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# Impacts of the 1996 Farm Bill on Price and Income Risk

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The 1996 Farm Bill may be the greatest change in farm policy since the 1930s. Since one of the enduring objectives of farm policy has been to lend price and income stability to agriculture, an important question arises regarding the impacts of the 1996 Farm Bill on price and income risk.

Three primary provisions of the Farm Bill affect the level of price and income risk exposure:

- Substituting lump-sum government contract payments for the target price deficiency payment program.
- Extending almost complete flexibility to farmers in switching cropping patterns (with the exception of fruits and vegetables).
- Reducing the role of government in holding discretionary commodity stocks.

The Bill also initiated/extended provisions for pilot projects to test the feasibility of alternative income insurance systems for managing risk.

This leaflet discusses the potential impacts of these provisions on farmers' price and income risk exposure. In addition to this leaflet, the reader is also encouraged to read information dealing with crop and revenue insurance and alternatives for the 2002 Farm Bill.

## Government Contract Payments

The primary income protection provision of the 1996 Farm Bill is annual lump-sum contract payments to participating farmers. These payments are allocated based on the farm's production and program participation history, and are decoupled from future market prices and production decisions. The amount of the payment was specified by the Congress for each year from 1996 through 2002 (Fig. 1). After reaching a peak of \$5.8 billion in 1998, payments decline to \$4 billion in 2002.

These lump-sum contract payments represent a major change in farm policy. From 1933 to 1973, farmers were afforded price and income protection through the maintenance of relatively high loan level price supports. Except during wars or crop failures, market prices tended to rest on these support levels. In 1973, Congress separated price from income support by instituting the target price provision. When the average market price fell below the target price, the government made up the difference in the form of a deficiency payment. Implementing the target price made it politically feasible for the government to lower loan rates/price supports which allowed U.S. commodities to be more competitive in world markets. The only vestige of the target price concept that remains in the 1996 Farm Bill is the marketing loan provisions, previously used for cotton and rice, where if the world market price falls below the loan rate, the government will make up the difference in a loan deficiency/pop payment.

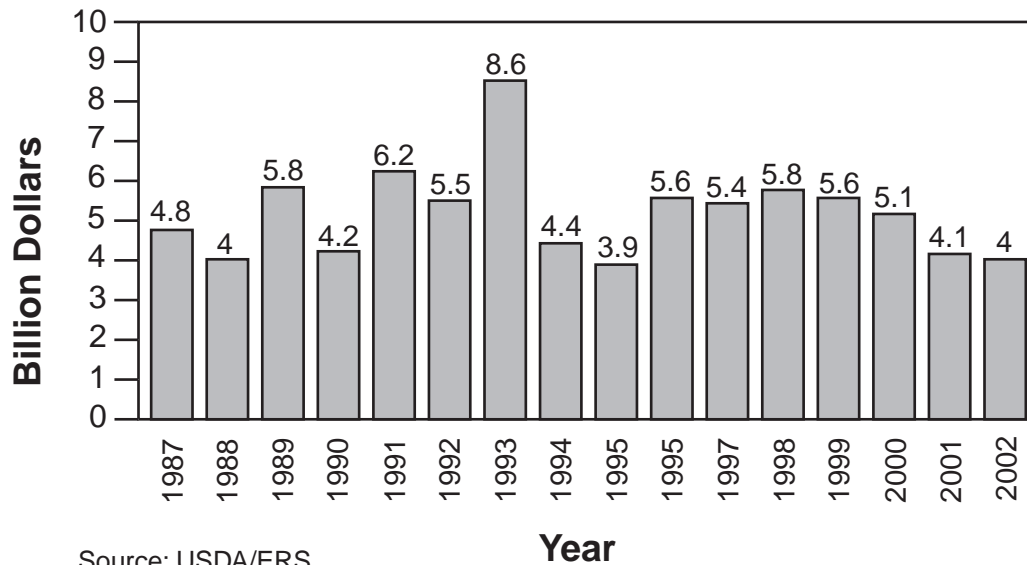
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Figure 1. U.S. Farm Program Payments by Crop Year:  
 Deficiency Payments 1987/95, Contract Payments 1996/2002.



These program changes affected the nature and level of farmers' price and income risk exposure. Before 1973, downside price risk was small because price support loan rates were relatively high. Upside price movement was likewise small because government accumulated stocks were high. After 1973, with lower loan rates, both downside price risk and upside price opportunity increased. However, farmers had income protection whenever the average market price fell below the target price because the government made up the difference in the form of deficiency payments. Since the size of the deficiency payment was the difference between the target price and the U.S. average price received by farmers, individuals with sufficiently superior marketing skills to sell above the average price stood to benefit even more from the program. However, with lower loan rates, farmers' exposure to price risk increased.

Lump-sum contract payments, combined with target price elimination, increased farmers' income exposure to price risk. Farmers lacking marketing skills are particularly vulnerable to the potential for periodically low market prices. The only remaining government program tools for reducing price risk are the nonrecourse loan and the marketing loan. However, loan rates, by law, are capped at relatively low levels for the purpose of maintaining competitiveness in world markets.

### Flexibility

Prior to 1996, wheat, feed grains, cotton and rice farmers' crop production decisions were heavily influenced by the farm program. Each participating farmer had an acreage base.

Producing crops outside the base carried considerable risk in that program benefits were lost for the entire unit. In other words, nonparticipating farmers were required to farm outside the program and their historical base acreage would be adjusted according to a formula based on what they planted. Therefore, it was not surprising that the best predictor of next year's program crop acreage was last year's acreage adjusted for the government-imposed acreage idling requirements. Year-to-year variation in production, therefore, was predominantly a function of yield unless there were major changes in the amount of land that was idled—as in annual acreage set aside requirements for program participation.

The 1996 Farm Bill gave farmers virtually full flexibility to produce whatever crop they desired. However, there are restrictions on farmers who have no previous production history of planting fruits and vegetables. Of course, farmers still need allotments/quotas to produce and market either peanuts or tobacco.

Flexibility affects price and income risk because, as farmers switch acreage, production adjusts and prices change. The amount of added price variability resulting from flexibility is the subject of substantial debate among economists. One camp asserts that since the fundamental factors leading to instability still exist, more production switching logically leads to more price instability. These fundamental factors include the fact that small shifts in quantity produced will result in a relatively larger percentage change in price and the tendency of farmers to make individual production decisions based on current prices. That is, many farmers will, because the price of corn, for example, is high at

planting time, expect it to be high at harvest. If a significant number of farmers come to the same conclusion and plant corn, then future harvest prices will be depressed as the market recognizes the aggregate positive supply impact of the farmers' individual decisions.

The other camp, arguing that there is less price instability under the 1996 Bill, believes that farmers have become more sophisticated than to base production on current prices. Flexibility allows farmers to adjust production patterns to demand and price expectations. In addition, they assert that flexibility inherently makes supply more price responsive, also resulting in less price instability. Moreover, it is suggested that, over time, U.S. farm prices have become a function of global market conditions—making them less sensitive to shifts in U.S. production. In the concluding section of this paper, the authors will provide their perspective on the price risk debate.

### Stocks

Historically, the government has acquired stocks under three programs:

- Through forfeiture of crops under nonrecourse loans to the Commodity Credit Corporation (CCC) when market prices were not sufficiently attractive relative to loan rates to draw them out of the loan.
- Through farmers placing stocks in the Farmer-Owned Reserve (FOR) under primarily a 3-year program which, over time, offered combinations of higher loan rates, storage subsidies and interest subsidies.

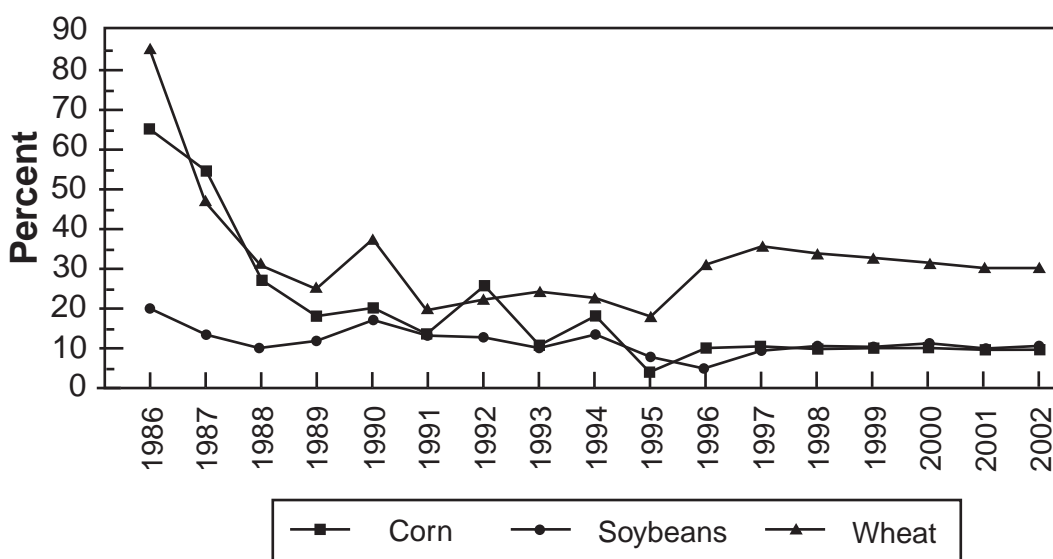
- Through outright government purchases of commodities into reserve stock programs. Recently, these reserves have been limited in quantity, by law, and have been designated as emergency reserves only.

The 1996 Farm Bill restricted government programs designed to encourage the holding of discretionary stocks. It eliminated the FOR, thus reducing the incentives for farmers to hold stocks. The continuation of relatively low loan rates reduces the likelihood that farmers will forfeit commodities to the CCC. If wheat, feed grains, soybean, cotton and rice producers were facing likely forfeiture, the Secretary is directed to move these commodities as rapidly as is feasible through marketing loan provisions. In other words, except for emergency reserves, the 1996 Farm Bill directly instructs the Secretary to minimize CCC stock holding.

These policy changes have shifted stock holdings from the public sector to the private hands of farmers and merchants. As a result, the level of stocks has materially declined (Fig. 2) and, based on FAPRI estimates, will continue to be low throughout the year 2002. Outside of the emergency reserves, stocks are essentially at pipeline levels—the level needed to satisfy the seasonal needs of domestic and export markets.

Tighter stocks mean more price volatility. That is, in the absence of discretionary CCC stocks, prices can be expected to move over a wider range and be more responsive to actual and perceived changes in supply and demand and other market disruptions. Because of agriculture's dependence on a global market place,

Figure 2. U.S. Stocks to Use Ratios – Corn, Soybeans, and Wheat 1986-2002.



Source: USDA/FAPRI

the actual or perceived changes in supply and demand or other market disruptions are not confined solely to the United States. Exposure is a global reality.

## Conclusions

The authors conclude that the 1996 Farm Bill has the net effect of increasing farmers' price and income risk exposure. Reaching this conclusion requires a balancing of opposing forces.

Favoring greater stability, a number of farm program provisions that may, at times, have added to price and income volatility were eliminated by the 1996 Farm Bill. In addition, flexibility increases farmers' ability to adjust to expected price changes and, with globalization, shifts in U.S. production may have relatively less price effect than in the past.

Favoring greater instability, tighter stocks suggest more price movement in response to

changes in supply and demand. Moreover, eliminating the target price more fully exposes farmers to the risk of changing market prices. This increase in price risk exposure is likely less for cotton and rice producers who have operated under a marketing loan since 1985.

On balance, therefore, the 1996 Farm Bill will likely increase the level of price risk. Yet, there is still a safety net in terms of government contract payments, the nonrecourse loan and the marketing loan.

In response to the perception that the 1996 Farm Bill increased risk, the Congress gave the USDA authority to continue to pursue the establishment and evaluation of pilot crop insurance programs in the price and income arena. Separate leaflets describe these programs and evaluate their potential for reducing farmers' risk exposure.

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