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Weekly Farm Economics: Incidence of High Debt-to-Asset Ratios Grow Over Time

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December 18, 2018

***farmdoc daily* (8): 231**

Recommended citation format: Schnitkey, G. "Incidence of High Debt-to-Asset Ratios Grow Over Time." *farmdoc daily* (8): 231, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, December 18, 2018.

Permalink: https://farmdocdaily.illinois.edu/2018/12/incidence-of-high-debt-to-asset-ratios-grow-over-time.html

Average debt-to-asset ratios on Illinois grain farms have increased since 2013. At the same time, the percent of farms with debt-to-asset ratios over 0.5 also rose, increasing from 7% at the end of 2013 to 13% at the end of 2017. At the end of 2017, roughly 13% of farms faced high financial risks.

Background

The debt-to-asset ratio is a measure of solvency, equaling debt divided by assets. Generally, debt-to-asset ratios below 0.30 indicate a strong financial position. A debt-to-asset ratios above 0.50 means that a farm's assets are funded by more debt than equity. Farmers with debt-to-asset ratios above 0.50 usually face more risk than those with less than a 0.50 debt-to-asset ratio. Debt-to-asset ratios above 0.75 indicate that an adverse event could cause debt to exceed assets, and the farm is in a weak and risky position.

Debt-to-asset ratios on Illinois grain farms enrolled in Illinois Farm Business Farm Management (FBFM) had an overall downward trend from 1991 to 2012, decreasing from .34 in 1991 to a low of .18 in 2012 (see Table 1). Since 2012, debt-to-asset ratios increased to .21 at the end of 2017 (for more information, see *farmdoc daily*, August 17, 2018). While a general upward trend is not desired, the average debt-to-asset level at the end of 2017 is not particularly troublesome either.

Farms with Over .5 Debt-to-Asset Ratios

While averages serve as good indicators of the general trend, they do not depict the range of financial positions on grain farms. Table 1 shows the percent of farms in categories based on debt-to-asset ratio. In 2005, 11% of the farm had a debt-to-asset ratios less than 0.10, 33% between 0.10 and 0.30, 34% between 0.30 and 0.50, 17% between 0.50 and 0.75, and 5% had a debt-to-asset ratio above .75 (see Table 1). In 2005, 22% of the farms had debt-to-asset ratios above 0.50.

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Table 1. Illinois Grain Farms by Debt-to-Asset Ratio Category

	Year						
	2005	2007	2009	2011	2013	2015	2017
Less than 0.10	11%	14%	17%	21%	22%	22%	21%
0.10 to 0.30	33%	39%	40%	43%	44%	40%	39%
0.30 to 0.50	34%	34%	31%	29%	27%	26%	28%
0.50 to 0.75	17%	11%	10%	6%	6%	10%	10%
Over 0.75	5%	2%	2%	1%	1%	2%	2%
Over 0.50	22%	13%	12%	7%	7%	12%	13%

Source: Illinois Farm Business Farm Management.

This table summarizes data from grain farms in Illinois FBFM who meet the following conditions:

- Are categorized as grain farms, meaning that they receive most of their income from grain operations.
- Are certified usable by FBFM field staff.
- Are sole proprietors. Many farms have more than one person or entity involved, and those entities can have different financial positions. The focus on sole proprietors assures that financial statements are for complete operations.
- Had at least 1,000 tillable acres. This criterion assures that a significant grain enterprise exists on the farm.

Between 2006, and 2013, commodity prices were relatively high and net farm incomes on farms were good. During this period, the percent of farms with debt-to-asset ratios over 0.50 decreased from 22% of the farms in 2005 down to 7% in 2011 and 2013 (see Table 1). At the same time, the percentage of farms with less than a 0.10 debt-to-asset ratios increased from 11% in 2005 up to 22% in 2013.

From 2013 to 2017, commodity prices and incomes were much lower. During this period, the percent of farm with over 0.50 debt-to-asset rats increased from 7% in 2013 to 12% in 2015, and 13% in 2017. Having 13% of the farms in the “over 0.50” deb-to-asset ratio class is not particularly high and is still about half that of the 22% level in 2005. Still, the trend upwards is not a good sign.

Note that the percent of farms with less than 0.10 debt-to-asset ratio have not declined since 2013. There were 22% of the farms with less than 0.10 debt-to-asset ratio in 2013, compared to 21% in 2017. There are a cohort of farms that are maintaining a low debt-to-asset ratio in the lower commodity price period since 2013.

In 2017, 21% and 39% of farms respectively were in the “less than 0.10” and “0.10 to 0.30” debt-to-asset ratio categories. This 60% of farms is extremely strong and can weather the vast majority of events that could possibly occur.

On the other hand, 13% of the farms may face more difficulty if prices and incomes turn down. Farms in this category may need to the sell assets and restructure debt if incomes turn low in 2019.

Commentary

Debt-to-asset positon of farms have worsened since 2013. Still the agricultural sector is remarkably strong. Few farms are in high debt-to-asset ratio classes.

It is likely that debt-to-asset positon will improve in 2018 because of relatively high incomes. Expectations are for worsening situations in 2019 (see *farmdoc daily*, September 18, 2018 and *farmdoc daily*, October 30, 2018).

More detail on the financial positon of farms is provided in a *farmdoc daily* (October 23, 2018) entitled "Incidence of Financial Stress on Illinois Grain Farms".

References

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