

The ARC-CO vs. PLC decision in retrospect

Over the last six weeks we have reviewed the US costs and returns for the crops that are most widely grown in the US: corn, soybeans, wheat, cotton, rice, and grain sorghum. Over the last four crop marketing years (2013, 2014, 2015 and 2016), only soybeans (\$23.36 per planted acre based on season average price paid to farmers) and rice (\$78.51) have experienced a positive average net return.

Corn (-\$38.64 per planted acre based on season average price paid to farmers), wheat (-\$79.54), cotton (-\$146.82), and grain sorghum (-\$116.37) have all experienced negative average net returns over the last 4 crop years for which we have full data. At the national level, all crops except soybeans saw negative net crop returns per planted acre in the 2016/2017 crop marketing year. For the 2017/2018 (2017) crop marketing year, the same 5 crops are expected to show losses, with soybeans showing a positive per acre revenue in the single digits.

Farmers saw these weak at best and negative at worst net returns despite their reducing both operating costs and allocated overhead. Prices have fallen further than farmers have been able to reduce their costs.

As a result of these lower prices, US net farm income has declined from \$123.8 billion in calendar year 2013 to a forecast \$63.8 billion in 2017 and a forecast \$59.5 billion in 2018. Of the \$59.5 billion, \$9.3 billion comes from direct government payments.

The last time net farm income was this low was in 2006 when net farm income was \$57.4 billion. This was before the ethanol-boom induced increase in prices that lasted the better part of a decade. By way of contrast, during the 1998-2001 slump in crop prices net farm income ranged from \$47.1 billion to \$54.9 billion. During that period, direct government payments averaged \$19.9 billion a year. Given the change in costs over the last nearly 20 years, 2018's \$59.5 billion does not look good.

The result of this is that bankers are not making 2018 operating loans to some of their farm clients while others are under severe financial pressure. Though things are not as bad as they were in the 1980s, we are seeing the beginnings of a farm crisis. In the coming years, short of a significant crop shortfall in the US or one of its grain/oilseed export competitors, the future looks bleak for the US crop sector and farmers around the world.

This week we intended to use this column to look at the implications of a falling net farm income on farm families, but before we do that (next week) we want to look at the policies that got us to this point. The surprise is not that we are in a potentially extended period of low prices. As our readers have heard us say before, crop agriculture is characterized by long periods of low prices, punctuated by short periods of high prices caused by crop production problems—e.g. 1995 and 2012—and slightly longer periods of high prices that are the result of government actions—WWI, WWII, the early to mid-1970s, and the recent price boom sustained by increasing demand for corn by ethanol plants.

The purpose of agricultural policy is not to gild the lily during the good times, but rather to maintain a healthy agricultural sector during the extended periods of low prices. During the good times, good farm policy, bad farm policy, or no farm policy at all will work just fine. But having to live with bad agricultural policies during times when the price is well below the cost of production is a recipe for disaster. And that is what we are seeing right now.

At the present, agricultural policy for the crop sector is based on crop revenue insurance and the election farmers had to make in 2014 between the Agricultural Risk Coverage (ARC)

program and the Price Loss Coverage (PLC) program. Some have described these as important counter-cyclical programs.

But, of the 3, only the PLC program is truly counter-cyclical.

What do we mean when we say that a program is counter-cyclical?

A counter-cyclical program pays little or nothing when prices are high and either stabilizes prices at a manageable level or provides supplemental income when prices are low. Counter-cyclical programs are not based on what happened last year or what might happen next year; they are based on what is happening in the current crop marketing year.

Using these criteria, despite what members of Congress and leaders of various farm and commodity organizations might have implied, crop revenue insurance is not counter-cyclical. It potentially pays well when prices are high and little when prices are low because it is price-following. The price of the coverage is based on expected prices and when expected prices are low, the level of coverage is low or non-existent. If a farmer's yields are within the normal range and the price is at or above the expected price, the policy pays nothing no matter how low that expected price may be.

ARC is designed to provide revenue protection when the current year's revenue per acre (at the county or individual level, depending on the choice the farmer made in 2014) falls below the prior 5-year county benchmark revenue per acre. That means that even in extremely low-price periods if the current year's revenue per acre is at or above the relevant olympic average revenue, the farmer receives a big fat goose egg. And if they do receive a payment, it is at the end of the crop marketing year, long past the time when they need the money. There are other problems with the program, but these are the big ones.

If a farmer can get no payment at all when prices are low and relatively high payments when prices are high, the farm program is NOT counter-cyclical. And as we have seen that is a characteristic of both crop revenue insurance and the ARC program.

The PLC program does not make payments when the season average price for a given marketing year is above the reference price written into the farm bill (in this case the 2014 Farm Bill). And, unlike the other two programs, the further below the reference price the season average price is, the greater the payment. But even though the PLC program makes no payments when prices are high and increasing payments when prices are below the reference price and falling, it does not meet the criteria of providing adequate supplemental revenue, the price is lower than it needs to be and the payment is only made on 85 percent of the acres and the program yield, which may not be the current yield average for the farm.

Though the PLC is a more income stabilizing program than the ARC program, 92 percent of all corn acres and 96 percent of all soybean acres are enrolled in ARC. We lay the fault for this at the feet of our many of our ag econ colleagues who led farmers to expect that we were on a new price plateau and the expected prices for the life of the farm bill were unlikely to fall below the reference price, though prices were falling just as farmers had to choose which program to participate in. They also suggested that farmers choose the program that would provide them with the highest expected revenue over the life of the farm bill. The result is the percentage levels we see above.

During the same farmer-decision time, we wrote a column explicitly to show that under a low-price scenario, PLC would be the better choice. In our columns, we also reminded farmers that a central focus of agricultural policies has long been to "help protect farmers during the long periods of low prices."

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