DISCUSSION: AN EVALUATION OF THE 1981 FARM PROGRAM FOR CROPS: IMPLICATIONS FOR THE 1985 FARM BILL

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The main substantive results of the analysis by Womack are the simulated effects of the four buffer-stock alternatives; and the (Payment in Kind) program of 1983 as compared to alternatives. These results are generally that reserve programs with a reserve placement trigger well above the CCC loan rate, and coupled with acreage controls to support that price, give the highest market price but lower stocks. The "minimum" (pre-1977 Act) alternative gives higher prices than the loan rate; acreage controls tend to keep price above the loan rate. These qualitative results are sensible, but a simulation model is not necessary to derive them. The 1983-84 PIK program analysis gives some interesting estimates of how much lower prices during that period would have been if less acreage had been removed from production. The answer is a surprisingly small price effect—14 million more acres, yields 20-25 percent more output, but only a 5 percent lower price.

The paper was not clear on how and why the particular 1970-76 and 1973-79 simulations were done. That is, are actual data used in the 1977 Act simulations for 1978-81? Also, target price and loan rates are kept the same in all simulations, so we cannot see what difference they make. We are thus looking at a narrow range of policies.

Generally troublesome is the lack of detail in the paper about (a) what the results look like and (b) what generates the results. For given target and loan prices, varying farmer-owned reserve provisions should affect mostly stabilization, so one would like to see year-by-year effects, with some sort of stochastic results. That is, how was the probability distribution of prices affected? And what happens to exports, yields, and the livestock sector? The within-year discussion was quite opaque to me.

On the issue of what generates the results, we see a table of demand and acreage elasticities, but no specification of equations. That is, how was acreage control put in the supply equations? The best available specifications I know to have been implemented, the approach by James P. Houck and his colleagues at the University of Minnesota, would be quite inadequate here. Also, export demand elasticities are quite low. Explanation is needed.

Most important is non-program stock demand. This seems to be treated simply as a demand component, represented by an elasticity of demand for stocks as a function of current price. But the level of stock demand will in general be sensitive to the public stock regime. That is, where we have government aquisition at the loan rate and release at 1.15 times the loan rate (the "minimum" option), we expect to see very little stockholding as long as the government holds significant stocks (as we actually saw in this regime). But, when the government sells out, private traders might continue to hold substantial quantities (at prices above the release price). The reason is that there is still substantial upside price potential, as we know from the 1970's when prices rose to twice the loan rate. On the other hand, with farmer-owned reserve release at 1.45 and 1.75 times the loan rate there is less room for speculative storage at times when price is, say, 1.3 times the loan rate. But with price at 1.15 times the loan rate, farmers could bet that a release price at 1.75 times the loan rate for wheat would make price rise up to that intermediate level faster, or with higher probability, under the farmer-owned reserve program.

In short, one cannot just use an elasticity of stock demand, but must respecify the profit-seeking storage function separately for each governmental storage program. This is a major problem with the approach as presented in this paper; and I cannot take the results seriously without knowing more about the procedures followed in modeling non-program holding of stocks.

Even if the results hold up, another problem of the paper is that some of the general lessons drawn at the end are not well tied to the simulation results.

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The paper makes a few historical points that are dubious or at least not supported by the work presented. One is that the cornerstone of the 1981 Act is a buffer stock program. Another is the reasons given for implementation of the farmer-owned reserve. A case can be made that the program's political survivability, and its economic downfall, derived from the use of an increased farmer-owned reserves entry price as a method of raising the de facto market support price without raising the loan rate.

In summary, this paper does not have a really convincing story to tell. Not that it is wrong, but one does not get a feel for where some of the key conclusions are coming from, which is required for confidence in them. Generally, it seems that a simulation model like this one is not used to its best advantage in this kind of work, i.e., estimating the effects of actual past programs. The model would be more helpful in obtaining an advance indication of consequences of a fairly narrow range of proposed policy options, such as alternative target price levels in the 1985 farm bill.