

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

IT'S ECONOMIC

H. Evan Drummond with

An Economic Perspective on Profits

by H. Evan Drummond

PROFITS. To Adam Smith profits were the "invisible hand" that drove the free enterprise system. To Karl Marx they represented the value of labor that was exploited by capitalists. To most farmers today profits are little more than a fond memory.

Farmers don't need an economist to tell them profits have all but vanished in recent years. They see it in the red ink in their checkbooks and mounting unpaid bills and in their neighbors' closing-out auctions.

Other rural residents don't need to be told about farmers' economic problems either. Falling land prices, frequent loan defaults and languishing new equipment sales are vivid, unpleasant reminders of the non-profit situation in much of U.S. agriculture today.

Nonetheless, there is a great deal economists can say about why profits are low and what the future implications of low profits might be. Unfortunately, the bottom line from the economist's perspective is that economic profits in agriculture today are a lot lower than the accountants would lead us to believe.

An observation such as this deserves further explanation. To understand the message of the economist, it is important to understand the concept of economic profit as compared to the more commonly known concept of accounting profit. A third concept, opportunity cost, is the key to this understanding.

Economists vs. Accountants

Profit is simply the difference between a firm's revenues and its expenses. Accountants and economists agree on this—but on little else. The essential difference between economic profit and accounting profit is how costs are determined.

To the accountant, a cost occurs whenever a payment is made. In very simple cash accounting the firm's costs include all cash expenditures and the depreciation of goods used in more than one time period. The skill of the accountant is in determining exactly how and when these expenditures will be entered on the books as a cost of the firm.

The economist's view of costs is much broader. Rather than dealing only with payments made by the firm, the economist accounts for the value of all productive resources—say, the farm operator's labor—even if there isn't any payment.

By using the concept of opportunity costs the economist asks, "How much could that resource earn in the highestpaying alternative?" Whatever that may turn out to be is the opportunity cost of the resource.

Wide Differences Possible. In most cases what is paid for a productive resource and its opportunity cost are equal. But in some cases that are particularly important in agriculture, there is a wide difference between payment from the accountant's perspective and what the economist sees as opportunity cost.

Several differences between payment and opportunity cost in agriculture are illustrated in our table—a hypothetical profit-loss statement for a family farm.

Note how the farmer's own labor is handled in the two sets of accounts. The accountant places a zero cost on the farmer's toil since the farmer never pays himself. The economist, however, places a value on that labor since it contributes to the production process.

From economists' perspectives, the final product of the farm has embodied in it the value of the farmer's work. Therefore, they say that work must be accounted for as a cost in the determination of economic profit.

Determining Opportunity Cost. This leads the economist into the dilemma of establishing the value of the farmer's labor in the absence of any payment for that labor. The economist relies on the opportunity cost concept to do this.

In the case of the farmer in our table, the appropriate question is, "How much would that farmer be making if he were not self-employed?" Clearly, this is a hypothetical question that cannot be answered in an unequivocal, exact manner. Nonetheless, the undaunted economist endeavors to provide the best estimate possible of the value of the farmer's labor.

The opportunity cost of our farmer could be determined in any of several different fashions. Which of the alternatives should be used is part of the art of economics.

A common technique for determining opportunity cost is to find out how much farm managers who are not selfemployed are being paid and consider that to be the opportunity cost of the farmer's own labor.

For instance, an adjacent farm may have a paid farm manager who performs most of the same tasks as our farmer and is paid \$30,000 a year for his efforts. We could safely say that the opportunity cost of the self-employed farmer is \$30,000 if these kind of jobs are generally available and our farmer would likely be hired if he applied.

A second approach would be for the

economist to consider if off-farm jobs are available. If there isn't much unemployment in the area and if work at a local factory earns \$8/hour, it would stand to reason that if the farmer weren't farming at all he could earn \$8/hour full-time, or \$16,000 per year. In this case, \$16,000 would be his opportunity cost.

In our example, we have used a \$30,000 opportunity cost for the farmer's own labor. But in any specific situation it could be higher or lower—even zero.

The other significant difference between the two accounts in our table is the land item. The accountant dutifully records how much the farmer paid on his mortgage during the accounting period.

In a rising land market, payments on a mortgage usually grossly underestimate that land value—especially when the land is fully owned by the farmer with no debt outstanding. By contrast in a declining land market payments on mortgages can be inconsistent with the opportunity cost associated with lower land prices.

Determining the value or opportunity cost of land is rather simple. If the farmer were not using the land himself, how much could the farmer earn if the land were rented to someone else?

To determine the current value of a farmer's land, simply determine the cash rent value of similar land in the vicinity and use that value. In our example, a cash rental value of \$30/acre

was determined, so the total economic value (as opposed to expense) of the farmer's 640 acres is \$19,200.

However, it is important to remember that many farmers who bought land in the past 8 years may have the opposite situation—their land expenses substantially exceeds the opportunity cost of that land today.

The Bottom Line. Now let's look at the bottom line in our example. The accountant found that the hypothetical family farm earned a profit of more than \$10,000 for the year, but the economist showed a sizable loss. Such differences are not uncommon in agriculture. Moreover, drastic differences can exist between farmers.

For instance, during the past year citrus farmers in south Florida made substantial economic and accounting profits because of the high orange prices caused by the freeze losses further north. Unfortunately, most of the northern citrus producers suffered economic and accounting losses as a consequence of the freeze.

Whatever the level of profits, economic profits are almost always less than accounting profits since both land and labor are typically undervalued by accountants. But which of these two concepts is more relevant?

Both concepts of profit are important. The accounting concept is closely tied to cash flow and will provide the farmer with an indication of how much money, if any, is left over at the end of the year for such things as living ex-

Hypothetical Profit-Loss Statement for a Typical Family Farm

Item	Accountant	Economist
Revenues		
Crops sold	\$201,600	\$201,600
Custom services	3,000	3,000
Total Revenues	\$204,600	\$204,600
Expenses		
Out of pocket costs	\$120,000	\$120,000
Depreciation	40,000	40,000
Fixed costs	30,000	30,000
Own labor	0	30,000
Land expenses	4,050	19,200
Total Expenses	\$194,050	\$239,200
Profit	\$10,550	-\$34,600

penses and buying another farm.

The economic concept provides an insight as to whether the farmer is earning a resource return consistent with the market value of those resources. An economic loss suggests that the farmer's resources are seriously misallocated. That is, if the resources were employed elsewhere, the return to the farmer's resources would be higher.

Bankruptcy

If accounting losses occur with regularity, bankruptcy is inevitable. If accounting profits are positive and economic profits are negative, the firm may continue to produce. But the real value of assets will slowly erode since some assets are not earning their opportunity cost.

This illustrates an important point with regard to profits. Accounting losses will inevitably drive a farmer into bankruptcy and cause assets to move out of the agricultural sector, but economic losses may not force resources out of agriculture even if they are earning less than their opportunity value in other sectors. This observation is particularly true of human resources.

Most farmers today are suffering substantial economic losses. This suggests that surplus resources exist in the agricultural sector as a whole. In addition, many farmers are suffering accounting losses. These farmers can live off of their savings for a limited time, after which bankruptcy becomes inevitable.

While unpleasant for the individual, bankruptcies should be beneficial to the aggregate sector as resources move out of agriculture—an unpleasant but inevitable conclusion. As resources move out, product prices should increase and economic profit should eventually return to near zero.

If that occurs, accounting profits in the sector should be well above zero. The only problem is that the adjustment process of moving land and labor out of agriculture is difficult and unpleasant. Non-believers haven't been to a farm auction recently.

H. Evan Drummond is Professor of Food & Resource Economics and Assistant Dean for Resident Instruction, College of Agriculture, University of Florida.