University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Cornhusker Economics | Agricultural Economics Department

8-8-2007

Shifting From a Price Safety Net to a Revenue Safety Net

Bradley Lubben
University of Nebraska-Lincoln, blubben2@unl.edu

Follow this and additional works at: http://digitalcommons.unl.edu/agecon_cornhusker

Part of the Agricultural and Resource Economics Commons

Lubben, Bradley, "Shifting From a Price Safety Net to a Revenue Safety Net" (2007). *Cornhusker Economics.* Paper 329.
http://digitalcommons.unl.edu/agecon_cornhusker/329

This Article is brought to you for free and open access by the Agricultural Economics Department at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Cornhusker Economics by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

CORNHUSKER ECONOMICS

University of Nebraska Lincoln

August 8, 2007

University of Nebraska–Lincoln Extension

Institute of Agriculture & Natural Resources
Department of Agricultural Economics
http://www.agecon.unl.edu/Cornhuskereconomics.html

Shifting From a Price Safety Net to a Revenue Safety Net

Market Report	Yr Ago	4 Wks Ago	8/3/07
Livestock and Products, Weekly Average			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight	81.47	88.34	91.84
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb	134.02	132.80	125.50
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb	116.49	111.12	117.50
Choice Boxed Beef, 600-750 lb. Carcass	140.62	139.87	143.75
Western Corn Belt Base Hog Price Carcass, Negotiated	68.13	67.86	70.04
Feeder Pigs, National Direct 50 lbs, FOB	50.09	47.87	54.07
Pork Carcass Cutout, 185 lb. Carcass, 51-52% Lean	72.27	71.84	72.09
Slaughter Lambs, Ch. & Pr., Heavy, Wooled, South Dakota, Direct	94.90	*	105.25
National Carcass Lamb Cutout, FOB	226.13	258.21	255.65
Crops, Daily Spot Prices			
Wheat, No. 1, H.W. Imperial, bu	4.41	5.37	5.70
Corn, No. 2, Yellow Omaha, bu	2.17	3.28	3.14
Soybeans, No. 1, Yellow Omaha, bu	5.27	7.89	7.52
Grain Sorghum, No. 2, Yellow Columbus, cwt	3.30	5.39	5.12
Oats, No. 2, Heavy Minneapolis, MN , bu	2.12	2.76	2.63
Hay			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton	135.00	135.00	135.00
Alfalfa, Large Rounds, Good Platte Valley, ton	87.50	92.50	87.50
Grass Hay, Large Rounds, Good Northeast Nebraska, ton	82.50	*	*

* No market.

In late July, the U.S. House of Representatives passed the *Farm, Nutrition, and Bioenergy Act of 2007*, or the "2007 Farm Bill," to re-authorize farm, food and other agricultural programs for 2008 through 2012. This culminated more than two months of discussion in the House Agriculture Committee and sub-committees and reflected much of the policy direction championed by committee chair Collin Peterson of Minnesota.

In the Senate, the agricultural committee under Chairman Tom Harkin of Iowa, has yet to begin formal consideration of the 2007 Farm Bill. However, given some comments from Senator Harkin, there are some elements of the House-passed version that could show up in an eventual compromise that would mean changes in the basic mechanics of farm commodity programs.

One of the potential changes is a shift from a federal farm income safety net based on price, to one that is in part, based on revenue. Specifically, the House has proposed a revenue-based counter-cyclical payment (revenue-based CCP) as an alternative to the current price-based CCP. The revenue-based program would add yield to the safety net calculation and would make a payment to participating producers when the combination of national average yield and national average price produced a revenue calculation that fell below a target established in the legislation. The target for each program crop was set at the product of the five-year Olympic-average national yield, times the adjusted target price as used for the existing price-based CCP (and as amended in the proposed language). Any shortfall below this target for each crop would be paid out on participating base acres for the respective crop, after adjusting for differences in farm versus national average CCP yield levels, and accounting for payment on only 85 percent of base acres as with the existing direct and CCP programs.

This revenue-based CCP would be offered as an optional alternative to the current price-based CCP. Thus, in the same manner as the 2002 Farm Bill sign-up process, producers would have to make a one-time decision as to whether to sign-up for the revenue- or price-based program. The decision and the program would not affect the direct payment or the marketing loan part of the federal farm income safety net. The direct payment program would remain unchanged and the marketing loan would stay intact, with a few adjustments in loan rates from the current program. The marketing loan would continue to provide price protection below the loan rate and would be the lower bound on the price factor used

IANR

Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the U.S. Department of Agriculture.

University of Nebraska Extension educational programs abide with the non-discrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture.

in the revenue-based CCP, the same as currently exists for the price-based CCP.

Building part of the farm income safety net on a revenue-based CCP instead of a price-based CCP looks appealing to producers, because revenue more directly affects the bottom line for producers than price. It also looks appealing to policymakers concerned about budget costs because the variability of revenue should be less than the variability of price alone, since price and yield are negatively correlated at the national level. As a result, the total payments may be reduced, while maintaining the safety net assistance in years of most concern.

However, there are also many questions about how a revenue program will work that will test how attractive the new policy direction looks to producers. The first is the level of protection actually provided by the safety net. With current higher price levels and forecasts for continued strength in most farm program commodities, the price- and revenue-based CCP would both kick in at levels substantially below current expectations. At a proposed target revenue of $344.12 per acre for corn, the revenue-based CCP safety net would be only about 69 percent of the current expected revenue, using baseline projections for 2008 of $3.22 per bushel and 155.1 bushels per acre. By comparison, the price-based CCP would continue to kick in at $2.35, which is 73 percent of the same $3.22 price expectation.

The numbers suggest that there is less chance of payments under the revenue-based CCP than under the price-based CCP. However, the revenue-based CCP would pay dollar for dollar on losses below the trigger on a producer's payment acres (85 percent of base acres). The price-based CCP pays for each penny in lost market price, but the payment is made on the same payment acres at the CCP program yield, which is itself just a percentage of expected production (e.g., the national average corn CCP program yield is 114.4 bushels per acre, or 72 percent of the same expected yield of 155.1 bushels per acre).

In the end, which CCP alternative would be most attractive to producers is not immediately clear. As proposed, the revenue-based CCP would not kick in as quickly as the price-based CCP, but it would make larger payments once it does kick in. And, the revenue-based CCP would pay for revenue losses due to price and yield, covering a greater degree of risk than the price-based CCP. However, neither program seems likely to make large payments on the major Midwestern program crops if the current market outlook remains for the life of the farm bill. In addition, while the revenue-based CCP potentially offers a better design for risk management protection, calculating it at the national level takes out only some of the systemic risk in production and marketing, and not the idiosyncratic, or distinct, individual risk.

An alternative revenue CCP proposal introduced in the Senate by Dick Durbin of Illinois and Sherrod Brown of Ohio may serve as a marker in the Senate farm bill discussions to replace both the current price-based CCP and also the current marketing loan program. This alternative would establish a moving revenue target based on 90 percent of the trend yield at the state level, multiplied by a three-year moving average national price. After actual state yields and national prices are determined, any shortfall below the revenue target would be covered by the revenue CCP. The actual revenue CCP paid to a farm would equal 90 percent of the shortfall multiplied by the quotient of the farm's actual production history, divided by the state expected trend yield, to adjust for productivity (and expected revenue) differences between farms.

This proposal also leaves several questions to interpretation. The use of a state-level revenue target is potentially much more appealing than a national-level revenue target because of the likely higher correlation of farm yields to state yields instead of national yields. But, the potential performance of the program is still very much related to the factors used in the calculations. The expected yield for each year is based on the trend yield curve estimated from 1980 to 2006. For some crops in some states, the trend yield over that time period has not trended upward very much. Whether it is due to multi-year weather problems bringing down yields at the end of the period or whether it reflects changing production patterns and cropping systems that have changed the average productivity of land devoted to each crop, it affects how high the safety net is and how much of a risk management tool it provides.

The three-year moving average price also means the safety net gradually tracks the market. Thus, it is designed more as a risk management tool than as an income support tool as passed in the House. Even with the moving average and a limit on changes from year to year, a multi-year swing in prices, either higher or lower, could substantially change the level of the safety net relative to long-run expectations. That could make the program relatively expensive if market prices drop from their current levels in the next few years. Conversely, it could make the safety net less effective if producers face a multi-year trough in price levels, such as occurred in the 1998-2001 period.

One other issue with a revenue-based safety net is its relation to crop insurance coverage. The House-passed version does not address any linkage with crop insurance, although a national-level revenue safety net does appear to be a very weak substitute for crop insurance. The Durbin-Brown bill in the Senate proposes a state-level trigger that would be a better substitute for farm or county-level crop insurance products currently on the market. As such, it is formally linked with crop insurance, such that any payments received under the revenue-based CCP would reduce any payments received on crop insurance for the crop on the farm. The goal here is not to eliminate the role of crop insurance, but to pass part of the systemic risk covered by crop insurance to the revenue-based CCP. If effective, the resulting crop insurance policy should be better able to isolate and cover just the idiosyncratic risk on the farm, and as a result be a cheaper, more affordable product that may also be more actuarially sound.

The final product of deliberations on the 2007 Farm Bill are far from complete. In fact, at this stage of the process, it is not entirely clear whether the new farm bill will be finished in time to call it the 2007 Farm Bill. But, it does appear that some new policy alternatives will work into any eventual product, including a gradual shift to revenue-based support. While the concept is appealing from a risk management perspective, there will be numerous issues in terms of how the program is defined and implemented. The level of aggregation (e.g. state versus national) and the level of protection relative to expectations impacts the effectiveness of the program as a risk management tool for producers. The moving average safety net implies more risk protection and less income support than with the fixed safety net. The level of integration of the revenue-based CCP with the existing safety net, including both marketing loans and insurance programs, is critical if the overall safety net is to provide an effective risk management package for producers.

Bradley D. Lubben, (402) 472-2235
Assistant Professor and
Extension Policy Specialist
Department of Agricultural Economics
University of Nebraska–Lincoln
blubben2@unl.edu