American agriculture--the new farm bill

What is the new farm bill for American agriculture? Answer, a dramatic change from previous programs. In simplistic terms production decisions will be made on the basis of market signals. The government has moved out of the business of direct price support and has eliminated acreage set-aside or supply controls. And it will no longer be burdened with the responsibility of commodity reserves. This is a direction that has been under way since the 1990 Farm Bill. But this bill states flatly that there will be no more massive stock reserve programs like the farmer owned reserve program that originated in the volatile period of the 1970s.

Complementing these two rather significant changes is a third component--the elimination of base acreage. American farmers have a long history of base acreage that was carefully monitored since government support was tied directly to commodities grown on this land. For some time there has been substantial pressure to grant more planting flexibility then allowed under the strict base acreage rule. A 1000 acre farm in the Midwest planting 500 acres of corn and 500 acres of soybeans normally participated in government programs to receive commodity support payments. Acreage base reflected this pattern with support tied directly to the 500 acre corn base. Should market price signals stimulate higher corn production this farmer could not respond beyond the base limit of 500 acres. Planting beyond this level would automatically disqualify the producer from receiving government support. The producer could drop out of the program and decide to come back later. But in this event penalties were enforced that resulted in a loss of base acreage, so most farmers participated in farm programs. Set-aside restrictions by the government varied according to market conditions and government stock levels. These decisions by policy makers generally reflected the major shifts in planted area. This will no longer be the case. The walls are down and the American farmer sector is poised like never before to respond directly to market price signals. For this reason the U.S. sector will be an aggressive player in world markets. It will strike quickly if favorable conditions signal the need for expanded production.

A fourth significant component is the 36 million acre Conservation Reserve Program initiated in 1986. This land was idled under ten year contracts that began to expire in 1996. The new bill extends the program. Some environmental restrictions suggest that 7 to 10 million acres currently in the reserve may not be eligible for reenrollment, however it is likely that much of the remaining land will be reenrolled and that some new environmentally sensitive acres will enter the program.

Obviously the level that remains in the reserve program will have a direct impact on U.S. and corresponding world agriculture. A continuation means that the U.S. still maintains a
substantial amount of set-aside land. These reserve lands are rented by the government with a fixed annual payment per acre. The farmer, in order to receive these payments, discontinues crop production and converts to some conservation activity like grass or trees as a primary cover crop.

Finally the farmer does receive a lump sum payment. This payment reflects about 80% of average payments received over the last five years. Payments are guaranteed over the next seven years--through 2002. Some additional conservation practices are mandatory in order to receive this payment. Most are aimed at practices that attempt to minimize erosion. So the government is still in the farm program business, but is no longer involved in the production decision of the American farmer. In this Farm Bill the farmer receives his check, puts it in the bank, pays bills, etc. So the government payment is tied to the farm and the land but not the planting decision. The farmer is free to plant according to the best opportunity that the market will provide.

To summarize, the most significant changes are associated with:

- Elimination of set-aside programs.
- Elimination of farmer owned reserves.
- Elimination of base acreage and most planting restrictions.
- Continuation of the Conservation Reserve Program.
- Seven year contract with government payment roughly 80% of previous historical payments.
- Market-driven price signals.
- Four-year path that eliminates the dairy price support program.

How will American agriculture respond to the new farm bill?

It will make a difference that will be felt in America and the rest of the world. There are several likely implications, obviously all are at best educated guesses. We have never experienced this level of market influence--at least not since the 1930s which is farther back in history than our econometric models track. Our models are not conditioned to accommodate this farm bill. This is especially the case for estimating farmer supply response. All our models are built over periods of time where government and market signals were interconnected. This is what the equation picked up so turning off government programs completely throws our area equations out of balance. We have some signals that are helpful, but must go through a learning curve like everyone else before we can be completely certain of our projections. Nonetheless there still exist economic signals that can be monitored and utilized in these decision oriented systems maintained by FAPRI. So much for qualifications--now on to estimated guesses.

Price paths of major crops

The current market situation is strongly conditioned by the low levels of carry-in stocks that resulted from small harvests and strong demand in 1995. Given fairly tight reserves and the continuation of the Conservation Reserve Program and moderate expansion in export markets, it is likely that the supply side will play catch up. It will probably take two normal crop years in a row to return farm prices to longer run equilibrium levels. Moderate supply disruptions will simply extend this period.

In the past government reserve programs would have been utilized to offset short crops. Set-aside programs would have been reduced to bring acreage back into production. This is
currently not a problem--set-aside is eliminated. However we still have a sizeable conservation reserve. Because that land cannot easily be returned to production, prices will remain higher for longer than they would have without the conservation reserve program.

Eventually economics begins to work on the supply side. Supply side response may be slow and in many countries partly constrained from immediately responding. But underlying dynamics suggests that eventually production shifts do occur. Crop prices will eventually begin to fall. As they do so, in the American market, very little breaking mechanisms exist. The question becomes, how low is low and for how long? Without set-aside programs and government stock accumulation, the answer is most likely lower than traditionally and staying on the low side longer.

This sequence of events starting in a tight grain situation is likely to produce a set of dynamics resulting in high prices lasting longer than usual followed by low prices that stay longer than usual.

If this is the case, there are fairly serious consequences for American and world agriculture. On one side grain producers benefit at the expense of the livestock and trade sectors. They receive an automatic payment from the government at the same time so they are better off in this case than under the previous farm bill. But this could turn negative eventually shifting the advantage to the livestock industry, consumer and the trade market.

This learning curve will necessarily imply a reaction in the market place to reserve holdings. These will be higher and prices will likely moderate after these conditions are fully understood. But we may go through three to five years of rather substantial swings in crop prices before the market has sufficient time to internalize this likely behavior.

This pattern suggests that the momentum swings in one direction and then flips into the other direction. Major disruptions on the supply or demand side will very likely move price from one extreme to the other or simply sustain them on one side of the band longer.

Certainly greater price risk is implied. The livestock industry, trade sector and the consumer are more vulnerable on the tight side. This pattern will require appropriate marketing steps to insure adequate income protection. Livestock farmers in America will necessarily be forced to develop marketing strategies that lock in feed grain prices or some hedge against these risk. On the crop side farmers will need to take advantage of high prices and consider the possibility of longer term contracts through vehicles like the futures market when prices are on the high side.

Our unit will spend a considerable amount of time on this issue. We will look for longer run averages and begin to assess how high is high and how low is low. We will begin to use this information to advise crop and livestock farmers on appropriate marketing strategies. This area of investigation will consume a good deal of our research time in the next three to five years.