Economic Toolbox

The Little Ratio That Could

"Hello...Hello...Hello? Does anybody hear me? Oh how I wish I could really talk. This passive communication just doesn't seem to be working that well. I sit here on this page with a dumb stare on my face screaming "*Read me! Read me!*" Then I realize I'm not underlined, not italicized, not even printed in bold. What's worse, I'm stuck near the end of a very long and sleepy financial report.

"Oh yea, once in a while someone will write about me or mention my name at some financial analysis seminar. I'm "important" they say, in fact, one of the most important financial ratios available for business analysis. But then I'm pushed back to the world of the obscure and forgotten, keeping company with great has-beens like the buggy whip, the milk can and that idiot cousin of mine, return on equity. The truth is out there and if it could only be known that I'm as useful now as the day I was invented. I never get obsolete, I don't rust, and I have no parts to wear-out. My only bane is that I am plain-faced!

"None of the other financial ratios tell the story of your business like I do. In fact, I believe that when ancient eastern philosophers asked their students to describe the sound of one hand clapping, it's me they were looking for. I'm both the starting point and the ending point of your farm analysis. I'm the end to your means. My simple three or four digits and a decimal point incorporate income, expense, owner withdrawals and the whole left side of the balance sheet. I sum up efficiencies for the use of capital and labor. I can both tell the history of and predict the future of your business. You can use me to compare your farm business to other businesses or farms. Heck, use me to compare your business to the returns you would get on your savings account or the stock market. If you haven't guesses by now, my name is Return On Assets or ROA. Sometimes, people refer to me as ROI or Return on Investment, but I prefer ROA.

“I have often wondered why such a useful gem like myself doesn’t get more attention. The flashy financial measures like Net Income, Percent Equity, and that blowhard Debt Per Cow - they think they’re big shots, grabbing the lime light and puffing up their chests with bold fonts. They even have the audacity to proclaim themselves “Rules of Thumb” even thought they don’t tell you a single thing about the health of your farm business. The nerve!

“I think I’m not used as often as others is because it takes a lot of good information to make me accurate, but my formula is straight forward. I’m (Net Farm Income + Interest Expense - Owner Withdrawals) all divided by Total Assets. Net Farm Income or NFI is income minus the expenses incurred to create that income. Expenses include depreciation and interest. The higher I am, the better. Finally, to be accurate, Total Assets should be the average value of assets at the beginning and end of the year.

“There are two adjustments to NFI before it is related to Total Assets. First, interest expense is added back because it represents the cost of your creditor’s asset contribution to the farm business. I really don’t care who owns the resources, I’m just trying to tell you how efficient you are at using the resources you control. By adding back interest expense, we are putting all farms on equal footing regardless of how much debt they have.

“The second adjustment is to subtract Owner Withdrawals from Net Farm Income. Businesses that are set up as corporations will already have the cost of the owner’s labor and management included as an operating expense. Owner Withdrawals are deducted to make a fair comparison with farms operated as proprietorships.

“The Farm Financial Standards Council counts me as one of four ratios used to measure profitability, and after all, creating profit is the goal of a business. I am superior to Net Farm Income (NFI) in measuring profit because I relate profit to the asset base used to create profit. For example, take two similar farms with the same NFI of $50,000. The

first, smaller farm has $250,000 worth of assets (real estate, livestock, equipment, inventories, etc.) and the second, larger farm has $500,000 worth of assets. Both farmers might have equal sized smiles with a $50,000 Net Farm Income. Assuming for illustration no owner withdrawals or interest expense, the smaller farm's ROA computes to 20% while the second farm's ROA is only 10%. The first farm generated the same profit using half of the assets of the larger farm. Which farmer would you expect to have a slightly bigger smile after seeing this analysis?

"ROA can only indicate that there is or is not a profitability problem on the farm. I cannot tell you why there is a problem or how to fix it. However, I can point you in several directions to look for problems. First, NFI may be too low because of poor operating efficiencies. Check your operating expense ratio ((expenses + interest + depreciation) / income)) to see if it's around 70% or lower. A high operating ratio can indicate poor cost control, low yields, or an inability to capture price incentives. Next, your asset base may be too high - you may have excess real estate, equipment or livestock that could be sold or used more efficiently. Finally, owner withdrawals may be too high for the size of your farm business.

"Compare me to returns from non-farm investments to see how your net farm income stacks-up against other alternatives. Assuming you provide realistic fair market values to your assets, compare your ROA to the 2.5% return on cash in a savings account or the 6% on long-term certificates of deposit or perhaps the 12% return you could get from investing in the stock market. Few farmers actually decide to forego farming for the potential to earn more income by not farming, but most can at least gauge the opportunity cost of staying in farming.

"Put me on a trend analysis and I can show you the results of your management decisions regarding capital investment for expansions, new equipment or operating procedures. Prof. David Kohl says that declining ROA's can predict cash flow problems

two to five years in advance. Since we all know that having your teeth drilled is more favorable than having cash flow problems, use me to help avoid bigger problems down the road.

“A recent analysis of dairy farm businesses for 1997 showed a 20% ROA for the top 20 percent of farms and -4% ROA for the bottom 20 percent with an average of 5.8% Cornell’s Dairy Farm Business Summary shows an average ROA between 3 and 8 percent for the last 30 years. If you want my advice, I’d shoot for at least twice the industry average ROA for your type of farm business to maintain a firm position in farming.

ROA gratefully acknowledges that it was finally given a voice by Bruce Dehm, president of Dehm Associates, a farm business services company in Geneseo, New York.