British Agriculture in the Common Market

AND

THE OUTLOOK FOR NORTH OF SCOTLAND FARMING TO 1977/78

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OUTLOOK FOR COSTS, PRODUCT PRICES AND NET INCOMES FOR BRITISH AGRICULTURE IN 1977/78

by

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Much of the discussion on the implications of entry to the Common Market for British agriculture has been concerned with changes in institutional arrangements for supporting farm product prices. These questions are not discussed in the present paper. It is true that the techniques for supporting prices within the Common Market are much different from our own and for a few commodities, notably pigs and potatoes, are less well developed. But, suffice to say here that (1) the existing Common Market arrangements work and that, while different from our own, are in line with systems used successfully in other parts of the western world, and (2) the gaps, particularly for pigs and potatoes, are likely to be made good within five to seven years.

This paper, in addition, differs from many of the available appraisals of the outlook for British agriculture in the E.E.C. in one other important respect. Most appraisals of the financial implications and membership have been made on the basis of current product prices in the Community, instead of looking to 1977/78 which is the first year when its agricultural policy will apply fully to British farming. Yet, the next five years are likely to see many changes in the economic prospects for Community agriculture. Analysis based on current conditions can be totally misleading.

In the rest of this document, therefore, our main purpose is to look into our crystal balls — to project *explicitly* those changes in costs and prices through to 1977/78 which we are usually guessing *implicitly* today and to provide a guide for investment planning on the farm. The making of projections is a hazardous art, but we cannot avoid it if we are to face the agricultural adjustments of the next five years as fully prepared as possible.

What, then, are the important political constraints on the

Note:
In order to have a standard currency for presenting historical price cost data for farming in the six present members of the European Economic Community, this paper presents all financial information in dollars unless otherwise stated; i.e. in the Units of Account used within the E.E.C. in making comparisons between individual member countries and in summarising this information.

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evolution of agricultural policy for British farmers in the next five years?

The British Government will try to exert some moderating influence on the agricultural policy of the Community, since we are phasing ourselves into agricultural product prices much higher than our own. For the time being it will be very much concerned with two broader domestic implications of adjusting to Common Agricultural Policy,

(a) general increases in the cost of living, and
(b) particular adverse effects on the poorer groups in our society, including many pensioners.

At the same time our Government will aim for a large increase in domestic agricultural production in the next five years to limit the balance-of-payments costs of joining the E.E.C. Broadly speaking, it will probably feel that the incentives of present levels of prices for farm products in the Community, with appropriate adjustments to meet future cost inflation, will be a sufficient stimulus.

In the enlarged European Economic Community of ten countries, Britain will account for under 13 per cent of total farm output. Our *overall* influence on Community agricultural policy in the years immediately ahead will be much less, even with probable support from Holland and Denmark (assuming the latter joins), than the countries with less efficient farming, particularly France, Germany and Italy.

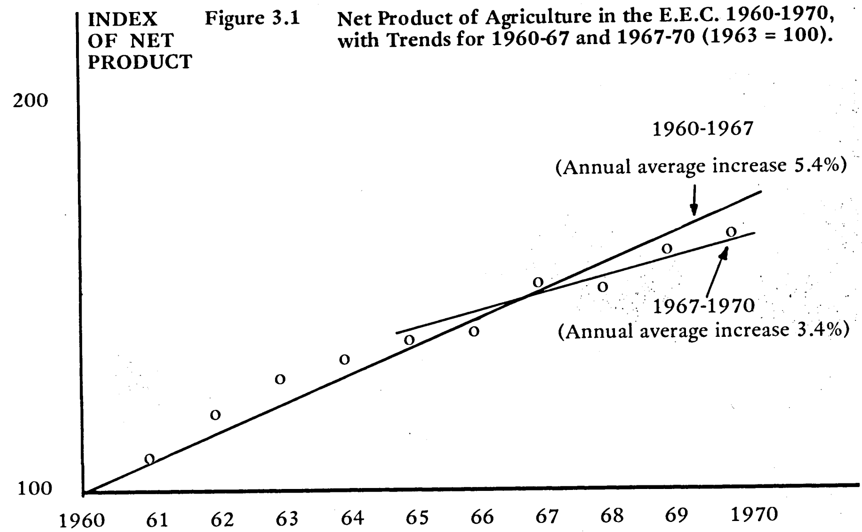
These statements should not be, and are not intended to be, the basis for concern over British agriculture's future in the Common Market. They are made to focus our thoughts on how to approach the outlook for farm product prices and costs in the next five years.

In the next five years the British Government will not be seeking a higher general level of prices for farm output than the present six members are prepared to pay their own farmers. Its influence generally will be in the other direction, but it will normally be in a small minority. In other words, we need to pay special attention to the economic circumstances of farmers in the Six to determine the likely levels of prices and production grants in the extended community of the Ten.

It is assumed that Denmark and Norway will proceed in their applications alongside Eire and the United Kingdom. Should these two countries not join, the analysis presented in this paper would not change significantly except to improve, probably marginally, the outlook for British pig production. *International political commitments would probably require that access for Danish bacon to the British market would not be reduced by more than a few percentage points within the next five to seven years.*

The early 1960's were more favourable for the development of agriculture in the Six than the closing years of the decade. Comparatively favourable price increases until 1966 were combined with good weather in the mid-60's. Then following a period in which (1) the Council of Ministers of the E.E.C. were forced to limit the rise in farm product price in the face of mounting surpluses of dairy produce and, to a lesser extent, of sugar, and of international political problems with cereals, and (2) there were several years of unfavourable weather. Accordingly, the fortune of Six agriculture in the 1960's falls into two distinct periods, one of perceptible economic progress followed by several years of lost ground, as shown by the course of total net agricultural product — the funds to pay wages, rent and interest and then to supply farmers' net income. Total net product averaged a 5.4 per cent annual increase in 1960 — 1967 but only 3.4 per cent annually in 1967 — 1970. (A similar pattern developed for British agriculture where the growth of net product was down to an annual average 3.7 per cent in 1967/68 — 1970/71.)

Figure 3.1 Net Product of Agriculture in the E.E.C. 1960-1970, with Trends for 1960-67 and 1967-70 (1963 = 100).



Net product per head in the agriculture of the Six averages a 10.0 per cent annual increase in 1960-1967. Its growth was down to an annual 8.9 per cent in the next three years and would have been less but for an increased rate of migration from the industry towards the end of the decade.

Table 3.1

E.E.C. Agriculture 1960-1970, Net Product and Net Product per Person Engaged in Agriculture 1960-1970

(At actual prices and exchange rates)

	Actual				Average Annual Percentage Change	
	1960	1965	1967	1970	1960-67	1967-70
	Thousand millions				%	%
Total Net Product	$14.0	$18.4	$20.0	$22.1 (1)	5.4	3.4
	millions					
Persons Engaged in Agriculture	15.0	11.9	11.0	9.4	–4.5	–5.0
Net Product per Head	$935	$1,540	$1,820	$2,350 (1)	10.0	8.9

Note:
Net product represents the funds available to cover the costs of hired labour, interest and rents and to provide farmers' incomes.

Source: *National Accounts 1960-70*, Statistical Office of the European Community. Also see the appendix, page 120.

(1) Preliminary estimates by G. R. Allen.

In 1960-1967 per capita incomes of farmers and of other agricultural workers rose relatively to those for the total labour force of the Community's economy. But the last few years of the 1960's were years when agricultural incomes lagged relatively to those in other sectors. Gross domestic product per head in agriculture as a share of that for the whole economy of the Six, rose from 42.1 per cent in 1960 to 44.6 per cent in 1967 but eased to 43.3 per cent in 1970.(1) Not surprisingly 1969 and 1970 were years of increasing social tension in the farming community of the Six.

(1) See page 120.

Once again the tide has turned. To some extent in 1969 and, more particularly in 1970-1972, a combination of

market conditions (notably a rise in beef prices, the at least temporary disappearance of large butter surpluses and the one-year shortage of maize), and

active intervention by the Council of Ministers

have combined to bring a sharp rise in actual prices of farm products, which, in my opinion, are likely to average some 11.5 per cent higher in 1972 than in 1970. This 5.5 per cent annual increase contrasts sharply with the 1.9 per cent annual average rise for 1963-1970.

In April 1972 the Council of Ministers raised the effective support of prices for the 1972/73 season by 6.3 per cent from those of the previous year. The increase of 4.0 per cent in the guide price for beef was clearly inadequate, especially given the 8.0 per cent increase in the intervention price for milk, to achieve Community objectives in meat production and was an interim decision in view of next month's elections (2) in Italy, where the price of beef is apparently a particularly sensitive political issue. The Council is to meet again this September when another 4.0 — 5.0 per cent increase in the guide price can be expected.

Actual market prices, plus the support under-pinnings provided in April and anticipated for beef in September, appear to have restored the incomes of the Six's farming community, relatively to those of other sectors, to the previous peak of 1967 and possibly to have improved them slightly. With this conclusion in mind, the projections in this paper take account of the following assessment of the Community's objectives for agricultural policy, and the means of implementing them, in 1972-1977:

(1) Closing the farm/non-farm income gap will remain an important objective but is not likely to be emphasised so much in the next few years as has been the case recently. The rate of increase in prices of farm products, after allowing for general inflation, will be less in 1973-1977 than in the last three years.

(2) The Council of Ministers will have to juggle the prices of individual products to meet changing conditions of the market place and their international ramifications.

(2) May 1972

(3) Intervention to support market prices will remain the chief means by which Community agriculture is assisted. Direct payments, such as production grants or early retirement pensions, will play a minor role. Even so, direct payments from Community funds to improve the structure of agriculture will assume some significance by 1977 and must be factored in as a minor alternative to, and restraint on, the overall level of price supports.

Accordingly, the basis for making our projections can be summarised as follows:

Analytical Basis for Projecting Prices of Farm Products In the E.E.C. 1972 - 1977

MAIN OBJECTIVE OF POLICY

Ensure that the average price for all agricultural products, after allowing for direct income payments to farmers, rises sufficiently to maintain the forward momentum in closing the per capita income gap between agriculture and other sectors of the Six, a momentum which was

(a) established in 1960 -1967,
(b) lost in 1968 -1970,
(c) restored by price increases in 1970 - 1972.

THREE STAGES IN MAKING PROJECTIONS

I	II	III
Project expenditure by the E.E.C. on structural reform and production grants for farming, these outlays being a partial substitute for increases in product prices.	Project changes in average price of all farm products, allowing for the capability of Six farmers partially to offset general inflation by improvements in productivity.	Project changes in the prices of individual farm products to be – (a) consistent with the projections under II, and (b) as far as possible compatible with their individual demand / supply balances, (i.e. minimise surpluses and shortages).

I. Projected Expenditure on Structural Reform

The Governments of the Six already have many active national schemes for improving the structures of their agricultures — such as early retirement pension schemes, attractive to the operators of small farms, incentives for re-grouping and consolidating fragmented fields and holdings, and land reclamation (particularly in the Netherlands). Structural reform has featured prominently in the Commission's proposals on agricultural policy for many years. Virtually no progress has been made within the Council of Ministers of Agriculture and until this year Commission proposals have "remained on the table". However, in March 1972, the Council of Ministers committed $1,500m. (£625m.) for the next four years — at least on paper — and there will be a reappraisal in 1975/76 with a view to expansion. Progress is likely to be slow. Specific schemes have yet to be developed. Community funds will likely remain the lesser source of finance for structural reform under the Common Agricultural Policy, with national exchequers paying up to 70 per cent of the benefits. In some large degree, therefore, Community structural programmes will become a substitute for national schemes and will not be entirely supplements to present arrangements.

By 1977, the net increase in expenditure on structural reform as a result of Community programmes should be running, in my opinion, at around $560m. annually — £213m. — which is equivalent to about 1.5 per cent of total Community agricultural sales in 1969/70. This outlay will represent a small deduction from the increases in farm product prices which Community policy would otherwise secure, say representing a cumulative 0.3 percentage points annually for 1970-1977.

II. Projected Increase in the Average Price of Farm Products

Two steps are necessary in projecting the average price increase for all farm products in the Six:

(1) to project general wage costs for all industries and the resulting increase in the cost of living, and

(2) to decide how far the Community farmer will be compensated for inflationary tendencies.

Inflation of wage rates has been even more rapid in the E.E.C. than in the U.K. over the last ten years but, with very much more rapidly improving efficiency in manufacturing industry at the other side of the Channel, has resulted in only the same rate of increase in consumer prices. In 1962-1967 average wages and salary per head in manufacturing industries in the E.E.C. rose at an annual rate of approximately 8.5 per cent as against some 3.5 per cent in consumer prices. In 1967-1971 the Six have experienced a wage explosion, just as in the U.K., with an average increase of some 11.5 per cent annually, but consumer prices have risen at around only 3.6 per cent annually and, even allowing for improvements in productivity, lagged somewhat behind the rise in costs.

For this study wages per head in all industrial sectors of the Six are projected to increase by about 8.5 per cent annually in 1972-1977 on top of an annual 11.5 per cent increases in 1970-1971. Against this base of cost increases, consumer prices for goods and services are expected to average 4.2 per cent annually from 1970-1977. All projections of product prices and input costs in the agriculture of the Six are made to be consistent with these fundamental economic trends.

In the E.E.C., as in the U.K., productivity has normally risen much more rapidly in agriculture than in other industries. As a consequence, prices received by farmers have increased consistently at a much slower rate than the general cost of living. The long term trend in this relationship is most reliably revealed from annual average values for 1958-1960 and 1966-1968. Subsequent years, for reasons already noted, are not representative.

In 1958-1960 to 1966-1968 productivity in agriculture rose more rapidly than in industry. Prices of agricultural products increased by much less than those of all consumers' goods and services in the total E.E.C., i.e. by an annual 1.4 percentage points and for France and Germany, the two most dominant countries in determining agricultural policy, by an annual 1.9 percentage points. See Table 3.2.

These relationships will hold during 1970-1977 because, in comparison with the earlier period, there will be

no significant change in the growth of productivity in agriculture relative to that in other sectors,

no important switch from price supports to direct income payments to farmers,

no significant shift in the trend of financial support to farming in the Six, and new members of the Community will not be able to bring about important modifications to its agricultural policy in the next five years.

On the basis of this appraisal the average farm-gate price for all agricultural products is projected to increase from 1970 through 1977 according to the following reasoning.

Basis for Projecting Annual Percentage Increase in Average Farm-Gate Price of All Agricultural Products in the E.E.C. 1970 - 1977

A.	
Prices of consumer goods and services rise more rapidly than farm-gate prices of agricultural products.	
Actual 1958 - 1960 to 1966 - 1968	
All countries in E.E.C.	1.4 percentage points annually
France and Germany	1.9 percentage points annually
Projected 1970 - 1977	
All countries in E.E.C.	*1.6 percentage points annually*
B.	
Basis of prices projections 1970 - 1977	
Prices of consumer goods and services rise by	4.2 per cent annually
Prices of agrcultural products rise by	2.3 per cent annually
Agricultural products below consumer goods and services	1.9 percentage points annually
C.	
Adjust for expansion in direct cash payments in place of price increases under Community programmes for structural reform.	
Price equivalence of expected expansion in structural reforms 1970 - 1977	0.3 percentage points annually
Effective difference in growth of prices of agricultural products and of consumer goods and services	*1.6 percentage points annually*

Increases in the prices of farm products are projected to lag those of all consumer goods by 1.9 percentage points annually in 1970-1977, as against annual differences in the late 1950's and

Table 3.2

Prices and Productivity in Agriculture and Other Sectors 1958-1960 to 1966-1968 In the E.E.C., U.K., Eire, Denmark and Norway

	Annual Average Percentage Change				Differences in Percentage Points		
	Prices		Productivity				
	Paid by Consumers for All Goods and Services	Received by Farmers	Agriculture	Other Sectors	Farmers Prices Below Consumers Prices	Agricultural Productivity Above Productivity in Other Sectors	Approximate Share of Total E.E.C. Farm Production
	%	%	%	%	Percentage Points	Percentage Points	%
Belgium	2.8	2.6	3.9	3.3	0.2	0.6	5.0
France	4.0	2.3	6.5	4.2	1.7	2.3	37.0
Germany	3.1	0.8	6.9	4.7	2.3	2.2	25.0
Italy	4.3	3.5	7.8	4.9	0.8	2.9	25.0
Netherlands	4.0	3.8	6.3	3.9	0.2	2.4	8.0
E.E.C.							
– All countries	3.8	2.4	6.8	4.4	1.4	2.4	100.0
– France and Germany	3.6	1.7	6.7	4.4	1.9	2.3	62.0
United Kingdom	3.0	0.7	6.0	2.4	2.3	3.6	–
Eire	4.9	2.3	3.9	3.3	2.6	0.9	–
Denmark	5.1	2.2	6.0	3.0	2.9	3.0	–
Norway	3.6	3.4	2.8	3.8	0.2	1.0	–

Note: Productivity is measured by gross domestic product per head at constant prices.
Source: Organisation for Economic Co-operation and Development, *Agricultural Review,* Vol. 18 No. 3, 1971.

most of the 1960's of 1.4 percentage points for the total Community and 1.9 percentage points for France and Germany together. However, when increased expenditure on structural programmes are measured per unit of output, the effective price gap will be around 1.6 percentage points annually.

Accordingly, farm-gate prices of agricultural products for the Six are expected to average a 2.3 per cent annual increase in 1970-1977 or a cumulative 17.5 per cent, with almost all of this projected gain realised by the end of 1972 when prices will average 11.5 per cent about 1970.

Table 3.3

Indices of Producers' Prices of Farm Products in the E.E.C. Actual for 1963 - 70 and Projected for 1977

	1963 = 100			1970 as % of 1963	1977 as % of 1970
	1963	1970	1977	%	%
All Farm Products	100	114	134	14	18
All Crops	100	120	133	20	11
All Livestock Products	100	111	133	11	23

See Table 3.5 for more detailed information.

III. Projected Increases in the Prices of Individual Farm Products

The projected increase in the average price for all farm products is the overall guide to which estimates for individual commodities for 1977/78 have been related. Projected relationships between the prices of individual commodities in other studies, particularly the recent report by the Institute of International Agriculture at Michigan State University (1), have been noted and, in some degree, used. But, special attention has been given to the following considerations which probably involve a much more pessimistic outlook for the consumption of beef in the United Kingdom and a somewhat more optimistic outlook for Community cereal and sugar beet prices than are generally held by most commentators on the implications of the Common Agricultural Policy for farming in the U.K.

(1) *The Impact on U.S. Agricultural Trade of the Accession of the United Kingdom, Ireland, Denmark and Norway to the European Economic Community*, Research Report No. 11, Institute of International Agriculture, Michigan State University, 1971, a study in which the Department of Agricultural Economics of the University of Newcastle was deeply involved.

(1) The overall demand/supply position and, as a result, farm-gate prices for individual commodities will be influenced substantially by the reactions of consumers in the four countries about to join the Community, particularly in Britain. The British housewife will face price increases for some products that, with the recent exception of butter, are entirely outside her experience. The past is no guide to her reactions, nor are the many sophisticated economic studies of the demand for food made in recent years.* We are thrown back almost entirely to our commonsense and intuitive judgements. But one clue is the consumption of butter, running at a weekly rate of around 6,500 tons in March 1972 as against 9,000 tons two years ago.

It is my strongly held opinion that current analysis is seriously under-estimating the shift to cheaper foods which will occur in the next five years in the United Kingdom, particularly from beef to pork, mutton and poultry meat. The Continental housewife, backed by a more rapidly rising standard of living than her British counterpart, will continue to demand increasing amounts of beef. But in the U.K. a sharp reduction in consumption is likely.

Table 3.4 Consumption of Meat in the United Kingdom 1960 and 1970 Actual, 1980 Projected

	Consumption (thousand tons)			1970 as % 1960	1980 as % 1970
	1960	1970	1980*	%	%
Beef	1,170	1,180	950	101	80
Mutton and Lamb	600	540	680	90	126
Pig Meat	1,060	1,260	1,520	110	121
Poultry	300	560	750	187	134
	3,130	3,540	3,900	113	110

*"Guestimate" by G. R. Allen

Total meat consumption rose by about 13 per cent from 1960 — 1970 and will probably increase by almost the same proportion in the next decade. Mutton, pig meat and poultry will

* Existing econometric knowledge on the response of demand for food to price changes is inadequate for two reasons. First, insofar as these studies "catch" the reaction of consumers to big changes in price, they are measuring the short-term response to extreme price variations which consumers implicitly expect to be temporary and not the long-term adjustment changes which are known to be permanent. Second, most econometric studies do not measure the higher values of price elasticity which exist at the extremities of the demand curve but only the much lower (arc) elasticity in its middle reaches.

likely all increase through 1980, but the decade could end with total beef consumption in the United Kingdom some 20 per cent below the 1970 level.

(2) The international cattle cycle is a shadow of its former self. But it is still there, is synchronised between major producing areas and has been exacerbated in the last two years by weather conditions in South America. Since the beginning of 1970 breeding herds have been going through a cyclical build-up in Western Europe, North America and Australia. Sometime this year the United States is expected to increase its import quota, which will pull more supplies from Australia. In Argentina herds have been built up around 6 per cent in the last 18 months, following severe liquidation prior to that date, and only now are Argentinian beef exports showing signs of increase after many years of decline.

These considerations of supply, together with the expected slide in beef consumption in the United Kingdom, support projections for cattle prices in the E.E.C. nearing their peak in 1972 and topping out in 1974 with a small decrease thereafter. *By 1977 cattle prices in the Six are expected to be no more than 2—3 per cent above 1972 levels.*

(3) Opportunities for improving productivity in cereals are much less in the next five years than in the recent past. Major increases in yield through new seeds seem unlikely and much of the crop, perhaps two-thirds to three-quarters, is now fertilised at or near economically optimum levels in the Community. Producers in the Six will be pressing more strongly for price increases to offset cost inflation than they were in the 1960's.

(4) In sugar there will be a better demand/supply balance in world markets than in the last decade and producers in the Six will not need to sell so much of their production outside the basic quota which secures the full support price. In addition, productivity gains will be harder to come by than in the 1960's.

Accordingly, Table 3.5 represents this writer's judgement on the outlook for prices in the Six. In addition to projections for all products in 1977, the expected course of prices for cereals and beef have been indicated for 1974. It is important to note that beef prices are projected to reach a cyclical peak in 1974, thereafter declining slightly North of Scotland prices, derived from the foregoing projections as set out in detail in later sections of this report, are also summarised in Table 3.5.

Table 3.5 (a)
Indices of Producers' Prices of Farm Products in the E.E.C. with Prices for North of Scotland

	Actual for 1958 - 1970 (1963 = 100)								
	1958	1963	1964	1965	1966	1967	1968	1969	1970
All Farm Products	90	100	102	106	109	105	104	111	114
All Crops	100	100	100	106	109	103	102	112	120
All Livestock Products	85	100	103	106	108	106	105	111	111
Crops(1)									
Wheat	91	100		99	100	100	97	95	100
Barley and Maize	93	100		102	105	101	101	100	108
All Cereals	92	100		100	101	100	99	98	104
Potatoes	125	100		150	145	101	88	156	171
Sugar Beet	91	100		103	103	108	108	107	104
Livestock									
Beef	86	100		121	117	116	120	128	129
Veal	77	100		112	113	113	117	125	129
Pigmeat	84	100		96	108	97	93	107	107
Milk	83	100		108	111	111	109	109	115
Eggs	95	100		99	88	85	84	84	70
Poultry	99	100		100	100	103	102	105	105
Hill Sheep (1970 = 100)									100

Distribution of E.E.C. Farm Production by Value of Sales:

	1970		*1977*	
Crops	42		39	
Wheat		8		7
Barley and Maize		4		5
Potatoes		3		2
Sugar Beet		2		2
Other		25		23
Livestock	58		61	
Cattle		9		9
Veal		2		1
Pigmeat		12		14
Milk		19		20
Eggs		4		4
Poultry		4		5
Other		8		8
Total	100		100	

Table 3.5 (b)
Indices of Producers' Prices of Farm Products in the E.E.C. with Prices for North of Scotland

	Projected for 1972, 1974 and 1977			North of Scotland Prices		
				1971/72		
	1972	1974	1977	Actual	if at E.E.C. Levels	1977/78
				£	£	£
All Farm Products	127	131	134			
All Crops			133			
All Livestock Products			136			
Crops[1]						
Wheat	109	115	120	33.00[2]	41.50	47.40
Barley and Maize	110	119	125	28.00[2]	35.00	41.60
All Cereals	109	117	123	–	–	–
Potatoes			150	16.00[3]	16.00[3]	17.50
Sugar Beet			120	–	–	–
Livestock						
Beef	152	158	155	121.60[4]	165.00[4]	178.50[4]
Veal	152	158	155	–	–	–
Pigmeat			130	20.50[5]	22.00[5]	26.00[5]
Milk			135	0.20[6]	0.21[6]	0.23[6]
Eggs			100	–	–	–
Poultry			120	–	–	–
Hill Sheep			120	6.00	–	7.20

Source of indices 1958-1970; *Agricultural Statistics 1970,* No. 4 pp 120-121 and *Yearbook of Agricultural Statistics 1970,* Statistical Office of the European Community.

(1) Other items not projected above represent 59% of all crops in 1970 including fruit, vegetables and wines.

(2) Total returns, including deficiency payments.

(3) Trend values, adjusted to eliminate effect of yield variations.

(4) Fat steer, summer fattened, 9.5 cwt.

(5) Bacon pig 195 lb. Liveweight.

(6) Aberdeen area.

The double adjustment of farm-gate prices in the U.K. — increases to the present E.E.C. levels and to the projected increases in the Six — produce large changes for British farmers. For those in the North of Scotland, whose experience will be in line with that of all British farmers, the projected price increases for 1977/78 from the actuals of 1971/72 range from 49 per cent for barley and 47 per cent for fat steers (summer fattened) through 27 per cent for bacon pigs and 20 per cent for sheep down to 9 per cent for potatoes.

Table 3.6

Farm-Gate Prices for Agricultural Products In the North of Scotland

	1971/72 Actual	1977/78 in E.E.C.	1977/78 as per cent of 1971/72
	£	£	%
Wheat	33.00(1)	47.40	143
Barley	28.00(1)	41.60	149
Potatoes	16.00(2)	17.50	109
Fat Steer (9.5 cwt., summer fattened)	121.60	178.50	147
Bacon Pig (195 lb. liveweight)	20.50	26.00	127
Milk (Aberdeen area)	0.20	0.23	115
Sheep	6.00	7.20	120

(1) Including deficiency payment. (2) Trend value.

IV. Projected Increase in Costs for British Farming

Projected increases in costs for North of Scotland farming are set out in later sections. They are based principally upon the following projections for individual inputs throughout the United Kingdom:

(1) The wages of a full-time farm worker will increase by 8.5 per cent annually from 1971/72 and 1977/78. If Britain stayed outside the E.E.C. an annual increase of 7½—8 per cent might be expected, but the increased cost of living within the E.E.C. puts the expected annual increase to 8.5 per cent.

(2) Fixed charges with a high service element are based on the foregoing projection of labour costs and are specified in more detail in later chapters.

(3) Protein meal (West Coast U.K. port) will increase through 1977/78 by 20 per cent over the 1971/72 levels, i.e. from £50/ton to £60/ton for Soya Meal, from £90/ton to £108/ton for Herring Meal, and corresponding increases for substitutes. Protein meals are some 10 per cent cheaper in the E.E.C. than in the U.K. as a result of smaller or non-existent tarriffs the other side of the Channel. Increases are expected, however, to 1977/78. Vegetable oils will remain in abundant supply in the next five years, but coming to a greater extent from non-meal bearing sources. The projections attempt to strike a balance between this fact, which makes for higher prices and reduced demand for soya beans, and the likelihood that American farmers would maintain most of their present level of soya bean production at *real* prices 15 — 20 per cent below present levels.

(4) Recent fertiliser prices are a misleading base from which to make projections in view of the severe excess capacity which has been plaguing British and overseas producers. A more representative starting point is 1967/68 when demand and supply of fertilisers, both here and abroad, were more or less in balance. The British industry will become more competitive than it was in the mid 1960's due to the removal of tarriff protection against E.E.C. producers. Accordingly, the Dutch level of farm-gate prices for fertilisers in 1967/68 is taken as a base, adjusting for the important cost changes facing U.K. producers since that date, including the effects of technological advances in ammonia production and potash mining and changes in world market prices of phosphate rock and sulphur. The tendency for increased costs in fertiliser production and distribution will, apart from technological improvements and other savings in manufacturing, be mitigated by changes in farmers' practices. By 1977/78 they will use proportionally more materials with higher plant nutrient content, and more straights in place of compounds. They will probably rely increasingly on biennial application of phosphate and potash. In addition, they will get larger volume discounts as their total purchases continue to increase.

The detailed calculations on fertiliser prices are shown in a separate appendix to this report. Assuming farmers continue to improve their fertiliser practices in line with past trends, representative farm-gate prices in 1977/78 should be around £141 per ton of nitrogen, £112 per ton of P_2O_5 and £62 per ton of K_2O.

Table 3.7

Prices of Fertiliser in the United Kingdom (£ per Ton of Nutrient)

	Actual Price Before Subsidy in the North of Scotland 1971/72	Projected Prices in the United Kingdom including North of Scotland 1977/78	
		Assuming Farmers Maintain Fertiliser Practices of 1971/72	*Assuming Farmers Continue to Improve Fertiliser Practices in line with Past Trends*
	£	£	£
Nitrogen	110[1]	185	141
Phosphate	120[2]	147	112
Potash	44	81	62

(1) Ammonium nitrate (2) Single superphosphate

(5) Increases in costs for other inputs are specified as appropriate in later chapters.

Outlook for Gross Margins and Net Surplus (Rent & Net Farm Income), and General Conclusions

Later sections of this report spell out in detail the implications of the foregoing projections of prices and costs for representative types of farming in the North of Scotland. Here it remains to summarise these results, both for gross margins and the net surpluses available for covering rent and net farm income. The financial conclusions are intended to apply directly to the North-East of Scotland. At the same time the percentages changes which they record from the base year 1971/72 will be representative for the corresponding farming systems in many other parts of the United Kingdom.

A valuable cross check with our results is available. One week before our conference on the Common Market, held on 19th April, the Trade Policy Research Centre published an analysis of expected changes in gross margins for British agriculture for 1977/78 by Mr. Brian Davey of the Department of Agricultural Economics, University of Newcastle.[1] There had been no prior

(1) T. E. Josling, Brian Davey, Alister McFarquhar, A. C. Hannah and Donna Hamway, *Burdens and Benefits of Farming Support Policies,* Trade Policy Research Centre, Buckingham Street, London, WC2.

discussion between ourselves and the Department of Agricultural Economics at Newcastle on the assumptions underlying our respective sets of projections. It is most significant, therefore, that the two sets of results are more or less mutually supporting where each has made a calculation for the same product/farming system.

Table 3.8

Comparison of Projected Gross Margins per Unit of Production in British Agriculture in 1977/78 Under Conditions of Full Membership of E.E.C.

1977/78 as per cent of 1971/72, after taking into account expected improvements in yields, feed conversion and other productivity factors

		Newcastle	*Aberdeen*		*Aberdeen over/under Newcastle*
		%	%		per pts.
Wheat		154	146		− 8
Barley		181	153		− 28
Oats			140		
Potatoes	– Ware	102			
	Seed		88		
Dairy Replacement			161		
Milk	– Purchased Cake	116	113	111	− 5
	– Home-Mixed Rations		109		
Beef	– Low Ground Suckler Herd		97		
	– Barley Beef	89	95		+ 6
	– Semi-Intensive 18 Month	130	133		+ 3
	– Winter Fattening		150		
	– Summer Fattening		210		
	– Extensive 24 Month	139			
Pigs	– Bacon	127	121		−6
	– Heavy Hog				
	– Pork				
Sheep	– Fat Lambs	112	120		+ 8

Ranking the relevant projected percentage increases in gross margin from high to low, it can be seen that Newcastle and Aberdeen reached virtually the same conclusions. Each see barley, wheat and semi-intensive 18 month beef as the three products with the largest projected increases in gross margins, and potatoes and barley beef with the smallest.

Table 3.9

Ranking of Percentage Increases in Gross Margins, High or Low

	Newcastle	*Aberdeen*
Barley	1	1
Wheat	2	2
Semi-Intensive 18 month Beef	3	3
Bacon Pigs	4	4
Milk	5	6
Sheep	6	5
Potatoes	7	8
Barley Beef	8	7

There is only one large difference in the projected percentage increases in gross margins for the above, namely for barley with Newcastle at 81 per cent and Aberdeen at 53 per cent.

We may conclude that our projections of gross margins — which make reasonable allowances for continued improvements in yields, feed conversion and other productivity factors — confirm that cereals will benefit most from Common Market membership, followed by dairy herd replacement and the less intensive forms of cattle fattening. Mutton, bacon and pork producers will secure a substantial improvement. In the case of pigmeat this change will be a consequence of economies of scale, resulting from increased sales per pig unit, and from improvements in technical standards which together will more than compensate from an adverse change in feed costs.

The detailed projections of net surplus — for rent, return on tenant's capital and farmer's renumeration — for five types of farming in the North of Scotland range from an increase of 63 per cent for a 300 acre mixed arable farm to a reduction of 3 per cent on a 100 acre dairy farm. All of these results require that farmers continue to improve their practices and technical standards.

Type of Farm	*Percentage increase in net surplus 1971/72 - 1977/78*
	%
300 acres mixed arable	62
300/350 acres dairy	46
100 acres beef and barley	39
300 acres beef and barley	32
100 acres dairy	– 3

In only one of the foregoing is there any allowance for increase in size of farm — namely the larger dairy unit which is assumed to go from 300 acres in 1971/72 to 350 acres in 1977/78. In practice, other types of farm will continue to increase their average sizes so that the foregoing calculations probably understate the potentiality for increasing net income provided by membership of the Common Market. In addition, net income from pigs will probably improve by 25-30 per cent from 1971/72 to 1977/78. (1)

In all, agriculture in the lowlands and uplands of the North of Scotland should realise a 40 — 45 per cent increase in net income over the six years 1971/72 to 1977/78. This annual average increase of 5.8 — 6.4 per cent compares favourably with the upward trend of 4.2 per cent yearly for all British agriculture in 1958/59 to 1970/71.

There remains one big unknown, namely the outlook for the £ sterling in relation to the currencies of the present E.E.C. members and its implication for prices of farm products in the U.K. With wages per employee projected to grow at 8.5 per cent annually in the rest of the British economy as much as in agriculture, i.e at 8.5 per cent annually, a devaluation will be inevitable unless manufacturing industry improves productivity at a much greater rate than in the last 15 years and than now seems likely. A devaluation of 5 — 8 per cent is, regrettably, probable before 1977/78. In such circumstances, the farm-gate prices of agricultural products would probably rise in about the same proportions since they will be pegged to the E.E.C.'s Unit of Account. The British Government might decide to break the rules of the Common Agricultural Policy and break the link with the Unit of Account. But, such action would probably not completely offset the additional stimulus to British agriculture resulting from devaluation.

(1) Some brief comments on the outlook for pigs are provided later, including financial estimates for an integrated sow/bacon unit.