

Changes in CAP and GATT – implications for Irish farming and land-use

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Update

Since this paper was delivered, CAP reform has got underway and a GATT deal has been achieved. The reform of the CAP is now in its second year and to date at least, the world has not fallen in on the agricultual sector. The currency devaluation of early 1993 has lessened some of the potential impact of market reform and perhaps its strongest manifestation has been in the cereals sector, with about 10% of the 1991 area now set-aside and a substantial increase in direct payments to farmers.

Agreement in the GATT talks was finally reached, officially concluded with the signing ceremony in Marakesh in April 1994 although yet to be ratified by some of the Contracting Parties. All going well, it will come into effect in July 1995. The final agreement represents a substantial improvement, from this country's point of view, on the November 1992 Blair House deal. It allows for a longer period of adjustment especially in the cereals and beef sectors but its ultimate impact could still depress production especially in the latter.

Introduction

The recent reform of the CAP is undoubtedly the most fundamental overhaul of the support system for agriculture since its inception 30 years ago. While the main emphasis was on the price/market issue rather than the socio-structural, the reform still represents a major shift in emphasis from price support as a means of assisting incomes to a policy based on direct payments. More commodities, with the notable exception of milk, now have this feature, and in consequence support mechanisms will now be much more transparent than the system they are replacing.

The rationale for and background to the reforms do not merit any lengthy treatment at this point as they are well known. A difficult budgetary situation, following on the Gulf crisis, German reunification and increased world food supplies provided the stimulus for tackling some of the basic weaknesses of the CAP. included: the build-up of surpluses which were costly to dispose of and created tensions on world markets, the encouragement of intensive production methods which damaged the environment, and, the inequity of a system whereby income support was proportional to the volume of output-- the oft-cited 80:20 argument. Additionally the CAP was deemed an inefficient system in supporting incomes in that only a fraction of total support found its way to producers due to the deadweight losses in storage, administration and other costs of dealing with surpluses. It would be naive to believe also that international trade issues such as GATT were not factors in the orientation of the reforms. The European Commission had earlier stated that "a more competitive agriculture through continuing action on prices (is) considered essential" and stressed that Community policy must be based on the need to meet inevitable competition both on its domestic and world markets.

All that is history now and a package of measures has been put in place which effectively ties up the price and market policy regime for cereals, beef, and sheepmeat for the next 3 marketing years and indirectly affects pig and poultry production also. The dairy quota policy remains in place until the end of the decade while the sugarbeet regime is next for review and reform. I will now dwell briefly on their impact as measured in a static sense.

'Static' effects of reforms

The static effects of the reforms take no account of possible producer reactions such as volume adjustments, enterprise substitution or changes in production practices in the course of and following the implementation of the reform measures. The price and other features of the reforms are simply imposed on the expected situation for 1992 and the results compared with that year. How the output and incomes will evolve in the next 3 to 4 years will depend on market prices and cost developments, productivity, and random factors such as weather.

The reforms represent a major improvement on the original proposals where an aggregate IR£62m loss is translated into a gain of IR£85m. The main beneficiary is the beef sector where a loss of IR£50m is replaced by a gain of about IR£60m, largely because of the easing of the stocking rate restriction, introduction of the extensification and spring slaughter premia and the greatly increased male cattle and suckler cow grants. There has

been a considerable improvement also in the cereals sector, relative to the earlier proposal, largely because of the extension of compensation for setaside to all producers, and the lower price reduction. The dairy sector emerged from the CAP relatively unscathed both with respect to the form of the regime itself and price/market adjustments. The sheep sector has also benefitted in the final agreement with the restoration of ewe flock size limits to their current level (1000 on hills and 500 on lowlands) subject of course to the numbers qualifying being pegged at the 1991 level.

The degree to which the CAP reforms differentially impact on particular farming systems and size has also been examined in a National Farm Survey context by Teagasc (Teagasc, 1992). Their analysis shows that dairy farmers will neither gain or lose from the adjustments – reduced milk prices being just about offset by increased cattle subsidies and reduced feed costs. Cattle farms will gain most from the reforms, confirming the conclusion from the budgeting exercise outlined above.

The Teagasc analysis shows substantial variations in the manner in which the reforms impact across size groups. In proportionate terms, smaller farms gain relatively more as shown in Table 1.

Hill farms also gain more than the national average, confirming that

smaller farms in the more marginal farming areas will do relatively better from the CAP reforms.

Output and incomes

The first point to remember is that the compensatory or direct payments will not be index-linked and their value in Irish pounds will depend on the prevailing Green rate for the Irish pound against the ECU. To the extent that the Green pound would be devalued then the value of the direct payments would be increased accordingly and this follows from the devaluation of last February. There is no doubt that these payments will increase appreciably as a proportion of income by the end of the reform period as indicated in Table 2.

They have risen in value from about 13% of total farm income in 1987 to an estimated 23% in 1992. However over the next few years they will sharply increase possibly reaching over 40% of total income in 1996. This is another way of saying that returns from the marketplace will be much less significant as a determinant of farm income in the medium term while at the same time direct payments will loom much larger in income formation. The direct payments approach was proposed for the dairy sector but this enterprise now stands apart from the other main landusing enterprises in being virtually wholly underpinned by the conventional CAP support mechanisms of a

Table 1: Effect of reforms on average family farm income (FFI) per farm by farm size (IR£).

Farm Size Group (ha)	2-20	20-50	50-100	100+	Hill	All
arm orze Group (na)	2-20	20-30	30-100	1001	Farms	7111
Average FFI pre-reform	2473	8973	18429	27830	3366	6282
Average FFI post-reform	2914	9560	19306	27802	3855	6774
Gain (Loss)	441	587	877	(28)	489	492
% Gain (% Loss)	17.8	6.5	4.8	(0.10)	14.5	7.8
					Source: Teat	gasc, 1992.

high price policy, intervention and export support.

The actual income level realised in any particular year will still be significantly affected by market returns. This will particularly be the case in the dairy sector but market returns will still play a key role in determining incomes in the sheep and cereal sectors and particularly in beef. I have assumed in the static exercise that cattle market prices would follow the downward path of 5% per annum in intervention prices and that this would translate into a 15% reduction in market prices. In such a scenario, direct supports including headage, would account for about 40% of the combined revenue of the cattle sector. Should finished cattle prices however decline further than that assumed, then the advantage of the reform could be steadily eroded and at a price fall of 20% the value of the extra payments would be fully offset. Conversely, if cattle prices decline by less than 15%, then cattle producers would be better off than suggested above.

At the end of the transitional period, 1995/96, we are likely to have approximately the same level of cattle output as we have in the current year with a possible deviation of plus or minus 2%. Sheep output could be marginally less due to environmental pressures and the establishment of the ewe quota at 1991 application levels. Milk production could be 2-4% less in 1995/96 than in the current marketing year particularly if markets disimprove relative to their present state, while cereal production will be reduced by perhaps 10% because of the impact of set-aside.

While the total volume of output in agriculture at the end of the reform period may be close to or a little lower

Year	%
1987	12.6
1990	22.7
1991	22.0
1992	23.0
1996 (forecast)	40.0 +

Table 2: Direct payments as % of farm incomes.

than in 1992 the volume of inputs will possibly contract also, particularly arising from some reduction in fertiliser use and crop protection chemicals. The other main determinant of income is the so-called internal terms of trade or cost/price developments. The significance of the price element in the case of cattle has already been mentioned but the relationship of costs to prices has the most vital bearing of all on incomes in the short-term. At the same time it is well nigh impossible to anticipate price movements with any degree of accuracy 3 to 4 years ahead but we can be somewhat more audacious in projecting that there will be significant downward pressure on costs. So taking the price relativity as it is in 1992, together with the input, output, and non-market income support expectations already referred to, then farm income levels could be relatively stable over the next few years.

Impact in marginal farming areas

In examining the impact of CAP reform on the forestry sector we must focus on those areas where the pace of afforestation has been greater than average and in particular on the farming systems in such areas. As shown in Table 3 while dairying is relatively important in Soil Class 2 it is almost insignificant in Soil Class 3.

However as the margins in dairying are so high, forestry is scarcely in com-

Table 3: Farming systems in marginal farming areas – by Soil Class

	Class 2	Class 3
Dairying	35%	7%
Cattle	53%	56%
Sheep	12%	37%

petition with dairying. Sheep farming is quite important on Soil Class 3 but largely on the hills where henceforth we are unlikely to see much afforestation. Thus we are going to concentrate on the cattle enterprise and the distribution of systems within this enterprise is shown in Table 4.

Table 4: Cattle systems in marginal areas

	Soil Class 2	Soil Class 3
Suckling	34%	75%
Other	45%	20%
Dairying	21%	5%

The dominant cattle system is single suckling or systems with a suckling element so it is of particular interest to examine the impact of CAP reform on this system. Two examples are chosen: the first where the new price and compensatory payments relevant to the final year of the 3-year CAP reform transitional period (1995/1996) are superimposed on the present average gross margins realised in the National Farm Survey (Table 5) and the second where a budgeting exercise is undertaken to determine the change in margins following CAP reform (Table 6).

In both instances the increase in margins is considerable: over 40% in the survey-based and 50% in the budgeting exercise. Both exercises assume

the payment of the extensification premium and a 15% reduction in cattle prices. To the extent that cattle prices decline by more or less than 15% then margins will be affected correspondingly. However the suckling cattle system does best out of CAP reform and it would take a reduction of over 40% in the market price of the product of this

"As the margins in dairying are so high, forestry is scarcely in competition with dairying. Sheep farming is quite important on Soil Class 3 but largely on the hills where henceforth we are unlikely to see much afforestation."

particular system to offset the effects of the increased premia.

Having said that however, the farmland of Ireland is still extensively used as indicated in Table 7.

About 43% of the grassland area of the country is stocked at less than one livestock per hectare or less on the basis of stocking rates calculated for the purposes of CAP reform. While it has to be recognised that much of this land may not be suitable for forestry or that the surplus areas involved may be individually too small for commercial afforestation, nevertheless over 1.7

Table 5: Effect of CAP reform on beef returns (Gross margin/ha)*

	Pre-reform	Post-reform	% change
	$IR\pounds$	$IR\pounds$	
Soil Class 2	223	320	42
Soil Class 3	137	195	42

^{*} includes green punt devaluation

	Pre-reform	Post-reform	% change
	$IR\pounds/cow$	IR£/cow	
Output	376	346	-8
Subsidies	152	352	131
Variable costs	198	203	3
Gross margin	330	495	50

Table 6: Effect of CAP reform on single suckling system*

million hectares of grassland are yielding very little in their present use and would be more productive in forestry.

Factors affecting land prices

One of the fundamental principles which underlies the determination of the price of agricultural land was enunciated almost 180 years ago by David Ricardo when he stated that:

"Corn [ie. its price] is not high because a rent is paid, but rent is paid because corn is high".

In other words Ricardo was implying that since land is in relatively inelastic supply, movements in the price of land will be mainly influenced by developments in the demand for land. The statement implies that not alone is land relatively fixed in supply but it is substantially so relative to other farm inputs like labour and capital. This viewpoint lies at the basis of the view among agricultural economists that the effect of most farm programmes tend to ultimately impact on the returns to farmland and consequently get capitalized in the price.

In general terms, the price of farmland is determined by:

- (a) the expected returns from farmland in agricultural or related (forestry) activity,
- (b) the expected real rate of interest and

Stocking rate (LU/ha)	% Grassland	Area ('000 ha)
<1.0	43.1	1 746
1.0-1.4	28.2	1 142
1.4-1.8	18.3	741
1.8 +	10.4	421
Total	100.0	4 050

Table 7: Land use intensity in Ireland

 the expected real rate of appreciation/depreciation in farmland prices.

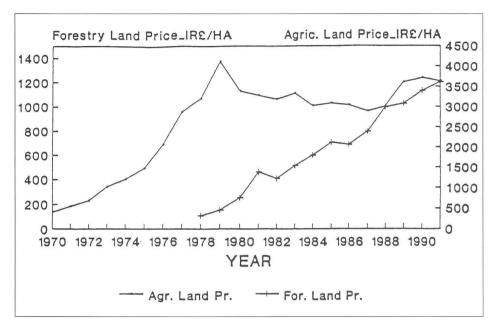
This formulation suggests that reductions in the expected returns from agricultural production will tend to reduce the price of farmland while increases in the real rate of interest will tend to drive down land prices. Likewise if the percentage rate of change in farmland prices is expected to run below the expected future trend in inflation, then the price of farmland will tend to fall.

Each of the three elements that constitute the demand for farmland are open to considerable speculation. The impact which any one of them will have on the land price depends very much on how forward-looking are the land market participants. It is probably fair to argue that market participants will be very influenced by short-run developments, for example, up to 4 or 5 years ahead.

The evolution of land prices is

^{*} includes green punt devaluation

Fig. 1
Forestry and agricultural land prices
IR£/ha
(Nominal values)
Source:
O'Connor and
Conlon



shown in Fig. 1. In the case of farmland, the price peaked in 1979. The story for forestry land is different in many respects. The data series in Fig. 1 only commences in 1978 and is interesting in that forestry land prices appear to lag developments in farmland prices by about two years. Thus the peak occurs in 1980 and the slump in 1982. However, the forestry land price recovers much more robustly than farmland and since 1983, with the exception of two years (1986 and 1989), there has been a capital gain in the price.

Forestry land prices may of course be influenced by the presence of the State purchasing agency in the market and the improved quality of the land now being purchased.

Future forestry planting programme

As far as the future planting programme is concerned much depends

on the returns in farming and their impact on land prices in turn, and on other factors, such as the impact of the accompanying measures and not least on the level of forestry incentives.

As far as the situation in farming is concerned farm incomes have recovered well having risen by 18% in 1992 and a further sizeable increase is in prospect for 1993. The scenario for income in the next 2-3 years suggests some element of stability, before the possible impact of a GATT agreement would materialise. However farm returns are very sensitive to developments in cattle prices and a price reduction of greater than 20% would more than offset the effect of the compensatory payments although its impact would be moderated in farming areas which are more likely to be planted. It must also be pointed out in this context that cattle and sheep livestock numbers are at a record level and

not likely to decline significantly in the short-term at least.

This brings me to the issue of GATT and its possible implications. The EC-US GATT agreement of November 1992 has yet to be ratified by the EC Council of Ministers and an endorsement can by no means be taken for granted, given the attitude being adopted by the French. The likelihood is, however, that the November accord will substantially frame the ultimate outcome. The agreement covers a six year period, possibly 1994/95 to 1999/2000.

The main features of the agreement concern:

- Community imports
- Community internal supports, and
- Community exports

The main issue is whether the GATT agreement will warrant EC price and market policy responses additional to those of the CAP reforms, or whether the CAP reforms will lead to outcomes which will encompass the GATT agreement. The Commission is clearly of the view that the outcome of the CAP reforms will encompass the targets laid down in the GATT agreement.

The agreement on exports causes most concern since it is very difficult to establish the likely production impacts of the CAP reforms and developments in internal consumption in the EC as a whole. One would suppose that in the case of cereals and milk, the EC negotiators would not have agreed to the export reductions unless they felt they were consistent with the relatively predictable production effects of "set-aside" and production quotas. As

regards the meat sector, and especially beef, it is much more difficult to call. There is very real concern about the impact of the agreement on the beef sector. The CAP reforms are unlikely to curb production to a degree warranted by the GATT agreement. On the reasonable assumptions of stable production and consumption over the balance of the decade, the exportable surplus could be around 1.2 million tonnes by the end of the period. This contrasts with an allowable exportable surplus of about 0.82 million tonnes which implies an excess of about 0.4 million tonnes or about 5% of EC consumption. If this volume were to be diverted to intervention it would lead to a substantial drop in cattle prices as there would be a tremendous pressure to limit intervention further and effectively removing any floor from cattle prices. We have assumed that as part of CAP reform producer cattle prices will fall by the full cut in intervention prices of 15%. We can say however that if subsidised exports of beef have to be curbed to the extent indicated it makes it more likely that producers prices will fall by more than 15% or supports will be curbed further. It should be noted that the earliest date for the implementation of a GATT accord would be mid 1994 and thus any initial adverse effects would be expected to emerge in 1995 and would be cumulative over the succeeding five years.

With respect to the accompanying measures as part of CAP reform they would also have particular effects on the planting programmes. The forestry measure will obviously be strengthened so as to beneficially affect the national forestry programme with the level of the support determined both by the availability of resources and the scale of stimulus required to achieve

particular targets. The agri-environment measure could have the opposite effect. This measure aims to give recognition to the dual role of farmers and producers and custodians of the environment and to encourage and reward less intensive farming. It could however, restrict the availability of land for forestry as aid would be given to conserve or re-establish biological diversity and set-aside land as conservation reserves and biotypes and for extensification. The farm retirement scheme does not seem all that positive for forestry either, as while it may increase the supply of land coming on the market it may be largely used for agriculture.

Concluding remarks

The achievement of any given rate of afforestation depends, of course, on prevailing economic circumstances as well as on the particular policy mix directed towards rural development. The recent CAP reform market regime measures, in the absence of adjustments to the forestry incentives, probably retard expansion in forestry in the short term by increasing agricultural returns and raising land prices. By contrast, the GATT measures should they materialise along present lines will depress returns in agriculture in the medium term and thus encourage forestry. A particular feature about land prices as noted is that incentives to encourage private afforestation may become capitalised into land values while the removal of farmland from agriculture tempers the extent to which farmland values fall.

The particular policy mix can also contain internal conflicts and contra-

dictions. For instance the receipt of social welfare payments impedes afforestation, even on near derelict holdings, while other CAP related measures, like the extensification and the agri-environment schemes, will tend to offset the effect of the forestry incentives.

While one cannot be too definite, it may be difficult to achieve and sustain the rate of afforestation which has been achieved in recent years. In the first place, the response to the new planting incentives was possibly at its maximum after their introduction and would be expected to gradually taper off, requiring even greater incentives to maintain any given rate of planting. Second, the outlook for agriculture may be less pessimistic than previously realised and the resilience of farmers can often be underestimated. Third, while the current high unemployment and weak labour market persist, there will be less restructuring and rationalisation in land ownership and use than would otherwise occur.

So, taking account of the implications of recent price/market and sociostructural policy adjustments, the future forestry programme may present a more formidable challenge than its immediate predecessor. The planting programme is likely to display a less regular planting pattern while the shift in the composition of planting as between the public and private sectors may not be sustained.

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