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Your Farm's Financial Health (Debt-to-Asset Ratio)

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The end of another year approaches – time to close out your accounting records for the year and review financial statements to assess the financial health of your business.This post will focus on the debt-to-asset ratio and how it tells about the risk exposure of your business.

The calculation is an easy one. From your December 31, 2012 farm business balance sheet, find your total debt on the right hand side towards the bottom. Now, find your total assets from the bottom of the left hand column and use the fair market value of your assets (not the modified cost basis). The math is easy – take the total debt and divide by total assets – and you have your debt-to-asset ratio. You should end up with a value between zero and one. Think of it as a percentage – it's the percentage of your business that your lender owns, so in general a smaller value is better than a larger value since a higher ratio is sign of greater financial risk.

The debt-to-asset ratio compares farm debt obligations to the value of farm assets. The greater your debt-to-asset ratio, the greater the level of financial leverage. That leverage is a wonderful thing when it is working for you and it is a force to be reckoned with when it is working against you.

The debt-to-asset ratio is obviously influenced by asset values, and our land values have been increasing at a rapid rate. If one's debt load remains steady, increasing land prices will lower the debt-to-asset ratio. Some would argue that including a deferred tax liability on the debt side of one's balance sheet is appropriate when using the fair market value of assets when calculating the debt-to-asset ratio. Debt-to-asset ratios are comparable, but there are some trends that emerge when multiple years data are reviewed.

To put your debt-to-asset ratio in perspective consider Table 1 for a review of the debt-to-asset ratio by age group over a five-year period. In general, debt-to-asset ratios tend to be higher at the outset of one's farming career. As one moves farther into their farming career and has had the opportunity to earn a profit over a number of years, this allows for debt repayment and makes for the trend to a lower debt-to-asset ratio as one ages.

Table 1. Median Debt-to-Asset Ratio (by Age Groups)

	<30	30-39	40-49	50-59	60+
2011	0.38	0.38	0.28	0.22	0.12
2010	0.43	0.39	0.29	0.24	0.11
2009	0.36	0.4	0.31	0.24	0.13
2008	0.41	0.36	0.3	0.24	0.13
2007	0.39	0.36	0.32	0.25	0.15

Again, for perspective, Table 2 reviews median debt-to-asset ratios by farm type. In general, farms with a significant livestock component carry higher debt-to-asset ratios without regard to the species. For this period, the median debt-to-asset ratio of hog farms has decreased while that of dairy and cattle farms has increased. Grain farms have carried a relatively steady level of debt compared to assets over the five years.

Table 2. Median Debt-to-Asset Ratio (by Farm Type)

	Hog	Grain	Dairy	Cattle
2011	0.22	0.2	0.29	0.29
2010	0.3	0.21	0.34	0.35
2009	0.33	0.23	0.32	0.33
2008	0.33	0.23	0.32	0.2
2007	0.33	0.24	0.27	0.23

For a final comparison, find the column in Table 3 below that corresponds to your debt-to-asset ratio. Then compare your current ratio with the five year history of median current ratios shown. Those with a lower debt-to-asset ratio tend to have higher current ratios and the reverse is true as well.

Table 3. Median Current Ratio (by Debt-to-Asset Groups)

	0-.20	.21-.40	.41-.70	.71-1.00
2011	5.73	1.95	1.29	1.13
2010	6.08	1.9	1.24	0.8
2009	5.63	1.82	1.16	0.83
2008	6.21	2.04	1.33	0.98
2007	6.43	1.95	1.27	0.93

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available to all farm operators in Illinois. FBFM staff provide counsel along with recordkeeping, farm financial management, business entity planning and income tax management. For more information, please contact the State FBFM Office located at the University of Illinois Department of Agricultural and Consumer Economics at 217.333.5511 or visit the FBFM website at fbfm.org