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**: farm income, farm assets and equity forecasted to increase.

• **Farmland markets**: flat growth in land values and rents for US and Ohio after declining land values and rents last year.

• **Financial stress**: reduced working capital, poor cash flow, overall deteriorating but stable financial performance.

• **Ag lenders**: heightened loan demand and slower repayment rates, but bankruptcy rates are historic low despite recent uptick, liquidity challenges have not led to widespread solvency problems.

• **Outlook**: Farm economy seems to be improving but slowly. What is the outlook for 2018 and beyond?
Net cash income ($100.4B) and net farm income ($63.4B) forecast to increase for the first time since 2013.

Source: USDA, ERS, Farm Income and Wealth Statistics.
Ohio net cash income ($1.3B) and Ohio net farm income ($0.4B) experienced a third straight year of decline in 2016.
Ohio farm income is about 2.4-2.5% of the U.S. farm income but shows more relative variability

Source: USDA, ERS, Farm Income and Wealth Statistics.
Farm income forecasts tend to underestimate farm income compared to realized estimates. The potential exists for farm income to be higher than currently predicted for 2017.

Source: Kuethe, Hubbs and Sanders (Farmdoc daily, 2017)
Large declines in net cash income were associated with the 1980s farm crisis and the recent ag downturn.

Nominal net cash income and net cash income in 2016 dollars, U.S.

Source: USDA, ERS, Farm Income and Wealth Statistics.
Net cash income per farm in Ohio has similar trends as the US
Cash receipts forecasted to increase; driven by increases in animal product receipts; crop receipts have modest increases

Source: USDA, ERS, Farm Income and Wealth Statistics.
Cash receipts are forecasted to increase by $8.35 billion (2.4%) in 2017, largely driven by increases in livestock and dairy

Source: USDA, ERS, Farm Income and Wealth Statistics.
Ohio cash receipts declined by 11.8% in 2016, due to decline in livestock receipts.

Source: USDA, ERS, Farm Income and Wealth Statistics.
Farm expenses expected to increase due to higher labor, interest and fuel expenses; declines in feed and fertilizer expenses.

Source: USDA/ERS Farm Income and Wealth Statistics.
Farm expenses mostly incurred by largest economic sales class farms

Source: USDA, NASS.
Farm assets, equity and debt expected to increase in 2017

Source: USDA, ERS, Farm Income and Wealth Statistics.
Farm assets, equity and debt expected to increase in 2017

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

Source: USDA, ERS, Farm Income and Wealth Statistics.
Farm real estate assets, representing 83% of farm assets, expected to increase in 2017

Source: USDA, ERS, Farm Income and Wealth Statistics.
Farm real estate assets to total farm assets has increased.

Source: USDA, ERS, Farm Income and Wealth Statistics.
Ag downturn reflected in falling farm assets and farmland values

Source: USDA, ERS, Farm Income and Wealth Statistics.
Servicing debt is harder when income declines: 1980s farm crisis and recent ag downturn

Source: USDA, ERS, Farm Income and Wealth Statistics.
U.S. pasture values and farm real estate increased in 2017

Source: USDA, NASS. Land Values Summary.
Ohio pasture land values continued to decline in 2017

Source: USDA, NASS. Land Values Summary.
2017 cropland values show major differences by state

Source: USDA, NASS. Land Values Summary.
Some states in the Corn Belt and in the Midwest had a decline in land values

Percentage change in U.S. Cropland Value per acre – Year 2017

Source: USDA, NASS. Land Values Summary.
Cash rent for pasture declined while cropland cash rent remained stable in 2017

Source: USDA, NASS, Cash Rent Survey.
Ohio cash rents increased in 2017

Source: USDA, NASS, Cash Rent Survey.
Cash rents higher in Corn Belt states

Cash rent per acre for non-irrigated land in the U.S. – Year 2017

Source: USDA, NASS, Cash Rent Survey.
Cash rents continue to decline for many regions in 2017

Percent change in U.S. cash rent per acre – Year 2017

Source: USDA, NASS, Cash Rent Survey.
Cash rents in Ohio vary based on soil productivity

Cash rent per acre for non-irrigated land in Ohio – Year 2017

Source: USDA, NASS, Cash Rent Survey.
Cash rent increased in central Ohio, though half of the counties suffered a decrease in cash rent.

Source: USDA, NASS, Cash Rent Survey.
Cash rent decreased in northern and eastern Agricultural Districts

2017 cash rents of Ohio Agricultural Districts and percent change

Source: USDA, NASS, Cash Rent Survey.

OH
$152 (1.0%)
Ohio cropland values and cash rents are above the national average. Ohio cash rents and cropland values follow the same trend.

Source: USDA, NASS.
In 2017, price to rent ratio in Ohio declined while that in U.S. increased.

Source: USDA, NASS.
Price to rent ratios are lower in Corn Belt states

P/rent Ratios (Land value/Cash rent) for U.S. – Year 2017

Source: USDA, NASS.
Fewer farms in Ohio over time, especially small farms but increasing number of large farms

Number of farms by economic sales class in Ohio

Source: USDA, NASS.
Increase in land operated by large farms

Area operated by economic sales class in Ohio

- $1,000 to $9,999
- $10,000 to $99,999
- $100,000 to $249,999
- $250,000 to $499,999
- $500,000 or more

Source: USDA, NASS.
Farm liquidity in the U.S. declined but acceptable. Ohio farm liquidity is similar to that of the US.

Source: USDA, ARMS.
Profitability was negative in Ohio and low but positive in the US.

Source: USDA, ARMS.
Debt-to-asset ratios decreased in Ohio and in the US

Source: USDA, ARMS.
Concentration of ag loans in Corn Belt but low ag delinquency rates

Commercial agricultural banking performance by state in 2017 Q2

Source: FDIC
Ag loans and delinquency rates in Ohio

Commercial Agricultural Banking Performance
from Q2 2017
Ag loans and delinquency rates in Ohio

Commercial Agricultural Banking Performance
from Q2 2017
Ohio has lower farm bankruptcy (chapter 12) filings

Number of farmer bankruptcy (chapter 12) filings by state, 2001-2017 Q2

Number of farmer bankruptcies (chapter 12) filings since 2001: 7,126 for US and 129 for Ohio

Source: U.S. Courts, Table F-2
Ohio farm bankruptcy rate is half of the U.S. rate

Farm bankruptcies filed per 10,000 farms
Annualized across 1997 to 2016: 2.33

Source: U.S. Courts, Table F-2
Agricultural delinquency rates and bankruptcy rates have declined over the last two decades.
Ag delinquency rates are higher in Ohio during ag downturns.
Farm bankruptcy rates have trended downward and seem to have flattened out. Ohio has similar to US bankruptcy rates.

Note: The number of farms in 2017 were approximated using the number in 2016.
Number of farm bankruptcies (chapter 12 filings) in Ohio increased in 2017

Source: U.S. Courts, Table F-2
Negative relationship between farmland values and bankruptcy rates

Bankruptcy rates vs farmland values in the U.S.

Note: 2017 bankruptcy information relates to the 2nd Quarter. The number of farms in 2017 were approximated using the number in 2016.
Negative relationship between net cash income and bankruptcy rates

Bankruptcy rates vs farm sector net cash income in the U.S.

Note: 2017 bankruptcy information relates to the 2nd Quarter. The number of farms in 2017 were approximated using the number in 2016. 2017 net cash income value is the forecasted.
How does financial stress now compare to the 80s?

Some parallels to the 1980s 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 (17.5%) than current interest rates (4-5%)
• 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
• Expanded crop insurance (revenue protection) coverage

Repeat of the 80s is unlikely in current conditions.
Ag Outlook 2018

• The downturn in agriculture has been gradual over the last three years with forecasted increases in farm incomes and farm assets for 2017. Livestock cash receipts are expected to increase but mixed forecast for crop cash receipts.
• Strength in farmland markets has helped, with cropland values and rents remaining flat for US.
• Farmers are experiencing more financial stress (uptick in delinquencies and bankruptcies) but still historic low and going down with improved farm incomes. Although financial stress is increasing for some indebted farmers, significant stress is not likely in the next year or two.
• 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 and decline in land values and possibly increase in farm loan delinquencies.
Summary – farm income and expenses

• Farm sector income is forecast to increase after three consecutive years of decline. Net cash farm income for 2017 is forecast at $100.4 billion, up 10.8 percent over 2016. Net farm income is forecast to be $63.4 billion in 2017, up 1.4 percent. If realized, it would represent a turnaround from the average annual declines of 21% over the period 2013 - 2016.

• Farm income in Ohio has been 2.4-2.5% of national estimates over the last decade. Ohio net cash income declined by 43% to $1.3 billion and net farm income declined by 62% to $0.45 billion in 2016. 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 increase $8.35 billion (2.37 percent) in 2017 driven by a $10.9 billion (6.7 percent) increase in animal/animal product receipts; crop receipts are forecast decline slightly (-1.3 percent) from 2016.

• Total production costs in 2017 are expected to go up 1.3%, although fertilizer, seed and feed are expected to decline.
Summary – farm assets, debt and equity

• Farm sector balance sheet forecasts farm assets in 2017 at $3,027 billion, of which $2,643 billion is farm equity and $384 billion is farm debt. Farm assets are expected to increase by 4.0 percent, farm equity to increase by 3.9 percent and farm debt to grow by 4.4 percent.

• Farm real estate continues to be the largest part of farm assets rising to 83% in 2017.

• Farm asset and land values have fallen during the downturn period but are expected to stabilize in 2017.

• Farm debt continues to rise slightly as decreases in cash income makes it harder to service debt.
• Cropland values for the U.S. did not change from 2016 to 2017, remaining at $4,090/acre. Cropland values in Ohio declined by 0.3% to $5,780/acre in 2016, after decreasing 0.9% in 2016. This is the second year of declines in cropland values in Ohio. Cropland values in the U.S. remained stable.

• Cash rent for cropland in the U.S. remained at $136 per acre in 2017. After experiencing rent increases since 2007, in 2017 witnessed no changes in cash rents. 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 was $152 in 2017, an increase of 1.3% from the previous year.

• 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.

• Farmland operated by farms in the higher economic class has increased indicating possible consolidation.

• Farm numbers have decreased, though farm exits are probably due to farmers retiring or transferring rather than farm bankruptcy.
Summary – farm financial performance

• Farm financial performance indicators have continue to deteriorate in 2016 since their peaks 4-6 years prior.

• Farm liquidity, measured by the current ratio, fell to 2.2 for the U.S. and increased to 2.0 for Ohio in 2016, but still acceptable.

• The lower profitability ratios are problematic. The rate of return on assets of 0.8% and rate of return on equity of 0.5% for the U.S. are lower than their peaks in 2010-2012. In Ohio, profitability ratios are negative. The rate of return on assets fell to -0.2% and rate of return on equity to -0.6%.

• Debt-to-asset ratio were at 8.9% for the U.S. and 9.5% for Ohio in 2016. 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 1.34 bankruptcies per 10,000 farms through the 2\textsuperscript{nd} quarter of 2017. This is a higher rate than that of 1.25 witnessed in the 2\textsuperscript{nd} quarter of 2016 and of 0.99 in the 2\textsuperscript{nd} quarter of 2015. Given past years, bankruptcies will likely remain above the rate of 1.57 in 2008. In Ohio, 124 farms have filed for bankruptcy (chapter 12) since 2001. The farm bankruptcy rate in Ohio is 0.67 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 2017 but still at historic lows. Farm bankruptcy rates are still relatively low and stable.
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Farm Income Enhancement Program
http://aede.osu.edu/programs/farm-income-enhancement-program