Months of high crop prices cause years of low prices

Though crop prices have recently declined from the highs that we saw in the weeks following Russia's invasion of Ukraine, the negative impact of months of high prices on future farm profitability has the potential to precipitate the fourth of the food/agricultural crises that we have been discussing in recent columns (http://www.agpolicy.org/articles22.htm, columns 1134, 1135, and 1136): the farm profitability crisis.

For us, a farm profitability crisis in crop agriculture is characterized by a long period of prices that are near or well below the full cost of production.

As we mentioned in last week's column, other industries also face periods of low prices. They respond by reducing production and thus costs, waiting until profitability to return before resuming more robust production schedules. What makes agriculture different from an industry like automobile production?

Both industries incur fixed and variable costs to produce the items they offer for sale. When we look at the mix, we see that fixed costs are a higher proportion of total production costs in agriculture than they are in auto production.

When faced with low consumer demand and soft prices, the auto industry can reduce its biggest cost: labor. Auto industry executives can reduce work schedules and lay workers off until demand and profitability return. For the auto industry, labor is a variable cost.

On a family farm, the owner and immediate family are also the labor. For these farms, labor is a relatively fixed cost, so farmers, unlike auto executives, cannot save money by laying off some of the labor until profitability returns.

While both agriculture and the auto industry incur fixed costs in machinery and land whether anything is produced or not, total fixed costs are a lower proportion of total costs for industry than they are for agriculture.

The auto industry also differs from agriculture in the nature of the production decision-making process.

In temperate zones, farmers generally can make their production decisions just once a year, spring for fall harvested crops that are then marketed over the ensuing 12 months. They make the production decision well before they know the average price that they will receive over the ensuing crop marketing year.

In contrast, auto executives can regularly adjust production decisions throughout a model year, depending on demand and the number of vehicles on dealer lots.

Farmers may be able to adjust the use of chemicals after the crop is in the ground, but as long as the variable cost for these chemicals results in an increase in the volume of production sufficient to cover the increased cost, the farmer will work to maximize production and a lower net cost per unit of production.

So why don't farmers idle some of their land? There are two reasons. The first reason is contained in the above paragraph. Each acre of production spreads the fixed costs out over more units of production.

Second, idling land incurs costs, in effect increasing the fixed costs. Land cannot be idled without controlling for weeds. If this cost is not paid in the year the land is idled, it will be incurred when the land is brought back into production.

Once an acre of land is brought into production during a high price period, it tends to remain under production for a long period of time. Historically, it has taken a land idling program like the Conservation Reserve Program, to reduce total crop acreage, but even that does not guarantee long-term farm profitability.

The question of maintaining long-term farm profitability is a matter of public food and agricultural policy and not simply textbook economics.

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