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Weather Uncertainty and Financial Risk

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The Revenue Assurance scenario is estimated to save $3 billion per year, after accounting for the increased government contribution of $0.47 billion per year to replace the current crop insurance with revenue assurance. This leaves $1.4 billion available for annual decoupled payments, in addition to transition payments already included in the program design. The adjusted net farm income drops by $1.47 billion. However, this scenario differs from the others in that an average annual increase of nearly $5 billion in government financed insurance indemnities also can be expected. This difference in cash flow by itself would reduce the farm income decline to about $1 billion or $60 for each $100 of budget savings. The "Risky Business" article in this issue indicates that the value of government financed insurance in terms of reducing cash flow risk has been estimated at two times the indemnities payments. Using this factor, net farm income plus the value of insurance drops by $54 billion per year compared with current program levels. This measure of farm sector well-being, therefore, falls by about $34 for each $100 of budget savings.

The main reason that the adjusted No Program and adjusted Revenue Assurance scenarios indicate a smaller income loss per dollar of budget savings compared with increasing flex acres is that these scenarios remove more of the current program constraints, and farming efficiency increases. We have assumed that the decoupled payments are distributed exactly like recent deficiency payments, so as to retain the benefit distribution of current programs. However, Congress could decide to target these payments in another way. As long as they would remain decoupled from production decisions, the principal impact would be on the distribution of income rather than on the level of income in agriculture.

The few options presented here are limited because we have not yet done analyses for specific levels of budget savings. However, these scenarios provide some indication of how the impacts can differ under different methods of achieving budget savings.

Weather Uncertainty and Financial Risk
(Darnell B. Smith, 515/294-1184)

It could well be that for many agricultural producers in the United States, the financial risk due to unusual weather conditions is greater today than at any time in the recent past. The two primary reasons are: (1) Increasing budgetary pressure in Washington, implying that less support for agriculture will be forthcoming in future years, and (2) Last year's federal crop insurance reform, replacing agricultural disaster assistance with low-cost catastrophic (CAT) coverage, offers only minimal risk reduction, at best.

Other articles in this issue have highlighted the expectation of reduced payments to producers as, even without budget cuts, baseline projections already incorporate future payment declines. It, therefore, taxes the imagination to envision that over the medium term, future support to agriculture will, on average, be anything but less than current levels.

Effects of CAT

Although CAT replaced disaster assistance, the coverage level is, at most, 30 percent of expected revenue (50 percent of yield times 60 percent of price) and even then, half the crop must be lost before any indemnities are paid at all. This means that for midrange losses, the losses most likely to occur, producers who did not choose to buy increased coverage will receive no indemnities whatsoever from CAT. For example, suppose an Iowa corn producer expects 150 bushels per acre at a price of $2.40 per bushel. This producer could lose up to 75 bushels per acre and not be eligible for any indemnities at all. With the 50 percent yield deductible, the yield must drop below 75 bushels before coverage kicks in. For each bushel lost past the 50 percent deductible, however, the producer receives payment at 60 percent of expected price ($2.40 x .6 = $1.44 per bushel). So, in this example, if the producer harvests 70 bushels per acre, the covered losses are $7.20 per acre (5 bushels at a rate of $1.44). For every 100 acres, this producer receives $720 in insurance and $16,800 in market receipts for a total of $17,520. The $720 payment covers only 3.75 percent of the $19,200 in lost market revenue.

A comparison with the proposed Revenue Assurance program may prove useful in illustrating differences in risk exposure. If we assume that realized market price is equal to the expected price, $2.40, then the per acre assured revenue for the above example equals .70 times 150 times $2.40, or $252 per acre. In our example, actual market revenue is $168 per acre, with the covered indemnities equaling $84 per acre with total receipts of $25,200 for each 100 acres planted. Thus, this coverage provides producers with an assured cash flow large enough to cover variable cost and some proportion of other costs and expenditures. And in situations of midrange losses, the kind most likely to occur, Revenue Assurance offers a much greater degree of cash flow risk reduction than the CAT.
Revenue Insurance and Revenue Assurance

Interestingly, USDA has officially proposed that a pilot revenue "insurance" program be stipulated in the 1995 Farm Bill. Although all of the details have not been worked out, it appears that producers would be offered a choice between traditional yield insurance and revenue insurance. Reportedly, revenue insurance coverage would involve the same level of federal underwriting and incentives for buyups in coverage as exist with current federally sponsored crop insurance. However, it is not clear what administrative instruments would be employed to bring this about. Also, pilot programs have, in general, not been very successful, as it is hard to change the policy environment for some individuals while, at the same time, keeping everything else the same. Thus, the structure of the proposed pilot program would affect whether or not it became a useful risk management tool for producers.

It is also important to distinguish a pilot revenue insurance program from a pilot revenue assurance program. Whereas, a pilot revenue insurance program could likely be successful under a variety of structures, a pilot revenue assurance program would be very difficult to implement successfully. This is because with the proposed revenue insurance plan, producers would only be giving up yield coverage in return for the higher coverage levels that could be offered for revenue insurance (in general, premiums for revenue insurance are less than yield insurance, making the coverage level higher for a fixed expenditure). From a risk management standpoint, revenue insurance is a better tool for most producers because of the higher coverage levels attainable. Thus, the participation rate for this type of a pilot would likely be quite high. With a revenue assurance pilot, on the other hand, because producers would be asked to give up expected deficiency payments in return for revenue coverage, there would likely be lower participation in the pilot, especially for highly subsidized crops such as cotton and rice. Therefore it would quite probably fail.

The general shift in policy emphasis from income enhancement toward better risk management is not unique to the U.S. policy scene. Other developed nations, such as Canada, New Zealand, and the European Union, also have seen policy shifts along these lines.

Different alternative policies will, by their nature, have much different risk structures. It is important to understand these differences during the present policy debate. Currently, the financial risks due to unusual weather events are probably higher than they have been in a long time. It is hoped that with more discussion of risk differences, producers and policymakers can address these issues in policy debates and in business planning.

Fall Ag Policy Conference to Focus on Livestock Issues

December 13, 1995, is the date set for CARD's annual Fall Agricultural Policy Conference. This year's theme is "New Directions for the Livestock Industry," a continuation of the conference series on "Changes and Choices for Agriculture and Rural Communities." The 1995 event will be held at Kirkwood Community College in Cedar Rapids, Iowa, from 8:30 am to 4:30 pm. This year's policy conference is jointly sponsored by CARD, the Leopold Center for Sustainable Agriculture, ISU Extension, and the Agribusiness Committee of the Cedar Rapids Chamber of Commerce.

Many aspects of the challenges facing the livestock industry will be covered at the conference. Among the general areas to be discussed are production, processing, marketing, development, positioning for the future, and the role of government. The tentative registration fee is $35, which covers the day's activities, refreshment breaks, lunch, and materials.

Planning committee members include Dennis Keeney and Rich Pirog of the Leopold Center; Linda Bostwick, Mike Duffy, Mark Edelman, Phil Hufider, Ron Irvin, and Mark Settle of ISU Extension; Keith Chapman of Kirkwood Community College; Tami Gillmore of KHAK Radio; Tom Glanz of NorWest Bank; Tom Plath of Farm Credit Services of the Midlands; Terry Reilly of Iowa Farmer Today; Tim Stearns of Firstar Bank; Pete Thurman of Federal Hybrid Seed; and Mary Adams, Keith Heffernan, William Meyers, Judith Pim, and Stanley Johnson of CARD.

More information about the Fall Agricultural Policy Conference will appear in the September issue of the Iowa Ag Review. For an update on current planning activities, call Judith Pim at CARD, 515/294-6257.