Ohio Farm Financial Conditions and Outlook:
Farm Income and Assets, Land Values and Rent, and Farm Financial Stress

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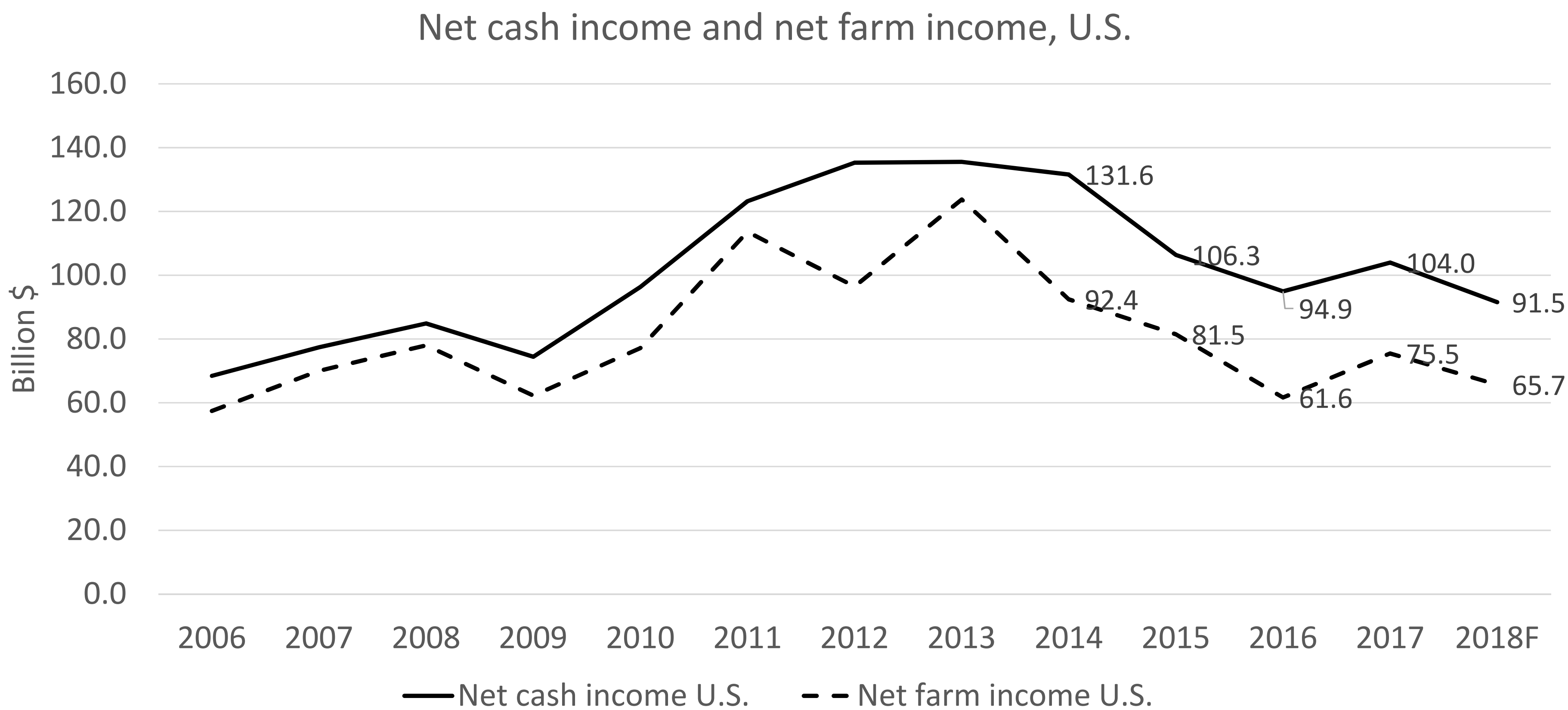
Farm financial conditions and outlook themes

- **Farm income and assets**: Ag downturn since 2013, with farm income forecasted 12-13% down after a temporary increase in 2017. Farm assets and equity forecasted to increase slightly in 2018. Concern about the duration of persistently low farm income.
- **Farmland markets**: Small growth in land values (1%) and cash rents (1.5%) for US for 2018 after stagnant land values and cash rents last year. Ohio land values increased (1.2%), while Ohio cash rents remained unchanged in 2018. Growth in farmland markets is smaller than inflation (2%).
- **Farmland property tax:** Property tax on farmland (CAUV values) in Ohio, which is expected to decline for a fifth consecutive year in 2019, will reduce upward pressure on cash rents.

Farm financial conditions and outlook themes

- **Financial stress**: Deteriorating working capital, poor cash flow, but overall stable financial performance in 2017, expected to worsen in 2018.
- **Ag lenders**: Heightened loan demand and slower repayment rates. Liquidity challenges have not led to widespread solvency problems as ag loan delinquency rates and bankruptcy rates are at historic lows but with recent upticks.
- **Outlook**: Farm economy continues to be in a downturn. What is the outlook for 2018 and beyond? How long will the ag downturn conditions last?

Net cash income ($91.5B) and net farm income ($65.7B) forecast to decrease by 12% and 13%, respectively in 2018



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

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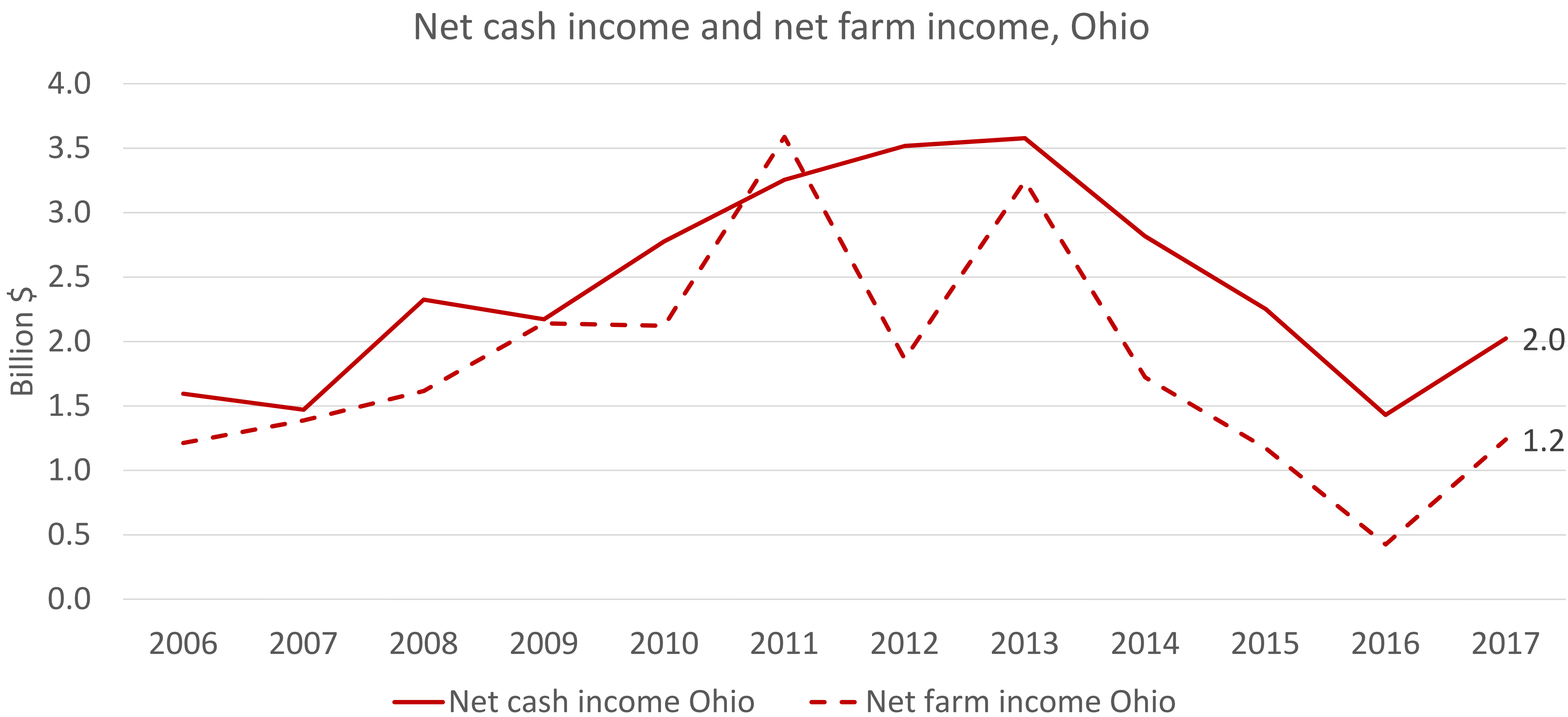
Ohio net cash income ($2.0B) and Ohio net farm income ($1.2B) experienced an increase in 2017 after three years of decline but 2018 may see further declines



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

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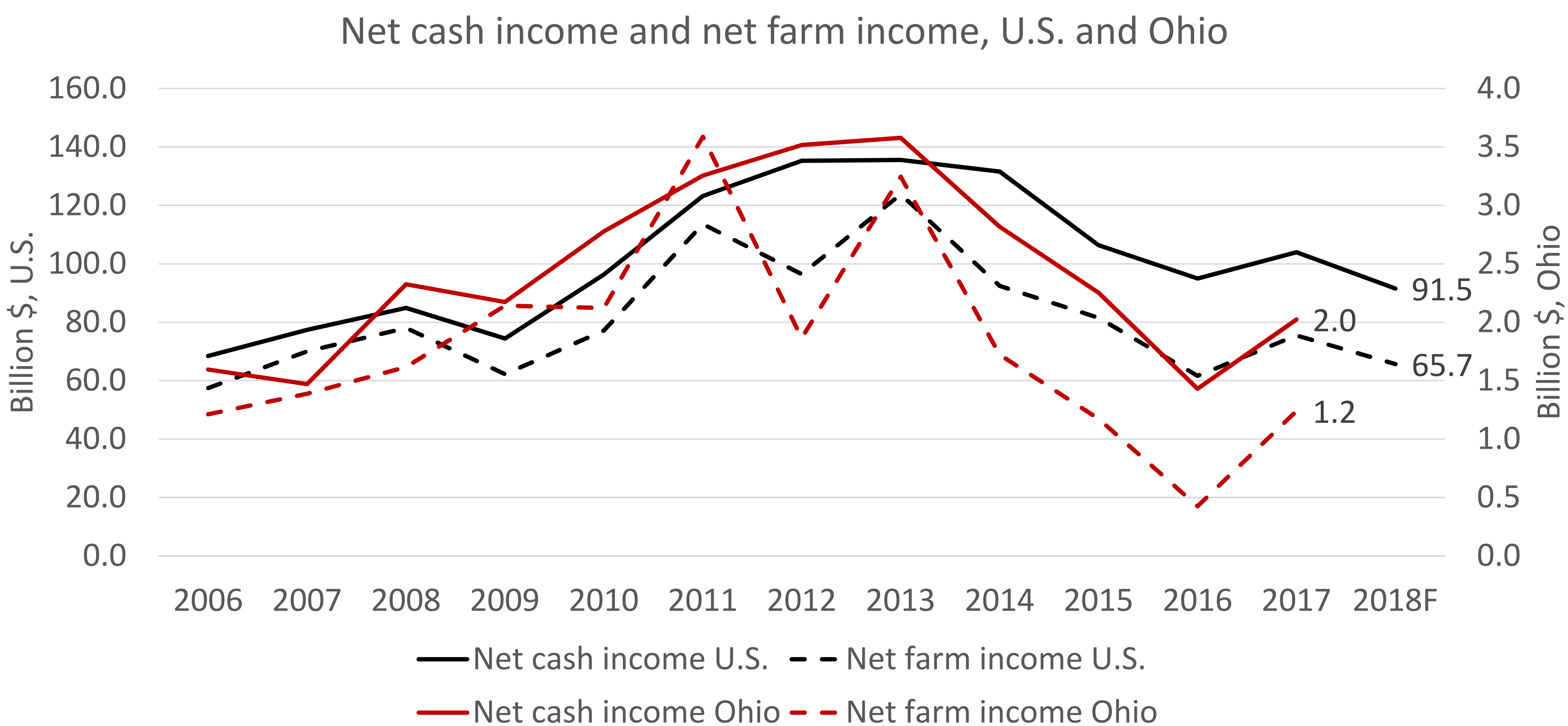
Ohio farm income is about 2.4% of the U.S. farm income with similar trends but shows more relative variability



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

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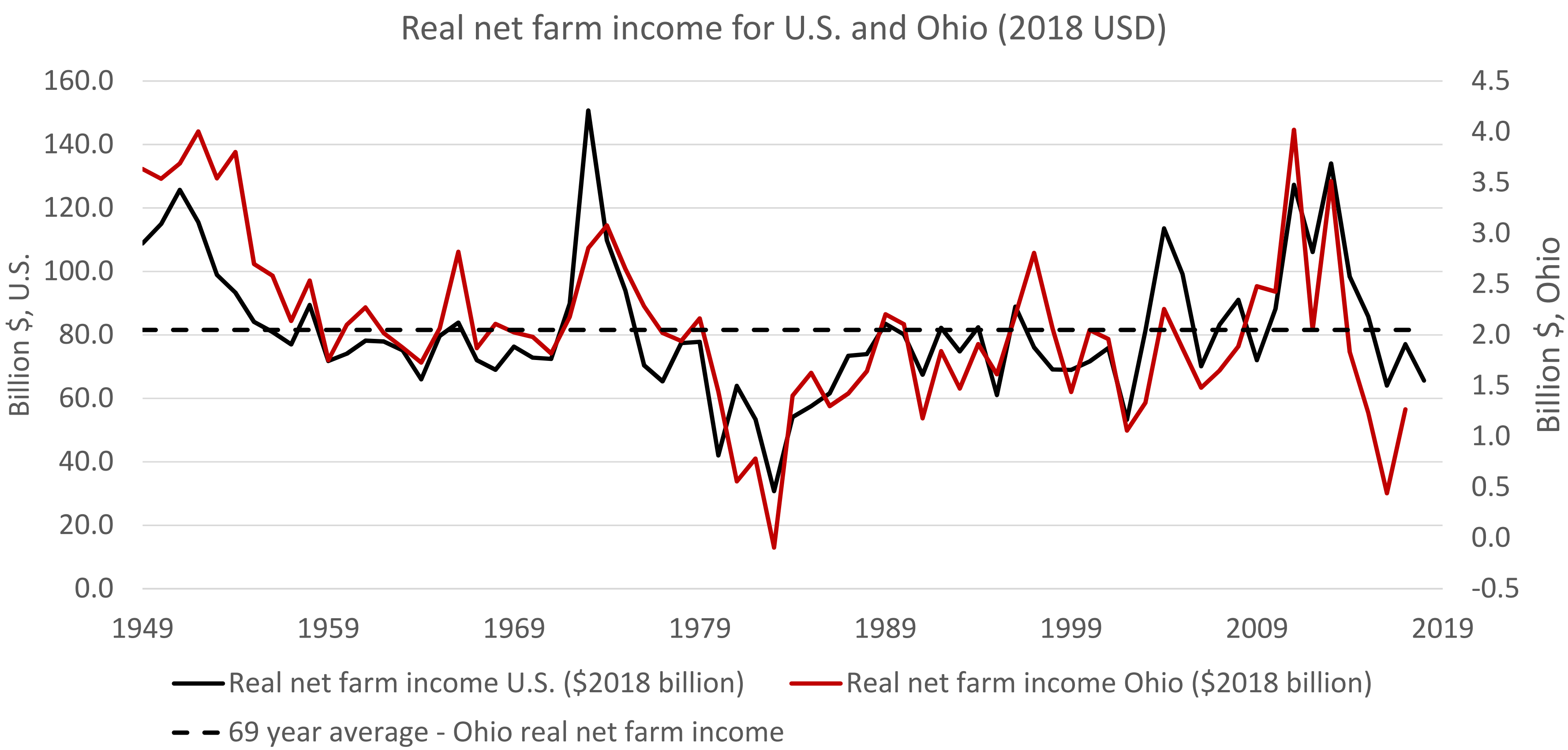
Ohio net farm income maybe below the long-term average for a fifth consecutive year in 2018



Source: Sant'Anna, Katchova, and Brown (2018) based on USDA, ERS, Farm Income and Wealth Statistics.

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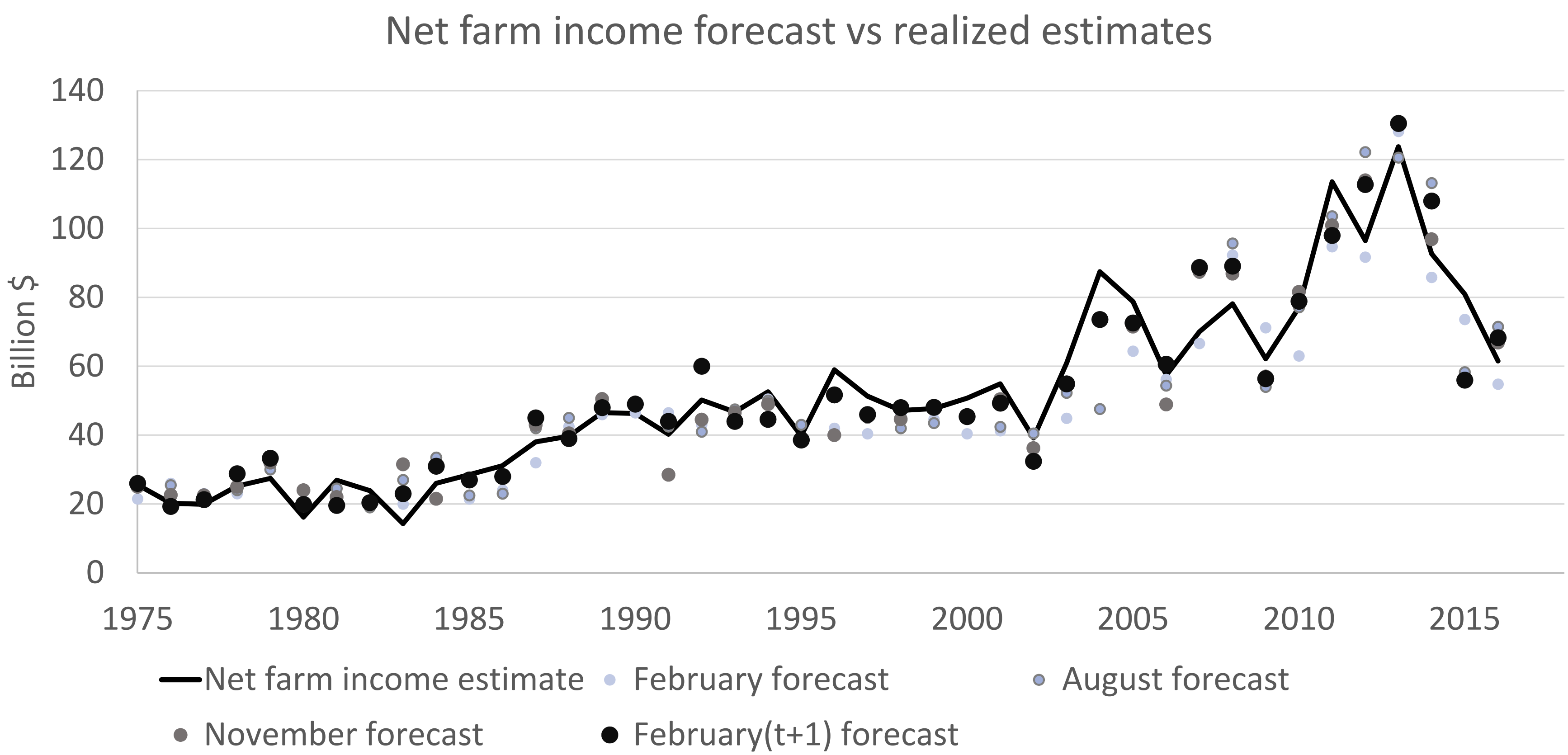
Farm income forecasts may under-predict or over-predict farm income compared to realized estimates



Source: Kuethe, Hubbs and Sanders (Farmdoc daily, 2017)

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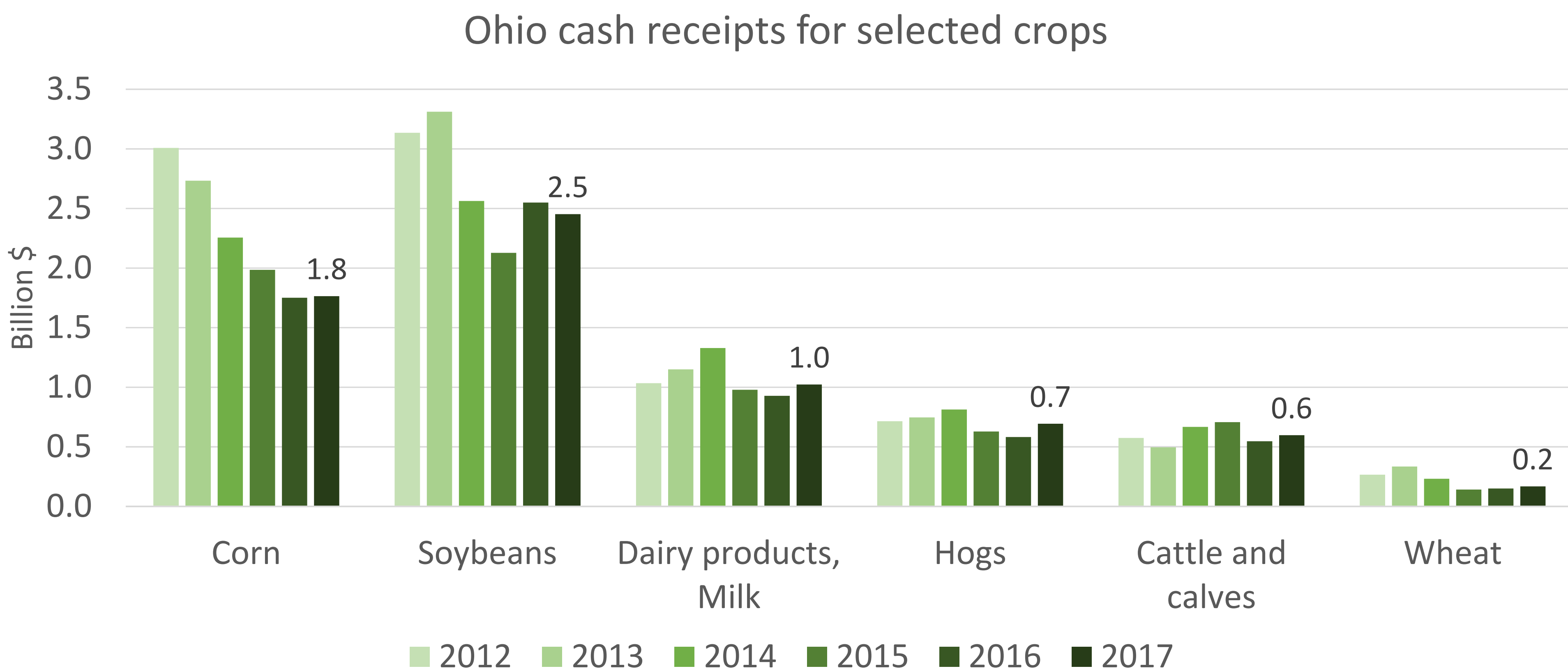
Ohio cash receipts increased by 3.7% in 2017, due to increases in animal products cash receipts and smaller decreases in crop cash receipts.



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

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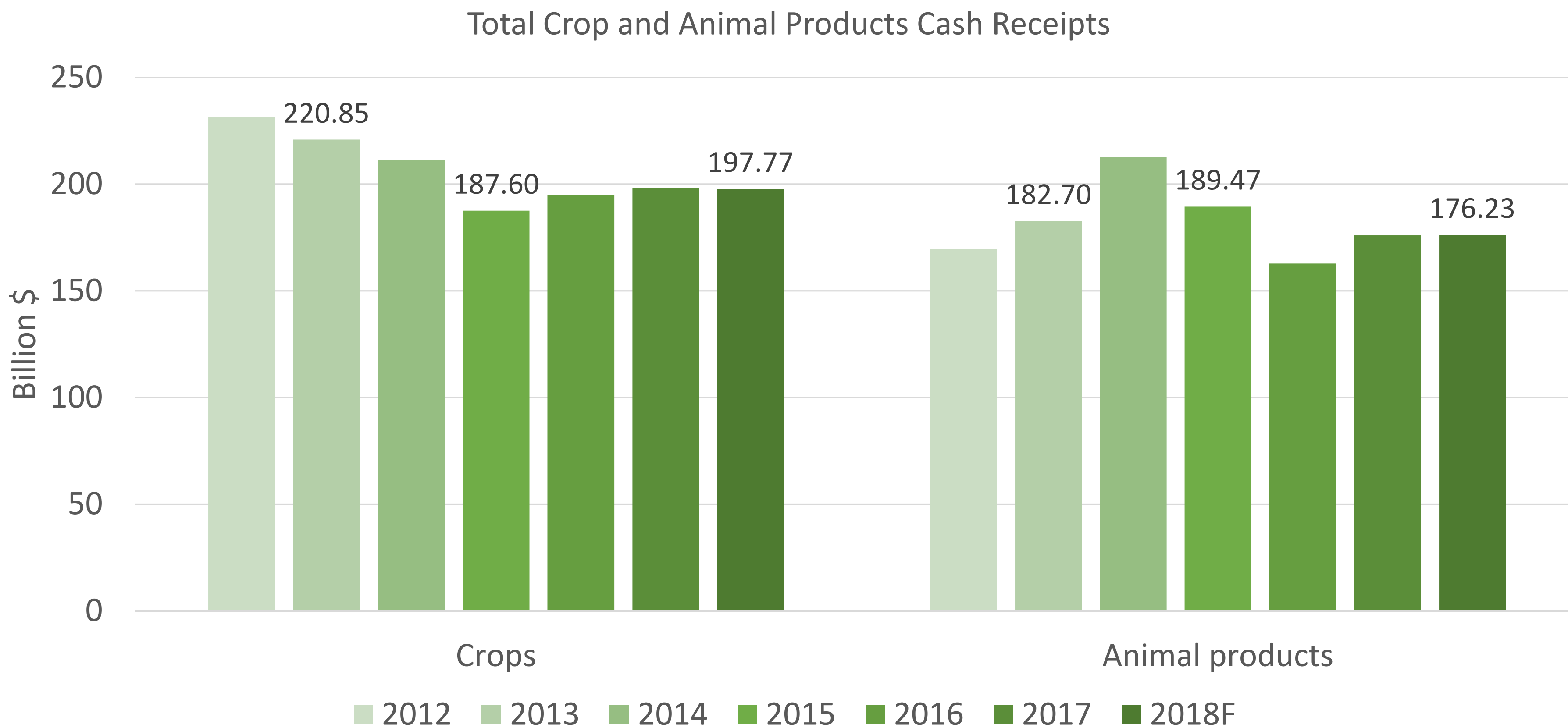
US cash receipts forecasted to remain stable; both crop and animal product receipts expected to be mostly flat in 2018



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

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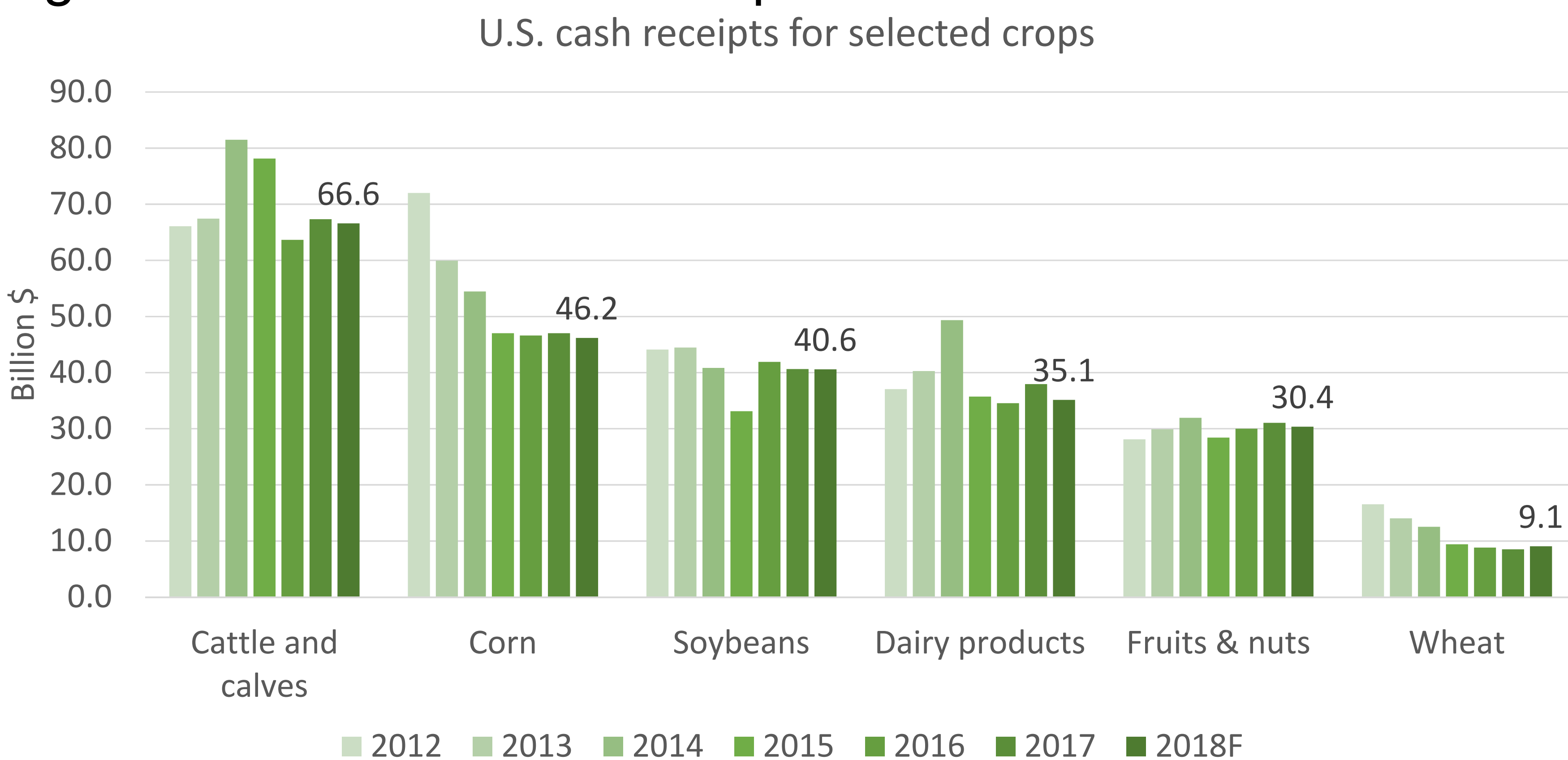
US cash receipts are forecasted to decrease in cattle and dairy sectors. Slight decrease in corn receipts expected to be offset by slight increases in wheat receipts in 2018.



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

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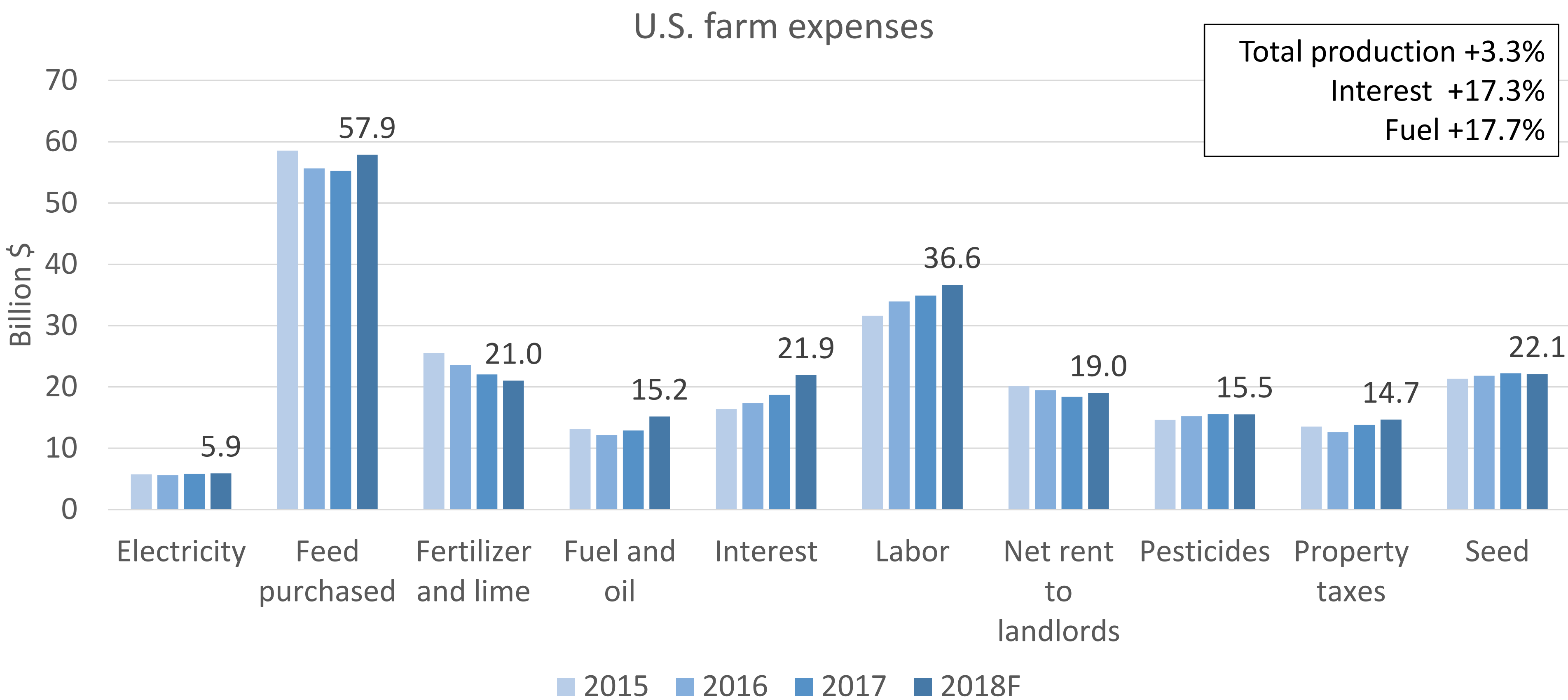
Farm expenses expected to increase due to higher labor, interest, feed and fuel expenses; declines in fertilizer and seed expenses.



Source: USDA/ERS Farm Income and Wealth Statistics.

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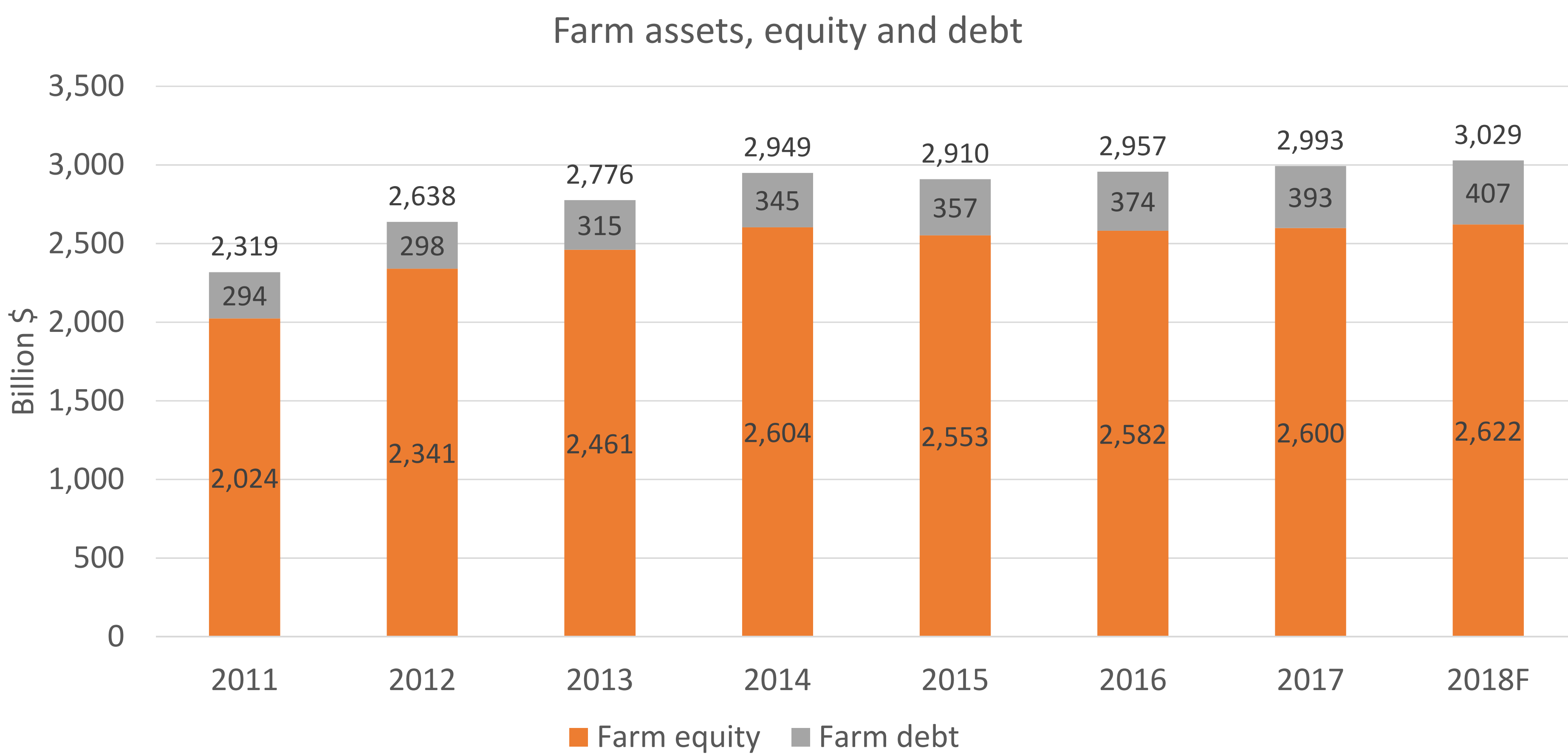
Farm assets, equity and debt forecasted to increase slightly in 2018



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

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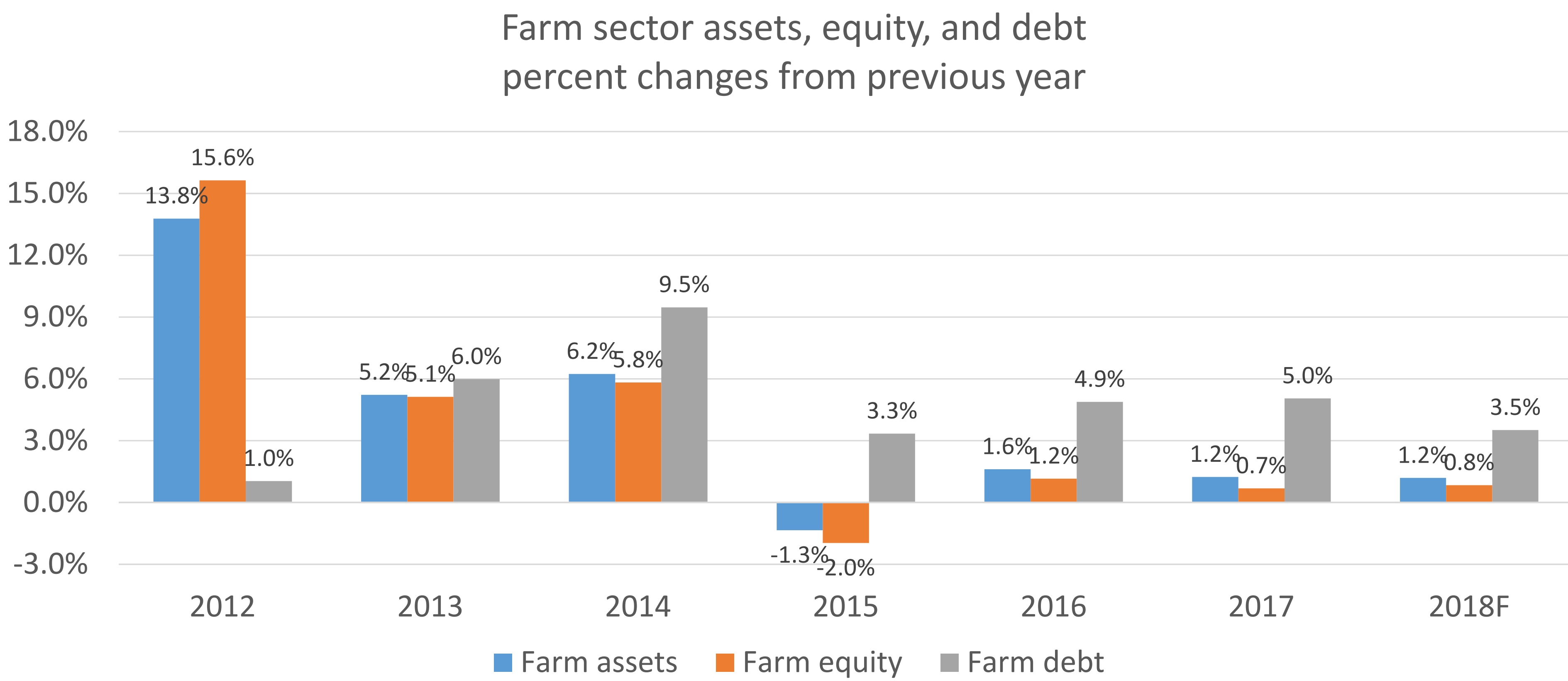
Modest growth expected in farm assets, equity, and debt for 2018. Growth in farm debt expected to outpace asset & equity growth.



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

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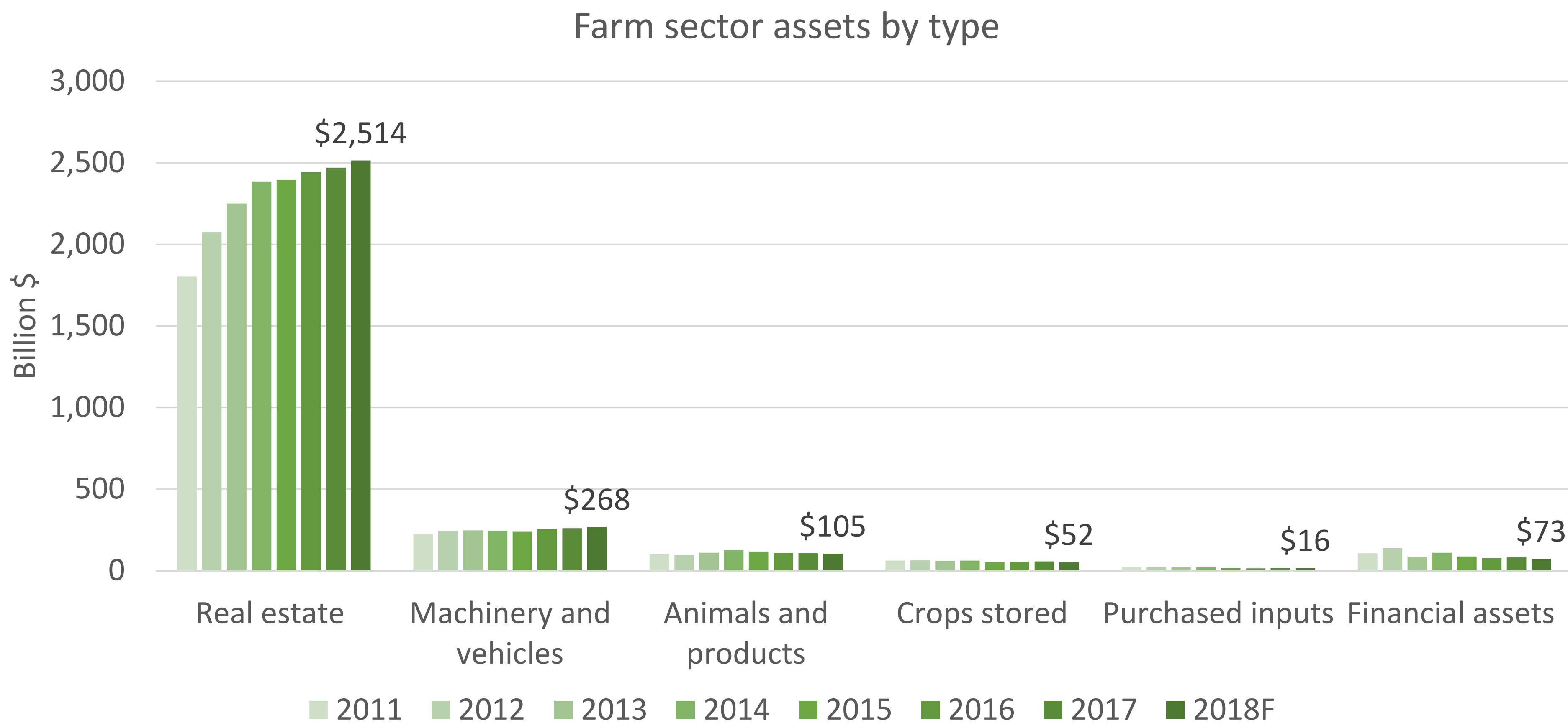
Farm real estate assets, representing 83% of farm assets, expected to increase in 2018.



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

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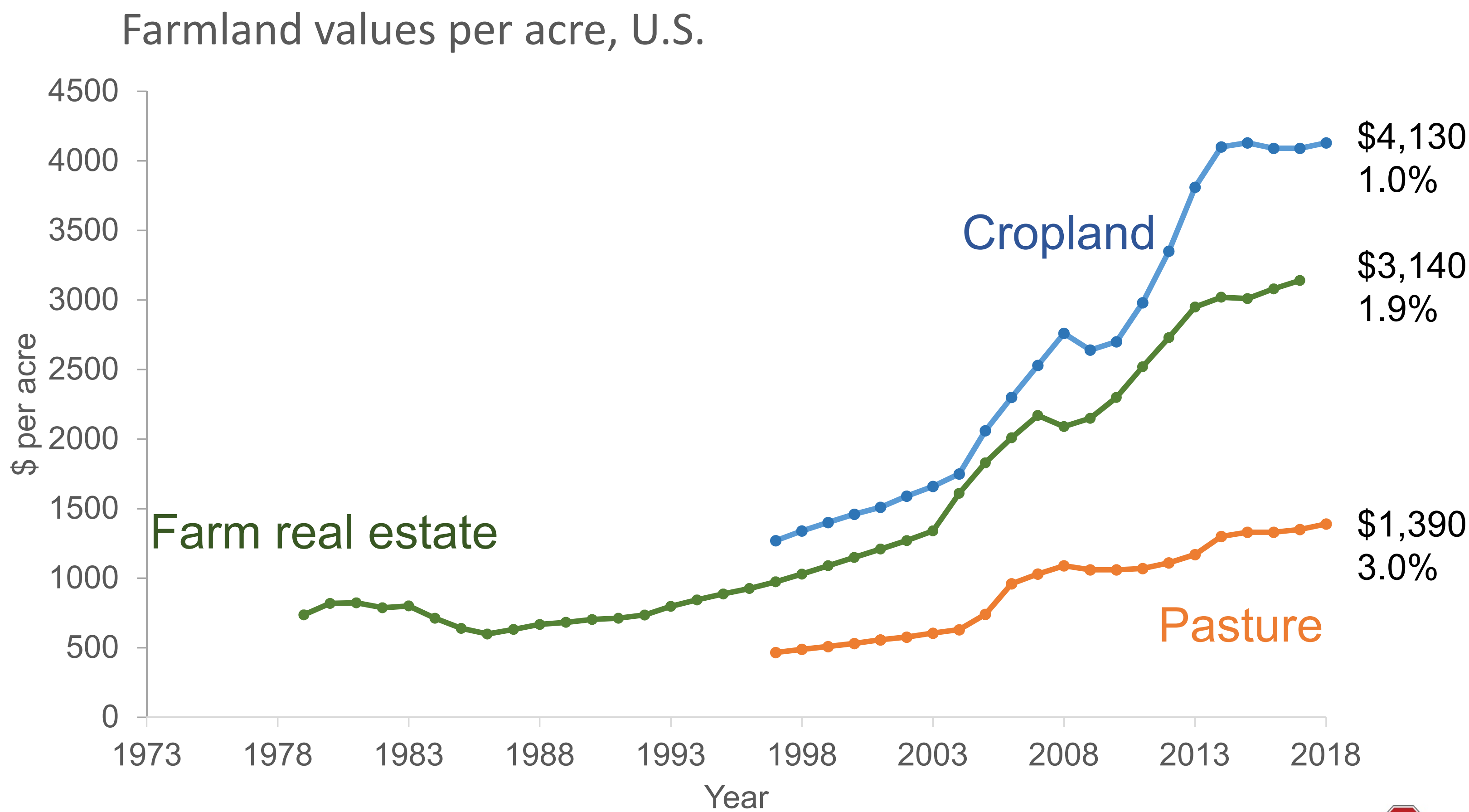
U.S. cropland values increased by 1% in 2018 after being flat for two years.



Source: USDA, NASS. Land Values Summary.

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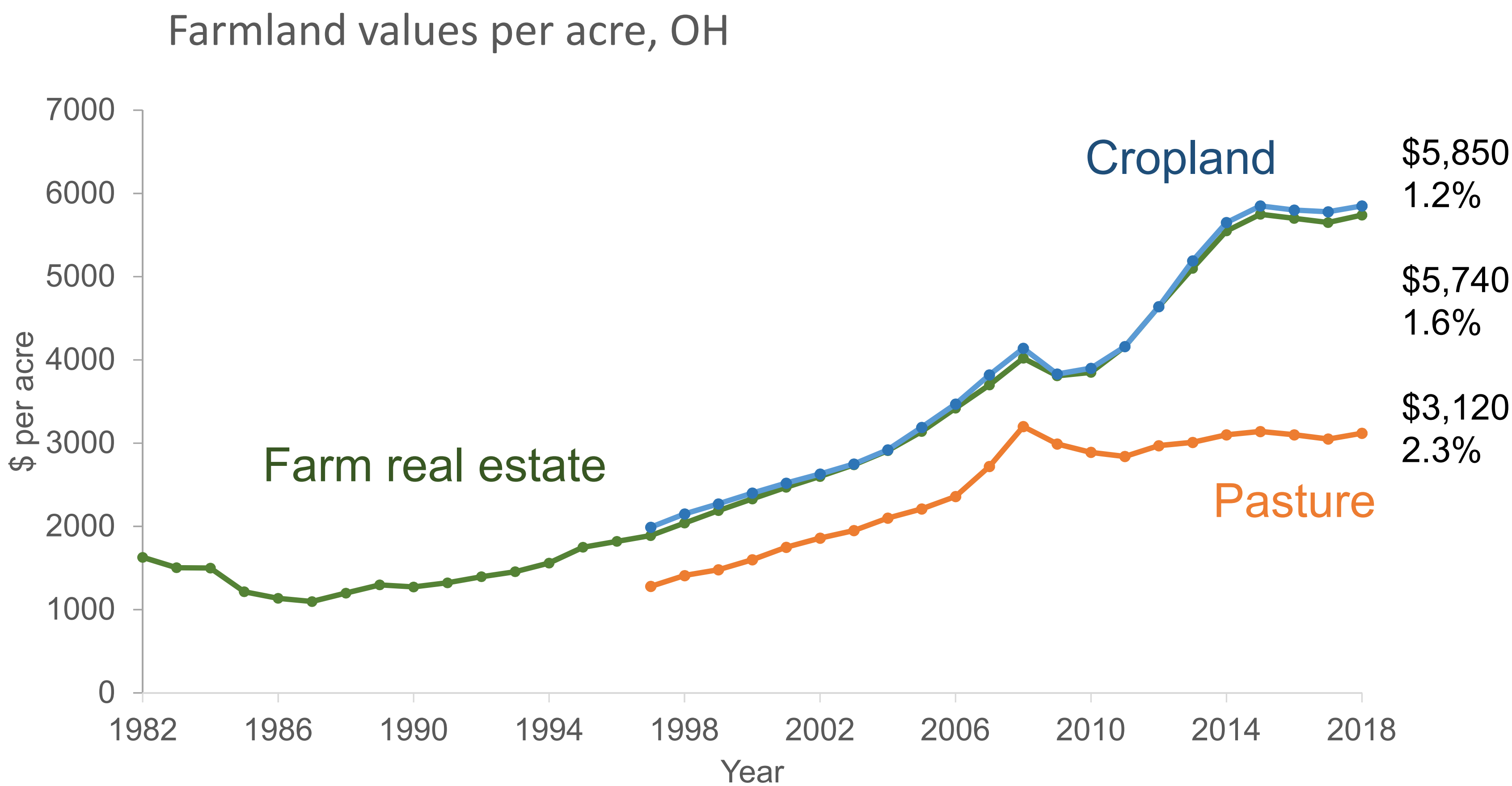
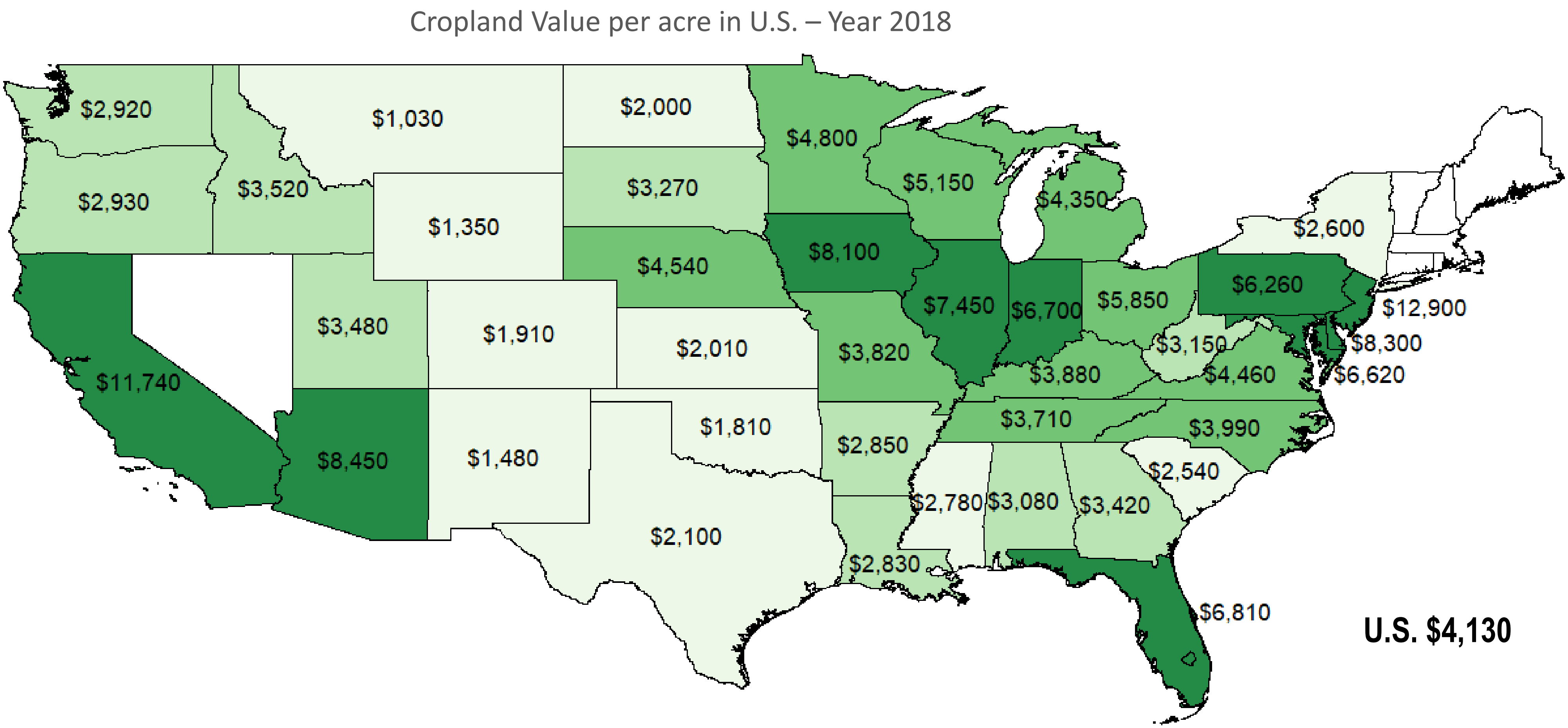
Ohio cropland values increased by 1.2% in 2018 after two years of declines.



Source: USDA, NASS. Land Values Summary.

Cropland values show major differences by state



Source: USDA, NASS. Land Values Summary.

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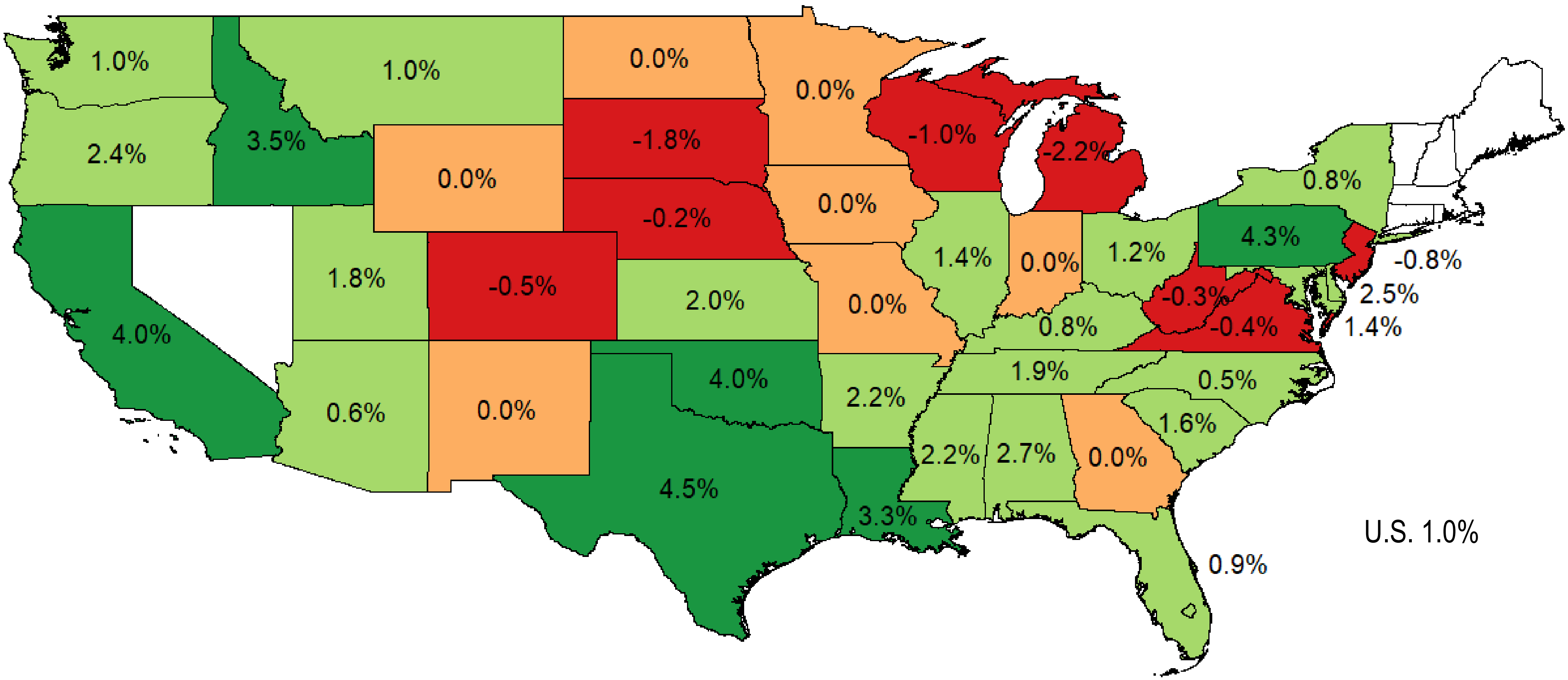
Most states in Midwest reported slight increases in cropland values, reversing previous declines.

Percentage change in U.S. Cropland Value per acre – Year 2018



Source: USDA, NASS. Land Values Summary.

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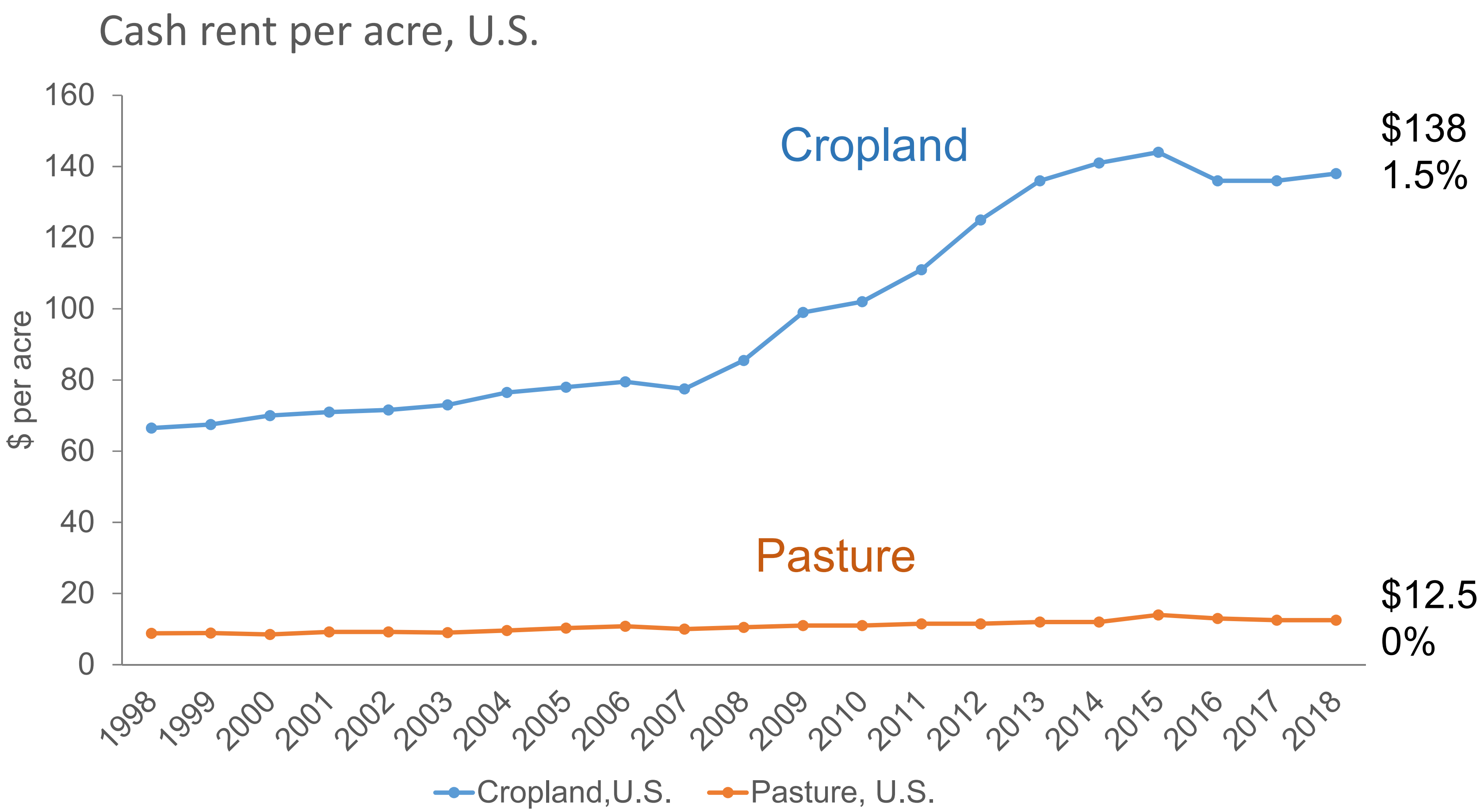
US cash rent for cropland increased in 2018 after remaining flat last year.



Source: USDA, NASS, Cash Rent Survey.

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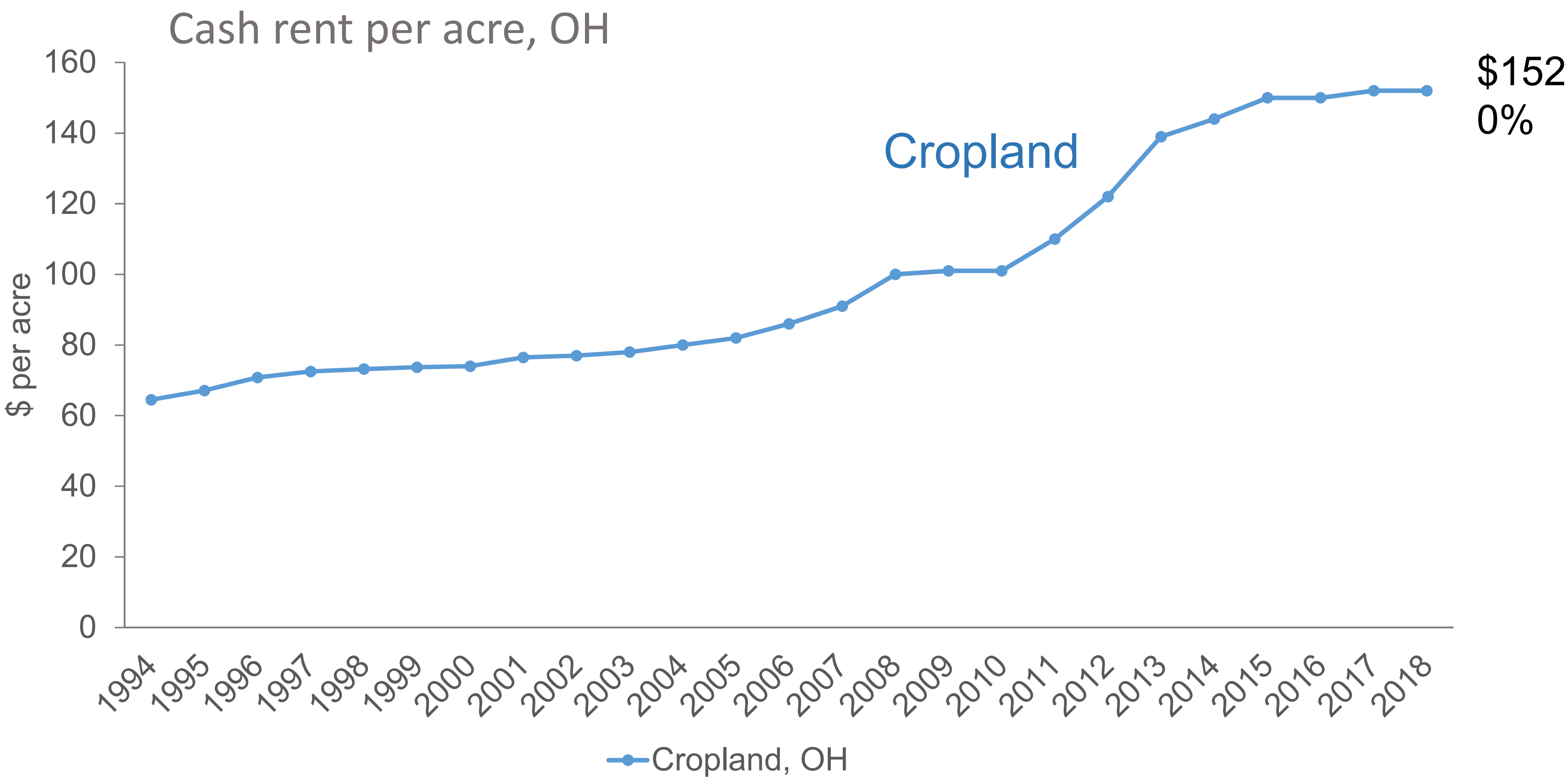
Ohio cash rents remained unchanged in 2018 after a slight increase last year.



Source: USDA, NASS, Cash Rent Survey.

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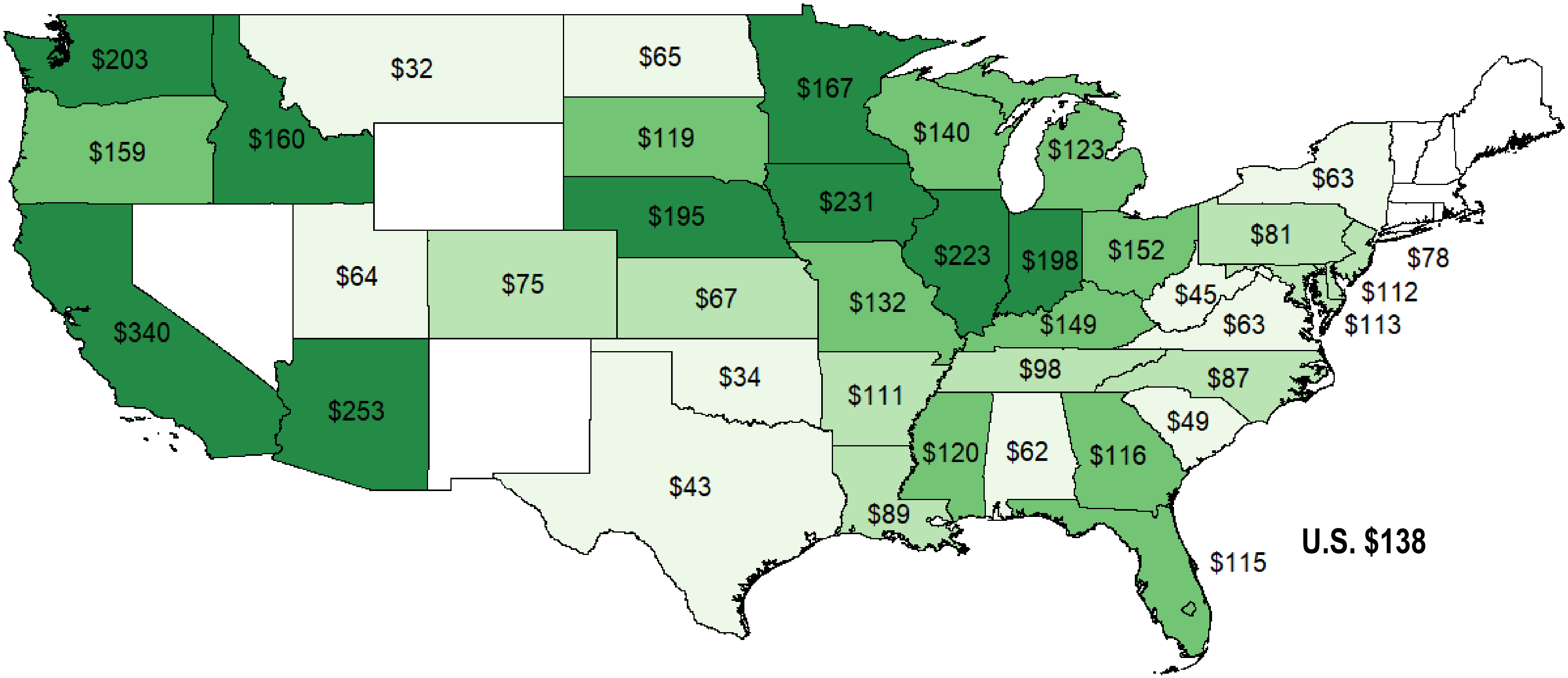
Cash rents in Corn Belt states are among the highest in the U.S.

Cash rent per acre in the U.S. – Year 2018



Source: USDA, NASS, Cash Rent Survey.

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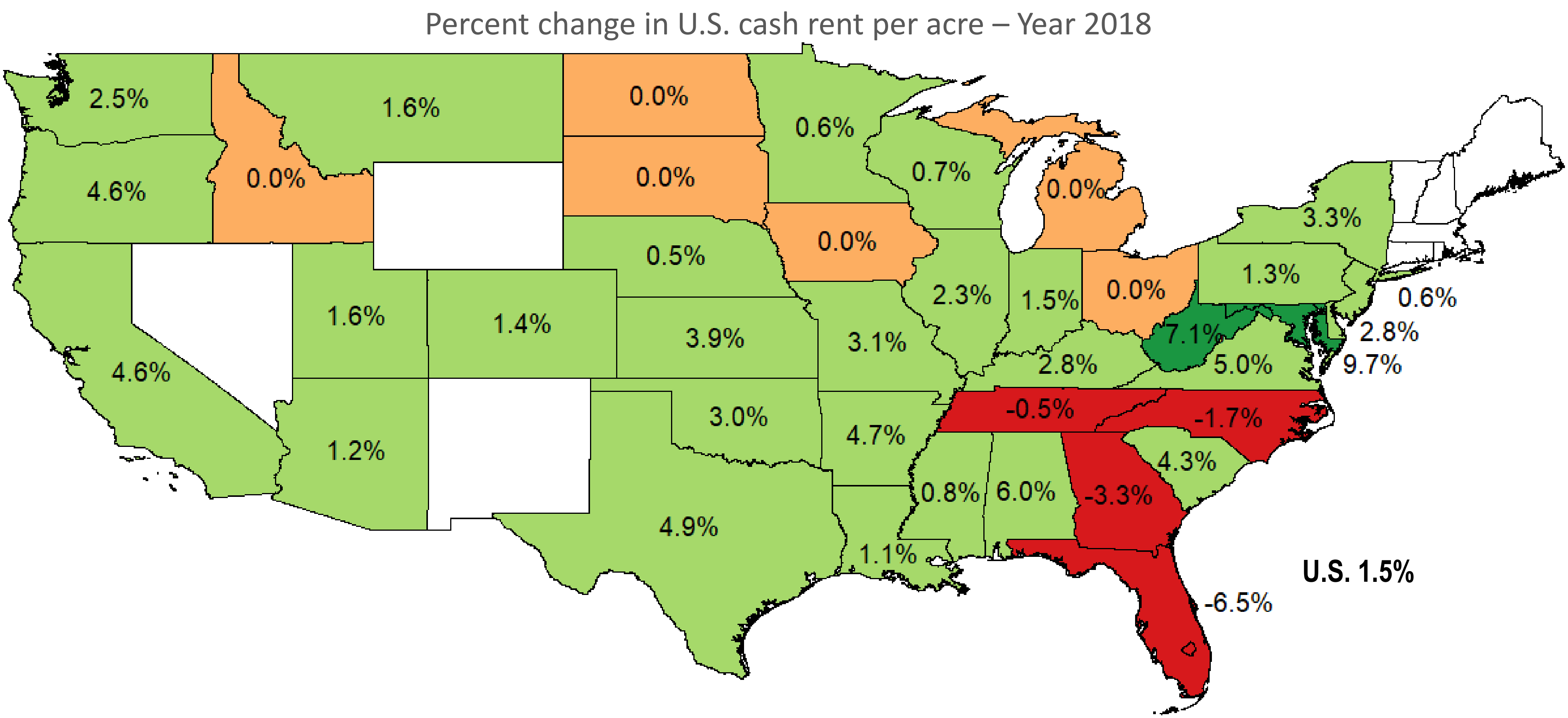
Cash rents increased in most regions in 2018 after being flat last year.



Source: USDA, NASS, Cash Rent Survey.

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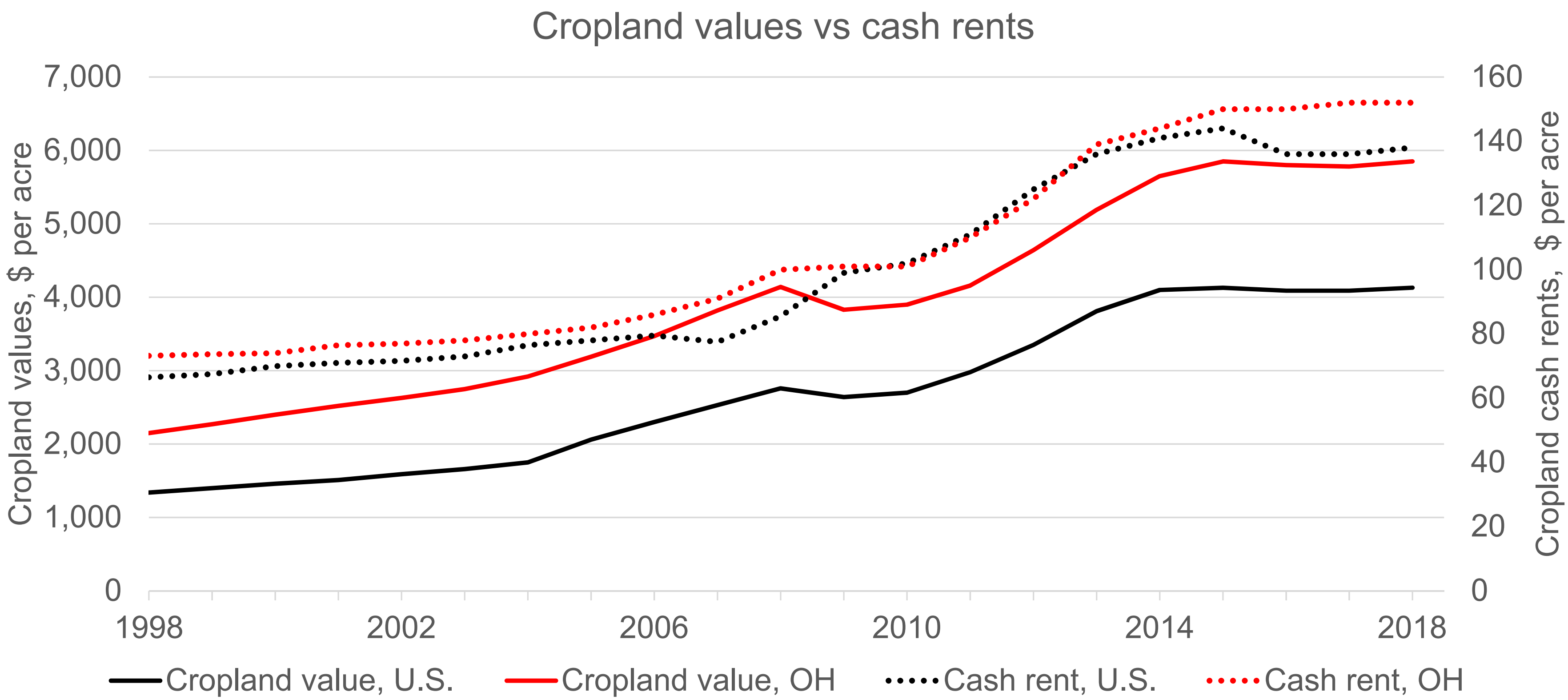
Ohio cropland values and cash rents are above the national average. Ohio cash rents have been higher than national levels since 2013, remaining stable while U.S. cash rents fell in 2015.



Source: USDA, NASS.

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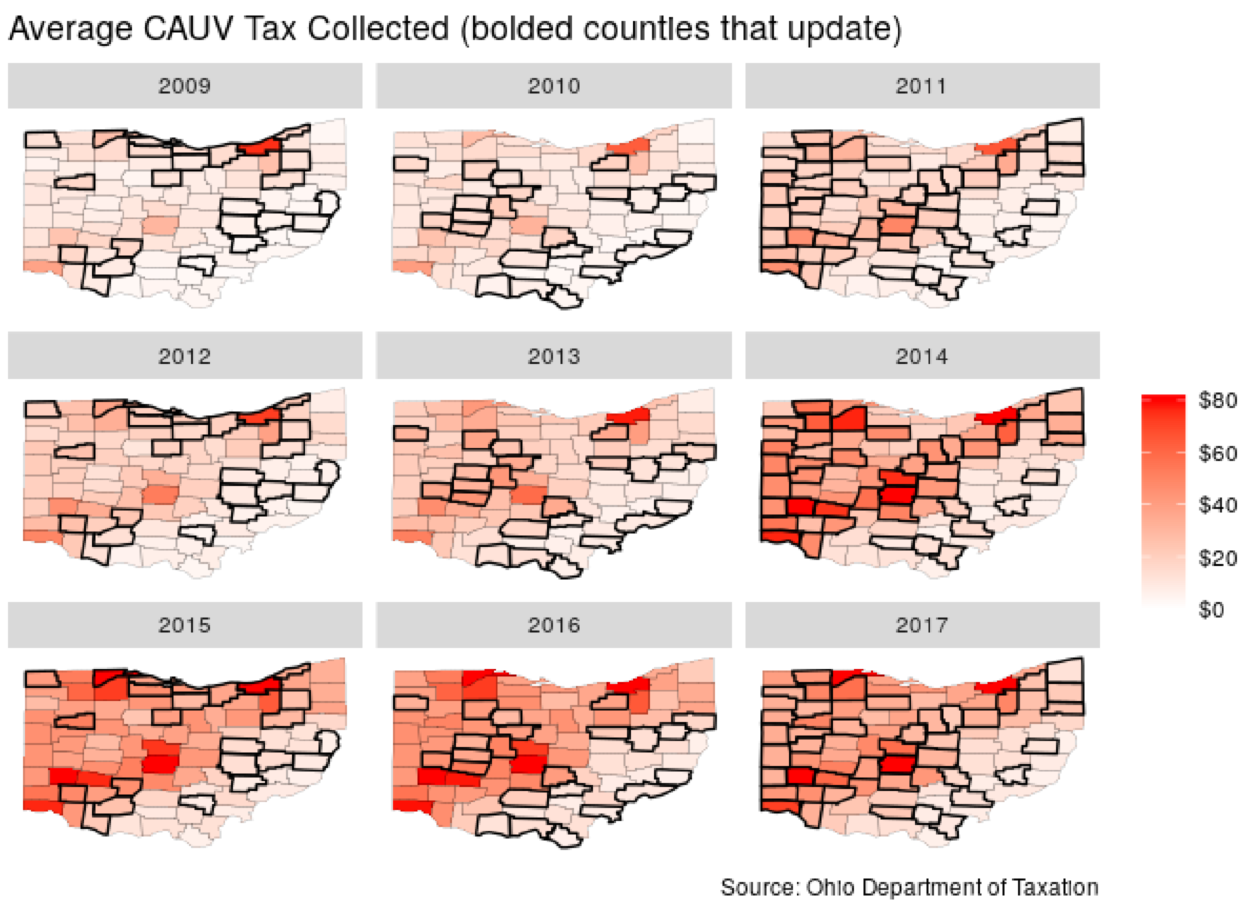
Farmland property tax in Ohio

Current Agricultural Use Value Program (CAUV) taxes farmland at use-value based on soil type as opposed to its market value.

- Program began in 1970s. CAUV uses a capitalization formula based on expected net operating income from corn, soybeans, and wheat.
- CAUV values to market values were 35% in 1985, trended down to 14% in 2006 and increased to above 50% in 2015.
- Low interest rates and high commodity prices largest factors for recent increases.
- Prompted changes in formula in 2015 and most recently 2017.

Our projections are for about 13% decline in CAUV values for 2019.

Run-up in CAUV values through 2015



Only 23 of the 88 counties in Ohio will receive an update in 2018.

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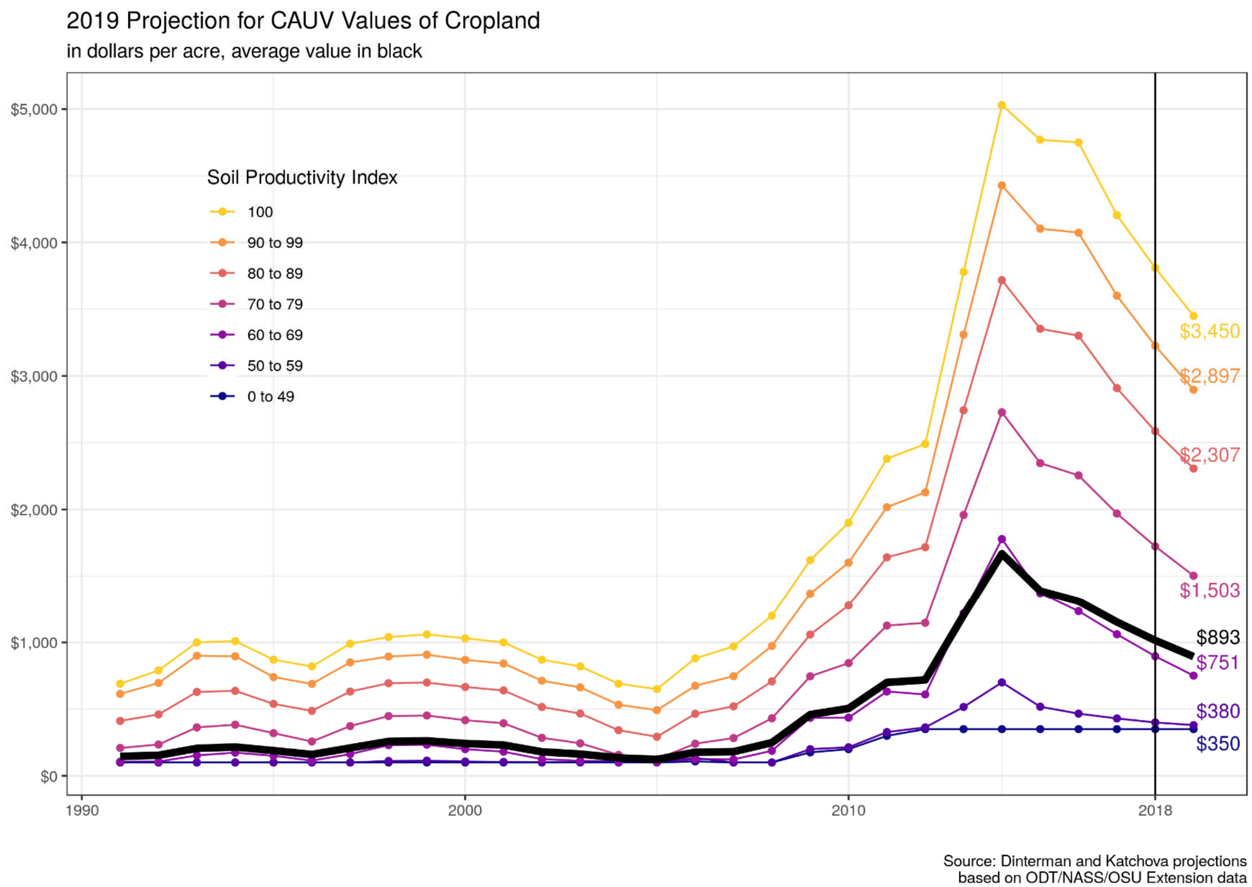
2019 CAUV values are projected to decline by 13%



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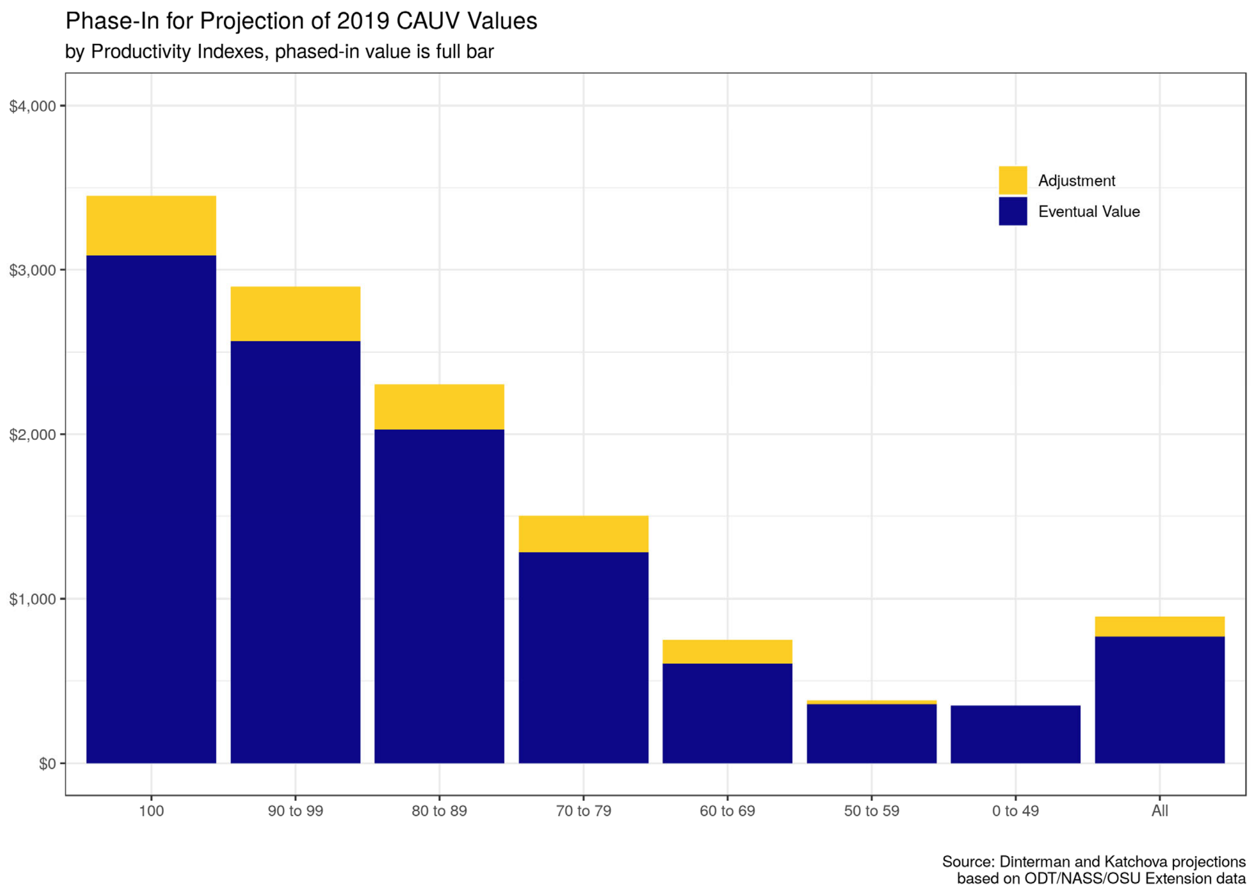
Last phase-in for 2019, so further CAUV value declines are expected in 2020. With an adjustment of approximately $125 for 2019, the average CAUV value is expected to be $775 in 2020.



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CAUV values and cash rents in Ohio

- About 30-40% of the farmland property tax in Ohio gets transferred from the landowner to the farmer operating rented land in the form of higher cash rents (Dinterman and Katchova, 2018)
- Because CAUV values and property tax on farmland in Ohio are expected to decline in 2019 and 2020 (for a fifth and six consecutive year), this will reduce upward pressure on cash rents in Ohio.

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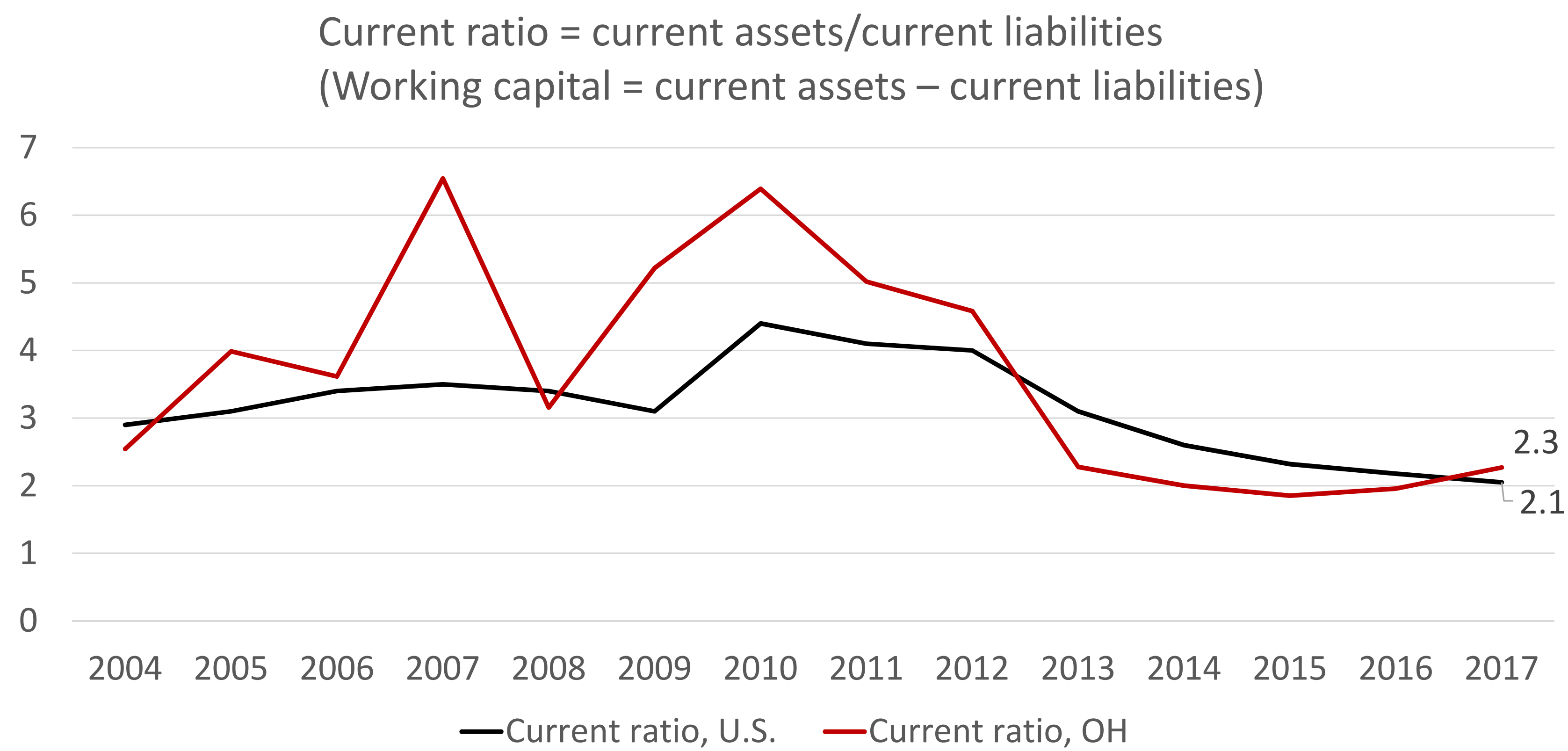
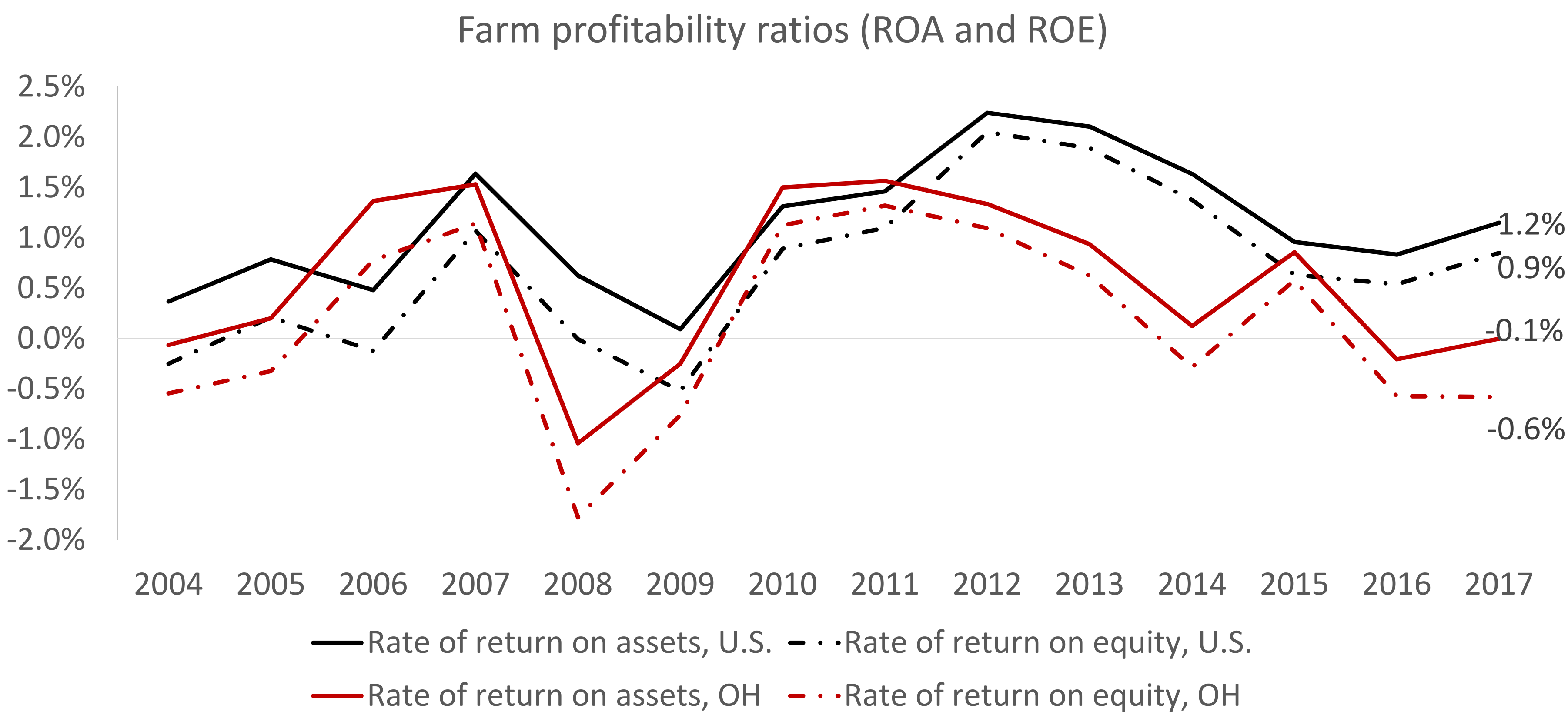
Farm liquidity declined for US farms but increased slightly for Ohio farms in 2017. Erosion of working capital continues.



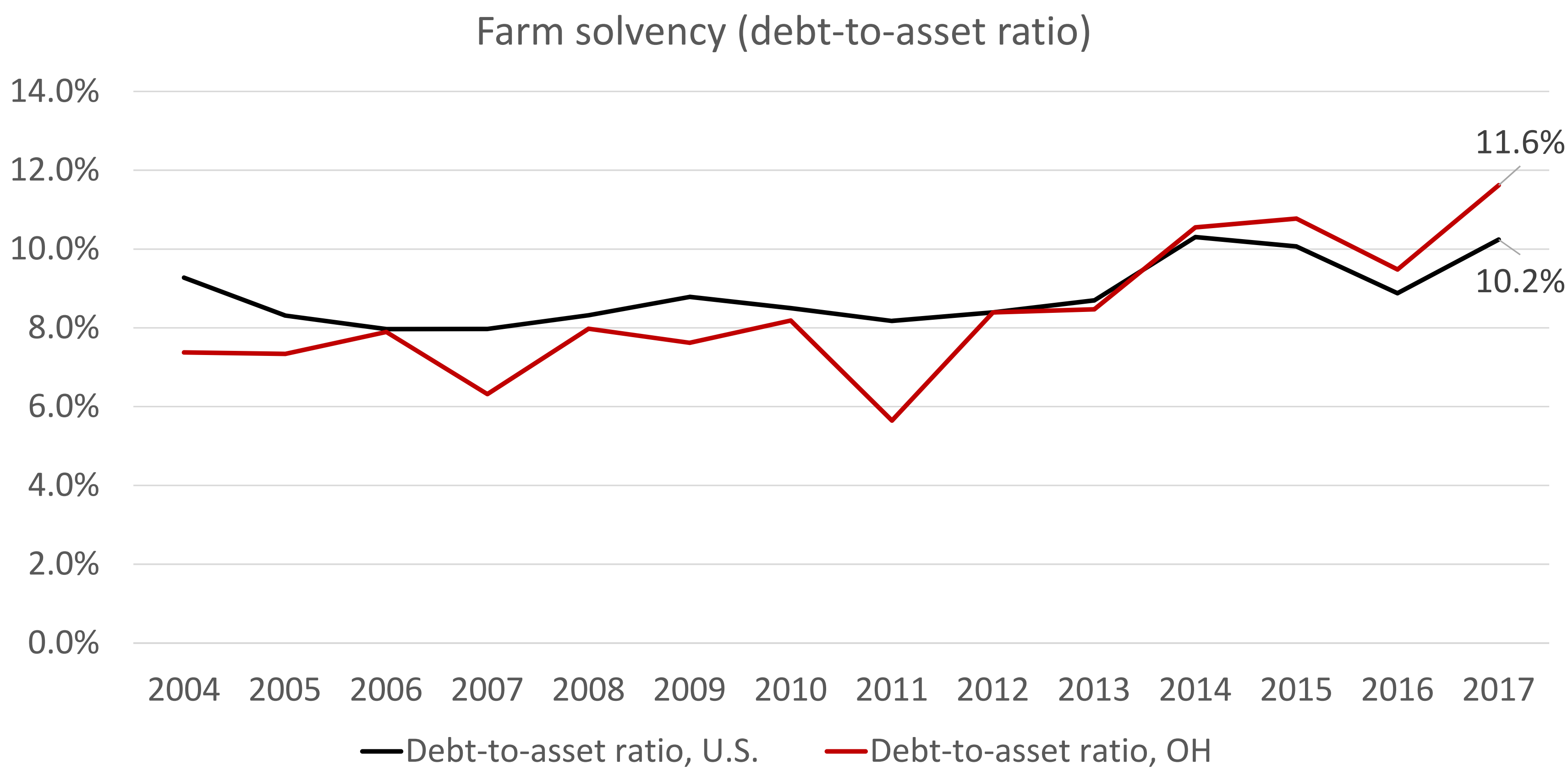
Source: USDA, ARMS.

Profitability was negative in Ohio and low but positive in the US for 2017.



Source: USDA, ARMS.

Debt-to-asset ratios increased for Ohio and US farms in 2017, still historically low.

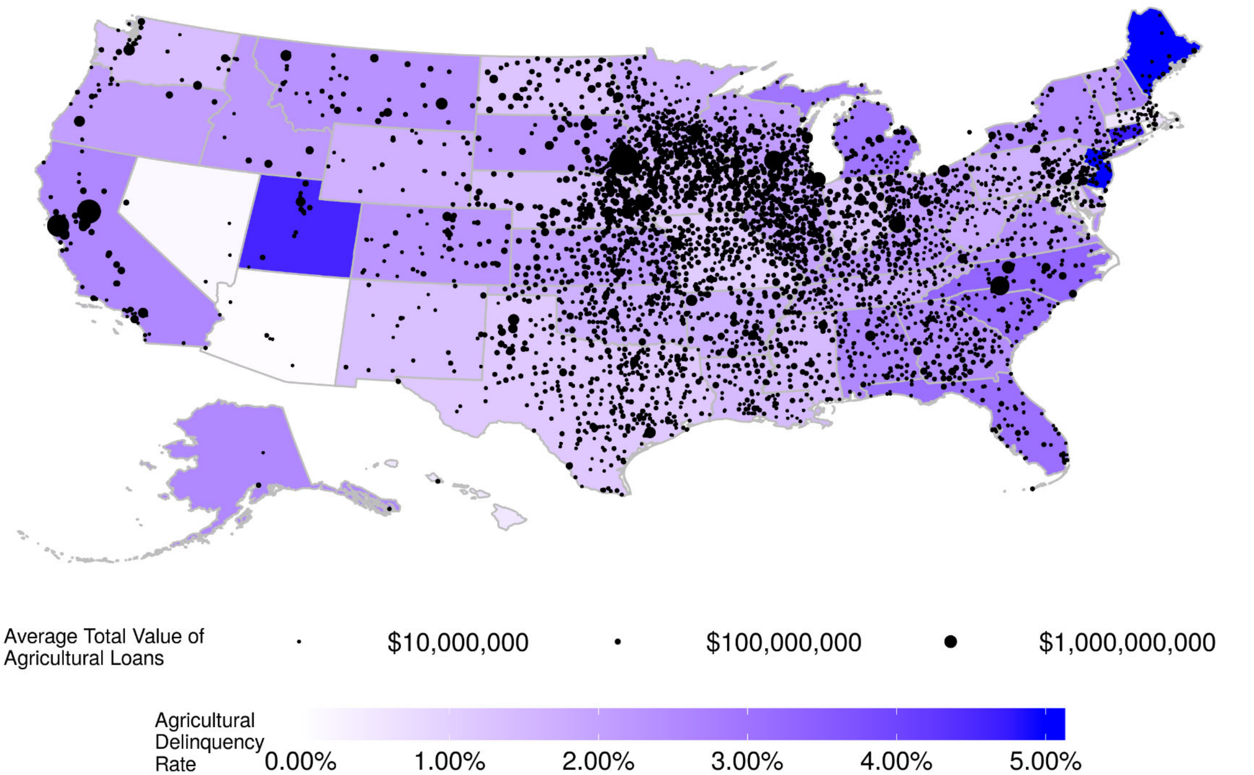


Source: USDA, ARMS.

Concentration of ag loans in Corn Belt but low ag delinquency rates. Average delinquency rates of 1.86% for U.S. during last four quarters.

Commercial Agricultural Banking Performance since 2017-09-30

Average Total Loan Value of $180,504,965,000 with Delinquency Rate of 1.86%



Source: FDIC Call Reports

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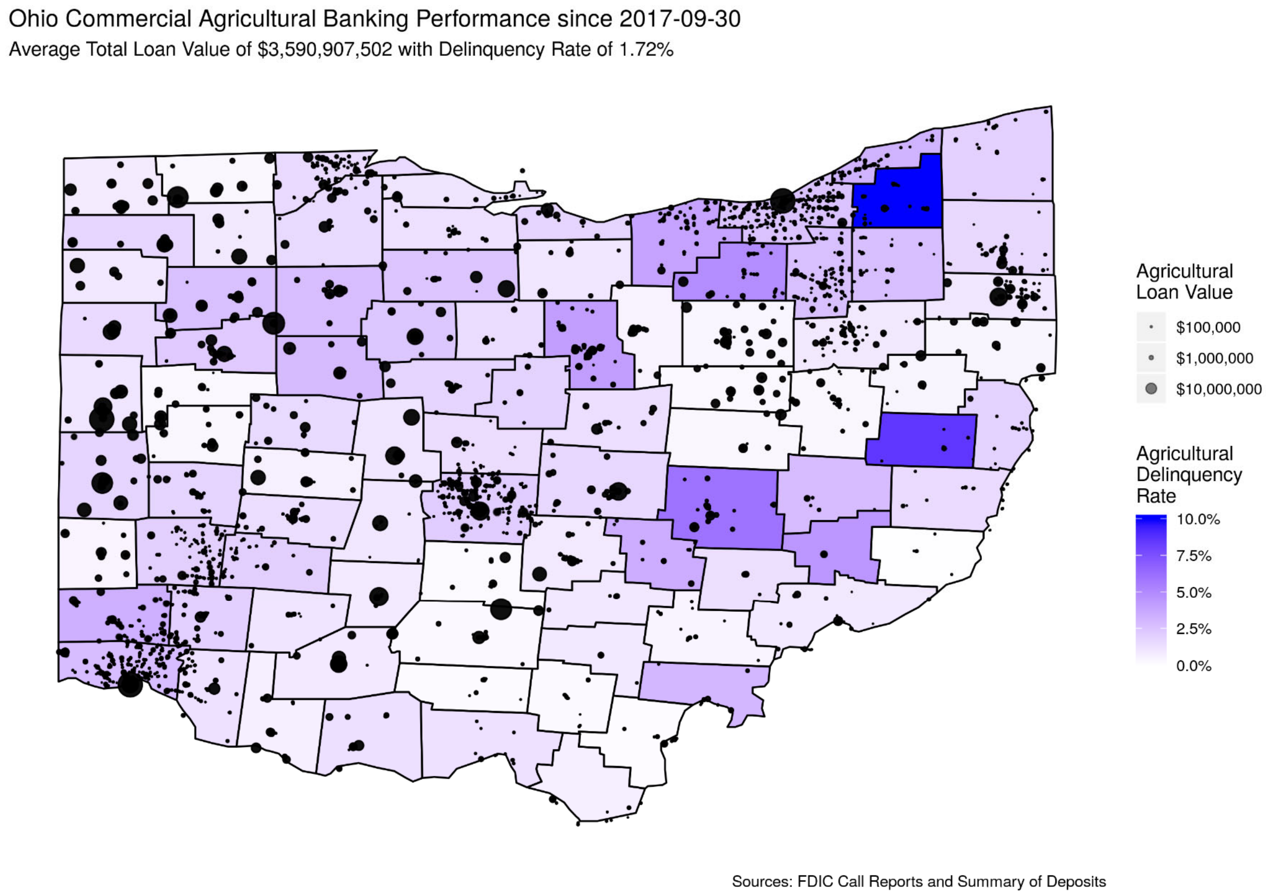
Ag loan delinquency rates of 1.72% in Ohio during last four quarters, increased from 1.3% previous year.



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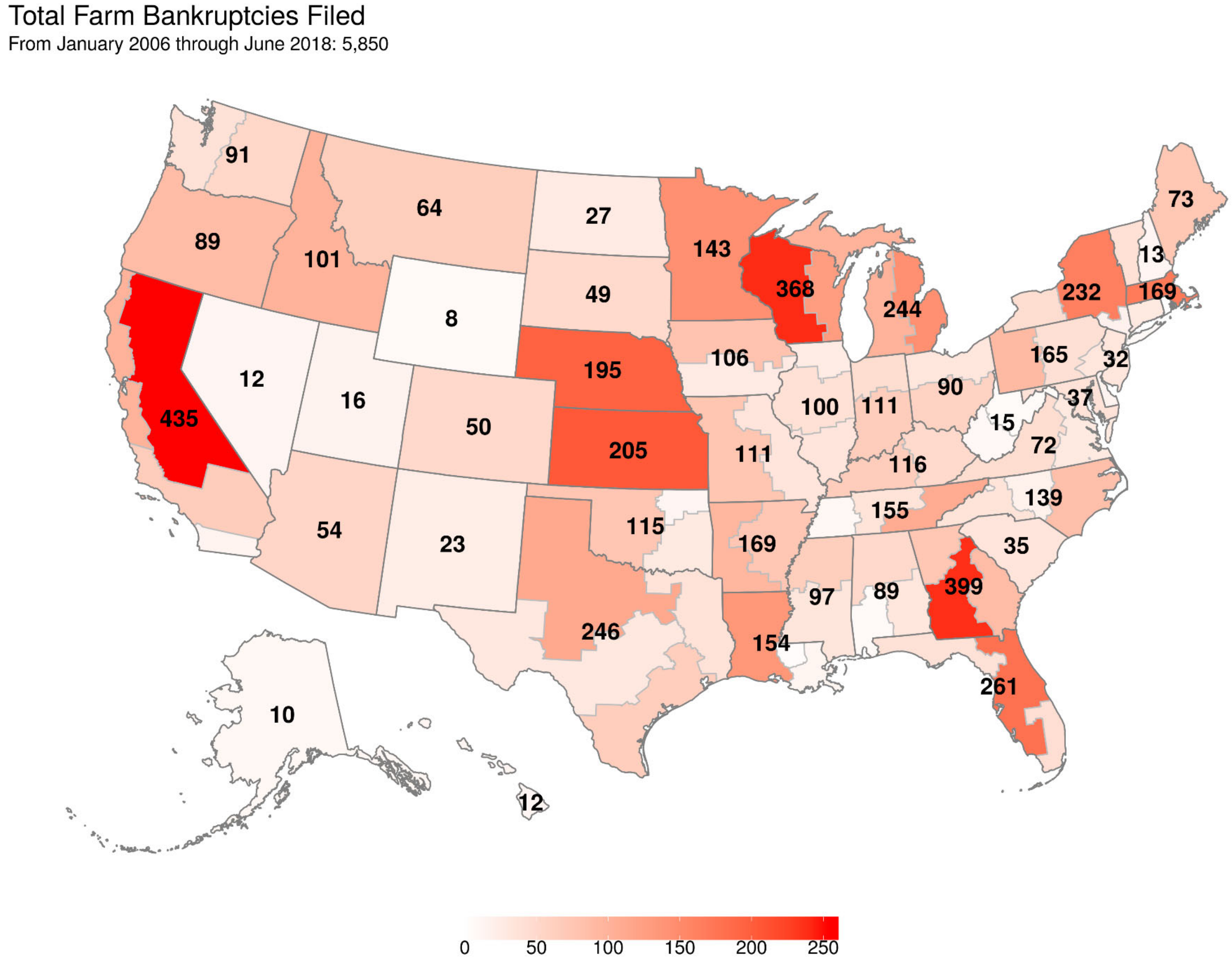
Ohio has 90 cases of chapter 12 bankruptcy fillings since 2006 of the total 5,850 cases in the US



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

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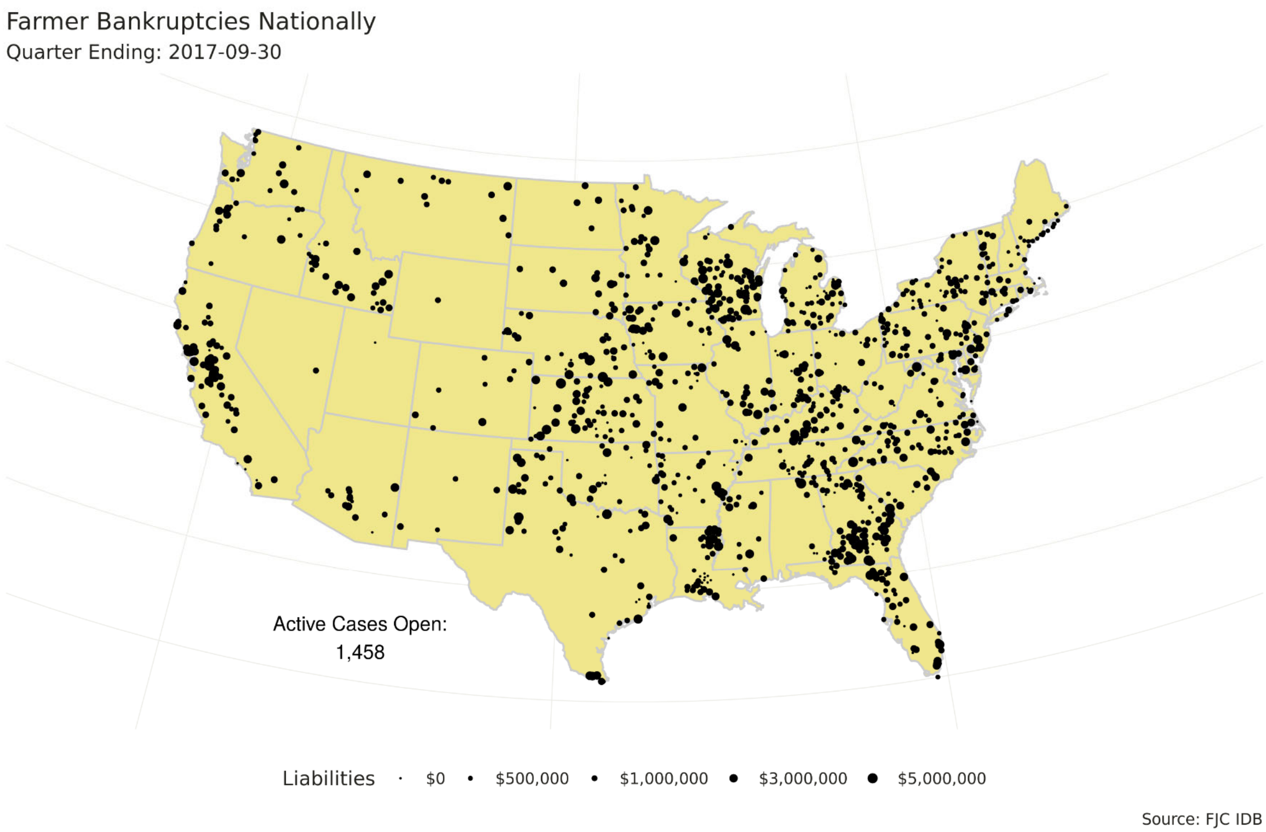
Currently 22 open cases of chapter 12 bankruptcies in Ohio as of third quarter of 2018



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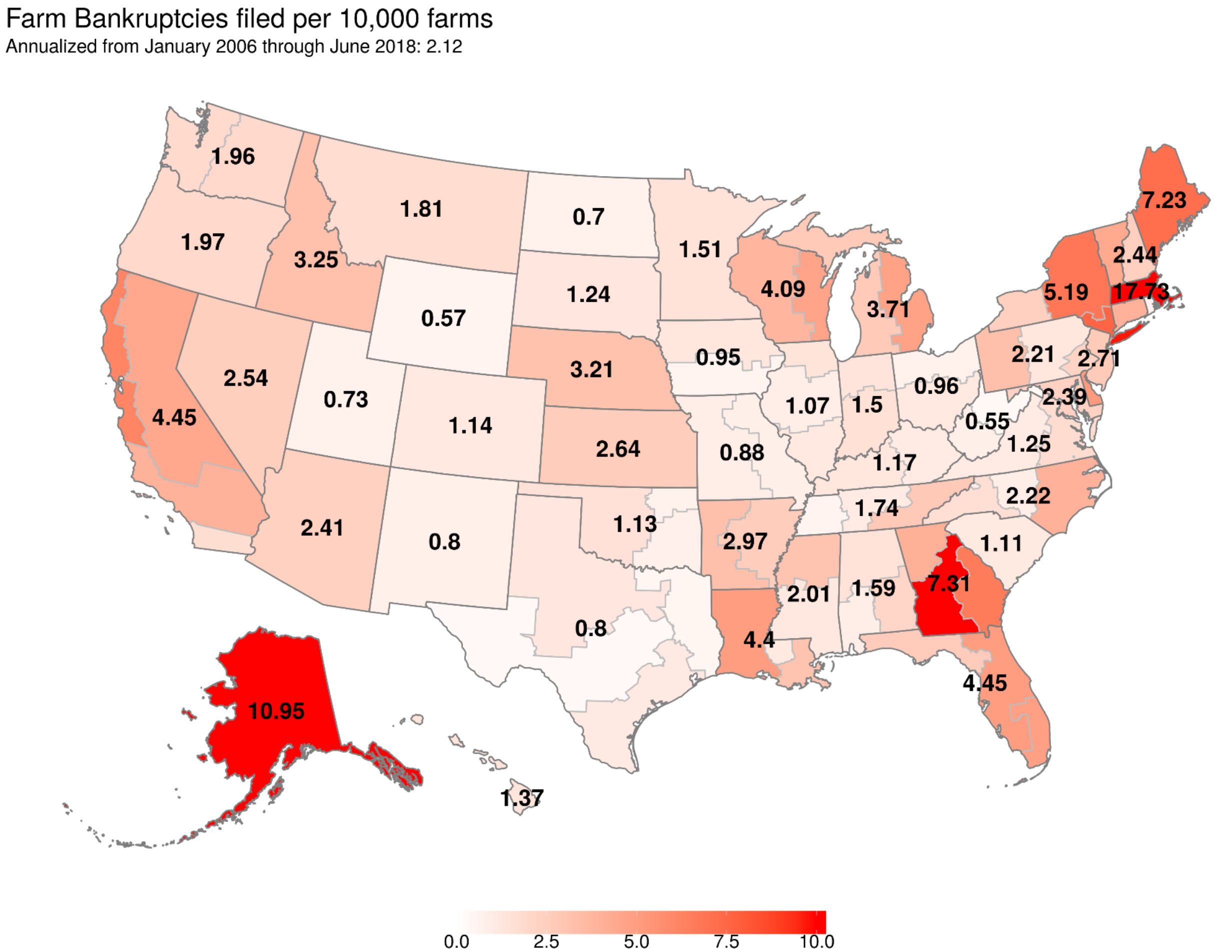
Ohio farm bankruptcy rate is half of the U.S. rate (0.96 vs 2.12 bankruptcies per 10,000 farms)



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

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How does financial stress now compare to the 80s?

Currently, agricultural downturn and farm financial stress, but not farm financial crisis.

Some parallels to the 1980s farm crisis:

- Declining commodity prices and farm incomes
- Land values fell after a rise but rebounding again
- Debt loads rising

Key differences:

- Interest rates in the 1980s were much higher (17.5%) than current interest rates (4-5%)
- Debt-to-asset ratios at 13% now are lower than at 20% in the 80s
- Much of debt now is held by commercial banks and Farm Credit System
- Expanded crop insurance (revenue protection) coverage

Repeat of the 80s is unlikely in current conditions.

Ag Outlook 2018 and beyond

- The downturn in agriculture has been gradual over the last five years with forecasted decreases in farm incomes and increases in farm assets for 2018. Small changes in animal products (+0.1%) and crop (-0.3%) cash receipts are expected for 2018.
- Strength in farmland markets has helped, with cropland values and cash rents increasing slightly (1-1.5%) for US in 2018.
- Expected declines in CAUV values/property tax for 2019 and 2020 will help farm income and will not put further upward pressure on cash rents in Ohio.
- Farmers are experiencing more financial stress (small upticks in delinquencies and bankruptcies) but still at historic lows. Although financial stress is increasing for some indebted farmers, significant stress is not likely in the next year or two thanks in part to strong farmland markets.

Ag Outlook 2018 and beyond

- The outlook for lower net farm incomes and relatively weak prices for many major program crops indicate likelihood of sustained lean ag economy in the near future.
- With record soybean and near-record corn crops predicted by USDA, continued growth in domestic demand and exports are needed to sustain prices at current levels.
- Question shifts from “how low farm income is expected to be” to “how long will low farm income last”?
- Longer-run projections raise some concerns for 2020 or later if these ag conditions persist. The severity of the concerns will significantly depend on the rate of growth in farm debt, changes in land values, and possibly increase in ag loan delinquencies.

Summary – farm income and expenses

- Farm sector income is forecast to decrease after a slight increase in 2017. Net cash income for 2018 is forecast at $91.5 billion, down 12 percent from 2017. Net farm income is forecast at $65.7 billion in 2018, down 13 percent from 2017. If realized, farm income would return to similar levels as in 2016.
- Cash receipts are forecasted to decrease by $337 million in 2018, largely due to decline in crop cash receipts. Total production costs in 2018 are expected to go up 3.3%. Fertilizer and seed are expected to decline, but fuel and interest expenses are expected to increase by 17%.
- Farm income in Ohio has been 2.4-2.5% of national estimates over the last decade. Ohio net cash income increased by 43% to $2.0 billion and net farm income tripled in 2017, from $0.4 billion to $1.2 billion in 2017. Ohio's variability in net cash income and net farm income was higher than the U.S. over the last decade. Ohio farm income is expected to follow national trend and decline in 2018.

Summary – farm assets, debt and equity

- Farm sector balance sheet forecasts farm assets in 2018 at $3,029 billion, of which $2,622 billion is farm equity and $407 billion is farm debt. Farm assets are expected to increase by 1.2%, farm equity to increase by 0.85% and farm debt to increase by 3.6%.
- Farm real estate continues to be the largest part of farm assets staying at 83% in 2018.
- Farm assets and land values are expected to increase gradually since 2016.
- Farm debt continues to rise as decreases in cash income have made it harder to service debt.

Summary – land values, cash rent, and farmland tax

- Cropland values for the U.S. increased by 1% to $4,130/acre in 2018. Cropland values in Ohio increased by 1.2% to $5,850/acre in 2018, after decreasing 0.3% in 2017. This is the first year of increases in cropland values in Ohio after two consecutive years of declines.
- Cash rent for cropland in the U.S. increased by 1.5% to $138/acre in 2018, after experiencing decreases and stagnation in 2016 and 2017. Cash rents in the Corn Belt are still among the highest. Many states experienced zero or positive growth in cash rents in 2018. Cash rent for cropland in Ohio remained at $152 in 2018.
- CAUV values for farmland in Ohio are expected to decline by 13% in 2019. Because CAUV values are expected to decline in 2019 and 2020, the declining property tax will reduce upward pressure on cash rents in Ohio.

Summary – farm financial performance

- Farm financial performance indicators have continue to deteriorate in 2017 since their peaks at the start of the downturn.
- Farm liquidity, measured by the current ratio, fell to 2.1 for the U.S. and increased to 2.3 for Ohio in 2017, but still acceptable.
- The lower profitability ratios have increased slightly but are still problematic. The rate of return on assets of 1.2% and rate of return on equity of 0.9% for the U.S. are lower than their peaks in 2010-2012. In Ohio, profitability ratios are negative. The rate of return on assets increased to -0.1% while the rate of return on equity remained at -0.6%.
- Debt-to-asset ratios increased to 10.2% for the U.S. and 11.6% for Ohio in 2017. These ratios are higher than they were in 2004 but still historic lows.

Summary – ag loan delinquencies and farm bankruptcies

- Ag loan delinquency rates can be considered a leading indicator of farm financial stress. Farm bankruptcy rates can be considered a lagging indicator of farm financial stress.
- Ag loan delinquency rates are at 1.76% for Ohio in the last four quarters, which increased from the previous year and almost reached the US delinquency rate.
- Ohio has seen 90 cases of chapter 12 farm bankruptcies since 2006 with 22 cases still open. In Ohio, there are 0.96 bankruptcies per 10,000 farms; approximately half of the US average.
- Delinquency and bankruptcy rates are still low (with small upticks) during the agricultural downturn.

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Farm Income Enhancement Program

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

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