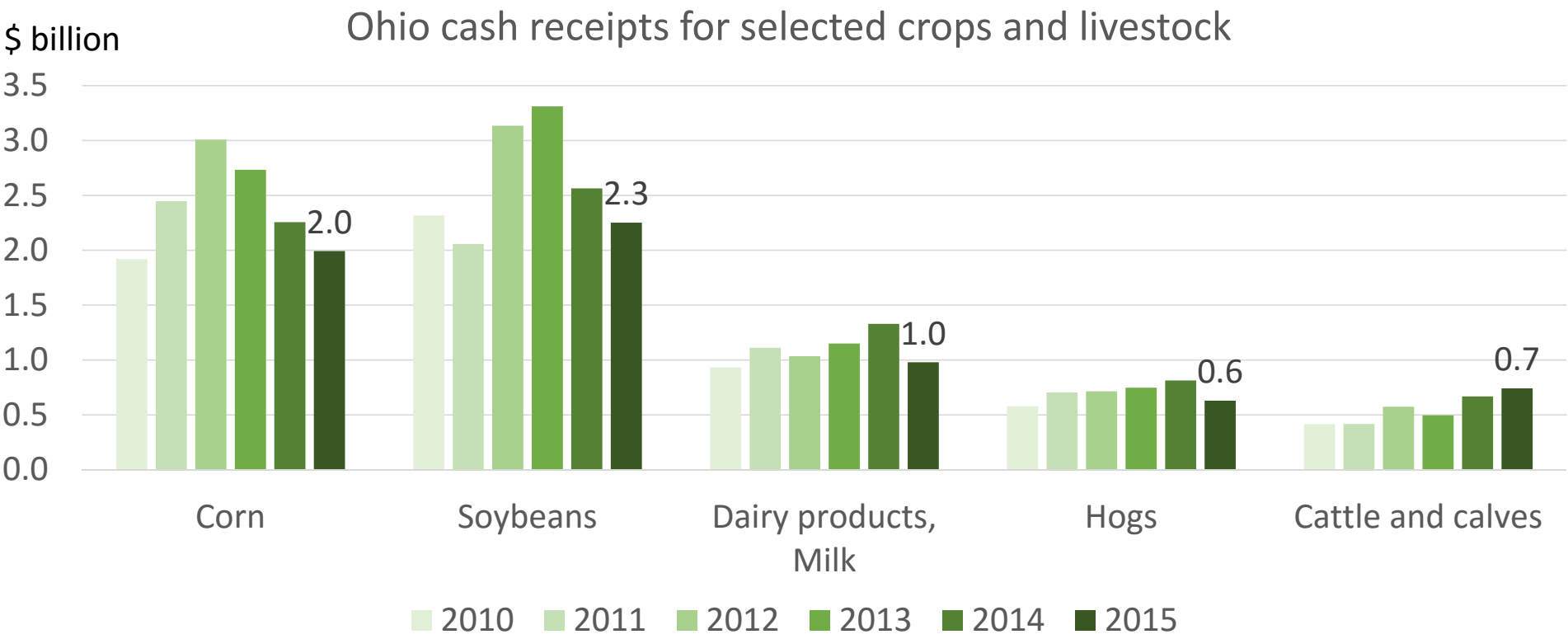
Source: USDA, ERS, Farm Income and Wealth Statistics.

# Cash receipts are expected to fall \$23.4 billion, mostly from livestock receipts; crop receipts forecast unchanged



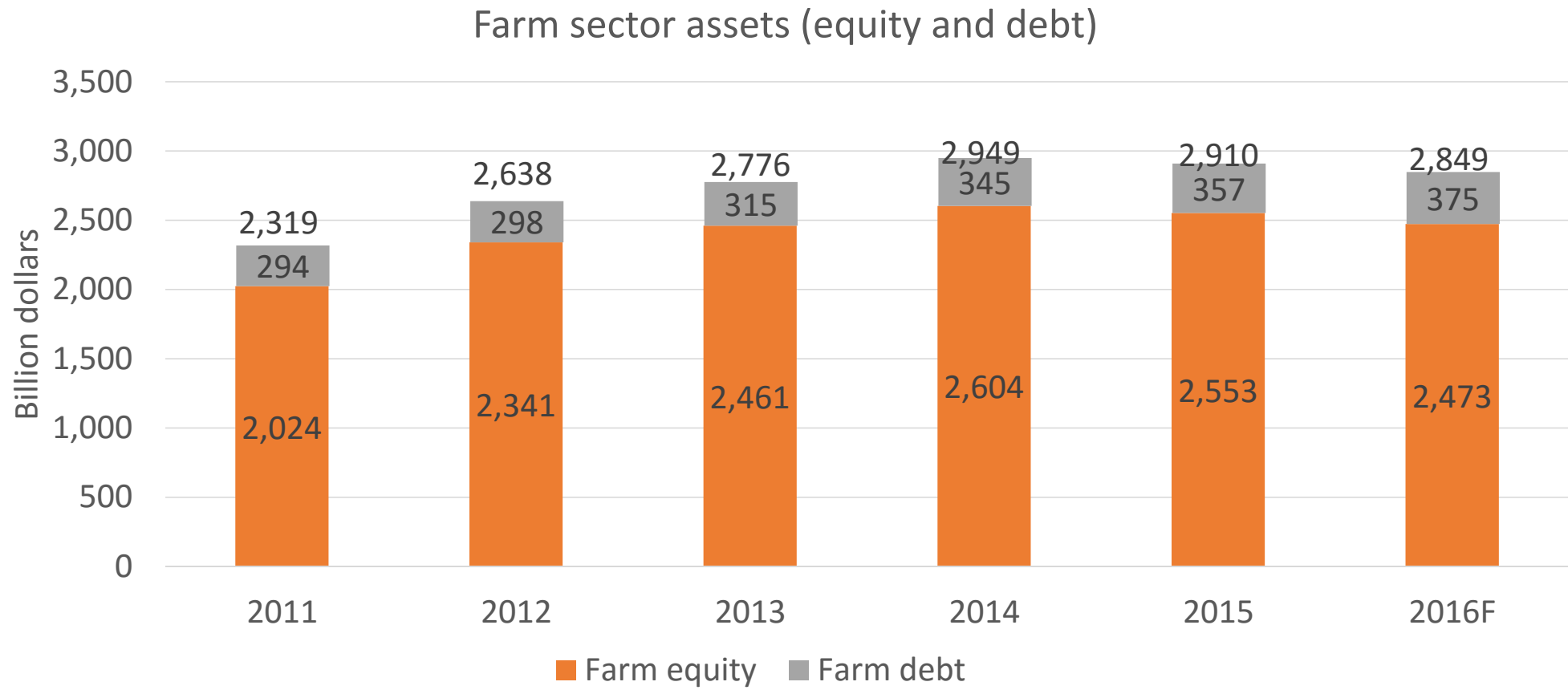
Source: USDA, ERS, Farm Income and Wealth Statistics.

# Ohio crops and livestock receipts declined in 2015



Source: USDA, ERS, Farm Income and Wealth Statistics.

# Farm assets and equity expected to decline, farm debt to increase

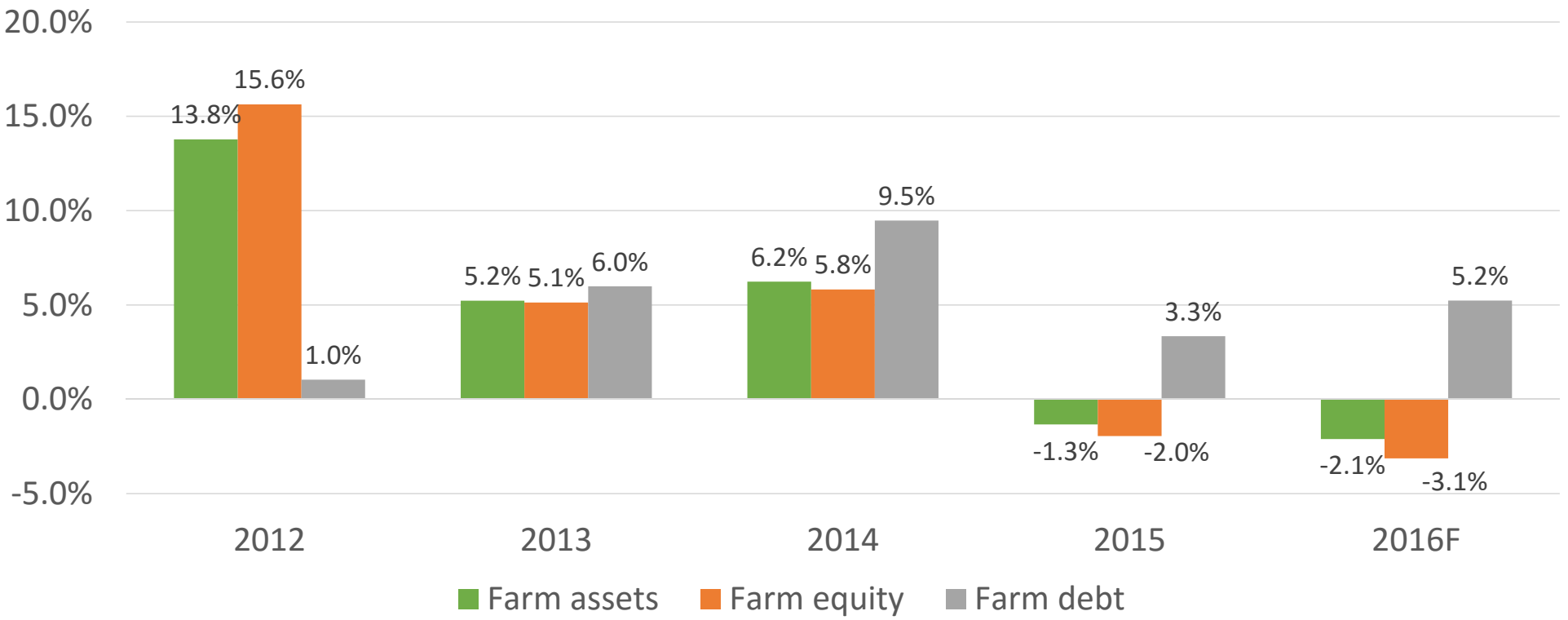


Source: USDA, ERS, Farm Income and Wealth Statistics.



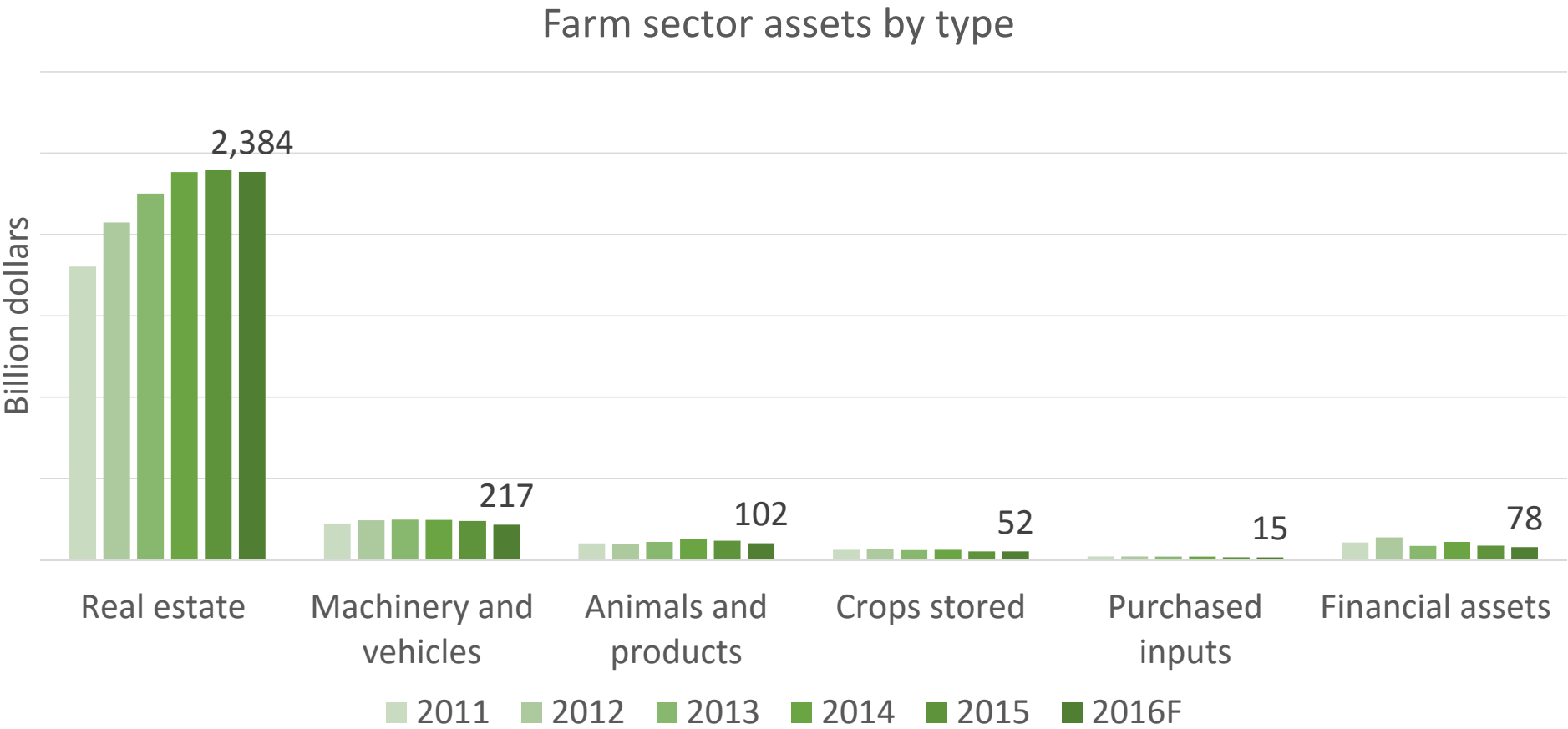
# Farm assets and equity expected to decline, farm debt to increase

Farm sector assets, equity, and debt  
percent changes from previous year



Source: USDA, ERS, Farm Income and Wealth Statistics.

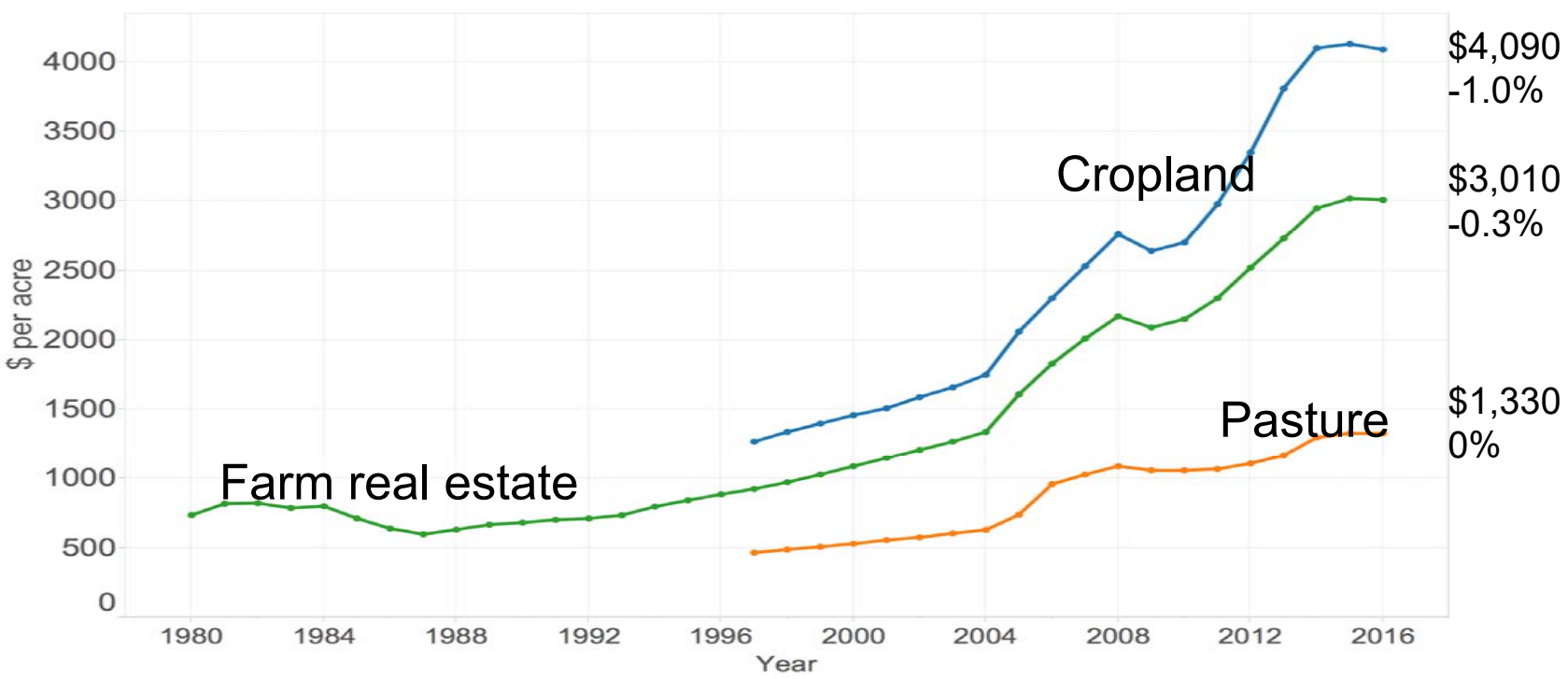
# Farm real estate assets represent 84% of farm assets; also expected to decline



Source: USDA, ERS, Farm Income and Wealth Statistics.

# Land values for the U.S. declined in 2016

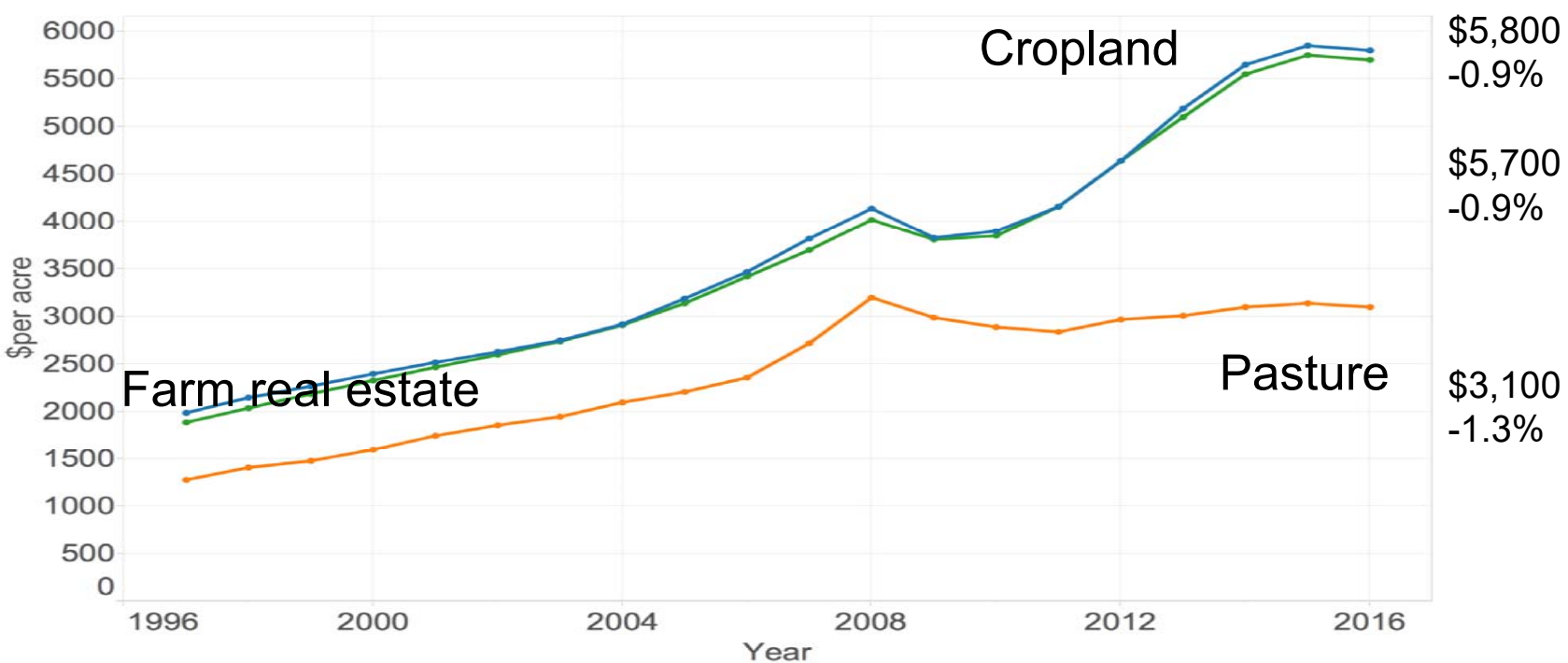
Farmland values per acre, U.S.



Source: USDA, NASS. Land Values Summary.

# Land values also declined in Ohio

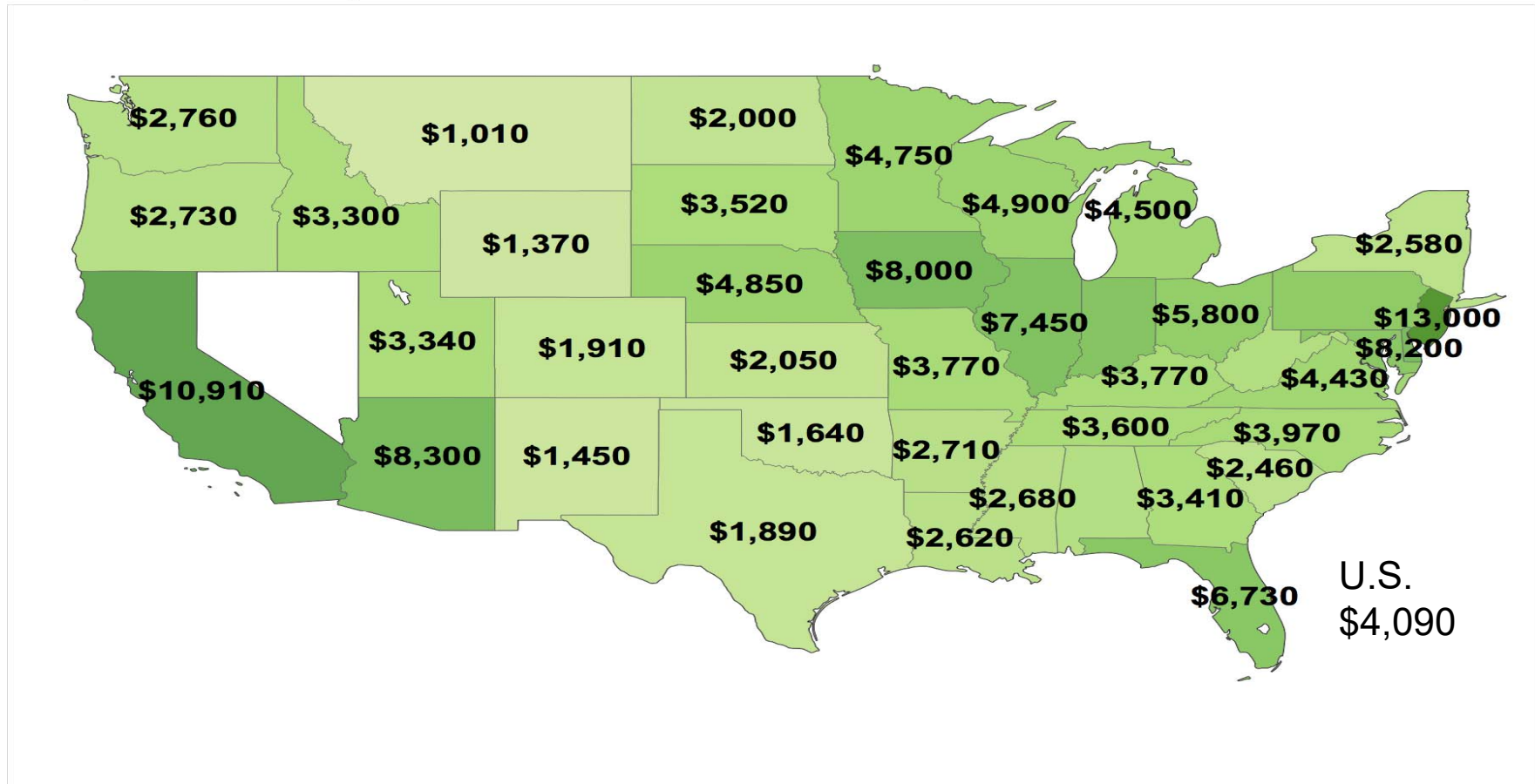
Farmland values per acre, OH



Source: USDA, NASS. Land Values Summary.

# Cropland values show major differences by state

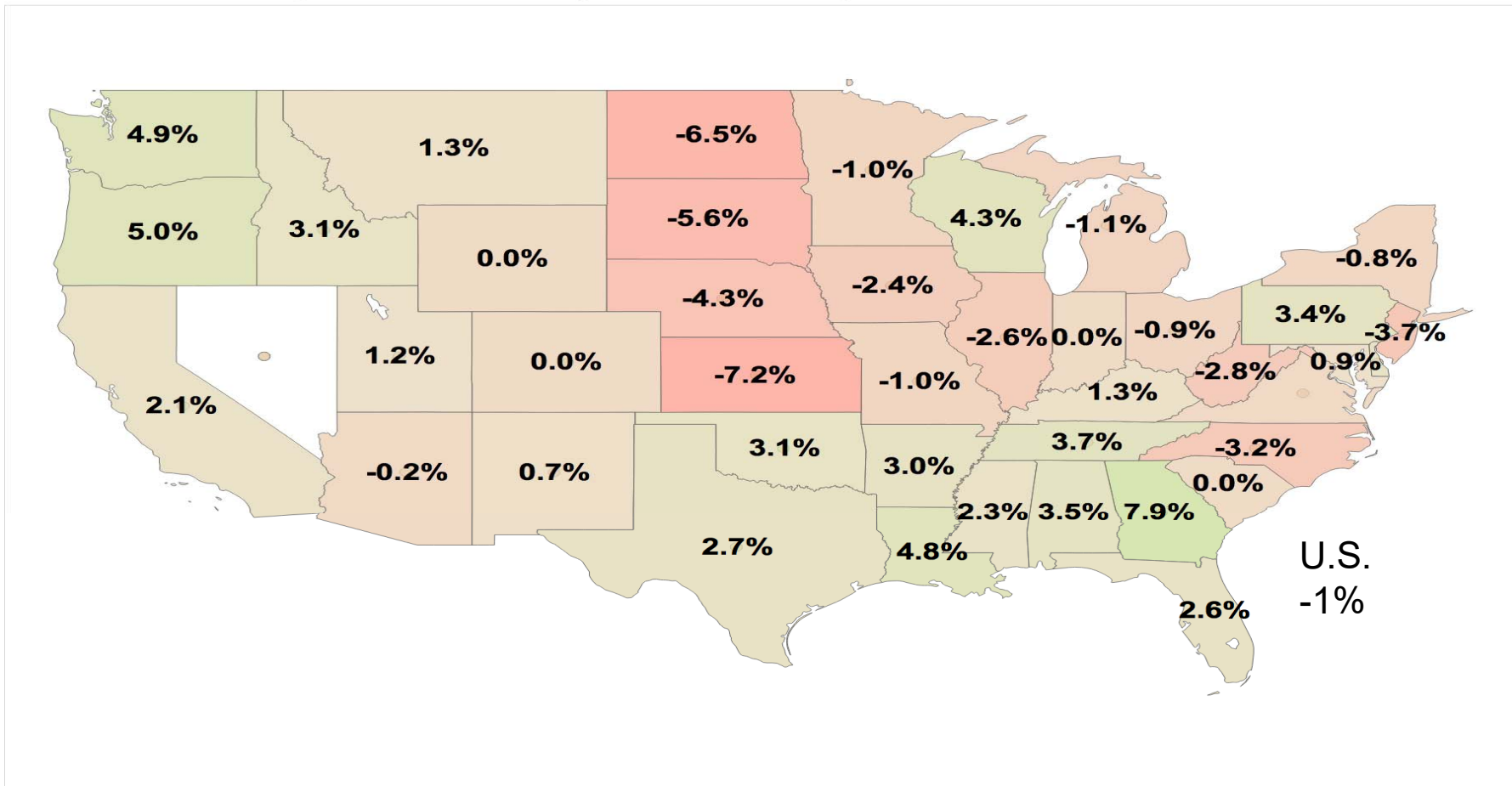
Cropland Value per acre in U.S. - Year 2016



Source: USDA, NASS. Land Values Summary.

## Many regions see declines in land values

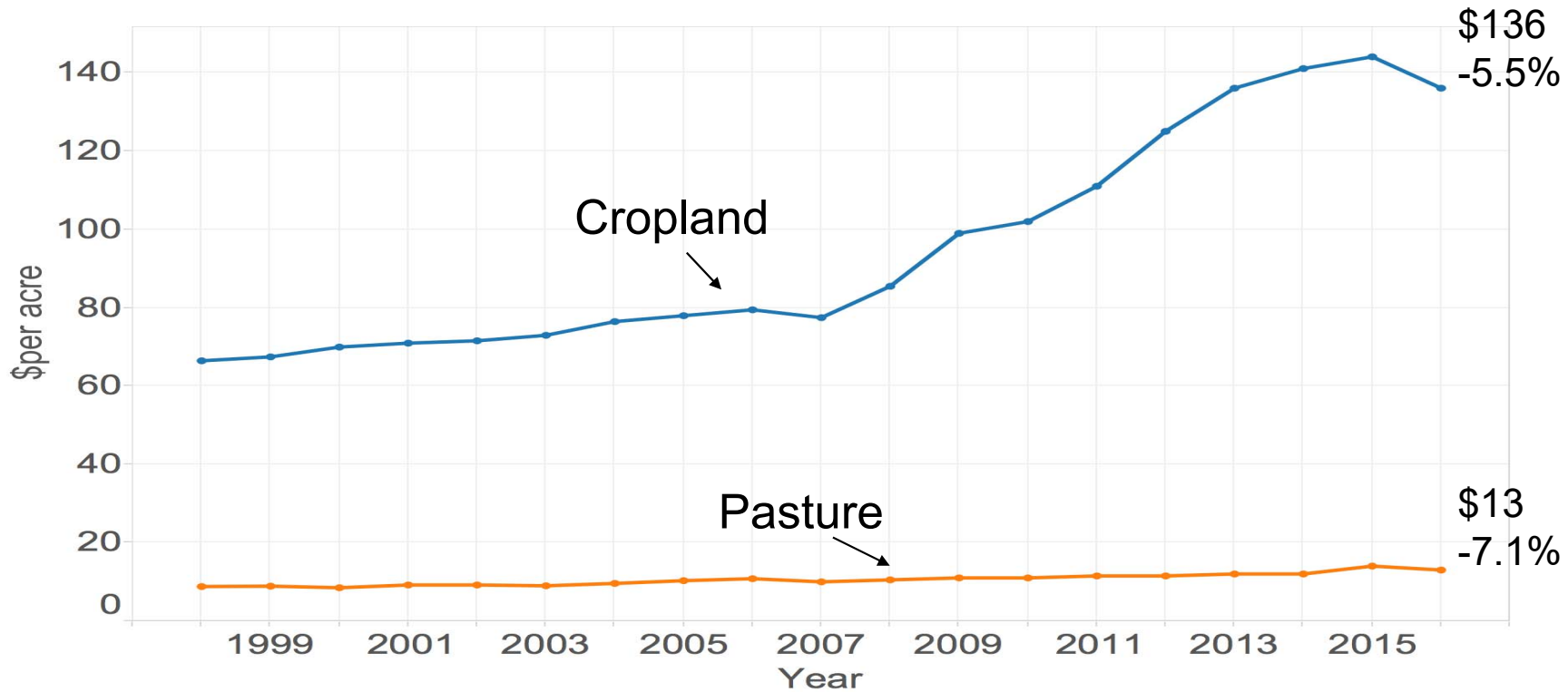
## Percent Change in U.S. Cropland Value per acre - Year 2016



Source: USDA, NASS. Land Values Summary.

# Cash rent for farmland declined in 2016

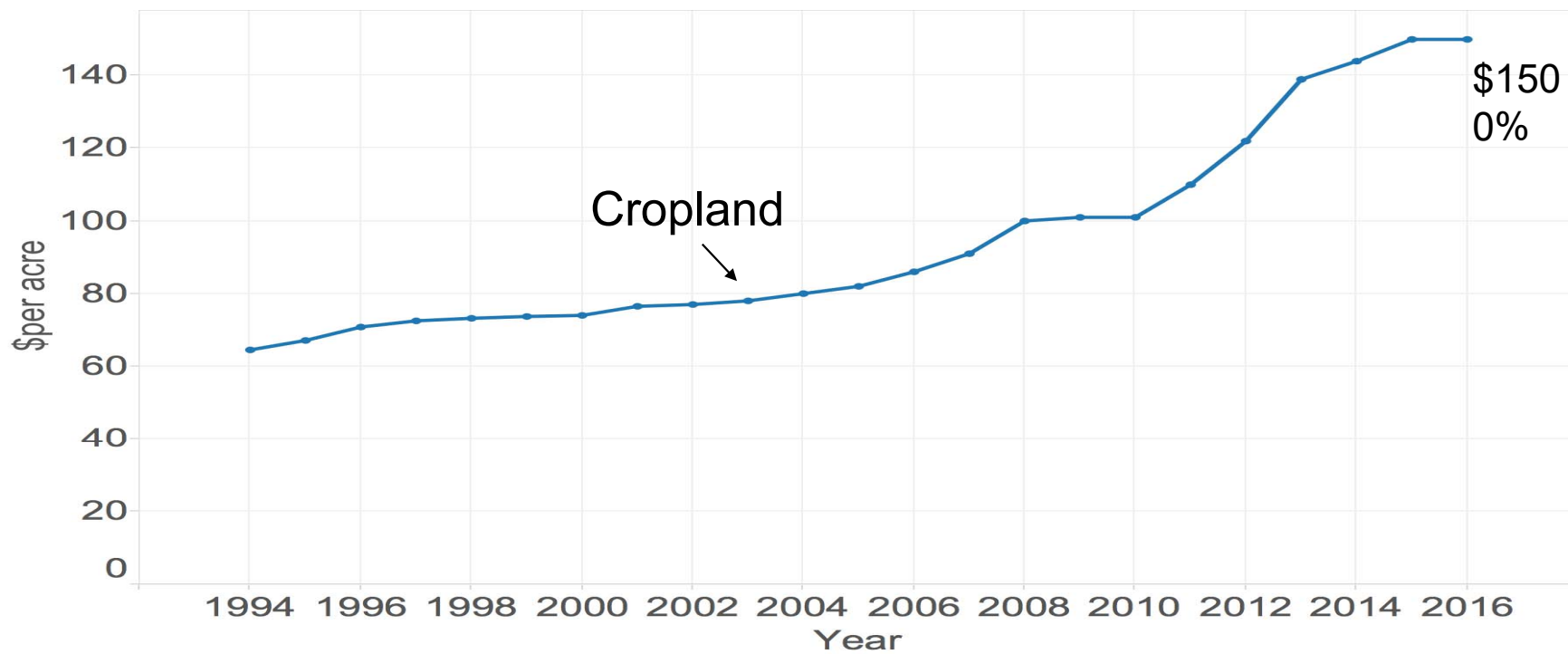
Cash rent per acre, U.S.



Source: USDA, NASS, Cash Rent Survey.

# Ohio cash rents remained flat at \$150/acre in 2016

## Cash rent per acre, OH

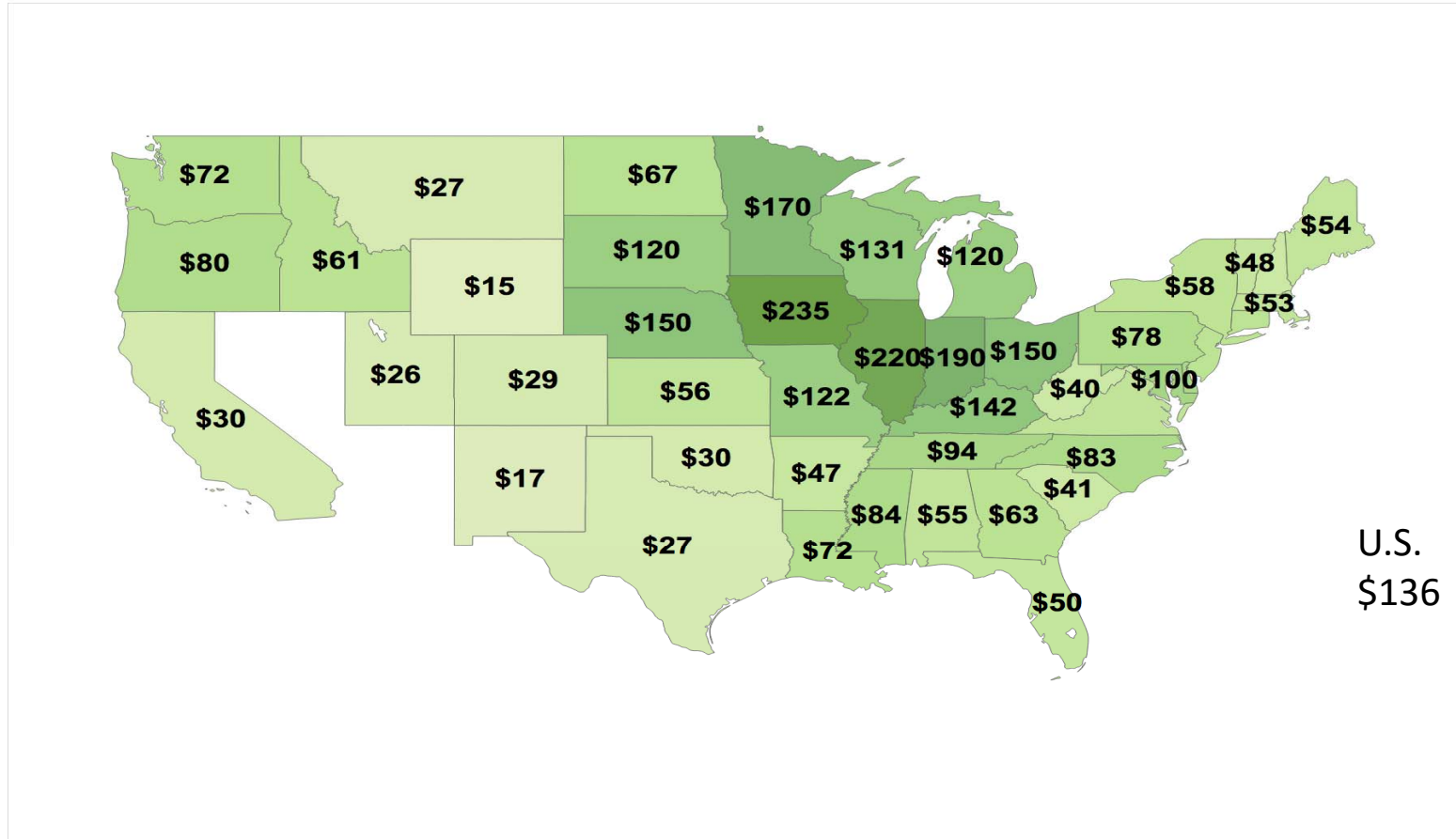


Source: USDA, NASS, Cash Rent Survey.



# Cash rents tend to be highest in the Corn Belt

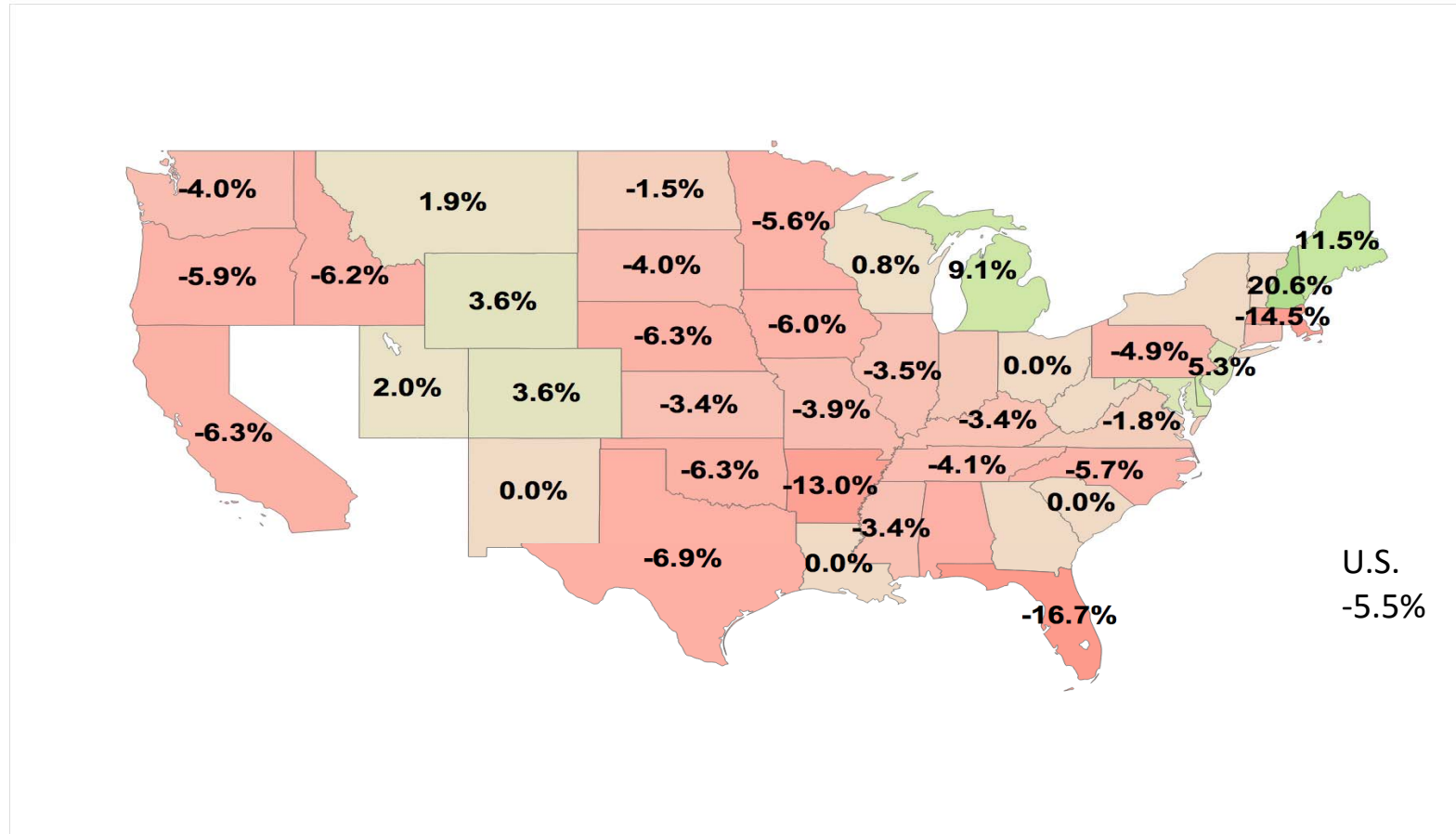
Cash Rent per acre for Non-irrigated Land in U.S.- Year 2016



Source: USDA, NASS, Cash Rent Survey.

# Many regions experience declines in cash rents

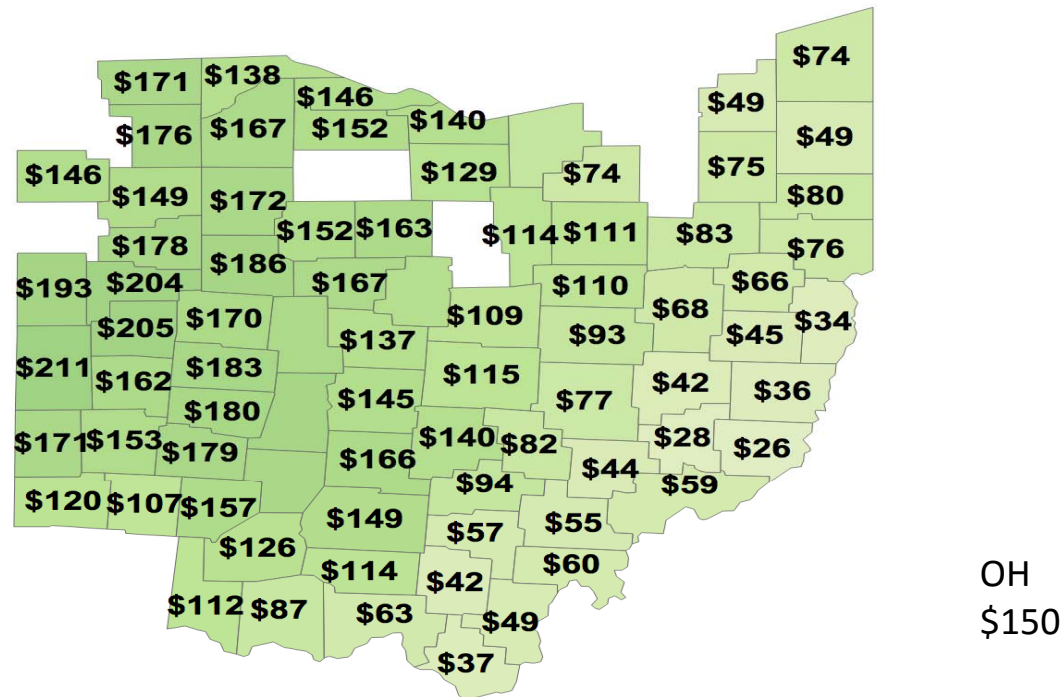
Percent Change in U.S. Cash Rent per acre - Year 2016



Source: USDA, NASS, Cash Rent Survey.

# Cash rents in Ohio

Cash Rent per acre for Non-irrigated Land in Ohio, Year - 2016

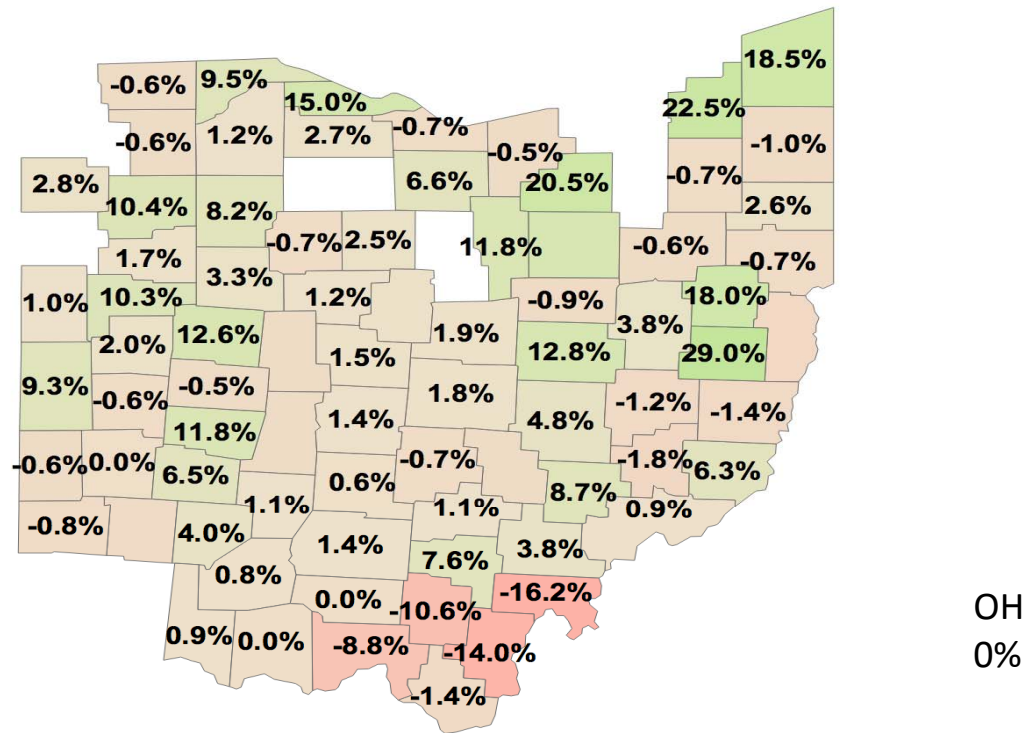


OH  
\$150

Source: USDA, NASS, Cash Rent Survey.

# Changes in cash rent changes vary widely across Ohio

## Percent Change in Ohio Cash Rent per acre - Year 2016



Source: USDA, NASS, Cash Rent Survey.

## Landowners for land rented out

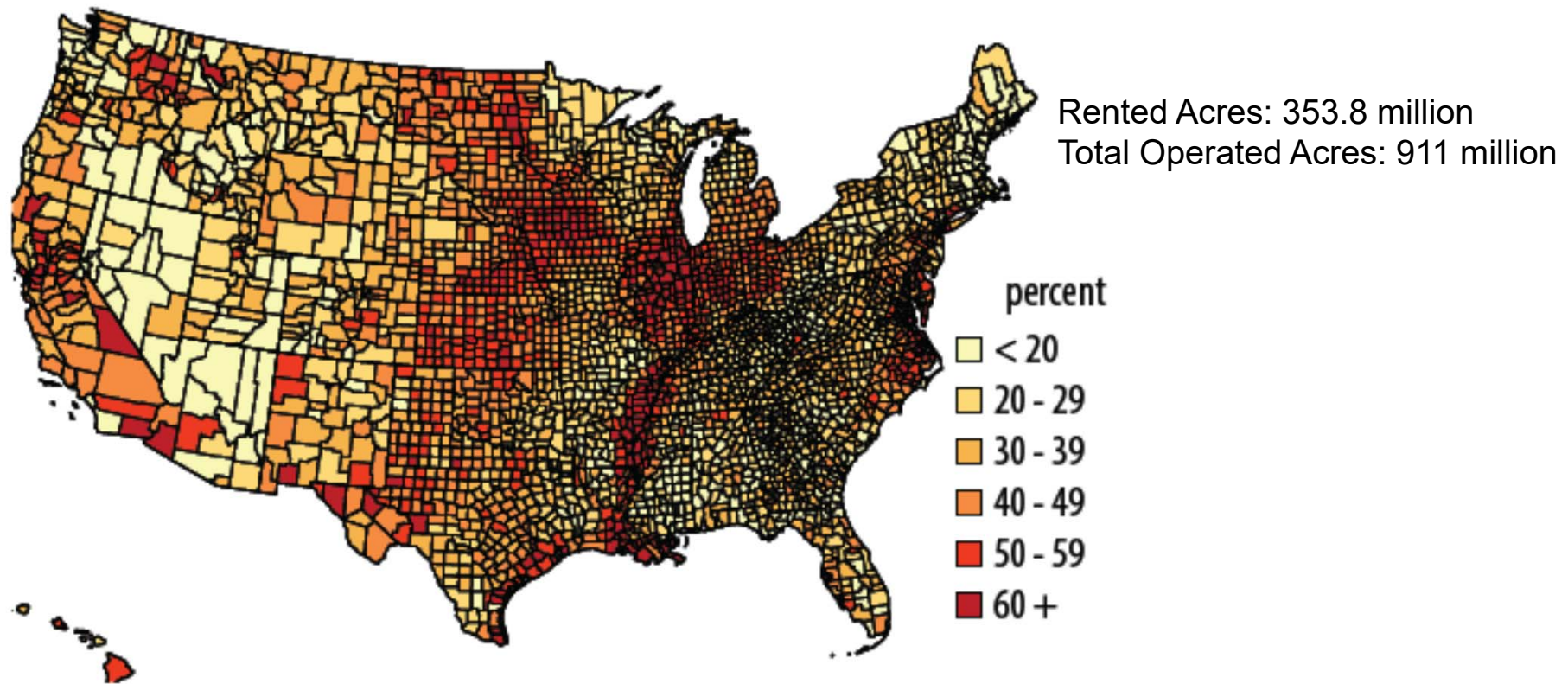
	Number of landlords	Acres rented out (millions)	Rent received (\$billions)	Expenses (\$billions)	Value of land and buildings (\$billions)	Debt (\$billions)
Operator landlords (US)	<b>280,044</b> <b>13%</b>	70.3 20%	<b>6.9</b> <b>22%</b>	1.9 20%	200 18%	7.9 24%
Non-operator landlords (US)	<b>1,851,796</b> <b>87%</b>	283.4 80%	<b>24</b> <b>78%</b>	7.4 80%	932 82%	25 76%
Total (US)	<b>2,131,840</b>	353.7	<b>31</b>	9.3	1132	33

Total (OH)	<b>81,942</b>	6.16	<b>1.01</b>	0.3	35	1.3
------------	---------------	------	-------------	-----	----	-----

Source: USDA, Tenure, Ownership, and Transition of Agricultural Land, 2014.

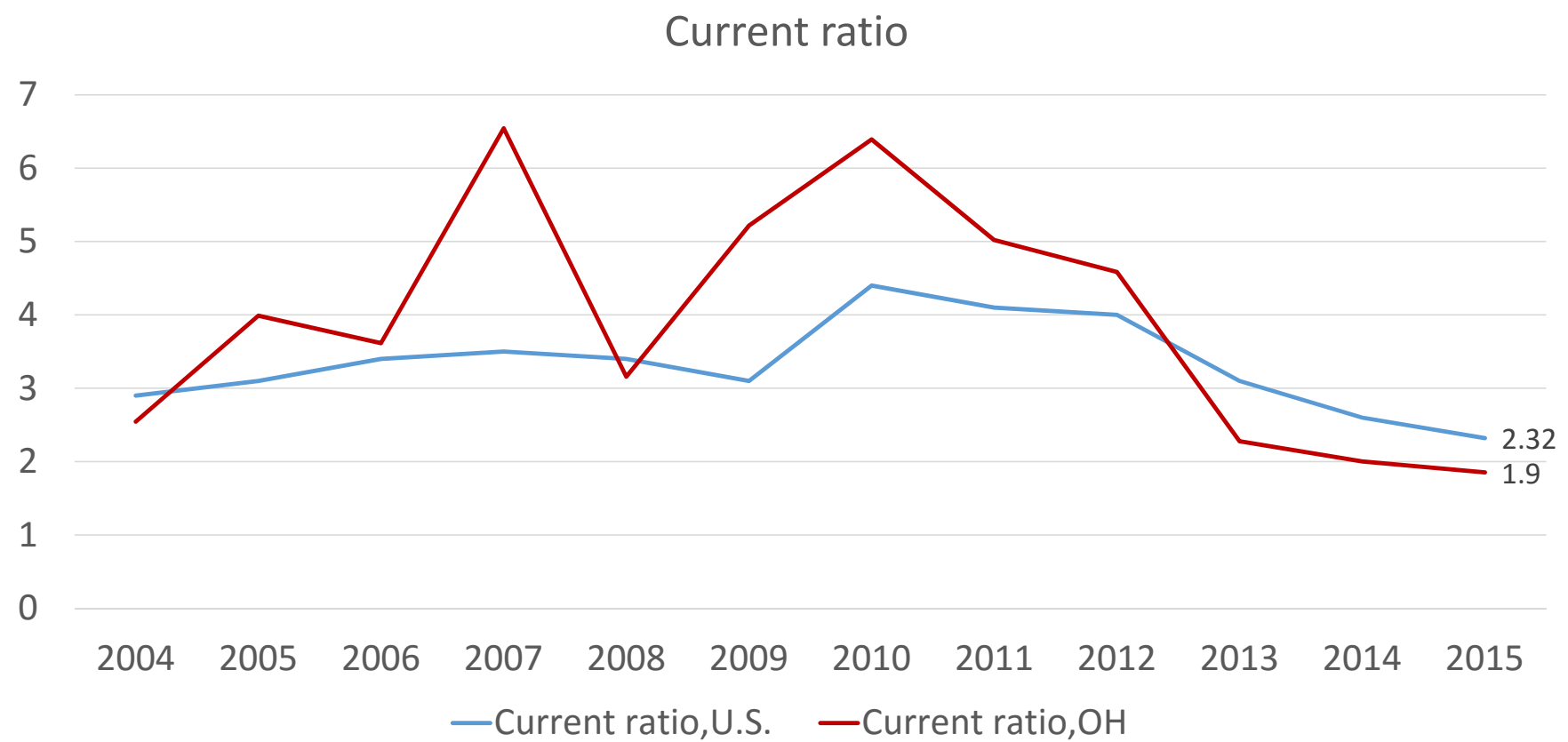
About 39% of farmland is rented, the rest is owned by farmers

### Percent of Farmland Rented, 2012



Source: USDA, Census of Agriculture & Tenure, Ownership, and Transition of Agricultural Land, 2014.

# Farm liquidity (ability to meet short term obligations) has declined but still acceptable

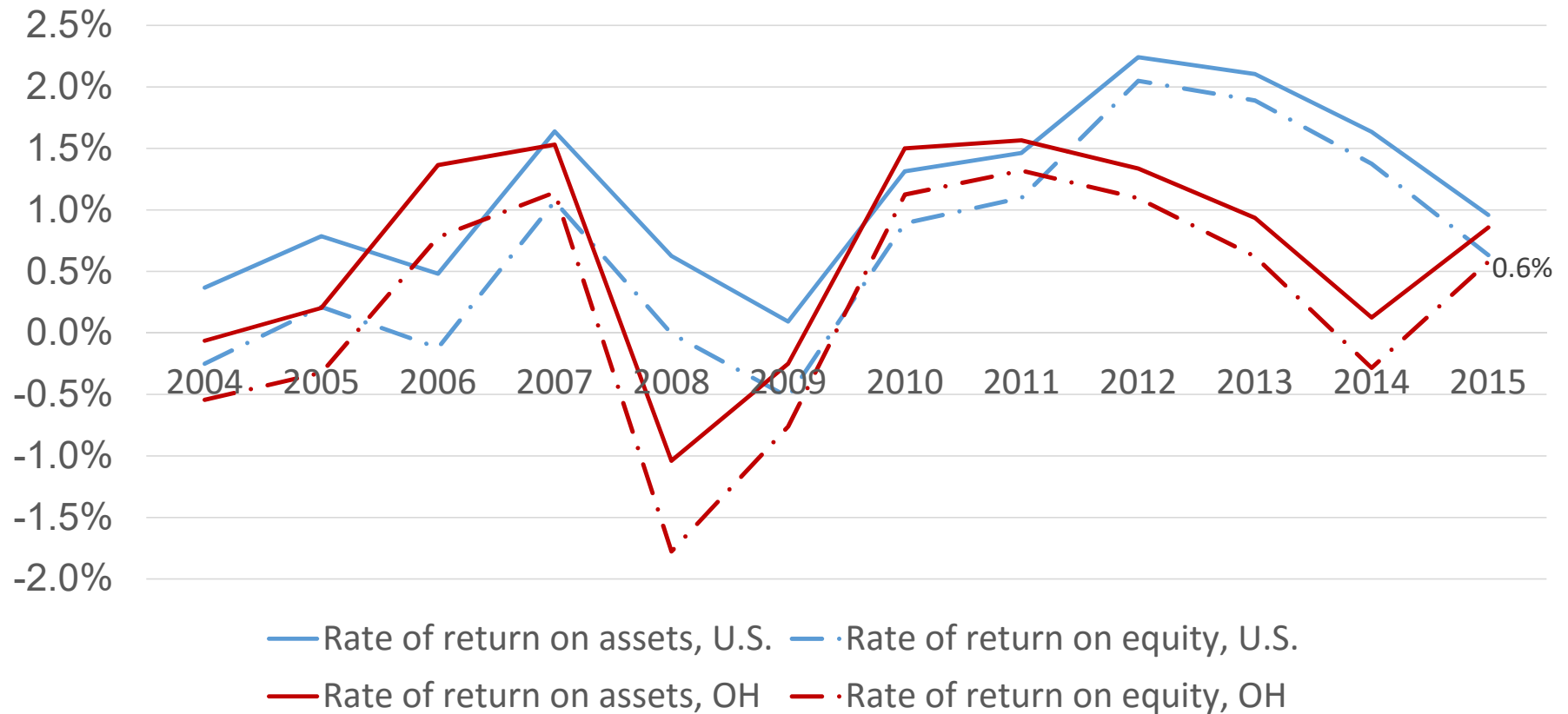


Source: USDA, ARMS.



# Profitability is low but still positive

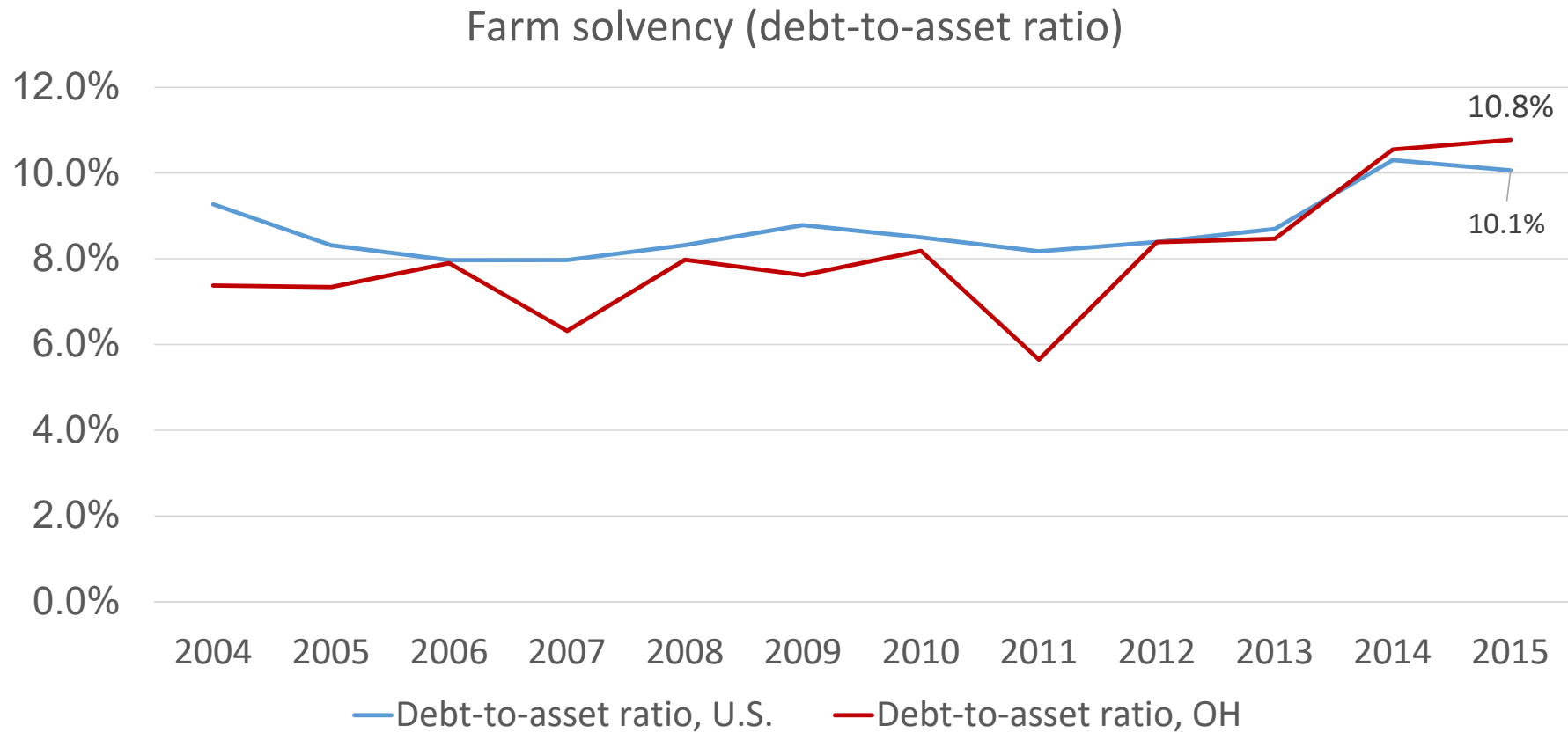
Farm profitability ratios (ROA and ROE)



Source: USDA, ARMS.

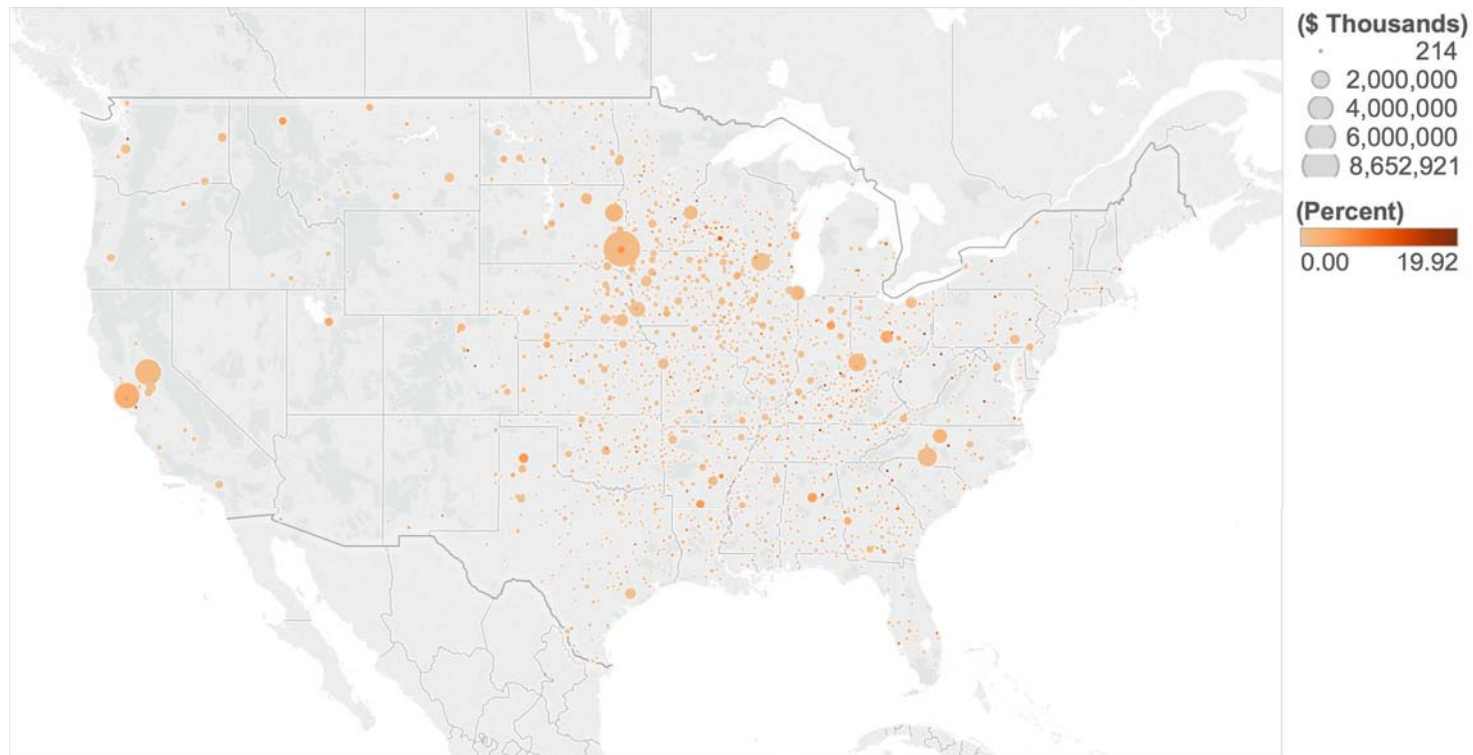


# Debt-to-asset ratios have increased but still at historical lows



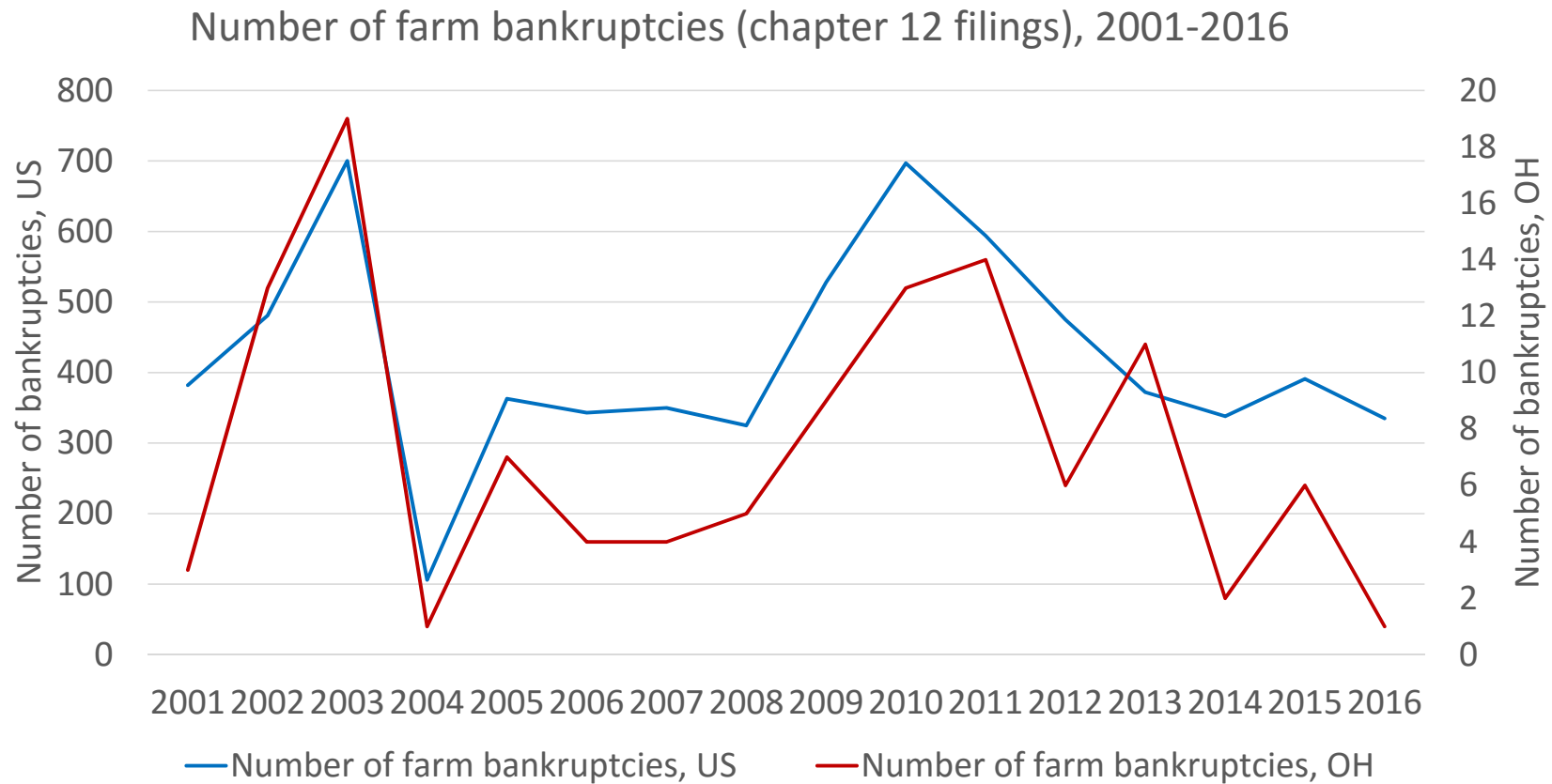
Source: USDA, ARMS.

# Ag loan delinquency rates are stable/low for most banks



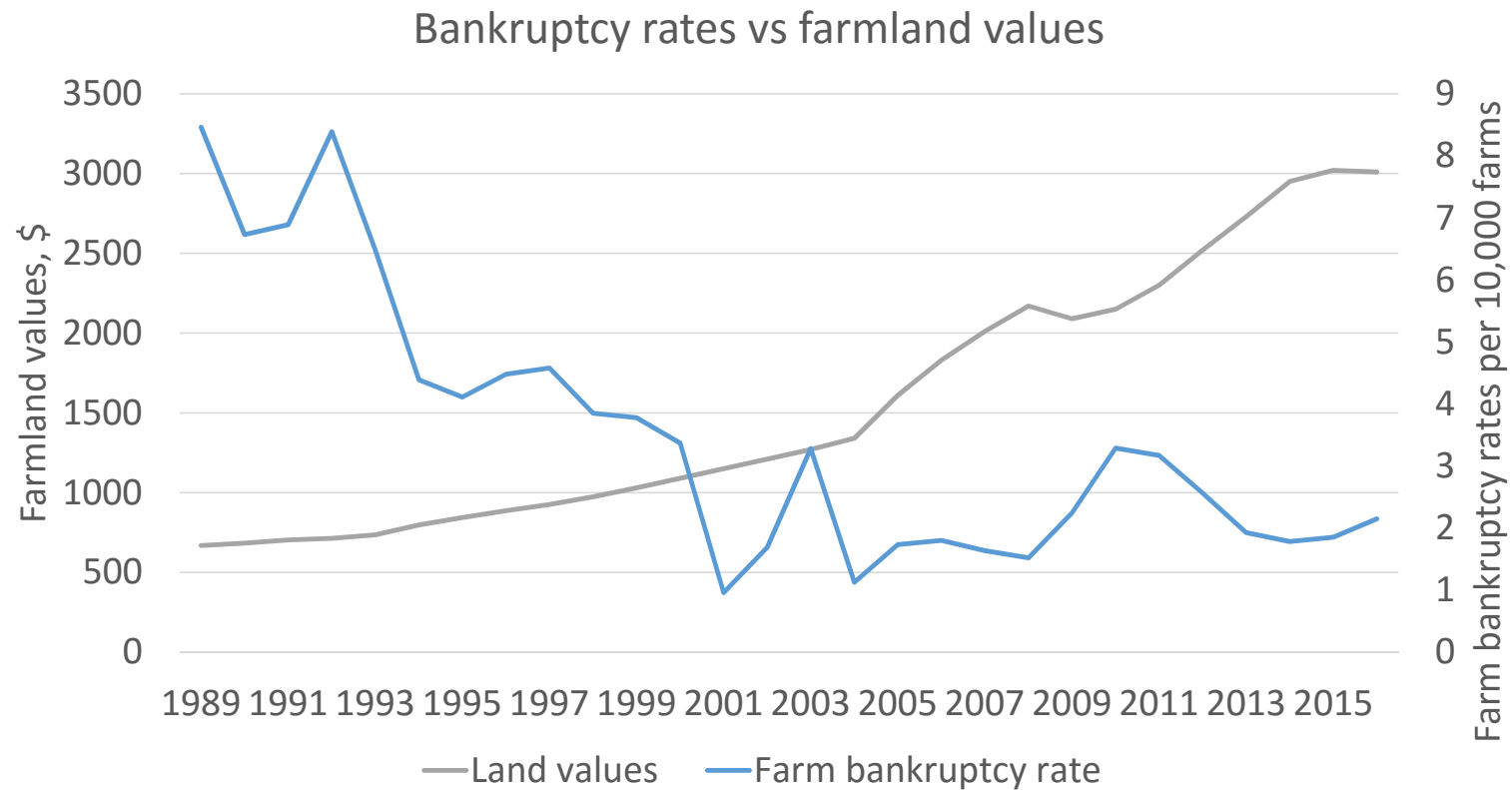
Source: FDIC

# Number of farm bankruptcies (chapter 12 filings) remains low

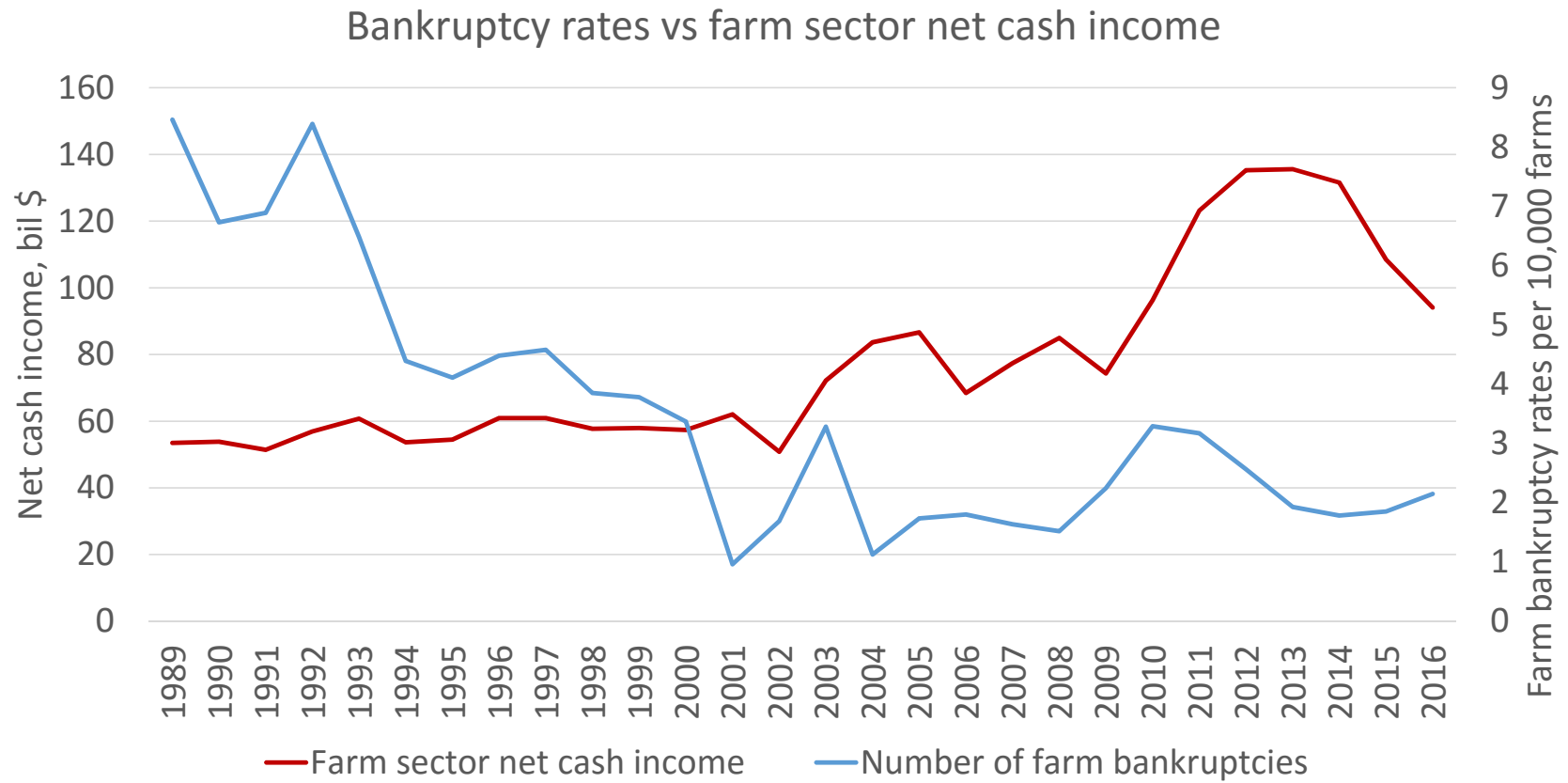


Source: U.S. Courts, Table F-2

# Negative relationship between farmland values and bankruptcy rates

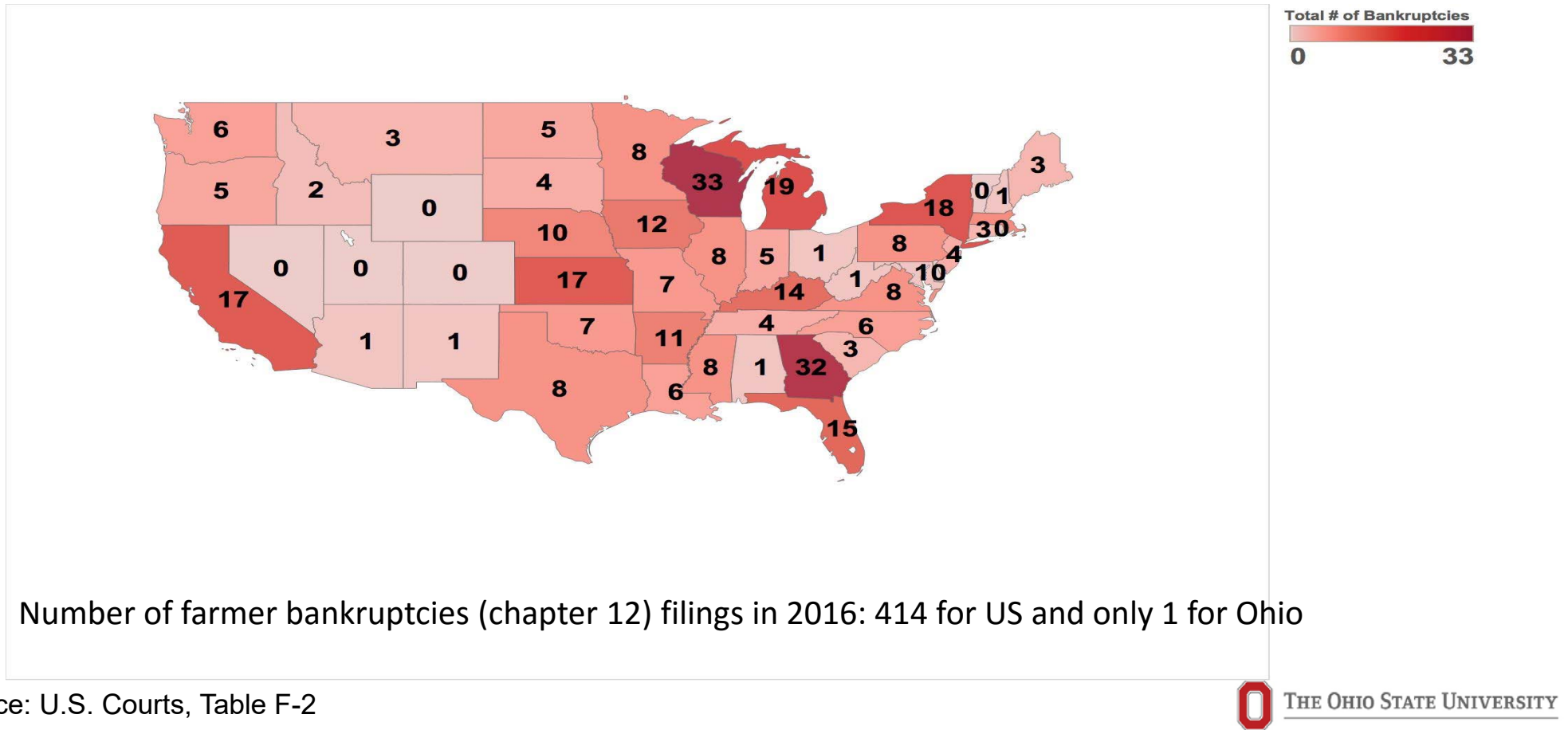


# Negative relationship between net cash income and bankruptcy rates



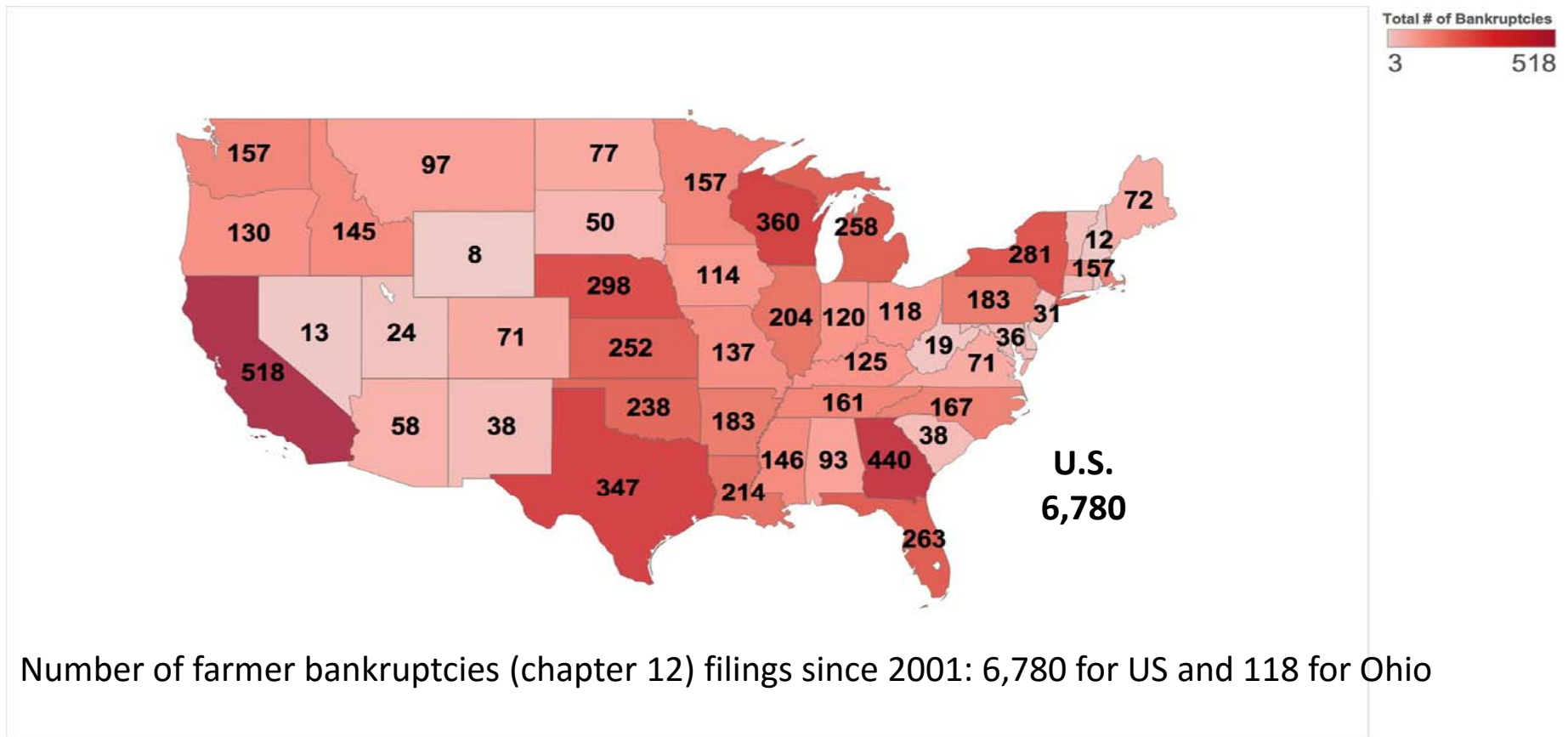
# Farm bankruptcy filings in 2016

Number of farmer bankruptcy (chapter 12) filings by state, 1<sup>st</sup>-3<sup>rd</sup> Quarters 2016



# Farm bankruptcy filings since 2001

Number of farmer bankruptcy (chapter 12) filings by state, 2001-2016

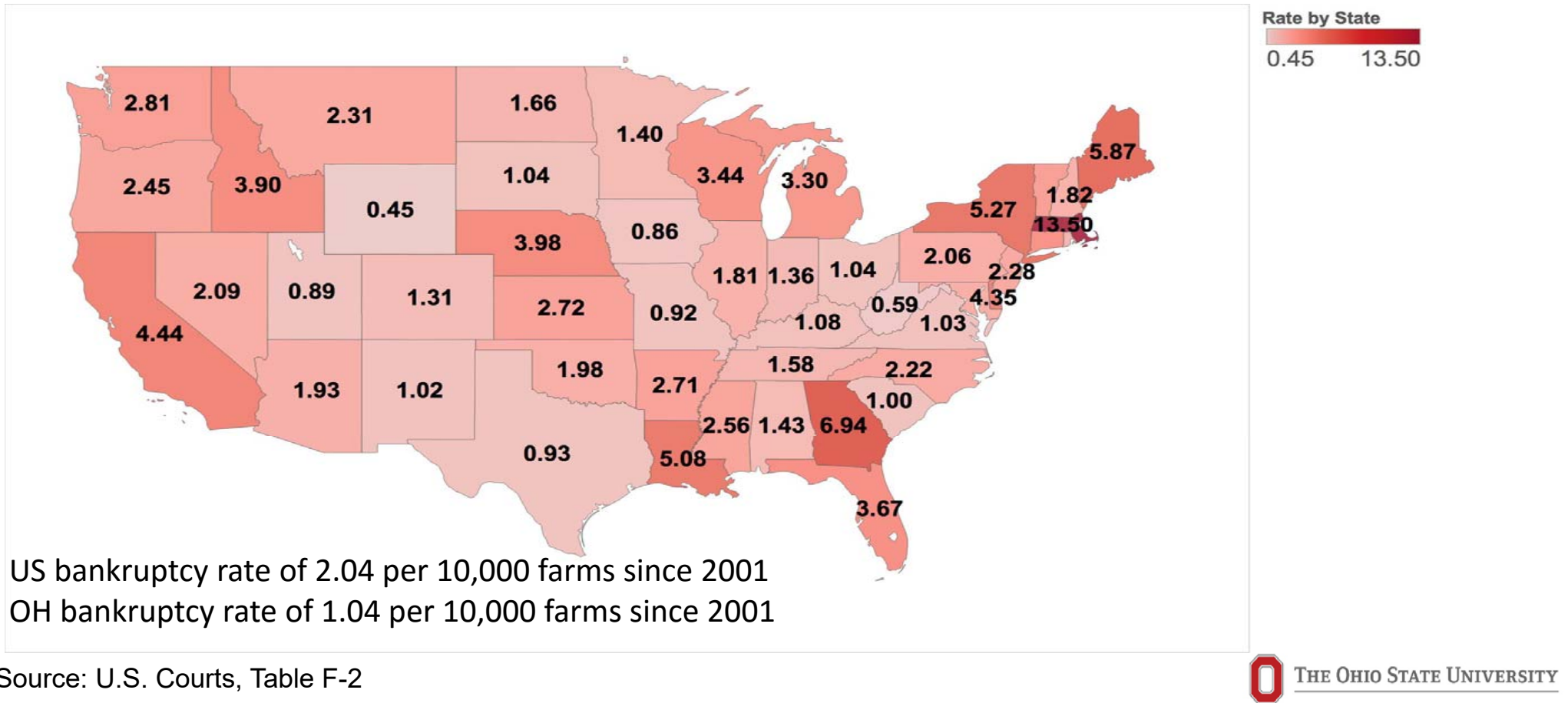


Number of farmer bankruptcies (chapter 12) filings since 2001: 6,780 for US and 118 for Ohio

Source: U.S. Courts, Table F-2

# Ohio's farm bankruptcy rate is half of the US rate

Farm bankruptcy rate per 10,000 farmers, 2001-2016





# How does financial stress now compare to the 80s?

Some parallels to the 1980's farm crisis:

- Declining commodity prices and net incomes
- Land values falling after a sharp rise
- Debt loads rising

Key differences:

- Interest rates in the 1980s were much higher than current interest rates
- Debt-to-asset ratios at 11% now are lower than at 20% in the 80s
- Much of debt now is held by commercial banks and Farm Credit System

Repeat of the 80s is very unlikely in current conditions.

# Ag Outlook 2017

- The downturn in agriculture has been gradual over the last three years.
- Farmers are experiencing more financial stress but it is still low.
- Strength in farmland markets has helped, but farmland values and cash rents have declined in the last year or two and these declines are expected to continue.
- Although financial stress is increasing for some farmers, significant stress is not likely in the next year or two.
- Longer-run projections raise some concerns for 2020 or later. The severity of the concerns will significantly depend on the rate of growth in farm debt and decline in land values and possibly increase in farm loan delinquencies.

# Summary – farm income, assets, and debt

- Farm sector income is forecast to decline for the third consecutive year. Net cash farm income for 2016 is forecast at \$90.1 billion, down 14.6 percent from the previous year. Net farm income is forecast to be \$66.9 billion in 2016, down 17.2 percent. If realized, 2016 net farm income would be the lowest since 2009.
- Farm income in Ohio has been 2.4-2.5% of national estimates over the last decade. Ohio net cash income declined by 14% to \$2.4 billion and net farm income declined by 32% to \$1.2 billion in 2015. Ohio's variability in net cash income and net farm income was higher than the U.S. over the last decade.
- Cash receipts are forecast to fall \$23.4 billion (6.2 percent) in 2016 due to a \$23.4 billion (12.3 percent) drop in animal/animal product receipts; crop receipts are forecast unchanged from 2015.
- Farm sector balance sheet forecasts farm assets in 2016 at \$2,849 billion, of which \$2,473 billion is farm equity and \$375 billion is farm debt. Farm assets are expected to decline by 2.1 percent, farm equity to decline by 3.1 percent and farm debt to grow by 5.2 percent.

## Summary – land values and rent

- **Cropland values** for the U.S. declined by 1% to \$4,090/acre in 2016, after increasing by 0.7% in 2015. Cropland values in Ohio declined by 0.9% to \$5,800/acre in 2016, after increasing 3.5% in 2015. This is the first decline in land values nationally and for Ohio since 2009.
- **Cash rent** for cropland in the U.S. was \$136 per acre in 2016, a decline of 5.5% from the previous year after experiencing rent increases since 2007. Cash rents in the Corn Belt are still among the highest. Many states experienced zero or negative growth in cash rents. Cash rent for cropland in Ohio remained unchanged (0% growth) at \$150 in 2016.
- **Farmland leasing** was at 38.8% in 2012 with the rest of the land owned in the U.S. Landowners rented out 353.7 million acres and received \$31 billion in rent in 2014. Eighty seven percent of the 2.1 million landowners do not farm themselves, but they collected 78% or \$24 billion in rent.

# Summary – farm financial performance

- Farm financial performance indicators have deteriorated in 2015 since their peaks 3-5 years prior.
- Farm liquidity, measured by the current ratio, fell to 2.3 for the U.S. and 1.9 for Ohio in 2015, but still acceptable.
- The rate of return on assets of 1% and rate of return on equity of 0.6% for the U.S. and Ohio are lower than their peaks in 2010-2012. These lower profitability ratios are problematic.
- Debt-to-asset ratio were at 10.1% for the U.S. and 10.8% for Ohio in 2015. They are still near historic low.

# Summary – farm bankruptcies

- Farm bankruptcy rates can be thought of as a lagging indicator of farm financial stress.
- Farm bankruptcy rate is at 2.14 bankruptcies per 10,000 farms through the 3<sup>rd</sup> quarter of 2016. This is an already higher rate than the rate of 1.93 in 2013, 1.78 in 2014 and 1.85 in 2015, but lower than 2.56 in 2012. In Ohio, 118 farms have filed for bankruptcy (chapter 12) since 2001. The farm bankruptcy rate in Ohio is 1.04 farmers filing for bankruptcy per 10,000 farmers. Ohio's bankruptcy rate is about half of the US bankruptcy rate.
- Analysis shows negative correlations between farm income and bankruptcy rates, and also between land values and bankruptcy rates. Declining farm incomes and land values resulted in an uptick in farm bankruptcy rates in 2016 but still at historic lows. Farm bankruptcy rates are still relatively low and stable.

# Farm Income, Land Values and Rent, and Farm Financial Stress: Outlook 2017

Ani Katchova

Associate Professor

Farm Income Enhancement Chair

Department of Agricultural, Environmental, and Development Economics

The Ohio State University

katchova.1@osu.edu

Farm Income Enhancement Program

<http://aede.osu.edu/programs/farm-income-enhancement-program>