What Is Your Level of Profitability?

-by-
Tom Kriegl
UW Center for Dairy Profitability

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Introduction

The following illustrates an approach that has helped farm families appreciate the impact of profitability on their business and way of life without requiring them to become economists or accountants. Farm families can use this approach to understand the price they pay for the choices they make.

The Concept of Profit

Profitability, solvency, and liquidity are the three most important goals of any business. Profitability is the most important one. In family businesses such as a farm, the goal of profitability competes with non-business goals, such as having adequate leisure time.

Where profitability ranks with these non-business goals is the choice of the family, but farm families need to remember that, in most cases, the farm must provide a living if it is to continue to be a way of life. So while being extremely profitable is seldom the number one goal of farm families, being at least somewhat profitable has to be one of their primary goals.

As a goal, profit isn't always understood well. Sometimes it is confused with cash flow. Sometimes it is confused with the highest income or the lowest cost. In rough terms, profitability is income minus expense. Ideally the difference is positive and large. In contrast, cash flow is money in and money out. Cash flow doesn't differentiate between money that is earned versus money that is borrowed or received as a gift or prize.

Businesses that view profitability as the number one goal have a very precise method for measuring profitability. The detailed method of calculating profitability is described very well in several references and is not repeated in the body of this article. Briefly, the calculation of profitability in general terms is as follows:

Gross Cash Farm Income
- Gross Cash Farm Expense
= Net Cash Farm Income
+/- Inventory Changes (feed quantity changes is an example)
+/- Capital Item Adjustments (depreciation and machine purchases are examples)
= Net Farm Income From Operations (NFIFO)

NFIFO is the return to the resources contributed to the farm business by the farm family: to unpaid family labor, to unpaid family management, and to the family's equity (net worth) in the farm business. Quite often, NFIFO is less than the opportunity cost of unpaid family labor, management and equity capital. A simple definition of opportunity cost is “the best alternative return that could be earned by the operator's labor, management, and equity capital.”

For the farm family without non-farm income, NFIFO is the source of funds for family living expenses, including housing and furnishings, food, medical expenses, children's education, the family car, entertainment, social security taxes, income taxes, and other personal items. It also represents money to pay principal on borrowings for land, buildings, and equipment and is a source of funds for new business and personal savings.

As the basic formula for calculating NFIFO shows, NFIFO typically consists of cash and non-cash components. Both components together represent a level of profit. In contrast, only the cash component is part of cash flow, but cash flow can include sources of cash that are not part of profit. Such sources of cash include loans, savings from previous years, gifts, inheritances and prizes. The amount of cash inflow minus cash outflow is often a larger amount than NFIFO. When this happens it can create a false sense of affluence for the farm family. Profit and cash flow are significantly different!

If family living expenses exceed NFIFO, equity will decline if there are no outside sources of income, whether or not NFIFO equals or exceeds opportunity costs. The cash to pay for living expenses above NFIFO may come from loans, savings, or from the portion of net farm earnings allocated to capital item or inventory adjustment. When the latter happens, it is often said that the family is living off of depreciation. This is a way in which cash flow can hide a lack of profitability.

Quite often, NFIFO is less than family living costs, which can cause the family to rely on non-farm sources for even the basic essentials of family living. One has to question the viability of any business that fully uses most of the family's labor, management and equity but doesn't support it without non-farm income. Prolongation of this situation will tend to discourage farm families who then might quit farming to use their resources elsewhere.

Profitability Levels - Economic and Normal Profits Defined

If NFIFO provides enough dollars to exactly pay the opportunity cost, (the best alternative return that could be earned by the operator's labor, management, and equity capital) then the business has produced what an economist would call a normal profit. It is also the breakeven point between income, expense and the opportunity cost of labor, management and equity. For a particular example family farm, assume a normal profit of exactly $30,000.

More than $30,000 is what an economist would call an economic profit for that example farm. In other words, an economic profit occurs when the collective returns to labor, management, and equity capital (NFIFO) are greater than their opportunity costs. Any economic profits earned by a family farm should be credited as a return to management. If a Fortune 500 company owned that farm and earned less than $30,000 of NFIFO on that farm, they would say they lost money. In fact, they didn't necessarily lose money but they did fall short of their profitability goal. Only if their NFIFO were more than $30,000 would they say they made a profit. This is understandable because Fortune 500 companies hire labor

and management who expect to be paid wages and salary. Equity in Fortune 500 companies is owned by stockholders who expect regular dividends.

Fortune 500 companies don't always succeed in making an economic profit or any profit at all but they also are not eager to enter any business activity not likely to produce an economic profit.
The fact that investors are constantly looking for opportunities to earn economic profits makes it difficult to maintain profits at that level. As more and more entities compete for economic profits, the industry initially finds ways to reduce the cost of production via increased efficiency. This may allow economic profits to persist for a while. But eventually competition narrows the margin between income and expense until economic profits disappear. As economic profits disappear, the least efficient producers may fail to achieve even normal profits and may go out of business. If enough of them leave the industry, economic profits might return only to repeat the cycle.

So far there have always been more than enough people whose desire to farm is stronger than their desire to earn economic profits. One of the reasons that economic profits do not often occur in farming is that too many people are willing to contribute too much labor, management and equity for economic profits to exist.

Farms rarely earn economic profits. If everyone decided that they would not invest in a farming operation unless it offered the realistic opportunity to earn economic profits, then it might be more possible for the remaining farmers to reach that standard of profitability. In such a world, some people who desired economic profits more than they desired farming as an occupation would choose to quit farming to achieve the other goal. In such a case, there may be fewer farmers and less invested in agriculture than there is now.

PROFITABILITY LEVELS - PURPOSE

So how much can anyone relax their standards of profitability if they have a strong desire to farm? The answer to this question is different for each individual. However, the following descriptions are offered to help individuals assess the risk of failure they accept at different levels of expected profitability. The descriptions can be especially useful when someone is deciding about their first investment in farming, when faced with a major investment decision in their existing farm operation and when their farm operation has financial difficulty. The descriptions of profitability levels are in numerical sequence to assist reader's understanding. The description levels are numbered from one to ten with ten being the most desirable and one being the least desirable level.

It is not suggested that anyone starts or tries to start on one extreme with the intent of finishing at the other extreme. Between the extremes, family farms can move from level to level in either direction even though the closer a farm's profitability is to level one, the greater the tendency for movement to be toward level one. Ideally, one would begin at level ten and remain there. While that seldom happens, some people do begin at level seven or eight and move up. Others move down. Most farms bounce between levels, five, six, seven, and eight with variations in weather, price, and other factors.

Ten Profitability Levels

Level ten, the highest level, is an economic profit or where NFIFO is greater than the opportunity cost of unpaid labor, management and equity capital.

Level nine is a normal profit where NFIFO exactly equals the opportunity costs of labor, management, and equity.

Level eight is a level below normal profit but high enough to pay business expenses, provide a comfortable family living and allow some increase in family savings over and above the increase in equity that occurs when loans on assets are paid.

Level seven differs from level eight in that there isn't enough profit to increase family savings over and above farm equity increases.

Level six differs from level seven in that business expenses cannot be paid while maintaining a satisfactory standard of living unless savings are used or non-farm income is earned.

Level five differs from level six in that necessary bills are paid but family living is quite restricted even if there is non- farm income.
By level five there is little if any savings (other than equity) left over from other years.

Level four differs from level five in that despite the belt tightening of level five, loans are refinanced to defer principal payments as long as possible so that other bills can be paid. This can accurately be called mortgaging the future. Money for family living is restricted even if non-farm income is available. Sometimes refinancing occurs at an earlier step. In the 1970s and early 1980s, inflating asset values allowed many family farms to regularly borrow more money despite continued low levels of profitability.

Level three differs from level four in that there is not enough money to pay even the restructured principal payments although the family severely restricts personal expenses to pay essential current business expenses. Unpaid bills accumulate. If it wasn't already occurring as early as level six, by now most of the non-farm income is being used for the farm instead of for the family. Equity is declining very rapidly while debt increases with equal speed.

At level two, there isn't enough money to pay all current business or other expenses despite non-farm income and loan restructuring. Unpaid bills pile up with ever-increasing speed.

At level one, insolvency occurs if stress didn't end the business a few levels earlier.

Profitability Levels - Further Interpretation

The more one relaxes their standard of profitability below economic profits (Level ten) the greater the risk that is assumed and the easier one falls to the next lowest level. The farther down the numerical sequence of levels, the faster one goes in the wrong direction.

Too many of the farm families that seek financial advice are at level five or lower. At whatever level I find them, I try to help them understand what their level of profit is, and what it would take to move to a higher level. Just as important, I help them understand that the lower the level, the less likely they are to succeed and continue to farm for long. Farm families that find themselves at level six or lower owe it to

themselves to seek financial advice soon. Of course farm families at level seven or higher might also benefit from financial advice.

I get quite enthused about level nine situations and seldom see level ten cases. I'm realistic enough to know that most people would have to wait years to find the right deals if they didn't relax their profitability standards to level eight or seven. However I get quite nervous about any levels lower than level seven especially for anyone getting started in farming. This is because, below level seven, the likelihood of business success decreases substantially.

Summary

Many farm families have a number of non-business goals that interfere with maximizing profitability. This isn't necessarily bad, but too often the level of profitability that farm families are willing to accept, places them under great risk, not only of falling short of business goals, but falling short of personal goals of improved family living and security. Financial analysis can help farm families understand the price they pay for the choices they make.

ENDNOTES

1/ Tom Kriegl is the Farm Management Project Coordinator with the University of Wisconsin Center for Dairy Profitability, Wisconsin and Associate Professor, Department of Agriculture/Agri-Business, Cooperative Extension Service, University of Wisconsin-Extension.

2/ Bulletin NCR-34 contains forms and instructions that will help calculate net farm income and other financial measures.
NCR-34 is out of print but may be available from the University of Wisconsin-Extension, Cooperative Extension Service Agricultural Agent in most Wisconsin counties.

For additional information on completing a net worth statement refer to Taking Inventory of Farm Assets and Liabilities to Build Your Net Worth Statement (Balance Sheet) by Robert A. Luening, Vol. 19, No. 5, September 10, 1986, and Managing The Farm and Recommendations For Preparation of Net Worth and Farm Income Statements by Gary G. Frank, Vol. 25, No.l, May 22, 1992 Managing The Farm.

For a more rigorous discussion of analyzing profitability in any farming venture, refer to Guidelines For Analyzing Financial Performance of Wisconsin Swine Farms by Tom Kriegl and Dan Short, Vol. 24, No. 6, November 15, 1991 Managing The Farm and Profitability, Liquidity, Solvency, Financial Efficiency, and Repayment Capacity (The Pentagon of Financial Analysis) by Gary G. Frank, Vol. 25, No.2, June 15, 1992, Managing The Farm.