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Contents

	<u>Page</u>
Foreword.....	3
Introduction.....	4
Agricultural Policies in the European Community.....	5
Welfare Loss.....	5
Intersectoral Effects of the CAP.....	9
Annex.....	13
Notes.....	14
References.....	16

FOREWORD

This study was drawn up in response to a number of criticisms of the CAP made by the Australian Bureau of Agricultural Economics.

According to the Bureau, the CAP has brought about a substantial fall in living standards in the Community by raising the price of agricultural products and thus of food.

The Bureau attempts to assess the extent of this fall, but the method used seems inadequate; while noting that producers have benefitted from relatively high prices and increased costs to the consumer, it fails to take account of the dynamic effects of economies of scale (specialization), which have made production more efficient and helped economic growth. Furthermore, the study only deals with the possible disadvantages of worldwide low prices because of Community refunds or market surpluses, neglecting the advantages to the importing countries of this situation.

A second argument advanced by the Bureau is that the CAP's protectionism has led to large-scale unemployment in the industries of the Member States as a consequence of high salary levels, themselves the result of high food costs. It also emphasizes that high prices in the agricultural sector have encouraged investment which might have been better made in other sectors of the economy. Although the Bureau's arguments are valid from a theoretical point of view, the methods used in estimating industrial unemployment as a result of the CAP are unsound. Hence, the estimates obtained by those methods are unacceptable.

Finally, it must be emphasized that the Bureau's study fails to allow for the fact that the basic arrangements applicable to the various products, taken in conjunction with the agreements passed by the Community as part of development or Mediterranean policy, for example, have resulted in about 55% of imported agricultural goods and foodstuffs being exempted from duty.

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This study was carried out by two officials in the Directorate-General for Research. The views expressed are those of the authors and do not represent Parliament's position in any way.

Although the topic discussed is highly specialized, we believe that it has a useful contribution to make to the current debate on the CAP and its impact on both trade and the consumer.

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Director-General in the
Directorate General for Research

Introduction

The CAP, which has provided support and protection for agriculture, is the only policy which has been fully developed on a Community basis. In a sense it is a victim of its own success, because it has led to structural surpluses of a number of important products. The result is that there are considerable stocks of major products, such as cereals, beef, and dairy products on hand at present which are costly to store and expensive to sell on world markets where this is possible.

The present difficulties have led to a wide-ranging debate in the Community on the future of the CAP. There is general agreement that something should be done to rectify the present situation, but there is little agreement on the way in which this should be done.

A classic economic solution would be to allow market forces, i.e. the free play of supply and demand to determine prices to the producers and consumers. If this were done in the short run, agricultural prices in the Community would fall and the income of a large number of marginal farmers would be so greatly reduced that they would no longer find farming a viable proposition. Their extinction would be politically and socially unacceptable.

This dilemma is reflected in the attitude of the Members of the European Parliament who are largely divided between those who wish to reduce agricultural prices, remove protection and liberalise trade, and those who feel that any change of this nature should be introduced gradually and should be accompanied by certain safeguards. The impact on the farming community should be tempered by providing adequate alternatives for those obtaining a living from family farms and providing income support in disadvantaged regions, otherwise they will be driven into bankruptcy and will swell the dole queues in the towns.

The Commission has suggested a number of measures which are designed to reduce agricultural surpluses, by encouraging some farmers to retire and others to limit their production of products in surplus and to turn their attention to products which are in deficit.

It is not the purpose of this paper to enter into the general debate on the future of the CAP. It is meant to comment on a series of specific economic arguments which were put forward in a number of documents published by the Australian Bureau of Agricultural Economics⁽¹⁾. This is a reputable body whose studies should be taken seriously. There is a danger, however, that some arguments put forward by it will be taken at their face value which on closer examination cannot pass without criticism.

The arguments relate to the following papers:

Agricultural Policies in the European Community

A study entitled "Agricultural Policies in the EC: their origins, nature and effects on production and trade" was published by the BAE in 1985. This is a serious study which is carefully documented and closely argued and is highly critical of the CAP. This paper confines its comments to the following aspects:

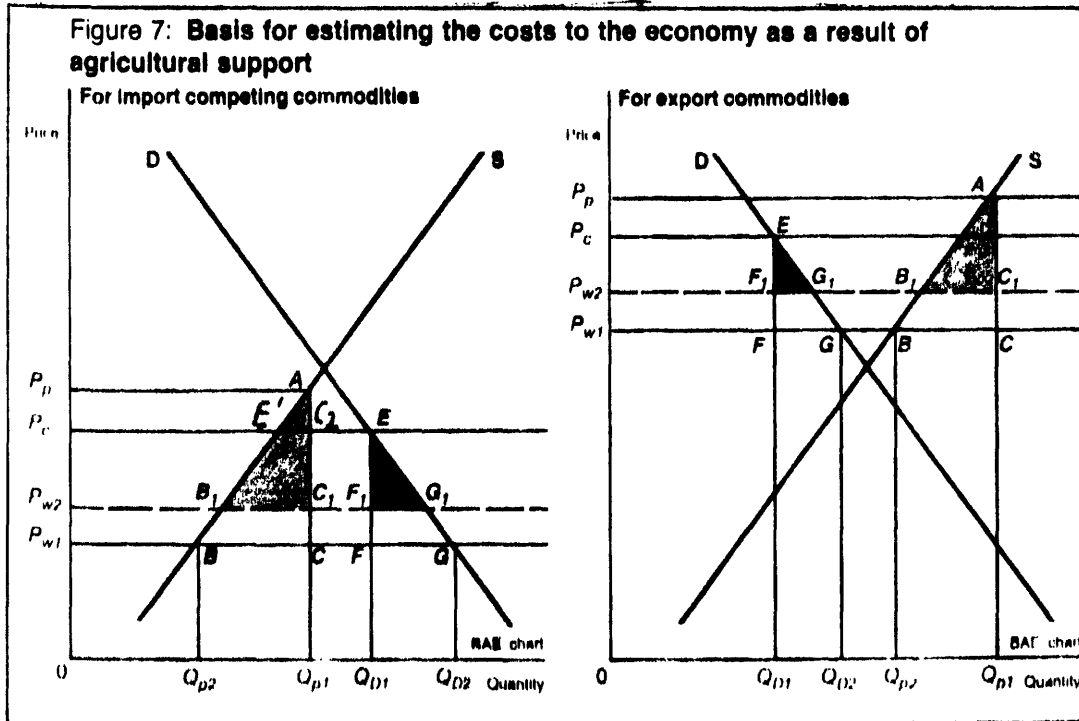
Welfare Loss

The study uses the standard model of customs union/economic integration theory that was developed by Meade, Scitovsky, Viner etc. Some misunderstanding may arise, however, because only cost is mentioned and it does not use the well-known concept of welfare, trade "creation" and trade "diversion" based on the concepts of producer's and consumer's surplus.

Consumer's surplus is the benefit to the consumer realised by a fall in the price of a good. The producer's surplus is the benefit to the producer realised by an increase in the price of the good he is producing and selling. Thus, a fall in the price entails a gain to the consumer and a loss to the producer. The difference between the consumer's gain and the producer's loss gives the welfare effect of the price change⁽²⁾.

See notes at end of text

The report produces the following diagram:



The world price for agricultural products in general is indicated as P_{w1} . Due to EC support arrangements, however, EC consumers have to pay a higher price P_c . CAP support arrangements raise the price producers receive, on average, for all agricultural products to P_p . At price P_p , farmers will produce a quantity Q_{p1} . This is above what would be produced at the world price P_{w1} . The total cost to the economy of producing the extra quantity ($Q_{p2}Q_{p1}$) is the area $ABQ_{p2}Q_{p1}$. Given the world price P_{w1} , the benefit to the economy from the extra production is only the area $BQ_{p2}Q_{p1}C$. The difference between the two areas - that is, ABC - represents a loss in total income to the economy, termed a production deadweight loss. However, if the European Community were to eliminate support and adopt world prices, the price reductions in the Community would reduce domestic production, increase consumption and either reduce exports or increase imports. This would, in turn, raise world prices to P_{w2} and reduce the production deadweight loss to the area AB_1C_1 .

The same principle applies with consumption. At the initial supported price P_c , consumption will be Q_{d1} , which is below Q_{d2} , the consumption level at the world price P_{w1} . The cost to consumers of goods forgone as a result of higher agricultural prices is the area $EQ_{d1}Q_{d2}G$. However, the value of the goods forgone at the world price P_{w1} is only the area $FQ_{d1}Q_{d2}G$. The area EFG represents a loss to the economy, termed a

consumption deadweight loss. If, as a result of eliminating Community support, the world price were to rise to P_{w2} , the consumption of deadweight loss would be the area EF_1G_1 .

Thus the CAP, by increasing domestic prices above world price levels, creates a welfare loss for the EC, since obviously consumer's surplus decrease (given by area $PW_2G_1EP_c$) is much bigger than producer's surplus increase (given by area $P_{w2}B_1E_1P_c$) and loss of revenue due to customs duties (given by area $C_1C_2EF_1$)⁽³⁾. The welfare gain by abolishing the CAP which would reduce the domestic EC price level from P_c (or P_p) to PW_2 would thus correspond to the two shaded triangles in figure 7.

This is theoretically accurate, but one must examine carefully the assumptions underlying the theory in order to see if those assumptions can be expected to be realistically applied to real situations.

1. There is some uncertainty as to what world price level would exist if the CAP was abolished. The BAE study postulates that the world price level would increase. The question is, by how much? In Figure 7 p_{w2} is above, but not very much above p_{w1} , and p_{w2} is still much below p_p and p_c . In this case Community welfare gains are substantial. But the abolition of the CAP could increase p_{w2} much more than postulated in Figure 7, bring it closer to p_c , and so reducing substantially the welfare gains.

In estimating the possible welfare gains, a crucial factor is the assumption made about the post-CAP world price levels.

2. A more difficult real problem is the case of comparison. Part II.b of the Study attempts to assess the benefits and costs of EC agricultural policies. The estimates of welfare gain in Figure 7 and in this part of the Study are made on the assumption that the world price level valid after the abolition of the CAP will also apply inside the EC, i.e. that there is total agricultural trade liberalisation. From the EC consumer's point of view, this may be a highly desirable prospect but hardly a very likely one. Realistically, it is to be expected that Member States would try to replace former CAP mechanism by national mechanisms. In this case the range of possibilities is very great and the comparison of the CAP with the ideal

liberal case becomes irrelevant. If national mechanisms were to replace CAP mechanisms, a big "trade diversion"⁽⁴⁾ would result, entailing huge welfare losses for the Community.

It is fair to say that for the EC there is a welfare case for lowering CAP prices. But the validity of the case depends crucially on the Member States not replacing CAP mechanisms by national ones.

3. The study alleges that if world prices were higher, due to less pressure by subsidized EC exports, the cost to non-EC agricultural exporters to the world market would be less, because they would be able to export at better prices. This would give them increased foreign exchange, better terms of trade, better trade balances and balance of payments.

This argument is one-sided because it neglects the benefits arising to countries that are net agricultural importers. If lower world prices are attributed to the CAP, as the study maintains, consumers in importing countries, as well as those in non-EC exporting countries, benefit. Their welfare increases due to high consumer surplus due again to low import prices. These effects are ignored.

The argument put forward in figure 7 (especially the second graph) against the CAP on the basis that it harms EC consumers can be used exactly as it stands to demonstrate the benefits of the CAP to the consumers of importing third countries!

It must be stressed that for these welfare gains the reason for lower prices is not important. The results stand on their own independently of whether lower prices are due to a comparative advantage in production or to subsidies. It must also be underlined that very often importing countries are poor, so that higher agricultural world prices would certainly create difficulties for them and reduce welfare.

But even domestic consumers in exporting countries benefit from low world market prices. Low world market prices mean lower domestic prices so that consumer surpluses in these countries are increased. These effects should be taken into account in estimating the cost of the CAP on other countries.

There is also the question of the structural effects of the CAP on other countries, and its effect on the reallocation of resources. In the absence of the CAP, higher world market prices would induce higher agricultural production in the non-EC exporting countries and the employment of more resources in this sector with the result that other sectors in industry and services would be developed less. This might have negative effects for the economy in the long run. (- an effect which the Australian study attributes to the CAP).

Apart from the criticisms mentioned above, grave doubts have been expressed about whether the methodology of measuring welfare effects through trade creation and trade diversion, is the appropriate instrument for estimating the effects of economic integration. Welfare estimates cannot properly be seen as equivalent to changes in real income, nor do they cover all of the important effects of integration⁽⁵⁾.

Such static concepts as trade creation and trade diversion are ill suited to dynamic measurement of growth effects like induced investment, increased efficiency, balance of payments, imports, reduced transport costs, and wage price effects. If for example market integration and the implementation of common policies leads to higher firm efficiency (and more firms of near optimum size in each sector) in all Member States, trade flows could remain more or less unchanged, (i.e. trade creation would be less than otherwise) but general productivity and efficiency could increase substantially, as well as production and costs could be reduced. In this case a shift in the production function could come about as a result of integration and the implementation of common policies. This has happened in European agriculture.

Intersectoral Effects of the CAP

The BAE's Occasional Paper No. 95 which deals with intersectoral effects of the CAP: growth, trade and unemployment argues that protectionism has negative effects and distorts the structure of an economy. On theoretical grounds the main points put forward are unassailable. In this sense, the statement that the CAP leads to distortions and to a loss of competitiveness must be regarded as being correct.

Yet a number of issues raised by the paper call for the following comments:

1. The paper observes that farm net value added per unit of both labour and capital increases as farm size increases. Thus the CAP has benefited the producers with larger farms that employ capital intensive technologies. Because 25% of farmers with the largest farms receive about 75% of the assistance, CAP support measures have done little to help producers with small farms. Indeed these measures could have resulted in a net migration of labour from the agricultural sector.

This is probably correct, but it deserves further comment. Large farms are in general more efficient with high total and labour productivity. This increases their competitiveness. It also has the structural effect of concentrating production in more optimum sized farms. Higher production and capital/labour ratio imply also higher real wages on these farms. The net result would seem to be that the CAP has increased the international competitiveness of the Community agricultural sector.

These large farms would most likely remain internationally competitive even in the absence of CAP support measures.

The paper argues on page 21 that in the absence of agricultural support, the trade balance of the EC in 1983 would be similar to that of 1973, but that agricultural exports would have fallen below the level of 1973. This is difficult to accept. This could be correct only if no structural change had taken place in EC agriculture and if no technical progress or innovation had taken place. In fact, changes did take place in these areas. Under the influence of the CAP technical progress in particular was substantial in the Community (probably greater than technical progress in similar sectors in other countries). It is likely that these changes would have brought about a reduction of imports and an increase in exports even in the absence of CAP. So that statement made by the paper and its estimates is questionable.

2. The paper argues that, in the absence of agricultural protection, economic growth would have been higher, prices of imports lower and therefore consumption greater. Agricultural production would have been much less and, combined with higher imports, a partial estimate is that the

net agricultural trade balance could have been 30,000m ECU lower in 1983. With long-run balance of payments equilibrium the implication of this agricultural trade change is that net manufacturing exports could have been 30,000m ECU greater in 1983, that is, in a simple partial equilibrium sense, manufacturing output may have been some 4% higher in 1983 in the absence of the agricultural support and, based on known output/employment responses, this implies that employment in the manufacturing sector could have been between 750,000 and 1,000,000 higher.

All this reasoning rests on the assumption of a balance of payments equilibrium. This is a truly staggering assumption. Except in the identity sense that a balance of payments is always in equilibrium (which is unimportant from an analytical point of view) there is absolutely no guarantee that a reduction in agricultural balance would be compensated by a corresponding increase of exactly the same magnitude in the industrial balance. If things were so simple, why does not Australia cover the alleged worsening of its agricultural balance due to the CAP by higher Australian industrial exports? This mathematical exercise can hardly be taken seriously.

3. It has been argued that the fall in the manufacturing share of GDP has been steepest in those countries where energy industries have blossomed: Holland, Britain and Canada. Thus a large increase in exports (in this example energy exports) adversely affects traditional export and import competing industries. The name given to this phenomenon is "Dutch disease" economics. This idea of "Dutch disease" was coined around 1975 when natural gas discoveries allowed the Netherlands to have a higher real exchange rate, with the result that her export industries were squeezed and a decline in Dutch manufacturing set in⁽⁶⁾.

The paper argues that the CAP is responsible for some "Dutch disease" effect, because agricultural policy develops through increased support, a sector that would not be internationally competitive (i.e. it has no comparative advantage) without this support. This may or may not be true, depending on the disaggregation of Community agriculture into its sub-sectors. Even if it were true there are some doubts about the validity of applying the "Dutch disease" argument to the CAP. The "Dutch disease" works through the appreciation of the real exchange rate, due to positive

balances of trade caused by high exports from a particular sector (e.g. oil, gas). Can it be shown that the CAP has led to an appreciation of the exchange rates of EC Member States? This point is not so easily proven.

Moreover the "Dutch disease" argument as presented in the paper can be inverted and applied to the Australian economy. Too high agricultural exports would bring about an appreciation of the Australian real exchange rate and thus squeeze the Australian industrial sector.

A N N E X

There have been studies that try to estimate the welfare effects of the CAP through the use of the concepts of "trade creation" and "trade diversion" which again embody the concepts of "consumer" and "producer surplus".

"Trade creation" occurs when following the creation of a customs union, imports from a cheaper source replace more expensive imports. "Trade diversion" occurs if more expensive production or imports replace cheaper imports after the creation of the customs union.

Estimates of the welfare effects of the CAP tend to indicate (at least for the period up to 1975) that the CAP led to trade diversion and to loss of welfare although the actual magnitude of this varied according to the underlying assumptions of each study.

For a summary of such studies see Bela Balassa "European Economic Integration" North Holland Publishing Company, 1975. Similar studies estimating the effects for more recent periods do not seem to have been made.

NOTES

- (1) See "Agricultural policies in the European Community" policy monograph no.2 and "Intersectoral effects of the CAP" occasional paper no. 95, both by the Bureau of Agricultural Economics, Canberra, 1985.

- (2) For the theoretical aspects of welfare, trade creation and trade diversion see for example J.E. Meade "The theory of custom unions" North Holland Publishing Company, Amsterdam 1955. George N. Yannopoulos "Greece and the EEC: The First Decade of a Troubled Association", Sage Research Paper in the social sciences, Beverly Hills and London 1975, Akira Takayama "International Trade" Holt, Rinehart and Winston, 1972, Ronald J. Wonnacott and Paul Wonnacott "Free Trade Between the U.S. and Canada" Harvard University Press 1967, and Bela Balassa "European Economic Integration" North Holland Publishing Company, Amsterdam, 1975. For a survey of articles using various methodologies in estimating integration effects and their numerical results, as well as their criticism, see P.J. Verdoorn and C.A. van Bochove "Measuring Integration Effects: A survey" in European Economic Review 3, 1972, pp. 337-349 and David G. Mayes, "The effects of economic integration on trade", Journal of Common Market Studies, Vol. XVII, No 1, September 1978, pp 1-25.

- (3) For simplicity direct aid given by the budget is ignored, in the figure $P_p - P_c$.

- (4) On "trade diversion" and "trade creation" see Annex.

- (5) See A.J. Marques-Mendes, "Economic Integration and Growth in Europe", Groom Helm, London 1985 and the same "The Contribution of the European Community to Economic Growth" in Journal of Common Market Studies, Volume XXIV, No. 4 June 1986

- (6) On the "Dutch disease" concept see W.M. Corden "The Exchange Rate, Monetary Policy and North Sea Oil: The Economic Theory of the Squeeze on Tradeables" and M. Beenstock, A. Budd and P. Warburton "Monetary Policy, Expectation and Real Exchange Rate Dynamics" both in W.A. Eltis and P.J.N. Sinclair, Ed. "The Money Supply and the Exchange Rate" Clarendon Press, Oxford , 1981.

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