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BIG PROBLEMS FACING SMALL SOCIETIES*

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People working in agricultural economics do so for a variety of reasons. I expect, however, that they would all agree that the advancement of knowledge is a key objective of the discipline. There would probably be agreement also that additions to knowledge are not valued mainly for their own sake, but because they allow better decisions by householders, firms and governments.

It is my intention to reflect upon some past and potential contributions of economists to increasing the return from resources by improving knowledge and policy making. In doing this I will be concerned mainly with two classes of phenomena responsible for wasteful use of resources. One of these is government intervention in markets to redistribute income. The other is externalities. More specifically, I will focus on the role of economists in contributing to knowledge and to policy in two broad contexts where problems arise because of government regulation of markets and because of spillover effects. One is domestic: agricultural policy in New Zealand and Australia. The other is global: agricultural protectionism and the greenhouse effect. The rationale for considering these two global problems together is that they represent an actual and a potential adverse impact on Australia and New Zealand as a result of what happens in the large industrial countries.

In thinking about what economists have to offer on these matters to policymakers, I have found helpful Milton Friedman's account of three ways in which economists can affect the course of policy decisions. 'The oldest, the way that we have practiced the most, is simply to try to inform the public, to give the public a better idea of what is in the public's own interest' (Friedman 1986, p. 4). The most obvious instance of this, said Friedman, was economists' promotion – often unsuccessfully – of the gains from free trade. Friedman's second way in which economists can influence policy '... is by analysing the changes in institutional arrangements that would bring about the desired results and trying to persuade the public to introduce those institutional changes rather than trying to influence policy makers directly' (p. 5).

*Revised version of the presidential address presented to the 33rd Annual Conference of the Australian Agricultural Economics Society, Lincoln College, Canterbury, New Zealand, 7 February 1989.

Some examples of institutional changes, including changes in higher level or constitutional rules, which could have favourable effects on the incentives facing firms, households and governments are mentioned later. The third and possibly the most effective way in which economists can influence public policy, says Friedman, is by developing and talking about policy alternatives so that options are available when policymakers are forced by a crisis to abandon a policy that has failed. I am not sure that this is independent of the other two ways, but in Friedman's view it was the *availability* of the floating exchange rates option at a time of crisis rather than any success by economists in persuading decision-makers of their virtues that led to the adoption of floating exchange rates.

I have introduced the main part of my address. But there is an addendum. Because I do not expect to have such a good opportunity again, I allow myself the indulgence of offering some thoughts on the approach to choosing presidents of our Society. More on that later!

Domestic Agricultural Policy

Overseas authorities are in agreement with local economists in awarding New Zealand and Australia high marks for performance on agricultural policy (for example, World Bank 1986; United States Department of Agriculture 1987). This favourable assessment reflects the high orientation of agriculture in both countries to world markets, and hence the low rates of protection for agricultural commodities and activities.

Prices for agricultural commodities in Australia have not always been related so closely to world markets as they are now. At the beginning of the 1970s, for example, rates of effective protection for wheat and sugar both exceeded 35 per cent. In New Zealand, too, agricultural policies were much less conducive to efficiency in the recent past than they are now. The movement to a closer relationship between world and domestic prices has been recommended by most New Zealand and Australian agricultural economists who, like Friedman, have seen a close connection between domestic and world prices serving the public interest. It is true that in Australia legitimate questions have been raised concerning the second-best economic case for retaining some assistance for agricultural, and other, exporting industries while substantial protection is given to domestic manufactures (Gruen 1969; Harris, Crawford, Gruen and Honan 1974). While the tariff compensation debate did not destroy this argument completely, it established that the information requirements for the implementation of an efficiency-increasing policy of compensating assistance were daunting. It was also noted in the debate that a policy of compensating assistance would have represented an institutional change conducive to rent-seeking activities.

The reduction in price distortions for agricultural commodities is a significant achievement for which public-interest minded academic economists, public service advisers and politicians can all take some credit. Without meaning to belittle the achievement, however, it is fair to say that the remedy for *policy-caused* sacrifices in social welfare is easier for economists to prescribe than is the remedy for market failure. If economic inefficiency is caused, as much was in earlier times in Australia, by domestic consumer prices being set administratively

above the world price, with all producers receiving a price equal to the weighted average of sales in the domestic and export markets, the prescription 'remove the schism between domestic and world prices' is obvious.

Furthermore, if we are objective I am not sure that we can infer from the high marks awarded agricultural policy in New Zealand and Australia that agricultural economists have done a better job than their counterparts in Europe or the United States in educating the public on the advantages of avoiding distortions to agricultural prices. Perhaps the better antipodean performance has more to do with historical factors (for example, the lateness of settlement – especially in comparison with Europe – making for larger farm holdings), economic considerations (for example, the greater export orientation of agriculture), and political factors than it does with successful education by economists on the virtues of undistorted prices.

I note in passing that economists have given little attention to educating the public on the case for departing from free trade in the situation where economic theory and evidence on elasticities of demand suggest most strongly that this would be in Australia's interest, namely, taxing exports of wool. Perhaps the Australian tertiary students who oppose the new tuition tax should commission an economist to report on whether efficiency and revenue needs would be better served by a tax on wool exports!¹

When we move from price distortions created by governments to other sources of concern about agricultural markets, it becomes much harder for economists to play a useful educative role. Consider the issue of instability. A recent sample survey of members of the American Agricultural Economics Association found that 55 per cent considered that reducing instability was the primary justification for government intervention in agriculture (Pope and Hallam 1986). (Market failure was given as the primary justification by 12 per cent, and income transfer by 18 per cent.) Certainly, 'stabilisation' has been an important, though ill-defined, objective of agricultural policy in Australia and New Zealand. In fact, many of the price distortions in Australian agricultural markets were originally rationalised by the reduction in price instability that they conferred – a process referred to by Allan Lloyd (1982, p. 357) as 'stabilisation upwards'. The basis for expecting that government action to reduce instability – which in practice if not in principle is accompanied by uncertainty – of prices, production or income will increase economic efficiency is usually weak (for example, Gardner 1987).

Externalities associated with agricultural activities are increasingly being viewed as important. In the Pope/Hallam survey 62 per cent of respondents *disagreed* with the statement 'Generally, externalities associated with agricultural production do not lead to distortions which are of sufficient magnitude to warrant government intervention.' In Australia most concern has been expressed about externalities involving soil erosion, salinisation, and agricultural chemicals.

¹ The spoken version of this address included some findings of a survey on the effects of the tuition tax on agricultural science students. The report on this survey has been relegated to Edwards (1989).

Economists are experts on the *general* answer to policy for dealing with externalities. We all know that the answer is to *internalise* them. But, in contrast to economic inefficiency caused by government-created price distortions, resource misallocation due to externalities cannot be removed without information on their nature and size from non-economists. Because agricultural externalities are usually of the non-point variety (many sources of pollution), and because individual contributions to externalities often have to be assessed by proxy measures (such as farm inputs and management practices), the technical information needed for efficiency-increasing government intervention is hard to obtain. In practice, the best feasible approach to reducing externalities of erosion and salinisation may vary from region to region, or even from farm to farm, depending on complex interactions between soil/water resources, inputs and management practices. The rotation history of a fallowed paddock may be important in explaining the soil loss it sustains. The contributions of scientists will be important in developing policies that allow more efficient resource use in the presence of agricultural externalities.

It is not only missing information on scientific relationships that hinders the development of policies for dealing with externalities. There are other problems. One of them concerns property rights. Uncertainty about *de facto* property rights causes more difficulties in treating externalities in agriculture than it does in removing policy-created market distortions. In Australia, at least, there is no generally held expectation that assistance measures for rural industries will be retained indefinitely. Subsidies for irrigation water aside, rural producers are not seen as owning enduring rights to assistance. In the case of agricultural externalities, on the other hand, whether the costs of changing land use or practices to reduce external costs should be borne by the landholder concerned or by others (usually taxpayers) is often a major issue. The issue sometimes arises starkly when new knowledge reveals that traditional practices generate harmful externalities. New information on problems caused by chemical residues and on the effects on salinisation of replacing deep-rooting trees or crops with shallow-rooting ones are examples.

The policy-adviser's task has been made more difficult (though potentially the adviser has also been made more effective) by the growth in our awareness of the *costs* of government intervention. A consequence is that the quality of the case that our peers expect to be mounted to justify government intervention to deal with externalities is rising. Brennan and Buchanan write:

'There is no necessary presumption that simply because market processes are imperfect, political processes will work better. On the contrary, as public choice theory reminds us, there are very good reasons for doubting the capacity of political processes to achieve Pareto optimality. The normatively relevant comparison is between two imperfect institutions' (Brennan and Buchanan 1985, p. 116).

I agree with this argument. But, in the context of externalities generated in agriculture, a couple of observations may be offered that increase the likelihood that government intervention is warranted.

First, if the widely accepted 'polluter pays' (initially) principle is applied – an approach likely to violate views held in agriculture on *de*

facto property rights – removing or reducing adverse externalities will often increase government revenue; governments can then reduce other forms of taxes which generate deadweight losses. That is, intervention which increases government revenue while reducing inefficiencies in the area directly concerned avoids one of the costs associated with intervention requiring extra outlays.

The second observation can be illustrated with reference to dryland salting. Suppose it is known that removing trees in a certain region causes external diseconomies in the form of land and stream salinisation. Opponents of action to restrict tree removal, and perhaps also economists conscious of the problem of government failure, might argue that too little was known about the *size* of the externality, in physical and dollar terms, to allow efficient government intervention. While it is true that more information is conducive to better policymaking, to argue that production of a bad should carry *no* penalty because of uncertainty about the size of the appropriate positive price is to infer to a zero price a natural status that it does not deserve.

Notwithstanding the need for information from scientists, agricultural economists with a good understanding of the relevant biophysical or biochemical relationships are probably the best equipped to research policy options for internalising important agricultural externalities. I regard the work of my colleagues Robert Dumsday and David Oram on modelling the effects of management approaches to soil conservation as a good illustration of this. They use scientists' findings on water balance relationships to simulate groundwater recharge – a proxy for contribution to salinity externalities – with different management systems (Dumsday and Oram 1988).

Two Global Problems

I focus now on two global problems of concern to Australia and New Zealand, and more generally: agricultural protectionism and the greenhouse effect.

World agricultural protectionism is the sum of distortionary agricultural policies followed by individual countries and blocs. I use the term 'protectionism' broadly to incorporate assistance that increases a country's exports as well as policies that reduce imports. Furthermore, the negative protection – that is, taxing – of agriculture in some countries, especially developing ones, is a part of the global problem of agricultural protectionism.

The greenhouse effect refers to the warming of the earth's atmosphere caused by increases in the amount of certain gases present there. The warming is due to the fact that these gases are transparent to (incoming) solar radiation, but opaque to (outgoing) terrestrial radiation (the latter occurs at infrared wavelengths), thus effectively trapping radiation (CSIRO 1987). The most abundant greenhouse gas is carbon dioxide. The most important of the others are methane, nitrous oxide, the chlorofluorocarbons and (lower atmosphere) ozone. By the year 2030 the combined effect of these other gases is likely to equal that of carbon dioxide (United Nations, undated).

In an economist's summary comparison of the problems of agricultural protectionism and of the global greenhouse, several points stand out.

First, agricultural protectionism is essentially caused by the policies of governments. The problem is one of distorted prices and impediments to free trade. The greenhouse, on the other hand, is a possible result of certain human activities changing the physical environment within which we live. That is, some activities undertaken to meet current consumption and investment demand threaten our environmental capital. There is a clear externality here. While the obvious – to economists – answer to agricultural protectionism is for governments to get out of agricultural markets, preventing the greenhouse may require governments to intervene to internalise the externalities. Even those who are generally pessimistic about the prospects of government intervention being successful will perhaps allow that avoiding the greenhouse is, like regulating for airline safety, a special case.

It is interesting to compare the current concern about greenhouse earth with the problem of running out of energy resources about which many have expressed concern. In a sense the greenhouse problem is the opposite of the exhaustion of resources problem: global warming – or at least the biggest contribution to warming – would cease if fossil fuels *were* used up! It is also of interest that the zero growth society supported by some would not prevent temperatures from rising, though it would help. As is true of probably all global problems, and of sub-global problems, the greenhouse is a resource allocation or *pattern of economic activity* problem rather than a *growth* problem.

The second point concerns the state of knowledge of the main consequences of the two problems. This is, I think, reasonably good in the case of agricultural protectionism. Members of our Society have played leading roles internationally in efforts to enhance understanding of the consequences of agricultural protection. The BAE/ABARE reports on agricultural policy in the EEC and Japan (BAE 1985; ABARE 1988), and the study coordinated by the Centre for International Economics (1988) on farm support policies in several countries are important instances of this work. So is the international modelling of agricultural protection undertaken by Tyers and Anderson (for example, Anderson and Tyers 1987). These studies provided information on the costs to major overseas countries and blocs of their own agricultural policies, and on the consequences of these policies for other countries through effects on world commodity prices and trade volumes.

While BAE/ABARE has played the role of educator on the costs of agricultural protection in industrial countries to the countries concerned and to efficient agricultural exporting countries, it has not explained the benefits that accrue through lower world prices to food importing countries. Nor do Australian farmers or politicians appear to be aware that United States farm policies have at times, as in the early 1980s, held up world commodity prices, to the benefit of farm and overall incomes in Australia and New Zealand. Further, while farmers and political leaders perhaps now have a reasonable appreciation of the reductions in Australian farm incomes caused by positive protection for agriculture in the industrial countries, they show no signs of recognising that *negative* protection for agriculture is also a significant phenomenon in world agriculture, and that this works to Australia's advantage.

In the case of the greenhouse, knowledge of future changes in temperature is less firm. The effect of a given increase in the main greenhouse gas, carbon dioxide, in the atmosphere is uncertain because of the complexity of the climate system. The possibility of either positive or negative feedback from changes in cloudiness, depending on the height, latitude and season of cloud formation, is one major source of uncertainty (CSIRO 1987). But scientific research in the last two decades has increased the grounds for concern. The United Kingdom Royal Commission on Environmental Pollution (1971) suggested that the greenhouse effect might cause the earth's atmosphere to warm by about 0.1 to 0.2 degrees Celsius in thirty years. Recent research puts the mean increase, with the continuation of recent trends, at 1.3 to 4.0 degrees Celsius over preindustrial times within the next fifty years (Pearman 1988). Further work will improve knowledge on average global temperature changes and on regional impacts. Research is also proceeding on the implications of changes in temperature, and related changes in climate, for plant growth. As with agricultural protectionism, there are likely to be gainers in agriculture – and elsewhere – as well as losers from global warming. Representatives of some developing countries have said that, on current knowledge, they would likely welcome the climatic change expected to accompany global warming (United Nations, undated). It is too simplistic to express the effects in such wholly negative terms as massive relocation of population, agriculture and industry.

A summary of likely broad changes in Australia by 2030 due to the greenhouse effect is shown in Table 1. That assessment was made by the Division of Atmospheric Research of CSIRO. Increases in temperatures are expected to be greater in southern Australia than in the north. It is considered probable that winter and minimum overnight temperatures will increase more than summer and daily

TABLE 1
*Changes in Australia Due to the Greenhouse Effect
(2030 AD)*

Temperature:	Up 2–4 deg.C.	
Rainfall:	Summers 50% wetter (except in the Southern regions)	
	Winters 20%+ drier	
Larger daily maximum rainfall		
Large regional changes in:	Soil moisture	} Can increase or decrease by a large %
	Runoff	
	Water supplies	
Tropical cyclones:	– further south	
	– more frequent?	
More frequent 'extremes':	e.g. floods, droughts	
Salinity problems inland		
Higher snowline		
Sea level to rise by 20–140 cm leading to:	<ul style="list-style-type: none"> • coastal flooding • salinity • erosion • storm damage 	
Plant growth to increase due to higher ambient CO ₂ levels		

Source: CSIRO (1987).

maximum temperatures. Gifford (1988) predicted that the combined effect of increased temperature and carbon dioxide will be to increase grain yields in the dryland cereal area of south-eastern Australia.

Economists have an important role to play in examining the pluses and minuses of different ways of reducing the global warming. This will include evaluation of the trade-off between short-run material standards of living and reductions in the rate of warming. But until there is better information on regional consequences of global warming, I doubt whether agricultural economists can contribute much to the study of the greenhouse phenomenon.

Third, what are the prospects that knowledge itself will be sufficient to stimulate global action to deal with the problems? The answer in the case of agricultural protectionism is clear: zilch! Agricultural protectionism has persisted, and in some cases worsened, despite an increasing body of evidence that it is against the 'public interest'. In the case of the greenhouse effect the answer is, in my view, unclear. The fact that there will be gainers as well as losers from global warming, and the fact that the changes occur relatively gradually – even if they are rapid by historical standards – will make for difficulties in reaching agreement at the national and international levels on the need to hold temperatures down. Another reality is that the policies necessary to slow atmospheric warming – notably, a reduction in the burning of fossil fuels – involve reductions in current material standards of living for most people. This contrasts with the *increases* in real incomes for most people resulting from removal of agricultural protection in industrial countries. The reduction in individuals' purchasing power as a result of anti-greenhouse policies, also, cautions against expecting easy agreement on effective action to deal with the greenhouse effect. Perhaps, however, some encouragement can be taken from the promptness with which scientific knowledge of the harm caused to the upper atmosphere ozone layer by chlorofluorocarbons was followed by international action, through the 1987 Montreal Protocol, to limit the use of substances that deplete it.

Fourth, is there a particular educational role to be played by countries such as Australia and New Zealand? It is understandable that agricultural exporting countries experiencing large economic losses because of agricultural policies followed by the industrial countries should engage in research and extension work directed to increasing knowledge of the cost of those policies to the countries concerned. But the production and dissemination of information on the domestic costs of agricultural policies does not ensure that policies which advance the public interest will be introduced. If it were otherwise, consumer and taxpayer groups in countries with offending policies would have promoted the needed research and education long ago.

In the case of global warming it is even less clear than it is for agricultural protectionism that research or extension activities by small countries can influence the action of the large industrial countries in which most of the greenhouse gases are produced. However, the specialised local knowledge available to meteorologists, climatologists, agronomists and other scientists in particular small countries will allow them, as knowledge advances, to provide advice useful to domestic decision-makers on climate changes within the countries, and on the agricultural and other consequences of this.

Fifth, is it sensible for small countries to act unilaterally on the two problems? Small economies *can* achieve economic gains by reducing agricultural, and other, protection unilaterally. Although overall its agricultural policy rates well, Australia could increase economic efficiency by reform of policy in such areas as dairying, wheat marketing, sugar, tobacco, fruit, and pricing of irrigation water. Much larger economic gains could be obtained by reductions in protection for manufacturing. If we are still in the age of reason, however, there is no point in governments in countries such as Australia or New Zealand trying to hold global temperatures down by unilateral actions such as requiring energy authorities to move to cleaner fuels or by subsidising the planting of trees. The most telling way of supporting this statement depends on one's perspective. If one is as concerned with the well-being of foreigners as of domestics, unilateral action by a small country to slow global warming is futile; its impact on the problem would be tiny. If, on the other hand, one takes the approach common in cost-benefit analysis of assessing policies by their effects on nationals, there is the additional reality that the main beneficiaries from unilateral action would live outside Australia or New Zealand while the costs would be borne domestically. For as long as the United States and Japan judge that unilateral action on the greenhouse effect involves domestic costs in excess of domestic benefits, it is extremely unlikely that the reverse relationship will hold in Australia or New Zealand. At least three factors point to a more favourable ratio of domestic benefits to costs for a large economy: it can exert a larger impact on global warming; it has a larger population to enjoy the benefits from slower warming; and its action is more likely to persuade other countries to follow suit.

Scientists and economists in Australia and New Zealand have a role to play in creating an information environment that will make it harder for governments to rationalise on greenhouse grounds policies that they wish to make for political or income redistribution reasons. One less obvious way of doing this is to compare and discuss the cost-effectiveness of action taken by Australia or New Zealand *overseas* to slow global warming with action taken domestically. For example, it may be cheaper to plant or save a tree in South America than in Australia.

Recognising that a favourable greenhouse effect is sometimes a (minuscule) bonus of a policy that is justified on other grounds, such as reducing domestic air pollution or salinity, is totally consistent with the above argument.

Institutional Changes

I have given considerable attention to the role of economists in influencing policy via education on the merits of different policies. Let me now make some remarks about the other approaches which Friedman says are available to economists for influencing policy.

The first of these other approaches was to carry out the analytical work and the exercise in persuasion necessary to achieve an institutional change that will 'bring about the desired result', and the second was to do the homework on problems so that new and better policies could be implemented at times of crisis. The problem of determining the 'desired result' will not always be as clear to others as it

is to Friedman. Someone said of Friedman 'I wish I was as sure about anything as he is about everything.' Often though the desired result will be to reduce economic waste.

I follow Friedman and other economists in using the term 'institutional change' to mean changing the rules of the game – that is the structure of penalties and rewards. A change in the arrangements for administering policy, such as the creation of a new government agency or the reallocation of functions between departments, typically does not represent an institutional change in this fundamental sense. Occasionally dramatic changes occur in the rules of the game. An example in the social area was the movement by the Whitlam Government to the system of no-fault divorce, allowing either party to unilaterally terminate a marriage. In the economics area, deregulation of the capital market and foreign exchange markets is a huge institutional change made in recent times in both New Zealand and Australia. I intend to make some extremely brief comments on institutional change to reduce the warming of the atmosphere, and some rather longer comments on possible institutional changes for reducing agricultural protectionism.

As economists we can expect to hear much in the future about institutional changes directed to internalising the external diseconomies involved in the emission of greenhouse gases. Much of this will be a re-run of stories with which economists are familiar – pollution charges and quotas. The most obvious impacts on agriculture would be the direct and indirect consequences of higher prices for fossil fuels. But the possibility of internalising externalities generated in agriculture by the release of methane and nitrous oxide may also appear on the institutional change agenda. Agriculture contributes to methane gas from rice paddies, enteric fermentation in cattle and sheep and from biomass burning, while nitrous oxide results from the use of nitrogen fertilisers and from biomass burning (Pearman 1988). The international nature of the greenhouse problem, and the unacceptability of efficient solutions which attach the same price to a unit of carbon dioxide produced in India as one produced in the United States, will present challenges to researchers in economics and other areas of the social sciences. If a group of non-polluting countries emerges to campaign for greenhouse-prevention policies as the Cairns group of fair trading countries is working in the GATT round for freer agricultural trade, Australia will not qualify for membership, let alone leadership!

Economists and reform-minded politicians are finding it hard to win support for institutional changes that would facilitate reductions in the distortions in global agriculture. Some seek to change the GATT to render unacceptable such measures as variable import levies, export subsidies, 'voluntary' export restraints and some state trading arrangements. Because changes require support of the very countries engaging in those practices, the prospects for reforming GATT in ways conducive to a freer world trade regime are not good. Lester Thurow has perhaps expressed the opinion of many informed observers in declaring GATT dead.

The approach of requiring each GATT member to implement institutional arrangements that would make the *domestic* costs of government intervention more transparent has received attention.

Australians have referred to this approach as 'exporting the Industries Assistance Commission'. It has been supported both by a former chairman of the IAC (Carmichael 1986) and by an international study group chaired by a former Director-General of the GATT (Long 1987). The approach of institutionalising arrangements that increase the visibility of the costs of protection has merit. When the costs of a policy are high, it can be expected that opposition to the policy will be greater the more transparent the costs are. But *how much* does effective opposition to wasteful policies increase with increasing transparency? It is not clear how much built-in transparency processes would help in reducing the ability of concentrated interest groups to win government intervention that was against the public interest.

Friedman has supported a Constitutional amendment saying 'Congress shall make no laws imposing tariffs or trade restrictions', or an even broader amendment saying 'Congress shall make no laws prohibiting voluntary contracts between consenting adults' (Friedman 1986, p. 5). While Friedman's focus was on the United States, the idea is applicable elsewhere. Clearly, the task of winning the mass support needed for such a radical restriction on the power of governments is a substantial one. Moreover, in view of the longstanding absence of open trade in market milk in Australia, despite a Constitutional guarantee of free trade between the States, Australians may be circumspect about accepting that a Constitutional guarantee would deliver what it promised!

Another Constitutional change would be to require governments to provide industry assistance from the budget, rather than implementing measures that effect transfers from consumers. The rationale offered for this change is that the assistance would be more conspicuous, a transparency argument. There are again major problems in winning support for such a change, including opposition from politically effective producer groups. In addition, experience in the United States indicates that reliance on the subsidy approach does not preclude heavy assistance to agriculture.

While constitutional change is potentially a powerful way of changing the incentive structure, it is difficult to achieve. This is so if the 'constitution' is taken to mean a society's conventions and attitudes, as in Brennan and Buchanan (1985), as it is of changes in a written Constitution. Most of the efforts of economists to improve policies will have to occur within existing constitutional rules.

There is in the agricultural economics literature discussion of an institutional reform which has a great deal of promise. It is lump-sum payments, which would make assistance received by producers independent of current production. This approach has attracted considerable interest in the United States where it is labelled decoupling. Ideally lump-sum transfers would be a transitional policy, pending the removal of intervention not justified by market failure. As with everything worthwhile, lump sum payments have their problems. Farmers do not like the idea, seeing assistance that is independent of current production as more in the nature of 'welfare' than they do conventional assistance. There would be difficulties in determining the bases to which to relate transfer payments, including the treatment of new entrants to farming. There is also the possibility that lump-sum policies would be reduced in effectiveness because farmers judge – not

unrealistically in view of past political decisions – that higher current production would give them a larger base for assistance in the future. And it would be harder to devise lump-sum policies to replace conventional assistance paid for by consumers than assistance funded by taxpayers. But I see the development and explanation of lump-sum type policies as a very worthwhile route by which agricultural economists may ultimately contribute to radical improvements in global agricultural policy.

Although we have been told often that global agriculture is in crisis, world policymakers have not felt that they have had to abandon wasteful agricultural policies as they abandoned fixed exchange rates. Because the potential gains are so large – and moreso for Australia and New Zealand than for most countries – it is important that agricultural economists continue to discuss new approaches that would reduce the waste and the international tensions. The climate in which political decisions are made can change in unexpected ways, and much more quickly than the atmosphere is warming! New Zealand's recent experience is a classic illustration of this.

Concluding Comment

Two major causes of economic waste and lost opportunities are externalities and efficiency-reducing intervention by governments in markets. The central theme of this address has been that it is much easier for economists to recommend action that will remove inefficiency and advance the public interest when the inefficiency results from government policies than when it is due to externalities. This is true for domestic external effects such as those associated with soil erosion, salinity and use of agricultural chemicals. It applies with greater force when international externalities exist, as they do with the greenhouse effect. Internalisation of externalities requires technical information; removal of distortion-creating policies does not.

Although it is easy for economists to prescribe efficiency-increasing policies for reducing agricultural protectionism, their prescriptions have not been attractive to governments in the major industrial countries. Perhaps the advice will be found more palatable with better education of citizens on the distributional and efficiency effects of agricultural policies, but private interest explanations of policymaking caution against being too optimistic. Because the potential gains – to Australia, New Zealand and globally – from reform of agricultural policies are substantial, it is very desirable that agricultural economists continue to examine and write about institutional changes, such as lump-sum approaches to assisting farmers, that offer prospects of a major reduction in distortions in world agriculture.

While economists have a clear in-principle solution for externalities – 'internalise them' – the operational meaning of this in a particular situation is usually much less clearcut than it is for the 'remove it' principle applying to government-caused distortions. While economists have a role to play in educating the public on appropriate policies for environmental externalities, they are dependent on scientists to specify the physical relationships. These may differ between regions and between farms in a given area. In their work on approaches to internalising externalities arising in agriculture, agricultural economists will need to be cognisant of these differences if

they are not to recommend policies that involve rough justice and much intra-agriculture inefficiency.

Scientific and technical data is again a crucial requirement for understanding the potential greenhouse problem and for thinking about policy responses. But there is also an important role for economists. One educational task is to point out that just as Australia 'shoots itself in the foot' if it decides against unilateral removal of protection, so will it experience lower real incomes if it *does* act independently of other countries in an effort to slow the global warming. Economists around the world will have ample challenges in assessing the efficiency and distributional consequences of different approaches to slowing the global warming. But, as with agricultural protectionism, there will be strong pressures at national and international discussions on the greenhouse effect from groups with conflicting interests.

If it becomes generally accepted in the world's leading societies that a greenhouse crisis is in prospect, institutional changes that create incentives for effective action will appear more attractive. At present, however, there is no institutional change that is as obvious as the floating of foreign currencies was in the exchange rate crisis of the early 1970s. Few things are all bad. Governments which felt compelled to act in ways which reduced real incomes in order to slow the global warming may come under stronger pressure to change wasteful policies, including policies for agriculture.

Addendum: Choosing Presidents of the Society

Finally, I turn to a rather different topic: the method of choosing presidents of our Society. I do not think that our Society has a big problem in this area, but I have heard a few expressions of dissatisfaction from members. The subject is not one that I have heard discussed in an open forum before, and I make no assumption that a majority of members, let alone of ex-presidents, will thank me for doing so. But I have come to the view that it is desirable to air a few thoughts on this matter. By way of connecting these thoughts with earlier parts of this address I suggest it is at least possible that discussion of how the president is chosen will allow the Society's objectives – broadly, the promotion of research, teaching and extension in agricultural economics – to be achieved more successfully. If that is so, knowledge useful to the Society's members is increased.

Before considering ways of choosing a president, let me state his or her main tasks. As I see it, Society members expect three main contributions from the president. One is to carry overall responsibility for the administration of the Society's affairs and for the development of new activities which contribute to achieving the Society's objectives. Of course, the secretary, treasurer, business manager, editors and other members of council play very important roles in these administrative and development activities. A second task is to be responsible for organising the programme for the annual conference. The third is to provide a challenging presidential address. In my view, these are the three most important tasks to bear in mind in thinking about potential presidents. This list might change if the Society's activities changed –

for example, if it were to adopt positions on agricultural policy issues. (I am not advocating this course.)

For as long as I have known anything about it, the normal experience has been that the person who was president-elect of the Society in one year has been the only person nominated for president the following year. Nor can I recall more than one person being nominated for president-elect, though that may have happened. The nomination for president-elect emerges from the executive. In my experience there is usually a process of broader consultation, sometimes extensive. It is normally a reality that the president has substantial potential to influence the nomination for president-elect, and hence the nominee for president a year later.

I am conscious of the fact that in choosing presidents-elect regard is had to the service provided to the Society as editor, contributor to conferences and in other ways. There is an equity dimension in the choice of a president-elect, just as there is in much of our work on agricultural policy. For many years the nomination has usually, though not invariably, followed the convention that the presidency alternates between an academic and a person from outside academia. It has always been possible for other nominations to be made for president and for president-elect, but as far as I am aware the custom of a single nomination has always prevailed.

The present approach to choosing the president has considerable advantages. The 'field' of eligible candidates should be considered, and hopefully sound judgements made about the merits of different contenders. This is a 'public interest' interpretation of office-bearers' behaviour. Given the skepticism shown by economists towards the view that politicians and bureaucrats are motivated mainly by the public interest, we should perhaps not accept too readily that Society office-bearers are concerned only with the good of the Society – and I abstract from the problem of giving content to that.

The obvious alternative approach to selecting a president is a more open encouragement of competition for the position. With this approach, it would be desirable that the competition occur at the stage of choosing the president-elect rather than the president. This would retain the valuable practice (mandatory under the present Constitution) that the president-elect be a member of Council. With more than one nomination being viewed as the normal occurrence, it would be desirable for members to be provided with information on each nominee to help them make their voting decisions. Following the American Agricultural Economics Association model, this could be restricted to such factual information as the qualifications, positions held, professional activities and awards of the nominees. Under the American system two candidates for president-elect are chosen by a nominating committee. In practice members choose between these, though the provision of a blank line for write-in candidates means that members not wanting to support either candidate can send a more specific message to the nominating committee than they can do by not voting. The successful candidate for president-elect subsequently becomes president. The contest could overtly take on a more political nature by allowing candidates to state a platform. While I am not aware of societies comparable to our own where this approach is followed, the platform would presumably indicate the direction in which a

candidate, if elected, would seek to lead the Society, and specific changes he/she would attempt to make in what the Society does and how it was done.

It is probably true with the present approach to choosing presidents that the general membership knows a reasonable amount about the professional background of those who become president-elect, but little if anything about their views on the direction in which the Society should head. This perhaps matters less than might initially be thought because virtually all significant decisions are made by Council, or at least by the executive, not by the president. In addition, Council is subject to instructions and guidance from the Annual General Meeting. However, other members of Council may be more reluctant to oppose a determined president if he/she had been chosen by members over other candidates. There is also the possibility that with competition in the election of presidents, would-be-presidents would try to secure the election of other office-bearers who would support them on Council.

There are several questions to consider in thinking about a change from our present approach. Some of them are: What would be the consequences of defeat in an election under a competitive system? Would worthy but sensitive contenders decline to run again? Would having competed before be seen as strengthening a candidate's credentials? Would a movement to a postal ballot of all members (as occurs in the American Agricultural Economics Association) be desirable with competitive elections?

It could be argued that if competition were taken seriously, there should be no limit on the number of terms for which an individual could be elected to the presidency. The Society's Constitution at present restricts an individual to a maximum of two consecutive terms as president. No one has ever been president for more than one term, and is unlikely to be while the Constitution stipulates the election of a president-elect as well as a president at the Annual General Meeting! Of course, it is not uncommon to find in the constitutions of other societies and of countries, even those placing a high value on competition, restrictions on the period for which an individual can be president. This restriction often has something to do with notions of fairness (spreading around the honour of being top dog) but some also see grounds for concern about efficiency when a leader, even one who regularly faces elections, occupies a position for a long period. The desire of members in a professional society for variation from conference to conference in the addresses they sit through is probably a major consideration pointing to frequent changes in leaders!

What is my bottom line on choice of presidents? Given the smallness of our Society in comparison with the American Agricultural Economics Association (approximately 650 ordinary members compared with around 5000), I am unconvinced of the case for moving to a system similar to the American one. Two nominations for president-elect under the American system gives a much lower ratio of nominees to membership, and presumably a lower ratio of nominees to strong contenders for leadership, than exists in Australia with one nomination. There are, however, two things that members can do which would open up to some degree the selection of the president-elect. The simplest is for members who would like a particular individual to be nominated to put their view to a member of

Council, perhaps preferably to the incumbent president. The second is to nominate someone for president-elect at the Annual General Meeting. Although such a nominee might appear normally to be at a disadvantage to a nominee put forward by the Council or executive, a strongly supported 'non-official' nominee could be successful. The likelihood of a non-official candidate being successful certainly appears much higher than under the American write-in option. In my view, members should feel free to nominate, canvass for and vote for a candidate of their choice. The fact that members of the Australian Agricultural Economics Society have the right to do these things perhaps makes selection of presidents more democratic in a significant sense in our Society than in the American Agricultural Economics Association. If most members were to feel comfortable about exercising these rights, that would amount to a change in the rules of the game for choosing presidents – and without changing a word of the Society's Constitution!

References

- Anderson, K. and Tyers, R. (1987), *Global Effects of Liberalizing Trade in Agriculture*, Trade Policy Research Centre, London.
- Australian Bureau of Agricultural and Resource Economics (1988), *Japanese Agricultural Policies*, Policy Monograph No. 3.
- Brennan, G. and Buchanan, J. (1985), *The Reason of Rules*, Cambridge University Press, Cambridge.
- Bureau of Agricultural Economics (1985), *Agricultural Policies in the European Community: Their Origins, Nature and Effects on Production and Trade*, Policy Monograph No. 2, Australian Government Publishing Service, Canberra.
- Carmichael, W. (1986), 'The national interest and international trade negotiations', *World Economy* 9(4), 341–57.
- Centre for International Economics (1988), *Macro-economic Consequences of Farm-support Policies: Overview of an International Program of Studies*, Datascope Information, Canberra.
- Commonwealth Scientific and Industrial Research Organisation (1987), *The Greenhouse Effect: Current Assessment of Anticipated Regional Climate Changes*, Australian Environment Council, Canberra.
- Dumsday, R. G. and Oram, D. A. (1988), *Economics of Dryland Salinity Control in the Murray River Basin, Northern Victoria*, Agricultural Economics Discussion Paper 3/88, School of Agriculture, La Trobe University.
- Edwards, G. (1989), 'Effects of higher education contributions on enrolments in agricultural science', *Unicorn* 15(3), 151–6.
- Friedman, M. (1986), 'Economists and economic policy', *Economic Inquiry* 24(1), 1–10.
- Gardner, B. (1987), *The Economics of Agricultural Policies*, Macmillan, New York.
- Gifford, R. M. (1988), 'Direct effects of higher carbon dioxide concentrations on vegetation' in G. I. Pearman (ed.), *Greenhouse: Planning for Climate Change*, CSIRO, Melbourne, 506–19.
- Gruen, F. (1969), 'Is there a case for agricultural subsidies? A reply to Dr. Davidson', *Farm Policy* 9(1), 14–8.
- Harris, S., Crawford, J., Gruen, F. and Honan, N. (1974), *The Principles of Rural Policy in Australia: A Discussion Paper*, Australian Government Publishing Service, Canberra.
- Lloyd, A. G. (1982), 'Agricultural price policy' in D. B. Williams (ed.), *Agriculture in the Australian Economy*, Sydney University Press, Sydney, 353–82.
- Long, O. (Chairman) (1987), *Public Scrutiny of Protection*, Trade Policy Research Centre, London.
- Pearman, G. I. (1988), 'Greenhouse gases: evidence for atmospheric changes and anthropogenic causes' in G. I. Pearman (ed.), *Greenhouse: Planning for Climate Change*, CSIRO, Melbourne, 3–21.
- Pope, R. and Hallam, A. (1986), 'A confusion of agricultural economists? – a professional interest survey and essay', *American Journal of Agricultural Economics* 68(3), 572–94.

- United Kingdom Royal Commission on Environmental Pollution (1971), *First Report*, Her Majesty's Stationery Office, London.
- United Nations Environment Program (undated), *The Greenhouse Gases*, UNEP/GEMS Environment Library No. 1.
- United States Department of Agriculture (Economic Research Service) (1987), *Government Intervention in Agriculture - Measurement, Evaluation and Implications for Trade Negotiations*, USDA, Washington, D.C.
- World Bank (1986), *World Development Report*, Oxford University Press.