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A REVIEW AND ANALYSIS OF THE EXPORT ENHANCEMENT PROGRAM

by

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ABSTRACT

A Review and Analysis of the Export Enhancement Program

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Chris Rittgers

The United States (US) Export Enhancement Program (EEP) was introduced in May 1985 with the goal of alleviating the agricultural sector's financial stress, through a restoration of export performance. Recently, the objectives of the policy have become more political in nature. The EEP is now considered to be an important means to pressure the European Community (EC) into offering concessions at multilateral trade negotiations. Under the EEP, payment in-kind of export subsidies are authorized for selected or "targeted" markets. The EEP sales are supposed to be additional to commercial sales and should displace subsidized EC exports.

Trade theory indicates that targeted export subsidies can be welfare increasing for the subsidizing country, but are likely to cause disruptions in international trade flows, and may reduce world prices. The effectiveness of using export subsidies to increase export volume is reduced when other exporters retaliate. Many other factors may affect the performance of the EEP, including import demand

elasticity, importer behavior, and market supply and demand conditions.

The EEP has not significantly increased US export volume or market share. The effectiveness of the program has been limited because the EC increased its use of export restitutions in response to the EEP. Other agricultural exporters strongly oppose the EEP, and the policy has caused diplomatic tension between the US and other agricultural exporters. This negative side-effect of the EEP acted to undermine the US position at international trade talks. When the EEP comes up for reauthorization in 1995, policymakers will need to reexamine this policy to determine if it is an essential element of US agricultural trade policy. If it continues to perform as it did during the 1985-1990 period, legislators should consider eliminating the policy.

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CHAPTER 1

OVERVIEW AND RESEARCH OBJECTIVES

This introductory chapter will provide a general outline of this paper, the issues to be addressed, the relevance of the topic, and the specific objectives of the study.

1.1 Issues to be Addressed

As the global economy became more integrated, world trade became more significant in determining the well-being of the United States (US) agricultural sector. Foreign trade offered both opportunity and hazards, because global conditions and events affected farm employment and income. With increased world market volatility, and a US farm economy increasingly dependent on exports, a certain degree of instability was injected into the US agricultural sector. Because reducing instability in the agricultural economy has historically been an important objective of US agricultural policy, trade policies and other policies affecting trade became an important element in overall US agricultural policy. In order to mitigate the risk inherent in an export-oriented sector, US policymakers authorized certain

measures to stimulate export volume, revenue, and US market share.

Though these trade policies are intended to benefit the agricultural sector, they also involve both political and economic costs. The political costs stem from the nature of trade policies. Government efforts to assist export performance necessarily have an impact on other countries. To the degree that trade policies are successful in increasing exports, they may reduce the export performance of other countries and affect the economies of other nations. Thus, US actions which attempt to increase agricultural export volume are bound to be a point of contention in international politics.

The economic costs will include both budgetary and off-budget costs. Taxpayers will have the responsibility of financially supporting trade policies. Off-budget costs refer to the foregone opportunities of using funds for other purposes, because the funds were employed for export programs. Because these costs exist, and also due to the fact that the costs of supporting the programs may fall on those who do not benefit, export programs are an important domestic political issue, as well.

Agricultural trade policy, and agricultural policy in general, acquires a greater political importance prior to the authorization of US Farm Bills. During the debate leading up to the 1990 Farm Bill, trade policy received considerable attention. Several new trade policies were

enacted in the 1985 Food and Security Act, and legislators were considering whether or not to continue these policies. The 1990 Farm Bill debate took on even greater significance because it was occurring in the context of ongoing multilateral trade negotiations, which were primarily concerned with liberalizing agricultural trade policies. Hence, the outcome of the debate would not only influence the US agricultural economy, but would also have an impact on the direction of future international trade policy.

One policy which was particularly contentious, during both the Farm Bill debate and international trade talks, was the Export Enhancement Program (EEP). This export subsidy program was authorized in the 1985 Farm Bill and was being examined again in 1990 to determine if it should be continued. Eventually, policymakers decided to continue the policy, and it was reauthorized in the 1990 Farm Bill.

Though the EEP has already been approved for continuation until 1995, the issue of whether or not to continue this policy is still worthy of consideration. A clear understanding of the EEP's features will be useful for future deliberations on the topic. Also, if this policy must remain in existence, it would be important to understand how it should be implemented.

With these questions in mind, this paper will focus on the characteristics of the EEP, and its effectiveness in achieving US trade policy objectives. As will be outlined in this paper, the EEP is the source of much tension in US

international relations. Thus, an analysis of the program will be helpful in determining if the benefits of the program warrant the associated political costs. Though a rigorous quantitative analysis is beyond the scope of this paper (not to mention the capabilities of the author), some generalizations concerning the costs and effectiveness of the program can be made. These generalizations will be based on previous empirical work which examined the policy, as well as standard trade theory. This will all be done in an effort to highlight the factors which need to be considered when addressing the issue of how, or if, the EEP should be implemented.

1.2 Relevance of the Study

Given the discussion in section 1.1, the importance of the topic of this study should be apparent. Nonetheless, the significance of this topic deserves further explanation.

US trade policy, and particularly the EEP, is a prominent issue in both domestic and international political arenas. The EEP plays a role in determining the performance of the domestic economy and foreign economies, alike. Export subsidy programs, like the EEP, have always been a sore spot among competing exporters who are adversely affected by the subsidies. The EEP is a source of friction in multilateral trade negotiations, and could be consequential in negotiators' efforts to liberalize the world trading regime. Domestically, the program affects

stock levels, and to a certain extent, farm prices and farmers' incomes. This combination of factors necessitates a closer examination of the policy.

1.3 Objectives of the Paper

The objectives of this paper follow from the discussion in sections 1.1 and 1.2. Understanding the characteristics of the EEP first requires a description of the reasons for its implementation, its objectives, and how it operates. With this knowledge, the theoretical implications of the policy can be determined. These factors can then be used to develop a conceptual framework for an EEP subsidy strategy. Finally, empirical data can be examined to gauge the performance of the policy.

Thus, the objectives of this study are to:

1) Determine the farm policy environment which led to the enactment of the EEP.
2) Discern the institutional mechanics and goals of the policy.
3) Ascertain the theoretical ramifications of the policy.
4) Develop a conceptual framework for an optimal manner to implement the policy.
5) Determine the effectiveness of the policy in achieving its stated objectives.

1.4 Organization of the Paper

The contents of this paper are structured along the same lines as the sequential flow of objectives described in section 1.3. The next chapter will describe the political and economic circumstances which resulted in the enactment of the EEP. Chapter 3 first defines the objectives of the policy, and then explains how the program is actually executed. In chapter 4, a theoretical analysis of the program is presented. Chapter 5 details factors that could have an impact on the performance of the program and attempts to develop an optimal EEP strategy. Chapter 6 reviews the performance of the EEP to date, and draws conclusions concerning the effectiveness of the policy. The final chapter provides a summary of the paper, and offers suggestion for further research.

CHAPTER 2

THE ENVIRONMENT LEADING TO THE ENACTMENT OF THE EEP

The EEP was introduced with the goal of alleviating the US agricultural sector's stress through a restoration of US export performance. To set the stage for the analysis of this export subsidy program, this chapter reviews the changing domestic and global economic and political conditions that prompted the inauguration of the EEP.

2.1 Introduction

The objective of this first chapter is to describe the policy environment leading to the enactment of the EEP. The rationale, objectives, and motivation for the enactment of the EEP must be viewed against the backdrop of the US agricultural policy formation process. Agricultural policy in the US is a product of philosophies, values, historical precedent, events, and reactions to both economic indicators and political pressure. This combination of forces has caused the US government to intervene in agriculture at various levels for more than 55 years. The original intent of US agriculture policy, which included preserving the family farm and supporting prices and farm income, remains

much as it was in the 1930s, even though emphasis and program tools have changed.

There has been a continuity in the objectives of US agricultural policy, because the deep-seated values and beliefs regarding the agricultural sector have remained relatively constant. The policy tools, on the other hand, have been forced to change in order to adapt to a rapidly changing political and economic environment. To avoid policy obsolescence, policy makers must be responsive to this evolving environment, and create new policy initiatives which reflect the demands of the new situation.

Accordingly, the enactment of the EEP came at a time when the domestic agricultural sector was experiencing significant financial stress, and following marked shifts in international currency and commodity markets. These domestic and global forces strained the capacity of prevailing US policy. Thus, there was political pressure to enact new legislation to better cope with the new setting. The pressure for new legislation conveniently coincided with the debate surrounding the design of the new Farm Bill in 1985. The upshot of this debate was the Food Security Act of 1985, which contained provisions that were intended to strengthen the competitiveness of US agricultural products in international markets. Among these provisions, were several policies intended to expand US agricultural trade, including the EEP.

This chapter will outline the abrupt changes in the domestic and international settings which elicited a sense of urgency for the need for more aggressive trade policy. The second section explains the factors that contributed to a large expansion of US exports and a flourishing agricultural economy in the 1970s. This "boom" period was followed by a period of serious difficulties in the early 1980s, which is described in the third section. Part 2.4 relates another factor figuring prominently in the U.S. decision to initiate an export subsidy policy: the emergence of the EC as a major player in world agricultural trade. Central to this discussion is an explanation for the GATT's inability to control agricultural export subsidies. This is provided in section 2.5. Finally, section 2.6 recounts a near all-out agricultural subsidy war between the US and the EC, which provided much of the political impetus for the initiation of the EEP.

2.2 The 1970s: Export Expansion and Flourishing Agricultural Economy

Much of the economic trauma that faced U.S. agriculture in the early 1980s, which the EEP was supposed to help alleviate, was rooted in the previous decade. A number of developments in the 1970s set the stage for the crisis that characterized the agricultural economy in the early 1980s. Many of these developments were related to macroeconomic factors.

In 1973, a flexible or "bloc-floating" exchange rate system, which was essentially free of any formal national macroeconomic policy obligations, emerged as the new international monetary system. This new system came about in response to the development of expanded and largely unregulated international capital markets. The expanded international monetary markets caused the collapse of the prevailing system of fixed international currency exchange rates, laid out in the Bretton Woods Agreement, and the flexible system came into use for lack of any better alternative (Kreinin, p. 191).

By converting to a system of flexible exchange rates, it was hoped that countries could independently conduct macroeconomic policies. However, as the ensuing discussion will show, the experiences of the late 1970s and early 1980s has revealed that the macroeconomic policies of individual countries can greatly affect trade, financial flows, and the economic performance of other countries. Having to consider international reactions to both trade and macroeconomic policy complicated overall economic policy making. In order to avoid international market instability, the complexity of the new international monetary system required cooperation among countries in setting macroeconomic policies. Yet, during the 1970s and through the early 1980s, there was no attempt to coordinate national macroeconomic policies. Each country was relatively free to set its own macroeconomic course in the new floating exchange rate policy regime. The

impact of each countries' policies would reverberate throughout the entire system, and the larger the country's share in world commodity and currency markets, the greater the potential impact of their policies. Being a major player in all international markets, US polices had the capacity to cause instability in the new flexible exchange rate system.

Without the obligation to maintain fixed currency exchange rates, the U.S. was able to embark on undisciplined fiscal and monetary policies. These expansionary policies accelerated economic activity, increased consumption levels, and lead to a surge in demand for agricultural commodities and other goods, as well. Eventually, output could not keep pace with rapidly growing demand, causing inflation in the US during the latter half of the 1970s.

The rapid economic growth at the time of the conversion to the flexible exchange rate system was not confined to the US. Partially as a result of the US expansionary fiscal and monetary policies, there was an economic boom throughout the rest of the world, as well, and this contributed to a boom in global demand for agricultural commodities. Annual real GNP growth rates among industrial countries, rose from 3.6% in 1971 to 7.4% by the end of 1973, while GNP growth rates in developing countries were expanding at 6.2 and 7.4 percent, in 1971 and 1973, respectively (Paarlberg, R., p.15, 1988). Like in the US, this rapid economic growth was

accompanied by inflation, which partially undermined the surge in growth.

Later in the decade, however, the global economic expansion was somewhat sustained by lending of windfall profits from Organization of Petroleum Exporting Countries. High oil prices just after the Arab oil embargo created "petrodollars" that were loaned to many countries at low interest rates. This flow of funds provided further impetus for increased demand of US agricultural products. In addition, the decision by the USSR, and other Centrally Planned Economies, to begin purchasing large quantities of agricultural commodities on world markets reinforced the strong global demand for US agricultural products during the 1970s.

As mentioned above, the economic growth of the 1970s was accompanied by inflation worldwide. Because, among other factors, inflation in the US was rapid, relative to other countries, the value of the dollar tended to decline vis-a-vis other currencies. With the depreciation of the dollar, US agricultural commodities became relatively cheaper in international markets; thereby, enhancing US competitiveness. The value of the dollar fell about 17% between 1976 and 1980, effectively increasing global demand for US agricultural products (Kitchen and Monaco, p. 32).

The result of the surge in global demand and decline in the value of the dollar, during the 1970s, was a sharp increase in US agricultural exports and the prices US

farmers received for their products. Total US agricultural exports grew from $7 billion in 1970 to nearly $44 billion in 1981, and the US share of total world agricultural trade increased from 14.4% in 1971 to a record 19.3% in 1981 (Langley and Baumes, p. 10). Moreover, between 1973 and 1980, real prices received by farmers rose nearly 40% (Kitchen and Monaco, p. 32).

The dramatic growth of agriculture exports, and the consequent commodity price boom, provided benefits to the agricultural sector in the short run, but would prove to be a source of instability in the agriculture sector in the early 1980s, which provided some of the rationale for beginning the EEP. For while it boosted farm incomes, the export boom in the 1970s created incentives for further investing in the agricultural sector. With the agricultural sector's viability becoming increasingly dependent on international markets, the success or failure of these investments hinged on the vicissitudes of the world market.[1] As the US agricultural economy became more integrated into the international economy, farmers' financial success was not only susceptible to the vagaries of pests and weather conditions, but also to shifts in international supply and demand, competitive foreign prices, and currency exchange rates. In the 1970s, it was not yet

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[1]Exports in the late 1970s accounted for 25-30% of farm cash receipts, compared with 10-15% in the 1950s and 1960s (USDA-564, p. 1-3).

apparent that the same set of conditions that produced growth in agricultural exports could quickly reverse and cause the opposite result. Farm operators drew the erroneous conclusion that the world's demand for agricultural commodities was a durable consequence of some fundamental change in the world's food supply and demand situation. Instead, the increase in global demand was simply an ephemeral consequence of rapid income growth in a highly inflationary global macroenvironment.

Along with expectations of continued growth in agricultural commodity demand, US monetary policy also contributed to the trend of greater investments in the agricultural sector. As was briefly discussed above, following the change to the floating exchange rate system in the early 1970s, the US embarked on a policy of monetary expansion. This contributed to inflation and decline of the dollar in the 1970s, yet also helped to keep the real bank prime interest rate at an average of just over 1% from 1973-80 (Kitchen and Monaco, p.32).

With expectations of unending growth in demand, and low real interest rates, farmers and non-agriculturalists alike invested in land. As a result, agricultural land values were bid up to a level that would yield low rates of return to farmer income. Nonetheless, farmers and investors considered farmland a hedge against the rapid inflation during the 1970s, and farmers were willing to accept low rates of current return, in anticipation of appreciating

land values. Due to this increased demand for land, average farmland values increased over 350% during the 1970s (Webb and Blandford).

Many farmers borrowed heavily to finance these new land purchases, and debt accumulated rapidly. Total US farm debt outstanding totalled $53 billion in 1970 and grew to a little more than $105 billion in 1976. By 1980, this figure had reached over 178 billion. As a percentage of farm income, the growth of farm debt was even more striking. It grew from a level of 275% in 1970 to 795% in 1980 (Harl, pp. 28-29). The obvious implication of these statistics is the increased vulnerability of farm operators to factors which may influence prices, including export volume.

2.3 The Early 1980s: Decline in Export Volume and Farm Financial Stress

US farmers entered the 1980s heavily in debt, yet optimistic that low real interest rates, a cheap dollar, expanding exports, and increasing land values would continue. The experience of the early 1980s makes it clear that an enormous price is paid when expectations about conditions, that should be viewed as aberrational in nature, harden into a belief that these conditions are permanent.

Farmers were not alone in drawing these mistaken conclusions. The commodity shortages of the 1970s, and the erroneous belief that world demand would continue to escalate, caused policymakers to feel that US agriculture

had approached an equilibrium, and that excess capacity was no longer a problem. Prior to the 1981 Farm Bill, the prevailing sentiment among policymakers was that production should be increased for fear of food shortages (Ericksen, et al.). Moreover, because inflation topped 9% before the 1981 Farm Bill debate, legislators felt farmers should be guaranteed protection against rising costs. Thus, unlike the 1970s when loan rates had been tied to costs of production, the 1981 Act established inflation adjusted minimum levels of loan rates and target prices for 1982-1985 crops[2] (Langley and Baumes). These high and inflexible loan rates would prove to be detrimental to the US export market share, as they effectively priced US commodities out of the world market (Paarlberg P. et al., 1986). The self-imposed retreat by the US left a gap in the world market that was quickly filled by other participants. Had the economic environment in the late 1970s continued through the early 1980s, this policy change would not have been as

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[2]For many agricultural commodities, the US operates a nonrecourse loan program. Price support loans to farmers enable them to hold their crops for later sale. The loans are nonrecourse in that farmers can forfeit, without penalty, the loan collateral (the commodity) to the government as full settlement of the loan. If the market price rises above the loan rate, the producer can repay the loan and sell the commodity for the market price. Hence, the loan rate acts as a price floor, because farmers will forfeit the commodity to the government when the market price falls below the loan rate. If the loan rate is set above the world price, as it was in the early 1980s, the loan program acts as an export tax, and the government will accumulate commodity stocks.

detrimental to the US agricultural sector. The environment, however, changed drastically.

The conditions and events which were so instrumental in accelerating growth in the agricultural economy in the 1970s, essentially reversed themselves in the 1980s. Whereas, the USSR purchased large quantities of grain in the 1970s, the 1980s began with a US grain embargo of that country. Though economists have debated the effects of the embargo, the most evident result of this US action was a loss in market share by US exporters (USDA-564). When the US halted exports to the USSR, other players were quick to take advantage of the market potential and made sales to the Soviet Union.

More importantly, in the early 1980s there were profound changes in the macroeconomic environment. By the end of the 1970s, the rapid inflationary income growth was becoming too difficult to sustain. An oil price shock in 1979, increased the inflation, dampened growth in the economy, and resulted in what is now known as "stagflation." In an attempt to control the inflation, the Federal Reserve Board began to tighten the money supply; thus, reversing the expansionary monetary policy of the 1970s. This change in monetary policy came in conjunction with increased fiscal spending. The result of this combination of expansionary fiscal policy and restrained monetary policy was a jump in real interest rates, which rose from 3.8% in 1979 to 9.2% in 1981 (Langley and Baumes, p. 12). Also, the tight monetary

policy in the US was partially responsible for a recession in the US in 1981 (Paarlberg, R., 1988).

The rest of the world experienced a recession as well, which was partly due to US policies. For while increasing fiscal spending, the US cut taxes in 1981. To finance the fiscal spending, the US resorted to borrowing foreign capital. As a result, within five years, the US was transformed from being the world's largest creditor nation, into being the world's largest net debtor nation. The fact that the US had such large claims on the stock of global capital contributed to the severity of the recession in the rest of the world. US monetary policy exacerbated world liquidity problems, which depressed growth in the rest of the world. Foreign real GDP growth rates, which had averaged 3.7% between 1975 and 1979, fell to a low of 1.6% in 1981, and then averaged only 2.4% between 1982 and 1986 (Paarlberg, R., p. 16, 1988).

Heavily indebted developing countries experienced the deepest recession. Real GDP growth in Latin America, for example, fell from a 6.3% yearly average during the 1970s to a negative 0.8% average between 1981 and 1983 (USDA, Table 3, p. 36, 1986).

In conjunction with these lower global economic growth rates came a decline in demand for foodstuffs. Grain consumption in foreign countries, which had increased at an average rate of 34 million tons per year throughout the 1970s, fell to an average 19 million ton increase during the

first half of the 1980s. Worldwide, the growth in per capita food consumption slowed in the 1980s to less than two-thirds the pace of the 1970s (Paarlberg, R., p. 17, 1988).

Slackened global demand was not the only problem facing US agricultural exporters. The same sudden tightening of US monetary policies, which helped trigger the recession, also caused the value of the dollar to appreciate. The exchange value of the dollar went up over 40% during 1979-85 (Langley and Baumes). Thus, while domestic prices were falling, US commodities were becoming more expensive to foreign purchasers, exacerbating the slide in demand for US agricultural commodities.

The combined effects of the global recession, appreciating dollar, and high downwardly rigid loan rates resulted in a decline in US export revenue from $44 billion in 1981 to $26 billion in 1986. Concurrently, the agricultural trade surplus fell from $26 billion to less than $5 billion (Langley and Baumes). In addition, the US share of total world agricultural trade declined.

After becoming increasingly dependent on export markets during the 1970s, the US agricultural sector was hit particularly hard by this turn of events. Stagnating agricultural trade contributed to declining commodity prices and farm income. Moreover, the declining commodity prices, along with rising interest rates, contributed to a decline in farmland values from 1981 to 1986. Total asset values

dropped from a peak of $1,104 billion in 1981 to a low of $789 billion in 1986. The decline in land values comprised 94% of this loss in asset values (USDA, 1986).

With this decline in land values, already highly leveraged farmers found themselves in severe financial stress in the early 1980s. Numerous farmers were forced out of business due to their inability to service their debt. The idea that industrious and diligent farmers were being forced out of business gained public attention, as the media focused on the plight of the farmer.

The problems in the farm sector also captured the attention of policymakers. This was due not only to the responsiveness of policymakers to the political power of the farmers, but also to the increasing amounts of federal funding being used to support farm incomes. Farm program outlays leaped from $2.7 billion in 1980, to 25.8 billion in 1986.

A major factor causing the escalation in budget outlays for agricultural programs was the cost of maintaining the burgeoning stocks of the Commodity Credit Corporation (CCC).[3] Ending inventories held by the CCC grew from a 500 million bushels in 1980 to 2.75 billion bushels in 1986. This sharp increase in government owned stocks can be

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[3]The Commodity Credit Corporation is a wholly owned federal corporation, within the U.S.D.A., responsible for acquisition of grain forfeited under the nonrecourse loan program.

primarily attributed to the high and inflexible loan rates set by the U.S.D.A. under the 1981 Farm Bill.

The cumulative results of the economic conditions just described were an agricultural economy experiencing extreme hardship, a set of agricultural policies unable to cope with the situation, and pressure on policy makers to remedy the problems.

To summarize the problems facing the US agricultural economy in the early 1980s, farmers were experiencing serious financial stress, commodity prices were declining, agricultural exports were falling, budgetary outlays for agricultural programs were escalating, and commodity stocks were expanding.

Table 2.1 contrasts the economic environment of the early 1980s with the economic circumstances of the 1970s described in section 2.2.

Table 2.1: The economic environment of the early 1980s compared with that of the 1970s.

ECONOMIC PARAMETERS	1970s	1980-1985
Argentina's real GDP growth rate (%)	2.70	-1.32
Brazil's real GDP growth rate (%)	5.72	1.44
Canada's real GDP growth rate (%)	4.50	1.52
Eastern Europe's real GDP growth rate (%)	4.10	2.48
EC's real GDP growth rate (%)	3.10	.94
Japan's real GDP growth rate (%)	4.90	4.36
Thailand's real GDP growth rate (%)	7.06	2.04
US real GNP growth rate (%)	2.90	1.80
US inflation rate	5 to 10	3 to 5

Table 2.1 continued...

	1970s	1980-1985
US real interest rate	-1 to 3	5 to 9
US exchange rate change (%)	(1969-80)=-29	(1980-84)=58
US agricultural export changes (billion dollars)	(1971-81)=35.8	(1981-85) =-12.6
Change in percent of US share of world wheat trade	9	-12
US agricultural program costs (billion 1983 dollars)	(1971-81)=5/yr.	(1981-1985) =14/yr.
Farm real estate value changes ($/acre)	105	-125
US farmers' average debt/equity (%)	19	27

Source: Adapted from USDA-564, Embargoes, Surplus Disposal, and U.S. Agriculture, Table 24.1, p. 24-2.

The EEP was begun, in part, in response to this changing set of conditions. It was thought that a rebound in exports of agricultural products could partially remedy the problems prevailing in the US agricultural sector.

Yet there is still another set of events that contributed to the motivation for the trade expanding policy. This was the emergence of the EC as an active and aggressive player in international agricultural markets.

2.4 The Emergence of the EC as an Agricultural Exporter

The EC went from being one of the largest net importers of food in the 1970s, to attaining the status of the largest exporter of food products in 1986 (Kelly et al.). Table 2.2 shows that the EC was able to become self-sufficient in many agricultural commodities, and more than self-sufficient in others, over a 20 year period.

Table 2.2: EC degree of self-sufficiency in certain agricultural commodities (percent).

COMMODITY	YEAR 1962 (EC-6)	1973 (EC-9)	1983 (EC-9)
Wheat	100	104	125
Maize	NA	56	72
Sugar	97	91	144
Cheese	98	102	108
Butter	101	101	123
Beef and veal	87	91	104
Pork	99	101	101
Poultry	98	103	110

Source: Johnson et al., Table EC-4, p.109.

Though part of this phenomenal transformation can be explained by normal increases in productivity, due to the use of improved technology, the favorable incentives and price supports provided by the Common Agricultural Policy (CAP) allowed the agricultural sector in the EC to exhibit rapid growth in the 1970s and 1980s.

The CAP provides the main framework for agricultural support in the EC. The foundations of the CAP are a system of target prices, variable levies, and export subsidies. Each of these policy tools requires the existence of the other two for the overall functioning of the CAP. Target prices provide price guarantees for farmers, and variable import levies prevent cheap imports from flooding domestic EC markets, where internal prices are administratively set substantially higher

than world prices. The import levies are variable in that they fluctuate with the variation in the difference between world market prices and internal support prices. Hence, there is always a gap between world market prices and higher internal EC prices. When commodities are exported, export subsidies are required to bridge the gap between the high internal prices and world prices. This favorable institutional environment enabled EC farmers to achieve rapid gains in productivity.

The rapid increases in productivity were accompanied by inevitable commodity surpluses. Because the target prices of the CAP supports internal EC prices well above world prices, exporting the surplus commodities required substantial export subsidies. In the early 1980s, as stocks in the EC continued to grow, the EC became more aggressive in their use of export subsidies, and became a much more prominent player in world agricultural commodity markets. Therefore, EC agricultural policies became increasingly important in determining US competitiveness in international markets. As has been described already, this was a time when the US agricultural sector was undergoing painful adjustments, and the US was losing shares in world agricultural markets. Thus, the increased use of export subsidies was perceived by the US as a direct threat to the viability of its farm economy. Part of the reason for developing the EEP was in response to this threat.

Yet, if the intent of the US was to retaliate against the EC for what was considered an "unfair" trade practice, a question arises as to why the US could not do so through conventional channels, i.e., the General Agreement on Tariffs and Trade (GATT).

2.5 Agricultural Export Subsidies and the GATT

GATT's ability to control the use of export subsidies was undermined at its inception when certain explicit allowances for "agriculture or fisheries" products were included in the rules. At the insistence of the US, the original rules of the GATT included an exception that would permit the use of export subsidies for agriculture. The only restriction imposed on agricultural export subsidies was an ambiguous stipulation that they not be used to capture a "more than equitable" share of world trade, taking into account an undefined "previous representative period" of marketing activities (Johnson et al., p. 66). In 1958, the GATT attempted to reform this permissive rule, but the efforts were futile, as the US again insisted that export subsidies for agricultural products be permitted.

In subsequent years, however, US traders began to realize that allowances for farm export subsidies could be more easily exploited by more liberal spending competitors, such as the EC. With both political and budgetary support, the EC was able to expand its use of export subsidies. When the EC increased its use of export subsidies, it became increasingly

apparent that their effects were detrimental to the overall performance of international agricultural markets. In particular, the EC's use of this trade policy was in conflict with the US objective of expanding its share in world commodity markets. Hence, the US sought to reign in the EC's utilization of agricultural export subsidies, through mechanisms in the GATT. But it was too late to impose discipline on the EC's institutionalized policies of export subsidization, and vigorous attempts by the US to strengthen GATT rules concerning the use of export subsidies have proved largely fruitless (Hufbaur and Erb).

During the Tokyo Round of GATT negotiations, held from 1973-1978, the US thought they had succeeded in tightening the GATT regulations governing export subsidies, when a new Subsidy Code was negotiated. The Code still permitted export subsidies, provided that the subsidizer not obtain "more than an equitable share" of world trade, or materially undercut the prices of other suppliers to the same market (Johnson et al., p. 15). The definition of "more than equitable share" was expanded under the Code to include displacement of other exporters in third country markets. In addition, the "previous representative period" for determining such shares was defined more precisely as the "three most recent calendar years in which normal market conditions existed." As the discussion in the next section elucidates, the new Code was largely ineffective in preventing trade tensions between the US and EC from developing. Moreover, the issue of

agricultural export subsidies, including the EEP, continues to be a serious point of contention in the current round of multilateral trade negotiations.

2.6 The US-EC Wheat Flour Subsidy War[4]

The first significant test of the new Subsidy Code was a disappointing failure from the perspective of the US, and this ultimately led to the US decision to react with export subsidies of its own, to combat those of the EC. The particular case igniting the US response was the EC's use of subsidies to boost wheat flour exports to Egypt. Upset over the EC's continued subsidization of exports to this market, the US registered a complaint within the GATT, with the hope that the new Subsidy Code would be effective in resolving the issue.

In February 1983, after six years of negotiations, the Subsidies Code mechanism yielded an ambiguous non-verdict: it recognized that EC subsidies had probably caused "undue disturbance to normal US commercial interests," but it could not prove that the EC was undercutting prices, or that the EC gained a "more than equitable" share of the market. It was concluded that the EC wheat flour export share had increased considerably, which would not have been possible without the subsidies. The GATT also recognized that the subsidies may have reduced market opportunities for the US. Yet the

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[4]This section is based on the account found in Paarlberg, R. (1988), pp. 51-52.

negotiators could not conclude that the use of the subsidies had resulted in the EC gaining a more than equitable market share. In the end, it was concluded that no action could be taken against the EC, because the terms of the Subsidy Code were not sufficiently "operational, stringent, and effective." Because the GATT failed to settle this trade conflict between the EC and the US, the US decided to directly retaliate against the EC with an export subsidy program of its own. It was this subsidy program that was used two years later to establish the framework for a more comprehensive policy of export subsidies—the EEP.

Thus, the origins of the EEP can be traced to this EC-US trade conflict concerning subsidies on wheat flour. When it became clear the new GATT subsidies Code would not prevent the EC from offering export restitutions, the US decided to provide 1 million tons of wheat flour to Egypt. This marked a drastic change in US trade policy. When US farm exports were expanding rapidly in the mid-1970s, export subsidies had actually been suspended. However, due to the problems in the US agricultural sector described in sections 2.2 and 2.3, in January 1983, the US felt compelled to start export subsidies once again.

When implemented, the US wheat flour subsidies undercut the EC price by roughly $10-$25 per ton. In addition, Egypt agreed not to import wheat flour on a commercial basis from any non-US supplier until June 1984. The short-run consequence was a successful displacement of French wheat

flour sales from the Egyptian market, and a temporary takeover of that market by the US.

However, the US subsidy program soon prompted a counter-response from the EC. Temporarily unable to market wheat flour in Egypt, the EC stepped up its subsidized exports of "unmilled" wheat. In the spring of 1983, the EC announced a 320,000 ton wheat sale to Egypt. This sale was followed by an expansion subsidized EC wheat sales to Iran, Syria, Libya, and Algeria. Intensifying the trade conflict, the EC also announced a 600,000-ton wheat sale to China; a market traditionally controlled by the US. To make this sale to China, the EC added a $6 per ton freight subsidy to its normal $76 per ton export restitution payment. In addition, the EC began competing more aggressively in Latin American markets, which was a also market where the US had historically been the dominant player.

In October of 1983, the EC changed its tactics and decided to challenge the US wheat flour subsidies directly, by increasing its own export subsidies on wheat flour by 10%. This was enough to cause Egypt to renege on the agreement with the US, which prevented Egypt from purchasing from any other sources, and Egypt agreed to buy 500,000 tons of wheat flour from the EC.

To avoid an all-out trade war in wheat flour, and also because of budget problems, the US temporarily halted subsidizing exports. The results of the initiative with Egypt were mixed at best. The total direct cost of subsidizing the

original 1 million ton US sale had been roughly $180 million. The export subsidy had been provided not in cash, but "in kind," through compensation of flour given to US millers, which was drawn from government stocks. Even assuming some reduction in CCC reserve storage payments, the financial cost to the US outweighed the benefits. The retaliation against the EC proved to be ineffective, as the EC began to enter other markets, and consequently, displacing the US from those markets. And subsequently, the EC simply countered the US export subsidies with higher export subsidies of its own. As will be discussed in chapter 5, this pattern of response and counter-response is strikingly similar to the sequence of trade maneuvers set in motion by the enactment of the EEP.

Trade tensions between the US and EC concerning agricultural trade matters continued to escalate. As a result, there were renewed calls for retaliation against the EC. In response to this political pressure, the US again resorted to the use of export subsidies to strike back at the EC. The response came in the form of the Export Enhancement Program.

Despite the disappointing experience with the wheat flour subsidy initiative, the US used this as a model when designing the EEP two years later. It came about only after several years of conflict with the EC. Hence, the motivation for the EEP must be viewed within the context of a larger battle between the EC and US for international agricultural commodity market share.

2.7 Conclusion

This chapter has outlined the economic conditions and events which led to the inception of the EEP in the spring of 1985. These included structural problems in the US domestic agricultural sector, a decline in US export market share and volume, and an emerging trade war with the EC. This economic environment was the product of policies and circumstances from previous years. In the 1970s and early 1980s, there were a series of seemingly unrelated events that combined to adversely affect the US agricultural sector. Thus, the sources of the problems in the US agriculture economy in the early 1980s can be traced to many factors, and it would be overly presumptuous to hope that a single policy could solve these problems. Nonetheless, responding to political pressure, policy makers in the US decided to implement export subsidies with the hope of reviving the performance of the US agricultural sector. In addition, it was thought that the export subsidies were needed to compete with the EC in highly contested markets.

CHAPTER 3

THE EEP: GUIDELINES AND OPERATION

In chapter 2, the rationale and historical background for the EEP was provided. Knowledge of how the program works, and the specific objectives of the policy will be helpful in understanding the ensuing theoretical discussion and evaluation of the EEP in the next three chapters. Thus, this chapter will describe the institutional framework in which the EEP is implemented, and some of the explicit and implicit goals of the policy.

3.1 Introduction

The outcome of any government policy is partially a function of the institutional framework, or "rules of the game", into which it is implemented. In the case of trade policy, these rules will determine the effect of the policy on many economic parameters, including trade volume, domestic price, and overall economic gains or losses.

These effects must be weighed against the dimensions of performance used to evaluate the policy. One of the problems in evaluating public policy is determining the exact

objectives of the policy. The objectives are often unstated, or ambiguous, at best.

One purpose of this chapter is to define the objectives of the EEP, in order to establish a framework for evaluating the policy in a later chapter. Section 3.2 identifies the objectives of the EEP. A second purpose of this chapter is to describe the manner in which the EEP is carried out. This has both theoretical and practical implications and is described in part 3.3

3.2 Objectives of the EEP

In the beginning of 1985, in an environment of economic stress in the agricultural sector, persisting declines in export levels, and intensifying competition with the EC for export markets, the US Congress was insisting that some form of export subsidy be used to counter these alarming trends. During the federal budget compromise negotiated during the Spring of 1985, farm state senators succeeded in winning concessions from the Reagan Administration for an agricultural subsidy program (Hillberg, p. 14). In accordance with this agreement, on May 15, 1985, Secretary of Agriculture John Block announced the availability of up to $2 billion in government owned surplus commodities for use in a new export subsidy program—the EEP. In his announcement, the Secretary outlined the objectives of the policy in broad terms:

> the most important feature of our plan is how it will benefit farmers on two important fronts, Block said. First, it will increase US agricultural

> exports. And second, our plan will benefit farmers over the long haul because it is designed to help gain some of the markets which were unfairly taken by foreign competitors (Block).

During the ensuing debate before the 1985 Farm Bill, the Administration, committed in principle to "free trade," struggled with the task of designing an export subsidy policy with a more focused scope of objectives. Finally, Congress and the Administration came to an agreement on a specific set of goals for the policy, and the EEP was incorporated into the Food Security Act of 1985.

In the beginning, four criteria were established to govern the program's operation. The four criteria published in the Federal Register were:

1. Additionally: sales must increase US agricultural exports above what would have occurred in the absence of the program;
2. Targeting: sales will be targeted on specific market opportunities, especially those that challenge competitors which subsidize their exports;
3. Cost Effectiveness: sales should result in a net plus to the overall economy;
4. Budget Neutrality: sales should not increase budget outlays beyond what would have occurred in the absence of the program (Federal Register, pp. 23750-51).

In addition, the 1985 Act contained language indicating that the program was to help make US commodities more competitive by offsetting export subsidies or other "unfair trade practices," the adverse effects of price support levels temporarily above competitors' export prices, or fluctuating exchange rates (Ackerman and Smith, p. 5). But the guiding criteria for carrying out the EEP was to be those listed above, and these standards were intended to be used as the performance indicators of the program. That these strict criteria were subsequently relaxed is a good indication of the performance of the program in the first few years of its operation.

After four years of operation, it became evident that the policy could not conform with the rigid guidelines set out at its inception. Hence, policymakers had to develop less stringent guidelines, in order to justify the continuation of the policy. Rather than specifying the precise impact the policy was intended to have on certain economic parameters, policymakers began to emphasize the political importance of the policy. The EEP began to acquire a larger political role as negotiators discussed trade liberalization at multilateral trade negotiations. This lead policymakers to characterize the EEP as an important "bargaining chip" at trade talks. Also, it was still considered to be critical to the overall US trade policy goal of expanding export volume.

The new objectives of the policy were clarified in a July 31, 1989, testimony to the House Subcommittee on Wheat,

Soybeans, and Feed Grains by Undersecretary of Agriculture Richard Crowder. In this speech, the Undersecretary stated that the US Department of Agriculture had proposed "to focus the EEP primarily on trade policy and trade negotiating objectives, by continuing to target the EEP to countries where competitors unfairly subsidize their exports, and where the EEP is needed to bridge the difference between subsidized prices offered by competing exporters and US prices." (Crowder).

The new objectives of the policy were further clarified, when, on November 27, 1989, the USDA's Foreign Agriculture Service (FAS) published new "guidelines" for the EEP in the Federal Register (Ackerman and Smith). It is noteworthy that FAS no longer used the term "criteria" to describe the performance indicators. Instead, FAS used the more ambiguous term, "guidelines," to refer to the measures which determine the efficacy of the program.

The new "guidelines," which replaced the four "criteria," emphasize the intended role of the EEP in the larger context of the overall trade policy objectives of the US: challenging subsidizing competitors and advancing negotiations in the Uruguay Round of the GATT.[1]

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[1]The Uruguay Round is the seventh round of GATT negotiations; so called, because it began in Punta Del Este, Uruguay. One of the main priorities of this round of negotiations is to bring more discipline and order to the international agricultural trading regime. At the onset of the talks, the US negotiators took the high road espousing a "free trade" position on agriculture. Their proposal called for broad sweeping reform in domestic agricultural policies

The first guideline requires that all EEP initiatives must advance the US negotiating position at the Uruguay Round. EEP subsidies are supposed to help US exporters displace the exports of subsidizing competitors in specified or targeted countries. Implicitly, this first guideline means that the US should target subsidies to markets where the EC is an active participant, with the intent of forcing the EC to scale down its use of export subsidies.

Under the second guideline, each EEP initiative is supposed to develop, expand, or maintain markets for US agricultural commodities. This guideline can be interpreted as synonymous with the additionality criteria mentioned above.

The third guideline requires that the USDA not approve an EEP sale which would have more than a minimal effect on nonsubsidizing competitors. This standard probably emerged as a result of the criticism the program was receiving from other agricultural exporters.[2]

The final guideline concerns an administrative matter. This guideline specifies that the amount of the subsidies be maintained at the minimum level necessary to achieve the

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and total elimination of all "trade distorting" policies. In contrast, the EC, the other primary protagonist in the talks, put forth a much less drastic proposal. Their proposal emphasized the need for managed markets and favored only a 15% reduction in agricultural support. The talks broke down in failure in December 1990, because the EC and US failed to reconcile their differences concerning agriculture. The role the EEP played as a "bargaining chip" in these talks is discussed in Chapter 6.

[2]This topic is addressed in chapter 6.

expected benefits of the program's trade policy and export expansion objectives.

3.3 Operation of the EEP

The extent to which the policy fulfills the guidelines and criteria discussed in the previous section will be determined by the manner in which the policy is implemented. This section describes the institutional mechanics of the program.

The progression of an EEP transaction is shown in figure 3.1. A key element of the EEP policy is that it functions as a targeted subsidy, with the subsidies given only to specific countries. Proposals for countries to be targeted under the EEP originate with foreign government officials and private importers, and USDA officials. After reviewing the proposals, USDA presents the proposals to an interagency group, the Trade Policy Review Group (TPRG) for approval (Ackerman and Smith, p. 6).[3] The representation of several different agencies in the TPRG helps to assure that the choice of targeted countries will not conflict with other US geopolitical objectives. When the TPRG approves a particular country for targeting, USDA announces the specific quantity and type of commodity which can be exported to the country under the EEP.

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[3]The TPRG is chaired by a Deputy US Trade Representative and is made up of Under Secretaries and Assistance Secretaries from the Departments of Agriculture, State, Commerce, Labor, Treasury, and Transportation; the Office of Management and Budget; the Council of Economic Advisors; and other agencies with interest in the topic under discussion.

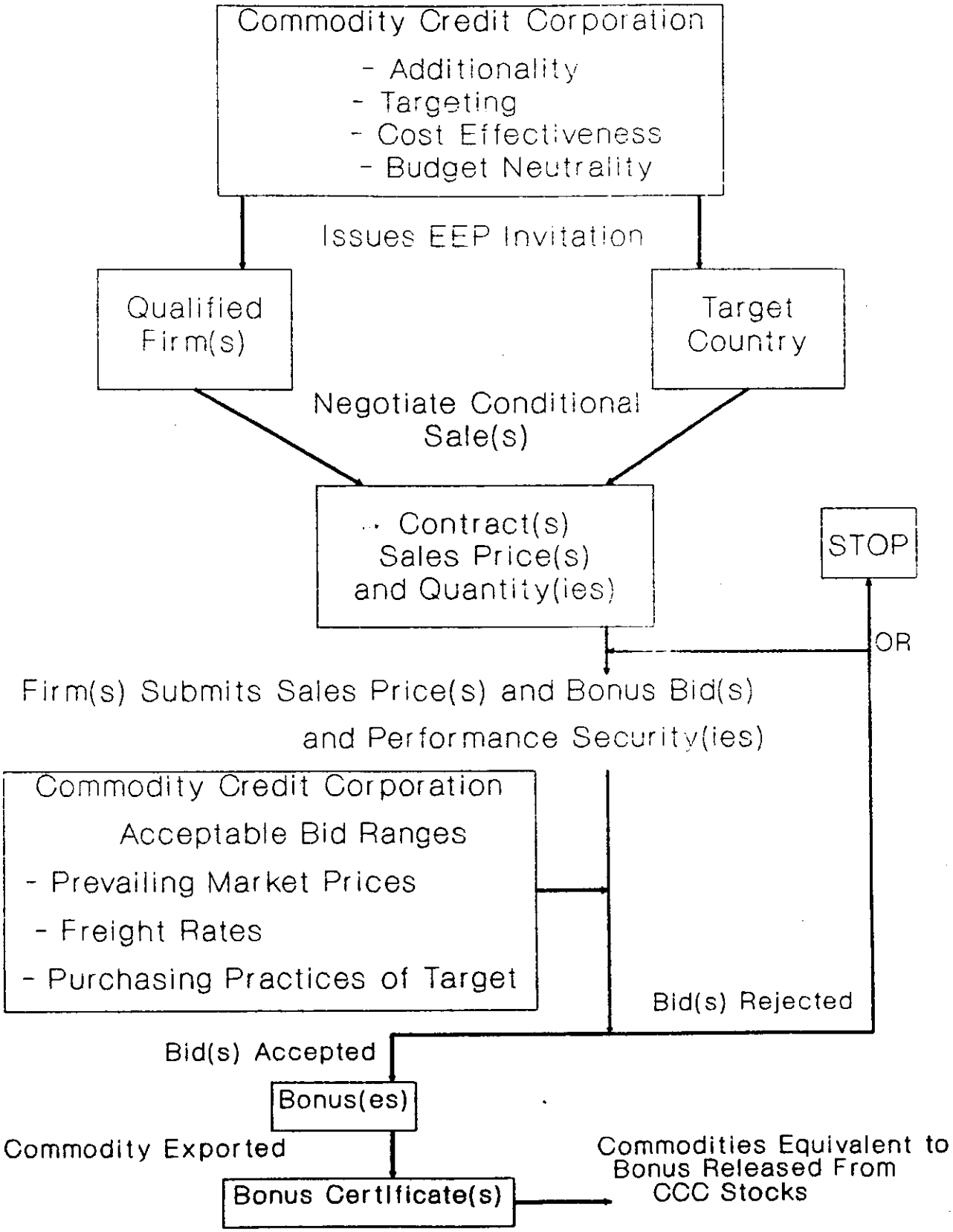
The USDA may either determine its own subsidy level, or allow the bonus level to result from a bidding process. In the latter and more prevalent case, the Commodity Credit Corporation (CCC) will issue an invitation to exporting firms to submit bids for obtaining an EEP bonus in connection with the sale of commodities to the specified country (FAS). Qualified firms may then negotiate sales with the targeted country.

After negotiating with the targeted countries, firms submit conditional sales contracts to the CCC along with the firms' bid for EEP bonuses. A bid takes the form of a per-unit dollar value, as estimated by the firm, necessary to make the commodity competitive with that from other exporting countries. The CCC, then, either accepts or rejects the bids on the basis of prevailing market prices, freight rates, and purchasing practices peculiar to the targeted country.

If a firm's bid is accepted, the firm exports the commodity to the targeted country and requests that a bonus certificate be issued by the CCC. Firms with rejected bids may revise and resubmit their bids.

For the successful firms, the certificates they receive equal the value of the previously negotiated bonus times the quantity of wheat shipped under the contract. These certificates may then be exchanged for an equivalent value of commodities in government storage or sold to other individuals. Certificates issued before September 2, 1986, specify the type of commodity available to the certificate

Figure 3.1: Progression of an EEP Transaction.



holder. For example, bonuses paid on EEP sales of wheat before this date were paid only in wheat. Since then, generic certificates have been issued and may be exchanged for any of the following commodities available from CCC stocks: wheat, corn, grain sorghum, rye, oats, barley, soybeans, rough rice, upland cotton, nonfat dry milk, butter and cheese (Hillberg, p. 18).

As an example of the operation of the EEP, consider the following EEP sale described by Seitzinger and Paarlberg, P., (1990, p. 96).

On June 4, 1985, USDA announced that EEP bonuses were available for up to one million metric tons of non-durum wheat destined for Algeria. Subsequent negotiations between Algeria, exporting firms, and the CCC resulted in EEP sales of 135,000 metric tons of soft red winter wheat and 170,000 tons of hard red winter wheat on October 15, 1985. Five exporters had submitted a total of thirty-six bids to the CCC, and fifteen of these bids, from a total of four different exporters, were accepted. According to the terms of the bids, Algeria paid $103 and $111 per ton on soft red and hard red winter wheat, respectively. In order to make these sales, the firms received average bonuses of $40.56 and $42.93 per ton on soft red and hard red winter wheat, respectively. Thus, bonus certificates totaling approximately $12.8 million were issued in relation to these EEP sales. The prevailing US market price was $115.74, so when the certificates were redeemed for

The subsidy equalled over one-third the value of the sale.[5] The implication here is that foreign buyers will benefit greatly with each EEP initiative. The extent to which they benefit will be a function of the bonus value.

3.4 Conclusion

This chapter has pointed out some of the more salient aspects of the objectives of the EEP. Although the stated objectives are redundant and somewhat ambiguous, the goals of the policy seem to be to increase US exports and to challenge the EC's use of export subsidies in contested markets. Ultimately, this pressure is supposed to force the EC to liberalize its agricultural trade and domestic policies.

The discussion of the operation of the program highlighted two important aspects of the policy. First, it is a targeted subsidy, rather than a general global subsidy. Secondly, it is a payment-in-kind (PIK) type of subsidy, with

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[5]Another way to consider this example is by calculating the effective subsidy.

$$\text{Effective Subsidy} = \frac{\text{Export Value}}{\text{Import Price}} - 1 = \frac{\text{Bonus Value} + \text{Import Price}}{\text{Import Price}} - 1$$

In the example of hard red winter, the effective subsidy equals:

$$\frac{\$43.00 + \$111.00}{\$111.00} - 1 = .39$$

Houck (1986) interprets the effective subsidy value as the percentage of free commodity contained in each unit of commodity exported. In this example, for every 61 bushels the Algerians imported, they received another 39 bushels free.

the payment of the subsidies being drawn from government-owned stocks.

Consideration of the objectives and characteristics of the EEP is important when attempting to analyze its effects. The next chapter will build on this chapter with a theoretical analysis of the EEP.

CHAPTER 4

THE ECONOMICS OF EXPORT SUBSIDIES

The last chapter presented the mechanics of the EEP. Understanding the manner in which the policy is carried out is important when considering the theoretical analytics of the policy. In this chapter, a theoretical analysis of the policy will be presented.

4.1 Introduction

The objective of this chapter is to explore what theory suggests should be the results of an export subsidy. Graphical models will be used to elucidate the impact export subsidies could have on various economic parameters. The chapter will begin with a discussion of global export subsidies. Next, a schematic representation of a targeted subsidy scheme will be presented in section 4.3. Because the response of competitors is pivotal in determining the efficacy of the program, a discussion of the theoretical effects resulting from competitor retaliation will be presented in part 4.4.

4.2 Global Export Subsidy

Though the EEP is not a general export subsidy, a discussion of the economic implications of a general export subsidy will be helpful in understanding the analytics of the EEP. Unlike the EEP, a general, uniform subsidy is one offered to all countries, and is the same for all importers.

The effects of a global export subsidy can be shown by considering a simple two country model, where there is one exporter (the US), and the rest of the world (ROW), in the aggregate, is considered to be a net importer.[1] This model assumes only one agricultural commodity, and assumes that prices, income, population, consumer tastes, and technology are all unaffected by changes in that commodity market. The model also assumes exchange rates are fixed, ignores transportation costs, and assumes the US and other traders employ no trade distorting policies, such as tariffs, export subsidies, or domestic support price policies. This model is shown in figure 4.1.

Under the assumptions described above, the initial equilibrium occurs where the import demand schedule (ID) intersects the US export supply schedule (ES), and establishes the free trade price at P_f. At this price, supply exceeds demand in the US, and the US exports quantity $O\text{-}X_f$ onto the world market.

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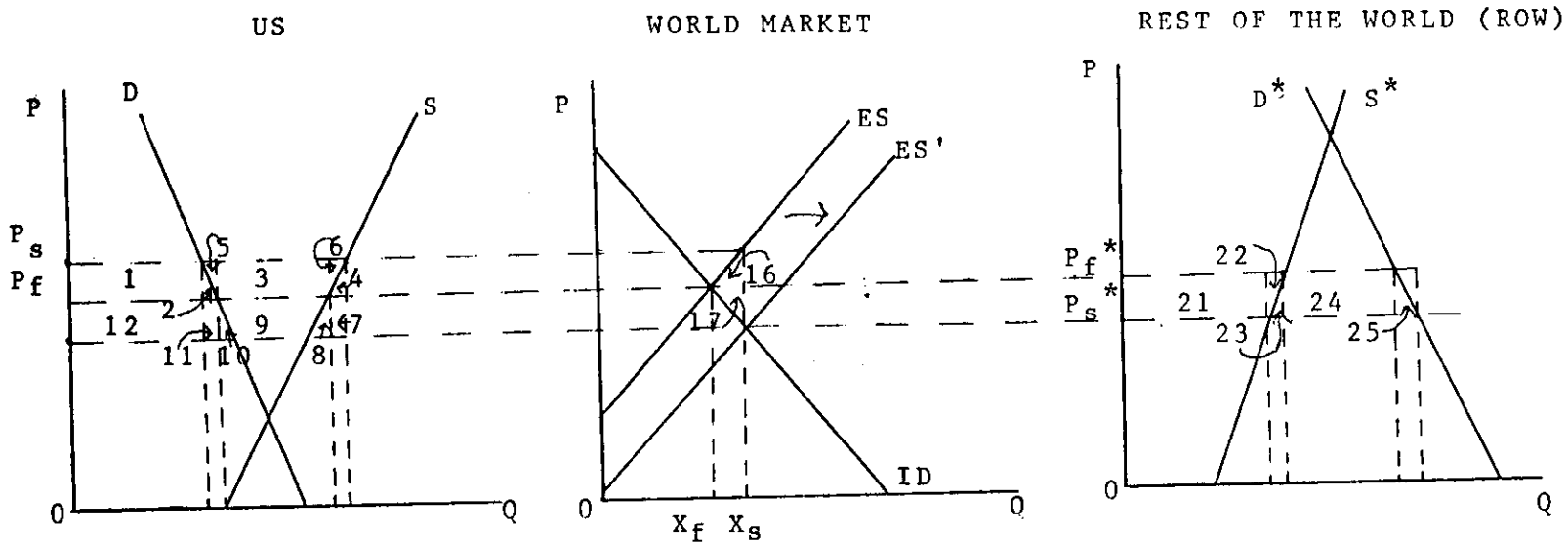
[1]A more complete description of this model can be found in Houck (1986), pp. 97-111.

Figure 4.1: Global Export Subsidy



Now suppose the US introduces an export subsidy. The imposition of a global export subsidy drives a wedge between the domestic and world market prices. The wedge is viewed by the rest of the world as an outward shift in the excess supply curve from ES to ES' in figure 4.1. In the case of a "large" country able to influence the terms of trade, the domestic price level rises from P_f to P_s, and the foreign price level falls from P_f^* to P_s^*. Here, the assumption is the US is a "large" country and faces a downward sloping import demand schedule.

By offering lower prices to importers, the US is able to increase its export volume by the quantity $X_s - X_f$. Production increases in the US, and consumption declines, as a result of the price increase. In ROW, the price decline causes a reduction in production, but an increase in consumption. The increased price and larger volume of exports benefit the US producers. In terms of producer surplus, their increase in welfare is equal to areas 1-6. Consumer surplus, on the other hand, declines (Area 1 + 2). Taxpayers absorb the cost of the subsidy (Areas 2-11), a portion of which is redistributed to ROW. In contrast, producers in the rest of the world suffer a decrease in welfare as their price falls (Area 21 + 22), but consumers in ROW benefit from the lower price (Areas 21-25).

The sum of these effects shows a decline in welfare in the US, but a gain for ROW. In turn, the sum of these regional effects determines the global subsidy to be welfare

decreasing for the world as a whole. This decline in world welfare stems from inefficient allocation of resources induced by the export subsidy, and is equal to areas 16 and 17.

The elasticities of supply and demand are the foremost factors in determining the outcome of an export subsidy. The magnitude of the price adjustment in the US is determined by the elasticities of supply and demand. For example, the more elastic the supply and demand functions in the rest of the world, the more elastic the import demand facing the US. As the import demand curve becomes more elastic (more horizontal), the value of the per unit subsidy the US must provide to achieve a given expansion in exports declines. Accordingly, the reduction in world price will not be as great. However, as the import demand curve becomes more elastic, more of the subsidy will be reflected in a higher US domestic price. The effect of a more elastic import demand curve can be visualized in figure 4.1, by imagining a more horizontal import demand curve and tracing through the effects on prices and the export quantity.

The elasticity of import demand facing the US is also critical in determining the extent to which a subsidy can increase export revenue.[2] When the import demand is elastic,

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[2]When import demand is elastic, the following inequality explains the relationship between the percentage change in quantity imported ($\% \Delta Q$) and percentage change in price ($\% \Delta P$):

$$|\% \Delta Q / \% \Delta P| > 1.$$

US export revenue can be expected to rise with an export subsidy. Conversely, when import demand is inelastic, subsidizing exports will actually cause export revenue to fall.

Results of one analysis of a hypothetical US export subsidy for wheat are shown in table 4.1 (Salathe and Langley).

Table 4.1: Effects of a US export subsidy for wheat when the elasticity of import demand varies.

ELASTICITY OF IMPORT DEMAND	EXPORT SUBSIDY	PERCENT CHANGE IN:			
		US PRICE	WORLD PRICE	US EXPORTS	EXPORT REVENUE
-0.25	15	1.8	-13.2	3.3	-10.3
-0.50	15	3.0	-12.0	6.0	-6.7
-1.00	15	5.1	-9.9	9.9	-0.1
-2.00	15	6.3	-8.7	17.5	7.2
-4.00	15	8.4	-6.6	26.6	18.2

Source: Salathe and Langley

These results illustrate the importance of elasticity of demand in determining the outcome of an export subsidy. For example, when the import demand elasticity is -0.25, a 15% export subsidy raises the US domestic price and US wheat exports by 1.8 and 3.3%, respectively. The export price for

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Therefore, the percentage increase in quantity imported is greater than the percentage decline in price. Alternatively, the percentage increase in quantity exported will be greater than the percentage reduction in price. Hence, revenue for exporters will be greater when the subsidized exports enter a more elastic market.

US wheat in world markets falls 13.2%, while export revenue is 10.3% lower.

In contrast, if the import demand facing the US is more elastic, US domestic prices and export volume show a greater increase. Furthermore, the subsidy raises export revenue. As shown in table 4.1, if the import demand elasticity is assumed to be -4.00, US price and export revenue increase by 8.4 and 18.2 percent, respectively. Moreover, US exports increase by 26.6%, yet the world price decreases by only 6.6%.

To summarize the effects of a global export subsidy, the quantity of US exports and the US domestic price increase and world prices decline. US producers and foreign consumers gain, while US consumers and foreign producers are worse off. There is a net transfer from US taxpayers, who pay for the subsidy, to US producers and foreign consumers. The effect on export revenue is ambiguous, and this hinges on the elasticity of import demand. A global export subsidy always results in a net decline in welfare for the subsidizing country.

4.3 The Economics of a Targeted Export Subsidy

The EEP has one important characteristic that makes it fundamentally different from the general, uniform subsidy described above. As was pointed out in chapter 3, the EEP is a targeted subsidy. That is, the US can choose the import markets it wishes to subsidize.

From a purely economic standpoint, targeting of subsidies would only be rational if import demand elasticities were

different among markets. To be economically rational, the US should target subsidies to the most price responsive markets and attempt to equate marginal revenue across markets. This targeting of subsidies to exploit differences in import demand elasticities has been characterized as being analogous to a price discriminating monopolist exploiting differences in separate markets' demand elasticities to increase profits (Abbot et al., 1987). Hence, as was the case with global export subsidies, import demand elasticities will be instrumental in determining the outcome of a targeted export subsidy scheme.

Partial equilibrium analysis of targeted export subsidies was presented by Sharples (1984) and extended by Abbot et al. (1987). These studies show that targeted export subsidies, unlike global export subsidies, can benefit the subsidizing country. However, there are several conditions necessary to obtain these results.

If the targeted country is relatively price and income sensitive, then the exporting country can potentially increase its welfare by adopting discriminatory subsidies to exploit differences in substitution and income effects among countries: a form of price discrimination. As discussed in section 4.2, the more price-responsive an importer is, the greater is the increase in demand as a consequence of receiving a subsidy. Targeting countries where income effects rather than substitution effects are large ensures that welfare gains in one commodity are not matched by losses in

the substitute commodity. That is, the gain in exports of one commodity should not occur in conjunction with a decline in the exports of another substitute commodity, as customers switch to purchasing the cheaper commodity.

Moreover, an increase in US welfare requires that the export subsidy cause an increase in the US domestic price level. With the increase in the domestic price level, the US will experience a gain in producer surplus, but a decline in consumer surplus. The decline in consumer surplus will be less than the gain in consumer surplus. Thus, without considering the cost of the subsidy, the US will show an unambiguous increase in welfare. When the cost of the subsidy enters the analysis, the US will experience a gain only if the difference between the changes in consumer and producer surplus outweigh the cost of the subsidy. Recall from the analysis of the global export subsidy that the cost of a global subsidy is always greater than the difference in the changes in consumer and producer surplus. But this is not necessarily the case with targeted subsidies because only a portion of total exports are subsidized under the targeted scheme. For the US to experience a welfare gain under a targeted subsidy, subsidy costs will need to be minimized, and the increase in domestic price needs to be great. Unfortunately, these two requirements conflict with each other. That is, for any given market, the larger the subsidy, the greater the increase in the domestic price level. Alternatively, smaller subsidies will result in a relatively

smaller impact on domestic price. The key to increasing US economic welfare, then, is to target highly price responsive markets with small subsidies, in order to obtain the greatest increase in export volume and accompanying increase in domestic price. In addition, to maintain the higher domestic price level, the US must continue exports to non-targeted markets at pre-subsidy levels. In summary, for a targeted export subsidy to be welfare increasing for the US, small subsidies need to be targeted at relatively elastic markets, the income effect in the targeted country must dominate the substitution effect, and the US must maintain its original export volume to non-targeted countries.

The results of empirical work by Abbot et al. (1987) support these theoretical results. In a hypothetical targeted subsidy scenario, the US benefits from small subsidies targeted at price responsive markets, such as Eastern Europe and China. In addition, shared markets such as the Soviet Union and East Asia may be defended using targeted export subsidies. However, the gains achieved by the US are relatively small and are obtained at the expense of large disruptions in world trade flows.

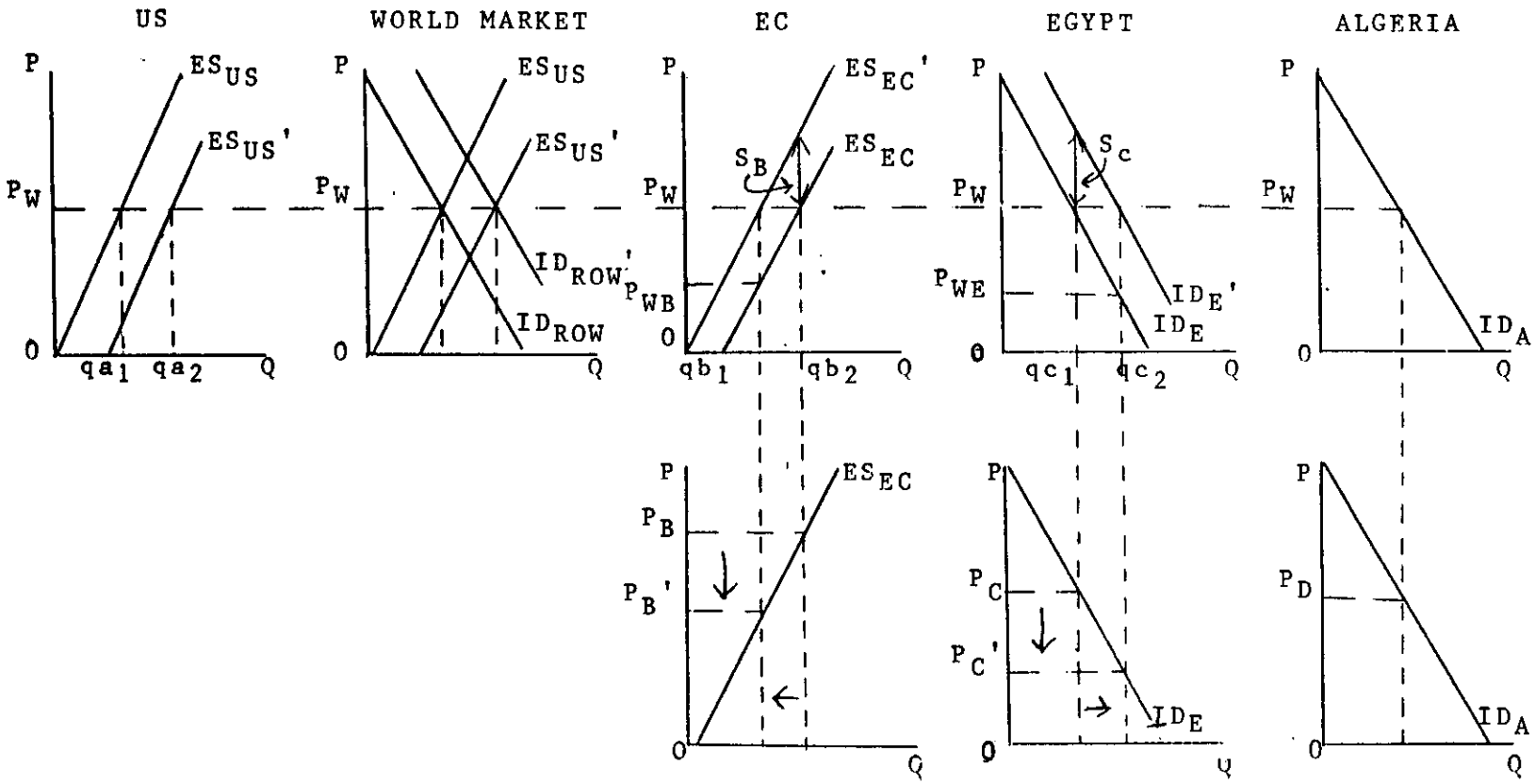
Recall from chapter 3 that one of the main objectives of the EEP is to increase US export volume at the expense of competitors, particularly the EC. Hence, the following graphical analysis will focus on the impact of the EEP on world trade, rather than welfare effects.

A stylized version of an EEP scheme is presented in figure 4.2.[3] Suppose the world wheat market is composed of four countries: the US, which operates the EEP; the EC, which is a US export competitor; Egypt, an importer targeted by the US; and Algeria, another importer. The schedules ES in figure 4.2 for the US and EC are excess supply schedules. Likewise, the schedules ID for Egypt and Algeria are excess demand schedules. The schedule ID_{ROW} reflects the net import demand for the rest of the world, facing the US export market. The world market clearing condition is the intersection of ES_{US} and ID_{ROW}, which determines the world price, P_W, and world trade. The free trade market equilibrium conditions are the world price, P_W, and export volume Oqa_1, for the US.

The impact of an EEP initiative is reflected in the excess supply schedule for the US, and in the price changes in the EC and Egypt. Suppose the US, Egypt, and exporting firms negotiate and agree to a bonus award S_c. The total subsidy is equal to S_c times the quantity exported to Egypt, as was explained in chapter 3. These awards are redeemable for CCC stocks. This undertaking has shifted the US export supply function from ES_{US} to ES_{US}'. ES_{US}' is a schedule of total supplies from the US that are available to Egypt, or any other

[3]For a discussion of the effects of an export bonus scheme within a partial equilibrium framework, see Houck (1986). Also, Bailey (pp. 273-279, 1988) presents a nonspatial equilibrium model of the EEP.

Figure 4.2: Targeted Export Subsidy



successful bidders, at each export supply price in the US. It includes commercial sales plus additional exports from government stocks allowable under the EEP.

By shifting its "effective" import demand schedule to the right, the EEP will also have an effect on Egypt's import price. The effective import demand schedule of Egypt lies above its import demand schedule by the per unit amount of the bonus award, S_C. This effective import demand schedule doesn't represent a shift in ID_E, since the bonus amount effects the price the importer must pay, and thus represents a movement along ID_E. Rather, the effective import demand schedule is an analytical construct that can be used to assess the impact of an EEP bonus on the import price and volume in Egypt. The price Egypt must pay for imports is lowered from P_W to P_{WE}, by the amount of the EEP bonus (S_C). The price that producers and consumers face in Egypt is lowered from P_C to P_C', and imports expand (Oqc_1 - Oqc_2).

The EEP may also effect the EC's export supply schedule. The EC must lower its selling price to Egypt to remain competitive with the US and retain its market share in Egypt. If not, the EC faces an "effective bonus" (S_B) which shifts its export supply function to the left (ES_{EC}'). The US EEP subsidy acts to lower EC's export price from P_W to P_{WB}, and the EC's export volume declines from Oqb_2 to Oqb_1.

The overall impact of the EEP scheme is as follows. US exports expand from Oqa_1, to Oqa_2, due to the rightward shift in the excess supply function to ES_{US}' and to the position of

the excess demand function, ID_{ROW}'. US export volume, Oqa_2 consists of Oqa_1, of commercial sales and quantity qa_1-qa_2 of government stocks liquidated under the program. The EC's exports drop from Oqb_2 to Oqb_1, and the price producers receive and consumers pay falls from P_B to P_B'. As a result of receiving subsidized imports, prices in Egypt fall from P_C to P_C'. Algeria, the non-targeted importer, is only effected to the extent the world price is altered. As in the case of the global export subsidy, this will depend on the elasticities of all excess supply and demand functions. This will also depend on how much ES_{US} shifts to the right in response to the EEP bonuses, and on the degree to which the export bonus effects ID_E and ES_{EC}.

Note that if the world price declines, other exporters besides the EC will be adversely effected by the subsidy program, as they may lose export share, as well as receive lower prices. In addition, this model shows how the targeted subsidy program can create many markets with different prices. Thus, the potential exists for considerable disruption of trade flows.

4.4 Retaliation

The model in figure 4.2 vastly oversimplifies the situation. Thus far, the analysis has assumed the EC simply meets world prices; that is, it merely moves along its export supply function. However, the EC could respond to the EEP by increasing its export subsidies to retaliate against the EEP.

Recall from chapter 2 that this is precisely what they did in response to a US export subsidy program on wheat flour in the early 1980s.[4]

If the EC chooses to meet the EEP bonus scheme by adjusting their own supply function, the effective demand facing the US will shift to the left. This shift occurs because the price of a close substitute for US products decreases. Returning to figure 4.2, any leftward shift in ED_{ROW}, induced by EC retaliation, will diminish the export enhancing effects of the EEP.

If the US wishes to maintain its market share, it could respond , in turn, with more export subsidies. This will result in a shift to the right of US excess supply again, and cause the EC to move down along its export supply schedule. Once again, this could provoke a counter-response from the EC. This tit-for-tat scenario illustrates how a policy of using export subsidies to defend market share can result in a price war in international markets. The ultimate outcome of such a war would be a large decline in world prices, and increased budget outlays for the countries engaged in the war.

Another way the EC could attempt to defend its market share is through adjustment of its domestic policy. Suppose the EC decided to implement (or already had) a target price deficiency payment system. Returning to figure 4.2, assume the target price is set at P_B. EC producers are guaranteed

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[4]Chapter 6 will show that the EC has responded to the EEP with larger subsidies, as well.

this price, so output in the EC will always equal quantity 0-qb_2. Therefore, the EC's excess supply schedule will be perfectly inelastic below P_B. With this domestic EC policy in effect, an EEP initiative will not affect output within the EC, but will cause additional pressure on the EC budget. The EC will be required to pay additional deficiency payments, but will not necessarily lose market share or export volume. They will, however, have to increase export restitutions in order to dispose of excess commodities. In general, whenever competing exporters have policies which result in their excess supply schedules being more inelastic (policies which act to insulate domestic producers from world market conditions), an EEP initiative will have a minimal impact on that country's output and potential export volume.

4.5 Conclusion

This chapter has attempted to identify the potential effects of a targeted subsidy scheme. In contrast to a global export subsidy, a targeted subsidy program can be welfare increasing for the subsidizing country, although the conditions for such an increase are stringent. The US will experience the greatest increase in export volume when the subsidies are targeted to the more price responsive markets. However, such targeting is likely to effect other exporters and disturb trade flows. If another exporter retaliates, then the effectiveness of the subsidy is reduced. In addition, the discussion in this chapter has shown that competitive use of

export subsidies can result in a situation where all participating exporters are worse off. The effectiveness of using an export subsidy program to displace a competitor will decline if that competitor has an inelastic excess supply function. Some of these concepts are used in the next chapter to develop a framework for an optimal EEP subsidy strategy.

CHAPTER 5

A FRAMEWORK FOR AN EEP SUBSIDY STRATEGY

In the last chapter, an attempt was made to conceptualize the consequences of an EEP initiative. The results from the theoretical discussion will be used in this chapter to establish a framework for an EEP subsidy strategy. Both chapter 4 and this chapter serve as a foundation for the critical analysis of the EEP, which is provided in the next chapter.

5.1 Introduction

The objective of this chapter is to identify factors which could effect the performance of the EEP. This will be done in an effort to consider the possibility of developing an EEP optimal subsidy strategy. If there is an understanding of the factors that can have an impact on the outcome of an EEP initiative, then it may be possible to develop some guidelines for identifying the circumstances under which the policy should and should not be implemented.

Based on the theoretical constructs presented in the last chapter, as well as economic intuition, several conclusions can be drawn regarding factors effecting the potential

effectiveness of the program. To gauge performance, some assumptions must be made concerning the objectives of the policy. Given the discussion in Chapter 3, increasing export volume and negating competitor subsidies can be considered to be the goals of the policy. Here, "additionality," will be defined as the increase in total exports attributable to the EEP, and "strategic value" will be the term used to refer to the impact of the EEP on the EC. The factors which could influence these performance dimensions are presented below.

5.2 Elasticity

The theoretical constructs in the last chapter underlined the importance of targeting the subsidies to price responsive markets. A country with a relatively high price elasticity of import demand will show a large change in volume purchased, given a change in price. Hence, if the price of a commodity is lowered to that country, its overall imports will expand. There exists, then, the potential for developing an export strategy, with an allocation of subsidies targeted to more price responsive countries.

The difficulty with this lies with the fact that the main commodity exported under the EEP has an inelastic short-run import demand in most countries. Wheat is the chief commodity sold under the EEP, accounting for over 80% of the value of sales of all EEP commodities (Seitzinger and P. Paarlberg, p. 3, 1989). Because wheat is a staple good and has few substitutes, short-run import demands for wheat are relatively

unresponsive to changes in price. However, some countries may be more responsive than others, and the US could behave as a price discriminator and target the more responsive markets.

Yet, due to the fact that there are no consensus estimates concerning the elasticity of specific markets, the potential for exploiting different demand elasticities is limited.[1] This precludes the possibility of developing any definitive export strategy, in which targeting is based on relative demand elasticities. Moreover, the countries which do exhibit elastic import demands may not be strategically important targets. That is, they may not be markets where the EC is a key player. In addition, targeting the most elastic market may be in conflict with US foreign policy.[2] If that

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[1]Estimates of the price elasticity of US export demand for wheat cover a wide range of values. Gardiner and Dixit (1987) summarized studies over the past two decades that estimated this elasticity. Fourteen of the 17 estimates for short-run price elasticity were in the inelastic range, with the longer-run elasticities tending to be more elastic. Hence, the magnitude of export expansion over the long run may be greater. Hillberg (1988) found import demand elasticities in four North African countries to be highly inelastic. Because the EC is highly competitive in these markets, these countries are also the focus of many EEP initiatives. In this case, it could be expected that additionality would be minimal, and the only benefit of the EEP would be its strategic value.

[2]When the EEP was being considered for implementation, the Economic Research Service conducted an extensive study to determine the potential effectiveness of such a program (USDA-564). In this study, they attempted to determine the best way to target subsidies, given various US objectives. When the objective is to maximize export volume, the results of this study show that the greatest subsidies should be targeted to the USSR, China, and South Africa. For political reasons, however, when the EEP began, these countries could not be targeted. Later, these constraints on the program were relaxed, and in 1987 China and Russia became eligible for EEP

is the case, then targeting those markets would not necessarily be in strict accordance with the objectives of the policy. The result may be only to distort trade flows and cause tension with non-subsidizing competitors, such as Canada and Australia.

To conclude, demand elasticities for specific markets are crucial in determining additionality. Yet, due to informational limitations and strategic considerations, designing an optimal targeted subsidy based on import demand elasticities would be extremely problematic.

5.3 Competitor Response

The response of the competitor will also determine both the additionality and strategic value of an EEP initiative. A competitor with a highly elastic export supply schedule will likely retreat from an EEP targeted market. Therefore, additionality may result even if the subsidies are targeted towards relatively inelastic markets.

For example, assume China, an importer, has a nearly perfectly inelastic import demand. An EEP bonus targeted to China, then, would not significantly increase US export volume. If, however, China is supplied by another exporting country, with a highly elastic excess supply, the potential for an increase in US export volume exists. The competitor

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subsidies. Eventually, these two countries became the largest recipients of EEP wheat, accounting for over half the wheat sold under the EEP in 1988 (USDA).

will respond to the lower price offered by the US and exit the market, to be replaced by the US. Thus, the US can experience additionality in inelastic markets shared with price responsive competitors.

The competitor highly responsive to price changes would react either by holding larger stocks or entering another market. If the competitor enters another market held by the US, then the effective additionality will be nullified. In that event, the US would simply be trading markets with the competitor, and the strategic value of such an initiative would be limited, as well.

If, on the other hand, the competitor decides to exit the market and hold stocks, the US could experience an increase in export volume. In the long run, the importer may even decide to reduce production, if it expects the EEP to continue. In this case, the strategic value would be the greatest.

For competitors with less responsive excess supply elasticities, the potential for retaliation exists. If the competitor decides to respond by offering higher export subsidies of its own, then the additionality of the EEP will be limited. The ability of a competitor to offer retaliatory subsidies will depend on its budgetary wherewithal, and its share of the market. The smaller the market share the competitor holds, the greater the likelihood it will be able to afford to match US subsidies. To the degree that a competitor matches US subsidies, additionality will diminish, and the strategic value will decline.

Thus, an optimal allocation of subsidies strategy will have to incorporate the various potential responses of competing exporters. This is made operationally difficult due to the infinite number of possible competitor reaction functions. As discussed above, there are a number of parameters which would need to be included in such a function—stock holding behavior, elasticity of excess supply, and a budget constraint, for example. The uncertainty surrounding the nature of these values compounds the difficulty in planning an export subsidy.

5.4 Importer Response

The importance of price responsiveness among importers has already been discussed. However, there is another important aspect of importer behavior which needs to be addressed. This is the inclination of importers to substitute purchases from one supplier with that of another. Again, because wheat makes up the majority of EEP sales, the wheat market will be used to exemplify this point.

Because there is a certain amount of substitutability among wheat from different exporters, importers can and do switch suppliers for various reasons. Price may be only one facet of an importer's decision to purchase. The importer may also consider other factors such as quality, reliability of sources, offers of credit, and political ties, when deciding from whom to import. Where these considerations are important, the effective elasticity of import demand

increases. Substantial competition in the world wheat market indicates that opportunities for switching suppliers are common, especially when there are market gluts (Ackerman and Smith, p. 29). During these periods, importers will be more likely to contemplate other factors besides price, when searching for suppliers. Additionality can be expected to be higher where importers respond not only to lower prices, but also to those factors mentioned above. As a consequence, these factors will need to be considered when planning which customers to target.

5.5 Supply and Demand Situation

Market conditions may also effect the EEP's effectiveness in increasing exports, and in combatting EC subsidies. As discussed earlier, a market condition of large world supplies will cause importers to be more particular in their choice of suppliers. Additionally, under conditions of excess supply, competitors are more likely to provide support for the exports of their commodities. In these circumstances, competition for markets will be fierce, and the incremental exports resulting from the EEP will be greater.

If, on the other hand, there exists an environment of tighter exportable supplies and excess demand, then importers will probably be less responsive to price changes. They will be determined to gain access to supplies regardless of supplier, and to a certain extent, heedless of the price. In such a situation, it would not be necessary to offer export

subsidies. Therefore, in an environment of tighter exportable supplies and increased competition for supplies among importers, additionality may decline. As a rule, then, it may be advantageous to increase the subsidy level when global supplies are large.

5.6 Market Share of Importers and Exporters

In the markets where the US has a dominant market share, subsidizing exports to increase market share is likely to be ineffective. Subsidizing exports to these markets is unlikely to displace competitors, and will probably just result in an increase in subsidized sales and a decrease in commercial sales. Hence, both the strategic value and additionality will be limited, when EEP initiatives are targeted to markets where the US holds a large market share.

However, if the US holds a small share of the market, an export subsidy may help boost US exports, at the expense of other importers. For that reason, the additionality and strategic value may be greater in those markets where the US is not a dominant player.

The dominance of importers in the market can also be expected to affect additionality. During periods of excess supply, large importers would probably not purchase from the US without a subsidy. In such market conditions, large importers will be more likely to "shop around" with the anticipation of finding a lower price. This is because they may expect to use their market power to extract subsidies from

other exporters. Therefore, additionality will likely be higher when subsidies are targeted to those markets where importers use their market power to extract the best possible terms of sale from possible suppliers (Ackerman and Smith, p. 29).

5.7 Transportation Costs

Abbot et al. (1987) point out that differences in transportation costs among suppliers can be exploited to enhance both the additionality and strategic value of a targeted subsidy. For example, suppose the US is currently not exporting to market A, due to transportation costs. Also, assume that the EC, could potentially supply this market because it has a transportation cost advantage over the US. The US could exploit the elasticity of market A, by subsidizing a market currently held by the EC. The EC would be displaced and supply the market beyond the reach of the US. Again, the paucity of information concerning the reaction function of the EC creates much uncertainty about tailoring a policy using this particular strategy as a guideline.

5.8 Importer Expectations

Whenever any type of subsidy is provided, the recipients expect the subsidies to continue, and any attempt to remove the subsidies will be met with resistance. Similarly, once the EEP is implemented, importers will count on being eligible for EEP bonuses in the future. Additionality in this case

would be high, since the importers would not purchase from the US without the subsidy.

Changing market conditions may override this factor, however. If world supplies tighten, resulting in expectations of higher prices, the importer might purchase without the EEP. In this situation, additionality would be lower.

5.9 Conclusion

This chapter has attempted to outline the factors which would need to be considered when planning an EEP export strategy. The main factors to be considered are importer and other exporter responses, as well as supply and demand conditions. The inability to ascertain the response of the competitors limits the potential for designing an optimal export strategy. The lack of generally accepted import demand elasticities also hinders the development of an EEP plan. The general conclusions from the discussion in this chapter are that the EEP subsidies are likely to be most effective when world supplies are large, and should be targeted to markets shared with the EC, or to markets which are large importers. In the process, the US must also be able to maintain market share in non-targeted countries.

This chapter has failed to provide any concrete standards for developing an optimal EEP strategy. Rather, this chapter has provided a general framework of factors to keep in mind when considering an EEP initiative. The difficulty in designing a definitive EEP policy may be the reason for its

mixed results, to date. In the next chapter, an analysis of the impact of the EEP is presented.

CHAPTER 6

EVALUATION OF THE EEP

The second two chapters of this paper described the origin, goals, and operation of the EEP. Chapter 4 provided a theoretical analysis of the program. That analysis was then used to develop a framework for an EEP strategy, which was laid out in the preceding chapter. This chapter will present an overview of the policy to date, and assess the degree to which it has been successful in achieving its stated objectives

6.1 Introduction

The objective of this chapter is to evaluate the performance of the EEP since its inception. The degree to which the EEP has expanded exports and its effects on the behavior of the EC will be the main criteria for evaluating the policy. As was discussed in the last chapter, these two goals can be effected by many factors, including choice of targeted countries, and the level of subsidization. These parameters and the commodities exported under the EEP will be discussed in part 6.2. Next, there will be a review of empirical work that has tried to measure the additionality of the program. Finally, the impact of the EEP on the EC, and

its success in furthering trade negotiations will be discussed in 6.4.

6.2 The Scope of the EEP

6.2.1 Commodities Sold. By value of sales, wheat is the most important EEP commodity, accounting for over 80% of EEP sales (USDA). As shown in table 6.1, barley is second in importance, followed by flour, vegetable oils, frozen poultry, dairy cattle, rice, poultry feed, barley malt, sorghum, eggs, and semolina.

Table 6.1: Commodity shares of EEP sales value, fiscal 1985-1989.

COMMODITY	SHARE OF SALES VALUE (%)	COMMODITY	SHARE OF SALES VALUE (%)
Wheat	82.2	Rice	0.6
Barley	5.8	Poultry feed	0.5
Flour	4.9	Barley malt	0.3
Vegetable oils	2.5	Sorghum	0.3
Frozen poultry	1.6	Table eggs	0.3
Dairy cattle	.9	Semolina	0.1

Source: Ackerman and Smith, Table 4, p. 8.

Wheat and flour were the first commodities targeted for EEP sales in June 1985. Wheat sales volume increased from fiscal 1986 through 1988, then declined in 1989 (table 6.2). Wheat shipments under the EEP have accounted for almost 60 percent of US wheat exports since 1988. EEP flour sales

Table 6.2: EEP initiatives, sales, and bonuses, by commodity, fiscal 1985-89.

YEAR	INITIATIVES	SALES	AVERAGE BONUS
Wheat:	1,000 metric tons		$/metric ton
1985	3,100	500	22.15
1986	5,306	4,847	26.17
1987	16,060	14,053	38.35
1988	31,390	26,584	30.78
1989	17,350	16,073	17.76
Total	73,260	62,057	28.74
Flour:			
1985	650	175	66.04
1986	1,044	703	83.19
1987	265	688	103.84
1988	270	322	98.25
1989	300	479	63.57
Total	2,529	2,347	85.86
Barley/sorghum:			
1986	2,160	946	30.05
1987	3,400	3,455	41.25
1988	2,100	1,877	34.36
1989	375	529	5.82
Total	8,035	6,807	35.04
Rice:			
1986	40	23	67.68
1987	130	28	41.57
1988	0	120	108.14
1989	40	20	11.31
Total	210	191	83.45
Vegetable oils:			
1986	25	0	0.00
1987	60	25	39.68
1988	560	357	140.86
1989	60	105	109.46
Total	705	487	128.92

Table 6.2 continued...

Frozen poultry	Initiatives	Sales	Average Bonus
1986	43.0	43.0	742.27
1987	99.5	94.5	638.21
1988	98	14.1	492.26
1989	0	7.5	489.65
Total	240.5	159.1	646.36
Table eggs	1,000 dozen		cents per dozen
1986	3,667	0	0.00
1987	22,000	12,659	0.38
1988	21,000	17,741	0.29
1989	4,000	4,224	0.14
Total	50,667	36,458	0.30

Source: Ackerman and Smith, table 5, p. 9.

peaked in fiscal 1986 at 700,00 tons, but were less than 500,00 tons in fiscal 1988 and 1989.

The US first offered barley, sorghum, and barley malt under the program in 1986. EEP barley and sorghum sales peaked at 3.5 million tons in fiscal 1988 and 530,00 tons in fiscal 1989. EEP sorghum sales of 319,000 tons represent a very small share of total sorghum sales, but EEP barley exports represented almost all US barley exports in 1986 and 1987 (USDA). Sales activity has been less frequent for other commodities targeted under the EEP. For example, EEP sales of vegetable oils totaled 357,000 metric tons in fiscal 1988, but dropped to 105,000 tons in fiscal 1989. Dairy cattle sales were terminated in 1988, and the last sales of semolina were in 1987. The majority of EEP sales, then, consist of wheat,

which has an inelastic import demand, and therefore, additionality will be minimal.

6.2.2 Targeting. The first four countries targeted for EEP sales were Egypt, Yemen, Algeria, and Morocco. These sales were in direct retaliation for EC subsidies to that region. But, to the consternation of other exporters, the EEP has since expanded to include almost every food importing country in the world. Over 65 countries have been targeted under the EEP with over 90% of the volume of EEP sales of barley, flour, frozen poultry, and rice going to North African and Middle Eastern Countries. Major importers of EEP wheat have been Middle Eastern and North African countries (34%), the Soviet Union (28%), and China (20%).

The Soviet Union and China are two of the world's largest importers of wheat, so targeting these countries is in accordance with the observation in the last chapter that importers with market power are likely to be most responsive to the initiative.[1]

In the first year of EEP operation, before China and the Soviet Union were eligible, the EEP helped to increase market share in North African markets, but US exports declined to the Soviet Union and China. That first year, US world market share in wheat actually declined from 36 to 29 percent, while

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[1]The world's largest importers of wheat are the Soviet Union, China, and Egypt, which comprised 16, 11, and 6 percent of world's imports, respectively, over the 1985-1988 period (Harwood and Bailey).

the EC, Australia, and Canada all increased market share (USDA).

This points to one of the problems of the program. While it may be possible to boost market share in one targeted market, it is probable that exports in the unsubsidized markets will actually decline. Paarlberg (1990) notes that Korea has increased purchases from suppliers other than the US since 1986, when Korea was excluded from the program. Moreover, the reason US wheat exports to the Soviet Union declined in 1986 is because they reneged on a long-term contract, which required the Soviets to purchase at least 4 million tons of US wheat each year. They broke this agreement in response to their exclusion from eligibility for EEP subsidies. They claimed they had no obligation to import at a higher price than other US customers (Paarlberg, p. 94, 1988). This is probably why the USSR subsequently became eligible for EEP sales.

In the 1987/88 marketing year, the US again targeted the North African countries in an attempt to counter EC subsidies in that market. Indeed, the US was successful in displacing the EC, but the EC responded by moving into other markets, such as Brazil and Columbia (USDA).

In 1988-90, the majority of EEP sales, mostly wheat, have been targeted to North African and Middle Eastern countries, China, and the Soviet Union.

As mentioned above, however, the targeting of EEP subsidies has not been limited to these markets. Since its

inception, the program has expanded to include countries where the EC has traditionally not been a major player, but where other exporters are active.

This aspect of EEP targeting has sparked political and diplomatic controversy. Australia and Canada have been particularly frustrated by the way the EEP has distorted trading patterns. In March 1987, the Chairman of the Australian wheat board accused the US of being "hell-bent on destroying the international wheat market" with export subsidies (Paarlberg, R., p. 105, 1988). In Canberra, a delegation of Australian farmers marched from Parliament House to the US Embassy, dumped wheat on the lawn, and presented the US ambassador with letters of protest. Expansion of EEP targets has been perceived by other exporters as a direct threat to their export markets. In 1989, when asked about the EEP, the Grain Council Director of Australia responded: "It stinks. We understand the United States wants to bury us as competitors. But what bothers us is the foul means by which they do it." (Scott). Also, the EEP was one factor leading to the formation of the Cairns Group.[2] Their proposal during the Uruguay Round called for a total elimination of export subsidies (Houck, p. 34, 1988).

6.2.3. Level of Subsidies Although the EEP has frustrated other exporters, the level of EEP bonuses has been

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[2]The Cairns Group is a diverse group of agricultural exporters, consisting of Canada, Australia, New Zealand, Indonesia, Malaysia, the Philippines, Thailand, Brazil, Uruguay, Argentina, Columbia, Hungary, and Chile.

higher in the markets the US shares with the EC, and lower in those where the EC has less a presence. For example, the Soviet Union and certain North African countries are among the markets that have received special EC restitutions for wheat exports. Correspondingly, Algeria, Morocco, and the Soviet Union have been the recipients of the largest EEP bonuses on wheat exports: other import markets where the EC is not as active, such as the Philippines, have received lower EEP bonuses (USDA). Thus, there is some indication that the EEP is being used as a strategic tool, and not just as a means to increase exports at the expense of all other competitors.

In 1986/87, the number of countries targeted for wheat exports increased significantly, with more African and Eastern European countries becoming eligible. Also, the average bonus value increased markedly. The average was $20.30 per ton in 1985/86, but increased to $30.88 per ton in 1986/87 (USDA). This increase in both eligibility and bonus value may be due to the fact that in 1986/87 there were large global supplies of wheat, and competition for markets was fierce. This conforms with the point made in the last chapter that the EEP will be most effective when supply is large, relative to demand.

To summarize, EEP subsidies have not just been targeted to countries where the EC is active. This has caused tension between the US and other agricultural exporters. When the EC has been targeted, the EC has often entered other markets; thus, nullifying the strategic value of the EEP. EEP bonuses

have been the greatest where the US is competing with the EC. Finally, EEP activity has accelerated when supplies are large.

6.3 Additionality

Several studies have been conducted attempting to estimate the EEP's contribution to expansion in wheat exports. Wheat has been the focus of EEP additionality studies not only because of its prominence in the overall program, but also because wheat exports increased significantly over the course of the program. US exports of wheat increased from .9 billion bushels in 1985 to 1.6 billion bushels in 1988 (Bailey, 1988).[3] Many factors led to this expansion in US wheat exports, including a lower loan rate, dollar depreciation, and smaller and poorer quality supplies in other countries. Thus, determining the increase in exports attributable to the EEP is difficult because these other factors were influential, as well. Nonetheless, econometric work has been done in an effort to quantify the EEP's part in the export expansion.

A caveat is in order concerning these studies. The basic methodology employed is to construct a model with the EEP in place, then remove the policy. The difference between the results of the with, versus without scenario is then taken as the EEP's contribution to trade. The problem with this

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[3]Export volume has since declined to 1.2 billion bushels in 1989 and 1.0 billion bushels in 1990 (USDA). US export market share is now just slightly greater than it was in 1985, when the program was created. One wonders how the EEP may have been instrumental in this precipitous decline since 1988.

procedure is the uncertainty surrounding the behavior of the EC, in the absence of the program. The modeler is forced to make assumptions about how the EC would have subsidized in the without program scenario. As a result, the degree of additionality obtained will depend on how the researcher thinks the EC reacted to the program. Overestimating the EC's policy response will underestimate additionality, while underestimating the EC's reaction will overstate the additionality result. The limitations of these studies should be kept in mind during the ensuing discussion.

There have been three studies conducted to measure the impact of the EEP on US wheat trade. Bailey (1988) developed a world wheat simulation model to assess the interaction of the major world wheat traders, including the EC, US, Canada, and Australia. The model was used to gauge the importance of several factors contributing to the rise in US wheat exports such as the EEP, lower wheat loan rates, depreciation of the dollar, and reduced wheat yields in competing countries. Bailey tested for the EEP by constraining the amount of the EEP bonuses to their 1985 level, which was zero, and then generating hypothetical export levels for 1986-1988. Differences in export levels between these simulated runs and actual exports were taken as the approximate measure of the EEP's contribution to export expansion. Bailey's model assumes the EC would not have altered its level of export restitutions in the absence of the policy.

Haley (1989) used a different analytical method and incorporated alternative assumptions of the extent to which the EC would have aggressively subsidized exports without the EEP in effect. In his study, Haley used a spatial price equilibrium model to isolate the impact of the EEP during the 1986/87 July-June crop year. Net trade elasticities for this study were calculated based on supply and demand elasticities provided by the US Department of Agriculture's Economic Research Service. All the base trade flow solutions were within 7 percent of the actual trade volume for importers and exporters during 1986-1987. Haley assumed that the EC maintains a $90/metric ton uniform subsidy, and includes various scenarios concerning the extent to which the EC would have used targeted subsidies above and beyond the $90/metric ton global subsidy.

Hillberg (1988) combines Nash bargaining game models with a quarterly spatial price equilibrium model to simulate the impact of the EEP in late 1985 through early 1986, and mid-1987. Because the export subsidy under the EEP is determined by a bidding process, which is influenced by and influences world market conditions, Hillberg employs cooperative game theory in constructing the simulation model. EEP negotiations are characterized as a bargaining game between the US Department of Agriculture (USDA) and the targeted country. The USDA's objective function is based on EEP goals, while that of the targeted country is based on expenditures for wheat imports. This bargaining model is then incorporated

into a spatial price equilibrium model to establish EEP and non-EEP trade flows. Quarterly trade elasticities were combined with price and quantity data to establish a base solution. The base solution underestimated the total quantity of EEP shipments by 7 percent. In addition, Hillberg's model does not incorporate hypothetical EC reactions in the absence of the program.

EEP sales were modest in 1985/86, the first year of operation, and had only a small effect on exports. Hillberg (1988) found that the EEP increased US wheat exports by 2-3 percent during late 1985 and early 1986, and by about 12-14 percent during the second quarter of 1987. As the EEP grew, the empirical studies show its contribution to exports also grew (See table 6.3). Bailey (1988) estimated that exports grew 20% in 1987 due to the EEP. Haley (1989) found that, depending on alternative assumptions on the extent to which the EC would have aggressively subsidized exports in the absence of the EEP, the program increased US exports from 10-30 percent in 1987. The 30 percent increase assumes that, even without the EEP, the EC would have targeted special refunds for sales to individual countries, in addition to its usual restitutions.

Using the world wheat trade model, Bailey (1988) concluded that the EEP accounted for a 7% increase in exports

Table 6.3: Summary of research results showing how much the EEP increased wheat exports.

TIME PERIOD	RESEARCHER	EXPORT INCREASE (%)
Oct. 1985-Mar. 1986	Hillberg	2-3
June 1986-May 1987	Bailey	20
July 1986-June 1987	Haley	10-30
Apr. 1987-June 1987	Hillberg	12-14
June 1987-May 1988	Bailey	7

Sources: Bailey (1988), Haley (1989), and Hillberg (1988).

during 1987/88. In 1987/88, EEP sales were the largest, so Bailey's study shows that increased EEP sales does not necessarily produce larger export gains. These studies also suggest that the EEP was most effective during the 1986/87 cropping year, when US supplies were large, and market competition was keen. Overall, however, there is evidence that the EEP has played only a minor role in expanding US exports. It has been shown that the lower loan rate and production short falls in China and the Soviet Union were the main factors causing the expanded US wheat exports from 1985 to 1988 (Bailey, 1988).

The results of these studies can also provide some indication of the cost effectiveness of the program. Bailey (1988) found the EEP to be responsible for roughly a 305 billion bushel increase in wheat exports over 1986/87 and 1988/88. Over this same period, the cost of the EEP subsidy given to exporters for wheat sales was approximately $1.24 billion (Coughlin and Carraro, p. 44). This translates to a

cost of $4.08 for every bushel of increased exports. The average US Gulf export price over these two years was $3.16. Hence, destroying the government stocks, which entails an opportunity cost of about $3.16, would have been a more cost effective method for surplus removal.

These studies also indicate that the majority of EEP sales would have been made without the subsidy. That is, if we use the highest measure of additionality, which is 30%, then 70% of the sales would have been made despite the cheaper prices. A majority of EEP exports just displace commercial exports. With this in mind, Paarlberg (1990) has suggested calling the EEP the "Export Displacement Program."

With the EEP having only a minor impact on export volume, it can be expected that the program has had only a small effect on US domestic prices, as well. Hillberg (1988) isolated the effect of the EEP on US wheat prices and found only a very slight increase in the first two quarters of the EEP initiative.

6.4 Pressure on the EC: The Strategic Value

Earlier it was pointed out that the EEP helped displace the EC from North African markets. The EC's share in that market declined from around 15% in 1985 to about 10% in 1987. However, the EC's presence in other wheat markets grew, and the EC's share of total wheat trade has remained more or less steady over the course of the program (USDA).

In order to maintain market share, the EC has had to increase its level of export subsidies. Bailey (1988) states that EC export subsidies for wheat rose from $365 million in 1985 to an estimated $1.8 billion in 1988, and that the EEP probably accounted for 35% to 40% of the increase. This means the EEP added about $500 million to the CAP budget. This is a paltry amount when considering that the total CAP budget is about $38 billion. Moreover, this amount represents only half the $1 billion per year US taxpayers must pay to fund the EEP. In the last chapter, and during the theoretical discussion, the point was made that the effectiveness of the EEP will be diminished when the EC increases its own export restitutions. The evidence described above indicates a willingness on the part of the EC to do just that.

This raises questions about the logic of even using the EEP to influence EC policy. Indeed, for both political and economic reasons, using the EEP to combat EC subsidies may actually be counterproductive. These reasons are described below.

Firstly, because the US has a much larger foreign market to defend, the US will have to outspend the EC to retain market share. Secondly, in portraying the US as an external enemy, the EC countries can use the EEP to create the political will to increase CAP spending for export subsidies. Tangerman (1985) writes that "there is probably no more effective way of making sure that the budget for CAP is expanded than by putting direct and external pressure on the

CAP." The EEP can be considered overt external pressure. Finally, if the use of EEP escalates into an all out trade war with the EC, the US will be the ultimate loser. Paarlberg (1988) notes that such a war would likely lead to EC retaliation in the form of import restrictions. As a major importer of US agricultural commodities, the EC is in a position to make a full-scale trade war more costly for the US. Thus, these considerations, combined with the empirical evidence indicating an EC willingness to increase spending for export subsidies, lead to the conclusion that the EEP is ineffective in inducing agricultural policy change in the EC.

Similarly, using the EEP as a tactical tool in multilateral trade negotiations has yielded few results. Recall from chapter 3 that the EEP is supposed to be used to bring reluctant trade partners to offer concessions during the Uruguay Round. Though it is difficult to ascertain the role the EEP played during the Uruguay Round, the most compelling evidence that it had only a minor impact on the EC negotiating position is the fact that the EC's proposal for reducing export subsidies was far less than US negotiators wanted. The differences between the EC and US on agriculture ultimately led to a breakdown in the talks in December, 1990.

In addition, it is inherently contradictory for the US to use export subsidies to bring about trade liberalization. The US is willing to subsidize exports; however, it has maintained a position of "free trade" during the Uruguay Round. In sending these mixed signals to other countries, the US

negotiating position has been undermined. As mentioned earlier, Canada, Australia, and the rest of the Cairns group has objected strenuously to the continued use of export subsidies. These countries should be the allies of the US during the talks. Instead, the EEP has eroded the credibility of the US position, and, in the eyes of the Cairns Group, blurred the differences between the EC and US. Hence, the EEP has been just large enough to attract criticism from the Cairns Group, but not powerful enough to be used as leverage against the EC (Paarlberg, 1990).

In order for the EEP to be an effective "bargaining chip" during trade talks, it must be powerful enough to bring about changes in the EC. But, as described earlier, the EC's attitude toward the use of subsidies has not been altered. Therefore, one can only conclude that continued attempts to use the EEP to effect the EC's negotiating position will be fruitless.

6.5 Conclusion

This chapter has outlined the impact the EEP has had on economic parameters and international relations. Using this information, the performance of the policy was examined. The evidence suggests that the policy has fallen short of reaching its two primary goals. First of all, the increase in exports attributable to the program has been slight. Any expansion in exports that has occurred has come at a high cost, and the US has shown no overall increase in world market share.

Secondly, the EEP has failed to "coerce" the EC into restructuring its domestic policies, and has not caused the EC to make compromises in world trade talks. The most significant impact the EEP has had on the EC is that it has forced the EC to increase budget outlays for export restitutions. Given the willingness of the EC to increase export subsidies in response to the EEP, and the inability of the EEP to significantly increase export volume, the wisdom of even using the policy is suspect. In fact this chapter has shown that the policy has been detrimental to the US negotiating position at the Uruguay Round, and may act to erode US export performance in the long run.

CHAPTER 7

SUMMARY AND SUGGESTIONS FOR FURTHER RESEARCH

7.1 Summary and Conclusions

This paper attempted to analyze the EEP as a policy instrument. Chapter 2 traced through the events and economic circumstances leading to the enactment of the EEP. Among the factors underlying the development of the EEP were an appreciation of the dollar, and a high loan rate, which contributed to a large decline in US agricultural export volume. Additionally, financial stress in the farm sector created the need for some form of policy instrument to deal with these problems. Also, it was thought that a retaliatory measure was needed to countervail EC subsidies. This farm policy environment set the stage for the enactment of the EEP. In retrospect, it seems that policy makers were overly presumptuous to think that an export subsidy program could solve these problems.

Chapter 3 described the official criteria for assessing the performance of the policy, and the specific objectives of the policy. Since it began, its official goals have changed. Currently, it seems the EEP is to be used mainly as a political tool to strengthen the US negotiating position at

trade talks. The fact that the policy goals have changed reflects the inability of the EEP to meet the strict performance criteria set out of its inception, and the changes in the farm policy environment. As the negotiations of the Uruguay Round drew to a close, the objectives of the program began to be more political in nature. Also, the conditions of the US agricultural economy improved in the latter part of the 1980s, and it became increasingly difficult to justify an export subsidy program on the grounds that it was intended to improve the welfare of the agricultural sector. Also in Chapter 3, the operation of the policy was described as being both a targeted and payment-in-kind type of subsidy. Specific countries are chosen to be the recipients of the subsidies, and commodities drawn from government stocks are used to pay for the subsidies. In addition, chapter 3 included a description of the bidding procedure required for determining which firms will be granted the rights to the subsidies.

In Chapter 4, the theoretical aspects of an export subsidy were presented. Unlike a global export subsidy, a targeted export subsidy can be shown to be welfare increasing for the subsidizing country, although the conditions necessary for such an increase are quite rigid. The EEP was portrayed as a price-discriminating mechanism with the US exploiting differences in import demand elasticities to increase trade volume and revenue. It was shown that the EEP could reduce world prices and cause significant distortions in trade flows.

Aggressive use of the EEP could also result in a costly subsidy war.

An attempt was made to construct a conceptual framework for developing an EEP export strategy in Chapter 5. The EEP is most effective as a policy tool when it is carefully targeted to more elastic markets. Unfortunately, this is impractical because import demand elasticities are not known with certainty. Moreover, targeting the most responsive markets may have the unintended effect of infringing on the markets of nonsubsidizing exporters.

Competitor response is also important in determining the effectiveness of the EEP. To the extent that the EC retaliates, exports will increase less than otherwise. If the US wants total exports to expand, it must also maintain market share in non-targeted markets. Also, the EEP may be a more effective policy tool when world supplies are large.

Finally, this chapter has critiqued both the performance of the EEP, and the underlying logic of using export subsidies to pressure the EC. The initial evidence from the program, although far from conclusive, raises doubts about the wisdom of using targeted export subsidies for wheat, and by implication, all agricultural commodities. While the EEP has contributed to increased US wheat exports, it has come at a high cost. It would have been cheaper to simply destroy surplus wheat than to dispose of it through the EEP. In addition, the EEP has imposed costs on agricultural exporters throughout the world, and created tension between these

countries and the US. The EC's initial response to the trade program suggests that the EC will be more likely to escalate its use of subsidies than agree to US proposals for eliminating protective agricultural policies. If continued, the EEP will undermine the US negotiating position, and possibly be counterproductive in effecting the EC's position.

Hence, US policymakers may wish to reexamine the EEP as a trade policy tool. The analysis in this paper has shown that the policy has fallen short of reaching its stated objectives. The EEP has been reauthorized through 1995, and given its previous track record, the future performance of the EEP warrants close scrutiny. The issue of whether or not to continue the policy will come up again in 1995, and policymakers will need to reassess the outcome of EEP initiatives. When considering the future of the policy, US trade policy goals should be the foremost consideration. Policymakers will need to determine if the EEP is merely a symbol of the US "getting tough" with the EC, or if the policy is an essential element of overall US agricultural trade policy. The policy is essential only if it is successful in achieving its stated goals. Therefore, an evaluation of the EEP's effect on EC policies, and US export volume will be crucial in determining the future of the policy. If the policy continues to perform as it has in the past, it should be eliminated.

7.2 Areas for Further Research

The preceding discussion has highlighted the importance of evaluating the future performance of the EEP. Again, when evaluating the policy, it is critical to keep the objectives of the policy in mind. Hence, any future examination of the policy should focus on its impact on US export volume. Research on the increase in exports attributable to the EEP could be conducted on a year-by-year basis, in order to gain a better grasp of the effectiveness of the policy.

One way to evaluate this aspect of the EEP is by using an econometric model. Though a number of models could be used, the spatial equilibrium framework is well designed to examine policy induced changes in trade flows. The spatial equilibrium model is primarily concerned with explaining trade flows between countries, and how those trade flows adjust to exogenous policy shocks, on the basis of differences in transportation costs. One limitation of this model is that countries are assumed to behave competitively in the international market and trade homogenous commodities; that is, the commodity, say wheat, exported by the United States is a perfect substitute for wheat exported by Canada.

In this framework, trade flows between countries are determined by price linkages between importers and exporters. The price linkages are a function of transportation costs and policy interventions.

In a yearly evaluation of the EEP, a base equilibrium model would need to be constructed that incorporates all

necessary parameters, including export volume, border prices, and the level of export subsidies. The results of the base model could then be used as a point of comparison for evaluating the EEP.

This could be accomplished by removing the EEP targeted bonuses, and thereby providing a shock to the base equilibrium solution. Eliminating the EEP bonuses from the base solution can be done by increasing the transportation costs in the base solution. After solving for the new equilibrium, a comparison could then be made with the base solution to measure the EEP's effect on quantity exported and world market share.

As was pointed out in chapter 6, assumptions made concerning the EC's behavior in the absence of the policy are crucial to the results of additionality analyses. Hence, in conjunction with the removal of the EEP bonuses, EC export restitutions would need to be adjusted in the base model, as well. In order to assess how sensitive the results are to EC behavior, a wide range of assumptions could be made concerning EC restitutions in the absence of the EEP. While not providing any unique values for EEP additionality, this analysis would provide measurements of the lower and upper bounds of the effectiveness of the policy. If conducted on a yearly basis, this research could provide a solid foundation of data for policymakers to use when considering the future of the policy.

Determining the success of the EEP in achieving its second objective-advancing the US position in global trade

talks-would be somewhat more difficult to assess. Yet, one way of determining this is to assess the progress of the trade talks when the EEP comes up for reauthorization in 1995. The extent to which the EC has acquiesced to US demands may provide some indication of the potency of the EEP. However, even if the EC does decide to reform its trade policy regime, it cannot be concluded that the EEP was the cause. Other factors may force the EC to carry out reforms. Hence, one should be hesitant in making conclusions about the EEP based on the outcome of trade talks.

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