AN EMPIRICAL INVESTIGATION OF PUBLIC CHOICE THEORY: THE CASE OF THE RURAL ADJUSTMENT SCHEME

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Abstract

The aim of this paper is to examine the provision of adjustment assistance to the agricultural sector, through the Rural Adjustment Scheme, using an interest group model. This model, draws on public choice theory which posits that self interested, utility maximising, homogenous interest groups will gain from regulation proclaimed in their interests. The intention is to examine the Rural Adjustment Scheme using the interest group approach, which allows predictions from the theory to be examined. Five agricultural industries are examined over seven years. The method of analysis involves using a comparative static approach utilising algebra to obtain estimates on the impacts of the policy. The indicators examined were the output price and quantity changes, the producer and consumer surplus changes and the welfare weights of producers in a political preference function.

The results of the analysis were mixed. Producers, who were the interest group expected to gain from the policy, had their economic surpluses reduced, received a lower output price and their welfare weighting by policy makers was lower than consumers. However, they did benefit from the provision of the subsidy and from production increasing. Conversely, consumers, who would not have been expected to gain, received the benefit of the lower price.

These results tend to provide evidence that refutes the public choice view that regulation occurs and continues in response to the benefits that narrowly focused interest groups receive. These findings are also in contrast to previous studies of agricultural policy which found that the interest group model provided a good explanation for the observed level of assistance to agriculture. Finally, a more general critique of public choice theory is made with reference to the published (mainly economic) literature.

1. Introduction

The aim of this paper is to present the empirical results of applying public choice's theory of interest groups to the provision of adjustment assistance to Australian farmers and to canvass the theory and literature as to its empirical validity. A quantitative investigation of the policy impacts will be undertaken using an interest group model. The interest group approach is one of many areas within the public choice field of economics. Public choice theory, the application of economic theory to political behaviour, posits that policy outcomes result from the actions of self interested, utility maximising, homogenous, interest groups. Thus, in return for economic benefits, those groups who expect to gain from a particular policy will actively support and lobby for it. A test for the theory is to examine the economic impacts of policy. In this paper the empirical results of testing public choice theory are presented. Traditionally, economists have claimed good results from undertaking empirical testing of the interest group aspects of public choice theory.

2. Background

Agricultural adjustment assistance is provided to Australian farmers to assist them to react to the forces causing structural change in agriculture. The method of assistance is a subsidy on the credit costs of farmers. The policy vehicle for delivering assistance is the Rural Adjustment Scheme.

The primary aim of the provision of the credit subsidy is to increase the efficiency of resources used in agriculture. This is achieved by recombining agricultural resources into more efficient and/or larger units of production. However, within the economics profession there is some criticism of subsidised credit programs generally, and the Scheme specifically. It is claimed by various economist authors that this policy instrument does not increase efficiency and that it is just another method by which government provides assistance to a clearly defined interest group in society. It could be hypothesised that the provision and continuance of assistance to farmers through the Scheme is the result of the gains that farmers appropriate from government and the market, as a result of the provision of the credit subsidy.

There are two competing theoretical frameworks which are used to justify government intervention in the economy: the public and private interest theories of regulation. In recent years, the private theory approach, of which public choice theory is a branch, has been increasingly used by economists in assessments of policy intervention.

3. Justification of the Study

This study is justified on three grounds. First, it could be argued that agricultural adjustment assistance, does not increase the efficiency with which agricultural resources are used, despite the efficiency arguments for its provision. Hence, the policy is viewed merely as a means of providing economic transfers to farmers. Second, the interest group approach of public choice theory appears to offer a plausible explanation for the Scheme's continued provision despite the reservations expressed by various authors: notably Industries Assistance Commission (1984), Wonder (1987) and Martin (1990a) amongst many others. More generally, the economics literature on subsidised credit does not support providing assistance to farmers on efficiency grounds. Third, the proponents of this interest group approach (mainly economists) claim good results for the predictive and explanatory power of the model: see Anderson (1978, 1980), MacAulay and Musgrave (1982), MacAulay, Musgrave, Thomas and Burge (1985) as Australian examples.

4. Theories of Economic Regulation

Within the economics paradigm there exist two broad approaches which have been used to undertake research on the relationship between politics and economics. These main contending approaches to the study of government intervention or regulation are: the public interest and private interest theories of regulation. The public interest approach has traditionally assumed market failure as the motivating force for government to act. The private interest approach assumes income redistribution as the prime motivating force for groups interested in regulation. The two approaches are examined in this section and the underlying assumptions of both are outlined.

Traditional Justification for Regulation - Market Failure or Public Interest

Traditionally, market failure is the reason advanced for government regulation or intervention. Regulation is viewed as the means of correcting outcomes associated with market failure. It is based on the assumption (Posner, 1974, 335) that:

> '...behind each scheme of regulation there could be discerned a market imperfection the existence of which supplied a complete justification for some regulation assumed to operate effectively and without cost.'

Market outcomes are often perceived as unfair due to the existence of some imperfection or inefficiency. Neo-classical economic theory proposes a correspondence between perfect competition and Pareto economic efficiency. Market failures which prevent the attainment of full economic efficiency are pervasive in the real world. Market failure results from the violation of one or more of the assumptions of perfect competition, such as, externalities, public goods or monopoly.

Posner (1974, 340) criticised this traditional justification on the grounds that it did not contain any explanation of how the perception of public interest is translated into government or legislative action. This contrasts with the theory of competition, which explains how the efforts of individuals acting in their self interest in the economic marketplace bring about an efficient allocation of resources. There is no comparable benchmark for converting perceptions about the public interest into government intervention, which would maximise social welfare.

The conventional economic case for regulation to overcome market failure is quite limited. It depends upon demonstrating some defined form of market failure. This conclusion with respect to declining sectors of the economy, like agriculture, is quite problematic. That neo-classical economics would for so long focus upon this justification for regulation is not surprising given that ' economists generally have not paid much attention to the processes of policy formulation but have, rather, concentrated on analysis of content and outcomes' (Standen, 1983, 93-94).

For many years the public interest approach was the traditional and most common theory used by economists to interpret government regulation. That is, it was assumed that regulation aimed to promote the public interest and achieve maximum economic efficiency. However, during the last twenty or so years, private interest economic analyses of regulation, like public choice, have increasingly shown that government regulatory policies do not seem to have these goals as their sole aims. This approach has attempted to explain regulation as the rational outcome of actions of self-interested actors in the economic and political processes. Therefore, to understand what governments actually do, as opposed to what they ought to do, it is necessary to examine the role of interest groups in influencing political outcomes.

An Alternative Hypothesis for the Existence of Regulation - Private Interest Theory

An alternative explanation for government intervention is the redistribution of income. It could be hypothesised that attaining productivity increases through the more efficient usage of resources is not the main motivation for government intervention in the process of agricultural adjustment. Rather, the aim of regulation is to redistribute income and wealth to specific groups in society. These groups are able to obtain a redistribution through the political process. Olson (1965) first formalised the role of interest groups into a theory of economic regulation. Benefits from policy intervention are usually concentrated on a relatively small number of producers, while the costs are spread widely amongst taxpayers and consumers. Prior to the 1970s, a number of empirical studies of regulation (mainly North American) had concluded that sectional rather than general interests were being served by regulatory activity, (see Peltzmann 1965). These studies were observations of particular situations, it was not until Stigler (1971) that a general theory was advanced to explain why and under what conditions regulation would occur.

5. Public Choice Theory

The basic behavioural postulate of the public choice framework is that collective political decision making is based on self interested utility maximisation on the part of all affected individuals (politicians, bureaucrats, interest groups or the public generally). This is the same postulate that is assumed in private market transactions. The political consumer is regarded as having essentially the same motives as the market consumer. Public choice assumes that those involved in the policy process attempt to maximise those values that are important to them as individuals. Public choice theory considers policy to be the outcome of the method by which the self interest of those affected are combined in the decision-making process.

Mueller (1989, 1) defines public choice as:

> '...the economic study of non-market decision making, or simply the application of economics to political science. The basic behavioural postulate of public choice, is that man is an egoistic, rational, utility maximiser.'

Mueller (1989, 3) outlined the public choice approach to non market decision making as:

- making the same behavioural assumptions as economics (rational, utilitarian individuals) ;
- depicting the preference revelation process as analogous to the market (voters engage in exchange, individuals reveal their demand schedules via voting, citizens exit and enter clubs) ; and

In the public choice approach it is argued that economic agents are induced mainly by government actions to divert resources non-optimally from production to rent seeking activities. An implication is that government should minimise economic interventions and only supply those 'public goods' the market cannot provide. The theory focuses attention on both the distributional and efficiency effects of policy.

That the methodology of public choice is that of economics can be seen from Buchanan (1989, 13) who explains public choice by noting:

> '...that it was a perspective, rather than a method in the usual meaning of the term. That is, it is not a set of tools, nor is it a particular application of standard tools with standard methods. Public choice is a perspective on politics that emerges from an extension and application of the tools and methods of the economist to collective or non market decision making.'

Hence, public choice does not have a single way to approach a policy problem. This situation can present problems as well as leaving analysts free to use whatever tools they wish in an attempt to examine a problem. The application of many of the tools of the theory of welfare economics are invariably applied to political analysis using the public choice approach.

The economic market is subsumed within the public choice framework. This theory potentially gives a richer understanding to the occurrence of regulation and potentially has more explanatory power than the public interest theory.

The literature on the theory and applications of public choice theory is vast. Mueller (1989) offers a good review. Variants within the literature include the theories of regulation, endogenous policy, interest groups, political economy, lobbying and rent seeking.

The public choice approach in building on the assumptions about individuals, attempts to predict how interest groups and others interested in the political process will be likely to behave.

Interest Groups

Interest groups play a central role in public choice theory. It is assumed that they organise to seek regulation which will advance the interests of their members. The theory attempts to examine whether political outcomes are influenced by powerful interest groups and, if so, what form the influence takes. Regulatory outcomes are viewed as representing the competition of a broad range of interests, each interest represented by groups of individuals. These groups compete with one another for the benefits that are available through government. Interest groups who expect to gain from a particular policy will agitate for its adoption by lobbying and by providing support up to the point where the net benefit from further expenditure is zero. At which level this may occur is a matter for judgment by the interest group concerned. Similarly, those opposed to the policy will lobby against it, until that point where their marginal net benefit is also zero.

Stigler (1971) takes the view that interest groups are primarily concerned with seeking wealth redistribution through the regulatory process. In effect, each group bids for the right to tax the remainder of society. The political system, or politicians themselves, arbitrate among the interest groups to maximise their own welfare, and this usually manifests itself in seeking and maintaining political power.

Hendrie and Porter (1987, 1) summarised that view when they stated that:

> '...the process of democratic government is one readily captured by interest groups with successful groups typically being articulate, narrowly focused in electoral terms, keen on rhetoric regarding the benefits to the needy, but far from poor themselves.'

The methodological basis of the theory is the individual, however analysis of particular policy problems invariably occurs at the aggregated group level. Pincus (1983, 35) stated that:

> ' The theory postulates that small, homogeneous collections of individuals respond to their collective economic opportunities in a way that is very much like the response of a single individual: an individual acts if, on the margin, benefit exceeds cost. For a large, diverse group, the sum of the benefits may greatly exceed the sum of the costs.'

Interest groups act as a proxy for the individual. According to Pincus and Withers, (1983, 45) '...a group acts more or less like an individual depending among other things, on their communality of interest '. In the theory, the postulate of egoistic rationality '...effectively reduces politics to an amoral system of trade between interest groups, mediated by politicians ' (Quiggin, 1987b, 1). Therefore, explanation of the results of political decisions can be made in terms of the relative strength of interest groups.

Hendrie and Porter (1987, 1) went on to state that:

> '...a wide range of (government) programs gain approval over time in the name of redistribution.......But the welfare which is being enhanced is rarely the welfare of those with real disadvantage.'

Successful interest groups, whilst difficult to definitively define, tend to have the following characteristics:

- often they have few members, as small sized groups can impose discipline upon their membership ;
- they are often well organised which enables them to target politicians who may be able to offer support and to also deflect attention by the public or other interest groups from their activities ;
- they attempt to promote their aims and elicit political support by linking those aims to popular goals ; and
- they offset commentary or research findings that are adverse to their interests by misinformation or other appeals to public opinion.

In an economic market a commodity will be distributed to those whose effective demand and willingness to pay is highest. In a political market Stigler (1971) believed that the question of which group will have the highest demand is directly related to the question of numbers. In his view small group dominance of the regulatory process results because of the large per capita stake each member of a small group has in obtaining regulation. Conversely, a large group (like consumers) who generally have a smaller per capita stake and more diffuse interests are not as successful in obtaining benefits from the regulatory process. It will therefore pay members of small groups to spend a large amount of resources in relation to a regulatory matter, while an individual consumer, who may be forced to pay a very small price if the regulation is promulgated will find that it in their interests not to become informed and protect their interests. Additionally, geographical concentration of interest group members will increase the chances that their demands for regulation will be met. This is particularly true if the demand is made by a significant number of voters in parliamentary seats which are marginal, i.e. their allegiance to a particular party is contingent on the demands of voters being met.

There are several problems facing collective action by interest groups. First, as new policy proposals or changes in policy are not costless to effect, high costs are incurred in obtaining information about the policy issue at hand. For example, consumers do not find it rational to spend much time or effort in becoming informed. The potential losses are insignificant. Interest groups on the other hand can supply that information more efficiently. However, this information is more than likely to be favourable to their position on the subject. Therefore, consumers are most likely to remain ignorant, or if they do become informed, receive biased information. In addition, the costs of negotiating and participating in the policy process can be prohibitive. Consequently, consumers and taxpayers are therefore likely not to become involved in the process and therefore their interests will tend to be ignored.

6. Decision Criteria and Method

Only a few studies in Australia have attempted to empirically examine the interest group approach of public choice theory by applying it to specific regulatory situations. The test of good theory is in its empirical validation. In all of these studies (except Anderson, 1978) the authors used an econometric approach, rather than a comparative statics approach to estimate the economic impacts of the policy. A problem with the econometric approach is that it tends to be highly aggregate, whereas the comparative static approach allows for a more detailed approach.

It is assumed in public choice theory that all participants in the policy process are perfectly informed. Therefore, farm producers would not be expected to lobby for a policy which harms their economic interests. Consequently, they should receive an economic benefit through the provision of the Scheme. If it can be proven that farmers do not receive a positive benefit, the theory will not prove to be a good explanation of the policy's provision. The indicators used are the output price and quantity changes, the producer and consumer surplus changes and the welfare weights of producers in the political preference function, that result from the policy.

Public choice theory, which encompasses the private interest model, suggests that regulation will divert income and wealth from relatively diffuse groups, toward more coalesced groups, whose members have strong individual interests in the effects of the regulation. Unlike the public interest theory, the private interest theory sees the bulk of regulation being motivated not by a search for greater efficiency but rather by income and wealth transfers.

Comparative statics analysis utilises algebra and was used to estimate the price nad quantity impacts of the policy and the subsequent changes in producer and consumer surpluses that result. The price and quantity changes are also used to estimate the value of the producer welfare weights in a political preference function.

Political preference functions or governing criterion functions reflect the power and influence of interest groups in obtaining transfers. The function assumes that current policies reflect a political-economic equilibrium. The function is made up of performance measures for each interest group. The weights or 'policy preferences' are seen as the outcome of the political market. The performance measures are typically economic surpluses or income. In its simplest form it is assumed that only two interest groups exist, producers and non-producers, and that their well being can be accurately measured by producer and consumer surpluses, respectively. In the function, the implicit weights placed on producers and consumers surpluses reflect the degree to which those surpluses affect political support. The framework embraces the objectives and decision rules of government and the two interest groups. Policy represents an equilibrium outcome in political-economic markets. In other words, the observed policy is the result of the structural framework or, equivalently, is the outcome of maximising the political preference function. This maximisation problem of government results in political efficiency which invariably does not correspond to economic efficiency.

The economic models used to obtain the estimates of the policy's impact are not shown here. However, full details are available from the author upon request.

7. Results

The main empirical results are presented here for illustrative purposes.

Table 1 outlines the funding available from the Commonwealth government for the Scheme since 1985-86, which was the year after the 'new' mid-1980s version of the Scheme commenced operation. Funding is broken down on an industry basis.

Tables 2 and 3 show the estimated impact of the policy on the output price and quantity. Table 4 shows the reduction in producers economic surpluses. Table 5 shows the reduction in consumers economic surpluses. Table 6 shows the value of the producers welfare weight in the political preference function.

To summarise, the economic impacts of the policy that subsidise credit, and which is embodied in the Rural Adjustment Scheme, are that:

Producers:

- lose from the output price reduction ;
- gain from total quantity produced increasing;
- lose from the reduction in producer surplus ;
- lose from the welfare weighting of their surpluses ; and
- gain from the subsidy.

Consumers / Taxpayers:

- gain from the output price reduction ;
- gain from total quantity produced increasing;
- lose from the reduction in consumer surplus ; and
- lose from the subsidy.

It was found that producers do not unilaterally gain from the provision of adjustment assistance, they are penalised by output price falling and their producer surpluses also falling. Consumers gain from paying a lower output price.

Table 1 Rural Adjustment Scheme Subsidy by Industry ($ million)

	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Wool	10.1	6.7	16.2	17.5	18.1	26.2	58.1
Beef	1.9	2.9	5.2	7.0	7.2	8.4	21.0
Wheat	17.2	7.1	14.8	19.6	13.7	15.5	39.0
Dairy	8.6	3.1	2.5	2.6	4.1	3.4	11.8
Sugar	4.8	1.3	0.0	0.4	0.5	0.8	3.6
Others (a)	20.1	12.8	4.2	6.1	9.7	8.2	23.8
Total	62.7	33.9	42.9	53.2	53.3	62.5	157.3

Note: (a) includes administration costs and welfare assistance

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Sources: Rural Adjustment Scheme Annual Reports (1985-86, 32-38) and (1986-87, 20-29) and written and personal communications with individual state managing authorities of the Scheme. In each state and territory:
New South Wales: Rural Assistance Authority of New South Wales
Victoria: Rural Finance Corporation of Victoria
Queensland: Queensland Industry Development Corporation
South Australia: South Australian Department of Agriculture
Western Australia: Rural Adjustment and Finance Corporation
Tasmania: Tasmanian Development Authority, and
Northern Territory: Department of Primary Industries and Fisheries

Table 2 Total Percentage Change in Price by Industry

	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Wool	- 0.5442	- 0.3110	- 0.7866	- 0.4995	- 0.4936	- 0.7550	- 2.7955
Beef	- 0.1164	- 0.1370	- 0.2223	- 0.2568	- 0.2232	- 0.2952	- 0.6455
Wheat	- 0.8974	- 0.3887	- 0.9186	- 1.5048	- 0.8126	- 0.9578	- 2.6218
Dairy	- 1.0667	- 0.3407	- 0.2811	- 0.2256	- 0.3276	- 0.2803	- 0.9461
Sugar	- 1.1723	- 0.2941	0.0000	- 0.1098	- 0.1263	- 0.1397	- 0.4664

Table 3 Total Percentage Change in Quantity by Industry

	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Wool	0.4354	0.2488	0.6293	0.3996	0.3949	0.6040	2.2364
Beef	0.1164	0.1370	0.2223	0.2568	0.2232	0.2952	0.6455
Wheat	0.7179	0.3109	0.7348	1.2038	0.6500	0.7662	2.0974
Dairy	0.3200	0.1022	0.0843	0.0677	0.0983	0.0841	0.2838
Sugar	0.7034	0.1765	0.0000	0.0659	0.0758	0.0838	0.2798

Table 4 Producer Surplus Changes by Industry ($ million)

	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Wool	- 2.52	- 1.80	- 7.36	- 5.06	- 4.93	- 5.38	- 12.99
Beef	0	- 0.01	- 0.02	- 0.03	- 0.02	- 0.04	- 0.19
Wheat	- 2.92	- 1.18	- 2.23	- 5.27	- 2.72	- 2.29	- 5.93
Dairy	- 11.00	- 4.06	- 3.60	- 3.32	- 5.13	- 4.17	- 16.15
Sugar	- 4.34	- 1.36	0	- 0.67	- 0.89	- 0.84	- 2.21
Total	- 20.78	- 8.41	- 13.21	- 11.31	- 13.69	- 12.72	- 37.47

Table 5 Consumer Surplus Changes by Industry ($ million)

	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Wool	- 1.89	- 1.35	- 5.52	- 3.79	- 3.69	- 4.04	- 9.74
Beef	0	0	- 0.01	- 0.01	- 0.01	- 0.02	- 0.07
Wheat	- 2.92	- 1.18	- 2.23	- 5.27	- 2.72	- 2.29	- 5.93
Dairy	- 14.66	- 5.42	- 4.80	- 4.43	- 6.83	- 5.56	- 21.53
Sugar	- 2.89	- 0.91	0	- 0.45	- 0.59	- 0.56	- 1.47
Total	- 22.36	- 8.86	- 12.56	- 13.95	- 13.84	- 12.47	- 38.47

Table 6 Value of Producers Welfare Weight in Political Preference Function

	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Wool	0.9943	0.9967	0.9917	0.9947	0.9948	0.9921	0.9703
Beef	0.9993	0.9992	0.9988	0.9986	0.9987	0.9983	0.9964
Wheat	0.9856	0.9938	0.9852	0.9757	0.9869	0.9846	0.9575
Dairy	0.9900	0.9968	0.9974	0.9979	0.9969	0.9974	0.9911
Sugar	0.9922	0.9980	1.0000	0.9993	0.9992	0.9991	0.9969

8. Discussion : The Inconsistency of the Results and the Theory

The empirical results tend to refute the public choice view that regulation occurs and continues in response to the benefits that narrowly focused special interest groups receive from regulation. Producers are not the main beneficiaries from the policy. The impacts of the Scheme results in the output price and producer surpluses being reduced. The estimated weights of producers welfare embodied in the political preference function mean that policy makers would appear to favour consumers, rather than producers. However, producers do benefit as they receive the subsidy and they gain as the quantity of output rises. It could have been expected that, if the theory held, the groups that successfully lobby for assistance would receive increases in economic indicators such as, prices, surpluses and the level of subsidy.

The National Farmers Federation (1993, 124), the peak association of Australian farm organisations, supports the provision of adjustment assistance through the Rural Adjustment Scheme. Given that producers appear to lose from the Scheme's provision a relevant question to ask is: Why do producers organisation lobby for the Scheme when they clearly are not net gainers from its provision?

As the individual producer interest groups are silent on the costs of the Scheme to them, it is possibly safe to assume that they do not perceive themselves to be detrimentally affected by the Scheme. Or, alternatively, is it that they believe that they benefit from the Scheme ? It is probably fair to assume that consumers do not perceive any reduction in their surpluses as a result of the policy. Bureaucrats obtain power and control of the Scheme, individual State governments receive money and power as a result of their administration of the Scheme, whilst the Commonwealth government reduces the political heat upon itself by being seen to be 'doing something'. Perhaps these are some of the reasons why the Scheme continues.

Given that the interest group most affected i.e. producers lose, it would appear that the theory does not explain the provision of the Rural Adjustment Scheme. The theory implies that interest groups have perfect knowledge and are only motivated by self interest. If this were true, it is unlikely that an interest group like the National Farmers Federation would continue to support and lobby for the Scheme.

9. Discussion : Income Redistribution

Interest group theory views government as a passive body to be exploited. Sieper (1982) examined the extent of assistance provided to Australian agriculture in terms of the demand and supply for regulation. Examination of seven policy instruments used to deliver assistance led Sieper to propose that the public interest model did not explain their provision. Sieper concluded that the policies were mostly inefficient in achieving their stated goals and in their delivery. However, when examined in the context of the private interest theory, the resultant type of assistance accorded with government having as its primary goal the redistribution of income to producers. The resultant regulation was invariably inefficient and a burden on consumers. The method he used was 'to uncover the market and political conditions that would make the particular form of regulation the one that maximises the benefits to producers in the industry.' (Pincus and Withers, 1983, 54).

Sieper (1982) concluded that if regulation exists then it must be rational for some group and the role of the interest group model is to define the group, and try to estimate by how much they are benefiting from the regulation. Pincus and Withers (1983, 55) criticised the ex-ante approach of the model and claimed validation of the model would be complete if groups could be defined on an ex-post basis. As it presently stands identification of some or any group who stands to benefit, will validate the model, however this may lead to erroneous results being obtained, whereby association is ascribed when in fact it may not be the causal factor.

In this instance, the impacts of the Scheme would tend to counter the argument by Sieper that government attempts to redistribute income to producers. The redistribution of income which occurs does not appear to explain the provision of the Scheme.

In fact, many of the changes to the Scheme evidenced over the past seven years were government responses to perceived ' rural crisis'. This involved outlining the deteriorating economic conditions of farmers in terms of drought or international commodity price falls or internal policy decisions by third party governments (Export Enhancement Program in the United States of America and production subsidies in the European Community) impacting adversely on Australian farmers. The widespread public view in recent years of a 'crisis on the land' has resulted in governments needing to be seen to be 'doing something'. The preferred policy instrument over the past five or so years has increasingly become the Scheme with its efficiency justifications, rather than the other policy instruments like price stabilisation schemes with their mainly equity orientations.

Martin (1990b, 198) stated:

> ' This development (the provision of agricultural adjustment assistance through the Rural Adjustment Scheme) would then be consistent with the public interest model.....Only if the private interest framework is interpreted in a much broader context than is usually the case would it be possible to reconcile this outcome with the private interest model. However at this level of generality, the private interest model loses the ability to explain why the distorting policies were chosen in the first place.'

10. Criticisms of Public Choice Theory

In this section the precursors of public choice theory, the economic theory of regulation and the private interest theory are initially critically examined. Then, the philosophical, theoretical and methodological basis of public choice itself is questioned.

Fels (1981, 40) criticised Stigler's formulation of the economic theory of regulation. The main criticism he made is:

> ' The political basis of Stigler's theory collapses when regulation takes forms other than the conferring of concentrated benefits and the imposing of diffused costs.'

Implicitly, Stigler assumes that regulation operates in the interests of producers. The implication of this criticism is powerful. If it can be shown that regulation resulted not as a result of lobbying by an interest group(s) and results in diffuse not concentrated benefits then the economic theory of regulation does not hold.

Fels (1981, 20) also criticised Stigler's original formulation of factors relevant to the demand and supply of regulation as being rather narrow. Demand by industry for the establishment and, more importantly, the continuation of regulation, is influenced not only by the goal of profit or wealth maximisation, but also by a quest for economic security or protection against the change that an unregulated market may bring. Supply of regulation by politicians is influenced by factors other than the votes or monetary contributions which regulated industries can offer to political parties. Management of the macro economy is an important goal of most governments, yet correspondingly they have little control over the real determinants of success in management, this residing with private economic individuals in a mixed economy. However, government can provide incentives to these agents to increase their economic activity and assist in achieving the goals of government.

Pincus and Winters (1983, 50) make a more general criticism when they state that:

> ' Because of this lack of a good theory of the political process, the private interest theory of regulation is better seen as *a* theory not *the* theory of regulation, and even then, more as " a list of criteria relevant to predicting whether an industry will obtain favourable legislation. It is not a coherent theory yielding unambiguous and therefore testable hypotheses " (Posner, 1974, 349). Thus, although it is an empirically oriented theory, it has not yet yielded clear predictions about the direction of effects of the variables entering the theory......Instead, it tends to be used to demonstrate that some existing regulations have done more harm than good and have benefited certain private interests.'

Martin (1990b, 197) stated that: ' Overall, the private interest model of regulation emerges as a powerful but incomplete model of policy choice.'

Martin (1990b, 198) continued:

> ' It seems difficult to interpret the development of these ideas on policy (structural adjustment) as being due to the private interest model, except perhaps through the private career interests of academics and public servants who contribute to the debate.'

Quiggin (1987a, 12) provides an insightful and demanding critique of public choice theory. In discussing the theory he said:

> ' Like other caricatures, these models present certain recognisable features, exaggerated out of all proportion. The results of public choice theory thus have some immediate appeal, especially to neoclassical economists, but do not stand up to empirical scrutiny.'

Mueller (1979, 7), one of the leading public choice theorists and proponents, made one of the most telling criticisms of the theory when he said:

> '...that public choice models seem but a naive caricature of political behaviour to political analysts not already committed to the postulate of egoistic rationality.'

The simplistic model of human behaviour in the theory is an economic view of the political behaviour of individuals, which may or may not reflect reality.

Self (1990) criticised the assumption of the theory that the political behaviour of individuals is motivated by the same self-interest maximising postulate that is applied to the economic individual. The stylised behaviour of the public choice economic man is a close function of the restrictive assumptions that neo-classical economics makes about them being rational and self-interested. However, Self (1990, 29-30) argues that the 'unnatural man' of economics does not necessarily exhibit the same motivating forces when they operate in the political market.

> ' Politics occupies a different institutional terrain and social relationships from (economics)..........Politics involves multiple and often contradictory goals which cannot be effectively reconciled and "traded off" even in one individual's mind, let alone expressed in some common measuring rod like money. Politics involves emotional preferences (frequently irrational ones in terms of rational egoism) as well as highly uncertain and speculative outcomes. Politics necessarily involves the individual subsuming her own private interest within some view of group interest, whether that group be an occupation or profession, an ethnic group, a socio-economic class, the nation, or some still broader reference group such as humanity. Dogmatic politics involves the attempted imposition of some single interest group interest ; democratic politics revolves around the unceasing adjustments of differing group interests (including the nation as a reference group); and, of course, the nature of group interest is always contestable.'

Another source of difficulty for the theory is in the relationship between interest groups and government. The theory postulates that government is a mere supplier of regulation and interest groups exert pressure through lobbying etc. to obtain the policies they desire. However, Quiggin (1987b, 2) believes that:

> '...the lobbying efforts of interest groups are much less important than the independent power they represent. Governments at both State and Commonwealth levels are forced to make concessions to certain interest groups, not because of the political or monetary assistance they can provide or withhold but because they have it in their power to promote or frustrate the achievement of the government's objectives.....Government is implicitly assumed to be all-powerful and interest groups exert pressure through lobbying, political donations etc. to secure the policies they desire.'

According to Quiggin (1987b, 1) public choice discussions of interest groups focus on attempting to ' explain and predict political processes using models centred on the notion of interest groups'. The assumption of egoistic rationality or self interest in man's political behaviour in public choice theory, results in ' attempting to explain political outcomes by the relative strength of the interest groups involved, which in turn is determined by factors affecting the cost of organising such groups.'

Quiggin (1987b, 2) went on to say that:

> '...the predictive and explanatory power of the interest group model has been grossly overstated by many of its proponents........Anderson (1980) argued that his results support the interest group approach, I believe that they are more consistent with the hypothesis that tariff policies are in fact motivated by their proclaimed objective of protecting jobs.'

Another source of criticism of the theory is the existence and occurrence of deregulation. The theory has failed to predict the phenomenon of deregulation that has occurred during the 1980s and continued on to the present. Given the central place interest groups play in the theory, the existence of an interest group, like economic rationalists, who have as their aim not a goal of redistribution of income toward themselves but a reduction in the total size of government and therefore the amount of transfers that occurs as a result of government, is an embarrassment for the theory. The theory is not very good at predicting broad political outcomes like the push for deregulation.

The recent history of deregulation raises the highly significant theoretical question : How can well organised, usually small, interest groups lose the benefits of regulation to diffuse, usually unmotivated, larger, interest groups, usually represented by the general public ? It would be necessary to examine each industry in which deregulation has occurred to specify the conditions and processes by which this occurred.

It has been argued here that the provision of the Scheme does not result from the rewards the producer interest group receives, but rather, is more consistent with the proclaimed efficiency goals of the policy and can therefore be explained in terms of the public interest model.

Summary

The main implication of the empirical results is that the interest group model of public choice theory does not seem to explain the provision of agricultural adjustment assistance. The results do not correspond to previous studies which hypothesised that intensive, geographically concentrated, small, declining agricultural industries would obtain a disproportionally larger level of assistance over time. Alternative explanations were canvassed which included a literature review. Finally, extensive criticisms of the private interest model and public choice theory were made.

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