



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

NEW.T

DP 2



GIANNINI FOUNDATION OF
AGRICULTURAL ECONOMICS
LIBRARY

DEC 10 1982

University of Newcastle upon Tyne



DISCUSSION PAPER

Department of Agricultural Economics

Department of Agricultural Marketing

UNIVERSITY OF NEWCASTLE UPON TYNE

Department of Agricultural Economics
Department of Agricultural Marketing

DP 2

October 1982

Forecasting EEC Support Prices

Christophér Ritson
Department of Agricultural Marketing

Foreword

This is the second of a new series of short papers describing various aspects of the research work being carried out by staff and associates of the Department of Agricultural Economics and the Department of Agricultural Marketing. The aim is to produce inexpensive and up-to-date summaries of specific pieces of work rather than more complete and discursive versions which merit publication in academic journals or in report form. The titles of the first seven papers in the series are listed at the end.

The present paper is a revised version of one prepared earlier this year, at the request of Mr. R. J. Bansback of the Meat and Livestock Commission, for an Agricultural Economics Society one-day conference on "Forecasting Method and Results - the Reality" in March 1982.

Acknowledgements

I would like to thank Allan Buckwell, Mitchell Ness, Kenneth Thomson and Rosalind Warren for their help in the preparation of this paper.

FORECASTING EEC SUPPORT PRICES

Contents

Foreword

Introduction

1. The "Reform Plan" Approach
2. The "Apocalypse Now" (or at least sometime) Approach
 - 2.1 The Budget Problem and Planned Reform
 - 2.2 The Budget Problem and "Unplanned Reform"
3. The Josling Decision Rule Approach
4. EEC Support Prices and the World Market

Conclusion

References

1

British agricultural economists who are knowledgeable about EEC agricultural policy tend to fall into one of two groups. There are those whose main interest is in commodity marketing. They are usually well-informed about the CAP mechanisms for their particular commodity area (beef, cereals, fruit and vegetables, or whatever). They will have studied the implications of these mechanisms for the development of market prices as well as the role of the policy in the general marketing system for their commodity. But they view the determination of CAP support prices as a somewhat mysterious exogenous process. The second group are the CAP analysts - sometimes referred to as the *policy men* (as opposed to the *marketing men*). This latter group have often been alarmingly ignorant about the detail of the policy mechanisms, but in general have had a better feel for the factors determining EEC agricultural policy decisions*. However, their work has been almost entirely prescriptive rather than explanatory. They have been concerned with what should happen to the CAP "if it is to come closer to fulfilling its objectives", rather than explaining the price decisions that have been taken, with a view to predicting future decisions.

* This distinction is now becoming less clear cut, with the marketing economists increasingly finding the need to go beyond the nuts and bolts of their particular market regime, and the policy analysts becoming more aware of the need to absorb the detail of the policy mechanisms, as proposed developments in the CAP become more complicated and commodity-specific (e.g. co-responsibility levies, quantums, and so on). But ten years ago there did seem to be two camps. I am thinking, for example, of the contrast between the Butterwick and Nevelle-Rolfe book "Agricultural Marketing and the EEC" (1971) and the contemporary contributions of - say - Marsh or Josling.

The commodity forecaster, to the extent that he has found it necessary to be cognizant of policy prices, has tended to feel more comfortable as one of the former group. A brief glance at the commodity contributions to, for example, the Agra-Europe or Aberdeen "Outlook" conferences, suggests that the policy is seen as affecting the consequences of the forecast but is not part of the forecast itself*. For example, a forecast which involves an increase in the excess of UK cereal production over consumption leads to the predictions that market prices will follow intervention levels, and exports will increase, rather than a prediction of declining real prices. Perhaps there will be some comment made about the feasibility of the intervention system being able to continue to underwrite prices in real terms, but this sentiment is unlikely to be built into the forecast. The forecaster, perhaps quite rightly, will believe that there are other more significant factors, which lie outside his realm, influencing the level of support prices.

Thus it seems that a gap has developed between, on the one hand, the broad appraisal of the CAP as a whole and, on the other, the detailed analysis of the consequences for specific commodity markets of policy price changes, with little work being directed towards explaining and forecasting the development of EEC support prices themselves. Perhaps it is too difficult. Nevertheless, this paper explores the possibility of systematically forecasting the development of policy prices in the EEC. Two points should be borne in mind throughout. First, since

* Though these conferences may well include a contribution from a Commission official giving his view of future developments in the CAP. For a comment on the value of this kind of contribution, see next section.

this is a subject which, if it has yet been born, is certainly still in its infancy, the paper is a very basic one. In particular, it is not concerned much with techniques; we are still at the stage of identifying what causes what, rather than worrying about which techniques are best for modelling the system accurately so as to be able to project into the future. Second, the policy-making process in the EEC is sufficiently peculiar to suggest that much of what is said is relevant only to EEC support prices. In contrast, I would expect much commodity forecasting to involve techniques which are relevant to any part of the world where the forces of supply and demand are predominant.

Four possible approaches to forecasting EEC support prices are now considered.

1. The "Reform Plan" Approach

Any British CAP expert worth his salt has, of course, a reform plan (some have two or three). Similarly, the European Commission produces one every two or three years (though since the ill-fated "Memorandum on the Reform of the Common Agricultural Policy" - the "Mansholt Plan" - they are euphemistically called "A new start for . . ." or "New directions for . . .", etc.).

It would be incorrect to suggest that many of the authors of reform plans expect their proposals to be implemented; it is even doubtful whether Commission officials have, any longer, much expectation of their reforms being put into practice. Nevertheless, the strength of the economic logic behind many reform plans has been such that there has been a strong temptation in some quarters to take the recommended change as a prospective change. In the early 1970s there was a broad consensus among "CAP experts" that support prices should be reduced substantially in real terms and small farmers compensated by some form of income supplementation scheme. To a considerable extent this proposed development became a fairly accepted UK view of the way the policy would develop.

Similarly, each Commission proposal has tended to be taken as an accurate picture of the future, and this tendency is still with us. Many people are, I think, at present relying too much on the current Commission "reform plan" documents (European Commission 1981a, 1981b) as a portent of things to come. They have been widely reported in commodity outlook bulletins (e.g. Volans, 1981), and they lead to a forecast of "the gradual alignment of guaranteed prices on prices ruling on a better organized world market", a radical shift in the balance of price advantage between cereals and livestock products; and the limited introduction of income aids. But only a year or so previously the same individuals

were attempting to estimate the implications for UK agriculture of the introduction of "super-levies" and "quantums".

The evidence now seems extremely strong that assessing the implications of the adoption of a major reform plan for the CAP is not the way to forecast EEC support prices. No major reform of the CAP has ever been consciously adopted by the Council of Ministers. What is arguably the only major change in the policy since its inception - the green money system - was created by accident and developed on the basis of a series of *ad hoc* decisions.

2. The "Apocalypse Now" (or at least sometime) Approach

For several years it has been forecast that the CAP would soon blow itself apart. For example:

"Spending on agricultural price guarantees throughout the 1970s increased at around 25% per year; the own resources of the Community have grown at around 15% per year. Taken together with expenditure on non-agricultural purposes, the European Commission projects that the total expenditure of the Community will reach the limit of own resources in 1982."

(Tangermann, 1981)

Well, we now know this will not happen in 1982, but this throws up the first problem of this approach - when will it happen? It is possible to forecast the growth of CAP expenditure by combining projected production and consumption levels with assumptions concerning real EEC support and world trading prices. But such forecasts are very sensitive to the assumed level of world prices. In 1980 the Commission was forecasting that the day of judgement would occur in 1982. By the time 1982 had arrived, historically high world commodity prices were leading many to view the concern over CAP expenditure outstripping EEC financial resources as a thing of the past.

". . . the budgetary situation as regards the Guarantee Section of the EAGGF has considerably improved. The growth rate in EAGGF Guarantee expenditure in 1980-82 has fallen to around 9.5% a year, whereas the annual growth rate of the Community's own resources is about 11%."

(European Commission, 1982)

But, at the time of writing (September 1982), Agricultural

Commissioner Paul Dalsager is reported (Agra-Europe, 1982) as having warned the Commission that the collapse of world market prices could lead to a major problem in financing the CAP during 1983/84.

2.1 The Budget Problem and Planned Reform

The second problem with this approach is what will happen when CAP expenditure does break through the ceiling of own resources? There are two schools of thought. The first is that this will be the issue which forces the ministers to adopt reform. Continuing with Tangermann:

"The most prominent fact about the CAP is that it is under heavy pressure. And among the many pressures on the CAP, the decisive one is the financial pressure, which has grown to such an extent that now something has to give. In the past even moderate proposals for change have never been accepted, the policy-makers never agreeing that there was a real need for change and for major adjustments in the CAP. This was until the financial crisis became an obvious threat. Now everybody talks about necessary reforms."

(Tangermann, 1981)

However, the "necessary reforms" are unlikely to resemble the "British" CAP reform plans. If it is the budget crisis which forces reform, then one would expect reform to be directed solely at the budget problem*. In particular, cutting consumer prices is

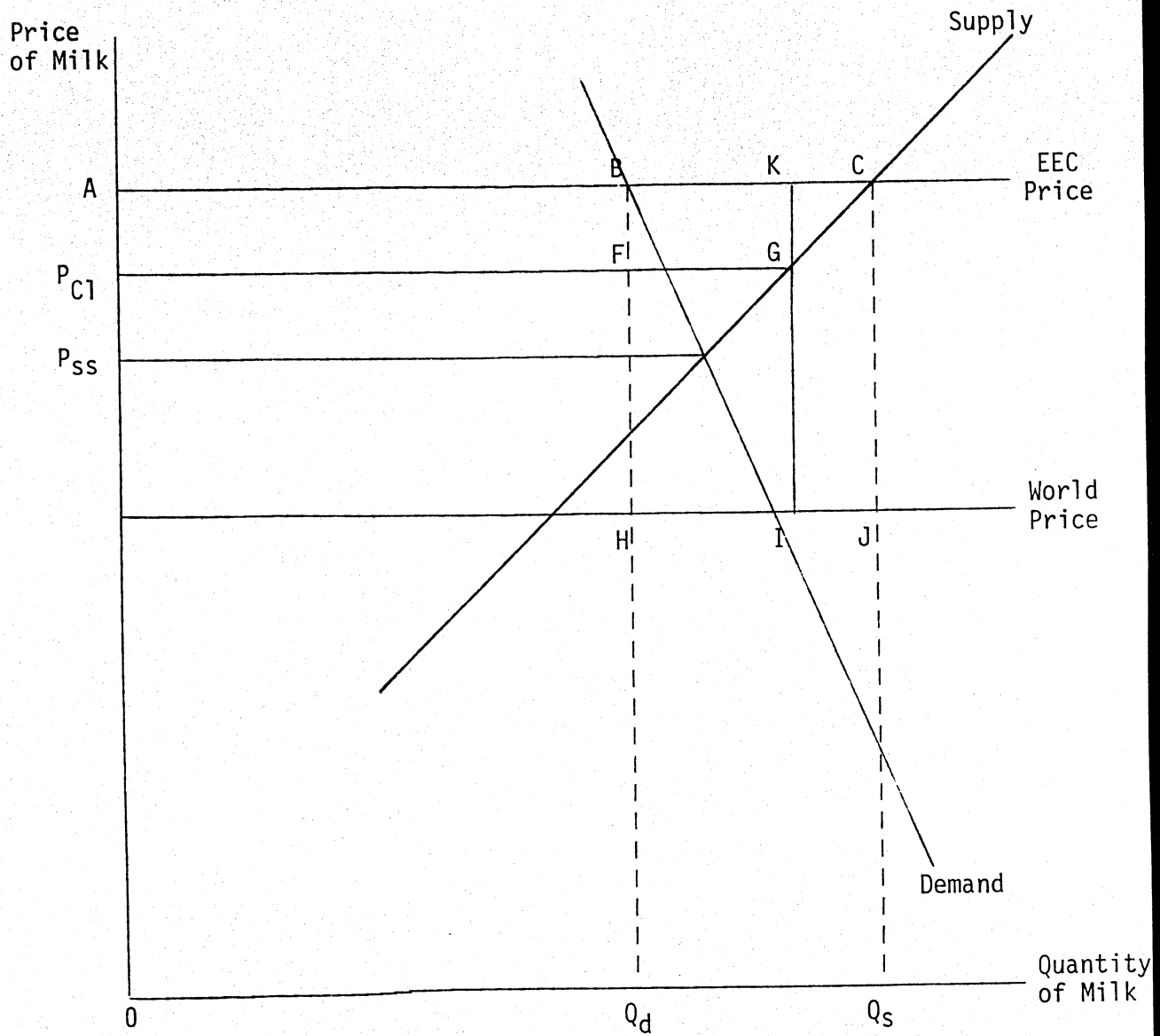
* By "Budget problem" I mean the growing financial cost of surplus disposal, and not the "British budget problem". The British problem can be dealt with by rebates which, of course, add to the general budgetary pressure.

not an attractive method of eliminating the financial cost of surplus disposal, if this is the sole objective of reform. The EEC budget provides only a small part of the total transfer to agriculture brought about by the CAP's market support system. What is required to deal with the budget problem is a mechanism which retains the part of the transfer financed by food consumers and eliminates only that part financed by the budget. One possibility is the imposition of quotas (either in the form of restrictions on production, or "super levies" on marginal output). However, in most cases, quotas are regarded as administratively infeasible. An alternative is the more widespread use of co-responsibility levies.

Much of the discussion in this country over the application of the co-responsibility levy has missed the central point about this mechanism - that it views market imbalance solely from the point of view of the budgetary consequences. It cuts producer prices without cutting consumer prices (or alternatively raises consumer prices without raising producer prices). It therefore attacks the financial cost of surplus disposal in two ways. Output is restrained, reducing the size of the surplus, and part of the transfer from consumers is taken as tax revenue: If the co-responsibility funds were to be used to finance the disposal of surpluses (which would surely follow any significant increase in the size of the co-responsibility levy) then the budget cost of the milk surplus can be eliminated by a much lower cut in producer prices than if intervention prices are lowered until market balance is restored.

This point is illustrated in Figure 1 which shows the total EEC market for milk and milk products (in milk equivalent). At the EEC support prices, surplus production $Q_S - Q_D$ must be disposed of on world markets at budgetary cost BCJH. In order to

Figure 1



eliminate the surplus, the producer (and user) price must be cut to the self-sufficiency level P_{SS} . If, however, a co-responsibility levy is applied, the milk policy budget can be balanced with a lower producer price cut to P_{C1} . The cost of surplus disposal is reduced to $BKIH$ and financed by levy revenue $AKGP_{C1}$.

Thus one must expect the budget problem - to the extent that it forces reform - to lead to reform which is directed specifically at the budget problem, and which involves policies which raise, as well as those which save, money. Apart from commodity taxes (like the co-responsibility levy, and the much-proposed vegetable oil tax) the other source of extra funds is national financing.

National financing of the CAP might develop in one of two ways - with different implications for EEC support prices. "Planned national financing" might develop as follows. In its proposals for the annual price fixing, the Commission stresses that, if a certain percentage increase (which is much less than that required to recoup farm costs) is exceeded, the cost of market support will exceed available funds. Already, in the previous year, there will have been some sort of financial crisis anticipating this development. The Council accept the Commission's view and agree on a set of prices which involve a drop in real EEC support prices. Thereafter, prices rise in nominal terms by only the percentage that can be financed without exceeding available funds. At the same time, however, the Council, under the threat of unilateral action by France (and others), agrees on a set of measures by which member state governments are allowed to compensate their farmers, to the extent that the rise in EEC support prices involves under-recoupment of farm costs. Such measures are likely to be as far removed from price support as is possible, given the constraint that individual farmers will have suffered in

proportion to the amount they produce of the products with declining real support prices (and thus perfect compensation would require a measure which is linked to production levels).

An EEC policy model, such as that developed at Newcastle University*, could be used to forecast EEC support prices in this way. For example, it might be assumed that prices remain constant in real terms until the budget ceiling is reached. Thereafter, the fall in real support prices necessary to maintain CAP expenditure within the budget limit can be predicted.

2.2 The Budget Problem and "Unplanned Reform"

The second school of thought on how a budget crisis might influence future EEC support prices might be described as "unplanned national financing". This would arise as a consequence of the Council continuing to grant increases in support prices in excess of those which could be financed by available "Own Resources". The Commission would then be forced to take *ad hoc* "administrative" decisions in order to allocate its scarce resources among competing ends. One can be only very speculative about what those decisions would be. First, it would probably save money by suspending export refunds and allowing intervention stocks to accumulate. This has already happened with dairy products. (The Community budget, in a sense borrows from national exchequers the money required to finance intervention stocks, and repays with interest (storage costs)

* The model is described in Buckwell, Harvey, Thomson and Parton (1982).

For an example of how the model can be used to examine the relationship between CAP price changes and budgetary cost, see Thomson and Hubbard (1982).

when the product is disposed of.) Next, it would presumably cut much "non-obligatory" expenditure. The third move would seem to be a decision to reimburse national exchequers for only part of the cost of surplus disposal. (Perhaps the decisions would be to delay until the financial position improves.) Intervention Authorities would then be under pressure from their governments to tighten up on intervention rules, in the hope that surpluses would accumulate in other member states - there would be an attempt to "pass the surplus". Some member states might choose to reduce intervention prices to the level financed by EEC funds; others would introduce border taxes to prevent imported produce moving into intervention. It is a ghastly and unpredictable picture; but it is far from unlikely. The new CAP would be based on a series of *ad hoc* crisis Commission decisions which would eventually become accepted as part of the policy.*

* In another, even more chaotic version, the Council would fail to agree on price increases, support prices would remain constant in money terms, and member states would unilaterally introduce nationally financed measures to compensate farmers for declining real prices. The 1982 decision to approve the price proposals on a majority vote perhaps makes this version a little less likely, and the version where the Council pushes through price increases which involve expenditure exceeding own resources, correspondingly more likely.

3. The Josling Decision Rule Approach

By far the most sophisticated attempt at forecasting EEC support prices which I am aware of is that developed recently by Tim Josling for the United States Department of Agriculture (Josling and Pearson, 1981). An article describing the approach has now been published in the European Review of Agricultural Economics (Langworthy, Pearson and Josling, 1981) and so only a very brief summary is provided here. The method is summarised in the flow chart (Figure 2). Briefly, the method is as follows: The only exogenous data input is a set of annual assumptions of member state inflation rates. Exchange rates are then projected via purchasing power parity, relative to the dollar. The value of the ECU is then calculated via the basket of currencies, by which it is defined. The movement in exchange rates generates MCAs. A decision rule is employed on the elimination of MCAs, based mainly on the "Gentlemen's Agreement" of 1980. Finally, a set of alternative CAP policy price decision rules are applied. These are constrained by the requirements that,

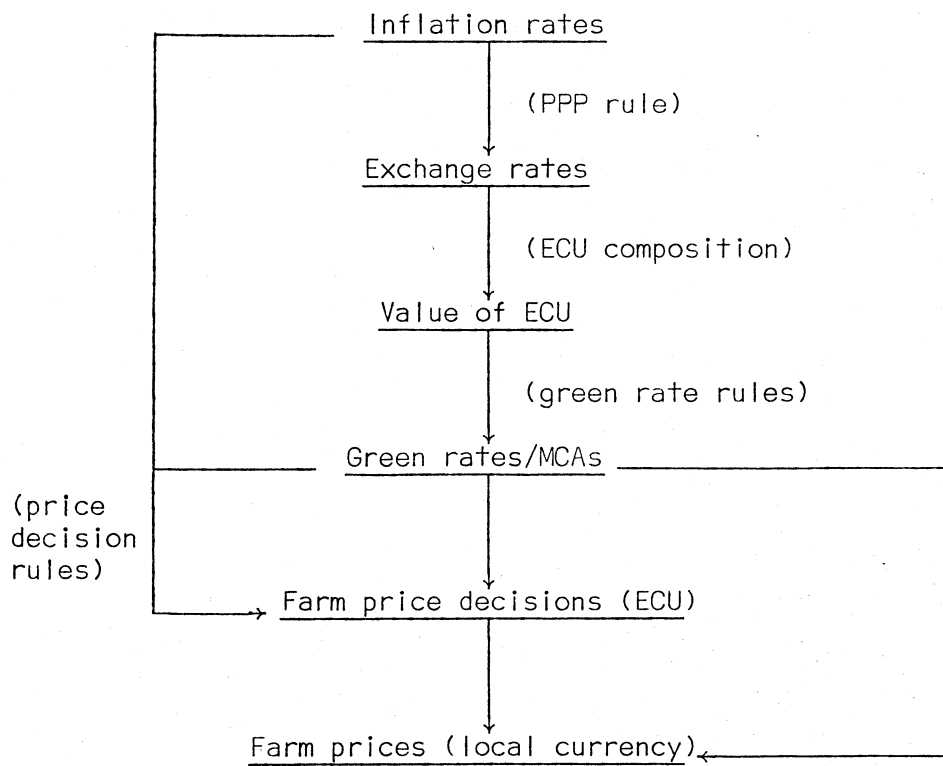
(i) there should be no decline in nominal domestic prices
(in local currency) in any country, and

(ii) prices do not rise in real terms in all countries.

Subject to these bounds, four alternative pricing rules are employed:-

(a) The maximum common price which would have provided total compensation for inflation in all countries (MAXMAX), i.e. (ii).

(b) The maximum price that would have fully compensated only the country with the lowest need of a price increase (MINMAX).

Figure 2Flow Chart for Method of Projecting Farm Prices

(c) The minimum price level that would have preserved all nominal prices (MAXMIN), i.e. (i).

(d) The actual price decisions taken during the 1970's.

From all this a set of national target prices for the main CAP commodities are predicted through to 1990. The MINMAX rule is used for the "basic" projections reported in the study.

The authors suggest two main implications of their work. The first is implicit in the present paper,

"... in commodity markets characterised by a high degree of government intervention, government policies should be included as an integral part of the model rather than be considered exogenously."

The second is that,

"... for each member country, policies are conditioned not only by commodity markets, but also by macroeconomic influences, most notably differential rates of inflation and corresponding exchange rate movements."

(Langworthy, Pearson and Josling, 1981)

One weakness of this approach is, perhaps, that it does not include budget pressure as a variable affecting pricing decisions. Rather, the decision rules are used to project FEOGA expenditure leading to the ability to predict "the day of reckoning" under alternative assumptions, and to a discussion of possible outcomes, as in the previous section of this paper. However, the results described below imply that budget pressure may influence CAP pricing decisions on a continuing basis.

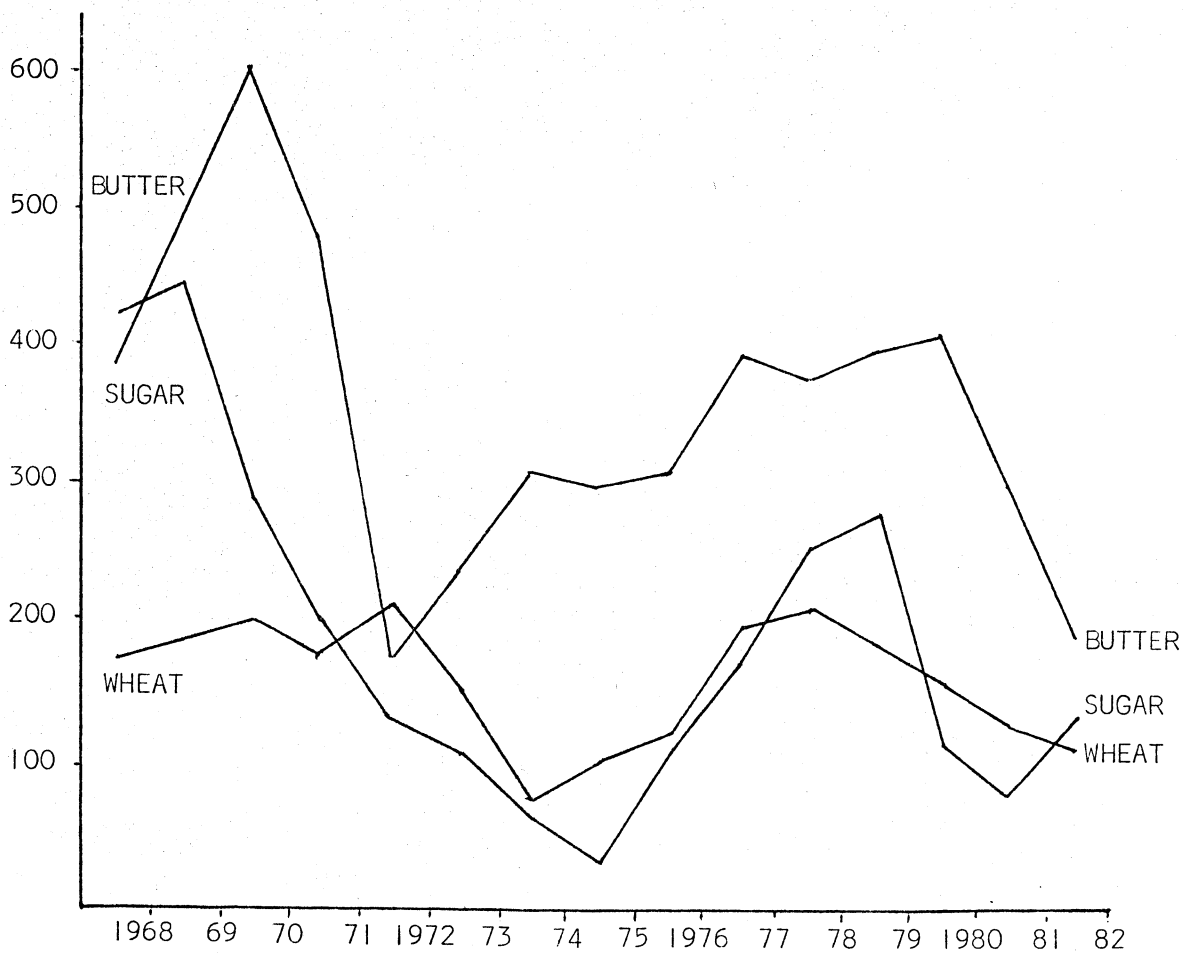
4. EEC Support Prices and the World Market

On the face of it, the determination of each year's rise in EEC support prices would seem to be an extremely complex affair. An attempt to explain past decisions would need, one would have thought, to incorporate many factors, including, for example, recent changes in member state farm incomes; the rate of change of FEOGA expenditure; member state counter-inflation policies; the timing of national elections; and so on. The present exercise arises as a result of the observation that periods during which the real level of EEC support prices were increasing seemed to be associated with periods of relatively buoyant world prices (and vice versa). (Ritson, 1981) The link between high world prices and real increases in support prices was obscured for much of the 1970's by the fact that the greater part of the increase in support prices was generated by green rate devaluations, together with transitional price increases for the new member states. Public attention, however, was directed towards the very low increases in unit of account prices agreed by the Council of Ministers, and a false impression of a "prudent price policy" was created. It was only when the Commission published a table in its "Reflections on the Common Agricultural Policy" (European Commission, 1980) showing the development of EEC support prices in real terms that it became clear that the 1970s had been a decade in which the rate of increase of average EEC support prices had generally been ahead of the average EEC inflation rate.

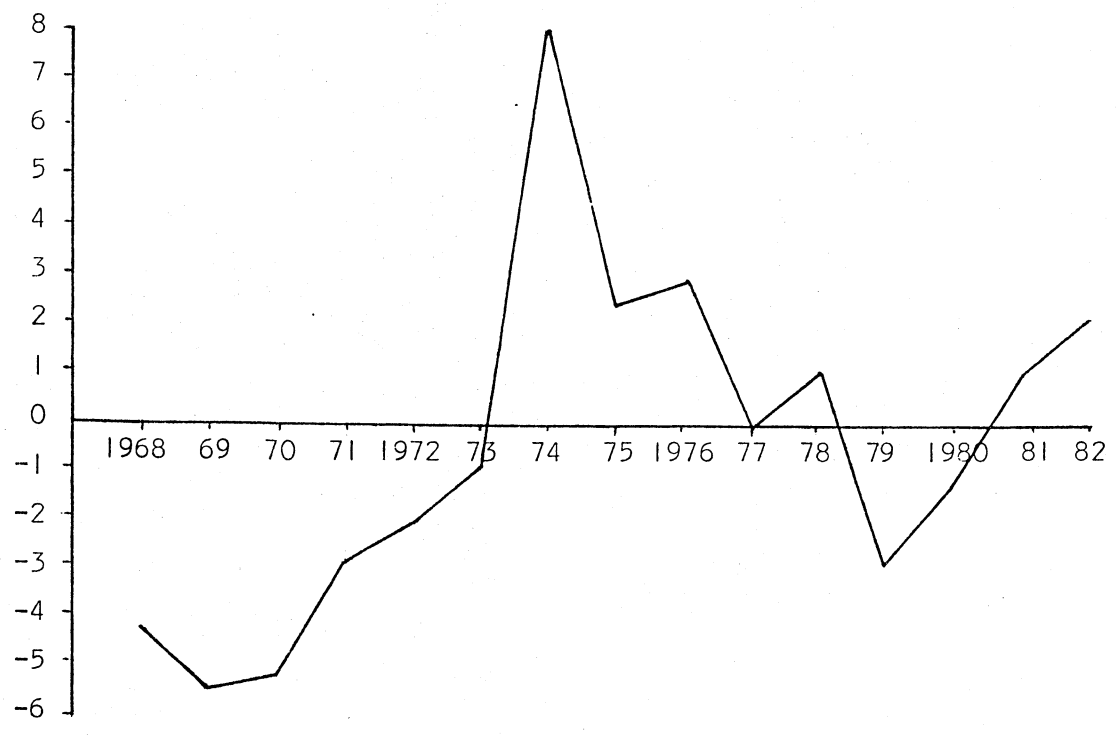
The association between world prices and the change in EEC support prices is illustrated in Figure 3. The top part of the diagram shows EEC support prices as a percentage of world prices for the three main "surplus" commodities; wheat, sugar and butter, and the bottom part shows the annual percentage

EEC Support Prices as % of World Prices

Figure 3



% Change in real EEC Support Prices



change in real EEC support prices*.

In Figure 4 the relationship between the two variables is shown directly by plotting the percentage change in real EEC support prices against the previous year's community support level expressed as a percentage of world prices. (The latter variable was taken as the simple average of the ratios for the three commodities.) This means, for example, that the rise in support prices between 1981/82 and 1980/81 is related to the ratio between EEC and world prices for the 1980/81 marketing year.

It is a short step from observing the negative relationship between these two variables to estimating the coefficients of the relationship. These are shown under various specifications in Table 1. The result of the best equation (which included a dummy variable to account for the large green rate changes in 1974, especially for Italy) indicate that a ten point "improvement" (reduction) in the EC/world price ratio is associated with about a .3 per cent rise in community price levels the following year. A ratio of 100 (i.e. EEC support prices equal to world prices) is associated with an annual real increase in EEC support prices of 3.3 per cent.

* The commodity price ratios for 1967/68 to 1979/80 are taken from the Commission's annual reports on "The Agricultural Situation in the Community". The ratios for 1980/81 and 1981/82 were estimated by Lionel Hubbard. The EEC support price changes are the Commission's estimates published for 1968 to 1980 in "Reflections on the Common Agricultural Policy", and for 1981 and 1982 in Avery (1982).

Figure 4

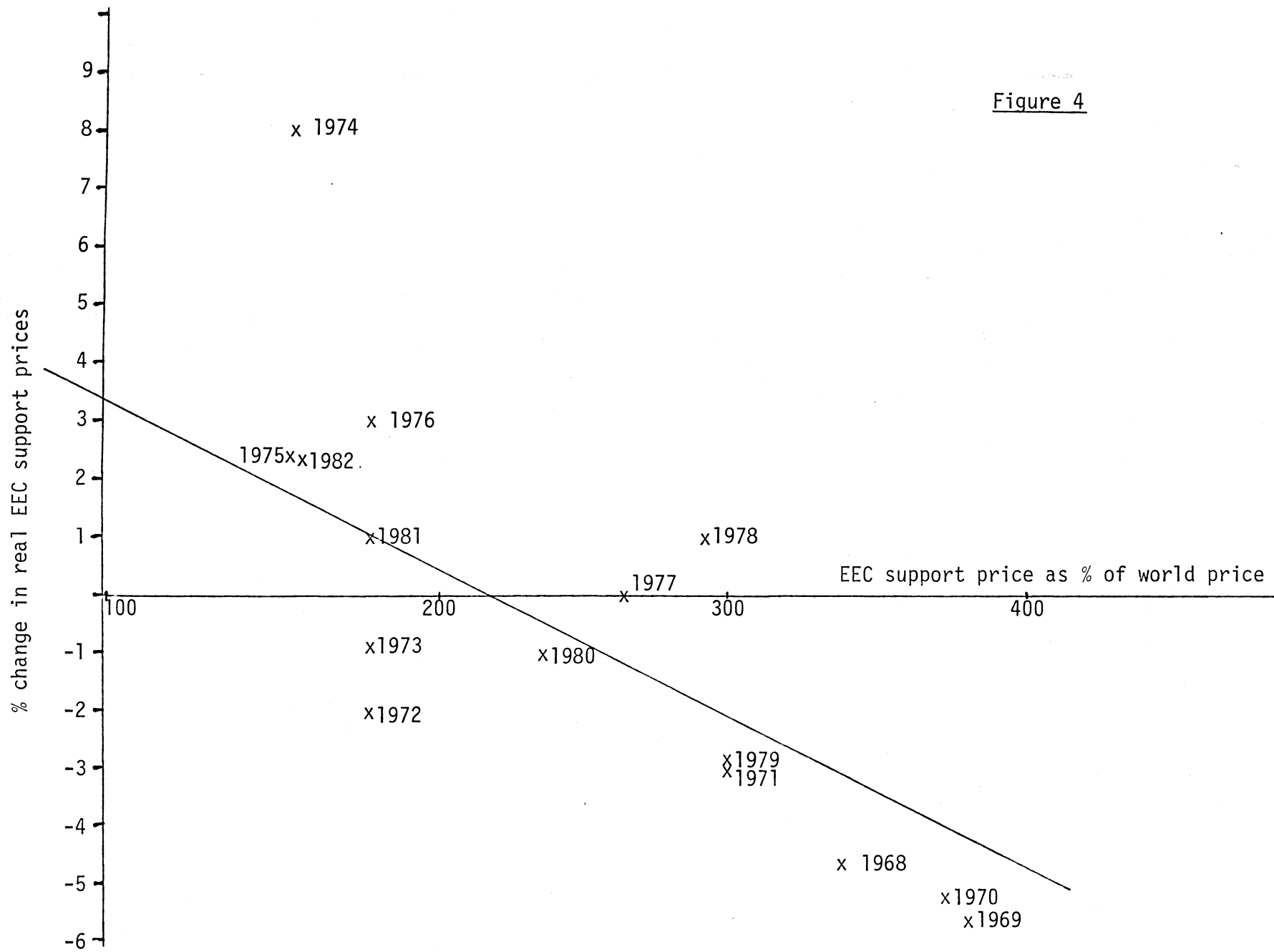


Table I

1. $P = 8.29 - 0.053W$ (0.016)	$\bar{R}^2 = 0.65$
2. $P = 4.41 - 0.014B$ (0.005)	$\bar{R}^2 = 0.61$
3. $P = 2.58 - 0.017S$ (0.004)	$\bar{R}^2 = 0.75$
4. $P = 6.16 - 0.028I$ (0.005)	$\bar{R}^2 = 0.79$

P = % annual change in real EEC support prices

W = Wheat support price as % of world price

B = Butter support price as % of world price

S = Sugar support price as % of world price

I = Index of EEC support prices as % of world prices

The purpose of reporting this exercise is to draw attention to what strikes me as an interesting relationship worthy of further study. It is, nevertheless, very tempting to take the analysis one step further and argue that a dependent relationship may be involved, so that a high ratio of EEC to world prices (or at least forces connected with it) causes a fall in real prices the following year and correspondingly, a low ratio causes a rise.

There is a very plausible story that one can tell to justify this. The larger the gap between EEC and world prices, the larger are export refunds, and the greater is the cost of surplus disposal. The Ministers meet against a background of growing financial pressure and are likely, as a consequence, to be more prudent in their pricing decisions. In contrast, when the gap narrows, surplus disposal costs less and there must be a temptation to restore support prices to the same level in real terms that applied before the most recent bout of budgetary pressure.*

Such a step would, of course, be most unscientific; one should start with an explanatory model, and assemble data to test it, not the other way round. However, having estimated this relationship it is only one small step further to use it to

* Another way of interpreting the results (which was pointed out to me by George Jones of Oxford University) is that there appears to be pressure within the EEC to maintain a constant level of protection (indicated by the intercept with the horizontal axis in Figure 4) - the "montant de soutien" of the EEC's approach to the Kennedy Round of the GATT.

forecast EEC support prices; because, by the middle of the marketing year, one can be reasonably confident about the broad order of magnitude of the relevant ratio of EEC to world prices. An earlier version of this paper (Ritson, 1982), which excluded the 1982 price decisions, used a similar estimated equation to predict that "the Council will, this year, agree on an average increase in CAP support prices which exceeds the average EEC inflation by a little under 2 per cent". The outcome according to Avery (1982) was +2.2 per cent. The much greater gap between EEC and world prices experienced during 1982 suggests 1983 Council decisions involving significant decreases in real EEC support prices.

Conclusion

The first version of this paper was prepared for an Agricultural Economics Society Conference on "Forecasting Methods and Results - the Reality". At the time I felt that, in the context of commodity forecasting, I was ploughing a lone furrow. The paper was written before I read the Langworthy, Pearson and Josling article in the European Review of Agricultural Economics. However, the conclusion to that article very much echoes my opening paragraphs. It begins:-

"The analysis in this paper addresses two issues in applied economics. The first has to do with commodity price projections. It is normal to start with the future market balance, by projecting supply and demand, and from this to deduce the movement of prices. Government policies are commonly downplayed in commodity projection models or simplified to the point of misrepresentation. The phrase "assuming a continuation of present government policies" is often found in such studies - usually denoting that policies have been ignored."

(Langworthy, Pearson and Josling, 1981)

References

- Agra-Europe. "World Market a Potential Threat the CAP Budget",
Agra-Europe no. 119, September 10, 1982.
- Avery, G. "The CAP: Key Policy Issues and Developments",
paper presented at the Sixth National Outlook Conference,
"The Outlook for Agriculture in the United Kingdom (1983
and Beyond)", North of Scotland School of Agriculture,
Aberdeen, 1982.
- Buckwell, A. E., Harvey, D. R., Thomson, K. J. and Parton, K. A.
"The Costs of the Common Agricultural Policy", London
Croom-Helm, 1982.
- Butterwick, M. and Neville-Rolfe, E. "Agricultural Marketing and
the EEC", London, Hutchinson, 1971.
- Commission of the European Communities. "The Agricultural Situation
in the Community", (annual).
- Commission of the European Communities. "Report of the Mandate of
the 30th May 1980", COM(81), 300 Final (1981a).
- Commission of the European Communities. "Guidelines for European
Agriculture - Memorandum to Complement the Commission's
Report on the Mandate of 30th May 1980", COM(81), 608
Final (1981b).
- Commission of the European Communities. "Commission Proposal on
the Fixing of Prices for Certain Agricultural Products
and Certain Related Measures", COM(82) 10, 1982.

Josling, T. E. and Pearson, S. R. "Developments in the Common Agricultural Policy of the European Community", USDA Economic Research Service, Foreign Agricultural Economics Report 172, Washington, 1982.

Langworthy, M., Pearson, S. R. and Josling, T. E. "Macroeconomic Influences on the Future Agricultural Prices in the European Community", European Review of Agricultural Economics, 8, 1981.

Ritson, C. "Forecasting EEC Support Prices", paper presented to Agricultural Economics Society One-Day Conference on "Forecasting Method and Results - the Reality", New Zealand House, London, March 1982.

Ritson, C. "European Farm Prices Compared" in "The CAP Under Pressure", Agra-Europe Special Report No. 10, March 1981.

Tangermann, S. "Financial Pressure", *ibid.*

Thomson, K. and Hubbard, L. "Evaluation of 1982/83 Price Proposals for the CAP", Departments of Agricultural Economics and Marketing Discussion Paper 1, University of Newcastle upon Tyne, March 1982.

Volans, K. "Outlook for Agricultural Commodities in 1982", East of Scotland College of Agriculture, Technical Note No. 5, November 1981.

The Department of Agricultural Economics and the Department of Agricultural Marketing plan to publish a number of Discussion Papers during 1982. They are priced at £2.00 each (including postage and packing) and are available from the Department of Agricultural Marketing, The University, Newcastle upon Tyne, NE1 7RU, or by telephone on Newcastle (0632) 328511, extension 2932 (Agricultural Marketing) or extension 2900 (Agricultural Economics). Please make cheques payable to the University of Newcastle upon Tyne and send to the Department of Agricultural Marketing.

- DP 1.* Evaluation of 1982/83 Price Proposal for the CAP.
Kenneth Thomson and Lionel Hubbard.
- DP 2.* Forecasting EEC Support Prices.
Christopher Ritson.
- DP 3.* Cereals and the CAP.
Kenneth Thomson.
- DP 4. Budgetary projections for the CAP for the 1980s.
Kenneth Thomson and Lionel Hubbard.
- DP 5. Herd Size and the Impact of Reducing EEC Dairy Support
Prices.
Allan Buckwell and Lionel Hubbard.
- DP 6. The CAP for Fruit and Vegetables: Its Impact on Third
Countries.
Christopher Ritson.
- DP 7.* The Urban-Rural Income Gradient and the Pressure of
Demand for Labour.
Martin Whitby and Lionel Hubbard.

* Now available.

