## Is the Farm Economy Repeating the 1980s?

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The farm economy is experiencing an agricultural downturn that concerns many farmers. How do you define this agricultural downturn with respect to farm incomes for the US and Ohio?

- US agriculture is indeed experiencing a downturn which started in 2013 with the decline of farm income. US net cash farm income in 2012 was historic high of 145 billion. After 4 consecutive years of decline, farm sector profits are forecast to increase in 2017. Net cash farm income for 2017 is forecast at \$100.4 billion, up \$11.2 billion (12.6 percent) from 2016. Net farm income, a broader measure of profits, is forecast at \$63.4 billion, up \$1.9 billion (3.1 percent) relative to 2016. The difference is in the sale of crop inventories from last year that increase cash income for this year but were counted toward farm incomes last year.
- The increase will largely be driven by gains in the animal product markets, with dairy and hog cash receipts leading the way. Corn receipts are forecasted down as 45.8 billion, but soybeans are expected to be up to 40.4 billion, wheat is also expected to be down to 8.6 billion in 2017.
- Ohio net cash income and net farm income follow similar trends. Farm incomes in Ohio increased significantly until 2013 to reach 3.8 billion dollars but have been on the decline since then. In 2016, net cash income declined to 1.3 billion and farm incomes in Ohio have declined to \$0.5 billion, and an 87% decline from the peak in 2011.
- Ohio's incomes have had very similar trends in the past to US farm incomes but with higher relative volatility so we expect this to continue. We don't have the 2017 forecasted values for Ohio farm incomes yet, but my personal forecast (not USDA) is for Ohio's net cash income to also increase say to 1.4 or 1.5 billion and to 0.5 to 0.6 billion for net farm income.

How strong are the balance sheets and equity positions for farmers in Ohio and U.S.?

- Balance sheet remained relatively strong even during the ag downturn. In the last two years, there were negative or zero changes in farm assets and farm equity. Farm assets, equity and debt are all expected to increase in 2017. Farm assets are expected to increase by 4%, farm equity by 3.9%, and farm debt by 4.4%. So the overall position of farms is expected to strengthen.
- Farm real estate (farmland and buildings) continues to be the largest part of farm assets and its proportion is rising to 83%. In the 80s real estate's proportion in total assets also peaked at about 78%. Given that farmland is such an important component of farm assets then we also need to understand how farmland values change over time.
- A balance sheet shows the solvency positions measured by debt to asset ratios. These are at historic low levels, currently at 11%, compared to the 23% in the 80s.

It looks like the farm economy is improving even though slowly. Are farmers still experiencing financial stress?

- Financial ratios measuring financial performance and stress are at historic lows. Latest data from 2015 shows current ratio showing liquidity was at about 2, profitability was low but positive at 0.6%, and solvency debt-to-asset ratios at 11% as low.
- Ag delinquencies (past due over 30 days) and bankruptcies (chapter 12 bankruptcies) show slight upticks. Ag delinquency rates have varied from a high of 4% to a low of 1% over the last two decades. From 2006 to 2009 the ag delinquency rate was lower and then it spiked in 2010 and then fell down until 2015. We see a small uptick in delinquencies now but still very low at 1 to 1.5%.
- Ohio had more extreme swings in delinquencies, reaching 5-10% in the late 1990s and exceeding 5% in 2010.
- Bankruptcy rates were similar for US and Ohio farms over the last two decades, slightly lower for Ohio farmers. Bankruptcy rates are about 2 farmers per 10,000 farms now without much uptick lately.

What is the current situation with land values and cash rents in Ohio? Is there any resemblance to the 80s?

- Ohio cash rents and land values are generally higher than average US rents and values due to better soil quality on average. Cropland value per acre is \$4,090 in the U.S. and \$5,780 for Ohio this year. That's no change since last year for the US but for Ohio it slightly declined by 0.3%.
- Cash rents in the US saw no change since last year and are currently at \$136/acre. In Ohio, cash
  rents increased slightly by 1% to \$152. So we see similar conditions and slight improvement this
  year for Ohio. Typically, Ohio seems to be behind the nationwide trends when it comes to cash
  rents declining but ahead of the nation with increases. Ohio's cash rents seem more resilient to
  the downturn.
- When we look at land values and cash rents in constant dollars we notice that land values in Ohio have been increasing since the 90s while cash rents have remained flatter/stable.
- Although Ohio farmland values follow similar growth pattern as before the 80s crisis, the growth rates now are much smaller now at 5% than in the 80s of about 19%. Recent drops in values are smaller than those witnessed in 82 and in 85. We don't have the crush in land values of the 80s.

How are farm income, land values, and bankruptcy related over time?

- There is a negative relationship between land values and bankruptcies. Bankruptcy rates have trended downward in the last two decades. When land values dropped in 2009 and 2016, there was a spike in bankruptcy rates. When land values drop it is harder to refinance loans, also typically land values fall in periods of falling farm incomes.
- Debt increased significantly in the 1970s in response to rising farm incomes and land values. When land values dropped sharply debt could not be serviced. Debt levels are rising over the last decade as well, but lower indebtedness now than in the 80s.

Has the agricultural downturn led to farm exits or consolidation is the farm sector?

• Many people assume that most exits are because of bankruptcies but that is not the case. Many farm transitions are due to farmers retiring and not transferring down the farm. Most beginning farmers acquire land through purchases not inheritance.

- Farm numbers are going down and consolidation is going up there are 2.06 million farmers in the US with average farm size of 442 acres. In Ohio, there are 74,500 farms with an average farm size of 188 acres.
- An increasingly larger portion of the farmland in Ohio is operated by the largest size class farms.

How does the agricultural downturn that we see these past few years compare to the conditions in the 1980's?

- There are three main similarities to the 80s: 1) Declining commodity prices and net incomes, 2) land values falling after a sharp rise, and 3) debt loads are rising. However, all of these changes are much smaller now than in the 80s.
- There are also key differences that make a repeat of the 80s very unlikely.
- Farmers are in much better liquidity and solvency positions now than in the 80s. Farm debt to asset ratios peaked at 23% in the 80s while it has been about 11% in recent years. However, these are sector numbers, so an individual farm can be highly indebted and experience financial stress.
- The period leading up to the farm crisis of the 1980s and today are the very different in terms of interest rates and lending environments.
  - Farm mortgage rates peaked at nearly 17.5% in the 80s and have generally declined throughout time to about 4-5% in recent years.
  - Much of farm debt now is held by commercial banks and Farm Credit System instead of individuals as it was in the 80s – these large organizations are much more able to withstand financial stress.
- There are new laws and institutions that were introduced since the 80s: the introduction of Chapter 12 bankruptcy laws that helps farmers experiencing financial stress, and the expansion of crop insurance with revenue coverage introduction (PLC and ARC) and increase in coverage levels.

How have the delinquency and bankruptcy rates changed over time and how to they compare to the 1980s?

- Chapter 12 on farmer bankruptcies was formed in 1986 as a response to the 80s crisis. Bankruptcy rates were over 20 bankruptcies for 10,000 farmers in the 80s, now only 2.33. National trend is downward since late 1980s and early 1990s.
- Small spike in bankruptcies in 2010 as a response to falling farm incomes and land values in 2009.

What is the farm economy outlook for 2017 and beyond?

- Financial conditions are improving but slowly.
- Farm income is forecast to be up after 4 years of declines. Net cash farm income for 2017 is expected to increase by 12.6% and net farm income by 3.1%. This is still far below the historic high levels of 2012, but still a reversal of the downward trend.
- Land values for the US and Ohio after declining by 1% last year have flattened out this year so at least they are no further declines.
- There is still small uptick in the bankruptcy rate in 2017 which is a lagging indicator of financial stress.

•	Overall, farmers are still in strong equity positions and hopefully if incomes improve this year we will see a reversal of the ag downward trend.