ENGLISH NATURE

Decoupling by degrees?

Agricultural liberalisation and its implications for nature conservation in Britain

No. 196 - English Nature Research Reports

working today
for nature tomorrow

English Nature Research Reports

Number 196

Decoupling by Degrees?
Agricultural Liberalisation and its Implications for Nature Conservation in Britain

Clive Potter
Environment Section
Wye College
University of London

ISBN O967-876X

Preface

The contract for a study on "Agricultural Trade Liberalisation and its Implications for Nature Conservation in Britain" was let in December 1996 by Lowlands Team under the management of Mark Tilzey, Lowlands Agricultural Policy Officer. This was in response to the debate surrounding the future of the Common Agricultural Policy in which there is a widely held, but largely unexamined view that freer trade in agricultural commodities will be environmentally beneficial.

The contract was awarded to Dr Clive Potter of the Environment Section of Wye College. His report supplies preliminary grounds for supposing that the environmental case for freer trade is not as clear cut as is commonly assumed. These preliminary findings are to be the subject of further research which will be carried out under a contract to be let this year. The results of the present report and this forthcoming research will be used to inform English Nature decisions and policies concerning the future direction and character of CAP reform.

Mark Tilzey
June 1996

Acknowledgements

I would like to thank Philip Goodwin for providing research assistance and valuable feedback throughout the research phase of this project.

Executive summary

Agriculture is the last bastion of protectionism in an increasingly free trading world. The Agriculture Agreement which concluded the Uruguay GATT Round in 1993 is as much a statement of intent as an achievement in itself, at least so far as liberalisers are concerned and there now appears to be a growing consensus that a further liberalisation of agricultural trade is inevitable in the years ahead. To what extent the GATT negotiations have been a catalyst in this process is unclear. Pressure for reform has been building for some time and there is a sense in which GATT has merely provided a convenient international forum in which to resolve essentially domestic farm policy issues. In future, agricultural protectionism for Europe's farmers will be as much strained by 'internal' events such as the accession of Central and Eastern European countries to the EU and the galvanic effects of a growing constituency of farmer support for freer trade. Nevertheless, the 'policy choice set' is more complicated than that between continued protectionism and liberalisation. Even with these pressures bearing down on it, evolution of the CAP is still more likely than revolution. In particular, varying degrees of decoupling can be defined, ranging from the weak separation of income support from output decisions achieved through the MacSharry reforms to a much more radical decoupling of the policy resulting in a substantial net reduction in the level of agricultural support.

There are significant nature conservation implications, opportunities and dangers associated with this process. While a weakly decoupled CAP is unlikely to provide the right balance of incentives and constraints for sustainable land use, the analysis presented in this paper suggests that radical decoupling also poses a significant threat to the nature conservation resource in a managed countryside like the EU's. Specifically, proponents of what might be described as radical decoupling underestimate the restructuring of production and the resulting loss of joint economies of agriculture and conservation which a significant withdrawal of farm support is likely to bring about. They also overestimate the size of the conservation dividend radical decoupling is supposed to make possible and the ability of policy makers to achieve wider conservation objectives through strictly decoupled and voluntary environmental management schemes.

In the context of further World Trading Organisation (WTO) negotiations, the key question is whether reducing trade distortion to satisfy the criteria for inclusion of farm subsidies in the 'green box' requires the withdrawal of agricultural support in the way liberalisers prescribe. Given that there is a strong case for the retention of a minimum level of protection on environmental grounds, there is now a need to articulate an alternative vision for European agriculture. Under a moderately decoupled CAP, hectarage payments to farmers on a broad enough front to preserve policy 'reach' need to be combined with discretionary payments designed to maximise environmental additionality and value for money. Agricultural policies with this broad configuration are already emerging elsewhere and there is confidence that they can be defended within a redefined WTO green box. Questions remain however concerning the political sustainability of such an arrangement within the EU, particularly in the face of pressures from the east.

Further research is needed on two fronts. First, to improve the knowledge base concerning the environmental impact of the different decoupling strategies outlined in this report. There is a particular need for empirical case study research which focuses on locations and explores the processes of adjustment themselves on a range of farm types and in representative farming situations. It is suggested that work be conducted in a selection of upland and lowland Natural Areas in order both to better define the relationship between the existing farming mix and the conservation resource and to conduct a sensitivity analysis of the effects of policy-induced changes to this mix. The research would draw on ecological assessments, farm

surveys and a local Delphi exercise to construct a picture of the likely quality profile of the Natural Area under different decoupling scenarios. Second, there is a need for further desk research to articulate the case for continued agricultural support in order to safeguard environmental assets in Europe's countryside. Links between systems and patterns of farming and the quality profile of the conservation resource need to be better defined and the significance of 'joint' versus specialised production of conservation goods on farms more fully explored. Again, this work could use Natural Areas as an organising concept, leading into an analysis of alternative decoupling strategies based on an assessment of their 'reach' and effectiveness in conservation terms. A key aspect of this work would be to assess the likely compatibility of the preferred policy configuration with existing and likely future GATT disciplines and to explore more fully the budgetary and agri-environmental implications of extending these entitlements to farmers in CEEs.

Contents

1. Introduction

This report explores the nature conservation implications, opportunities and dangers of what the European Commission, with well judged ambiguity, once called 'moving farmers close to world markets'. Dismantling the farm support policies of developed countries to bring about the liberalisation of agricultural trade is now under serious discussion as a long term policy goal. When OECD governments committed themselves in a Ministerial Declaration of 1987 to a progressive and concerted reduction in agricultural support, they were paving the way for agriculture to be included in the Uruguay GATT Round and the unprecedented deregulation of agricultural policy which has followed. For conservationists this is a profoundly important development, for it raises the prospect of a substantial withdrawal of public support for rural areas, albeit over an extended period, and the restructuring of production and land use which will necessarily follow. Having spent most the last decade critiquing a Common Agricultural Policy (CAP) based on protection, agri-environmentalists are discovering they need to engage with a completely different policy debate, in which the eventual abolition of the CAP, not merely its continued reform, is firmly on the agenda.

Conventional wisdom says that the price cuts which would be the immediate result of trade liberalisation will be broadly environmentally beneficial, both in terms of the direct impact on land use and resource deployments and indirectly through the 'peace dividend' which international agricultural policy disarmament promises to generate for agri-environmental programmes. This optimistic view of agricultural liberalisation as a positive sum game is deeply entrenched in official circles, setting the boundaries of debate about alternative policy configurations and the potential role of agri-environmental policy within these. A recent report from the MAFF's CAP Review Group (MAFF, 1995), for instance, argued that increased international competitiveness and improved environmental protection are complementary policy goals. Here and elsewhere in the policy literature, what Tilzey (1996) calls the market optimists appear to have the upper hand, recruiting conservationists to their cause by apparently being able to demonstrate that removing farm support will be a priori good for the environment (or if damaging, not sufficiently so to justify a change in policy direction). It is a classic example of policy choice being constrained in advance by uncritical acceptance of ideas which then limit the range of alternatives that can realistically be contemplated. In reality, considerable uncertainty surrounds both the likely environmental impact of either a gradual or sudden removal of price guarantees and the willingness and ability of policymakers to spend any peace dividend which liberalisation might yield. This more pessimistic interpretation of events has implications for the way organisations like English Nature need to approach the issue of agricultural liberalisation. At a minimum, there is a need to research and debate what a countryside exposed to the full rigors of world market forces would look like. Will nature conservation goals be more difficult to achieve in such a context? Should a different stance be taken on the future development of agri-environmental policy, for instance, as an instrument to deflect and slow down land use change? And does market pessimism strengthen the case for a much more precautionary approach to biodiversity protection?

Meanwhile, the outlines of an alternative strategy for the long term environmental reform of the CAP are becoming clear, based on a critical distinction between the need to reduce trade distortion and the desirability of maintaining a minimum level of agricultural protection necessary to sustain the social and environmental fabric of the European countryside. The success of this strategy, which follows directly from an analysis of the environmental dangers of liberalisation in a managed countryside, depends on how well the case for 'moderate decoupling' can be articulated in the years leading up to the next WTO Round in 2001. At present the concept is poorly defined and there is a lack of strategic thinking so far as long term options are concerned. It is nevertheless implicit in much European Commission thinking and already has a broad base of political support amongst many member states anxious avoid a purely market driven approach to rural restructuring.

The objective of this short desk study is to develop a critique of the market optimist model of agricultural policy reform in order to make the case for the retention of some form of agricultural support on socio-environmental grounds. The report begins by assessing the prospects for further liberalisation in the wake of the Uruguay Round Agriculture Agreement (URAA). It asks how far GATT disciplines are already reshaping the CAP and defining the different degrees of decoupling which comprise policymakers' 'choice set'. An analysis in then undertaken of the nature conservation implications of each of these steps on the road to a fully liberalised CAP. On this basis an assessment is made of the relative merits of a moderately or radically decoupled policy on environmental grounds. The report concludes by making recommendations for further research.

2. The Challenge to Agricultural Protectionism

Trade liberalisation dominates the international political agenda. As McCalla (1993, p7) observes, supporters of liberal world trade have been pressing their case for at least two centuries and since 1945 have been building institutions like GATT and now the World Trade Organisation (WTO) to achieve the goal of a world trading system free of barriers or restraint. Today, their arguments are very much in the ascendancy, defining the terms of debate in advance and setting the boundaries of what is considered feasible in the management of the international economy. For agriculture, the consequences of free trade thinking are profound. Having enjoyed levels of government support unmatched elsewhere, the agricultural sector is regarded as the last bastion of protectionism in the industrialised world and as such ripe for reform.

In entering into a debate that is so heavily scoped by the tenets of neo-classical economics, conservationists face a difficult task. The ideological strength of trade theory is such that the liberal trading system is presented not as an historical choice, or as a prefered option, but as the inevitable destination of all trade talks. Despite many critiques of the assumptions on which it is based, the myth still prevails amongst policy makers that freer trade can unequivocally be associated with 'the greater social good' (Ekins *et al*, 1994). In this unreconstructed form of the liberalisation argument, everyone benefits from the additional production and consumption that is possible when trading nations exploit their comparative advantage (Daly and Goodland, 1994). Liberalisers, of course, place their faith in perfectly operating markets and attack trade protection as a source of resource misallocation; their critics, on the other hand, point to the failure to account for the full social costs of production when calculating the benefits of freer trade and argue for a revised understanding of comparative advantage and its determinants (Arden-Clarke, 1992). Political economists like McMichael (1993), meanwhile, stress the highly integrated nature of the world economy in the 1990s and its domination by a few hundred transnational corporations. The liberalisation of agricultural trade is in these terms the effective de-nationalisation of agricultural policy and the unshackling of international capital. Specifically, it will encourage a further expansion and concentration in the agro-food system and an associated configuration of agricultural production which privileges intensive, grain-fed livestock systems (Goodman and Redclift, 1989). Paradoxically, any attempt to open up further competition will strengthen the hand of large, oligopolistic corporations best placed to take advantage of a unified global market place.

Historically, of course, agricultural protectionism was invented to protect the economic interests of individual farmers and the national interest with which these were associated. The first significant tariff barriers against imports of agricultural goods in fact were raised in Europe during the late 1870s in response to falling grain prices, caused in part by the huge surge in exports from the New World. After World War One a depression in agricultural prices precipitated a further increase in protection in Europe and its introduction in the United States so that by the late 1930s trade in agricultural products had contracted substantially. Following the ending of the Second World War the Allies had resolved to create a new world order centred on more liberal international trade and in 1947 a charter setting up a World Trading Organisation was agreed. Although the US Congress refused to ratify the creation of a WTO, it did agree to a chapter dealing with commercial policy which subsequently became the GATT. Significantly, a number of escape clauses were inserted which exempted domestic agricultural support and allowed governments (especially the US Government) to continue protecting their farmers through non-tariff barriers and export subsidies. When the newly formed European Community came to set up its own agricultural policy in 1961, it exploited this loophole and other waivers granted to the US in order to establish one of the most protectionist policies in the world based on internal price support, variable import levies and, eventually, export subsidies. It is ironic that an institution founded on the principle of using free trade to promote political harmony, should have as its only truly common policy one so heavily rooted in protectionism. In fact, as Tracy (1982) points out, the CAP was partly invented to provide France with a ready export market for its comparatively efficient farming industry in compensation for the industrial markets lost to the FRG under the Common Market. Liberalisers have since been kept at bay ever since by a powerful farm lobby which continued, until very recently, to see its members' interests best served by protection.

By this time, the US was increasingly persuaded of the need to bring agriculture into the GATT. Under the Kennedy Round of 1963-1967 there was the first of several fruitless negotiations to bring about the liberalisation of agricultural trade through tarrification (the replacement of quotas and variable import levies with a fixed ad valorem tariff). This Round ended with a stand-off due to the EC's refusal to bind (i.e. agree to legal limits on) variable import levies, let alone convert them to fixed tariffs. Sheltered from world markets by the apparatus of the CAP, and encouraged to increase output by price guarantees which effectively gave the largest subsidies to those who could produce the most, European farmers now proceeded to turn an EC net import demand for wheat of 20 milllion tonnes in 1963 into an export balance of 6 million tonnes by 1981. By 1992-93 the EC was exporting 27 million tonnes of grain onto world markets and had become the world's largest exporter of dairy products, meat and sugar. Viewing this massive turnaround in market potential and the impact on world prices of widespread surplus dumping, the US again argued for agricultural support policies to be brought within GATT disciplines under the Tokyo Round of 1973-1979. As before, resistance from the EC and Japan made this impossible and agriculture ended the decade much as it had begun it "the most highly protected sector in national economies, the most undisciplined area of international commerce, and the cause of some of the most dangerous fractures in international trade relations" (Warley, 1989, quoted in McCalla, 1993, p1105).

A sharp fall in commodity prices, coupled with a major loss of market share during the early 1980s, nevertheless stiffened US resolve to put agricultural protectionism at the top of the agenda when the Uruguay Round was convened in 1986. Economists had by this time sharpened their analysis of the costs of existing policies and could point to a steady rise in the level of protection since the late 1970s. The conclusion of influential studies such as those by Anderson and Hyami (1986) was that agricultural support is both costly and inefficient, imposing huge deadweight losses on consumers and taxpayers and leading to self defeating 'beggar my neighbour' subsidisation whereby everyone becomes worse off. The authors estimated that in 1986/7, 40% of government support to US farmers in that year merely offset the loss in profits caused by depressed world prices, which in turn were largely the result of surplus dumpling. According to Ronningen and Dixit (1991), the situation was little short of trade war, with escalating support levels being deployed to protect farmers on an increasingly grand scale. Modelling exercises which claimed to quantify the substantial welfare benefits of liberalisation were now called in aid of the case for restoring market forces in agricultural markets. This was to be achieved by ending the use of export subsidies and closing the gap between domestic and international prices by cutting price guarantees. The latter would involve 'decoupling' the subsidies which farmers receive from their decisions about how much to produce, long seen by agricultural economists like Koester and Tangermann (1977) as the cardinal weakness of the CAP, and putting in their place income schemes that are strictly neutral in their production (and thus trade distorting) effects. Meanwhile, research conducted by the OECD provided negotiators with the conceptual tools to measure and compare levels of protection and created a basis for discussion. Without necessarily committing themselves to this strategy, negotiators appeared to concede that some liberalisation of agricultural trade was inevitable when they agreed in the Punta del Este Declaration opening the Uruguay Round to "bringing all measures affecting (agricultural) import access and export competition under strict and more effective GATT rules and disciplines" (OECD, 1995).

The tortured course of negotiations over the next six years is well known. In the event, the final Agreement on Agriculture, reached in late 1993, was a considerable dilution, not just of the early radical proposals of the US and the Cairns Group of exporting nations, but also of the more moderate 'Dunkel Draft' tabled by the GATT Secretary General after talks had broken down in December 1991. It did however commit the EU, along with other signatories, to the principle of tariffication, to reducing the use of export subsidies and, most significantly of all, to reforming domestic policies in order to make them less trade distorting, chiefly via decoupling. In fact, the EU had already begun to push the CAP in this direction with the MacSharry reforms of 1992 and the decisions taken then paved the way for the Agreement itself. The result is a definite, if tempered, liberalisation of the policy. Reductions in export subsidies made possible through moderate cuts in price guarantees for cereals and the expedient of set aside, a partial substitution of direct income aids for price support in both the arable and livestock sectors and more open market access through lower threshold prices combine to increase the degree of exposure of Europe's farmers to world markets. Opinions vary concerning how far the Uruguay Round precipitated these reforms or merely provided a convenient international forum in which to resolve essentially domestic pressures for reform.

For certain, the budgetary cost of the CAP had by the mid 1980s become unsupportable and the EC had itself already reached the conclusion that decoupling was the only way to address the basic design fault which was at the root of all their problems - the use of price support to support farmers' incomes. According to this interpretation, agriculture was incorporated into the Round because the EU and its trading partners realised that their farm policies as then constituted were politically unsustainable at home and reform would be easier and cheaper with multilateral negotiations than without. On the other hand, there is a view that reforming a policy as entrenched as the CAP is impossible without pressure exerted from outside. Tangerman (1996) is particularly bullish on this point, commenting that if the motive had been purely budgetary, farm ministers would hardly have agreed a package which substantially increased farm spending overall. The real motive for the MacSharry reforms, in his view, was the need to make the CAP consistent with international obligations on agricultural policy and for this an expensive rebalancing of the policy was necessary. Josling's (1994) assessment, with which this writer agrees, is that while international rules may be insufficient to reform domestic policies by themselves they are still likely to be very necessary. Moreover, GATT acts like a ratchet, codifying an agreed reform strategy (decoupling) and making it more difficult to reverse once agreed. The Uruguay Round's Agriculture Agreement (URAA) is thus a significant and almost certainly irreversible step towards a more liberalised CAP.

3. Further Liberalisation to Come?

It does however have a limited shelf life and the 'peace clause' agreed between the EU and US is due to expire in 1999. A review of the URAA will quickly follow and this is expected to usher in a new WTO Round in 2001. The question arises: will this signal a further liberalisation of the CAP in the years to come? Liberalisers point to what they see as the unfinished business of the Uruguay Round, notably the failure to achieve significant reductions in overall levels of support and, related to this, the ambiguities which still surround so called 'green box' measures - those domestic subsidies that are allowed under Annex 2 of GATT rules because they are deemed to be minimally trade distorting. The exempted measures range from completely decoupled income payments to environmental, regional and structural adjustment schemes. Within the terms of the Agreement it is possible for countries to compensate farmers fully for any reductions in price support and to do so through direct payments that, while not linked to output, may still be tied to land or livestock. As OECD (1995) point out, signatories to the Agreement, including, of course, the EU, have reinstrumented their policies to this effect. Moreover, there is no limit on the level of spending on such measures. Consequently, while the Aggregate Measure of Support (AMS), which excludes green box measures, may have been reduced, the Producer Subsidy Equivalent (PSE), which includes them, has not. The case for many of these compensation payments being decoupled from production in the original GATT meaning of the term is extremely moot. As Harvey (1995,p.210) observes: "the passing of the present compensation arrangements as within the green box, and thus non-trade distorting, is widely understood to be a convenient fiction for the purposes of the current agreement only". For commentators like Swinbank (1992) and Ingersent, *et al* (1994) this fudge cannot be continued indefinitely and a tightening up of criteria for inclusion in the green box is inevitable and desirable when the next Round is convened. Harvey (1994) is less emphatic. Pointing to the fact that, while not completely decoupled, many measures are strongly defensible in domestic policy terms, he is sceptical that they can be negotiated away in a multilateral forum like GATT.

That said, there are other pressures pushing towards further agricultural liberalisation which are quite independent of WTO (although, as before, they may only be satisfactorily resolved in the context of another Round). Perhaps the most important is the least obvious: that from within the farming community itself. There are increasing signs of dissatisfaction amongst the commercial sector at least with farm policy in general and the MacSharry reforms in particular. As Tangerman (1996) points out, the existence of set aside, while something of a bonanza in the short run for many commercial farmers, effectively prevents them exploiting the growth in world demand for cereals expected in the years ahead. Many are looking to world markets for economic salvation and wish to be free of the bureaucratic entanglements of set aside and quota systems. To the extent that this represents a qualitative change in the policy debate (Grant, 1995), liberalisation may become self generating and probably impossible to reverse once embarked on. The political impact could be all the greater if farm support begins to be equated with income support for the deserving poor. At this point the farm lobby will split and as in the US campaign become a force for both protection and liberalisation.

More widely discussed is the impact of the planned accession to the EU of various Central and Eastern European (CEE) countries (see for instance, House of Lords, 1994). With their potential comparative advantage in the production of many agricultural products, it is thought that the CEEs would respond to price guarantees available under the CAP by expanding output and quickly putting strain on the CAP's system of market management. Few believe that the CAP in its present form could sustain the resulting increase in expenditure on export refunds, even if they were allowable under GATT. As a Foreign Office Minister recently put it: "I think it would be impossible on budgetary grounds to bring the CEEs within the CAP in its present form. Put crudely, I think it would bankrupt the European budget" (quoted in House of Lords, 1994, p122). But this may again not mean that agricultural support itself has to be reduced in the process. The consensus is that EU internal prices will have to come down to world market levels before the agriculture sectors of CEEs can be brought inside the CAP. Others however go further and argue that an extension of the income aids and compensation schemes currently on offer to EU farmers would also be financially impossible. Commentators like Tangermann (1992) go on to claim that this dovetails with the pressures that will be exerted within GATT to scale down agricultural support altogether. To the extent that it smuggles in full scale liberalisation by the back door, as it were, this is an argument which needs to be taken seriously. What has not been explored is the strength of the case for an extension of support to CEEs (and its continuation within the existing EU) on socio-environmental grounds. This will be taken up again below.

4. Degrees of Decoupling

Policy makers appear to have very persuasive reasons to further liberalise the CAP. Moreover, the route is marked out for them in the form of tariffication and decoupling. On the other hand, there are varying degrees of decoupling that might be achieved (see table 1) and it is by no means certain that the process will be taken to its logical conclusion. As defined here, decoupling is taken to mean the process of breaking the link between the subsidies farmers receive and their decisions about production by replacing payments calculated on an output basis (effectively the situation with price support) with payments calculated in some other, production neutral way. At its most extreme, a radically decoupled CAP would be one in which there is no link between payments and production, price support having being abolished and any subsidies allocated to farmers on strictly social or environmental grounds. The MacSharry reforms represent the lowest rung on this ladder and have achieved what might be called a 'weak decoupling' of the CAP which has begun to separate agricultural support from production decisions without severing the link entirely. While the apparatus of target and intervention prices and intervention buying are still in place, significant reductions have been made to the effective price guarantees offered to farmers and there has thus been a partial substitution of direct compensation payments for support through subsidised prices. The Arable Area Payment Scheme (AAPS) partially decouples payments from yields by calculating payments on a hectarage basis only and should mean that in future farmers will only have an incentive to increase their use of inputs to boost yields if market prices justify it. The decoupling is not complete because farmers still have an incentive to maintain their cropped area in order to receive the payment. But to the extent that increasing yields has been an important factor in farmers' supply response to the CAP, this is an important step. Set aside complicates the picture however. As Josling (1994) points out, it has been introduced because EU farm ministers were not bold enough to reduce internal prices to levels that would have elicited a significant supply response - and thus allow the EU to stay within the limits on export subsidisation specified under the URAA. Rather than put all of the burden of area payments onto taxpayers, policymakers have effectively decided that consumers should bear part of the cost by continuing to pay higher prices for food. Weak decoupling is also evident in the reforms for the livestock regime, where premium payments have been introduced that are calculated on a headage basis but subject to quotas, ceilings and stocking rate limits. Again, the effect is to achieve a partial break between the amount of subsidy a farmer receives and his production decisions. Although payments depend on current herd and flock sizes being maintained, there is now no direct policy incentive to expand above these levels unless warranted by market prices.

Table 1: The Policy Choice Set

	Assumptions regarding Desirable Future Direction of CAP Reform	Justification for continuation of Agricultural Support	Resulting Market/Policy Configurations
Free Traders	Abolition of price support, full exposure of farming industry to world markets	NONE	World market prices
Radical Decouplers	Reduction of EU internal prices to world levels offset by partial, transitional and strictly decoupled compensation payments	To ease the transition to world market prices and buy off potential obstructers to further liberalisation	World prices offset by bond schemes or other time-limited compensation
Moderate Decouplers	Reduction of EU internal prices closer to world market levels while retaining permanent policy entitlements delivered through hectarage payments or PEGs	To maintain farmers on the land in order to guarantee the social and environmental fabric of rural areas	Reduced price support offset by PEG-type schemes or hectarage payments
Weak Decouplers	Reduced price support to minimise budget exposure and meet GATT obligations. More support delivered through compensation schemes and producer aids	To compensate for reductions in price guarantees	Reduced price guarantees, set aside and compensation schemes

Will all this be enough to defuse the pressure for further reform? To the extent that the MacSharry reforms maintain internal EU prices well above world market levels and fail to completely decouple any remaining payments from production, the answer must be no. Few believe that a weakly decoupled CAP can be sustained beyond the next WTO Round. It is however possible to envisage an evolution towards a more politically sustainable policy which retains significant levels of support for farmers by combining phased price reductions with strictly decoupled hectarage payments or producer entitlement guarantees (PEGs). As envisaged by Tangermann and Josling (1995), this would require as a first step converting all existing headage payments to a hectarage basis in the livestock sector. Making set aside voluntary while putting no limits on the percentage of cropland that can be diverted on an individual holding would be the next step. This effectively decouples payments downwards because less production now no longer reduces the amount of subsidy a farmer receives (Tangermann and Josling's next suggestion, which is to phase out set aside altogether in order to decouple 'upwards', is a further step towards complete decoupling and is not considered here). Voluntary set aside would address one of the anomalies thrown up by weak decoupling, which is that it keeps marginal land under crops; it would also concentrate the retirement of land on the economic margin. The PEG idea has been around for some time and was first advocated by the International Agricultural Trade Research Consortium (IRCC) as part of a policy set which would include abolishing price support and moving towards full tarrification (IRCC, 1988). According to Harvey (1990), the PEG is an attempt to devise a policy instrument which allows states to continue support with minimum trade distortion. Under this arrangement, all farmers would be allocated an 'entitlement' to an annual government subsidy calculated as a percentage of the output of their farms in the recent past (80% of 1986 levels has been proposed). Agricultural production above this level would be sold on an unsupported open market. Essentially, the PEG defines a threshold of support for each farm, beyond which the farmer's production decisions are determined by world market prices. It thus very substantially decouples support while recognising that there is a social value in keeping many marginal farmers on the land.

The proposal has been widely discussed, though in recent years the more strictly decoupled bond scheme (see below) has eclipsed it somewhat in public debate. This may be because the socio-environmental case for farmer survival is still poorly articulated. Supporters of the PEG approach acknowledge that the effect will be to enshrine 'historical' distortions caused by the CAP by maintaining a larger industry than would otherwise be the case - but they assume a case can be made for this on social or environmental grounds. Radical decouplers, by contrast, envisage a much more limited and transitional role for any direct payment schemes. According to Rausser and Irwin (1989), direct payments are necessary to meet legitimate (but time limited) claims for compensation due to breach of contract. In Tangermann's slightly unforgiving phrase, their purpose is "to tide farmers over the adjustment pressures resulting from a policy change". At worst, decoupled payments are a messy transaction which governments have to enter into in order to buy off potential obstructers to the reform process. In either case, according to the standard formulation, payments should be transitional, degressive and strictly decoupled from production. The much vaunted bond scheme (see Marsh, et.al, 1991; Tangermann, 1992; Tangermann and Josling, 1995) satisfies all these criteria. Under this arrangement, farmers would be allocated a bond with a capital value equivalent to the income loss likely to result from a removal of price support. The farmer is free to sell the bond like any security and may use the proceeds to adapt to the changed market conditions or get out of farming altogether. Alternatively, he may opt to receive an income stream from the bond (Tangermann likens the situation to farmers granting governments credit on borrowed capital) for a limited period. In the eyes of its supporters the advantage of the bond option is that it signals governments' determination to offer compensation on a strictly time limited basis and in a fashion which is entirely production neutral. The House of Lords Select Committee on the European Communities summarises its merits as "enabling farmers to be compensated for the removal of price support and to adjust to more competitive