APAC Agricultural Policy Analysis Center

PolicyPennings by Dr. Daryll E. Ray

Biomass as a part of supply management

The call by some trade negotiators for the elimination of agricultural subsidies in developed countries and Secretary of Agriculture Mike Johanns' listening tour with its focus on the 2007 Farm Bill are stimulating a wide ranging discussion on our favorite topic: agricultural policy. In the process various groups from farmers to agribusiness to environmentalists are all working on writing up recommendations that they believe will result in improved farm legislation.

As a part of that discussion we have suggested that a new vision for agricultural policy ought to be based on a clear set of principles. In an earlier column, we offered three principles that provide a realistic and common sense base upon which to formulate a sensible U.S. agricultural policy. First, farmers should receive the bulk of their income from the marketplace and not the government. Second, agricultural policy needs to be based on the recognition that because of low price responsiveness of both agricultural supply and demand the timely market corrections seen in other economic sectors do not occur in agriculture particularly crop agriculture. Third, U.S. agricultural policy should not contribute toward the dumping of agricultural products on international markets at well below the cost of production, harming farmers in the U.S. and worldwide.

In a prior column, we have shown that the elimination of commodity programs is not the solution to the low price problems of farmers worldwide including farmers in the U.S. The prices for corn, soybeans, and wheat would not increase while the prices of cotton and rice would increase by less than 10 percent in 2011. U.S. crop acreage would decline by less than one-half of one percent, but net farm income would be reduced by 25 percent in 2011 when compared to a continuation of present programs. The elimination of all subsidies does not take into account the unique characteristics of agriculture that form the basis of our second policy principle - the low price responsiveness of agricultural supply and demand.

We have also described a farmer-oriented blueprint which includes (1) acreage diversion through short-term acreage set-asides and longerterm acreage reserves; (2) a farmer-owned food security reserve; and (3) price supports through government commodity purchases.

Under such a blueprint the price of corn in our model was \$3.13/bu, 37 percent above what would be expected under a continuation of the current set

of policies. Similarly, wheat would see a 34 percent increase, soybeans a 24 percent increase, cotton a 16 percent increase, and rice a 24 percent increase. Because the policies were designed to enable farmers to get their income from the marketplace, government payments declined by 57 percent from what would have been expected under a continuation of current policies while net farm income increased by 5 percent to \$50.4 billion.

The farmer-oriented blueprint meets all three of the criteria that we identified. Farmers receive the bulk of their income from the market. The policies provide the supply management that is needed due to the low price responsiveness. And, if the loan rate is properly set, excess agricultural supplies are not dumped into international markets at below the cost of production.

One objection that someone will undoubtedly raise is the fact that with acreage set-asides, farmers are being paid not to farm. We can hear the jokes now about people living on half acre parcels in the suburbs volunteering not to plant 300 acres of corn so they can get the payments. One alternative for the use of the set-aside in the farmer-oriented blueprint is to merge agricultural and energy and subsidize the purchase of perennial biomass crops like switchgrass by utilities for co-firing with coal to generate electricity. Alternately, the biomass could be used to produce ethanol.

Our analysis of this scenario suggests that government payments would decline by 69 percent while net farm income would increase by 10 percent above what would be expected under a continuation of current policies. Corn prices would be \$3.13, wheat \$4.17, soybeans \$6.36, cotton \$0.73, and rice \$8.37. In addition this policy would recycle atmospheric carbon dioxide while reducing the U.S.'s dependence on foreign oil supplies.

In developing the farmer-owned blueprint for supply management of crops, it needs to be recognized that such policies will work as long as the U.S. is the price leader and dominant player in international grain and seed markets. For example, if Brazil continues to expand its soybean acreage to the point that it becomes the price leader, it may be necessary to work together to manage soybean supplies in international markets.

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