A farm program that addresses the root problem

In our previous column (http://tinyurl.com/y89hzf39), we introduced a farm bill policy study that we are conducting for the Texas Farmers Union. The study indicates that the policy we designed in conjunction with a representative group of farmers from Texas would provide farmers with $82.7 billion in average national net farm income for the 2017-2026 period, compared to USDA's estimate of $58.0 billion under a continuation of the present policies. The APAC/TFU study also results in lower annual government costs—$59.3 billion compared to $82.7 billion under present policies, a savings of $234 billion over the ten-year period used by Congress to evaluate the budgetary implications of legislative items.

In this column, we provide a general description of the program we use to achieve these results. Over the coming weeks, we will discuss the various elements of this program in greater detail. We hope that we don't get too far into the weeds of the proposed policy for the general reader. But at the same time, we want to provide enough detail so that our readers have a good understanding of how the program works and why certain policy decisions were made in designing the program.

To achieve higher net farm income and lower government costs than those in the USDA 2017-2026 Projections, we replace the Agricultural Risk Coverage (ARC) and Price Loss Coverage (PLC) programs with a supply management program for the 8 major crops (barley, corn, cotton, grain sorghum, oats, rice, soybeans, and wheat).

In a supply management program, the government establishes a loan rate (effective floor price) for each of these commodities and takes off the market the quantity of those commodities that is sufficient to achieve the established minimum price level. When the US previously used a supply management program, the season average price generally remained at least 10 percent above the loan rate.

The amount of the commodity taken off the market is held in a reserve until the market price reaches a specified release price level. This happens in response to either a production shortfall like we saw in 2012 in corn or a sudden increase in demand like the entry of the Soviet Union into international grain markets in the early 1970s. Once the market price of a commodity reaches the release price, reserve commodities are sold to prevent the price from going any higher.

If the reserve takes in the allocated amount of a commodity and the price remains low, the government institutes an acreage reduction program as a means of reducing production to more closely mirror current demand.

A supply management program protects farmers from extended periods of low prices through the establishment of a loan rate and reserve program. With a supply of reserve stocks and a release price, the supply management program protects consumers from extremely high prices and assures the market of a stable supply of essential storable farm commodities.

Opponents of supply management programs argue against government interference in agricultural production decisions asserting that free markets should govern these decisions. For most products that is a rock-solid, valid argument. But in the case of agricultural commodity markets there are price responsiveness problems that need to be taken into account.

On the consumption side, after basic nutritional levels are met, consumers do not respond to price declines by expanding overall food consumption. Drop the price of cars and the

oversupply of vehicles quickly evaporates and prices bounce back. In case of food, it is literally impossible for consumers to eat through the oversupply to the point that prices recover. Economists call this the low price-elasticity of demand.

There is also a price responsiveness problem on the production side. Crop producers tend to keep on all their cropland in production from one season to the next. Hence total agricultural production declines little even when prices decline sharply. They may switch crops in an attempt to increase net revenue, but they will plant all of their cropland to something. This characteristic is what economists call a low price-elasticity of total agricultural crop supply.

By setting a floor price, a supply management program corrects for the low price-elasticity of demand by taking excess supply out of the commercial marketplace. Likewise, by instituting an acreage reduction program a supply management program corrects for the low price-elasticity of supply. In both cases, less output is on the market when prices are "low."

By acknowledging the price responsiveness characteristics of aggregate agriculture, judicious government policies can create a price band within which agricultural commodity markets efficiently respond to market signals.

One of the advantages of a supply management program when compared to ARC, PLC, Loan Deficiency Payments, and other counter-cyclical programs is that it only pays for the bushels, bales, and hundredweight of agricultural commodities that it takes off the market. These other programs can end up making a payment on every bushel, bale, and hundredweight produced.

In the next column, we begin with a description of how we established the loan rate and release price for commodities in the APAC/TFU supply management program.

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