Agricultural Policy Questions: Since Prices Are So Low, Why Hasn’t Production Declined?

With crop prices severely depressed for two years in a row, why are we still producing so much grain? One answer—and the one often heard these days—is that it’s the emergency government payments that have made it possible for farmers to continue producing. Of course this is true for some farm operators, but the clear implication of that answer is that if the payments were withdrawn the oversupply problem would disappear.

But is that really true? Given what we know about the nature of agricultural markets, is it credible to decree: “Do away with payments and crop production will decline, inventories will rebalance, and all will be well.”

Given our recent dismal success record in proclaiming ‘only if’ solutions to farm problems, credibility of policy prognosticators is likely to be in short supply. The litany of ‘only if’ answers is indeed long: only if loan rates were lower, only if interest rates were in single digits, only if inflation were conquered, only if the value of the dollar were lower, only if government payments were decoupled, only if there were no government stocks, only if soybean acreages were higher, only if set-aside and bases were eliminated, only if the Asian Crisis had not occurred, only if farmers are given another season to respond, etc. In fact, it would not be surprising if exasperated farmers and others give a “there you go again,” reaction to yet another ‘only if’ solution.

The unfulfilled expectations of one-liner panaceas suggest that it is time to “Get Back to the Basics” of grain market economics. Clearly, the supply and demand structure of grain agriculture is not a textbook case. The markets for crop agriculture do not react robustly to price declines and general oversupplies like the markets for other economic sectors.

Agricultural economists have long known why crop agriculture tends to have price and income problems. But since the 1970s that explanation has been drowned out by the very compelling argument that the nature of agricultural markets has changed to point that now the crop
sector can adjust rapidly to changes in economic conditions just as the textbook suggests. Yet when unleashed to the open market—free of government program constraints—crop agriculture’s adjustments to two years of low prices have not been sufficient to rebalance inventories and raise prices and incomes. While the September issue of Policy Matters very briefly summarized the traditional reasons why agriculture has trouble adjusting to low prices, this issue begins a more detailed explanation. Let’s begin with the supply side.

No Control Over Industry Supply

In contrast to other product-producing industries, there is no leading grain producer to balance grain supply to match demand. In fact, each producer’s output is so miniscule compared to the sector total there is no perceptible influence at all on industry supply and price. In stark contrast, leading firms are large enough in typical nonfarm industries that they can and do influence product prices by governing supply to match demand.

Producers Do Not Decide Industry Size

Unlike nonfarm product-producing industries, crop agriculture does not deliberately plan the production capacity of the sector. In the farming industry, production capacity is driven by technology. Since farmers cannot influence price, the only way they can increase per unit net returns is to slash cost. This competitive struggle to cut costs translates into a continual escalation of productive capacity. Farmers clamor for new cost-reducing and output enhancing technologies. Publicly funded agricultural experiment stations and private firms develop the new technologies including higher-yielding, disease-resistant seed strains, improved chemicals for controlling weeds, insects and diseases and more productive machinery. This combination of ready sources of technology and eager innovators ensure perpetual launching of new technology adoption cycles in agriculture.

Company managers in nonfarm product-producing industries, especially leading firms, use demographic and other projections to estimate potential future demand for their products. Per unit costs are computed at various firm and industry size configurations to evaluate margin opportunities. If the numbers work, they expand. Industry capacity is not left to chance but is part of the business plans of dominant firms.

Producers Always At Full Capacity

Nonfarm industries usually maintain sufficient capacity to meet peak demand periods but they pull back on production schedules when demand is slack. If orders fail to keep pace with production and inventories begin to balloon, selling prices may be reduced but usually as a last resort. Rather the work week is shortened, or workers are furloughed, material purchases are delayed, and production is curtailed. By restraining production, operating costs can be sharply reduced which generally generates a better ‘bottom line’ than making steep price cuts and trying to move large quantities of output. If the imbalance is prolonged, the firm’s highest cost plants may be boarded up or sold to another industry and workers dismissed.

Farmers on the other hand, do not have the option of holding-the-line on price. If crop supplies outstrip demand, it makes no difference what an individual farmer does or does not do, prices are going to fall and without delay. Understanding farmers’ reaction when full production capacity is not required is an important piece of the farm-problem puzzle.
Productive capacity tends to be fully used not only during the crop year but also from one production season to the next. Even when supplies are excessive, farmers find it best to continue full production but readily shift from one crop to another. Individual farmers often find that slowing down farm operations reduces gross income faster than total costs. Adjustments in input applications per acre may reduce or retard growth in yields somewhat, or land may be converted to less intensive uses but few acres are totally idled. Any contribution to paying fixed costs including taxes, insurance and weed control—after paying out-of-pocket crops expense—beats no returns at all.

Farmers natural tendency is to stay in business as long as possible. Farmers are emotionally tied to the land. Also farmers tend to take the long view. They believe that financial hardships come with the territory but if you persevere, reduce per unit costs by using the latest proven technologies, be a steward of the land, work hard and have faith in the future, times will eventually get better. Again, the bias is toward producing at full tilt.

**Individual Farmers May Quit But Land Remains in Production**

When industry capacity far exceeds demand at acceptable prices, both farm and nonfarm firms go broke or reluctantly decide to leave before all their capital is depleted. But the effects are vastly different.

If there are too many tire or tractor plants, the closed plants are offered for sale to some other industry. The plants are removed from the industry list. The total size of the industry is reduced in plant capacity and the real property becomes part of a different industry.

But transference of land and buildings to another industry is usually not possible when a farm fails. Housing developments, high-rise office buildings, and shopping centers are possibilities for farms on the periphery of cities and towns. But most farmland is not so ideally located. What usually happens is that another farmer takes over the land, perhaps, at a lower price or rental rate. He adds the land to his existing operation. And, since his methods may be better, the transaction may actually increase the original farm’s output but a lower fixed cost. Unlike the typical nonfarm industry, the size of the farm industry is typically not reduced when a farmer goes out of business. Some marginal farmland may leave but it produced very little before.

The next issue of the *Policy Matters* Policy Question Series will continue the summary of why agriculture tends to have price and income problems by adding the peculiarities of agricultural demand into the discussion.

The “Agricultural Policy Questions” series of *Policy Matters* continues next month. The February ‘Question’ is “With Prices Low, Why Haven’t Bargain Hunters Scooped Up The Excess Grain?” That issue compares the characteristics of U.S. domestic demand for food and agricultural products to the demand for non-farm products.

In the March issue, we take a look at what makes the grain export market tick (or not tick). We know grain exports have not grown significantly during the last 15 years (Vol. 2, No. 6). What can we realistically expect in the future?

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Policy Matters is a regular publication of the Agricultural Policy Analysis Center (APAC) in the Department of Agricultural Economics and Rural Sociology at the University of Tennessee Institute of Agriculture.

APAC was established in 1992 around the Blasingame Chair of Excellence in Agricultural Policy to conduct research and provide information on the impacts of alternative policies and economic conditions on agricultural output, prices, and income. Analyses are conducted at the representative farm, state, regional, and national levels.

Policy Matters is intended to be a vehicle for APAC to share analyses on farm policy issues and information on the economics of agriculture with farmers, agricultural leaders, policy makers, and researchers in the state and around the nation.

We Welcome Your Input

Are there policy issues you would like to see APAC address? Please contact APAC’s director, Daryll E. Ray, at:

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Include a daytime telephone number or email address and we may contact you about addressing your concerns in a future issue of Policy Matters.

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