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, but farm income, farm assets and equity forecasted to increase in 2017.
- **Farmland markets**: Flat growth in land values and rents for US for 2017 after declining land values and rents last year. Land values continued to decline in Ohio but cash rents increased in 2017.
- **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 show some signs of improvement. 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.

Source: USDA, ERS, Farm Income and Wealth Statistics.
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 may under-predict or over-predict farm income compared to realized estimates.

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.

Source: USDA, ERS, Farm Income and Wealth Statistics.
Net cash income per farm in Ohio has similar trends as the US

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

Source: USDA, ERS, Farm Income and Wealth Statistics.
Cash receipts are forecasted to increase by $14.1 billion (4.0%) in 2017, largely driven by increases in livestock and dairy receipts.

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

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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 assets, equity and debt forecasted 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

Farm sector assets by type

Source: USDA, ERS, Farm Income and Wealth Statistics.
Farm real estate assets to total farm assets has increased
Ag downturn reflected in falling farm assets and farmland values

Assets, equity and real estate values per farm in 2016 dollars

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

Debt and net cash income per farm

Source: USDA, ERS, Farm Income and Wealth Statistics.
U.S. cropland values remained the same in 2017, farm real estate values increased by 2.3%.

Source: USDA, NASS. Land Values Summary.
Ohio land values continued to decline in 2017 for a second year.

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 cropland remained stable in 2017

Source: USDA, NASS, Cash Rent Survey.
Ohio cash rents increased by 1.3% 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 it decreased in half of the counties.

Source: USDA, NASS, Cash Rent Survey.

Percent change in Ohio cash rent per acre – Year 2017

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.
Ohio cropland values and cash rents are above the national average. Ohio cash rents and cropland values follow the same trend.

Source: USDA, NASS.
Farm liquidity declined but still acceptable. Working capital only a third to a half from highs of 2010.

Current ratio = current assets/current liabilities
(Working capital = current assets – current liabilities)

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

Source: USDA, ARMS.
Debt-to-asset ratios declined in Ohio and in the US, currently at historic lows showing great solvency and strong equity position.

Source: USDA, ARMS.
Concentration of ag loans in Corn Belt but low ag delinquency rates. Average delinquency rates of 1.71% for U.S. since last year.

Commercial Agricultural Banking Performance since 2016-09-30
Average Total Loan Value of $175,078,766,500 with Delinquency Rate of 1.71%

Source: FDIC
Ag loan delinquency rates of 1.3% in Ohio since last year.

Commercial Agricultural Banking Performance since 2016-09-30
Average Total Loan Value of $6,612,174,500 with Delinquency Rate of 1.3%
Ohio has 82 cases of bankruptcy fillings since 2006

Source: U.S. Courts, Table F-2
Ohio farm bankruptcy rate is half of the U.S. rate (0.93 vs 2.11)

Source: U.S. Courts, Table F-2
Farm bankruptcy rates in Ohio remained low and half of U.S. Ag loan delinquency rates in Ohio now lower than U.S.

Financial Stress Indicators

Sources: U.S. Courts, Table F-2 and FDIC. Note: The number of farms in 2017 were approximated using the number in 2016.
How does financial stress now compare to the 80s?

Some parallels to the 1980s farm crisis:
• Declining commodity prices and farm incomes
• Land values falling after a 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 cash rents remaining flat for US.
- Farmers are experiencing more financial stress (small uptick 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.
- 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 ag 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 12.6 percent from 2016. Net farm income is forecast to be $63.4 billion in 2017, up 3.1 percent from 2016. If realized, it would represent a turnaround from the declines of 50% 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 forecasted to increase by $14.1 billion (4.0%) in 2017, largely driven by increases in livestock and dairy receipts.

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

• Farm debt continues to rise as decreases in cash income has made it harder to service debt.
Summary – land values and rent

• 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 2017, 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.
Summary – farm financial performance

- Farm financial performance indicators have continued 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 and ag loan delinquencies

- Ag loan delinquency rates can be thought of as a leading indicator of farm financial stress. Farm bankruptcy rates can be thought of as a lagging indicator of farm financial stress.

- Ohio has seen 82 farm bankruptcies since 2006 (0.93 bankruptcies per 10,000 farms; approximately half of the US average). The state has already had 6 bankruptcies through 3 quarters of 2017, which is higher than the 2 in 2016 and equal to the 6 in all of 2015.

- Ag loan delinquency rates are at 1.71% for the U.S. since last year and at 1.3% in Ohio. Delinquency rates in Ohio are now lower than the U.S.

- Still have low delinquency and bankruptcy rates (with small upticks) during the agricultural downturn.
Ohio Farm Financial Condition: 
Farm Income and Assets, Land Values and Rent, and Farm Financial Stress

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Farm Income Enhancement Program
http://aede.osu.edu/programs/farm-income-enhancement-program