6 The Political Economy of U.S. Export Subsidies for Wheat

Bruce L. Gardner

U.S. agricultural commodities are predominantly exported rather than imported, but border price distortions for the exported commodities nonetheless exist, in the form of export subsidies. This paper investigates the economics and politics of export subsidies for the commodity where these subsidies are most important, wheat, and focuses on the Export Enhancement Program initiated in 1985.

6.1 Background: Agricultural Price Support Programs

Systematic programs to support agricultural commodity prices date from the initial New Deal legislation of 1933. Wheat was one of the original "basic" commodities supported (the others were cotton, corn, hogs, rice, tobacco, and milk). Wheat continues to be one of the most heavily supported commodities. Table 6.1 shows estimates of transfers to producers of wheat and other commodities during 1984–87, our period of primary concern. Wheat fares well, with $3.25 billion in estimated net gains (producers' surplus) annually, 48 percent of the market value of wheat.

The means of support have been predominantly domestic market interventions—government purchases, supply controls, payments to producers—but border measures have inevitably been required to maintain U.S. prices above

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Helpful comments on this chapter were received from Robert Chambers, Thomas Grennes, Howard Leathers, Erik Lichtenberg, David Orden, Larry Salathe, and Daniel Sumner, as well as participants in the NBER conference at which this chapter was first presented.

1. Rye, flax, barley, grain sorghum, cattle, peanuts, and sugar (beets and cane) were added in 1934. The only important commodities excluded were poultry and eggs, soybeans, forage crops, fruits, and vegetables. A useful, detailed discussion of agricultural policy in the 1930s is Benedict (1953).
Table 6.1 Estimated Annual Gains from Commodity Programs, 1984–87

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Number of Producers (thousands)</th>
<th>Producers’ Gains (million $)</th>
<th>Market Value of Crop (million $)</th>
<th>Protection Rate (2) ÷ (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>352</td>
<td>3,250</td>
<td>6,770</td>
<td>.48</td>
</tr>
<tr>
<td>Corn</td>
<td>627</td>
<td>4,200</td>
<td>16,550</td>
<td>.25</td>
</tr>
<tr>
<td>Soybeans</td>
<td>442</td>
<td>410</td>
<td>10,520</td>
<td>.04</td>
</tr>
<tr>
<td>Rice</td>
<td>12</td>
<td>460</td>
<td>870</td>
<td>.53</td>
</tr>
<tr>
<td>Cotton</td>
<td>43</td>
<td>680</td>
<td>3,580</td>
<td>.19</td>
</tr>
<tr>
<td>Tobacco</td>
<td>137</td>
<td>360</td>
<td>2,310</td>
<td>.16</td>
</tr>
<tr>
<td>Sugar crops</td>
<td>9</td>
<td>610</td>
<td>1,670</td>
<td>.36</td>
</tr>
<tr>
<td>Peanuts</td>
<td>19</td>
<td>820</td>
<td>1,080</td>
<td>.76</td>
</tr>
</tbody>
</table>


corresponding world market levels. Commodities imported into the United States—sugar, citrus juices, dairy products, wool, meats—are protected by means of tariffs or quantitative restrictions on imports. But a substantially greater volume of U.S. agricultural output is exported (fig. 6.1), causing greater difficulty for domestic price support.

Attempts have been made to explain the economic and political forces that result in agricultural price supports generally, and the political economy of differences between the support provided for different commodities. Explanations have focused on political factors such as the long tenure of mostly rural Southern committee chairmen in Congress, the fact that rural areas are more than proportionally represented in the Senate, and general sympathy for farm people among the nonfarm population (see Benedict 1953; Hardin 1968; Bonnen and Browne 1989; Rapp 1988).

In Gardner (1987), I attempt to explain differences between commodities in the level of support granted. There is not clear evidence that having either a small or large number of producers or being geographically concentrated or dispersed makes much difference in the degree of protection. But it helps a commodity’s political prospects significantly to be an imported product and to have experienced a recent price decline. And it harms a product’s prospects to be highly elastic in both supply or demand (making it difficult for either production controls or subsidies to transfer a large amount to producers without generating relatively large deadweight losses). Nonetheless, most of the commodity-to-commodity variation in protection remains unexplained. Further progress in understanding U.S. agricultural protection may well require more detailed investigation of particular commodity policies.
6.1.1 Wheat Trade and the Wheat Program

Immediately following World War II wheat exports became a large component of the demand for U.S. wheat (fig. 6.2). In 1950, 35 percent of production was exported, and over half the crop has been exported in 1980–93. At the same time, wheat prices have been seen by producers as generally too low throughout the postwar period. These concerns have been politically potent enough to maintain Depression-era wheat program mechanisms in place to the present. The new element in the 1950s was the importance of the export market, and the problems and opportunities this posed for the wheat price support program.

The traditional means of price support is a governmental agreement, through its Commodity Credit Corporation (CCC), to buy wheat at the support price. This program periodically led to governmental acquisition of large stocks which were costly to store and for which markets did not exist at the support price level. Three main policy instruments have been on the agenda for solving the surplus commodity problem: subsidizing sales abroad, implementing acreage reduction programs, and permitting market prices to fall while compensating producers with "deficiency" payments when the market price falls below a legislated target price.

In post–World War II wheat policy, subsidized sales abroad were the first approach tried. Continued foreign donations of wheat were a natural follow-up to the Marshall Plan. They were systematized in the Agricultural Trade and Development Act of 1954 (known as P.L. 480 and, as reformulated in the 1960s, Food for Peace). At the same time U.S. commercial wheat exports were
subsidized in the framework of the International Wheat Agreement, under general authority given the secretary of agriculture in the 1930s. The subsidy ranged from 5 to 30 percent of the price of wheat, depending on world and U.S. market conditions in each year. The Agricultural Adjustment Act of 1933 (section 22) gave the president authority, strengthened in the Agricultural Act of 1948, to impose import quotas if imports threatened the effectiveness of any price support program.\(^2\)

In the mid-1950s it became apparent that food aid and subsidized commercial exports were insufficient to dispose of U.S. wheat surpluses. Acreage allotments, a feature of the 1930s programs, were reintroduced in 1954 and reduced planted acreage by about 18 million acres (from 79 million in 1953 to an average of 61 million in 1954–56). Each producer had to stay under the farm's allotment in order to be eligible for price support loans. In 1956 the Soil Bank program was introduced. It paid wheat growers about $20 per acre (roughly market rental rates) to idle an average of 12 million more acres (20 percent of preprogram acreage) in 1956–58.

In 1964 the approach of letting price supports fall, with compensating payments to producers, was introduced. The support price was cut essentially to

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\(^2\) Small quantities of wheat imports were grandfathered in by a lower limit of the wheat import quota at 50 percent of the quantity imported in a base period determined by the president. The wheat imports shown in fig. 6.2 are from Canada. Section 22 quotas were suspended by executive order in 1974, but a recent increase in U.S. imports of Canadian wheat has led to calls for their reimposition and a one-year tariff rate quota in 1994–95.
the world market-clearing level, with the idea of reducing CCC stocks and the need for export subsidies. At the same time, payments were made to guarantee higher farmer receipts for that fraction of the wheat crop sold domestically. Each producer received a "domestic allotment" for purposes of calculating this payment.

Acreage idling, payments, and export subsidies all remained in place until the commodity boom that erupted with the large Soviet wheat purchases of July 1972. During 1973–76 market prices were well above support levels. The conflation of Soviet purchases, the oil shock, income growth in food-importing countries, and accelerating U.S. inflation convinced many that a watershed had been crossed that meant an end to the era of agricultural surpluses. Acreage reduction programs were abandoned and farmers were encouraged, in the secretary of agriculture's phrase, to plant fencerow to fencerow. The Nixon administration went so far as to replace export subsidies by quantitative limitations on exports to Eastern Europe and the Soviet Union in 1974–76.

By late 1976 the boom mentality had begun to fade, for wheat before any other major crop. In October 1976 President Ford, at the urging of Senator Dole and others, raised the CCC loan rate for wheat from $1.37 to $2.25 per bushel. President Carter was confronted within a year of taking office by a tractorcade, led by wheat growers, that resulted in legislation that resurrected the traditional wheat policy instruments. However, sustained intervention on the pre-1972 scale did not reappear until the mid-1980s. See table 6.2 for a summary of indicators.

6.2 Origins of the Export Enhancement Program

Agriculture in general faced severe economic problems in the early 1980s. The problems are apparent in the data on farm income and the farm sector's balance sheet. Real farm income (including government assistance) in 1980–84 averaged about half its level in 1971, before the commodity boom (fig. 6.3). The USDA's estimate of farm equity, the value of farm assets minus liabilities, declined from $1.14 trillion (1987 dollars) on January 1, 1979, to one-half of that value, $0.6 trillion, on January 1, 1985.

With respect to wheat growers more specifically there are no data on income or equity value, but an indication that is particularly useful in political terms can be obtained from state-level statistics. Kansas and North Dakota are the two most important wheat states, the centers of the winter and spring wheat growing areas, respectively. Together they account for about 30 percent of U.S. wheat acreage. Within these states, 46 percent of Kansas cropland and 45 percent of North Dakota cropland is planted to wheat. In both states, real farm equity declined sharply after 1979 (fig. 6.4), at about the same rate as in the nation as a whole. Figure 6.5 shows the real price of cropland in Kansas, North Dakota, and the United States, again all declining sharply.

These indicators are sufficient (but perhaps not necessary) conditions to ex-
Table 6.2  Wheat Policy Instruments, 1960–90

<table>
<thead>
<tr>
<th>Crop Year</th>
<th>Government Inventory (million bushels)</th>
<th>Government Payments (million acres)</th>
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<tbody>
<tr>
<td>1960</td>
<td>1,280</td>
<td>0</td>
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<tr>
<td>1961</td>
<td>1,134</td>
<td>0</td>
</tr>
<tr>
<td>1962</td>
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<td>1963</td>
<td>839</td>
<td>243</td>
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<tr>
<td>1964</td>
<td>646</td>
<td>443</td>
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<tr>
<td>1965</td>
<td>343</td>
<td>509</td>
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<tr>
<td>1966</td>
<td>132</td>
<td>681</td>
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<tr>
<td>1967</td>
<td>102</td>
<td>727</td>
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<td>1968</td>
<td>163</td>
<td>746</td>
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<td>1969</td>
<td>301</td>
<td>856</td>
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<tr>
<td>1970</td>
<td>378</td>
<td>871</td>
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<td>1971</td>
<td>380</td>
<td>886</td>
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<td>1972</td>
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<td>859</td>
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<tr>
<td>1973</td>
<td>19</td>
<td>478</td>
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<tr>
<td>1974</td>
<td>1</td>
<td>102</td>
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<tr>
<td>1975</td>
<td>0</td>
<td>51</td>
</tr>
<tr>
<td>1976</td>
<td>0</td>
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<td>1977</td>
<td>390</td>
<td>1,157</td>
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<td>1978</td>
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<td>1979</td>
<td>448</td>
<td>72</td>
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<td>1980</td>
<td>560</td>
<td>228</td>
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<tr>
<td>1981</td>
<td>750</td>
<td>635</td>
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<tr>
<td>1982</td>
<td>1,253</td>
<td>489</td>
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<tr>
<td>1983</td>
<td>799</td>
<td>1,080</td>
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<td>1984</td>
<td>1,032</td>
<td>1,556</td>
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<td>1985</td>
<td>1,198</td>
<td>2,208</td>
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<td>1986</td>
<td>1,462</td>
<td>3,673</td>
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<tr>
<td>1987</td>
<td>750</td>
<td>3,290</td>
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<td>1988</td>
<td>477</td>
<td>1,686</td>
</tr>
<tr>
<td>1989</td>
<td>267</td>
<td>724</td>
</tr>
<tr>
<td>1990</td>
<td>177</td>
<td>2,420</td>
</tr>
<tr>
<td>1991</td>
<td>202</td>
<td>2,245</td>
</tr>
<tr>
<td>1992</td>
<td>178</td>
<td>1,370</td>
</tr>
</tbody>
</table>


*Includes wheat base placed in the Conservation Reserve Program under 10-year contracts (10.6 million acres in 1992).

plain cries of economic pain from the wheat growers. The wheat program as revised in the Agriculture and Food Act of 1981 involved considerable government efforts to assist wheat producers. The price paid to farmers for wheat placed in government ownership was increased to $4.00 per bushel for the 1982 crop. It had been only $1.37 up to 1975. U.S. wheat acreage planted expanded 45 percent, from 59 million acres in 1973 to 86 million acres in 1982, and the USDA increased its wheat stocks to over a billion bushels in
Fig. 6.3 Farm income (1987 dollars)

Fig. 6.4 Farm equity: assets minus liabilities (1987 dollars)
1982, the highest level since the early 1960s. In reaction, the payment in kind (PIK) program was introduced and idled 30 million acres of wheat base in 1983, the largest supply control effort ever. In 1984, direct payments to wheat growers rose to exceed $1.5 billion. Yet none of these measures was capable of stemming the decline in income and equity values through 1985.

6.2.1 Underlying Economic Situation

The supply-demand situation is sketched in figure 6.6. Production in 1985 is shown as the vertical line $S_{1985}$. While well above mid-1970s levels, production in 1985 was only slightly higher than the 2.38 billion bushels of 1980.3 The notable change in market conditions is on the demand side, where 2.3 billion bushels cleared the market at $3.99 a bushel in 1980, while 1.96 billion bushels sold for only $3.08 (nominal) in 1985. The demand curves sketched show the magnitude of demand reduction that occurred, and the separate demand function shown for U.S. exports indicates that reduction in demand is accounted for entirely by a decline in the foreign demand for U.S. wheat. Exports declined by 40 percent despite lower U.S. prices in 1985 than in 1980.

3. Although a point is plotted at the market price of $3.08 and 2.42 billion bushels on $S_{1985}$, this is not a point on a supply curve in the usual sense. The market price is not the incentive price for production because producers also receive deficiency payments and because producers held 18.8 million acres of wheat land idle in order to qualify for deficiency payments. The underlying market supply curves for 1985 is somewhere to the right of $S_{1985}$ for prices above $3$. 

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Fig. 6.5 Cropland prices (1987 dollars)
Several econometric investigations were undertaken in the early 1980s to explain U.S. wheat exports (e.g., Gallagher et al. 1981; Sharples 1982; USDA 1986). Other studies have been conducted since that time, but the ones cited indicate the informational basis for policy decisions in 1985. Two factors received most of the blame for the decline in export demand: the strong dollar and the agricultural policies of the European Community. Between 1980 and 1985 the dollar rose 17 percent against the Canadian dollar and more than doubled against the French franc, the principal alternative sources of wheat in world trade. The overall trade-weighted value of the U.S. dollar rose about 60 percent. An exchange rate weighted by wheat export market shares rose 50 percent over this period (Dutton and Grennes 1985). This means that the apparent fall of 25 percent in the dollar price of wheat between 1980 and 1985 was actually a rise of about that much relative to competing sellers in terms of the buyers' currencies.

EC policies in this period were a continuation of those in effect since the 1960s under the Common Agricultural Policy (CAP) of the European Community. Wheat prices received by producers in the European Community have averaged about double the U.S. farm price. The main means of protection is a variable import levy, a tariff adjusted weekly to make up the difference between world prices and the protected ("threshold") price level in the European Community. In 1985 the levy varied between 57 and 140 ECUs ($64 and $175) per metric ton, 40 to 110 percent of the world (Rotterdam) average price. This mechanism provides EC farmers with a price that is not only high but also stable.

Behind this protective wall EC wheat production expanded steadily, despite a limited land area. Between 1969–71 and 1989–91 the wheat area of Western Europe (including 4.0 million hectares outside the European Community in 1970 but now in) increased from 17.1 to 17.6 million hectares, a little over half
the U.S. wheat area. Yield per hectare, however, increased more sharply, from 2.7 to 5.1 metric tons per hectare, a rate of growth of over 3 percent annually. Over this period U.S. wheat yields grew at a rate of about 0.5 percent annually. By 1989–91 U.S. yields were a little less than half of European yields. EC yields grew not so much through genetic improvements as through increasing and increasingly sophisticated use of chemical fertilizers and pesticides. EC production methods have been tried in humid areas of the United States and have doubled yields there, but are too costly to be profitable at U.S. wheat prices.

The result in trade is that the European Community moved from self-sufficiency in wheat in 1970 to being a net exporter of about 25 percent of its production in the mid-1980s, making it the second-largest wheat exporter in the world. These exports are accomplished in the face of EC internal prices well above world trading prices by means of export subsidies. These subsidies in the mid-1980s were $80–$100 per metric ton of wheat, bringing the EC price from $230–$250 internally to a $140–$160 world level (Rotterdam basis) and costing the EC budget $1.0–$1.5 billion annually in 1980–85.

Between 1979–81 and 1984–86, EC annual wheat exports increased about 5.5 million metric tons. This amounts to 200 million bushels, one-third of the U.S. wheat export decline between 1980 and 1985.

Overall, it appears plausible (from the perspective of 1994 as well as that of 1985) that the combination of the high value of the dollar and EC subsidies accounted for much and quite possibly all of the decline in U.S. wheat export demand during the early 1980s. With an elasticity of foreign demand for U.S. wheat of −1.5, a 25 percent real price increase would reduce U.S. wheat exports by about 500 million bushels. Together with the 200 million bushel EC export gain being shared proportionally by export losses of the United States and other wheat exporters, one can explain a decline of about 600 million bushels, which is the entire 1980–1985 actual loss.

Another factor that received much attention in 1981–85 was the role of U.S. wheat policy, particularly the high prices paid for grain entering the Farmer-Owned Reserve and acreage controls, especially the reduction of 16.5 million acres of wheat harvested that occurred in 1983 under the PIK program. Under this program U.S. wheat production fell by 350 million bushels in 1983, a reduction of 13 percent from 1982. This would be expected to cause a reduction in U.S. wheat exports; but at the same time Farmer-Owned Reserve stocks were reduced by 450 million bushels—the payment in kind was in the form of CCC stocks. So it is not clear that the PIK program reduced exports (or propped up world prices to the benefit of the European Community). But it is clear that the combination of high loan rates and supply management during 1981–85 held wheat prices (U.S. and world) above the levels to which they would otherwise have fallen. Since the 25 percent rise in the value of the dollar could have been offset by a 25 percent fall in the U.S. wheat price, it is an
oversimplification to point to the value of the dollar but not U.S. price supports as a cause of the wheat export slump.

6.2.2 Political Situation in 1980–85

The economic problems of administering the wheat program involved not only export demand but also CCC stock accumulation as demand fell and serious financial difficulties of farmers, stemming largely from borrowing heavily at high interest rates to buy land at the high prices of 1979–81. So it is not obvious that wheat growers would have concentrated on the export market as the principal source of their problems or export subsidies as a plausible remedy. Nonetheless, there was a heavy emphasis on wheat export issues by all the interested groups: farmers, agribusiness, economic analysts, the USDA, and Congress. The main political decision points are listed in table 6.3.

In 1983 the Reagan administration, at the urging of Secretary of Agriculture John Block, after debate settled only at the cabinet level, accepted the idea of ad hoc subsidized exports of CCC-owned wheat to targeted North African markets where EC wheat was being sold with the help of their export subsidies. This was intended to serve the dual purpose of reducing excessive stock levels and smiting the European Community. This venture was a substantial political success, affording an opportunity to attack the European Community, please farmers, and hold off congressional pressure for more sweeping programs. The impetus was thus established that led eventually to the full-fledged Export Enhancement Program (EEP).

In Congress, the idea of legislation to target in-kind export subsidies at the European Community did not prevail when first seriously considered in 1983. The principal reason given by opponents was the worry that such legislation would trigger a trade war in which the European Community would increase their subsidies and perhaps withdraw previously negotiated concessions such

<table>
<thead>
<tr>
<th>Table 6.3</th>
<th>Events in the Political History of the EEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>Reagan administration cabinet, responding to wheat grower requests to USDA, authorizes the use of CCC stocks to subsidize certain wheat exports.</td>
</tr>
<tr>
<td>April–May 1985</td>
<td>In an agreement between the Reagan administration and Senate Agriculture Committee bipartisan leadership, the EEP is formally established and publicly announced as an ongoing in-kind export subsidy, with $2 billion in CCC stocks to be used for this purpose.</td>
</tr>
<tr>
<td>October–December 1985</td>
<td>The EEP is incorporated in the 1985 Farm Act.</td>
</tr>
<tr>
<td>October 1990</td>
<td>The EEP is reauthorized by Congress and supplemented by a “GATT trigger” that reinforces and expands EEP in the event no GATT agreement is reached.</td>
</tr>
<tr>
<td>December 1993</td>
<td>GATT agreement is reached which requires reduction in EEP and in the European Community's export subsidies.</td>
</tr>
</tbody>
</table>
as their duty-free binding on U.S. oilseed products and feed grain substitutes. In addition, the secretary of agriculture already possessed sufficient authorities for ad hoc export subsidies as needed for surplus management or strategic purposes.

Two years later, as the 1985 farm bill deliberations began, the situation was different in two respects: farm groups had refined their general support for export promotion to more concrete proposals, and U.S. wheat exports had declined still further while the European Community's grew. In this situation the administration's desire to continue ad hoc subsidization without binding legislation was no longer politically tenable.

Congessional Debate

A detailed investigation of the political positions and arguments concerning the EEP is helped greatly by the focus of all parties on the 1985 farm bill as the venue for debate. Existing legislation, governing target prices and acreage reduction programs, in the Agriculture and Food Act of 1981 expired with the 1985 crops. Because of economic problems of the farm sector and dissatisfaction with existing programs, many sought substantial changes in the existing legislation.

Both the House and Senate agriculture committees conducted extensive hearings in preparation for the 1985 farm bill. The Senate committee, controlled by Republicans and chaired by Jesse Helms of North Carolina, appeared particularly interested in a fundamental review of agricultural policy (although tobacco policy was excluded). In 1983 Chairman Helms wrote to some 300 industry and academic people, asking for comments and suggestions for the 1985 legislation. A selection of the responses was published by the committee (U.S. Congress, Senate 1984). In late 1984 and early 1985 both the House and Senate committees held hearings at various locations in the country and in Washington, D.C., at which academic experts as well as interested parties responded to requests for suggestions to revamp the commodity programs (U.S. Congress, Senate 1985c).

Two issues of program structure emerged for the grain programs (beyond the overriding general issue of the budget for these programs). The first was whether to support farmers' returns by means of further acreage controls coupled with increased market price support via CCC loan rates, or to let support levels follow market prices and support farm income through deficiency payments. The second was what steps to take to promote increased exports of U.S. commodities.

Producer groups were divided on the first issue, with the National Farm Organization, the National Farmers Union, and the National Grange arguing for high loan rates and stringent production controls, and the (much larger) American Farm Bureau Federation arguing for fewer controls and market-oriented loan levels. The National Association of Wheat Growers (NAWG) took a middle position of marginal changes in the existing wheat program.

The Reagan administration, in its proposed Agricultural Adjustment Act of
1985, took the Farm Bureau position on phasing out acreage controls but went significantly further in the market-oriented direction by calling for much lower target prices than any of the farm groups wanted. The administration’s wheat provisions were outlined on March 7, 1985, as:

   Loan rates are based on 75 percent of national average prices received by farmers in the immediately preceding three years.

   Target prices are based in 1986 on 100 percent of national average prices received by producers during the immediately preceding three years; this percentage would drop 5 percent each year until it reaches 75 percent for the 1991 and succeeding crops.

   An acreage reduction will be required of program participants at the following levels: 15 percent—1986 crop year; 10 percent—1987; 5 percent—1988 crop year, 1989 and thereafter, the authority for acreage reduction would be eliminated. (U.S. Congress, Senate 1985c, part 1, 403)

The administration largely prevailed on loan rates (where they took essentially the Farm Bureau position) but lost on target prices and on phasing out acreage controls. The implied target price cuts led members of the congressional committees to label the administration’s bill “dead on arrival.”

With respect to export promotion, the administration wanted to maintain discretionary authority to negotiate with trading partners to remove barriers to U.S. exports, and to continue export credit programs and food aid programs. But there were no explicit export subsidies proposed. In Congress and among agricultural interest groups, however, sentiments were quite different. The successful use of CCC stocks to pay farmers for idling additional land in the 1983 PIK program prompted several commodity groups to adopt the label for an “export PIK” program in which CCC stocks would be used to subsidize exports. The domestic PIK resulted in additional wheat on the market in the United States, partly offsetting the price-increasing effect of acreage idling. An export PIK, it was argued, would remove commodities that were overhanging the U.S. market and hence drive up U.S. prices. In February 1983, the NAWG and the Nebraska Wheat Strike Force had testified before the Senate Agriculture Committee in favor of this general approach. Unlike the case of acreage controls, the American Farm Bureau also supported the export PIK idea, providing a united front among farm groups.4

In 1985, the wheat growers, principally through NAWG and U.S. Wheat Associates, the growers’ market development arm, had been arriving at their position through many months of meetings. The wheat growers’ focus on international marketing traditionally had to deal with a “prairie populist” isolationist impulse that emphasized supply management and higher prices in the domestic market. These sentiments had been fatally discredited for a majority of wheat growers by the prosperity brought by the export boom and sales to the

Soviets in the 1970s. The populist impulse for an antigovernment position was satisfied by the wheat growers' vociferous objection to controls on export sales to Eastern Europe and the Soviet Union in 1974–76 and 1980.

As the 1985 farm bill debate began, NAWG backed a "marketing loan" approach, under which producers could repay their CCC loans at the local market price of wheat and reclaim the wheat for sale. This essentially would establish a general (domestic and export) subsidy. However, the wheat growers also supported the EEP in written testimony for the Senate Agriculture Committee in 1984 (Schwensen 1984). The EEP approach was easy to assimilate to export promotion proposals NAWG already had made.5

On the agribusiness side, the grain-exporting companies of course supported export subsidies, with caveats about maintaining the companies' autonomy in negotiating sales. Even bakers and grain millers, who might have opposed the subsidized export of their raw material, did not object. The American Bakers Association's president did not take a position on the subject, and the Millers National Association testified in favor.6 One reason is that the first major shot fired in the export subsidy dispute with the European Community had been an arrangement negotiated under existing authorities of the secretary of agriculture in which 30 million bushels of CCC wheat was given free of charge to flour mills who then sold 1 million tons of flour (requiring about 50 million bushels of wheat) to Egypt, at a price low enough to capture that market from the European Community. This "largest flour sale in history" won the hearts of the millers. A second reason is that subsidies paid in kind out of existing stocks would place additional wheat on the market and would not raise the domestic price of wheat as a cash export subsidy would.

Executive Branch Action

Senator Dole took the lead in organizing a series of meetings in spring 1985 to get the Reagan administration to establish a targeted export subsidy program focused on grains, especially wheat. Representatives of NAWG as well as other farm groups attended these meetings in Dole's office. In May 1985, the administration (represented by the Office of Management and Budget [OMB] and USDA) and the Senate leadership (principally Dole and Senator Zorinsky) agreed to implement under existing authorities7 an EEP.

5. Among many interesting arguments of the wheat growers, one was that the Reagan administration "has a double standard bordering on hypocrisy. They advocate but close off export markets by placing protectionist measures against steel, textiles, and other products they need to send to us to gain foreign exchange" (U.S. Congress, Senate 1985a, 42). This is one of the very few instances in the thousands of pages of testimony on the 1985 farm bill in which farmers rehearsed elements of their traditional free trade line. Nonetheless, the wheat growers practical thrust was for export (and domestic) subsidies.


7. Authorities of the secretary of agriculture as chief executive officer of the CCC under the CCC Charter Act of 1936.
In particular, the EEP was given the breath of life by the conjunction of interests represented by three individuals: Senator Zorinsky's strong desire, as the ranking Democrat on the Agriculture Committee and representative of Nebraska, for a substantial export subsidy program; David Stockman's need for Democratic votes on key economic legislation; and Senator Dole's brokering savvy, with interests in supporting both the administration (as majority leader) and Kansas wheat growers. Stockman agreed the administration would implement an export subsidy program, in exchange for Zorinsky's vote on the budget resolution containing the Reagan administration's fiscal proposals, with the subsidies to take the form of unwanted CCC surplus commodities with a zero budget score.

The agreed-upon program committed $2 billion worth of CCC-owned commodities to be made available as a bonus to U.S. exporters to expand sales of U.S. agricultural commodities in targeted markets. The objectives stated were to increase U.S. farm exports and to encourage trading partners to begin serious negotiations on agricultural trade problems.8

Guidelines for the EEP, established by the Economic Policy Council of the White House, were that each subsidized sale should meet the following criteria: (1) additionality, that is, net increase in export sales caused by the subsidized sale; (2) targeting to displace competing exporters who are subsidizing their sales; (3) a net gain to the U.S. economy; and (4) budget neutrality. Each proposed EEP initiative was to be tested against these criteria by an interdepartmental committee chaired by the U.S. trade representative and USDA, but also having representatives of the OMB, Council of Economic Advisors (CEA), Treasury, State, Labor, Commerce, and National Security Council (NSC). It was never publicly stated how the "net gain to the U.S. economy" and "budget neutrality" criteria were to be defined and measured. Participants in the process indicated that criterion 3 was not a factor in interagency debate, although 1, 2, and 4 were.9

Despite the creation of the EEP through executive branch action, farm and commodity groups were so strongly in favor of an export subsidy program that Congress wished to exercise authority and claim authorship of the EEP by establishing it in the 1985 farm legislation. The key general issue10 was whether to target export subsidies to counter competitors' subsidies or to subsidize exports more broadly. The House Agriculture Committee took the broad view that subsidies in kind would boost exports by "countering the effects of

8. Recall that the EEP was announced in the months leading up to the Ponte del Este meeting which launched the Uruguay Round of General Agreement on Tariffs and Trade (GATT) negotiations.

9. In November 1989, USDA published revised guidelines in the Federal Register which emphasized the trade policy objectives of challenging competitors who subsidize exports and encouraging negotiations in the Uruguay Round (see Ackerman and Smith 1990, 6-7).

10. "General" meaning basic principles of design. Committee deliberations devoted more time to specific issues of interest to members (e.g., how much white wheat from Washington in the program) than to any general issue.
foreign subsidies in international markets; compensating for the high value of
the dollar; [and] alleviating the cost of transportation\textsuperscript{11} of U.S. agricultural
goods” (U.S. Congress, House 1985b, 71). This led the House to support a
broad, untargeted export subsidy program called BICEP—Bonus Incentive
Commodity Export Program—apparently to highlight the application of gov-
ernmental muscle to agricultural exports.

\textit{Legislative Action}

The Food Security Act (FSA) as finally enacted in December 1985 reflected
the Senate’s closer ties to the administration by codifying the EEP essentially
as the administration had established it six months earlier. The main issues, as
often in enabling legislation, were what the executive branch “shall” (be re-
quired to) do and “may” (has discretionary authority to) do. The 1985 act re-
quired the secretary of agriculture to provide CCC commodities at no cost to
“United States exporters, users, and processors and foreign purchasers” and
required that a total of $2 billion in CCC commodities be used for this purpose
during the three fiscal years ending September 30, 1988. The purposes which
the subsidized exports were to serve are even more broadly stated than in the
House bill: in addition to combating other countries’ subsidies and the high
value of the dollar, export subsidies may be used to offset “the adverse effects
of U.S. agricultural price support levels that are temporarily above the export
prices offered by overseas competitors in export markets” (U.S. Code 99 Stat.
1483).

In addition, the act authorized the unlimited use of cross-subsidization, that
is, the use of one CCC commodity to subsidize the export of another. This was
politically important because many commodity interests, including processed
products and products which did not have price support programs, prevailed
upon the agriculture committees for support. Egg producers and pork produc-
ers, for example, testified that they needed assistance in competing with EC
export subsidies. But no CCC stocks of these commodities existed. The legisla-
tion shared EEP benefits across commodities by permitting CCC wheat stocks
to be used to subsidize egg or pork EEP exports, for example.\textsuperscript{12}

The 1985 act thus established the authority for either narrowly targeted or
broad-based export subsidies, and mandated $2 billion in spending on the pro-

\textsuperscript{11} Transportation costs are a quantitatively small but highly politically charged issue in U.S.
export promotion programs. “Cargo preference,” a requirement that food aid be shipped on U.S.
vessels, has been an issue in EEP, export credit, and sales to the Soviets. Cargo preference has not
been required for EEP shipments.

\textsuperscript{12} The EEP is not as barter based as this discussion might suggest. Exporters never received
actual tons of CCC grain as a subsidy, but rather certificates entitling them to grain at any time up
to an expiration date six months from the date of issue. A market quickly emerged in which these
certificates could be sold at only a small discount from the market value of the grain. Since export-
cers could take their transactions costs into account in their bids, the subsidy in kind is very close
to the equivalent of a cash subsidy. And when available CCC stocks ran out in 1991, the program
was smoothly converted to one where certificates are redeemable for cash.
gram over three years. The EEP was not subject to discipline in the annual appropriations process because the Appropriations Committees provide generally open-ended funding for the CCC to achieve its price support mandates. The committees do not control how the CCC uses its acquired commodity stocks. Congress could have brought budgetary disciplines to bear by scoring EEP costs in Budget Committee proceedings. However, Congress agreed with the OMB on zero scoring for EEP. The principal argument was that CCC commodities cost so much to store that it was worth about as much to give them away as to keep them. In addition, to the extent that increased exports increased the U.S. market price, deficiency payments for wheat and other target price commodities would be reduced.

The EEP in a Broader Political Context

The EEP came into being with very little opposition between February and December 1985. Why was the way so clear? The natural opponents of an export subsidy are U.S. domestic wheat buyers and foreign wheat producers. In the case of EEP U.S. millers were diverted by their participation in subsidized flour exports and by the release of CCC stocks to pay the subsidies, as discussed earlier. The bakers and broader consumer groups were relatively weak participants, and their participation in the 1985 farm bill debate was focused on opposition to acreage controls and on limiting budgetary outlays. The latter point was the dominant item of contention throughout 1985.

The 1985 farm bill was debated in the culminating period of the “farm crisis” and at the same time the bill known as Gramm-Rudman-Hollings (GRH) was being developed. Just before the congressional farm bill debate began, in February 1985, President Reagan vetoed a farm bailout bill that would have forgiven billions of dollars of farm debt and made new subsidized and guaranteed loans to farmers in trouble. The administration's proposal, in its Agricultural Adjustment Act of 1985, to go still further and cut benefits that farmers were already receiving caused this aspect of the bill to be labeled, correctly, as “dead on arrival” by congressional Democrats.

While the testimony on export promotion was proceeding as described earlier, much more contentious and widely reported hearings were being held on the broad problems of agriculture. Newsweek had a five-page story featuring an Iowa State agricultural economist's estimate that 12 percent of U.S. farmers would go out of business in 1985 and 30 percent were “sliding toward insol-
vency” (Newsweek, February 18, 1985, 52). At a special hearing staged by congressional Democrats (no Republicans attended) three famous actresses of the day (Jane Fonda, Jessica Lange, and Sissy Spacek) appeared, each of whom had starred in movies featuring heroic struggles of farmers against economic adversity and insensitive bureaucrats. The actresses “decried the farm policies of the Reagan administration as uncaring and insensitive to rural America’s anguish” (Washington Post, May 7, 1985).15

In this context it was probably not reasonable to expect national consumer groups to adopt positions in support of cuts in farm support, and none did.

The role of outside experts on the economics of agriculture is more difficult to explain. Many such experts submitted testimony on many aspects of farm programs. In 1984, 12 economists made written contributions to the Senate Agriculture Committee’s trade policy compendium (U.S. Congress, Senate 1984b). Of these, none proposed export subsidies, and the three that addressed the issue directly all raised objections to the idea (Johnson 1984; O’Rourke 1984; Sharples 1984). In the 1985 hearings also, no economists supported the EEP. This may be in part due to a lack of opportunity, since the EEP was not spelled out in a form that testifying economists could react to before it was introduced as a nonlegislated fait accompli in May 1985. But even if economists did not object formally to the EEP, it was clear from their general comments on trade policy that they would have opposed it because of concern about igniting a subsidy war and because of low expected benefits to farmers per dollar of cost to consumers and taxpayers.

Another source of independent testimony was the statements of five former secretaries of agriculture—Orville Freeman (Kennedy), Clifford Hardin (Nixon), Earl Butz (Nixon/Ford), John Knebel (Ford), and Bob Bergland (Carter) (U.S. Senate 1984b). Their comments focused on trade issues and supported various measures to stimulate exports. But none advocated direct export subsidies.

During October–December 1985 the farm bill assumed its final form. The House passed its version on October 8, the Senate on November 22, and the Conference Committee reached agreement on a bill which achieved final passage on December 18. This period was marked by sharp debate. The anti-farm-support side was almost entirely a matter of budgetary exposure, the endgame issue turning on whether target prices should be frozen for one year (administration) or four years (congressional Democrats) before declining. The ultimate compromise was a two-year freeze followed by modest cuts. The wheat target price was kept at $4.38 in 1986 and 1987, then cut in steps to $4.00 by

15. This was the only 1985 agricultural hearing to run on all three prime-time network newscasts. The Post quoted one actress as saying “the solid core of our agriculture is threatened,” and further quoted: “It is heartbreaking to witness their anguish as they watch their lives being stripped away,’ Lange said of farmers as she choked back tears.” The Post played the story on page 1, but it was page 1 of the “Style” section under the headline, “The Farm Act.” This deflated the impact somewhat.
1990. Because the debate focused almost exclusively on budgetary issues, for wheat and other commodities (notably dairy), the EEP received little legislative attention.

The overall compromise achieved was of the highly pragmatic type in which legislators like Congressman Foley and Senator Dole worked from a middle ground outward to obtain a majority. Both the most ardent profarmer voices and most ardent budget cutters opposed the bill. The vote for final passage was 325–96 in the House and 55–38 in the Senate. Both the chairman of the Senate Agriculture Committee, Jesse Helms (N.C.), and the ranking Democrat, Ed Zorinsky (Nebr.), voted against the bill, for opposite reasons. President Reagan signed the bill into law on December 23, 1985.

In summary, the EEP was enacted in 1985 because wheat growers and exporters asked for it and no interest group opposed it, except economists in general terms. Because the pressure to assist agriculture was strong, and was countered only by budgetary pressures, the OMB finding that the EEP would be budget neutral ensured its supporters of an easy political victory.17

6.2.3 Related Export Assistance

In addition to the EEP, wheat exports continue to be promoted by:

- Food assistance, through P.L. 480 and related programs, under which about 3 million tons of wheat are shipped each year under generous credit terms that amount on average to a substantial subsidy on limited quantities in country-to-country agreements.
- Export credit, with guaranteed repayment to lenders by the U.S. Treasury if the foreign borrower defaults. The interest rate is a commercial rate negotiated by borrower and lender, typically just above the LIBOR (London Interbank Offer Rate), a rate available only because of the guarantee. The U.S. government has had to absorb substantial losses from loans to Iraq, and the possibility of big losses on credits to Russia.
- The Targeted Export Assistance program, introduced in the 1985 act, provides matching funds for private sector initiatives to promote agricultural exports. This program was reformulated as the Market Promotion Program in the 1990 Farm Act, and its budget has been reduced from over $300 million

16. While there were no immediate budgetary savings through target price cuts, it was known by the time of Conference Committee action that GRH provisions would require a reduction in deficiency payments for FY 1986 (the first crop year of the new bill, for which winter wheat was already planted). In the event, farmers had their payments reduced by 4.3 percent in FY 1986. The wheat target price remained at $4.00 through 1993 and continues at that level through 1995.

17. Congress’ own budget agency, the Congressional Budget Office (CBO), has not accepted the budget neutrality argument. Indeed CBO has in recent years called attention to the EEP as a potential area for budgetary savings, estimating most recently a $4.2 billion saving in FY 1995–99 if the baseline EEP spending of $5.0 billion over this period were eliminated (U.S. Congress, Congressional Budget Office 1994, 218). Their clinching argument against the budget neutrality of EEP is the following: Whatever price effects could be achieved by EEP could also be achieved at lower budget cost using ARPs. With both EEP and ARPs the subject of annual policy determination, one should not hold the ARP constant when evaluating the EEP.
authorized in 1985 to about $100 million for FY 1994. About 10 percent of the program’s expenditures have been used to promote grains and grain products with $50 million spent in 1986–89 (Ackerman and Smith 1990, 39).

Farm and agribusiness groups have consistently supported these programs. Groups interested in international development—mainly nonprofit foundations and charitable organizations—have questioned the negative impact of food aid on food production in the recipient countries. But these groups have also supported food aid in times of famine or emergency. Other international interests have promoted food assistance for geopolitical reasons, notably to Russia, Egypt, and Pakistan. There has been no sustained political opposition to these programs, except as part of generic budget cutting.

An illustration of how these programs work in tandem is afforded by recent wheat sales to the former Soviet Union (FSU). In FY 1992, roughly coinciding with President Yeltsen’s first year as leader of Russia, the United States exported 8.7 million metric tons of wheat to the FSU. Market receipts for the wheat were $1.022 billion, or $117 per ton. Russia and the other former republics could not afford to pay hard currency for this wheat. The wheat was sold through a combination of government-guaranteed commercial credit, EEP subsidies, and food aid programs. Credit of $810 million was allocated to the FSU for wheat and wheat product purchases in late 1991. EEP bonuses of $350 million were paid on 8.4 million tons of wheat in FY 1992 ($41.50 per ton on average). The credit program, called GSM-102, involves short-term credit, up to three years, with a repayment schedule beginning in the first year. By November 1992 Russia’s repayments were sufficiently in arrears to trigger its suspension from the program. However, in FY 1993 a more liberal credit program for Russia was established under the Food for Progress authorities of USDA. This credit is financed directly from the U.S. government rather than through commercial banks and has a longer repayment period and lower than commercial interest rates. Credit is even granted, using CCC funds, for freight and handling costs. In addition, 700,000 tons of feed wheat have been donated to the FSU. (For further details, see USDA 1993, 39–45.) Overall, while the EEP subsidy on U.S. wheat exports to the FSU amounts to about 30 percent of the U.S. Gulf price, the package altogether amounts to a much larger export subsidy.

The main political pressures in these subsidies have come from representatives and senators whose wheat growers have been concerned that credit has not been allocated quickly enough to keep wheat moving. Fiscal cautions have also been raised and have restrained FY 1993 and 1994 wheat sales to the FSU.

6.3 Consequences and Evaluation of the Program

Questions were being raised about the effectiveness of the EEP even before its legislative enactment. The administration announced its first EEP initiatives in May 1985. By October only two sales had been made, 500,000 tons of wheat
and 175,000 tons of wheat flour to Egypt. The administration in May had appointed an advisory committee on the EEP, consisting primarily of commodity group and agribusiness representatives. In August, the committee’s representatives from the National Corn Growers and U.S. Wheat Associates, joined by four other committee members, issued a press release saying they were “disappointed and frustrated over the lack of any concrete results from the EEP” (National Corn Growers Association 1985). In October and November the House Committee on Agriculture’s Subcommittee on Department Operations, Research, and Foreign Agriculture held hearings to review complaints about EEP administration.

The substance of the commodity group complaints was that the EEP was being carried out in too restrictive a manner. In particular, the groups argued that wheat sales to the Soviets fell under the EEP criteria listed earlier. The European Community had since 1980 expanded its subsidized wheat exports to the Soviet Union substantially, yet USDA had not approved an EEP initiative for U.S. wheat sales to the Soviet Union. The Soviets were switching wheat purchases from the United States to the European Community, even though that meant not honoring their purchase agreements with the United States under a previously negotiated long-term grain sales agreement. The hearings made clear, however, that even if USDA were willing to accede to the Soviets’ ploy to acquire previously agreed upon shipments at a lower price, potential exporters of nonagricultural products to the USSR would not accept the subsidizing of wheat sales to the USSR while other holds on U.S.-Soviet economic arrangements were in place as part of the political struggle for freer emigration from the USSR (U.S. Congress, House 1986). It was not clear, however, which particular export industries Congress was hearing from on this point.

Apart from being subject to such political constraints, the procedures for implementing EEP were far from clear. There were (and are) two main steps: administration approval of an EEP initiative and USDA’s acceptance of exporters’ bids for bonuses under the initiative. Approval of an initiative is done by the EEP interagency committee described earlier, after a proposal by USDA, based on the criteria of additionality, targeting, cost effectiveness, and budget neutrality. For example, one of the first initiatives approved was for the sale of 1 million tons of wheat to Algeria. With the initiative in place, a U.S. exporting firm can attempt to arrange a sale with an importing firm (or government agency) in Algeria. If the exporting firm cannot meet the price offered by competing exporters, in this case the European Community, it will apply to USDA for a “bonus” of commodity certificates equal in value to the amount needed to make up the difference between the cost of U.S. wheat delivered to Algeria and the price negotiated to make the sale. USDA assesses U.S., EC,

18. The outside EEP advisory committee understood there to be two additional criteria: coincidence with overall U.S. trade policy and approval by the interagency committee (U.S. Congress, House 1986, 88).
and Algerian market conditions and either approves or disapproves the deal. If the transaction is approved, the firm receives the certificate requested and ships the wheat.

This mechanism is quite different from the approach used for wheat export subsidies by the European Community, or by the United States in its pre-1972 program, of periodically announcing a dollar value of the subsidy, say $35 per ton, and then letting any firms who export U.S. wheat collect that amount on the exported quantities. The approach raises questions of how USDA can determine, for each proposed sale, what the competitors' price is. Wouldn't the competitors' price itself be affected by EEP? And, is there sufficient incentive for U.S. commercial exporters to obtain the highest possible market price?

USDA Under Secretary Amstutz testified on the new EEP mechanism as follows:

Program implementation, in terms of mechanics such as tendering and contractual arrangements, has remained flexible. Procedures have varied from country to country to accommodate the individual buying systems of the importing nations involved in the program.

The bonus is to be sufficient to allow our commodities to be competitive, but it is not intended to undercut the world market price. In other words, the program is designed to ensure that sales made under it are at commercial, not concessional, prices.

To ensure that we are meeting these competitive and commercial objectives, a price review process has been developed. The process calls for a review of the level of both the bonus and the sale price. This is to assure not only that the bonus paid to exporters is not too high, but also that the sale price, relative to subsidized foreign competition, is not too low.

In the price review we determine the cost of delivering the U.S. commodity to the foreign buyer and the price at which the same commodity can be delivered to the same destination by subsidized foreign competitors.

The difference between the two—the amount by which the competition can under-price us—is used in determining the acceptable bonus.

Currently, an exporter is required to post a performance security with CCC before CCC will consider the exporter's offer. Once an offer is accepted, the exporter reserves bonus commodities from CCC inventories. After shipment, the exporter must furnish proof of export to request delivery of the bonus commodity. After the exported goods arrive in the destination country, USDA releases the performance security posted by the exporters. (U.S. Congress, House 1986, 142)

Neither this nor other statements of USDA have answered questions about U.S. exporters' incentives and pricing behavior under the EEP. But these were not issues of concern to Congress in 1985 (or later). The main objection of House Agriculture Committee members to the EEP was their desire for a program that would subsidize most or all wheat exports, not just a subset of targeted markets. Two main concerns were raised about the operation of the EEP: first, it would antagonize traditional buyers of U.S. commodities who did not
receive the subsidized price, hence possibly driving them to other suppliers, and second, it would drive down the prices received by nonsubsidizing competitors like Argentina and Australia. At the House hearings, several commodity groups raised the first concern, and the General Accounting Office (GAO) the second.

6.3.1 Economic Analysis of EEP

While economists' analyses did not play a role in the 1985 legislative process, analytical work was available that did not make the EEP attractive. The standard argument (e.g., in Dixit and Norman 1980) that, for purposes of domestic income redistribution, a domestic distortion is always preferable to a border distortion should apply to agricultural export subsidies undertaken for the purpose of farm income support. The question addressed in agricultural economists' analyses is whether there are second-best or other special characteristics of the world wheat situation that make targeted, in-kind export subsidies more attractive.

General (untargeted) Export Subsidy

Consider the effect of a subsidy in the 1985 U.S. wheat market. Using elasticities of -2.1 for the short-run demand for U.S. wheat exports and -0.2 for U.S. domestic demand (consistent with USDA analysis at the time), the 1985 crop situation is shown in figure 6.7. Of the 2,400 million bushels produced, 900 million bushels were exported and 1,050 were consumed domestically, leaving 450 million bushels added to CCC stocks at the farm-level supported price of $3.10. Despite the inelastic demand for domestic use, CCC activity creates perfectly elastic demand at the market support price (not the target price).

Suppose we introduce an export subsidy, $s$, of $0.40 per bushel ($15 per ton). This drives down the world price of wheat by $15 per ton and increases the demand for U.S. wheat by about 300 million bushels. The U.S. domestic price remains unchanged because of the CCC loan program. If the price were to rise above the supported level, wheat would not go into the CCC program; but there is too much wheat to clear the market at any price above the support level. CCC loan availability creates a perfectly elastic demand at the support price level, so the total demand for wheat, in the absence of the export subsidy, is $D_r$. Introducing the export subsidy shifts total demand to $D'_r$. Wheat is exported rather than going into stocks.

The gains and losses to the United States are as follows. Domestic consumers and producers are unaffected, since the U.S. price remains the same. Budgetary outlays are $s$ times the quantity exported, here $0.40 \times 1.2$ billion bushels = $480$ million annually. But there is a budgetary saving from not having to

19. The legislated support price was $3.30, but this translated to an average farm-level price of $3.10 in the 1985–86 marketing year.
Fig. 6.7 Wheat export subsidy

pay CCC loans of $3.10 × 300 million bushels, or $930 million. This implies a net budgetary saving of $450 million in the current fiscal year. However, current-year flow accounting (although it is what drives budget scoring) does not take into account the value of the wheat the government owns. There is no agreed-upon valuation of CCC stocks, or even an agreed-upon method for determining their value. The principal necessary calculations are (discounted) expected storage costs over the period the grain will be held, and the expected value of the grain when sold. Assuming three years of storage costs and eventual sale at roughly the loan rate (acquisition price), the present value of $930 million spent on CCC wheat is about half its cost, or $465 million. So the net government costs are ($480 - 465 =) $15 million.

According to the analysis so far, farmers do not gain from the export subsidy. However, this also occurs only because the diagram shows only the current year, in which wheat acreage and input decisions are fixed by wheat program provisions. Under the wheat program the supply function is changed in more complicated ways than is the demand side of the market. Producers receive a deficiency payment that they know will make up the difference between the target price ($4.38 in 1985) and the U.S. average price in the five-month peak marketing season (June–October). So they should make planting decisions, in the preceding autumn for winter wheat and spring for spring wheat, based on the target price, not the expected market price. However, in order to qualify for deficiency payments farmers had to stay within their acreage base and hold idle 20 percent of base acreage. Therefore, the incentive price for growing wheat is considerably less than the target price. For 1985 I have estimated that the average producer's incentive price was about $3.75 per bushel as compared to the $4.38 target price (Gardner 1991). Moreover, producers are limited in their ability to respond to the incentive price. They cannot expand acreage as
already mentioned. They can expand output by using more fertilizer or other inputs, but deficiency payments provide no incentive for this because payments are made on a fixed (since 1981) yield base which is assigned to each producer. A final complication is that, principally because of land-idling requirements, some farmers choose not to participate. For them the incentive price is the market price.

In calculating farmers' gains from an export subsidy, these considerations come into play through the annual determination of the acreage reduction percentage (ARP). The reason the ARP was as high as 20 percent in 1985 (and 27.5 percent in 1986 and 1987) is the large prior CCC stock accumulation. The 450 million bushels added to stocks from the 1985 crop was piled on top of the 1.4 billion already accumulated. If 300 million bushels could have been exported instead of being added to stocks, the ARP could have been reduced accordingly. At the U.S. average yield of about 35 bushels per acre, 8.5 million acres could have been planted that had been held idle. At a net rental value of wheat land of $40 per acre, the gain to wheat producers would be $340 million.

The results of the two ways of accommodating a general wheat export subsidy under 1985 conditions are summarized in table 6.4.

Given the existence of excessive CCC wheat stocks or ARPs, an export subsidy program has quite small costs. However, an option with still smaller costs would be to have a domestic consumption subsidy also. In figure 6.7, if $s$ were paid on all consumption the budget cost of the subsidy would be offset, except for a small triangle, by gains to U.S. consumers. An alternative, better policy would be to pay a larger subsidy on domestic consumption than on exports (or even taxing exports). This avoids using U.S. Treasury funds to provide lower-cost consumption abroad.

*Special Features of EEP*

The EEP differs from a general export subsidy in three key respects: targeting of particular importing countries to receive subsidies, limiting the quantity of wheat eligible to each targeted country, and payment in kind of the subsidy in the form of CCC stocks.

Targeting and quantity limitation are attractive because they reduce budgetary outlays for subsidies and because they do not undercut the prices of our nonsubsidizing competitors, notably Argentina and Australia. At least that is

20. In fig. 6.7, this is achieved at a price of $2.00 per bushel. As compared to the $3.10 price, this policy would add $1.10 \times 2.4 \text{ billion} = $2.64 \text{ billion} of budget outlays, partly offset by consumer gains of roughly $430 \text{ million} and net CCC stock savings of $700 \text{ million} (assuming CCC stocks valued at half the support price) or $510 \text{ million} in producer gains if ARPs are reduced and stock buildup maintained. In either case the net cost of the policy is over $1.5 \text{ billion} (mainly because of the bonanza given to foreign consumers). In fact, the 1985 marketing loan proposal of the wheat growers would have generated this kind of result. Because of its potential budget costs (which depend crucially on the elasticity of total demand for wheat) this proposal was a nonstarter in the 1985 congressional debate.
Table 6.4 Results of Alternative Implementations of a $0.40 Wheat Export Subsidy under Mid-1980s Market Conditions (million dollars)

<table>
<thead>
<tr>
<th>Effect</th>
<th>Policy 1</th>
<th>Policy 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget cost of subsidy</td>
<td>-480</td>
<td>-480</td>
</tr>
<tr>
<td>Budget savings on CCC stocks</td>
<td>465</td>
<td>0</td>
</tr>
<tr>
<td>Overall budget effect</td>
<td>-15</td>
<td>-480</td>
</tr>
<tr>
<td>Farm income effect</td>
<td>0</td>
<td>+340</td>
</tr>
<tr>
<td>Welfare gain</td>
<td>-15</td>
<td>-140</td>
</tr>
</tbody>
</table>

*Policy 1: Give a $0.40 export subsidy, holding ARP constant and reducing CCC stocks by 300 million bushels.

*Policy 2: Give a $0.40 export subsidy, holding CCC stocks constant and reducing ARP by 8.5 million acres.

the thought. We pay the subsidy of $ to reduce the price of, say, one-third of U.S. wheat exports while continuing to sell the rest at unsubsidized world price.

The question with respect to country targeting is whether the policy is capable of creating the price wedge $ between the targeted and nontargeted wheat-importing countries. Transportation and other transactions costs between these countries suggests there would not be fully price-equalizing arbitrage. But there is also the problem of redirection of the competitors’ wheat exports. If the United States sends wheat to Algeria, replacing EC wheat, then the European Community sends the wheat that otherwise would have gone to Algeria to Iran, say. But despite the multichannel nature of world wheat trade there are possibilities of U.S. export subsidies changing the spatial price pattern, and some economists have developed arguments on how the United States could exploit differing elasticities of demand for U.S. wheat to profit from targeted subsidies as a form of price discrimination (Dutton 1990). However, the knowledge base on these elasticities and arbitrage possibilities is essentially nil, and these studies have no detectable connection with the actual administration of the EEP, or with what the wheat producers had in mind.

The quantity limitation raises other problems. As the wheat growers noted in their criticism of the first EEP sales to Egypt, once the sales were complete the European Community reentered the market and sold at the pre-EEP prices. It appears that the price at the margin is the nonsubsidized price, so there is no reason for the EEP recipients to consume more wheat with the EEP in place than without it. But if no country consumes more wheat because of the EEP, the market-clearing price will remain unchanged, as will U.S. and other countries’ exports. EC exports and prices remain unchanged, and the United States will have done nothing to force the European Community to increase their export subsidies, hence driving them to the GATT bargaining table. We have simply transferred funds from U.S. taxpayers to Egyptian buyers (probably the
government) on an intramarginal quantity of wheat imports. However, there are complications.

First, it is not clear that the U.S. EEP quantities are so limited as make sales intramarginal in the targeted countries. Second, payment in kind makes a real difference, even though subsidies are given to wheat exporters in the form of generic certificates that are transferable and can be used against any CCC-owned commodity. Even if exporters cash out their certificates, the buyer of them must redeem them for CCC commodities before their expiration date, so that wheat will inevitably be redeemed. This was important in 1985 because the CCC by law could not dispose of its stocks until market prices rose well above their current or likely attainable levels. Therefore, the EEP provided a way to place on the market commodities that otherwise would have been sequestered. In this way the EEP tended to place general downward pressure on world wheat prices, by increasing marketed supplies. Chambers and Paarlberg (1991) argue that this effect could have caused the EEP to generate a net loss to the United States. However, if CCC stock reductions trade off with equivalent ARP changes, the supply-increasing feature of the EEP subsidy can always be neutralized.

6.3.2 Assessment of EEP Operations

It seems impossible to predict much about the consequences of EEP on the basis of a general economic analysis of it. How then are the criteria to be met for EEP sales—additionality, net economic gain, and budget neutrality—to be assessed against the program’s operations? Turning first to the data for 1985–92, statistics of EEP shipments are shown in table 6.5. After a slow start, EEP exports reached 26.6 million metric tons in FY 1988, about half of all U.S. wheat exports. The average subsidy reached $38 per ton in 1987. A price wedge this large on substantial quantities would be expected to make a noticeable difference in world trade flows and prices.

“Additionality”

As an initial step in assessing the effectiveness of targeted export subsidies under EEP, several economists have attempted estimates of additionality—the net increase in U.S. wheat exports caused by each ton of EEP-assisted shipments. If one simply regresses wheat exports on EEP tonnage using the data of table 6.5 for 1986–92, the result indicates that each ton of EEP sales generates 0.8 ton of exports. This means only 20 percent of the EEP sale replaces

21. Indeed, by the end of 1991 all available CCC commodities had been distributed to holders of certificates or otherwise sold.
22. The 1985 and 1990 farm acts made it easier to dispose of these stocks after 1985.
23. Reporting of fiscal-year EEP data and crop-year total export data creates possible confusion. Fiscal years are October to September, and wheat crop years are June to May. Fiscal years are referred to by the calendar year in which they end, and crop years by the calendar year in which they begin.
Table 6.5  EEP Wheat Sales and Bonuses

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>EEP Sales (million metric tons)</th>
<th>Total EEP Bonus (million $)</th>
<th>Average EEP Bonus ($ per million tons)</th>
<th>Total U.S. Exports(^a) (million metric tons)</th>
<th>EEP Share(^b) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>.5</td>
<td>11</td>
<td>21.84</td>
<td>28.0</td>
<td>2</td>
</tr>
<tr>
<td>1986</td>
<td>4.8</td>
<td>126</td>
<td>26.20</td>
<td>20.7</td>
<td>23</td>
</tr>
<tr>
<td>1987</td>
<td>14.1</td>
<td>541</td>
<td>38.33</td>
<td>28.1</td>
<td>50</td>
</tr>
<tr>
<td>1988</td>
<td>26.6</td>
<td>819</td>
<td>30.83</td>
<td>40.6</td>
<td>66</td>
</tr>
<tr>
<td>1989</td>
<td>16.0</td>
<td>288</td>
<td>18.05</td>
<td>37.6</td>
<td>43</td>
</tr>
<tr>
<td>1990</td>
<td>14.3</td>
<td>241</td>
<td>16.84</td>
<td>33.2</td>
<td>43</td>
</tr>
<tr>
<td>1991</td>
<td>17.7</td>
<td>767</td>
<td>43.18</td>
<td>26.7</td>
<td>67</td>
</tr>
<tr>
<td>1992</td>
<td>19.7</td>
<td>813</td>
<td>41.14</td>
<td>34.3</td>
<td>58</td>
</tr>
<tr>
<td>1993</td>
<td>21.6</td>
<td>1,281</td>
<td>33.82</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Sources: Ackerman and Smith (1990); Ackerman (1993, private communication).

\(^a\)Fiscal-year exports, which differ from crop-year data used elsewhere in this paper. Constructed from USDA monthly export statistics.

\(^b\)EEP tonnage as percentage of total export tonnage.

commercial exports that would have been made anyway; that is, "additionality" is 80 percent. However, if we include the three years immediately preceding the EEP, thus incorporating a before-EEP and after-EEP contrast in the data, the result indicates additionality of zero. These results together indicate that a simple annual regression cannot provide a believable estimate of additionality.

The approach taken in the literature is to build a supply-demand model of the world wheat market and simulate the effects of the EEP. To do this one has to model not only supply and demand equations in the countries involved, both the targeted markets and nontargeted ones, but also the trade linkages between them and the policy instruments that influence wheat trade. Moreover, some policy instruments abroad should be treated as endogenous since they may respond to EEP. Brooks, Devadoss, and Meyers (1990) argue that analyses that take policies other than the U.S. EEP as given miss a key element, at least as far as Canada is concerned. Canada’s wheat export policy is not explicitly rule driven; wheat is priced for export on an ad hoc basis by decisions of the Canadian Wheat Board, which has a monopoly on exports. The board has announced it has a special program to counter U.S. EEP sales but has not revealed details, nor the prices received for Canadian wheat in the EEP-targeted markets. Australia has a similar wheat export monopoly.

Given the difficulties of specifying a simulation model that one can have confidence in for the purposes at hand, it is perhaps heartening that the range of additionality estimates is not large. Brooks et al. estimate that a ton of EEP exports added 8 to 13 percent of a ton to total exports in 1986–88. Ackerman and Smith (1990, 12) summarize five USDA Economic Research Service studies whose estimates of additionality range from 2 to 30 percent.
Additionality has become important in EEP policy because the budget neutrality of the program depends on additionality. In the earlier calculations involving a general export subsidy additionality depended only on the elasticity of foreign demand for U.S. wheat. Matters are more complicated with the targeted EEP. Until the end of FY 1991, subsidies in the form of CCC stocks made budget neutrality easy to justify because of the high costs of carrying these stocks. Since November 1991, when the CCC exhausted its available stocks and introduced cash subsidies, the budget neutrality of EEP depends upon the program's ability to increase the U.S. price of wheat and thus reduce deficiency payments.

The way EEP increases the U.S. price is by increasing the total demand for U.S. wheat. USDA has been using a wheat simulation model in which each million ton increase in wheat exports generates an increase of $0.10 per bushel in the U.S. farm price of wheat. The assumption that the CCC support level sets the market price is no longer appropriate since after 1985 the support level has been reduced and has always been substantially below the market price of wheat. Each $0.10 rise in the price of wheat reduces deficiency payments by $174 million. Empirical studies suggest additionality of 10 to 30 percent. Therefore an EEP of 20 million tons adds 2 to 6 million tons to U.S. export demand. With a $40 per ton bonus level, the budget outlays for the EEP are $800 million annually (recent levels). The 2 to 6 million ton increase in exports causes the wheat price to rise $0.20 to $0.60 per bushel and hence deficiency payments to decline $350 to $1050 million annually. Thus, if the high end of additionality pertains, which is what USDA assumes, deficiency payments fall by more than the cost of EEP bonuses and the EEP is budget neutral or better.

Farm Income and Consumer Welfare Effects

The main losses from the EEP accrue to domestic buyers of U.S. wheat. The exact incidence on the buyers' side—among farmers who feed wheat, millers, bakers, retailers, and final consumers—has not been estimated. Because domestic final demand for foods containing wheat is quite inelastic, domestic consumption of these products is unlikely to change appreciably because of the EEP, and in fact domestic use has been quite stable over time despite large changes in wheat prices. It is therefore unlikely that the EEP reduced the demand for, and thus the returns earned by processors, distributors, or other middlemen. Certainly the evidence in the political debate is consistent with this conclusion. Millers and bakers who took public positions favored the EEP (usually because they had export as well as domestic interests).

Farm use of wheat in feeding ranges from 5 to 20 percent of U.S. production. Wheat feeding is highly concentrated in the late summer months after

24. CCC costs of holding grain are much higher than commercial storage rental rates plus the opportunity cost of funds tied up, which sum to about $0.40 per bushel annually. Stocks are "rotated" (old wheat replaced with new) and relocated periodically. GAO estimates it costs the CCC over $1.00 per bushel per year (25–30 percent of the price) to hold wheat.
winter wheat is harvested but before the fall corn harvest, especially when year-end stocks of feed grains are low and old-crop prices high. Generally, livestock producers who use this wheat have very good substitutes in other feeds, so that feed use practically disappears in high-price years. If the EEP drives up the U.S. price of wheat 10 percent ($0.35 per bushel), and if livestock prices do not rise so that livestock producers absorb the feed cost increase, the expected cost of the EEP to the livestock industry is about $100 million annually. To the extent meat prices rise, the cost is shifted to consumers. The remainder of the cost of higher wheat prices is absorbed by consumers of bread, breakfast cereals, bakery products, and other food items containing wheat.

USDA's economic analysis, which is the basis for OMB's budget work on EEP, uses a model which provides estimates of farm income gains and consumer costs of EEP. The model estimates that an increase of $0.10 per bushel in the price of wheat raises farm income by $60 million and reduces consumers' surplus by $120 million (Salathe 1991). The consumer cost estimate assumes farm price increases for all domestically used wheat are passed on to consumers without any change in the farm-to-consumer markup or profits in the wheat-processing industry. The farm income increase is only about one-fourth of the rise in the market value of the wheat crop because three-fourths of wheat production is protected by deficiency payments which decline cent for cent as the market price rises.25

The overall domestic welfare effect of the EEP can be estimated by summing the budget, consumer, and producer changes if we assume the farm income change is a change in economic rents (i.e., farmland and farm operator labor taken as fixed in supply). For the range of additionality of 0.1 to 0.3, the EEP at its average recent size of about 20 million tons and cost of $800 million annually generates the results shown in table 6.6. While an optimistic assumption of additionality permits EEP to achieve the objective of budget neutrality, no assumption permits the program to achieve its cost effectiveness objective of providing a benefit to the U.S. economy.26 It is possible, however, under optimistic additionality assumptions, that the EEP is not an extremely inefficient mechanism for transferring income to farmers. With 0.3 additionality,

25. This assumes the price rise occurs in the five-month peak marketing season. In the 1990 Farm Act, in any case, the calculation of deficiency payments was changed to a full-year basis after 1993. Since the full-year price averages $0.10 per bushel above the five-month price, and the payment will be determined by the maximum of the full-year price or the five-month price plus $0.10, this change was scored as a budget saving (about $120 million a year) in the 1990 Budget Reconciliation Act negotiations.

26. If such calculations are to be used in budget planning, one should also consider the ARP as an alternative policy instrument. This is not a counterfactual exercise in the way invoking a lump-sum transfer as an alternative policy would be. The ARP is in fact adjusted annually. The CBO has argued that it would be preferable to reduce wheat acreage rather than grow wheat and subsidize its export. Assuming 0.3 additionality, the same deficiency payment, farm income, and consumer costs as in the right-hand column of table 6.6 could be achieved with a paid land division program that would cost about $400 million (for 8 million acres) instead of the $800 million EEP subsidy cost.
Table 6.6 Economic Gains from the EEP (million dollars annually)

<table>
<thead>
<tr>
<th>Gain</th>
<th>Additionality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of EEP subsidies</td>
<td>-800</td>
</tr>
<tr>
<td>Deficiency payment reduction</td>
<td>350</td>
</tr>
<tr>
<td>Subtotal: budgetary gain</td>
<td>-450</td>
</tr>
<tr>
<td>Crop producers' income gain</td>
<td>120</td>
</tr>
<tr>
<td>Gain of wheat buyers (consumers and</td>
<td>-240</td>
</tr>
<tr>
<td>livestock feeders)</td>
<td></td>
</tr>
<tr>
<td>Total U.S. gain*</td>
<td>-570</td>
</tr>
</tbody>
</table>

*Assumes set-aside acreage (ARP) held constant.

table 6.6 says it costs the U.S. economy a net (deadweight) loss of $110 million to transfer $360 million to wheat growers.

International Effects

Political discussion of the EEP from its inception emphasized the effects abroad as well as domestic effects in the United States. The Bush administration in 1989 and Congress in its reauthorization of EEP in 1990 focused even more sharply on the foreign effects. The Food, Agriculture, Conservation and Trade (FACT) Act of 1990, which authorizes the EEP at a level of not less than $500 million annually and explicitly authorizes cash as well as in-kind subsidies, gives the only purpose of the EEP as being "to discourage unfair trade practices" (U.S. Congress, House 1990, 335). The context for this focus was the continued expansion of EC subsidized exports and EC intransigence on agriculture in the Uruguay Round, then scheduled for completion in December 1990. The Omnibus Budget Reconciliation Act, enacted in October 1990 along with the FACT Act, contained a "GATT trigger" which required spending $1 billion annually on EEP if no Uruguay Round agreement had been reached by June 30, 1992. Since no agreement had been reached at that time, EEP spending has proceeded at about the $1 billion rate.27

The international effects of the EEP are impossible to estimate with precision. Uncertainties about effects on other countries' exports and on world prices are even greater than in estimates of U.S. export additionality. The intention of targeted EEP subsidies is to displace EC subsidized exports and increase the cost of EC export subsidies, yet not displace the exports of nonsubsidized commodities.

27. The wheat EEP activity shown in table 6.2 accounts for most of U.S. agricultural export subsidies, but EEP bonuses have also been paid for exports of feedgrains, vegetable oil, rice, eggs, frozen poultry, and dairy cattle. In FY 1992, total EEP bonuses were $966 million, of which $838 million were for wheat and wheat flour.
dizing exporters. If perfectly realized, the result would be no change in worldwide wheat imports, no change in (nonsubsidized) world wheat prices, but a rise in the U.S. wheat price and wheat exports, and a fall EC wheat exports achieved by increased stocks and reduced acreage in the European Community.

In fact, the European Community would be expected to respond by reducing acreage, as they have done, but also by countering EEP subsidies with increased subsidies of their own, thus retaining part of the market. This competition would be likely to remove the intramarginal nature of the subsidized price in importing countries and reduce the price of all wheat in these contested markets. Therefore, total wheat imports in these countries should increase. The best markets in which to observe the consequences of the subsidy war are the North African wheat importers (Egypt, Algeria, Morocco, Tunesia, and Libya), traditional buyers of French wheat and flour which were the first and largest EEP targets (except Libya) and whose imports account for about 15 percent of world wheat trade. Aggregate wheat imports in these countries have increased since 1985. Indications are that North African buyers—principally government-related enterprises with substantial market power locally—have filled their needs via tenders and bargaining which results in all suppliers—the European Community, the United States, Canada, Australia, and (in Libya) Argentina—selling for comparable prices (Ackerman 1993; Parker 1990). So the nonsubsidizing suppliers are being harmed as well: the Canadian and Australian wheat boards have to subsidize their sales in these markets also.

A question can also be raised about the program’s capability of separating targeted and nontargeted countries. Why would nontargeted countries keep buying at nonsubsidized prices? Even if reexports from, say, Morocco to Korea are ruled out by transportation costs, Australian exports could easily be redirected from North Africa to Korea if the price were higher in Korea. So we should expect to see wheat prices falling worldwide, except inside the United States and European Community. Other countries’ wheat exports should be replaced by U.S. and EC wheat in importing countries where the United States and European Community compete, while competing exporters should increase their market share in countries where the United States and European Community do not offer subsidies. Such shifts have in fact occurred, but nonetheless the United States has retained the ability to export about half its wheat without EEP subsidies (although most of this has credit subsidies or is shipped in the P.L. 480 food assistance programs). Notably, Japan continues to buy about 3 to 5 million metric tons of U.S. wheat annually (10–15 percent of U.S. exports) at nonsubsidized prices.28

28. Taking Japan as an importer with inelastic demand while other importers have relatively elastic demand and exporters inelastic supply, we have an approximation (if other exporters cooperate) of the situation shown by Dutton (1990) to create the possibility of targeted export subsidies being a second-best mechanism for exporters to exercise monopoly power. This result would show up empirically as an increase in the U.S. price of wheat for a given level of imports (as U.S. wheat...
The Political Economy of U.S. Export Subsidies for Wheat

Data on wheat border prices in several countries are shown in figure 6.8. The EEP, if effective, should have increased the U.S. price, from which the subsidy is subtracted and transportation added to obtain the importing buyer's price. And, if the EEP affected other countries' prices it should have reduced them. Comparing two U.S. prices (Kansas City and U.S. Gulf) with Canada, Australia, and Rotterdam prices, no such pattern is apparent. Of course, the price levels everywhere are determined more by world crop conditions, U.S. ARPs, and macroeconomic factors than by the EEP. But none of these factors would place a wedge between U.S. and other exporters' wheat prices in the way the EEP might do. Yet, to take a long-term comparison, the difference between the U.S. Kansas City price and the Argentine, Canadian, Rotterdam, and Australian prices are largely the same in 1984 with no EEP and in 1992 with an average EEP bonus of $40 per ton. Indeed, if there is a difference it is that the U.S. prices fell relative to the foreign prices.

The data are more consistent with the hypothesis that the EEP drove down the price of wheat in the targeted importing countries, with all the competing exporters who remained in those markets offering matching subsidies, while prices in the remaining markets were mutually determined by spatial market forces which are basically the same as with no EEP. If this is true, the economic effects of the EEP are at the low end of the ranges given in table 6.3, perhaps even lower.

The price relationship most crucial to the essentially null-effect interpreta-

is reallocated from elastic-demand to inelastic-demand markets). Empirical evidence that this has occurred is lacking.
tion of EEP effects is that between the United States and Canada. If the EEP were to place a $30 to $50 wedge between U.S. and Canadian prices for a period of eight years there would be tremendous pressure to export Canadian wheat to the United States. In fact, such pressure in the past has led to the imposition of import quotas under the section 22 authorities described earlier. But section 22 import quotas were removed by executive order in 1974 and have never been reinstated.

In 1992 and 1993 there has at last occurred a surge of wheat imports from Canada, about 2 million tons each year. This is a quadrupling of such imports compared to the 1980–90 average. Yet as a percentage of either Canadian or U.S. wheat exports, the amounts are quite small (refer back to fig. 6.2). It is noteworthy also that much of these imports are of durum wheat, a type used primarily in making pasta, and grown in the United States predominantly in North Dakota and in Canada just across the border. The price of durum wheat moves rather independently of other wheats.

The U.S. International Trade Commission (USITC) investigated the Canadian exports of durum wheat to the United States in response to congressional requests. Their report (USITC 1990) attributes these exports in part to the EEP driving down the price of durum wheat in the markets to which Canada has traditionally been exporting this product. Since the ITC report, durum imports from Canada have increased substantially, from about 0.2 million metric tons annually to 0.7 million tons in 1992–93. U.S. durum exports have continued at about 1.5 million tons annually during this period, with the majority receiving EEP subsidies in the range of $25–$50 per ton. In 1992, U.S. durum exports under EEP were 0.9 million tons, with an average bonus of $42.50 per ton (Alston and Carter 1993). This would appear a clear case of the EEP creating a wedge between U.S. and Canadian prices, so that durum wheat going out through the front door (to North Africa and South America) comes back in through Canada. The picture is complicated, however, by the facts that U.S. durum wheat in 1992 had declined in price since 1989, sold at a lower price than average wheat in the U.S., and that U.S. durum wheat acreage and production declined in 1992 by roughly the amount of the increased Canadian shipments to the United States. The NAWG has cited the data of table 6.7 as showing a lack of correlation between U.S. durum exports under EEP and Canadian wheat exports to the United States.

The economic analysis carries political freight because if the imports are attributable to autonomous Canadian policies rather than being caused by the EEP, the case is better for imposing section 22 import quotas. The case to be made is that Canadian exports interfere with the operation of the U.S. wheat program. These imports can be argued to have increased the cost of the program by driving up deficiency payments slightly, but whether this argument is legally sufficient remains to be determined. In the course of the NAFTA debate, the Clinton administration promised another inquiry into the matter, which the ITC subsequently undertook. In July 1994, the ITC found that wheat
Table 6.7 Data on Wheat Trade between Canada and the United States (thousand metric tons)

<table>
<thead>
<tr>
<th>Crop Year (July–June)</th>
<th>U.S. EEP Sales of Durum Wheat (worldwide)</th>
<th>Canadian Durum Exports to the All Canadian Wheat</th>
<th>All Canadian Wheat Exports to the United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985–86</td>
<td>50</td>
<td>0</td>
<td>280</td>
</tr>
<tr>
<td>1986–87</td>
<td>1,122</td>
<td>59</td>
<td>417</td>
</tr>
<tr>
<td>1987–88</td>
<td>942</td>
<td>177</td>
<td>320</td>
</tr>
<tr>
<td>1988–89</td>
<td>187</td>
<td>191</td>
<td>285</td>
</tr>
<tr>
<td>1989–90</td>
<td>700</td>
<td>173</td>
<td>379</td>
</tr>
<tr>
<td>1990–91</td>
<td>990</td>
<td>330</td>
<td>547</td>
</tr>
<tr>
<td>1991–92</td>
<td>673</td>
<td>393</td>
<td>858</td>
</tr>
<tr>
<td>1992–93</td>
<td>895</td>
<td>420</td>
<td>1,320</td>
</tr>
</tbody>
</table>

*Source: National Association of Wheat Growers (1993, private communication).*

imports from Canada were increasing the cost of the U.S. wheat program but disagreed on the amount and made no recommendation for a remedy. In August the United States and Canada reached a one-year agreement under which Canadian wheat would be subject to a $50 per ton tariff for quantities above about two-thirds of 1993–94 import levels. The political context for this protection was the Clinton administration's effort to obtain the Democratic wheat-state senators' support for the Uruguay Round GATT agreement.

### 6.4 Political Response to the EEP

In 1990 the legislation authorizing the EEP (and other farm programs) expired and was reconsidered in a comprehensive set of hearings (U.S. Congress, House 1991; U.S. Congress, Senate 1991). This provided a convenient opportunity for interest groups to express second thoughts and suggested modifications of the EEP. The NAWG, as well as representatives of other commodities using the program, were totally supportive of continuation of the EEP without substantial change. Concerns that had been expressed in the 1985 House hearings about targeting as opposed to a generally available subsidy disappeared. Grain users might have been expected to be more critical, but more of them supported EEP in 1990 than had in 1985. The American Bakers Association, the Biscuit and Cracker Manufacturers' Association, and the North American Export Grain association all testified in favor of continuing the program.

Grain exporters asked for changes in the procedures by which export bonuses are awarded, which would give the companies greater flexibility in making deals with importers (U.S. Congress, Senate 1991, part 13). This however was the one area where concerns had been expressed by nonfarm and some farm groups—that the program was too friendly to exporting companies and that these companies rather than farmers were profiting from the program. This concern persists to the present, as exemplified in the recent *New York Times*
series on “Tainted Trade,” the first installment of which was headlined on page 1: “Abuses Plague Programs to Help Exports of Agricultural Products” (New York Times, October 10, 1993). None of the particular abuses cited—and substantively there were not many—involved the wheat EEP program. In addition, economists have continued to assert, based on arguments and analysis discussed earlier, that the EEP generated few benefits to farmers for its costs.

Because of firm support from commodity and agribusiness groups, and weak opposition, the EEP emerged unchanged in structure and strengthened in budget in the 1990 Farm Act. EEP spending was far higher in FY 1991–93 than in any previous three-year period (table 6.5). The solid political support was attributable not so much to particular export achievements of the EEP, but to farmers’ general satisfaction with the recovery of farm income from mid-1980s lows and the role of the commodity programs in that recovery. CCC wheat inventories had been sold off, deficiency payments protected producers from low prices in 1986, the export market had recovered with the dollar’s decline from its 1985 high, and reduced output boosted wheat prices back to 1980–81 level in 1989 and 1990. Farm interests in the 1990 farm bill debate were devoted mainly to attempting to forestall the budget cuts of about $2 billion annually that the Bush administration was calling for. The EEP was thus seen as a piece of a set of programs that was working. Beyond general satisfaction with the situation, a principal threat to U.S. grain producers was seen to be EC subsidized exports. The EEP was seen as particularly valuable in this situation, with the Uruguay Round languishing.

Opposition to EEP was mitigated because farm bill reformers focused on other policies. The only organized reform effort, by a coalition of conservative Republicans and urban Democrats in the House of Representatives, brought to the floor of the House amendments to reduce or eliminate the sugar, wool, and honey programs and eliminate deficiency payments to farms with over a million dollars in sales or to farmers who earned more than $100,000 from off-farm sources. These amendments all failed. These had more apparent popular appeal than an anti-EEP amendment would have; this helps explain why none was offered.

A second important factor mitigating opposition to EEP was its being scored as budget neutral. The reforms that were successful in the 1990 Farm Act, most notably the introduction of a 15 percent reduction in deficiency payments by making 15 percent of each producer’s base acreage ineligible for payments,

29. The two main abuses were tobacco export assistance (not under EEP) that subsidized exports by U.S. tobacco companies of foreign-grown leaf and corruption (Iraq allegedly using credit meant for grain import to buy arms) in the sale of rice to Iraq in the period leading up to the invasion of Kuwait in 1990.

30. It may be thought that farmers’ positive attitude is being overstated in view of the complaints of many farm witnesses and the gloomleading of many Agriculture Committee members. Evidence that this was aimed at forestalling cuts rather than changing programs is the absence of major proposed changes in the 1990 debate. Recall too that President Bush won the farm vote in 1992 (see Cook, Art, and Evans 1991).
was driven by the budget reconciliation agreement to cut $13 billion from farm program spending over the five fiscal years 1992–96. The $1 billion annual spending on EEP would have been a prime target for cuts if the program had not been scored as budget neutral by OMB.

After passage of the 1990 Farm Act the EEP became politically still stronger. In 1993–94 EEP sales were extended to Mexico. The GATT triggers locked a minimum of $1 billion annually for EEP bonuses. The Canadian government has objected to this program on several occasions. When President Bush was planning his visit to Australia in 1991, the White House found to their surprise that the lead item for discussion between the heads of state, in the Australian view, was U.S. wheat exports under the EEP.

The desired route to demise of the EEP would be implementation of the Uruguay Round GATT agreement. In agriculture the agreement requires multilateral phase-down of export subsidies, including the EEP. In the end, this agreement could be considered a success in the same vein as President Reagan’s arms buildup in promoting nuclear weapons agreements with the USSR. Even without the Uruguay Round, it is noteworthy that the European Community has in 1991–94 introduced significant reforms of the CAP, including acreage set-aside and other measures to reduce outlays on their export subsidies. The strength of U.S. willingness to spend on EEP quite likely had a role in encouraging these reforms, though how important a factor is unclear.31

6.5 Conclusions

A summary of interest group positions on the EEP, and how they fared, is shown in table 6.8. The most active group, wheat producers, were substantial economic gainers from the program. Wheat-exporting businesses were less active but were also supportive of EEP, and were winners. Other agricultural producers, notably feed grains, gained by obtaining a piece of the EEP action and also supported the program. The losing groups—domestic grain processors and consumers—did not visibly oppose the program.

The most striking feature of the political economy of the EEP is how little impact standard economic arguments have had. Economists have produced many analyses showing that the program, even as a second-best measure, gen-

31. What is the U.S. gain from CAP reform? Although it is even more conjectural than the earlier calculations, CAP reform along the lines being implemented could well reduce EC wheat exports by 3 to 4 million tons annually and raise the U.S. market price by $0.20 to $0.30 per bushel. The resulting gain for U.S. producers would be $120 to $180 million annually, and the gains to taxpayers would be $350 to $520 million (because of less deficiency payments). U.S. consumers would lose $240 to $360 million. The overall net gain to the United States, equal roughly to the price increase times wheat exports, would be $230 to $350 million.

Suppose the EEP accelerated CAP reform by five years. Then the EEP generated $1.1 to $1.8 billion for the United States. The overall U.S. cost of the EEP in 1990–92 was about $350 million annually, or about $2 billion for 1986–93. These calculations are of course crude, but they indicate that it is quite difficult to obtain any net U.S. gain from EEP as a strategic investment, even under the assumption that it successfully induced policy changes in the European Community.
Table 6.8 Interest Groups' Positions on the EEP in the 1985 Congressional Debate

<table>
<thead>
<tr>
<th>Support</th>
<th>Most Active</th>
<th>Least Active or Neutral</th>
<th>Opposed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Winners</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat producers</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat exporters</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Rice, feed grains, and other EEP-eligible farmers</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custom wheat harvesters and input supplies</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed or no effect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General farm organizations</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Losers</strong></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Consumer groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livestock producers</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bakers</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Public-interest watchdogs</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

*Millers were not all losers because subsidies are paid for some flour as well as wheat exports.

*Principally op-ed columnists and other authors.

erates a net loss to the U.S. economy, although some have muddied the waters by showing that a precisely calibrated system of country-specific export subsidy rates could be welfare increasing if the United States has varying degrees of monopoly power in different wheat import markets (e.g., Abbott, Paarlberg, and Sharples 1987). The lack of clout of the overall U.S. welfare argument is not surprising given the prevalence of government activity that generates deadweight losses in order to redistribute income.

It is perhaps more surprising that fact-based analyses that argued farmers as well as the rest of the economy would be better off under alternative policies did not cut more ice politically (e.g., Paarlberg 1988). It seems clear in retrospect that for such an argument to be effective it has to be accepted by farmers themselves as well as by disinterested observers. The agriculture committees take their cue first and foremost from farmers, and if farmers are united, only very strong opposition can be effective.

In order for wheat growers to abandon EEP, they would have to be shown how they could be made just as well off with alternative policies that are politically feasible. The option of cutting acreage with an increased ARP causes farm income to be lower for a given price of wheat because of the opportunity cost of idled acres. Political feasibility also means avoiding the one nonfarm source of strong opposition, objection to increased budget outlays. This rules out the standard approach that economists offer, nondistorting or less distorting transfer payments. With acreage and yield bases fixed, and farmers free to plant alternative program crops without affecting their payments, increasing the
wheat target price would provide payments not far from being a nondistorting transfer (apart from the marginal cost of raising government funds). But budgetary pressure makes this a nonstarter.

The biggest losers from the EEP are buyers of wheat, with losses of $250 to $600 million per year according to estimates presented earlier, with recent world price data suggesting the lower end of the range is more likely. But no buyers of wheat—millers, bakers, livestock producers, or consumers of retail products containing wheat—have raised politically significant objections to the program. Agribusiness interests probably did not bear any losses. Livestock feeders' costs have not been substantial, and a feeling of solidarity together with logrolling keeps them from opposing the program.32 Consumer costs are only about $1 to $3 per year per person; and the general public remains generally supportive of farmers according to polls.

In short, the EEP has proved a political winner because: wheat producers see a benefit from it; wheat producers have a unified view on the issue, and they have effective channels of influence through the congressional agriculture committees; wheat buyers have not opposed the program; the program has been accepted as budget neutral.

There are two points of vulnerability for the EEP in the near future. The first is in the budgetary arena. Budget-neutrality arguments are becoming less plausible now that CCC stocks are no longer used as bonuses, and apparent effects on U.S. prices are small. FY 1995 agricultural appropriations, enacted in September 1994, contain a $200 million reduction in EEP that has been scored as a budget savings. The second point is that the GATT agreement in agriculture requires a reduction of the EEP. This places EEP reform as part of a policy package that would make U.S. farmers as well as nonfarmers better off than at present.

References


32. Livestock producers do not have price support programs, but logrolling can occur because cattle feedlots get lower-priced feeder calves when grazing costs are lower, so cattle interests need crop producers' support on keeping federal grazing fees low; and poultry products have been exported under EEP using CCC grain as a source of bonuses, so the poultry industry has an interest in the EEP.


Comment

Robert Paarlberg

Gardner's paper on the Export Enhancement Program (EEP) is exceptionally strong, by far the best work that has yet been done on this topic. What interested me most was his questioning how such a costly and ineffective policy could remain politically popular for so long. Several years ago I wrote a brief article of my own entitled, "The Mysterious Popularity of EEP" (Paarlberg 1990). Gardner's analysis is thorough and careful on the evolution and the consequences of EEP, but to some extent it only deepens the mystery as to the program's popularity.

One key to the program's survival, Gardner shows, was its scoring by the Office of Management and Budget (OMB) as "budget neutral." Several larger questions arise from this scoring which might deserve more analysis.

First, what explains the fact that the deficit hawks at OMB were sooner willing than the Congressional Budget Office (CBO) to designate EEP as budget neutral, despite evidence from inside the U.S. Department of Agriculture (USDA) itself that the additionality gained by EEP was only about one-third the amount needed to claim budget neutrality? More important, why did OMB hold on to this unrealistic claim even after surplus stocks were gone and the program was cashed out in 1991? My own suspicion is that OMB was taking an indulgent view of EEP in part because of its own original role in creating the EEP, in 1985. OMB was reluctant to punish EEP because OMB, under David Stockman's leadership, had been the original midwife of the program. In this regard, EEP may not be the only program instrument that plays a prominent role in U.S. agricultural policy because of the influence and indulgence of OMB. Acreage reduction programs (ARPs) also tend to be championed by OMB, despite the long-term damage they do to the competitiveness of U.S. agricultural exports, and to the economic health of rural America.

A second question also arises from EEP's budget-neutral scoring. How is it that measures like budget neutrality have come to be more important, in the agricultural policy debate, than measures such as cost effectiveness in contributing to national welfare, or even to farmer income? The EEP, as Gardner shows, is a terribly inefficient way to support farm income in the United States. Like most export subsidies, its primary effect is to transfer welfare to foreign customers (who get the wheat they normally would have been buying at a lower than normal cost). If the purpose of the program is to boost farm prices in the United States by removing wheat from the market, it would actually be cheaper for taxpayers to remove that wheat by purchasing it and burning it, rather than trying to create additional sales abroad with subsidies that tend to be immedi-

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1. Kenneth W. Bailey estimated only 0.1 additionality during the early years of the program (Bailey 1989).
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ately offset by similar subsidies from competitors such as the European Community.

In the policy debate in Washington, however, the only important standard for measuring EEP has seemed to be its short-term budget cost compared to current policy. In areas like agriculture where current policy is costly and ineffective, this is not strict enough a standard. Under these circumstances, praising the EEP for budget neutrality is a bit like praising someone for having switched from gambling away his paycheck to drinking away his paycheck, because his behavior change was "paycheck neutral."

Another area I might look into more deeply is the alleged contribution made by EEP to Common Agricultural Policy (CAP) reforms, and to the recent completion of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) negotiations. Gardner makes an interesting calculation, that even if EEP advanced CAP reform by five years, its overall cost to the U.S. economy still exceeded the benefit. I would go farther, since there is no convincing evidence that EEP was key to CAP reform. The Australian Bureau of Agriculture and Resource Economics estimated several years ago that EEP was only increasing the budget cost of the CAP in Europe by about 1.5 percent. It takes courage to argue that this small straw played any role in breaking the camel's back. In some ways, EEP was on balance unhelpful in the Uruguay Round since it antagonized our allies there (Australia and Canada) much more than it punished the European Community. True, the United States in the end traded away a 21 percent reduction in EEP for a 21 percent subsidized export volume reduction in the European Community, but this came after the European Community had already embraced its MacSharry Plan reform, which would have made likely a significant volume reduction in any case, with or without a GATT agreement. Moreover, it is not yet clear how the modified Blair House agreement on export subsidies will function. There is some danger that as the use of direct export subsidies declines, the use of export credits, credit guarantees, blended credits, market promotion, barter, and "food aid" will expand.

There is also a danger that the Uruguay Round outcome will help, in the end, to keep the EEP in place indefinitely. Farm groups will argue that "we bargained hard" for an allowable level of export subsidies, and to provide anything less will be "unilateral disarmament." The GATT ceiling on export subsidies, in other words, could start to become a floor.

What might it take, in the end, to prompt a termination of EEP? Most of my own predictions, until now, have been wrong. I originally thought the program would end after the 1988 summer drought, which eliminated U.S. surplus stocks of wheat, and hence ended the "surplus disposal" justification for the program. EEP remained in place, however, because farm groups said they needed it as a "bargaining chip" in the Uruguay Round. They claimed they wanted EEP to get a better GATT, but in fact they were using the negotiations in GATT to hold on to a bigger EEP.

I next thought the program would end in 1992, when stock shortages actu-
ally forced the CCC to stop providing "bonus" wheat flour to the domestic school lunch program. I could not imagine there would be support for continuing to subsidize consumers in Russia and Egypt at a time when poor consumers in the United States were being denied. Several months later, however, President Bush expanded the program, part of an election-year play to wheat-state political leaders.

I then concluded that the program probably would not end until it became clear that scandalously large subsidies were going to foreign governments with which the United States had major diplomatic differences. This, after all, was how an earlier U.S. wheat export subsidy policy was ended, following the "great grain robbery" sale to the Soviet Union in 1972. In early 1994, however, even this hypothesis proved unfounded, when USDA offered a record-high $65 per ton subsidy to the government of China, at precisely the same moment that China was being targeted by other U.S. government agencies with economic sanctions, for various human rights transgressions. Not even this sale was sufficient to discredit the program.

So it is that the mystery of EEP's popularity deepens.

References