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Target Prices in the United States: A Reform that Failed the Political Test

Not every reform is a success, even a reform that may have been thought to have a substantial potential for improving the functioning of policies. In fact, I suppose that if we carefully evaluated the outcomes of a wide range of reforms in agricultural policies we would find that many seemingly reasonable and well thought out proposals when adopted had consequences that were both unanticipated and undesirable.

The concept of target prices represented such a reform in the United States. It was officially introduced in the Agricultural Act of 1973 though its basic framework had been evolving over the previous decade. During the 1950s high and rigid price supports resulted in losses of export markets and accumulation of stocks in government hands. The first responses to this situation were the extensive use of export subsidies and efforts to restrict farm production. The export subsidies took two forms – one was Public Law 480 which made large quantities of agricultural products available free or at low cost to low income countries, and the other was extensive use of export subsidies for commercial sales. especially for wheat, cotton and dairy products.

During this period the Eisenhower administration pressed for lower price supports to discourage production and expand utilization. However, Congress voted to maintain price supports at relatively high levels. Programmes that were adopted to restrain production were generally ineffective. When in the late 1950s some price support levels were introduced, there was clear disappointment in Congress that output did not decline immediately and domestic demand and exports did not respond promptly. Thus the 1950s ended with little apparent progress in finding a solution to problems of large stocks, excess production, limited volume of commercial exports and large governmental expenditures. There was a general failure to agree that the crux of the farm problem was that there were excess resources engaged in US agriculture – there were more resources in agriculture than could earn acceptable incomes at market clearing prices.

Eight years of conflict were seemingly ended by the election of both a Democratic President and Congress in 1960. But such was not the case. While President Kennedy believed the large governmental costs of the farm programme were unsustainable, his proposed approach was to increase the government's role through strict mandatory supply management covering most farm commodities. Congress refused to support the President in his call for mandatory

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control. During the 1950s Congress had persisted in its efforts to achieve a balance between supply and demand at unrealistically high prices through the use of voluntary supply management. Farmers were induced to remove land from cultivation by payments. As surpluses in the hands of the government mounted during the last half of the decade, there was increasing recognition that price supports had been maintained at unrealistic levels and downward adjustments were made, especially for corn, as the decade ended. The price support for corn was reduced from US$62 per ton in 1955 to US$40 in 1960.

President Kennedy desired mandatory controls because he believed that government costs could be substantially reduced. Congress was unwilling to accept mandatory controls – the last thing Congress wanted was to forego the credit for distribution of large payments that were widely dispersed throughout rural America and, in addition, accept the onus for forcing mandatory controls upon their farm constituents. In the end the conflicts between Administration and Congress were resolved by a series of costly voluntary programmes designed to limit crop production and by gradual reductions of price supports on farm crops to or below world market levels. With most crop prices at world market levels, a transition that was largely completed by 1964, farm exports grew significantly, and farm incomes were maintained at politically acceptable levels by direct payments that supplemented the returns from the market prices. By almost any standard, the direct payments were large, averaging for 1966 through 1970 about US$3.5 billion and more than one-fourth of the net farm income of farm operators from their agricultural operations.

The major features of the compromise farm policies that evolved after 1955 were included in the Food and Agriculture Act of 1965. While the legislation was modified somewhat by succeeding acts, most of the basic ideas have remained unchanged until today. The basic concepts were: (l) price supports were to be set at levels that permitted the market to allocate supplies among the various demanders; (2) income support was to be achieved by direct payments that supplemented market receipts; and (3) voluntary methods of achieving supply management when deemed necessary.

What has this history to do with the concept of the target price? Once the basic idea of using direct payments to supplement market prices was accepted, there had to be a criterion for determining the payment. The concept gradually emerged that payments were to represent the difference between a price specifically established in the legislation or, for some commodities, as a given percentage of the parity price.[1] It was also necessary to specify the quantities to which the payments would apply. Prior to 1973 the payments for wheat applied only to domestic use and for corn only to half of the base acreage. Only in the case of cotton did the payments apply to the output from all or nearly all of the land devoted to the crop.

The 1973 legislation, called the Agriculture and Consumer Protection Act of 1973, codified the concept of established price or, as it became known, the target price. The target price was used only for determining deficiency payments – the shortfall, if any, between the target price and the actual market price or the price support of loan level, whichever was higher.[2] The quantity of product to which the deficiency payment applied was not actual output, but equalled the amount determined by multiplying the farm allotment for the crop times the established

yield. The established yield was, approximately, the estimated average yield for the past several years, generally five years. Thus the payments were made for an output level that was approximately equal to the actual output whenever acreage restrictions were in force. The deficiency payments were not the only direct payments to farmers. In most recent years there have been payments made for land set-aside or diverted from production in excess of the amount required to receive the deficiency payments and to participate in the price support loans. In virtually all instances, farmers must take some action to receive the deficiency payments and to be able to receive the price support loans. In recent years, the conditions for receiving the payments have involved making idle from one-quarter to one-third of all the cropland devoted to the major crops. Thus the payments are generally not 'a free good' – after all, there never is a free lunch.

ESTABLISHING THE LEVELS OF TARGET PRICES

The critical feature of target prices is the level at which they are established. In my opinion, the major shortcoming of target prices has been that there is no generally agreed theory or concept to determine the levels of the target prices. What was required was an understanding of what can be accomplished by governmental interventions of different kinds and of what the long-run objectives of agricultural policy should be.

If it is believed, erroneously in my opinion, that a major determinant of the incomes of farm families is the level of prices, then there would be an argument for establishing target prices at the level required to achieve a desired income for farm labour, management and capital. In the 1977 farm legislation the target prices were presumably determined by cost of production and were to be adjusted annually by changes in the variable costs of production.

It is obvious that there are serious limitations to any estimate of cost of production. In any country there are wide variations in costs both regionally and among farms within the same area. Whose costs are to be used? If costs are set at the national mean, many farms will not cover their full costs while others will make substantial profits. Adam Smith taught us that cost of production determines price. It is equally true that price determines cost of production. Have you ever seen a cost of production study in which there was not a close relationship between price and cost of production, whether the price of rice was US$300 a ton or US$1400 or the price of wheat less than US$100 per ton or more than double that?

It is instructive to see how Congress used cost of production to determine target prices. The most difficult issue was to determine what constituted an appropriate measure of the price of or return to land. Should land be valued at its acquisition cost? If land and the rent or return to land is based on current relationships, the estimate of production cost is a circular one since the rent is a function of the return from the product produced on the land. The solution that Congress accepted in 1977 was to use a recent land price and assume a return to land of 3.0 to 3.5 per cent; this was at a time when the rate of interest on farm mortgages was in excess of 8 per cent reflecting anticipated inflation as well as a real return to assets. The cost of production formula that was to be used to adjust

the target prices over time was to reflect only changes in variable costs and not changes in land rents or values.

However, Congress rather soon found that adjusting target prices by cost of production was not to their liking. This was because significant increases in yields resulted in a decline in the estimated cost of production rather than an increase as had been expected. Consequently in legislation passed in 1978 the target price for wheat was increased substantially from the level established just a year earlier. Nothing more was heard about the cost of production and target prices for wheat and in the 1981 legislation all connections between cost of production and target prices were severed.

The level of target prices affects production. Target prices are an indication of what farmers can receive for their output. True, if the deficiency payments are substantial there will be a requirement that farmers not utilize all of their land for current production. Thus farmers will incur certain costs in order to receive the deficiency payments. And the larger are the anticipated deficiency payments, the greater will be the incentive to abide by the requirements with respect to diverting land. The reason for this is very simple – the larger the deficiency payment, the lower is the anticipated market price given a fixed target price.

If target prices are set too high, farmers will be encouraged to devote additional resources to agriculture. Before very long, the additional resources will be reflected in additional output and there will be one of two outcomes. If price supports are above the market clearing level, the government will accumulate stocks or market prices will be permitted to fall to low levels and thus increase the cost of the deficiency payments. In either case, the necessary response will be the imposition of measures to reduce production by restricting the amount of land that can be devoted to the crop.

The absolute level of target prices is an important policy variable since the target prices may serve as a general guide for expected prices. In addition the relative levels of target prices are important – the level of target prices for wheat and corn, for example. One could imagine a situation in which the target price for each commodity was a uniform percentage in excess of either a moving average of market prices or of the projected market clearing prices for the next several years, assuming normal or average climatic conditions. If this were the case, the target prices would not be a significant factor in influencing the relative output levels of the farm products. And if the target prices were only a small percentage, say 10 per cent, in excess of average past or expected future prices, the effects on total resources committed to agriculture would be modest.

It is not at all obvious what criteria policy makers applied in establishing relative target prices. In the 1973 Act the target price for wheat was set at 49 per cent more than for corn on a bushel basis; the farm prices for the decade from 1963 through 1972 were US$1.41 for wheat and US$1.20 for corn, a difference of but 19 per cent in favour of wheat. The relative target prices in the 1977 Act were the same as in the 1973 Act. However, in emergency legislation passed in 1978 the target prices for both wheat and corn were increased but the wheat target price was increased more and was put at 62 per cent greater than for corn. In the 1981 legislation the wheat target price was returned to the same position relative to corn that it had in 1973 and 1977 – namely 50 per cent higher. Target prices and price supports are given in real terms in Table 1.

TABLE 1 *Loan rates or support prices and target prices for farm products, United States, 1974 to 1987 in 1980 purchasing power*[a]

Loan rates or support prices	Wheat	Corn	Sorghum	Barley	Rice[b]	Cotton	Dairy[c]
		(dollars per metric ton)				(cts/lb)	(US$/cwt)
1974	80	69	66	65	264	40	10.43
1975	73	63	60	59	271	49	10.46
1976	112	80	76	75	185	50	11.05
1977	105	100	96	94	174	55	11.46
1978	102	94	89	88	168	57	11.72
1979	100	90	86	84	163	55	12.53
1980	110	88	84	83	157	48	13.10
1981	107	86	82	80	161	47	12.30
1982	112	86	82	80	154	49	11.23
1983	111	86	82	80	148	45	10.82
1984	96	79	76	75	140	44	9.99
1985	93	77	73	72	135	44	8.90
1986	66	56	54	53	63	33	8.67
1987	61	52	50	49	92		8.21
Target prices							
1974	128	86	82	82	–[d]	60	
1975	109	78	74	75	–[d]	55	
1976	114	84	79	80	247	59	
1977	135	100	114	126	232	61	
1978	148	99	107	123	224	62	
1979	136	94	100	120	218	63	
1980	133	93	98	117	209	58	
1981	127	86	91	109	207	64	
1982	127	91	88	102	205	61	
1983	130	93	88	99	207	63	
1984	127	94	90	95	207	64	
1985	123	92	87	92	201	62	
1986	120	89	84	89	196	61	
1987	117	86	82	87	187	58	

Notes: [a]Nominal prices deflated by Gross National Product Implicit Price Deflator, on a 1980 base
[b]Paddy or rough rice
[c]There is no target price for dairy products; price support is for milk for manufacturing
[d]No target price for 1974 or 1975

Source: US Department of Agriculture statistics.

Another relevant comparison is the relationship between the target price and the loan rate. The loan rate or price support level may have a significant effect upon the market price. It is the loan rate that in the short run affects the disposition of the currently available supply – what share will be consumed and what share will be in stocks. During the late 1960s and early 1970s the loan rate for wheat was about 10 per cent more per ton than for corn. This difference was approximately the same as the higher feeding value of wheat, due to its higher protein

content. The difference in the loan rates was increased in the 1973 Act to about 15 per cent but was returned to the earlier relationship in 1977 and was widened again in the late 1970s and in the 1981 Act. During the 1980s the wheat price support has exceeded the corn support by about 20 per cent. I know of no economic rationale for the variations in relative loan rates. These differences represent political decisions.

The 1985 legislation continued the target prices from the previous legislation for the first two years (1986 and 1987) and then provided for minimal reductions of 3 per cent or so for subsequent years. Such was the case, even though the production incentives provided under the 1981 legislation had resulted in very substantial and growing excess capacity in US agriculture. The 1981 legislation also contributed to a major loss of export market share due to the high levels of price supports and the mammoth diversions of cropland in an effort to reduce the overhang of stocks. The stock overhang was only temporarily eliminated by acreage diversion in 1983; by the end of the 1985 crop year grainstocks were even higher than two years earlier.

As is well known, the 1985 legislation made only modest changes to reduce excess capacity but acted to halt and reverse the loss of export market share. That was done by sharply reducing price supports and increasing deficiency payments. In the first year of the legislation (1986) the price support level for wheat was reduced by 27 per cent and corn by 25 per cent without any reduction in target prices. Thus deficiency payments for wheat in 1986 at US$73 per ton represented more than 80 per cent of the price received by farmers. The deficiency payment for corn was US$44 per ton and 58 per cent of the farm price received by farmers. The US did increase its share of world grain exports – not because US agriculture had become more competitive but rather because of a very large increase in subsidies.

TARGET PRICES AND AGRICULTURAL ADJUSTMENT

An appropriate long run objective of agricultural policy is to achieve a situation in which the resources engaged in agriculture receive returns equal to what comparable resources earn in the rest of the economy and to earn those returns from market prices that represent an equilibrium of supply and demand. It is in terms of this objective that one can judge the agricultural policies of the United States and other developed countries, though my comments are restricted to the former.

Some years ago I argued that US farm policy came very close to eliminating the excess capacity in agriculture through the policy adjustments made from the late 1950s to the early 1970s (Johnson, 1973, pp. 41–2). I estimated that for the early 1970s the excess productive capacity of US agriculture, at the price then in effect, was approximately 2 per cent. In a recent study of excess capacity in US agriculture, Dvoskin (1988, p. 23) concluded that excess capacity was approximately 2 per cent in the early 1970s; this estimate was relative to both livestock and crop production capacity. Even the estimate of 2 per cent excess capacity may be on the high side. Dvoskin specifically included the value of food aid in his measure of excess production capacity and my earlier estimate implicitly did

likewise. But food aid has not been entirely surplus disposal; a significant level of food aid was maintained in the years of higher real prices following 1972.

The estimate of such a modest level of excess productive capacity for 1970–2 may seem inconsistent with the high level of government payments under the farm programmes for 1969/70 to 1971/72. These payments averaged US$3.5 billion annually or nearly US$10 billion in 1988 dollars. But as Schuh (1974) pointed out, during the early 1970s the dollar was overvalued by approximately 10 per cent. Since the prices of most farm products were at world market levels – the major exception being dairy – the adverse effects of the overvalued exchange rate on domestic farm prices were approximately the equivalent of the government payments. At most, no more than half of the government payments was available for payment to farm labour and capital. Some part went to landlords and some was required to compensate farmers for the costs of the acreage diversion that they were required to make in order to receive the payments. It may also be noted that much of the 55 million acres of land diverted from crop production would not have been utilized for crop production if there had been no supply management programmes. Even with the increase in real crop prices that occurred in 1973 and 1974 barely more than half had returned to cultivation by 1975 and 1976. Had real crop prices remained at the levels of the early 1970s it was likely that little more than one-third of the diverted land would have returned to cultivation if the government supply management programmes had been eliminated.

From the mid-1950s to 1970 inputs used in agriculture declined by 7 per cent. This was the time when farm programmes were gradually becoming more market orientated. By 1980 inputs had increased by 8 per cent from 1970 levels and had returned to the same level as in the mid-1950s. In effect, the resource adjustments that had been achieved by policy adjustments prior to 1970 had been fully offset.

The increased inputs used in agriculture that occurred during 1970 halted the process of eliminating excess capacity even though agricultural exports more than doubled in real terms between 1970–2 and 1979–80. US agricultural exports reached a peak in constant prices in 1980 and then declined by more than 40 per cent by 1986 (Dvoskin, 1988, p. 17). From 1980 to 1986 inputs used in agriculture declined by 15 per cent. A large part of the input decline was in farm labour, a delayed response to the long-run necessity of reducing farm employment if farm labour is to receive the same return as comparable nonfarm labour. Dvoskin (p. 26) estimates that in spite of the decline in inputs used in agriculture in the 1980s, the fall in exports and limited growth in domestic use of farm products meant that excess agricultural capacity in 1986 of 8 per cent of total agricultural capacity was more than double excess capacity during the earlier peak in the mid-1960s.

A major factor in the reversal of the trend in resource adjustment was that for wheat and corn the real target prices increased substantially from the levels at which the target prices were introduced in the 1973 legislation. These target prices were applicable first in 1974. The subsequent changes in real target prices are given in Table 1. Changes in price supports or loan rates are also provided. The real target price for wheat increased by 25 per cent from 1974 to 1978; 1978 was the first year affected by the 1977 legislation. The real target price for corn

increased by 14 per cent over the same years. Target prices for barley and sorghum, two other feed grains, increased, respectively, by 49 and 30 per cent between 1974 and 1978 (see Table 1). If farmers considered target prices as a reasonable predictor of trends either in prices or gross income, the increase in farm inputs was a rational response.

Another factor influencing input use may have been favourable price expectations derived independently from the increases in real target prices. With the rapid run up in real farm prices that started in mid-1972 there was considerable optimism that agriculture had entered a new era of prosperity. While real prices received did increase significantly in 1973 and 1974, real market prices declined in each succeeding year, returning to the 1972 level by 1977. In the absence of the increasing real target prices, it would be difficult to predict continued profitable price levels in the face of prices that were decreasing year after year.

The 1981 legislation resulted in modest reductions in real target prices from their peaks in the late 1970s. However, throughout the first half of the 1980s the real target prices were higher than when introduced in 1974. This increase in real target prices was in the face of a continuation of the long term decline in real prices received by farmers. History provides no basis for the official optimism regarding the trend in real farm prices that was espoused in the 1970s and, again, in 1981 (Johnson, 1985). From 1955 to 1970 real farm prices received declined at an annual rate of 1.96 per cent; from 1970 to 1986 the annual decline was at the rate of 1.8 per cent. The optimistic views held in Washington clearly misled both farmers and taxpayers. Farmers were misled and responded by expanding the agricultural resource base when it should have been contracted and taxpayers were misled by being told that due to the strength of demand for food the expenditures on the farm programmes would be much less than turned out to be the case.

UNREALISTIC TARGET PRICES AND SUPPLY MANAGEMENT

One inevitable consequence of unrealistically high target prices is that they lead to efforts at supply management and acreage diversion. These, in turn, result in a loss of US export share and an expansion in output in other exporting countries. Supply management does not make a significant contribution to the long-run decline in agricultural resources that is required if farm labour and capital are to continue to receive returns equivalent to those obtained by comparable resources elsewhere in the economy. In fact, supply management and the payments associated with it delay adjustments that must eventually occur.

If target prices are established at levels above the long-run market equilibrium levels, supply management efforts are inevitable. This is true because the fiscal burden of high target prices increases from year to year as output is encouraged to grow more rapidly than consumption increases at market prices influenced by price supports. Thus the excess supply increases and stock increase to unacceptable levels. The validity of this conclusion should by now be obvious. It is clearly supported by US experience in the late 1970s and, particularly, during the 1980s. Further substantiation comes from the recent efforts of the European Community to restrain the budgetary costs of the Common Agricultural Policy. Supply

management is now the vogue after being strongly resisted as neither desirable nor possible. The costs of the CAP grew beyond the available resources of the Community, not once but twice during the 1980s. The path or trajectory of the costs made it clear that a substantial change in price and income policy was required. The change could have been achieved by gradual but substantial reductions in price supports. While there have been some reductions in support levels, the political process did not permit reductions large enough to bring costs within the limits of potentially available resources. In any case, by now it has been learned that resources can be attracted into agriculture at a faster rate than it is feasible to expect them to be withdrawn. Thus it was nearly inevitable that the EC would turn to supply management as the route by which costs are to be contained. But the EC will discover that supply management is nothing more than a palliative and is in no way a long-run solution. In fact, supply management may be likened to drug addiction – giving it up is very difficult, indeed.

DISTRIBUTION OF INCOME IN AGRICULTURE

It is difficult, one might say impossible, to determine with any degree of accuracy what the income distribution objectives of farm price policies are for any industrial nation, and the United States is no exception. Some three decades ago the rhetoric emphasized the much lower average incomes of farm families from agriculture than the family incomes in the non-farm population. However, the evidence was so clear that higher output prices had little or no effect upon the incomes of the smaller or noncommercial farms that the emphasis shifted to the incomes of the larger farms which were defined as commercial farms.

Income distribution can be viewed in two quite distinct ways. One relates to equity and the other to economic welfare – how income is distributed among farm families and the efficiency with which resources are allocated between agriculture and the rest of the economy. There is a third approach which is really a combination of these two – the comparison of the average real incomes of farm and non-farm families. This latter comparison involves the combination of the distribution of wealth, assets or ownership of resources on the one hand, and the prices received for the services of the resources on the other. Resources are defined to include both material and human resources. Thus whether the mean and other characteristics of the income distribution of farm families differ from those for non-farm families is a function of the product of the distribution of assets owned and the prices of the flow of services from those assets. An efficient allocation of resources between agriculture and nonagriculture could be consistent with quite different mean incomes for farm and non-farm families. Mean incomes of farm families could exceed those of non-farm families even if resource prices for comparable resources were less in agriculture than in the rest of the economy if farm families owned more assets than non-families. And in high income countries such as the United States and probably in Western Europe, the farm families that operate the larger farms that produce 75 per cent or more of national farm assets have substantially more net assets than the average non-farm families and much higher incomes.[3]

Economists have known for several decades that the benefits derived from higher price supports go primarily to a small percentage of farm families. For some time, perhaps two decades, well informed policy makers concerned with agriculture also have known how unequal the distribution of benefits has been. In the United States the inequality in distribution of benefits has resulted in efforts, largely of little avail, to limit the size of payments made to any individual.

A rough approximation of the degree of inequality in the distribution of benefits from target prices in the United States can be derived from the distribution of deficiency payments. In 1986, 56 per cent of the direct government payments went to 14 per cent of the farm enterprises that had sales in excess of US$100,000. These farms accounted for 76 per cent of farm sales. The average net income from farming was US$118,000 to which needs to be added off-farm income averaging of US$14,000. The average family incomes of these farm operators was approximately four times the national average family income (USDA, 1987, pp. 33–48 and, 1988, p. 51).

Two caveats should be made with respect to the distribution of direct payments. First, not all of the payment is available as net income; farmers must sacrifice income earning alternatives to receive the payments and incur certain expenses as well. Even with payments as large as they were in 1986, 17 per cent of the wheat base acreage and 12 per cent of the corn base did not participate in the programmes. Thus for some farmers the costs of participation are quite substantial. Second, some benefits result from higher market prices due either to the effects of supply management (wheat, feed grains and cotton) or to high price supports (dairy, sugar, and peanuts). I know of no study of the distribution of benefits from the dairy programmes, which is the largest of the sectors relying upon price supports for the income transfers. However, there does exist a study of the 1978 programme for commodities with target prices and supply management (Lin, Johnson and Calvin, 1981). Estimates were made of the distribution of benefits by farm size (acres) due to direct payment plus indirect price benefits minus income foregone on set-aside acres. It was estimated (p. 26) that 55.5 per cent of the net benefits went to the 10 per cent of the farms with the largest acreage, 82 per cent went to largest 30 per cent and just 8.5 went to the smallest 50 per cent. Under the conditions prevailing in 1978, it was estimated that net benefits, including the price enhancement, amounted to 86 per cent of the amount of the direct payments.

Based on the relationships between the direct payments and the net cash incomes of farms classified by types, it seems reasonable to conclude that in 1985 and 1986 probably less than 85 per cent of the direct payments was reflected in net income. In 1978 a little less than 20 million acres of land was diverted; in 1985 there were 30 million acres diverted and in 1986, 42 million acres. Consequently the income foregone from the land diversion would have been significantly higher in the latter period. In addition, there was no price enhancement from supply management in 1986; in fact, the opposite was true due to the efforts to reduce stocks by lowering price supports.

The data in Table 2 are quite striking. For 1986, direct payments exceeded net cash income less the direct payments for the types of farms with a supply management programme – wheat, rice, corn and cotton. Soybeans also fell into this category even though there are no direct payments for soybeans. However,

TABLE 2 *Total direct payments and net cash income by type of farm, United States, 1985 and 1986*

	Direct Payments	Net Cash Income	Direct Payments Net Cash Income	Direct Payments Net Cash Income less Payments
	(millions of dollars)		(per cent)	
All farms				
1985	7703	47282	16	19
1986	11813	51912	23	30
Wheat				
1985	1017	2293	44	79
1986	1704	2008	85	565
Rice				
1985	209	443	47	89
1986	255	236	108	a*
Corn				
1985	1565	4928	32	47
1986	2398	4356	55	122
Soybean				
1985	748	1399	25	33
1986	548	1110	49	103
Cotton				
1985	541	1580	34	52
1986	693	1280	54	118
Tobacco				
1985	32	1246	3	3
1986	52	730	7	8
Cattle				
1985	894	6404	14	16
1986	1543	7690	20	25
Hogs				
1985	396	1790	22	28
1986	627	2826	22	28
Poultry				
1985	11	7471	1	1
1986	18	9135	2	2
Dairy				
1985	507	3637	14	16
1986	703	5011	16	19

Note: a*The value of the direct payments exceed the net cash income. The calculated figure would have a large negative value.

Source: Economic Research Service, US Department of Agriculture, *Economic Indicators of the Farm Sector: Farm Sector Review*, 1986 ECIFS 6–3, January 1988, p. 13

most soybean producers grow either corn or cotton. Note that livestock farms have a low ratio of direct payments to net cash income, though in the case of dairy products this is misleading if it is interpreted to mean that dairy farms are not heavily protected by price supports.

WHY TARGET PRICES FAILED

Earlier it was noted that a study found that the excess capacity of US agriculture increased from approximately 2 per cent in the early 1970s to more than 8 per cent (Dvoskin, 1988, p. 23) . From 1974 to 1977 there was no land diversion and the general favourable situation was interpreted as meaning that not only was there no excess capacity in agriculture but that it was necessary to increase agriculture's productive capacity to keep up with growing domestic and world demand. There was a strong signal in 1976 and 1977 that policy makers were living in a fool's paradise. The signal was that, in spite of continued strong export demand, wheat stocks, in part due to sharp increases in price support levels in 1976 and 1977, were at higher levels at the end of the 1976 and 1977 crop years than at any time since 1962. Also at the end of the 1977 year feed grain stocks were the largest since 1964. Modest set-asides were made in 1978 and 1979 for wheat and feed grains, though in both cases over the two years stocks increased rather than decreased. A poor corn crop in 1980 in the US and a surge in exports resulted in significantly higher crop prices in 1980 and 1981 than in the late 1970s. Consequently the signal that the long-run tendency for supply to grow at a faster pace than demand if real output prices are held constant or increased was ignored.

By the time the 1981 farm bill was ready for passage by Congress it was quite apparent that the income situation of farmers was deteriorating at a rapid rate. In a period of rapid inflation, net farm operator income fell from US$25.2 billion in 1978 to US$16.1 billion in 1980. But in real terms the decline was much more drastic – in terms of 1982 dollars, net farm operator income fell by 47 per cent between 1978 and 1980 (USDA, 1987, p. 21). Consequently Congress viewed agriculture as being in crisis and the structure of the 1981 farm legislation was to meet short-run adverse conditions with no recognition of the need to facilitate the long-run adjustment that agriculture had to undergo. Target prices were increased in nominal terms, though not quite enough to offset inflation. But in real terms target prices were higher in 1981 than in 1974.

But perhaps the greatest failure of the target price system and related policy measures was not recognizing that macroeconomic policies were having a greater impact upon the fortunes of farmers than output prices. Higher interest rates combined with a rapidly increasing farm debt, almost half of which was required for operating expenses, and significant increases in other farm expenses resulted in downward pressure on net farm income. The 1981 legislation fixed target prices for four years, providing for significant increases in nominal terms. The framers of the legislation assumed that inflation would continue into the future and, presumably, that exports would remain at high levels. No provision was made to permit easy or automatic changes in the target prices if these assumptions turned out to be false. And false they were. Inflation rates dropped sharply – the GNP deflator increased by 9.7 per cent in 1981 falling 6.4 per cent in 1982 and 3.9 per cent in 1983. The growth of farm exports halted in 1981 and then declined, first slowly and then precipitously as the real foreign exchange value by 1985 was 55 per cent greater than in 1980.

The 1981 farm legislation also fixed the price support or loan weights for four years. As inflation slowed and developing countries restricted their imports to service their external debts, international market prices for the grains and cotton

declined to and below the support prices. Thus once again the United States became a residual supplier in the world market. One of the presumed advantages of the target price system was that it made it politically possible to set support prices at low enough levels so that there would be little interference with the disposition of the available supplies. But this expectation was not met and US farm exports declined by more than would have occurred if the price supports had been at significantly lower levels. The 1981 legislation permitted, under particular circumstances, the Secretary of Agriculture to lower the price supports when the supports interfered with the disposition of available supplies. But because of the efforts to control the federal government's deficit this provision was not used from 1981 through 1985. As is evident from Table 1, the provision was retained in the 1985 legislation and has been used in recent years in an effort to dispose of the accumulated large stocks of grain and cotton. There has been apparent success in the case of cotton but little for the grains.

The 1985 legislation called for very modest declines in target prices starting with 1988 and some further decreases have occurred as a result of efforts to reduce the budget deficit. But the failure to start lowering target prices in 1986 only delayed the adjustments that must come. And the annual reductions in target prices for the period of the Act were hardly more than the anticipated productivity growth. Thus it was unlikely that by 1991 agriculture's excess capacity would be very different from that of 1985. But perhaps halting the growth in excess capacity should be considered a successful outcome, at least by comparison with what occurred during the first half of the 1980s.

There are apparently several reasons why target prices failed to provide appropriate guides for farm production decisions, to prevent the accumulation of large stocks of farm products due to price supports set above market clearing levels and to hold the costs of farm programmes to taxpayers and consumers at reasonable levels. One reason was that during most of the 1970s and during the early 1980s the US Department of Agriculture was a source of optimistic statements concerning the long term relationships between the growth of supply and demand. If there ever was a case for a law prohibiting secretaries or ministers of agriculture from pronouncing good news, that set of experiences provides the rationale. There is an inherent bias in the announcements forthcoming from these sources – bad news almost never is transmitted.

Another reason was that the Congress was unwilling to grant significant discretion to the Secretary of Agriculture that would have permitted him to adjust target prices and loan rates at the same time; permitting one without the other was largely nonsensical for the years involved. A third reason was that since Congress was unwilling to delegate authority to change the target prices. In light of the decline in the inflation rate and the rise in the exchange value of the dollar, it should have been willing to recognize the need for changing the target prices and loan rates through legislation. But there was a lack of both leadership and will and nothing was done to provide for needed changes in production incentives and in impediments to the sales of farm products in both the domestic and international markets.

There are two primary means by which target prices can be effective tools for agricultural adjustment in the future. One is to announce that over a specified period target prices will be reduced by some fixed percentage each year, such as

3 to 5 per cent in real terms, until the target prices are at or very near the long run market equilibrium prices for each farm product. Such an announcement would mean that farmers would be honestly informed by their government concerning the adjustments that they faced. This would be such a rare event that perhaps they would take it seriously and accept it as realistic.

The second is to move at once to decouple all payments from current production – supply management would be abandoned and deficiency payments would be based upon some past level of actual or normal production from the areas that would have been planted had all farmers participated in the supply management programmes. The payments would be made only to those who were farming at a specific date; all who entered agriculture after such a date would have to depend upon market prices for their incomes. The real value of the payments would be fixed at the average level for the period used to calculate the first annual payment. It would be reasonable to limit the payments to a definite period, such as a decade. We know that farmers apply a relatively high discount rate to expected income streams from production quotas or high price supports. Thus a constant real value of payments for a decade should have a present value greater than the loss in the value of farm assets, including loss in specialized human capital as well as for land, equipment and livestock.

Would such a programme of decoupling prove more costly than a continuation of current farm programmes? I think not, even if real market prices of farm products increase over the next few years as I anticipate they will. The costs of the current US farm programmes are substantially greater than the direct payments made to farmers. Because of the methods used to calculate the current costs of farm programmes it is difficult to make an estimate of their economic costs. The costs are based on net cash outlays. But we do know that there are substantial costs of making price support loans, handling government owned stocks, storage, transportation and processing of products acquired under the farm programmes. For 1985-7 such costs averaged US$4 billion. This amount should make it possible to decouple payments for the highly protected sectors where there are no target prices – dairy, sugar and peanuts – as well as for the commodities for which deficiency payments are now used.

CONCLUDING COMMENT

It is obvious that target prices have not been any less subject to political manipulation than any other technique that is used to influence the returns received by farmers. It was apparently quite naive to believe that its special feature of transparency would make a difference. If both the public and politicians knew how much the farm commodity programmes cost, there would be an effective demand that target prices be at levels that would both limit government expenditures and provide reasonable guides to farmers in the use of their resources. Surely, the answer has been that knowing the costs is not enough.

NOTES

[1]For an informative discussion of the development of US agricultural price and income policies and definitions of the relevant concepts, see Cochrane and Ryan (1976).

[2]The target price is not a market price – it is used solely to determine payments. To receive deficiency payments farmers must participate in supply management programmes and meet the conditions of those programmes.

[3]The largest 14 per cent of US farms that account for 76 per cent of all farm sales had net assets of US$918,000 at the end of 1986. Their average income in 1986 from both farm and non-farm sources was US$132,000 (USDA, 1987).

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DISCUSSION OPENING – MICHELE DE BENEDICTIS

Professor Johnson's analysis of the birth, growth and failure of target prices as the crucial agricultural policy instrument during the 1970s and 1980s in the United States is not only very informative but gives us an articulated interpretation of the course of action that led eventually to unanticipated and undesirable results. Within these two adjectives, 'undesirable' and 'unanticipated', is condensed the crux of the paper. The presentation leaves no doubt about the undesirability of the consequences: not only has the excess capacity of American agriculture increased considerably since the adoption of target prices, but American agricultural policy seems to be structurally squeezed between two undesirable alternatives: the increase of stocks – if the loan rate is too high – or the explosion of government costs if the movement is in the direction of expanding exports.

In my view the paper is somewhat less successful in explaining why these undesirable results were actually unanticipated. On this point I would like to make a remark and raise one question.

The remark concerns the weakness of our analytical tools when we are faced with the problem of predicting with an acceptable degree of accuracy which

decisions will be taken, in a given economic context, by the policy maker or, even worse, when we are challenged with forecasting the implementation of a given policy instrument. In this respect the neoclassical framework does not help us at all. Just to give an example: if we use the pursuance of the long run equilibrium as a yardstick for assessing the desirability and the probable results of any given policy, we should not be surprised if reality will continue to provide us with 'unanticipated' results. Alternative theoretical frameworks, such as the Public Choice approach or the Theory of the State, if they have helped us to understand why governments do what they do, are not yet refined and powerful enough when we are asked to carry out exercises in prediction. The conclusion of this first remark is that, in my opinion, we still have a lot of work to do in order to strengthen our predictive ability: if we are going to be successful on this account, future studies will probably continue to register undesirable results (personally I am not very optimistic about the probability of quick and drastic reforms of our agricultural policies) but, at least, they will be more anticipated.

Coming now to the question; this concerns a central point of the interpretation put forward by Professor Johnson. He attributes to the optimistic view held in Washington during the 1970s and the first half of the 1980s with respect to the perspective of American agriculture a crucial role in generating the negative effects of target prices fixed out of line with the long-term supply-demand relationship. 'There was a strong signal' – he says – 'that policy makers were living in a fool's paradise.' But, it seems appropriate to ask, if the signals were strong and clear, what kind of rationale supported this unjustified optimism? If it is convenient and, to a certain extent, coherent with Congress's generous attitude towards farmers and agricultural interest groups to adopt an optimistic view, what has been the role and the attitude of the Administration? And what about the role and the attitude of the profession? Were agricultural economists providing the policy makers with the correct reading of the signals? 'Farmers and taxpayers' – Professor Johnson points out – 'were clearly misled.' While the major responsibility undoubtedly lies on the shoulders of the policy makers, is our profession fully innocent? In this, as in many other cases, it seems appropriate to ask whether all that could have been said and done was actually said and done and whether the profession can look at herself with a clear conscience.

I will now devote the rest of my comments to some of the lessons that can be learned from Professor Johnson's analysis of this 'case study' or, for that matter, from many other episodes of the by now fairly long history of agricultural policies in market developed economies. I will try, very sketchily, to underline some points on which it may be worthwhile to concentrate a part of the discussion.

An initial and fundamental issue concerns a better and more realistic understanding on our part of the preference function of the 'representative' policy maker and of the general frame of mind that, on the basis of past experience, seems to shape his views and govern his actions. What I put forward here is not a sketch of a model of any sort, but only some plain commonsense considerations.

(1) The systematic pursuance of long-term equilibrium, a paramount objective in the minds of the economists, receives a much lower priority in those of the policy makers. Only when the departure from equilibrium exerts its negative impacts in terms of unacceptable levels of over

production, governmental expenditures and contraction of exports, are policy makers unwillingly compelled to consider the trade off between the support of farmers' income and the deviation from long-run equilibrium. If this interpretation is correct, the strong negative evolution put forward by Professor Johnson with regard to the management of target prices – and which personally I am inclined to share – would be quite mitigated in the eyes of the policy maker.

(2) In the adoption of the instruments with which to carry out its policies, the policy maker will strongly prefer those packages that engender highly visible results and invisible costs. Growing visibility of the mounting costs of price policies is, probably, the only scenario within which the likelihood of adoption of less distorting policies increases substantially.

(3) There is strong and widespread resistance against the abrupt and drastic departure from previous policies: as the experience of target prices suggests, the acceptance and the adoption of new conceptual approaches and instruments by the various institutional bodies involved in the formulation and implementation of policies may become an extremely slow and contorted process. The institutional dualism between Parliament and Administration, common to all market developed economies, may contribute significantly to an increase in the inner conflicts in the decision-making process and to a decrease in the efficiency of its overall performance.

(4) Only limited and sporadic recognition is given on the part of the policy makers to the existence and the implications of the inequality of distribution of benefits flowing from price policies.

A few other significant lessons, pointed out in Professor Johnson's paper, are worth noting and remembering. Very briefly, they concern the following issues:

(a) Policy instruments that are based on shaky theoretical foundations – such as the determination of the level of target prices – are more susceptible to arbitrary application and their implementation more difficult to control.

(b) The impact of macroeconomic variables and/or policies on farmers' income and expectations may be significantly greater than that exerted by output prices.

(c) Resources can be attracted into agriculture at a faster rate than it is reasonable to expect them to be withdrawn. The costs associated with this kind of distortion may remain invisible for a considerable stretch of time and thus are likely to be ignored by the policy maker.

In the last section of his paper Professor Johnson comments briefly on the possible strategies to adopt in order to increase the effectiveness of target prices for agricultural adjustment. He looks with some confidence and some optimism at the possibility of moving at once toward a full decoupling of all payments from current production. Decoupling is very fashionable these days and thanks also to the commendable efforts of agricultural economists in developed economies,

its virtues and its implications are not only being discussed in academic circles but are also becoming the subject of debate at the GATT negotiating table. Without question, decoupling makes a lot of economic sense but we should be aware, and we probably are, that its application involves the solution of several operational problems. Because of time limitations, I want only to put forward a word of caution with regard to its political feasibility.

On the basis of past experience and of the points raised earlier I am quite sceptical about the possibility of a whole–hearted acceptance on the part of the policy maker, at least in the short term, of the rationale and of the operational implications of decoupling. If we look at this perspective from a European viewpoint, it seems reasonable to predict that a movement toward a more decoupled world, through a substantial reduction of prices, will be driven by two major economic forces: the necessity to cut expenditures and the advisability of avoiding trade conflicts, rather than by a conscious political acceptance of the principles of decoupling. In synthesis, a cautious optimism may be justified, but, as Professor Marsh has put it recently 'those who seek salvation through decoupling will need to exercise eternal vigilance if they are not to be disappointed'.