

PolicyPennings by Daryll E. Ray & Harwood D. Schaffer

Farm-level production decisions and industry-level impacts

Agricultural policy analysts are faced with three polarities that they have to take into account in their work: microeconomic/macroeconomics; short-term/long-term, and do they develop policy prescriptions that treat the symptoms (low prices) or treat the cause of low prices. The way in which they treat these polarities determines, to a great extent, the policies they design and support. It also affects the advice that they give to farmers and policy makers. In this column we deal with the tension between microeconomic analysis and macroeconomic analysis in the formulation of agricultural commodity policy.

Producers operate their farms using the microeconomic tools they were taught to keep tabs on whether they are generating a profit or a loss from their operation. Microeconomics provides farmers with two strategies—reduce costs and increase production—that they can apply singly or together. The overall goal is to manage these two to find the sweet spot that provides them with the greatest net income.

Finding the sweet spot is a challenge in farming because, unlike many other businesses, agricultural producers cannot precisely control their production which depends, in part, on unpredictable factors like weather and disease. Not only that, farmers do not know the price that will prevail during the marketing year that begins some 4 months after they put the crop in the ground. As a result, most farmers plan their inputs so as to achieve maximum production under optimal conditions. It can be said that, even considering the vagaries of weather and disease, farmers have more control over production than they do price.

When prices are high, farmers seek to maximize production to capture the higher prices and maximize total net income. When prices are low, farmers need to maximize production in order to reduce the per-unit cost of production, with the goal of covering variable costs and as much of the fixed costs as possible. Because farmers have high fixed costs relative to other businesses where labor—that can be idled—is the highest cost they face challenges quite different from those faced by Main Street businesses. For farmers working in a low price period, any contribution in-

creased production can make toward fixed costs helps reduce losses. And, this increased production then leads to a further reduction in price.

This is where economy-wide macroeconomic comes into play. The low-price signals that would lead the manager of an auto repair shop to lay off some workers and reduce the hours of others do not have the same effect on the decisions of crop producers. Until the farmer runs out of money and the bank steps in there are few effective brakes on production. All farmers can do is hope that there will be a production shortfall somewhere other than on their own farm.

None of that would matter if demand for their grains and oilseeds increased at a rate faster than the increase in supply. But, it doesn't except in unusual periods such as the recent increase in corn demand for ethanol. When prices fall domestic consumers do not respond strongly enough to low prices to right the ship. And while exports are thought to be more price responsive than domestic demand, most countries increase imports when they have a shortfall in their domestic production—a factor that is unrelated to price.

All of this results in the lack of timely correction to low prices. When we have been on panels with other agricultural economists, we have described these factors in our presentation to the audience. In their remarks, the other economists strategically avoid any discussion of these factors and instead tout the current “hot” policy prescription. Often in private discussions afterwards with other agricultural economists they say they agree with our analysis of this dynamic. Then they say, “But I don't like the policy implications of that kind of analysis.”

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