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#### **Abstract**

Economic analysis condemns market intervention in favour of farmers as inefficient and ineffective, and therefore worthy of radical reform. Practical experience, however, indicates that such lessons are hard to learn and implement. Economic analysis tends to ignore the path dependencies generated by the policy evolution process. Without reform strategies that take full account of these dependencies, policy reform will continue to be reluctant, slow and frequently counterproductive.

This paper reconsiders the evolution of farm policies and the economic assessment of their costs and benefits. In so doing, it re-phrases conventional economic arguments in terms which seem to accord better with sensible intuition, which may prove more accessible and credible to policy makers and advisors. The difficulties of reconciling economic efficiency with political acceptability are identified. The paper concludes with a substantial challenge to the agricultural economics profession

Keywords: policy dependency; policy reform; cost/benefit analysis; political negotiations; liberalisation

#### 1. Introduction – the genesis of the policy dependency problem

Economic analysis demonstrates that farm support programmes operating through market intervention are inefficient. This conclusion is derived against the benchmark of a competitive market. Consumers, who earn their incomes and spending power through production, govern the competitive market. Producers and production are simply means to an end – if they do not serve consumers' demands (and thus also savings opportunities) efficiently, they can be expected to fail and disappear. If policy intervention does not enhance consumers' scope for choice, then it is inefficient. The remaining justification for policy becomes one of distributional equity, as recently outlined and reviewed by Bullock and Salhofer, 2003, about which conventional positive economics has little to say.

However, as the public choice literature emphasises, competitive markets require government – to establish and police property rights, enforce laws of contract, outlaw theft and regulate currencies (e.g. Phelps, 1985, Bromley, 1997). The mechanisms of the competitive market system, by providing signals and penalties encouraging efficiency, will necessarily create both losers and winners. Since governments are also used to repair inequities generated by markets, government becomes endogenous within the political-economic system. The more democratic the government system, the more likely are losers demands to be met, because there are likely to be more losers than winners. With an endogenous government, used by its constituents to remedy the outcomes of the market mechanism, intervention policies are both likely and typically framed in favour of producers, who would otherwise lose as a result of market competition. This is because trade and specialisation generates more concentration amongst producers than consumers, so that gains and losses per individual, which is what counts in a democratic system, are more salient among producers than consumers, and thus receive more attention from the political market determining intervention.

Since the political-economic system evolves with changing circumstances, it tends to generate path dependencies (e.g. Kay, 2003). Radical policy reform requires that such dependencies be broken. The logic of policy dependency can be explained through the co-evolutionary histories and patterns of farm policies with the political-economic systems in which they are embedded (e.g. Harvey, 1995). The general framework of policy development is seen here as evolution. In this sense, existing policies are the 'natural' consequence of their ancestry and of the socio-economic environments and political climates in which they evolved. These histories exhibit three critical dependencies.

## 2. Three Critical Policy Dependencies: an overview

#### 2.1 Strategic Dependency

Without government, producers have to compete. Marketing and management strategies to manage and, if possible, control the market are the major competitive recipes for prosperity and replication. Otherwise, competitive advantage for atomistic producers tends to be both ephemeral and subject to conditions largely outwith producers' own control. However, with government, an alternative route to producer prosperity is opened up – persuasion of the government to act in producers' rather than consumers' interests. While the extent of government response depends on the degree of democracy and constituent pressure on policy development, there are three major conditions that determine the strength of constituent pressure for intervention.

First, the more the sector is (like agriculture) subject to inevitable relative decline as economic progress occurs, simply by Engel's Law, the greater the pressure for support and protection. de Gorter and Tsur (1991) explore the formal calculus of this condition, as populations shift from being predominantly agrarian (rural) to predominantly industrial (urban). They argue that political support for redistributive policies depends on both per capita relative incomes prior to redistribution and the extent of redistributed incomes. This calculus is consistent with many of the observed features of agricultural support in the world, over both time and space.

Second, the more coherent are the production systems and sectors with electoral constituency sympathies, and the more fundamental are the products of the system to survival and prosperity, the more likely it is that government support for the sector will be forthcoming – that the winners will be willing to pay. Classic examples of this condition in the developed world prevailed following WWII. Recent memories of food insecurity (especially in Europe and Japan) bred domestic policies aimed at food self-sufficiency and security.

Third, the more atomistic is the sector, and thus the more reliant individual firms are on the vagaries of the market place as opposed to their own marketing management capacities, the more benefits are the producers likely to gain from efforts at political persuasion relative to competitive market manipulation. Since production necessarily involves specialisation, producers will be more concentrated than consumers. It follows that producers' individual gains from market protection will outweigh individual consumer and taxpayer losses, incurred as a result of the protection. It will thus

pay producers to exert more effort in persuading the political system of their just deserts than consumers and taxpayers can be expected to spend on opposing such protection. This argument is a reinterpretation of the logic of collective action (Olsen, 1965).

On all three counts, substantial support and protection of the farm sector is to be expected as development occurs. Furthermore, policies will tend to be coupled through market protection and support. Any other support system would contradict the market mechanisms that give birth to the pressures for support and which precondition coherent, and thus sustainable responses to such pressures (e.g. Harvey, 1998). In addition, the logic outlined by de Gorter and Tsur (*op. cit.*) suggests that economies with major peasant sectors (the old and more densely populated worlds) tend to generate greater levels of support and protection than those without such sectors (the new world), again as is observed in practice.

But the extent of support also depends on the willingness of the payers to bear the costs. The faster is economic development, the greater are the disparities between agriculture and the rest of the economy, and the more willing is the rest of the economy to support agriculture. Furthermore, importing economies tend to generate higher levels of protection than exporting economies, because protection of the latter is necessarily at the expense of the taxpayer, whose interests are more strongly represented and deployed than those of the consumer. Again, the patterns of farm support around the world, both across space and over time, well demonstrate this outline logic.

This is the first major dependency – the *strategic dependency*. The egress of economies from an agrarian to an industrial condition, especially when coupled with democratic government, generates strong pressures for agricultural support and market intervention. These pressures will be stronger the more rapid the pace of development, the larger the farming-dependent population, and thus the greater the structural shift required in the move from the agrarian to industrial condition, and the more vulnerable the local population feels their food supplies to be. This dependency has been well documented, for example, the classic study of Japanese agricultural policy (Hayami, 1988).

Progress towards liberalisation of the farm sector thus depends on sufficient decline in the importance and electoral power of the sector and its sympathisers (especially those who have recently exited the industry) to offset its 'natural' political advantage. It also depends on the extent to which farmers are perceived to be significantly worse off than their non-farming neighbours. That is, liberalisation depends on sustained economic progress away from its agrarian roots, and on sustained development

and modernisation of the farm sector as it adjusts to the forces of economic development. On this basis, it is not surprising that the strongest pressures for radical reform of farm policies come from the most developed countries with the most well-adjusted farm sectors (especially the US, the UK and Australasia).

#### 2.2. Support Dependency

However, even in these cases, there is clear evidence of substantial resistance to radical reform. This is the second major dependency – the *support dependency*. The greater the levels and history of support, the more dependent will the farm and farm supply chain become on continuing levels of support, and the greater will be the resistance to its removal. It is this dependency which underlies the "conservative welfare function" (Corden, 1974, also Winters, 1987b and MacLaren, 1992), in which political systems will generally seek to prevent, and seldom initiate, changes which significantly reduce the current welfare of any substantial and identifiable group in society. The more coherent and organised the group, and the more substantial the threatened welfare reduction, the more resistant the political economy is likely to be to genuine policy reform. It is in this context that the Olson (1965) model of lobbying power and interest group pressure is even more plausible than under strategic dependency, which leads to the existence of support in the first place. This resistance is not always fatal for reform, as the New Zealand experience shows, though it is clear (e.g. Scrimgeour and Pasour, 1996), that a combination of circumstances is needed for successful reversal of this force for continued support. In particular, the New Zealand experience suggests that farm policies are easier to reform if they are young and thus incompletely embedded in the cost structure of the sector, and also if done in conjunction with a more general economic reform. Even then, the institutional framework and constitutional conditions are likely to be critical. Since this dependency is the essential link between the conventional economic analysis of policy effects and the nature of the policy system itself, it is explored in more detail below.

#### 2.3. Programme Dependency

Policy intervention necessarily requires bureaucracies and also generates political networks and coalitions associated with the policy. Substantial political and bureaucratic organisations become established with vested interests in policy continuation. The bureaus typically have the responsibility for implementation and also for the continued development of the policy, while the associated lobbies frequently become closely involved and dependent on the continuation of the policy for their coherence

and power. It is extremely difficult for these groups to critically evaluate the policy, or propose radical reform or elimination, without very substantial pressure from other parts of the economic polity. The typical response to pressures for policy reform is for the existing policies to become infested with immunising stratagems (à la Popper, 1959), by which reform pressures are absorbed through modification of existing policies rather than their wholesale replacement, still less elimination. Policies tend to become more and more complex, and thus more difficult to change. Heclo and Wildavsky, 1981, and Hogwood and Peters, 1985, for example, deal with these general pathologies, though the agricultural policy literature has not generally pursued these ideas to any substantial extent.

There is a deeper and more widespread dependency bred from programmes of intervention. A history of farm support tends to encourage a common perception that governments and their associated bureaucracies both can and should be responsible for curing the ills of an otherwise competitive market place. This perception is common even amongst professional policy analysts. Thus, if rural development is thought to be failing, or public goods associated with land use and management are thought to be lacking, then it is clearly the responsibility of government to correct these market failures, implying new or reformed policies. However, van den Doel and van Velthoven, 1993, for example, explore the rational logic of this general presumption in favour of benign and capable government and find it seriously wanting.

The consequences are already becoming apparent, especially in the EU. Economic progress generates increased demands for "rurality" as people demand more and better space and landscapes within which to both work and play. The demands are especially strong in densely populated rich countries (western Europe and Japan). Provision of such ruralities is frequently associated with visions of historic farm production systems, practices and structures. This perception delivers new arguments in favour of support and protection of at least the more backward or remote (and frequently less prosperous) parts of the agrarian sector. Multi-functionality is bred and nurtured as a sustainable reason for farm support systems, again more vigorously proposed and defended in the old world than the new, preconditioned as it is by the preponderance of a native peasant class and associated structures, including the important programme dependencies.

The logic of the interaction between the joint pursuits of social goods (correcting for genuine market failures through resource transfers) and of rents (pursuit of self-interest by the participants in the policy system) has been well explained by Rausser, 1982. However, the general presumption that government

is competent to deal with issues of multi-functionality or other forms of traditional market failure is seldom questioned. However, especially in the case of multi-functionality, the nature of the legitimate demands for the conservation of rurality implies that conventional government intervention is likely to be at least as inefficient as the so-called market failures it seeks to correct. This is because the market failures themselves arise because of the excessive costs of negotiation and transactions compared with the benefits of resolving these difficulties. As the benefits of resolution rise with increasing income and leisure time, so it becomes more urgent to develop new transaction and negotiation systems for dealing with the externalities and public goods of the countryside. However, such new systems require more participation and local implementation, which are not the comparative advantages of the existing bureaucracies developed to deal with market intervention (Harvey, 2003).

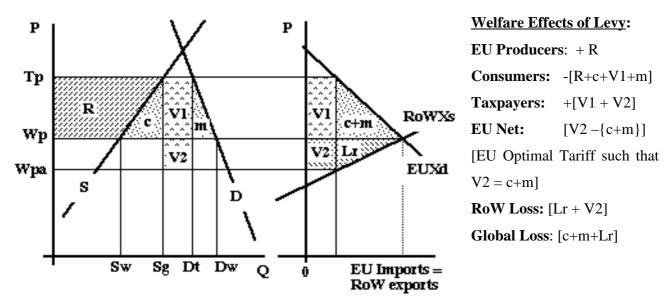
Nevertheless, strategic dependency is likely to co-evolve with programme dependency to generate a new hegemony of interest in preserving rurality and a common belief in the competence and capacity of existing government to deliver these through more or less conventional support policies. It is in the nature of support systems, as with market systems, that the more adventurous find more effective ways of exploiting them than the less adventurous. Preservation of historic entitlements for these farmers is worth some effort and pressure. These pressures fit well with the political and bureaucratic networks and mechanisms, and tend to be mutually re-inforcing. Sectoral support tends to be encouraged, albeit more indirectly, despite all good intentions. The circle of support does not naturally become more virtuous. The solution does not lie only in designing ever more rigorous and targeted support systems, even though such targeting and rational design is clearly necessary to solve public good and externality problems. Genuine reform must involve breaking the support and programme dependencies generated by the evolutionary history of the farm support policy systems. For this, it is necessary to reconsider the nature of these dependencies.

#### 3. Simple Analysis of support

Josling, 1969, 1974, was amongst the first to highlight the importance of policy transfers as opposed to deadweight efficiency costs (see, also, Gardner, 1983). The simple partial geometric analysis of farm policy has now become so familiar that its implications tend to be forgotten. The analysis is worth revisiting.

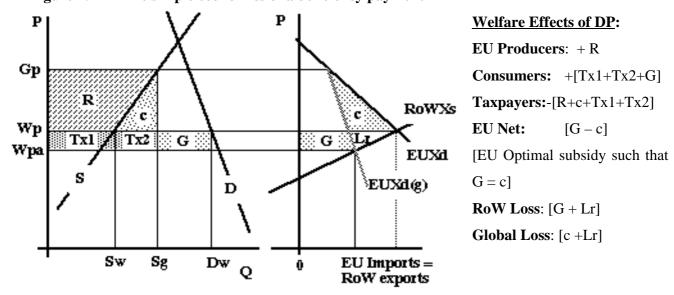
Consider, first, the simple economics of an import protection policy, Figure 1, drawn for a large country, as illustrated by the European Union in its early days.

Figure 1. The simple economics of an import levy



Other things being equal, importing political economies are likely to choose import protection in favour of the alternative of deficiency payment or direct subsidy support (Figure 2), despite the higher economic costs of so doing.

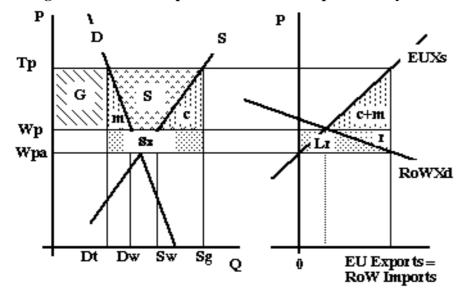
Figure 2. The simple economics of a deficiency payment



The obvious reason is that the former generates tax revenues while the latter spends them. *Ceteris paribus*, import-protecting countries are likely to exhibit higher levels of protection than their subsidising counterparts, because consumers in developed economies exhibit less resistance to support costs than do finance ministries and competing spending departments of state. The major offsetting force to this tendency is the effect of the policy on the rest of the world. The losses imposed on the rest of the world tend to be greater, and certainly more transparent, under import protection than under the equivalent subsidy alternative. There can be little doubt that the UK, before joining the EU, chose the subsidy alternative in preference to import protection precisely because of the perceived importance of her commonwealth trading partners (predominantly agricultural exporters) and her strong links with the USA. Her European neighbours were less constrained by such commonwealth ties or world market concerns, and were able to employ generally higher levels of protection.

As such support policies become entrenched, so the process of economic development also tends to shift developed country supply curves substantially to the right, as technological and structural change improve the competitive ability of agriculture, while domestic demand tends to grow at a substantially slower rate. The consequence is that excess supplies tend to increase in the domestic market, which might also be encouraged by the underlying support. This is classically exemplified in the EU, which became an exporter for most major agricultural products in the 1980s (Figure 3).

Figure 3. The simple economics of an export subsidy



Welfare Effects of Export Subsidy:

**EU Producers**: + [G + m + S]

**Consumers:** -[G+m]

**Taxpayers:** -[m + S + c + Sx]

**EU Net:** -[m+c+Sx]

[where Sx = Lr + r]

**RoW Loss**: -[r - Lr]

**Global Loss**: [c + m + r]

The consequences of the move to an export status are abundantly clear. The losses suffered by the culprit country now become self-evident, in either increasing tax costs or mounting surpluses, thus provoking strong support limiting pressures at home, again well illustrated by the EU case. Furthermore, the exasperation of trading partners grows, exerting growing external pressure on the domestic policy. The timing of the Uruguay Round (UR) was not accidental. It arose coincident with development of competing and subsidised exports from both sides of the Atlantic. The gains to be obtained from a collective, negotiated agreement were also clear – the losses sustained under an export subsidy regime appear significantly greater than those of the equivalent import protection regime, especially to competing exporters (the US and other new world countries). Under such circumstances, some positive outcome to the UR seemed very likely.

The surprise of the UR, and of domestic EU policy reform, according to this logic, was not that it happened, but that it was so modest. The budgetary pressure on the EU as a consequence of the move to exporter status is obvious from Figure 3. Against this, domestic pressures for the continuation of support could have been met through restriction of domestic supplies, as through the dairy quotas introduced in the EU in 1984. However, such restriction of supply, especially for cereals, ran counter to the emerging pressures facing the EU at that time. The happy collapse of the Berlin wall dramatically altered Germany's national interests in the structure and extent of farm support. Former eastern Germany needed the opportunity to expand production, and converted Germany from being a natural importer to a natural exporter. These conditions clearly reduced the resistance within the EU to a move towards the subsidy alternative from the previous import protection stance. Nevertheless, both the EU and the US continue to demonstrate substantial resistance to radical reform and elimination of support.

A substantial part of the explanation of this resistance lies in the relative magnitudes of the gains and losses associated with reform. Quantitative estimates of the net social costs turn out to be small, in comparison with trade revenues, or with the major transfers involved (e.g. as classic examples, Tyers and Anderson, 1992; Winters, 1987). Elasticities of both supply and demand for farm products at the farm gate are typically low, making domestic welfare loss triangles relatively insignificant, at least in the popular mind. Trade volumes compared with total supplies and demands are typically sufficiently small to make reasonable estimates of elasticities of excess demand and supply curves high (see, e.g. Josling, 1977, Harvey, 1997b). However, as these authors point out, if support policies elsewhere in the world provide substantial insulation and protection from world markets, then the effective elasticities of excess demand and supply can be very low, giving rise to substantial world price effects, and major

costs to country support policies for no overall support effect on the transfer to producers versus a no policy alternative.

Given the reduction in insulation of domestic markets from world markets achieved in the URAA, further reductions depend on a more complete and general realisation of the social costs of support. Are these social costs large enough to be generally convincing? Perhaps the modest UR agreement represents a political economy equilibrium, in which the interactive effects of domestic protection and support on the world market are just sufficiently modified to justify continued domestic support. Perhaps export subsidies can be eliminated eventually, since they can be demonstrated to be socially undesirable without substantial equivocation. However, recent US and EU experience seems to demonstrate that reductions in these instruments are often accompanied by an increase in other forms of domestic support. To reduce or eliminate these forms of support requires that the near universal support dependency culture be broken or dissipated.

#### 4. Breaking the support dependency culture?

The producers' surplus, identified by the conventional partial analysis of policy, is the analytical key to support dependency. Producers' surplus, if defined over a short run supply curve, is quasi-rent – returns to production factors engaged in the farm product supply chain over and above those necessary to retain these factors within the supply chain. The normal workings of competitive markets bid these quasi-rents into long run costs, capitalising the rents into the values of the chain-specific factors. The extent to which particular factors attract the rent transfers of policy depends on their specificity to the farm product supply chain. The more inelastic is the supply of these factors to the chain, the greater the extent to which their values will be increased by farm product support. By the same token, the balance of producers' surplus, which is not accounted for in long run rents of farm specific factors, is dissipated in transfer earnings - merely offsetting incomes that would have been earned elsewhere in the economy in the absence of the policy (see, for example, Gardner, 1992).

As a consequence of this unavoidable logic, new entrants to the supply chain, obliged to pay an entrance fee that is equivalent to the policy induced rents, are no better off with the policy than without it. The only gainers are those who owned the chain specific assets prior to the introduction of the policy, who benefit from a windfall policy gain in the value of their assets (including any specific labour and management assets). Otherwise, all the policy can possibly succeed in doing is to raise the costs of the chain, by raising capital and factor costs.

This logic is captured, at least in part, by a general equilibrium formulation of the policy analysis. Here, any social gains from policy reform only appear as gains in consumers' surplus. There is no general equilibrium counterpart to the producers' surplus of partial analysis. In effect, GE models include the effects elsewhere of the release of excess transfer earnings from the supported sector, thus reducing the downside effects of policy liberalisation, and increasing the estimate of net social benefits compared with partial counterparts. However, any sector specific factors in GE models (which do not transfer to other sectors, such as land) will suffer a decline in rents and income, which translates into an offsetting decline in consumption, limiting the net social gains indicated by the models.

More traditional reports of partial analyses of policy reform need to account for the reductions in producers' surplus. Typically, these estimates are interpreted, at least by policy makers and advisors, as reductions in farmers' incomes. Since these results conform exactly to sensible intuition of the effects of policy reform, it is hardly surprising that such estimates encourage policy inertia and resistance to reform. While GE model estimates can be presented so as avoid this particular trap, they become less credible to policy makers simply because they then appear to ignore the downsides of policy change – the reductions in farm incomes. Once these reductions are elaborated, the trap opens again, and is made deeper for non-economist policy makers by the apparent complexity of the GE model itself.

Such interpretations, however, ignore the first principle of applied welfare economics – the principle of compensation. Since these reductions in income (policy rents) are translated through the market mechanisms into the capital values of the underlying assets, they can (and arguably should) be compensated. Once such compensation is complete, the arithmetic of policy reform looks completely different. As a recent example, consider the results of a partial analysis of elimination of EU dairy policy (Colman *et al.*, 2002), as represented in Table 1.

As can be seen from the table, considerable effort was made in this study to augment the traditional partial and comparative static estimates of the consequences of policy elimination. Both transactions costs and the general equilibrium effects have been included, while (perhaps even more contestably) estimates of the potential dynamic effects (stemming from release of the benefits of structural and technical changes at the farm level, and liberalisation of dairy marketing chains) have also been included. Nevertheless, the overall social gains still only amount to 23% of the losses estimated for producers. These figures can hardly be expected to convince congenitally sceptical policy-making and

policy interested audiences. This is not surprising, since they ignore the consequences of possible compensation.

Table 1. Costs & Benefits of Eliminating EU Dairy Policy (ps, real terms, 2010)

Interest Group and Source.	¤bn.
Producers	-9.94
Consumers	6.57
Taxpayers	3.71
Net Partial Static Benefit	0.34
Transaction Cost (@ 10% of SB transfer payment))	0.37
General Equilibrium effect (@ multiplier of 1.2)	0.14
General Static Net Benefit	0.85
Dynamic gains	1.42
Overall Net Benefit of Elimination	2.27

Source: Colman et al., 2002.

Consider the following suggestion for EU dairy policy reform, which echoes the principles of the recent Australian reform of dairy policy. Abandon all present instruments of dairy policy in the EU, including quotas, immediately, and compensate producers with a lump sum payment, representing the loss in the value of the dedicated factors associated with dairy production. In the case of dairy quotas, most of this value is already capitalised in the value of the quota itself.

At a 5% real discount rate (reflecting the commercial risk associated with the anticipated continuation of the present policy), the producers' surplus estimate in Table 1 amounts to ¤76bn. over 10 years (which, incidentally, is a considerable over-estimate of the current market value of dairy quota). Provision of this lump sum would fully compensate producers for the reductions in values of their policy-enhanced assets. It could be fully financed by an amortisation of the current consumer and tax costs of the present policy (¤10.28bn.), at 3% (reflecting the lower social opportunity cost associated with public funds) over 9 years. From year 10 onwards, EU society would be unambiguously better off by ¤12.5bn per year, the true cost of the programme dependency generated by the history of dairy support in the EU. This is an unambiguously welfare improving policy change, though even this figure amounts to less than ¤100 per worker in the EU, which is barely convincing as an argument for change.

The conventional welfare arithmetic, conducted on annual flows, ignores the potential benefits to be realised from a longer-term re-allocation of society's fixed resources – the land and capital that

accumulate the rents accruing from policy intervention. Even general equilibrium representations of the economic system only partially capture the benefits of this reallocation, since the re-investment possibilities are inevitably restricted to a given set of input/output relationships, themselves preconditioned by the price relatives ruling under policy intervention.

#### 5. Liberalisation – overcoming the political addiction to farm support policy

Compensation, according to this logic, is the critical feature of any sensible policy reform. The fundamental economics dictate that there is a price for which the current apparent beneficiaries of policy support can be persuaded to give up their rights to continued support. Compensation for policy-induced reductions in asset values is more than simply an equity question; it also has efficiency implications. Existing farmers are those people who consider they have a comparative advantage in farming. Given an inelastic supply of these people, an uncompensated change will result in a considerable transition period (and associated economic costs) during which at least some (often the more productive) of these displaced farmers seek the means and opportunities through which to resume their preferred occupation. It is inefficient to make it more difficult than necessary for them to do so.

A major conclusion from economic analysis is that any compensation for policy elimination must be fully decoupled, otherwise it simply degenerates into conventional production related support. In the limit, fully decoupled means that the market outcome achieved with decoupled compensation should be indistinguishable from that with an uncompensated change. However, this strict condition is an ideal that cannot be met in practice. Any form of compensation will affect the capacity of present producers to adjust, and thus will affect the market outcome in some way. The point of the previous paragraph, however, is that an uncompensated reform can generate a free market outcome that is less efficient than a compensated outcome.

Practically, the most fully decoupled form of compensation possible is a once-and-for-all lump sum payment (e.g. Tangermann and Swinbank, 2000). Once distributed, neither the decision to continue farming or not, nor the decisions about what, how and where to farm, should be affected by the lump sum payment. In effect, the lump sum payment simply compensates the owners of farm assets for the fall in their value occasioned by the policy change. Otherwise, it has no effect on the disposition of

these assets, which are freely tradeable and thus convertible into what ever sector and practice the owner wishes.

Such a lump sum payment would provide the capital reserves necessary for adjustment to the new unsupported and unprotected market, in readily liquid form. Adjustment problems would be very substantially eased by such compensation, to a greater extent than any alternative form of adjustment assistance. The justification is twofold: first, compensation provides the necessary capacity for the current industry participants to adjust to a liberalised world; second, it recompenses owners of dedicated assets for policy-induced reductions in their value. Since the value of these assets represents the owners' pension funds and adjustment capacity, policy reform without explicit compensation will remain seriously difficult. It is in this context that an amber box (containing compensation policies) might continue to be important in the world trade negotiations.

But such compensation does not deal with programme dependency. This dependency of bureaucrats and politicians typically results in substantial efforts to re-cast compensation ideas into continued payments, justified on new grounds (e.g. environmental or multifunctional) for continued support for an identifiable constituency, as closely related to the farming sector as possible. In turn, programme dependency is re-inforced by any vestiges of traditional strategic dependency – the apparent sociopolitical need to support sectors which are disadvantaged by economic progress and growth. Hence the difficulties associated with the amber box.

#### 6. Conclusions

The political nature of farm support policies is frequently recognised (e.g. Gardner, 1989). However, this recognition typically treats the political intervention as a form of failure, albeit explained by the largely self-interested motives of political groups and bureaucracies. The suggestion here is that farm support policies can also be seen as an evolutionary response to changing socio-economic environments and political climates, and hence emerge as best-fitted adaptations to those conditions. These best-fitted policies generate dependencies amongst the constituents. Identification and acknowledgement of these dependencies is likely to be a necessary step to radical reform. But it is unlikely to be sufficient. As is obvious from other areas of social and individual behaviour, breaking dependencies requires a commitment on the part of the addict to breaking the habit. While the

economic (support) dependency can be broken relatively easily, as the Australian and New Zealand examples clearly show, removing the strategic and programme dependencies is likely to be far more difficult (as the European and American examples illustrate). In breaking such dependencies, support groups are typically regarded as valuable. The WTO provides exactly such peer group pressure and encouragement for the breaking of habits. But for these to be successful addicts must be willing to cooperate and commit to such groups, while the support groups also need to acknowledge the nature and attraction of the dependency.

Too much economic analysis of reform options is presented either as vilification of the habit of support, or as ignoring the nature and basis of, particularly, strategic and programme dependency, if not of support dependency, as demonstrated by the tendency to dismiss compensation as a "mere" equity or political expediency issue. But it is perfectly possible to account for full compensation and identify the true costs of programme dependency – the first and critical steps in breaking the addiction to existing programmes. Compensation is thus critical for the breaking of both the support and programme dependencies. Furthermore, presentations of the benefits of reform need to concentrate on the long-run advantages, with compensation already accounted.

Nevertheless, strategic dependency threatens to be a critical barrier to further liberalisation of farm policy, both domestically and thus also internationally. This is evidenced by developed countries propositions of multifunctional justifications, as well as by the demands by developing and transition countries for continued special treatments. It is irrational to ignore the strong strategic pressures for farm sector support, especially amongst developing and transition economies. Much more intelligent thought and analysis is required to develop sensible support policies to cope with this problem. Simply asserting that such policies cannot work, and are economically inefficient, and should therefore be illegal – the basic argument of the liberalising tendencies – is deeply insufficient: political economies in the process of industrialising cannot be expected to accept such arguments. While integrated rural development and adjustment assistance programmes might appear to provide efficient palliatives for this strategic pressure, the evidence from developed country histories is that they are insufficient. Some more general and more visible support system for the declining sector appears necessary to buffer the socio-political pressures of economic development. The profession of agricultural economics needs to recognise this, and devote some effort to designing and promoting sensible policies to cope.

#### References

- Alston, J.M. and Hurd, B.H., 1990: "Some Neglected Social Costs of Government Spending in Farm Programmes", *American Journal of Agricultural Economics*, **72**, 149 156
- Ballard, C.L. and Fullerton, D, 1992: "Distortionary Taxes and the Provision of Public Goods", *Economic Perspectives*, **6**, 117 131
- Bromley, D. W., 1997, "Rethinking markets", *American Journal of Agricultural Economics*, 79, 5, 1383 1393
- Browning, E.K. (1987) "On the Marginal Welfare Cost of Taxation". *American Economic Review* 77 (March 1987), pp.227-242.
- Bullock, D.S. and Salhofer, K., 2003, "Judging agricultural policies: a survey", *Agricultural Economics*, 28, 225 243.
- Colman, D., (ed), 2002, *Phasing out Milk Quotas in the EU*, available from: http://www.defra.gov.uk/esg/economics/Milkquota/index.htm
- Corden, 1974, Trade Policy and Economic Welfare, Oxford University Press
- de Gorter, H, and Tsur, Y, 1991, "Explaining Price Policy Bias in agriculture: the calculus of support-maximising politicians", *American Journal of Agricultural Economics*, 73 (4), 1244 1254.
- Fullerton, D. 1991: "Reconciling Recent Estimates of the Marginal Welfare Cost of Taxation". *American Economic Review* 81, (March), pp.302-308.
- Gardner, B. L., 1983: "Efficient Redistribution through Commodity Markets", *American Journal of Agricultural Economics*, 65, 225 -334
- Gardner, B.L, 1989: "Economic Theory and Farm Politics", *American Journal of Agricultural Economics*, 71 (5), 1165 1171.
- Gardner, B.L., 1992: "Changing economic perspectives on the farm problem", *Journal of Economic Literature*, 30 (March), 62 101.
- Harvey, D.R., 1982: "National Interests and the CAP", Food Policy, 7 (3), 174 190
- Harvey, D.R., 1995: "European Union Cereals Policy: an Evolutionary Interpretation" *Australian Journal of Agricultural Economics*, 35 (3), 193 217
- Harvey, D.R., 1997, "Extensions and political analysis of the CAP" Ch. 8, *The Common Agricultural Policy and the World Economy*, 2nd. edn., eds. Ritson C.R. and Harvey, D.R., CABI, Wallingford.
- Harvey, D.R., 1997b, "The CAP, the GATT and the WTO" Ch. 17, *The Common Agricultural Policy and the World Economy*, 2nd. edn., eds. Ritson C.R. and Harvey, D.R., CABI, Wallingford.
- Harvey, D.R., 1998, "The US Farm Act: Fair or Foul?", Food Policy, 23 (2), 111 121.
- Harvey, D.R., 2003, "Agri-environmental relationships and multi-functionality: further considerations", *The World Economy*, 26 (5), 705 725.
- Hayami, Y., 1988, Japanese Agriculture under siege: The political economy of agricultural policies, Macmillan, London.
- Heclo, H. and Wildavsky, A., 1981, The Private Government of Public Money, Macmillan, London.
- Hogwood, B.W. and Peters, B.G., 1985, The Pathology of Public Policy, Clarendon Press, London.
- Kay, A., 2003, "Path Dependency and the CAP", *Journal of European Public Policy*, **10**, 3, 405 420.

- Josling, T.E., 1969: "A formal approach to agricultural policy", *Journal of Agricultural Economics*, 20 (2), 175 195.
- Josling, T.E., 1974, "Agricultural Policies in Developed Countries: a review", *Journal of Agricultural Economics*, 25 (3), 229 264.
- Josling, T.J., 1977, "Government Price Policies and the Structure of International Trade", *Journal of Agricultural Economics*, 28 (3), 261 276
- MacLaren, D, 1992, "The political economy of agricultural policy reform in the EU and Australia", *Journal of Agricultural Economics*, 43 (3), 424 439.
- Olson, M. (1965) The Logic of Collective Action, Harvard University Press, Cambridge, Mass.
- Phelps, E.S., 1985, Political Economy: an Introductory Text, Norton, New York.
- Popper, K, 1959: The logic of scientific discovery, Routledge, London
- Rausser, G., 1982: "Political Economic Markets: PERTS and PESTS in food and agriculture", *American Journal of Agricultural Economics*, 64 (5), 821 833.
- Scrimgeour, F.G. and Pasour, F.C,1996, "A Public choice perspective on agricultural policy reform: implications of the New Zealand experience", *AJAE*, 1996, 257-267
- Swinbank, A. and Tangermann, S., 2001, The Future of Direct Payments under the CAP: A Proposal, *EuroChoices*, Premier Issue, Spring:28-29,32-34.
- Tyers, R. and Anderson, K., 1992: Disarray in World Food Markets, Cambridge University Press
- van den Doel and van Velthoven, 1993, *Democracy and Welfare Economics*, Cambridge University Press.
- Winters, L.A., 1987a: "The Economic consequences of agricultural support: a survey". *OECD Economic Studies*, 9, 7 54.
- Winters, L.A. 1987b: "The political economy of agricultural policy in developed countries", *European Review of Agricultural Economics*, 14, 285 304.