

CONSISTENCY IN INDUSTRY ASSISTANCE POLICY EVALUATION:
A CASE STUDY OF THE BUREAU OF AGRICULTURAL ECONOMICS

BY

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DECLARATION

Except where otherwise indicated, this dissertation is my own work.

A handwritten signature in cursive script that reads "Bernard Wonder". The signature is written in dark ink and is centered on the page.

(BERNARD S. WONDER)

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ABSTRACT

The main concern of this study is consistency in industry assistance policy evaluation. A survey of the literature suggests two alternatives for defining consistency but the one adopted in this study is the absence of incompatible propositions.

While attention is focussed on consistency in the policy evaluation arguments contained in BAE submissions to the IAC and related reports over the period 1974-83, the issues raised in the study are judged to be of wider applicability. In particular, it is argued that the degree of consistency in policy evaluation has implications for both equity in the 'rules of the game' governing the provision of industry assistance and the level of uncertainty in assistance and related producer and consumer markets. Inspection of the literature suggests that any increase in the level of uncertainty due to variations in the principles adopted for policy evaluation could affect the behaviour of the household and the firm.

Because the BAE has been identified as a major participant in rural industry inquiries conducted by the IAC it is important to scrutinise the policy evaluation criteria considered and applied in its submissions and related reports. To this end a review of the economic arguments perceived by the Bureau to be relevant to assessments of industry assistance is presented in Part 2 of the study. It deals with short-term assistance, longer term assistance for rural outputs and assistance for the use of inputs and structural adjustment.

From the review of Part 2, a list of economic arguments relevant to rural industry assistance is compiled in Part 3. The list covers a range of topics including criteria for short term industry assistance, tariff compensation, resource mobility, price instability, market imperfections, structural adjustment and welfare assistance.

The Bureau's use of industry assistance arguments is examined from two perspectives. First, an attempt is made to identify those occasions where the economic circumstances of industries under inquiry

are similar. This information is then employed for the purpose of locating those submissions where it may have been appropriate to raise particular economic arguments, given their consideration in other submissions under similar economic circumstances. Second, the Bureau's application of industry assistance arguments are discussed with a view to identifying any differences in attitude towards their validity.

The main results of the analysis are that the Bureau may have contributed to the level of uncertainty surrounding the eligibility conditions for rural industry assistance and may not have always employed a consistent policy evaluation framework in its rural industry submissions to the IAC and related reports. However, it is necessary to exercise caution in the use of these results as they are derived from a study which focusses attention on the Bureau's negative contribution to consistency. Also, it is not appropriate to use the results as a measure of the Bureau's contribution to rural industry assistance policy evaluation. Nevertheless, the inconsistencies discussed in this study do emphasise the substantial benefits that may be associated with careful co-ordination and regular stock-taking of the grounds for industry assistance.

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LIST OF ABBREVIATIONS

AAC:	Australian Agricultural Council
ACFC:	Australian Canned Fruits Corporation
AWB:	Australian Wheat Board
BAE:	Bureau of Agricultural Economics
CPD (H of R):	Commonwealth Parliamentary Debates (House of Representatives)
CSIRO:	Commonwealth Scientific Industrial Research Organisation
DPI:	Department of Primary Industry
ESC:	Export Sugar Committee
FISCC:	Fruit Industry Sugar Concession Committee
IAC:	Industries Assistance Commission
NFF:	National Farmers Federation
RAS:	Rural Adjustment Scheme
SCA:	Standing Committee on Agriculture
SCIA:	Standing Committee on Industry Assistance
TAA:	Temporary Assistance Authority

PART 1

THE SIGNIFICANCE OF CONSISTENCY IN POLICY EVALUATION AND
RECOMMENDATIONS

CHAPTER 1

INTRODUCTION

1.1 Background

In Australia and overseas there has been considerable work on the nature and adequacy of the policy making process (see, for example, Lindblom, 1968; Loveday, 1982; Emy, 1976 and Edwards III, 1980). Particular attention has been focussed in Australia on the development of industry assistance policy, especially the public inquiry process and the institutions involved in that process. Two recent Australian studies are those by Warhurst (1982) and Edwards (1980). Warhurst examines the provision and competition for industry assistance with particular reference to the role of the Industries Assistance Commission (IAC). Edwards also focusses on the IAC but his concern is more with the reasoning behind IAC agricultural policy recommendations than with the impact of various interested parties on industry assistance decisions.

The purposes of an industry assistance public inquiry process have been documented by IAC (1980, p.1). According to the Commission it:

'...provides the means by which the views of all interested parties (producers, trade unions, importers, retailers, consumers etc) can be taken into account and exposed to public scrutiny. The public inquiry process provides an opportunity for participants to comment on the submissions of other interested parties and also places a discipline on the Commission in that its analysis and views are subject to the same critical public scrutiny'.

Furthermore, Mauldon (1975) discusses four criteria which he believes can be used to identify an effective public inquiry process and are characteristic features of the IAC. These include independence, impartiality, public scrutiny and consistency. While Mauldon discusses these criteria in the context of the activities of the IAC it is clear that they are relevant to any advisory body involved with the public inquiry process.

In this study attention is focussed on consistency in policy evaluation. The report is based on a case study of the Bureau of Agricultural Economics (BAE), a research unit located within the Commonwealth Department of Primary Industry (DPI) and the author's employer. The main data sources for the study are the published submissions by the BAE to IAC inquiries on rural industry assistance and related BAE publications.

The reasons why the author has chosen to focus on consistency in policy evaluation in the BAE are outlined in the following chapter of Part 1. In summary, however, the methodology and issues considered in this study are judged to be of wider applicability than just policy evaluation in the BAE and of interest to all those involved in policy evaluation, regardless of the sector or industry under study.

1.2 Outline of Study

The study is presented in three Parts. The remainder of Part 1 (Chapter 2) is concerned with summarising the role of the BAE in the public inquiry process and examining the concept of consistency as it relates to the subject matter of this report. In addition, some hypotheses to be considered further in Part 3 of the study are outlined towards the end of Chapter 2.

In Part 2 of the report, policy evaluation criteria used by the BAE in its submissions to IAC inquiries into rural industry assistance and related reports are discussed. Part 2 consists of Chapters 3, 4 and 5. Each chapter is concerned with identifying the major economic arguments put forward by the BAE in selected categories of IAC rural references. Thus, Chapters 3 and 4 examine respectively BAE submissions to IAC inquiries into short-term assistance and longer term assistance for outputs of rural industries. Chapter 5 considers those submissions concerned with rural inputs and structural adjustment in the farm sector.

Identification and assessment of any inconsistencies contained in BAE submissions to IAC inquiries and related reports are undertaken in Part 3 of the study. In Chapter 6 inconsistencies in the industry assistance arguments considered and applied by the Bureau in

its submissions and related reports are evaluated. Also in Chapter 6 is a discussion of these results with respect to the hypotheses outlined in Chapter 2. Finally, in Chapter 7, a summary and concluding remarks are presented.

CHAPTER 2

CONSISTENCY AND THE POLICY MAKING PROCESS

2.1 BAE and the Public Inquiry Process

The BAE was established in 1945 as a distinct and independent research unit within the Ministry of Post-War Reconstruction. Since its establishment the Bureau has been transferred between a number of Departments and today is the research unit of the Commonwealth DPI.

A detailed statement of the role and functions of the Bureau is presented in BAE (1980a). For the purposes of this study it is appropriate to outline broadly the two main activities of the Bureau and then focus on the strategic importance of the BAE in inquiries into assistance to rural industries.

In the Bureau's submission to the Royal Commission on Australian Government Administration reference is made to the functions of the organisation as perceived by the Minister for Commerce and Agriculture, Mr McEwen in 1950.

'The Bureau was established as an independent and authoritative body to conduct continuous research into rural economic problems, to advise Commonwealth Departments and other organisations of financial and economic aspects of land use and agricultural policies and to provide primary producers with competent and impartial interpretations of the economic matters affecting their activities'. (BAE 1975a, pp 1-2).

These two aspects of the Bureau's activities (ie. research, including the identification and evaluation of policy options, to provide a sound, factual basis for Government policy making and the provision of information to assist rural producers with their production and marketing decisions) remain the basic functions of the BAE. In executing these functions, Ministers responsible for the Bureau have noted that the BAE is an independent agency (within DPI) and it should publish and disseminate its work as widely as possible (BAE 1980a, pp 2-3).

In recent years the Bureau's submissions to IAC inquiries into rural industry assistance have been a major component of its policy research activities. While not making contributions to all IAC rural references, the Bureau has pursued a policy of orienting its work program such that it is in a position to make submissions to those inquiries where it has specialised industry data and research skills. An indication of the frequency of IAC rural references is given in Table 2.1 which lists the annual number of IAC reports concerning agriculture.

Table 2.1: Number of IAC Reports Concerning Agriculture

YEAR	NUMBER
1974-75	7
1975-76	13
1976-77	6
1977-78	4
1978-79	3
1979-80	2
1980-81	2
1981-82	5

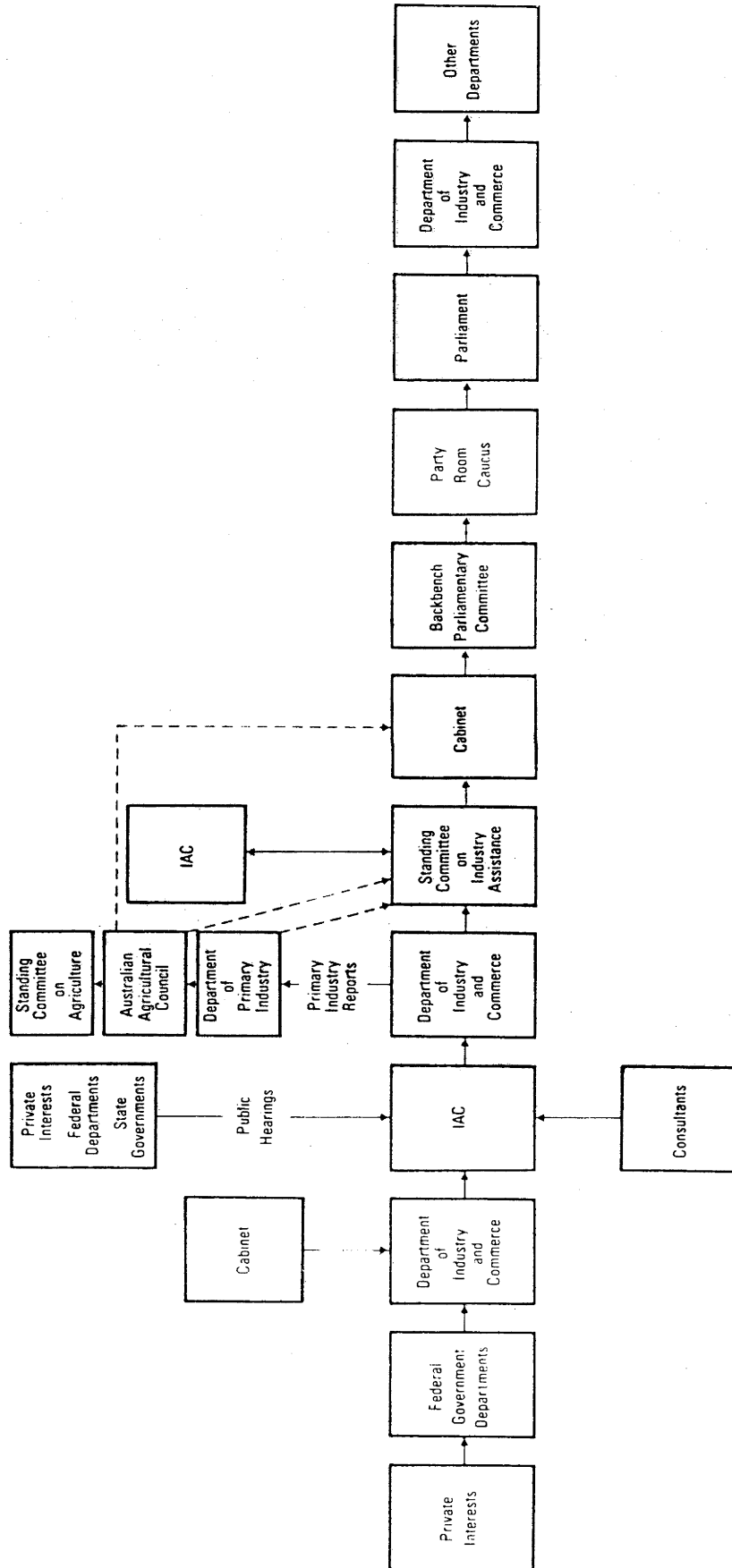
Source: IAC (1983)

The importance of the BAE in the industry assistance inquiry process has been summarised by Warhurst (1982, p. 148). Warhurst notes that:

'Within the department was the BAE which conducted continuous economic research into the rural sector. BAE was an agency of the highest status within both the academic and rural community. It was perhaps the closest equivalent, in research capacity, size and general orientation of its staff, to the IAC within the federal public service...BAE research was crucial to a successful IAC inquiry into primary industry. Its evidence was the starting point for many investigations, and its research program was adjusted in a number of cases to meet the IAC's needs'.

A better understanding of the industry assistance process and where the BAE fits into this process can be obtained from inspection of Figure 2.1. The inquiry process commences with a reference to the IAC from the responsible Minister (presently the Minister for Industry and Commerce). The reference could originate from a number of sources including: (a) a request from an industry Minister (sometimes

Figure 2.1: The Industry Assistance Policy Making Process



following from private sector interests); (b) a decision by the government to have an inquiry; and (c) a mandatory reference to the IAC following the granting of temporary assistance by the Temporary Assistance Authority. (TAA)⁽¹⁾

After a reference is received by the IAC interested parties are notified and submissions for a public inquiry are received (under oath or affirmation in a public hearing).

Since 1976 the IAC has published a draft report before further hearings are held and a final report is prepared for submission to the responsible Minister. Between the delivery of the report to the responsible Minister and the final government decision the process is not public. Government policy is formulated following formal advice from the Standing Committee on Industry Assistance (SCIA) and informal lobbying by state and federal departments and interest groups. SCIA may choose to refer back to the IAC for clarification of its arguments.

In regard to rural references the Australian Agricultural Council (AAC) has become increasingly involved in the industry assistance inquiry and policy processes. Following the surge in IAC reports on primary industry in the latter half of 1975 (see Table 2.1), the AAC resolved at its January 1976 meeting to be '...more closely involved with the decision making processes arising from references to the IAC of direct concern to agriculture' (Resolutions of the AAC, 95/8, 31 Jan. 1976, p.12). Subsequently, both the AAC and Standing Committee on Agriculture (SCA) considered IAC reports in some detail and were given the opportunity to convey their views directly to Cabinet through the Minister and indirectly through the inter-departmental committee.

Further inspection of Figure 2.1 suggests that the BAE could be involved at three stages of the industry assistance, policy making process. First, the BAE might advise its Minister (ie. for the DPI) to request a reference on some aspect of rural industry assistance. Second, the Bureau could prepare evidence for and attend public hearings on primary industry assistance. Third, the BAE could participate at SCIA meetings along with representatives elsewhere in the DPI. Of course, the second and third possibilities are closely related as the BAE would usually have a document available, from its evidence submitted to public hearings, on which to base its SCIA representation.

Through any or all of the above channels the BAE may have some impact upon the ultimate decisions of the Government on matters of rural industry assistance. Of course, the Bureau could also use the second channel for the purpose of presenting evidence to IAC on how assistance to non-rural sectors and industries of the economy affect the farm sector and rural enterprises. However, the author is aware of only one occasion where the Bureau has exploited this option (see BAE 1982a).

From the above discussion it is clear that the Bureau is in a position to exert some influence on policy outcomes. Its direct impact on the recommendations of IAC reports will vary with respect to the relevance and persuasiveness of its arguments as perceived by presiding Commissioners. Ultimately, of course, it is the government's ministers who will decide upon the fate of the IAC report itself.

2.2 What Does Consistent Policy Evaluation Mean?

For any organisation involved in public inquiries, the question arises as to whether or not it is appropriate to apply the same set of decision criteria over time or across a number of problems at a point in time. In the case of industry assistance inquiries this question manifests itself in a form whereby those making submissions to the inquiry process (such as the BAE) and those preparing reports for government (such as the IAC) must decide whether there is a framework which can serve as a model applicable to all analyses of industry assistance. Of course, many organisations are aware of this issue and have recorded their sensitivity to questions of consistency. For example, a previous chairman of the IAC (McKinnon 1982, p.1) has stated that:

'Thus, in considering assistance to agricultural industries, the Commission applies criteria applicable to all industries'.

Hence, the IAC certainly displays some concern for applying a single framework to all questions of industry assistance which come before it and offers the reader a definition of what might be labelled consistency in policy evaluation. Of course, it is an empirical

question as to whether or not the IAC achieves consistency in its reports (see Edwards 1980). Moreover, there is the further question concerning why consistency in policy evaluation might be important. It is this latter question which is addressed in the following sub-section. Before doing so, however, two definitions of consistency, as they relate to policy evaluation, are discussed.

Formally, consistency in policy evaluation and policy decisions has received little attention. A review of the literature identifies only two studies which are concerned directly with defining and drawing out the implications of an inconsistent policy framework.

The first of these studies is Lindblom's (1965) work on decision making through mutual adjustment. Lindblom (1965, p. 193) defines consistency amongst policy decisions as the presence of Pareto optimality. That is, a set of decisions is consistent if there is no way to alter any particular decision(s) in such a way as to benefit at least one person and harm no one.

In defining consistency in this manner, Lindblom has a particular use of the concept in mind. Lindblom is concerned with the advantages and disadvantages of alternate decision making procedures and wishes to compare them on the basis of several criteria, amongst which is included consistency. In particular, Lindblom's work addresses the issue of whether or not there are appealing reasons to believe that policy co-ordination across people who lack a common purpose is more satisfactory than policy co-ordination via more centralised methods of decision making. Lindblom concludes that, contrary to what many others suggest, there must be considerable doubt about the validity of claims made for central co-ordination as a rational basis for decision making.

Kaufmann (1944) provides a second definition of consistency based on the principle of contradiction. A consistent system is defined by Kaufmann (1944, p.62) as one which satisfies the following conditions:

1. 'Simultaneous acceptance of incompatible propositions must not be permitted.
2. Simultaneously, with the admission of a proposition into a science, the elimination of all propositions incompatible with it must be prescribed'.

In this study attention is focussed on consistency in the sense defined by Kaufmann. This choice is not meant to suggest that pursuit of consistency as discussed by Lindblom may not in itself be a worthy objective. Rather, it is beyond the scope of this study to attempt to establish a comprehensive policy evaluation framework that can be described as satisfying unambiguously all the requirements of Pareto-optimal or related welfare criteria⁽²⁾. Instead, emphasis is placed here on highlighting and discussing in detail any major contradictions identified in BAE submissions to IAC inquiries and related reports. Such a study may also be relevant to those readers interested in consistency, as discussed by Lindblom, as it is likely to identify alternative policy evaluation principles that might be considered in development of a welfare oriented framework for analysis of industry assistance problems.

2.3 Implications of Inconsistent Policy Evaluation

The identification of inconsistencies, as defined by Kaufmann, in policy evaluation principles and policies themselves is not to be regarded as an end in its own right. Such a study is only of use if the identification of inconsistencies can be used as a means to pursue some other objective(s). In the following sub-sections, two major implications of inconsistent policies and policy evaluation principles are discussed. The first, 'Inconsistency and Rules of the Game' discussed in sub-section 2.3.1, concerns the doctrine that all entities in an economy should be governed by the same set of rules relating to provision of industry assistance. The second, 'Inconsistency, Uncertainty and Credibility' examined in sub-section 2.3.2, suggests that inconsistency in policy evaluation may have two possible effects. First, it could lead to increased uncertainty in the rules governing the provision of industry assistance and thereby affect the levels of output, production and consumption in the economy. Second, inconsistent policy evaluation at any point of the public inquiry process might reduce the credibility of policy advice at subsequent stages of the public inquiry and industry assistance decision processes.

2.3.1 Inconsistency and Rules of the Game

Concern about the use of a uniform set of rules for all industries seeking government assistance has emanated from many sources including Prime Minister Whitlam prior to the establishment of the IAC. Whitlam criticised the field of industry assistance inherited by his Government as being '...a complex, confusing and inconsistent collection of measures which discriminated between individual industries - particularly as between primary and secondary sectors of the economy...', and promised to rectify the situation '...in the interest of fair dealing and open dealing...' (Commonwealth Parliamentary Debates (House of Representatives) (85, 27 September 1973, 1632-33)).

As mentioned previously, the IAC has argued that its general approach is to adopt a consistent approach to questions of assistance. Examples of the IAC's efforts to achieve uniformity in the rules governing industry assistance are provided in its 1975-76 Annual Report (IAC 1976) and its second Discussion Paper on Approaches to General Reductions in Protection (IAC 1981a). Thus, in the latter publication where temporary assistance criteria are discussed, it is stated (IAC, 1981a, p. 17) that:

'To minimise inconsistencies that can arise in the treatment of individual industries, both advisory bodies (IAC and TAA) have attempted to formalise a set of criteria to be considered when deciding whether or not to recommend temporary assistance'.

Similarly, in IAC (1976), it is argued that there was a need to review the existing approach to granting temporary assistance and to develop criteria applicable to all industries. Such a list of criteria is discussed further in section 3.1.

In taking this stance the IAC appears to be concerned primarily with an objective of equity in the conditions which determine the provision of assistance. This point should not be confused with the fact that the efficiency-oriented framework of the Commission seeks to maximise the social return to the use of the community's resources. It is the application of the efficiency framework to all producer and consumer interests rather than the framework itself which is argued to be concerned with the equity objective.

The view that the IAC's concern with consistency is related to equity is supported by Mauldon's (1975, p. 73) argument that:

'Extending a single advisory process to all sectors is of profound significance for agricultural policy, since it places all industries on an equal footing with regard to assistance policy. The Commission's policy guidelines contain no special cases. The exporter, the producer of foodstuffs, and the self-employed have no more nor less claim to public support than the provider of services or the multinational corporation.'

Mauldon also notes that the application of a single industry assistance advisory process has not been unchallenged in the past. He refers (1975, pp. 73-4) to the Tariff Board act which '...permitted matters of assistance to primary industries to be referred to the Board, but as a general rule they are not'. Also '...some authoritative proposals have been made for a separate advisory system for the rural or mining sectors'.

Crawford (1973) also emphasised aspects of equity in the IAC's activities. Through its independence, Crawford (1973, p. 3) argues that the Commission can '...provide disinterested advice in an area of government activity which will always be subjected to conflicting pressures from special interest groups within the community'. Thus, the independence of the Commission enables it to apply the same set of rules for provision of industry assistance to all industries, regardless of their particular characteristics.

2.3.2 Inconsistency, Uncertainty and Credibility

The economic environment surrounding decision makers throughout the economy has been modified significantly by governments attempting to promote economic, political and social objectives. For example, governments have policies relating to employment, price stability, resource conservation, income distribution and risk reduction to name a few areas of involvement. In the area of rural policy, particular attention has been placed on measures which benefit farmers via: (a) rural outputs (eg. discriminatory domestic pricing arrangements for several rural products, export incentives and inspection schemes and production bounties); (b) value adding factors (eg. rural adjustment assistance, agricultural research, concessional credit and income taxation concessions) and (c) rural inputs (eg. disease control, fertiliser subsidies and sales tax concessions on inputs) ⁽³⁾.

The review of industry assistance arrangements requires the IAC and other organisations involved in the public inquiry process to consider the arguments relevant to the provision of assistance. The Industries Assistance Commission Act, 1973 provides guidelines to the IAC and other interested parties as to what governments might be trying to achieve in the industry assistance arena. These guidelines draw attention to governments' desires to improve and promote the well being of the community. More specifically, IAC (see McKinnon 1982, p. 1) regards the guidelines as requiring the development of assistance policies which: '...achieve sustained growth through balanced industry development, improve the efficiency of resource use, facilitate adjustment to change while having due regard to the capacity of the economy to sustain change, recognise the interest of consumers and ensure consistency between industry assistance and other policies and with national economic policy as a whole.'

By using its efficiency framework for all inquiries into industry assistance the IAC addresses an important economic function other than the well documented linkage between resource use efficiency and the general welfare of the community. This function relates to the removal of uncertainty about the rules which govern provision of industry assistance. For if the IAC was to employ and apply a range of industry assistance criteria in its inquiries there would be considerable uncertainty in the economy—about how the IAC would go about assessing assistance arrangements. Moreover, a variety of policy evaluation criteria could well lead to the emergence of substantial inconsistencies in industry assistance policy.

The relevance of the industry assistance guidelines contained in the Act extend beyond the IAC to all parties interested in convincing the Commission of the weight of their respective arguments. However, those making submissions to the IAC are, of course, free to submit whatever evidence they regard as relevant to the outcome of an industry assistance inquiry. This evidence may not necessarily coincide with the guidelines adopted by the IAC. Furthermore, in the case of those agencies which make submissions to a number of rural inquiries over a period of time (eg. BAE, National Farmers Federation (NFF) and the various state industry interest groups), the evidence may contain inconsistencies in the arguments considered and applied to a series of industry assistance problems.

While the occurrence of inconsistencies over a period of time might affect, in the eyes of the IAC, the credibility of a witness's evidence, such a reaction is not pursued any further in this study. Rather, it is assumed for the purpose of this analysis that any inconsistencies in BAE submissions, either internally or with the framework employed by the IAC, are fully reflected in the policy criteria and recommendations of the IAC.

If there are inconsistencies present in the submissions of the BAE to IAC rural inquiries and these are reflected in the recommendations of the IAC and the policy decisions of governments then it follows that the BAE could be identified as an agency contributing to inconsistencies in industry assistance policy. It can be expected that any inconsistencies in policy recommendations of the IAC and policy decisions of governments could introduce uncertainty into the market for assistance and related producer and consumer markets. That is, any contradictions in industry assistance recommendations and decisions which arise from the public inquiry and policy making processes over time can be expected to add to the uncertainty surrounding eligibility criteria for assistance.

In the past, governments have expressed concern about uncertainty associated with public inquiries into industry assistance. For example, in September 1978, the Minister wrote to the Chairman of the IAC advising him that reporting dates would be written into all future references so '...that uncertainty should be reduced as much as possible to facilitate planning and investment decisions' (IAC, 1979, p. 50). It is of interest to observe the intention of governments to minimise uncertainty in a public inquiry process that is often dealing with policy devices to reduce uncertainty elsewhere in the market place.

The concern of governments with uncertainty in the industry-assistance process is well founded in the theoretical economic literature. It is worth noting the key results in this literature as uncertainty about the rules governing the provision of industry assistance is likely to have real effects on investment, consumption and output similar to other sources of uncertainty such as

variability in international prices. This is because uncertainty in the rules determining the provision of industry assistance often relates to variables which have been the subject of economic analysis under uncertainty such as output and input prices, income, the size of a domestic or import quota, the magnitude of an investment concession and so on.

The presence of uncertainty in the assistance or any other market can be thought of as a lack of knowledge as to what values relevant parameters in that market are going to assume in future periods. Knight (1933) has distinguished between different forms of imperfect knowledge on the basis of whether or not it is possible to attach probabilities to various possible states of the world. Knight refers to circumstances where it is possible to assign probabilities to alternative states of the world as risk and situations where probability assignment is not possible as pure uncertainty.

Following Knight's classification it is unclear as to whether imperfect knowledge of the criteria for industry assistance (due to changes in the criteria rather than prohibitive costs of acquiring information on what the criteria are at any point in time) should be classified as a risky or uncertain situation. It may be that some individuals feel capable of assigning probabilities to what the rules for industry assistance might be in future periods but this is unlikely to be true for all those affected by assistance policy decisions of governments. Such a description of individuals' abilities to assign probabilities is undoubtedly true of many situations where there is lack of certainty.

While recognising the usefulness of Knight's work, economists have, almost without exception, studied economic behaviour under incomplete knowledge on the basis of a world of risk rather than a world of uncertainty. Accordingly, the documentation of the effects of uncertainty on the household, the firm and the economy presented below is one where the term uncertainty is meant to be read as risk as defined by Knight.

In regard to the effects of uncertainty on the behaviour of the household there has been a wide range of work on consumption-saving decisions, consumer search models, labour search models and the decision to supply labour. The point that uncertainty in the economic environment may have real effects on the household is well illustrated by Sandmo's (1970) two period model of the consumption-saving decision. Sandmo examines the impact of income uncertainty on the consumption-saving decision and finds that the presence of decreasing temporal risk aversion is a sufficient condition for increased uncertainty about future income to lower consumption (or alternatively, increase saving) in the present period. Mirman (1971) reaches a similar conclusion for the case where there is rate of return uncertainty.

Concerning the behaviour of the firm it is possible to study the impact of uncertainty by introducing randomness in output or input prices or the production function itself into the conventional certainty model. In the case of an uncertain output price, Hey (1979) demonstrates that output for the risk-averse firm is less than output under certainty. Immediate corollaries are that for the risk-neutral firm output is the same under uncertainty as is the case under certainty, while for the risk preferring firm, output is greater under uncertainty. It is significant to note that in the Australian rural sector there is evidence to suggest that while there is a wide range of risk attitudes amongst farmers, the largest group is the risk-aversers (see Bond and Wonder 1980). In the case of the monopolistic firm Leland (1972) concludes that the effect of uncertainty in product prices on output is that the risk-averse firm would produce less than it would under certainty.⁽⁴⁾

There has also been substantial work on the theory of factor demand under uncertainty. As a generalisation Hey (1979, p. 158) concludes that '...there do appear to be grounds for suggesting that the presence of uncertainty (with risk averse firms) leads generally to a reduction in factor demand'. More detailed analysis is contained in Hartman (1976) in the case of the perfectly competitive firm and Holthausen (1976) in the case of the monopolist.

The task of putting together the theories of the household and the firm under uncertainty to obtain a market model under uncertainty

has been attempted by numerous authors. The work includes that of Diamond (1971) and Fisher (1970) on price adjustment models, Eaton and Watts (1977) and Lucas and Prescott (1974) on wage-adjustment models and Grandmont (1977), Debreu (1959) and Rothenberg and Smith (1971) on general equilibrium models. In general, the task of developing market models under uncertainty has proved to be fraught with difficulty because of the interdependence of buyers and sellers behaviour in an uncertain world. Nevertheless, it is useful to refer to the work of Rothenberg and Smith who consider a small open economy producing two goods (whose prices are determined exogenously) from two factors, capital and labour. While finding it difficult to obtain general results on the effects of uncertainty on resource allocation, Rothenberg and Smith do demonstrate the interesting result that in the presence of an uncertain labour supply, national income is lowered relative to the case of labour supply certainty.

In regard to empirical studies of the effects of uncertainty on the household, the firm and the market, two examples serve to illustrate the point that policies which result in the introduction of uncertainty may have real effects. While neither of them address the impact of uncertainty in the criteria for provision of rural industry assistance (a subject yet to be investigated), they are both concerned with the real effects of uncertainty introduced by government action.

The first study is that conducted by Anderson (1983) on the effects of uncertainty in the rules relating to foreign investment. Anderson compared the impact on foreign investment of the guidelines administered by the Canadian Foreign Investment Review Agency and the Australian Foreign Investment Review Board. The key result emerging from Anderson's study was that the uncertain nature of Canadian foreign investment guidelines had depressed foreign investment in Canada relative to Australia where the guidelines are characterised by less uncertainty.

The second study of interest is Friedman's (1982) work on the effects of the US Federal Reserve monetary policy on interest rate volatility and the US capital raising mechanism. Friedman argues that the Federal Reserve's strategy of pursuing a tighter monetary policy may well have led to a substantial increase in volatility of US interest rates and ultimately the impairment of the market mechanism for raising long term capital. It is found that in the presence of increased interest rate volatility, the non-financial sector relies less on long-term debt than would have been the case with a more stable interest rate structure. The major consequence of uncertainty in the credit market may well be reduced capital formation.

2.4 Hypotheses

Having examined the concept of consistency and discussed the implications of inconsistent policy evaluation for the 'rules' governing the provision of industry assistance and resource allocation it is appropriate to outline the principal hypotheses to be considered in Part 3 of this report. Two hypotheses which relate to the contribution of the BAE to the industry assistance inquiry and policy making processes are:

- (1) BAE does not contribute to any inconsistency and uncertainty which might characterise the policy evaluation principles and policies relating to rural industry assistance; and
- (2) BAE does not discriminate between rural industries in its application of policy evaluation procedures.

It is clear that acceptance or rejection of either of the abovementioned hypotheses implies the simultaneous acceptance or rejection of the other. This is because in both cases acceptance or rejection depends on the detection of inconsistencies in the submissions of BAE to rural industry assistance inquiries and related reports. It follows that the procedure which might be implemented in the event of finding major inconsistencies in the policy arguments of the Bureau is the same regardless of which hypothesis is being considered. That procedure is the one outlined by Kaufmann and

discussed in subsection 2.1 of this Chapter. Following Kaufmann, acceptance of the hypotheses would require the identification of the sources of inconsistency and adoption of non-contradictory arguments. The analysis presented in Part 3 of this study goes some way towards achieving this objective.

A final point worth noting is that caution must be exercised in relation to any claims of inconsistency in the BAE. While this study is based on the view that there may be considerable benefits to be derived from a consistent policy evaluation framework, it does not necessarily follow that any inconsistencies identified in BAE submissions to IAC inquiries and related reports are due to errors made by BAE. As in the case in other sciences, the methodology employed in economics in general and BAE in particular changes to some extent due to progress and uncertainty in the discipline itself. Consequently, it is likely that at least some percentage of any identified inconsistencies in BAE reports would also be found elsewhere in the contemporary economic literature.

PART 2

A REVIEW OF POLICY EVALUATION ARGUMENTS IN BAE

SUBMISSIONS TO THE IAC AND RELATED REPORTS

In Part 2 BAE submissions to rural industry assistance inquiries conducted by the IAC are reviewed. Particular emphasis is placed on identification of the major economic arguments that were seen by the Bureau to be relevant to the provision or reduction of industry assistance over the period 1974-83. In addition, some effort is also made to compare and contrast these arguments in preparation for the more detailed analysis of consistency presented in Part 3.

Because of the fact that some thirty submissions and related publications are reviewed in this Part, the discussion of these reports is presented in three chapters, each of which deals with a particular type or category of assistance. To some extent this classification is arbitrary as several economic arguments relevant to the industry assistance debate can be found in at least one of the following three chapters. Nevertheless, the presentation does serve to organise the discussion into a form which readers may find convenient. In Chapter 3 submissions to inquiries on short-term assistance are examined. Following this, in Chapter 4, is a review of BAE submissions to IAC inquiries and related reports concerned with longer term assistance for rural outputs. Finally, in Chapter 5, the Bureau's submissions on rural inputs and structural adjustment are examined. In all three chapters the amount of detail on assistance afforded rural activities is necessarily limited. However, readers interested in an outline of assistance arrangements governing rural industries are referred to Appendix 1.

CHAPTER 3

SHORT-TERM ASSISTANCE

3.1 Background

When the long term viability of an industry is threatened by a temporary downturn in economic conditions the IAC or the TAA may be required to inquire and report on the question of short term assistance. Because the matter is usually considered urgent, the time permitted for a temporary assistance reference is typically short - 45 to 90 days in the case of references sent to the IAC.

In order to minimise inconsistencies that might arise in the treatment of industries seeking short-term assistance, the IAC, in its 1975-76 Annual Report (IAC 1976, p. 15), outlined several criteria which it considered basic to the question of short-term industry assistance. These are:

- . 'Industries in all sectors should have access to temporary assistance on the basis of public inquiry and common criteria, machinery and procedures. There should be no limitation on the form of temporary assistance; (i)
- . 'All industries should be required to absorb some fluctuations in their competitive position without government assistance; (ii)
- . Industries should have access to temporary assistance only if it would be fully consistent with long term government decisions on assistance, and if there would be irreparable damage without it; (iii)
- . The higher the existing assistance afforded an industry the heavier should be the onus of showing that temporary assistance is in the national interest; (iv)
- . Temporary assistance should be strictly limited in term and subject to review; and (v)
- . There is little case for the provision of temporary assistance for individual industries if their difficulties are due to economy-wide problems such as cost inflation or a general downturn in the economy, since such assistance is at the expense of other industries including those facing similar difficulties'. (1) (vi)

These criteria are referred to in more detail in subsequent sections of Chapter 3.

Of the four BAE submissions to IAC inquiries on short-term assistance examined in this section, only one (beef) was presented to the Commission prior to its publication of criteria for temporary assistance. The others (sugar, canning fruit and the south-east trawl fishery) have all been submitted to the IAC over the past two years.

3.2. Beef

In its submission to the IAC on short-term assistance to the beef cattle industry, the BAE (1975b, p. 12) remarks that:

'The beef cattle industry is essentially an efficient employer of resources and the case for providing assistance on efficiency grounds would appear to be valid. There would also appear to be a valid need for welfare assistance particularly for non-viable producers'

Underlying this statement is the Bureau's estimate of the beef industry's effective rate of protection⁽²⁾ (calculated on p. 2 to be 3.9 per cent in 1971-72) and its judgement (on p. 3) that there is a '...community objective of ensuring that the income of each adult in the community does not fall below a given level'. (NB. my emphasis).

The relatively low effective rate of protection in the beef industry is particularly relevant to the view that the industry is '...disadvantaged by the protection afforded to other industries' (BAE 1975b, p. 2). That is, the beef industry may be larger in the absence of protection afforded to other rural and non-rural industries of the economy. This is, of course, the familiar 'tariff compensation' argument which will be considered on a number of occasions in subsequent chapters of this report.

The 'tariff compensation' argument and the Bureau's concern that some households in the beef industry are, or are about to become, impoverished forms the basis for the Bureau's proposals for assistance which may ensure a viable industry in the longer term. These proposals include the provision of carry-on finance, debt reconstruction and structural adjustment assistance.

A final point worth noting in relation to the 1975 submission on short-term assistance to the beef industry is that the Bureau expresses some concern (see p. 5) about a possible movement of resources out of an efficient industry in response to a temporary economic downturn. The Bureau notes that the risks and associated costs of resource movement out of the industry need to be balanced against the benefits of maintaining the industry structure and its potential production at about the present level in order to take advantage of a recovery in the market. Significantly, the Bureau argues that 'Judgements of this nature would have to be made by the industry and depend importantly on assessment of the market outlook for beef'. That is, it is clear that the Bureau, on this occasion, does not regard the possession of information on the longer term market outlook as sufficient grounds for encouraging the retention of resources in the industry during a temporary downturn. Rather, the Bureau has provided its assessment of likely market developments and left the industry to decide on the appropriate level of resource retention for beef production.

Overall, the case for affording the beef industry short-term assistance is assessed by the Bureau as resting on the relatively efficient nature of beef production and the prospect of significant poverty (as measured by income) in farm households. The possibility of a movement of resources which may be inconsistent with the industry's longer term outlook is raised but it is argued that this is primarily a matter of commercial judgement for those engaged in beef production.

3.3 Sugar

The approach taken by the Bureau in its submission to the 1982 IAC reference on domestic pricing and short-term assistance for the Australian sugar industry (see RAE 1982b) is oriented around the resolution of three major issues. First, there is the question of whether or not the economic difficulties confronting the sugar industry stem from imperfections in the market place which can be acted upon by government. Second, the Bureau acknowledges that IAC has several basic criteria for provision of short-term industry

assistance and considers it appropriate to address both their validity and the circumstances of the industry with respect to these criteria. Third, the Bureau regards it appropriate, in principle, to address the applicability of short-term assistance on equity grounds.

Concerning imperfections in the market place, it is clear that domestic sugar policies of many importing and exporting countries have prevented the transmission of low world prices to producers and consumers and thereby lowered world free market prices for sugar. However, the Bureau argues (on p. 25) that '...these distortions cannot be acted upon effectively in the short-term' and '...the appropriate set of prices which should be of principal concern for efficient resource allocation in Australia are the observed world prices'.

A further argument considered by the Bureau in the context of efficiency-related justifications for assistance is the effect of export price uncertainty on investment and output in the sugar industry. In the presence of risk aversion the Bureau suggests that it might be argued that export price variation may lead to less than socially desirable levels of investment and output. However, the Bureau acknowledges the fact that there are differing schools of thought in relation to the validity of the risk-based argument for assistance and concludes that, in any event, it would not be appropriate to base temporary assistance on the existence of price uncertainty which is present in both the short and longer terms.

The position of the sugar industry with respect to several of the criteria for temporary assistance outlined by IAC (and discussed earlier in section 3.1) is examined in Chapter 4 of the Bureau's submission. Of the four criteria addressed by the Bureau (ii, iii, iv and vi) it is criterion (iv) which is most closely related to the efficiency aspects of temporary assistance. The Bureau's contribution on how the sugar industry stands up against the other criteria is discussed subsequently.

Criterion (iv) is concerned with avoiding the provision of temporary assistance to industries which are already highly protected as resource movements out of these industries are generally in the

long run interests of the community. Furthermore, criterion (iv) also suggests that a movement of resources out of an industry which is lightly assisted in response to short term stimuli may not be in the national interest. In the case of the sugar industry the concern is that resources may flow out of an essentially low cost industry to higher cost industries elsewhere in the economy.

On p. 27 the Bureau notes that the validity of the 'resources retention' argument rests on two issues. The first is whether **resources would move out of the sugar industry if short term assistance were not given.** The second is, given that resources would move out of the sugar industry, whether they would flow to lower or higher cost uses compared to their employment in the sugar industry.

The Bureau goes on to question the premises upon which the 'resource retention' argument is based. In particular, it is suggested that it is not clear that a temporary squeeze on industry returns will initiate a withdrawal of resources from sugar production. Moreover, of those resources which do leave the industry, the Bureau suggests that it may be in the community's interest for these to earn a higher reward elsewhere in the economy while the sugar market is depressed and return to sugar production when more buoyant conditions in that market return.

While having serious reservations about the validity of the 'resources retention' argument, the Bureau, in the interests of a consistent approach to temporary assistance policy, does point out that sugar production is a relatively low-cost activity. That is, the relatively efficient nature of sugar production in Australia lightens the onus on the industry to show that temporary assistance is in the national interest.

Concerning criterion (ii) the Bureau presents, on p. 29, aggregate data on the value, area and prices paid for sugar. However, it stresses that '...industry data would need to be made available for public scrutiny before it were possible to conclude whether or not growers and millers could absorb the most recent fluctuations in their competitive position without government assistance.' These data are

not available in the Bureau as it does not survey the sugar industry. For similar reasons the Bureau is unable to comment on the applicability of assistance on equity grounds since it has no data on incomes, net assets and profitability of growing sugar.

Of the final two criteria considered by the Bureau (iii and vi), it is concluded that one lends support to the case for provision of temporary assistance while the other suggests the possibility of longer term objectives being jeopardised. More specifically, the Bureau notes (on p. 31) that it intends to examine the case of a market oriented approach to domestic pricing of sugar and cannot (via criterion iii) support the implementation of short-term assistance which may be inconsistent with longer term marketing proposals. On the other hand, an assessment by the Bureau that the problems confronting the sugar industry are, to a significant extent, specific to that industry suggests (via criterion vi) that the provision of temporary assistance may be appropriate.

The Bureau concludes that while it is difficult to demonstrate an efficiency-based case for providing the sugar industry with short-term assistance, there may be characteristics of sugar growers and millers and the economic problems confronting them which are consistent with the IAC criteria for affording temporary assistance. Given the latter result, the Bureau regards it as appropriate to evaluate the use of two existing policy instruments for the purpose of providing temporary assistance. These are assistance under the provisions of the Rural Adjustment Scheme (RAS) and raising the domestic price of sugar under the 1979 Commonwealth-Queensland Governments Sugar Agreement.

In summary, all of the economic efficiency arguments which might be used to justify the provision of temporary assistance are rejected by the Bureau on this occasion. These include the effects of policies in overseas countries on world sugar prices, the impact of export price uncertainty on investment and output in the sugar industry and the withdrawal of resources from sugar production in response to a temporary economic downturn. Also, the case for providing the industry with assistance for accomplishing equity objectives is rejected. Finally, the industry has some characteristics which comply with IAC's basic criteria for temporary assistance. Consequently, some short-term assistance options are canvassed.

3.4. Canning Fruit

In January 1982 the BAE (1982c) presented a submission to an IAC inquiry into the provision of assistance to the canning fruit industry. The terms of reference required IAC to prepare reports on longer term and short-term assistance to growers and processors. The scope of the BAE submission was limited to assessing the case and developing options for assistance in the short and medium terms.

In contrast to its submission on short-term assistance to the sugar industry the Bureau chose to examine the grounds for assisting the canning fruit industry independently of the criteria for temporary assistance outlined by the IAC. The Bureau concluded that a case does exist to assist the canning fruit industry cope with its problems and subsequently evaluated several possible assistance measures.

The broad grounds for government intervention in the rural sector are outlined in Chapter 4 of the Bureau's submission. In particular, the Bureau notes (on p.4.1) that:

'On the efficiency side, intervention may be justified where there is a difference between private (farmer) and social (national) benefits and cost, where public goods need to be provided, where the transformation of information is inadequate, where risk leads to underutilisation of resources and needs to be diffused, where monopolies exist in the supply of inputs or in processing industries, or where there is a demonstrated need to accelerate the process of structural adjustment above what might be achieved privately. On the welfare side, intervention may be warranted to ensure a satisfactory community living standard or to provide equal social and economic opportunity. Wherever government intervention is considered appropriate it is necessary to ensure that such intervention would produce a superior outcome to that, which would prevail in the absence of intervention'.

Proceeding from what it regards as the broad grounds for assistance the Bureau places particular emphasis (see p. 15) on assistance to increase the rate of adjustment in the industry. It is noted that '...on both efficiency and welfare grounds, government intervention can be justified where there is a demonstrated need to accelerate the process of structural adjustment'. The 'demonstrated need' arises from a 'number of factors peculiar to orcharding'. These include:

- . the small size and limited adjustment options of canning fruit properties;
- . the fixed investment nature of orchards;
- . the cost of entering alternative enterprises;
- . the long lead times with alternative enterprises and the associated lengthy periods of reduced incomes;
- . the existing high levels of indebtedness.

The method, outlined by the Bureau, for promoting the rate of adjustment in the industry is the subsidisation of tree removal. This strategy, it is argued (see pp. 4.5-4.6), will '...increase the viability of the efficient growers remaining in the industry' and reduce the '...hardship for those growers wishing to leave the industry.' Thus, the Bureau regards a tree pull scheme as serving the twin objectives of 'efficiency' and 'welfare' because such a scheme will encourage the industry to contract to a level consistent with its projected market outlook and represent a form of financial support to those households with basic welfare difficulties. Accordingly, it is recommended by the Bureau (see p. 22) that '...the Rural Adjustment Scheme be amended to accommodate a tree pull scheme or, if administratively more manageable, a second fruitgrowing Reconstruction Scheme with appropriate improvements be introduced'.

Overall, the Bureau relied principally on the argument that there is a demonstrated need to accelerate the process of adjustment as a basis for recommending the implementation of a tree-pull scheme. A number of farm characteristics are selected as the foundations on which the argument is built. It is significant to note that a measure such as subsidised tree removal is regarded by the Bureau as an appropriate means to assist those with welfare difficulties. It is also important to take note of the fact that on this occasion the Bureau has chosen to ignore the basic criteria for short-term assistance outlined by IAC.

3.5 South East Trawl Fishery

Following a request for an inquiry into problems facing south eastern Australian trawl fishermen by the Australian Fishing Industry Council the IAC was sent a 60 day reference on whether short-term assistance should be provided to the industry. The submission from BAE (1982d) to the inquiry recommended against the provision of specific short term-assistance.

In reaching this recommendation the Bureau makes reference to the IAC's general approach to the provision of temporary assistance. In particular, attention is focussed on criterion (ii) discussed previously. The Bureau notes (on p. 25) that, '...the majority of boats...appear capable of absorbing some short-term fluctuations in income without affecting their long term viability'.

Apart from the Bureau's reference to criterion (ii) there is no further direct attention given to the IAC's guidelines for temporary assistance. However, there are significant comments made by the Bureau about the likely interference with longer term adjustment in the fishery that may occur as a result of the provision of short-term assistance. It is clear that this point is directly relevant to criterion (iii) described earlier in this Chapter.

In summary then, the examination in this Chapter of the Bureau's approach to short-term assistance has raised several issues of relevance to Part 3 of this study. In 'beef' the Bureau advanced a pro-'tariff compensation' argument in support of assistance but showed only limited concern for the possible withdrawal of resources from beef production in the short-term. The 'resource retention' argument for temporary assistance was also rejected in 'sugar' as were the effects of overseas policies on the local industry and the risk arguments. The unavailability of survey data on the sugar industry precluded the Bureau from commenting on any equity case which might support temporary assistance to the sugar industry. However, in the case of 'beef' the Bureau noted that households may face significant difficulties in terms of depressed income levels. Welfare was also a concern of the Bureau in relation to its recommendation for short-term

support of the canning fruit industry but the means by which the problem would be addressed on this occasion was the subsidisation of tree removal. The 'canning fruit' submission was also of interest in that it raised the argument that a slower than socially desirable rate of industry adjustment may also be a basis for recommending assistance. Finally inspection of the Bureau's submissions on short-term assistance reveals varying recognition of IAC's criteria for temporary assistance. The range of interest in these criteria extends from total disregard in the case of 'canning fruit' to detailed analysis in the case of 'sugar'.

CHAPTER 4

LONGER TERM ASSISTANCE FOR RURAL OUTPUTS

4.1 Introduction

Under the classification of BAE submissions to IAC rural industry assistance inquiries adopted in Part 2, the largest group is that concerned with longer term assistance arrangements for rural outputs. The industries covered in this study under that category include wheat, sugar, dairy, canning fruit, wood and wood products, dried vine fruit and citrus.

4.2 Wheat

In its most recent submission to the IAC on assistance arrangements in the wheat industry, BAE (1982e) highlights what it believes to be a number of inadequacies in the existing regulations and proposes several significant changes. Broadly, the Bureau recommends that controls operating on the domestic market should be relaxed but the current level of assistance afforded to the industry should be maintained via alternative methods of assistance ⁽¹⁾. The basis for the Bureau's judgement that existing assistance levels should be maintained is that the wheat industry is a low cost industry which has performed well despite significant imposts stemming from manufacturing industry assistance. A summary of the Bureau's attitude towards wheat industry assistance is provided on p.6 of the submission where it is argued that:

'As the industry receives little assistance now, particularly relative to assistance received elsewhere in the community, there is little, if anything, to be gained by further reduction in the overall level of assistance. The issues are, rather, the effectiveness of current assistance arrangements and ways to make the assistance the industry receives more effective'.

According to the Bureau (see p. 12), '...deregulating sales on the domestic market could potentially have a significant number of benefits in terms of the efficient use of resources as well as increasing returns to some growers significantly'. The conclusion that overall assistance levels afforded the industry should not be reduced leads the Bureau to identify (see p. 8.2) four options for 'trading-in' deregulation of the domestic market for alternative means of intervention. These are: (1) subsidising output prices; (2) subsidising input prices; (3) reducing risk; and (4) subsidising research.

Of these options the Bureau makes the judgement that providing assistance to reduce risk or increase research is preferable to subsidising inputs or returns to growers. In particular, the Bureau notes (p. 8.3) that '...an input subsidy will tend to distort the efficient allocation of resources since the subsidy provides an incentive to make greater use of the subsidised input relative to other inputs'. Similar efficiency-oriented objections could be levelled against output subsidies, particularly in the case of the wheat industry where such support is likely to be at the expense of sheep, beef and other low cost competing activities. Risk reduction could be classified as an output subsidy when expressed as a form of underwriting which not only alters the distribution of prices received by growers but also changes the mean of that distribution.

Several recommendations follow from the Bureau's argument that existing regulations on the domestic market should be 'traded-in' for assistance measures which increase research and reduce risk. In particular, consideration should be given to further government funding of wheat industry research and initiatives to reduce the risks confronting wheat growers should be more closely evaluated. Included amongst the options relevant to the latter recommendation are removal of the constraint on annual variations in the guaranteed minimum delivery price (GMP), expression of the GMP in real terms and the undertaking of an investigation to examine whether a feasible all-risk crop insurance scheme can be developed.

Some additional evidence submitted by the BAE (1977a) to an IAC inquiry on wheat stabilisation throws further light on some of the issues raised in the Bureau's 1982 submission. In the former submission the Bureau examined the likely resource movements into the

wheat industry that might follow any increase in the level of assistance. A central conclusion of the analysis is that the majority of resources taken up by an expanding wheat industry would be drawn from other low cost agricultural industries so that any improvement in national resource use efficiency following the provision of assistance to the wheat industry would be small. This conclusion is of direct relevance to the Bureau's 1982 wheat industry submission because it highlights some potential difficulties with the 'trading-in' recommendation. In particular, the 1977 submission raises some doubts about the likely magnitude of any national efficiency gains that may result from an expansion in the wheat industry due to the replacement of assistance on the domestic market with measures which increase research and reduce the risks of wheat production. Moreover, the results reported in the 1977 submission suggest that if research subsidies and measures which reduce the risks of wheat production are more efficient than existing measures then the current size of the industry might be maintained at a lower level of public support.

The Bureau's 1977 submission also raises several other arguments relevant to any debate on industry assistance. They concern both efficiency and welfare considerations.

As mentioned, a key result of the submission is that any expansion of the wheat industry will, to a large extent, be at the expense of other low-cost industries in the rural and non-rural sectors. The submission also, however, reminds the reader that the assessment of national efficiency gains (or losses) following a change in an industry's assistance arrangements isn't just a matter of evaluating the outcome of competition for common resources. It notes (p.III.10) the possible impact of a wheat industry expansion on the exchange rate and the direct consequences for all the traded goods sector.

A further aspect of the 1977 submission is its detailed discussion of reasons why price stabilisation might be justified. The three arguments put forward (at pp. VII. 5-6) are: (a) price instability has undesirable resource allocative effects at the farm level; (b) short term disruptive price instability does not produce a series of production responses consistent with the long term prospects in the industry; and (c) price stabilisation is a means of providing

income support. This final argument is rejected in the submission on the grounds that there are superior measures such as adjustment assistance and income smoothing techniques which can achieve such social objectives. Furthermore, arguments (a) and (b) are qualified significantly on pp. VII 6-10. The contribution of price stabilisation to improvements in resource-use efficiency is seen to depend significantly on the relative importance of price and output variability. More importantly, the presence of price instability is only a pre-requisite for considering stabilisation policies. Implementation of such policies would require identification of net benefits which, in the case of the wheat industry, may not be present because of the possibility of other low-cost industries competing for resources and diminishing returns to expanded wheat production.

4.3 Sugar

The submission by the Bureau (1983a) to IAC's inquiry into long term assistance for the Australian sugar industry also proposes a 'trade-in' of existing assistance for alternative means of intervention. On this occasion the Bureau refers to the inappropriateness of the current domestic pricing arrangements as a vehicle for delivering long term assistance. The Bureau argues that the major problems with the existing arrangements include: (i) the relative insignificance of the domestic market as an outlet for production; (ii) the unpredictability of the level of assistance conferred by the arrangements due to fluctuations in export prices; and (iii) the distortionary nature of producer and consumer decisions due to incorrect price signals. It is argued by the Bureau that consideration should be given to an underwriting scheme as an appropriate policy instrument for delivery of assistance.

In Chapter 3 of the submission two main arguments are cited as the basis for the provision of assistance to the sugar industry. These are:

- (i) 'capital markets do not efficiently accommodate risks associated with fluctuations in prices and production;
- (ii) tariffs and other forms of assistance to other sectors of the economy penalise rural industries and cause resource misallocation between sectors.'

Applying the first argument to the sugar industry, the Bureau (p. 17) suggests '...that the aggregate of risks associated with evaluating producers' viability individually is likely to be higher than the risk associated with failure when considering the industry as a whole. Consequently...the private cost of coping with price instability is likely to exceed the social cost' and '....the sugar industry would appear to have a prima facie case for economically justifiable government intervention'.

The Bureau's case for underwriting proceeds beyond the risk argument to a discussion of tariff compensation. If accepted, the latter argument is particularly significant as it strengthens considerably the economic justification for raising the mean price received by growers operating under an underwriting scheme.

In contrast to the Bureau's 1977 wheat submission, there is no attempt in the 1983 sugar submission to outline the likely resource movements between sugar and other industries following variation in the assistance arrangements. Rather, it is noted on p. 18 that the efficiency case for long term assistance is dependent on resources being able to move into and out of the sugar industry. Hence, existing barriers to entry and exit weaken the long-term assistance case. It is clear that the 1977 wheat submission goes somewhat further in its 'guidelines' for assistance as it emphasises the need to be confident that assistance to a low cost industry is not at the expense of other low cost industries. That is, the 1977 submission not only requires a first or second best case for intervention (eg. price instability or tariff compensation), it also demands demonstration of the likely net national benefits that will follow the provision of assistance.

A final issue raised in the 1983 sugar submission concerns the effects of supply control removal on the welfare of those currently benefiting from the quota system. On pp. 23-4 the Bureau notes that society might wish to protect the interests of producers who may experience capital and revenue losses due to deregulation. Such a situation could arise as a result of additional sugar sales to lower priced export markets, which may dilute the unit value of the No. 1 pool from which landlocked producers currently receive their returns.

Because these producers cannot enjoy the benefits of any industry expansion they stand to have their revenue streams and land values reduced significantly. While recognising that any decision to protect these producers against erosion of the rents conferred on them by existing arrangements is a political determination, the Bureau does raise some policy options for avoiding any sudden changes in the welfare of vulnerable growers. This approach to rural welfare is based on the notion that society's social welfare function might be conservative (see Corden 1974).

4.4 Dairy

Of all the rural industries, none has attracted more attention, so far as questions of industry assistance are concerned, than the dairy industry. Since 1974 the BAE has contributed to the debate on dairy industry assistance through at least 10 published reports (BAE 1983b and c, 1977b, 1976a, 1975 c, d, e, f and g and 1974a). Inspection of the Bureau's reports reveals a host of economic arguments relevant to industry assistance analysis.

Perhaps the most common argument in the Bureau's earlier work on dairy industry assistance is the view that protection afforded to other parts of the economy might justify a departure from unrestricted free trade and export parity pricing of dairy products (see BAE 1974a, 1975d and 1976a). In particular, the Bureau argued that in view of the protection afforded import competing industries, prices received by dairy farmers for export sales may not reflect the real marginal returns of dairying to the economy. Consequently, it was argued (see BAE 1975d) that there may exist a case for raising the marginal returns to the industry. A further implication of this argument (referred to in subsequent chapters as the existence principle) is that it may not be appropriate to withdraw or reduce assistance to the dairy industry because resources might flow to other higher cost activities which rely to some extent on government intervention for their existence.

In more recent times the Bureau (1983c) has altered its attitude to the 'tariff-compensation' case for assisting the dairy industry. While the Bureau (1983c, pp 59-60) recognises that a reduction in

dairy industry assistance may lead theoretically to a flow of resources into more highly protected industries, it cites evidence which suggests that such an outcome is extremely unlikely. Therefore, the 'tariff compensation' argument is no longer considered an obstacle to reductions in dairy industry assistance.

Although there have been some changes to the Bureau's stance on 'tariff compensation' as a basis for assisting the dairy industry, other arguments that were adopted in the Bureau's earlier work continue to have currency. In the Bureau's examination of equalisation arrangements for dairy products (BAE 1974a) concern is expressed about the effects of price instability on planning decisions at all points in the production/marketing chain. It is argued (on p. 54) that at the farm level export parity pricing may not encourage the 'best' use of resources because producers may organise their enterprises such that resources are devoted to protecting themselves against the effects of price instability. In a similar vein, it is argued (in BAE 1983c, p. 62) that an individual's capacity to withstand the risks involved with a temporary market downturn would be less than that of society at large and without intervention, underinvestment might occur. This latter argument appears to combine the views expressed by the Bureau on price-risk induced underinvestment (BAE 1974a) and the movement of resources from an industry which is inconsistent with its longer term outlook (see, for example, BAE 1977a).

Apart from 'tariff-compensation' and 'price instability' the Bureau (1983c) has also considered the economic merits of several other arguments for assistance to the dairy industry. Political interference in the market by foreign governments is rejected as an efficiency-based case for assistance as is the regional concentration of farmers likely to be affected by reductions in protection. Furthermore, the international comparability of consumer prices is regarded as an appropriate factor to consider but it is pointed out that the comparison should be with efficient producing countries where prices are lower. Finally, the view that dairy industry assistance should be retained because of its low per capita cost to consumers and large gains to individual farmers is also rejected. This is because the Bureau sees the burden of supporting the dairying industry as being larger for low income households with large families.

Having rejected this latter group of arguments as representing economic grounds for assistance and moved away from its earlier 1974 argument that assistance to the dairy industry might be warranted on 'tariff compensation' grounds, the Bureau is left, in its 1983 submission (BAE 1983c), with the resource allocation effects of price instability as the only economic ground for intervention. This argument is elaborated upon in some detail on pp. 64-5 of the submission:

'The chance of such instability might provide an economic/welfare base case for intervention. It would not, however, of itself justify assistance of more than a potholing nature...'

However, there is some doubt expressed by the Bureau on p. 65 about the strength of the argument:

'There is no reason to believe that resources cannot, given time, re-enter dairying where to do so would be profitable. Against this background, high levels of assistance could well prove very expensive insurance.'

Nevertheless, the Bureau goes on to recommend that ultimately, the underwriting of market returns should be the major form of assistance to the dairy industry. It is significant to note that support for an underwriting scheme cannot rest on the price instability argument alone. This point has been acknowledged informally in other BAE submissions (such as BAE 1983a) where 'price instability' has been coupled with 'tariff compensation' to form a basis for recommending underwriting schemes which may not preserve the mean export return. It would seem, therefore, that BAE's support of an underwriting scheme for the dairy industry would rest on the economic effects of price instability and the fear of resources leaving their current employment in response to short-term stimuli which are inconsistent with the long term industry outlook. That is, the 'resources retention' argument appears to have displaced the 'tariff compensation' argument as a basis of support for underwriting on grounds of economic efficiency. This result is of particular interest given the rejection of the 'resources retention' argument in other BAE submissions.

A final point worth noting concerns the Bureau's support, on this occasion, for the use of underwriting as an instrument for addressing welfare problems of dairy industry households. Underwriting affords assistance in direct proportion to the size of a farm's output. The regressive nature of price-support as an instrument dealing with welfare problems of farm households has led the Bureau on other occasions (eg. BAE 1977a) to recommend the use of measures which are directly related to income (eg. income smoothing techniques) as a basis of welfare assistance.

4.5 Canning Fruit

In its submission to the IAC inquiry into assistance to the canning fruit industry, BAE (1982f) identifies two essential attributes of an efficient marketing system. First, such a system should reflect back to producers the marginal returns or the returns from the lowest priced outlet. Second, it should not obstruct movement of resources into or out of the industry. The Bureau is careful to point out, however, that modifications to the existing assistance arrangements must be made in full recognition of the possibility that reductions in the level of protection may lead to resource movements to other higher cost industries. Consequently, '...there is an economic argument that the level of assistance to the canning fruits industry should be equivalent to that given to industries which compete for the same resources...' (see p. 5.19). Just what that level of assistance might be, however, is not clarified by the Bureau. Several industries (citrus, sultanas and dairy) are cited (on p. 5.19) as competing for the same resources employed by the canning fruit industry but their effective rates of assistance vary considerably. For example, the IAC (1983) reported effective rates of assistance in the citrus, dried vine fruits and dairy industries as being 85, -5 and 31 per cent respectively in 1980-81.

In addition to the economic efficiency aspects considered by the BAE in its canning fruits submission the question of welfare-related assistance is discussed. The specific instrument suggested to deal with problems of hardship that those leaving the industry might

experience is a government sponsored tree-pull scheme. The choice of this measure is of interest in that it would most likely confer benefits on producers in direct proportion to the number of trees pulled and result in a pattern of welfare benefits which bears little relationship to the wealth-income status of individuals. In addition, such a scheme might cause the removal of trees whose fruit could be sold in non-canning outlets. The suggestion in this submission of a tree-pull scheme to deal with welfare problems contrasts with the recommendations concerning welfare measures in other Bureau submissions and related reports (eg. see the Bureau's 1977 wheat and 1983 dairy submissions (BAE 1977a, 1983c) where direct income-related instruments and underwriting market returns are discussed respectively as welfare measures).

4.6 Wood and Wood Products

As in its submission to the IAC inquiry into the canning fruit industry, the BAE, in its submission to the IAC's inquiry into wood and articles of wood (BAE 1980b), addresses the questions of whether and if so, to what extent, existing assistance should be reduced. In the latter submission the Bureau expresses concern about the effects on investment in plywood production of continued assistance to the industry. It is argued, amongst other things, (p. 88) that the greater protection afforded the plywood manufacturing industry relative to other wood processing industries will result in distorted investment decisions. The Bureau recommends (p. 26) the phased reduction of nominal tariff levels to the average nominal level for other wood product industries determined by the IAC's inquiry.

There are three noteworthy points about the nature of the Bureau's recommendation. First, it suggests that the industries competing for resources used by the plywood industry are limited to other wood product industries. There does not appear to be the concern (perhaps justifiably) expressed in the Bureau's 1977 wheat submission that the linkages between industries are very complex and may reflect macroeconomic variables as well as common inputs into production. Second, the recommendation is to reduce assistance to the plywood industry to an average of the levels enjoyed by other wood

product industries. This part of the recommendation is meant to deal directly with any difficulties which might be encountered in relation to widely disparate levels or rates of assistance of industries identified as competing for the resources used by the plywood industry. It contrasts, however, with the canning fruit recommendation (see BAE 1982f) which advocates a reduction in that industry's assistance to the level afforded to competing industries. Third, it is significant that the Bureau recommends a variation in the plywood industry's nominal rather than effective level of assistance. The preference to amend nominal rather than effective levels or rates of assistance presumably reflects the Bureau's judgement that the consumption distortions of the tariff are more significant than the production distortions.

A reduction in the plywood industry's tariff protection is, according to the Bureau, not the only amendment that should be made to the industry's assistance arrangements. The Bureau sees merit (p. 22) in providing a more certain production and investment environment to insulate the industry against the effects of sharp and unexpected falls in world prices and proposes the introduction of a variable import levy to achieve this objective⁽²⁾.

While it does not offer explicitly an economic efficiency argument to support the use of a variable import levy, it seems that the Bureau's proposal for 'a more certain environment' is based on 'the adverse effects of price instability argument' canvassed in several other BAE submissions (see, for example, BAE 1977a, 1983a). Furthermore, the Bureau's recommendation that tariff protection be reduced at the same time as a variable import levy is introduced represents a 'trade-in' of assistance to the plywood industry. In this instance, however, the effects of the 'trade-in' on resource allocation in other wood product manufacturing enterprises and industries elsewhere in the economy are not evaluated.

4.7 Citrus

The author is aware of two submissions made by the BAE to IAC inquiries into assistance to the citrus industry. The first (BAE 1981) is concerned with support to the orange and tangerine juices industry and considers, amongst other things, the benchmark level of assistance that might form the basis of adjustment to the industry's protection.

The second (BAE 1977c) is also concerned with amendments to industry assistance but focusses upon adjustment and welfare support to the citrus industry. The main recommendation of the Bureau's submission to IAC's inquiry into assistance to the orange and tangerine juices industry (BAE 1981) is that protection should be phased down over an extended period. It is argued (p.16) that adoption of this policy will '...enable and encourage the industry to achieve productivity gains and longer term cost reductions or to adjust by diversion of some resources into other enterprises or off-farm pursuits'.

There are a number of economic disadvantages, according to the Bureau, of the existing high level and forms of assistance. In particular, they:

- . insulate the industry from trends in world prices;
- . impose a significant cost on consumers and constrain consumption of oranges and orange juice;
- . contribute to upward pressure on land prices;
- . attract resources out of low cost industries and do not efficiently support incomes of small farmers.

It is primarily these circumstances which leads the Bureau to conclude (p.15) that there does not appear to be any economic case for continuing with existing levels of assistance, though it is acknowledged that some welfare or adjustment support may be appropriate. The Bureau recommends that the level of industry support be reduced to a level commensurate with that received by other horticultural industries.

In contrast to many other rural activities, the orange industry is relatively highly assisted. For 1980-81 the industry's effective rate of assistance was estimated by the IAC (1983) to be in excess of 100 per cent, at least 14 times the average for the rural sector and 4 times the average for the manufacturing sector. Because the orange industry must be amongst the 'tallest poppies' in terms of its effective rate of assistance, the Bureau could recommend a reduction in industry support virtually without fear of resources flowing to higher cost uses. Nevertheless, the decision to recommend a reduction

in an industry's assistance remains complex to the extent that the Bureau still had to assess the magnitude of the appropriate reduction. As mentioned, the benchmark chosen was '...a level commensurate with that received by other horticultural industries', a 'level' which was presumably selected because of the likelihood that it is other horticultural industries which compete for resources employed by the citrus industry. The nature of the Bureau's recommendation is very similar to its conclusion in its canning fruit submission (BAE 1982f) where it was argued that assistance be reduced to a level afforded competing industries. However, just what these levels are, when it is known that competing industries have widely different rates of assistance, is unclear. ⁽³⁾. The alternative solution, adopted in the Bureau's submission on wood and articles of wood (BAE 1980b), is to use an average of competing industries rates of assistance as the benchmark, a strategy where assistance disparities remain but are at least diminished.

In its earlier 1977 submission to IAC, the Bureau (1977c, p.12) also found that, on the basis of 1974-75 data, citrus production is a relatively high cost industry compared to many other rural and manufacturing industries ⁽⁴⁾. However, on this occasion the Bureau did not analyse or recommend a reduction in the industry's assistance. Rather, it noted (p.18), that '...it is apparent that continuing adjustment in the industry will lead to improvements in efficiency and profitability. Assistance aimed at encouraging and facilitating such adjustment would therefore seem to be justified on efficiency grounds'. The Bureau's argument that adjustment assistance is justified on efficiency grounds appears to be based on the view that there are impediments to adjustment which, if removed or modified, would improve the economic situation of the industry. Particular emphasis is placed on the nature of the citrus enterprise (relative fixity of assets, large initial investment, long investment/production lags) and restricted opportunities for off-farm employment.

A further conclusion reached by the Bureau is that the industry is likely to be subject to a continuing welfare problem, although the magnitude of this problem may be less acute when income and net worth (rather than income alone) are included in the welfare assessment.

Overall, the Bureau concluded (p.20) that '...the objectives of continuing to encourage adjustment while providing welfare assistance of a basically interim nature is consistent with the aims and objectives of the existing Rural Adjustment Scheme'.

4.8 Dried Vine Fruit

In 1975 the Bureau (BAE 1975h) presented a preliminary submission to an IAC inquiry into assistance to the dried vine fruits industry. Because the economic performance of the industry in the two years immediately preceding the submission was regarded by the Bureau as 'satisfactory', attention was focussed on resource use efficiency rather than welfare related issues. In particular, the Bureau considered the economic case for price stabilisation and adjustment assistance.

In regard to price stabilisation the Bureau (1975h, p.9) argued that it may be desirable, on efficiency grounds, to 'dampen' short periods of high prices in order to reduce investment (and subsequent economic losses) based on a limited assessment of the market outlook. This argument was seen to be particularly relevant to industries such as dried vine fruits production, where world output has a significant impact on price received, and where there is a long gestation period between the making of investment decisions and the production of maximum output. This argument is similar to the 'resource retention' argument put forward in the Bureau's 1977 submission to the IAC inquiry on wheat price stabilisation.

A further feature of the Bureau's analysis of price stabilisation for the dried vine fruits industry, also present in its submission to the IAC on wheat price stabilisation, is that the presence of output price risk is not a sufficient condition for government intervention. The Bureau notes (1975h, p.9) that price stabilisation might cause substantial social losses if it causes investment decisions to be based on biased price expectations. Therefore, the economic case for price stabilisation becomes an empirical problem, dependent upon the nature of trends and fluctuations in prices and the particular stabilisation mechanism employed, rather than a problem which can be resolved on principle alone.

Concerning the structural adjustment process, the Bureau finds the market system, at least in some respects, to be inadequate. In particular, the Bureau notes (p.13) that growers with access to adequate supplies of capital may wish to expand the scale of their operations but an important impediment to this process is '..the time scale within which blocks come up for sale'. The Bureau's conclusion that '...market forces cannot be relied upon to ensure eventual consolidation of blocks sequentially acquired' leads them to identify the Fruitgrowing Reconstruction and Rural Reconstruction Scheme as possible means of solving such problems. In section 5.2 of the following chapter, where the Bureau's 1983 submission to the IAC's inquiry on Longer Term Rural Adjustment is discussed, attention is again focussed on market impediments to farm adjustment.

CHAPTER 5

RURAL INPUTS AND STRUCTURAL ADJUSTMENT

5.1 Fertilisers

Of the inputs into rural production that have been the subject of IAC inquiries, fertilisers have probably received the most attention. Since 1973 the BAE has made three submissions to IAC inquiries on fertiliser subsidies, the first two (BAE 1975i, 1976b) on phosphatic fertilisers and the third (Easter et al. 1982) on nitrogenous and phosphatic fertilisers.

In its preliminary report on phosphatic fertilisers, BAE (1975i) addressed the question of whether or not the superphosphate subsidy should be reinstated. The 'tariff compensation' argument was identified as providing a potential basis for assisting the farm sector but was rejected because of the practical difficulties associated with its implementation. In particular, the Bureau (1975i, p.10) argued that for '...it (the tariff compensation argument) to be acceptable in practical terms, it would appear to be necessary for specific need to be established and accordingly for each rural industry or group of producers to be assessed on an individual basis'.

Analysis of the relative efficiency of resource allocation undertaken by the Bureau (1975i, p.11) indicated that more efficient employment of resources on farms using superphosphate might be achieved through an expansion in the improved pasture input and therefore, the increased use of superphosphate. However, it did not appear that potential efficiency gains were being prevented because of market imperfections or external factors relating to superphosphate use. On the basis of the evidence examined, the Bureau could not support the provision of assistance for the use of superphosphate.

Following the IAC's recommendation for reintroduction of a superphosphate subsidy the Government announced a bounty of \$11.81 per tonne for the period February 1976 to June 1977. However, the IAC was

also asked to report by July 1976 on the need for longer-term assistance regarding the use of phosphatic fertiliser. It was this latter inquiry to which the Bureau's 1976 report was directed.

As with its 1975 superphosphate report, the 'tariff compensation' debate figured prominently in the Bureau's 1976 report. Although there had been some discussion of tariff compensation immediately prior to publication of the Bureau's report (see Harris 1975, Sampson 1975, Norman 1975 and Lloyd, 1975) the main conclusions reached earlier by the Bureau, while refined, remained largely unchanged in its later report. Once again, the Bureau (1976b, p.15) noted that it is necessary for assistance provided on tariff compensation grounds to be selective, because the extent of loss or gain from the tariff will vary within and between sectors according to relative efficiency and the degree of resource substitutability. It was argued that a superphosphate bounty would not be sufficiently selective to achieve the resource allocation objectives of tariff compensation. Also, the Bureau once again examined the argument that market imperfections might impede farmers from effecting resource use efficiency improvements but it was concluded that, if present, such constraints should be addressed directly rather than through an input subsidy.

Another issue addressed in the Bureau's 1976 report is the price elasticity of demand for superphosphate and its relationship with the resource use efficiency aspects of a superphosphate subsidy. It is noted that where the demand elasticity is low the subsidy would accrue to farmers as income and there will be little increased use of superphosphate relative to the situation where there is no subsidy. It is clear that this result is of direct relevance to any tariff compensation argument for maintaining the superphosphate subsidy as that argument is itself based on the notion that assistance to the rural sector will restore output to that level which would have prevailed had there been no tariff protection afforded to the manufacturing sector. It is equally clear (though not considered by the Bureau in its 1976 report) that a low demand elasticity for superphosphate is of little support to proponents of the 'existence principle' who might wish to argue in this case that the subsidy should not be discontinued because of the danger of resources flowing subsequently from low to higher cost activities.

The Bureau's 1976 submission also raises several welfare related issues in relation to continuation of the superphosphate subsidy. First, it is argued that imposition of a maximum tonnage to which the subsidy would be applicable could be appropriate if the prime purpose of the subsidy is to raise rural welfare. This is because the main beneficiaries of an input subsidy are larger producers who tend to earn high farm incomes. Second, it is argued that an input subsidy might be considered as a means of maintaining income relativities across the economy in an environment where farm incomes are under the pressures of a cost-price squeeze. However, the use of a superphosphate subsidy to raise farm incomes is rejected because of its inferiority to alternative measures which act directly on income and its small impact on incomes of the majority of farmers. Finally, the Bureau considers the usefulness of a superphosphate subsidy for promoting farm adjustment but concludes that such a measure would most likely inhibit rather than encourage movement of low income producers out of their respective industries. The linking of adjustment to welfare goals in the Bureau's 1976 report is similar, in principle, to the provisions of the housing expenditure loan plan outlined in the Bureau's 1983 submission to the IAC inquiry on Longer-Term Rural Adjustment, (see section 5.2) where it is proposed that loans to farmers facing welfare difficulties be converted to grants if they leave their employment within 12 months of their most recent payment.

In its most recent submission to an IAC inquiry on fertiliser subsidies, the BAE (see Easter et al. 1982) addressed the question of whether assistance should continue to be provided for the consumption of phosphatic and nitrogenous fertilisers. Yet again the Bureau considered the merits of the tariff compensation argument for justifying fertiliser subsidies but concluded that there is considerable doubt as to whether such assistance would lead to an improvement in national welfare ⁽¹⁾. However, unlike the Bureau's 1976 report, the 1982 report also raises the 'existence principle' as a basis for not removing or reducing existing assistance, including fertiliser subsidies, afforded to the rural sector. In particular, it is argued (see Easter et al. 1982, p.49 and p.59) that:

'...partial or total removal of assistance to rural industries together with the retention of high levels of assistance to high-cost industries may create a more inefficient allocation of resources than maintaining assistance to the rural sector in the same circumstances....This conclusion stems from the argument that removal of assistance to the rural sector may result in a flow of resources to higher cost industries elsewhere in the economy'.

On pp. 42-3 of the Bureau's 1982 submission and in its earlier 1976 submission it is argued that the price elasticity of demand for fertilisers in the longer term is low and inelastic, thereby casting doubt on the validity of the conclusion that removal of the subsidy is not justified on efficiency grounds. That is, a reduction or removal of the fertiliser subsidy may not be expected to result in a significant reduction in fertiliser use or output on farms where fertiliser is an input into production. (2)

Because of its concern that withdrawal of fertiliser bounties may disadvantage the rural sector relative to other sectors in the economy the Bureau suggests that public expenditure saved through removal of the fertiliser subsidies might be reinvested elsewhere in the form of '...more efficacious rural assistance measures'. In particular, the Bureau argues (p.60) that assistance to replace fertiliser subsidies should be designed to be cost-effective in attracting resources to the rural sector. Hence, the Bureau has advocated a 'trading-in' arrangement where fertiliser subsidies, which are regarded as ineffective in stimulating rural output, are swapped for assistance measures which better serve the goals of tariff compensation.

Such a strategy appears odd given the Bureau's stance in all of its fertiliser submissions on tariff compensation. In particular, the Bureau does not express any concern in its 1982 submission about the practical difficulties associated with ensuring that new or replacement assistance measures do not attract resources from lower to higher cost industries. Rather, a set of criteria for selecting second-best measures which are cost effective on tariff compensation grounds is outlined and it is recommended that unless an instrument which satisfies these criteria and improves national income can be found then the fertiliser subsidies should remain in place.

5.2 Structural Adjustment

In a recent submission to an IAC inquiry into Longer Term Rural Adjustment, the BAE (1983d) addresses the case for rural adjustment assistance. Particular attention is focussed on defining the nature of the adjustment problem and assessing the economic efficiency and welfare aspects of adjustment assistance.

The Bureau's perspective on the nature of an adjustment problem is put forward on pp. 4-5 of its submission where it is noted that:

'Care is required that a perception of an adjustment 'problem' is well founded in relation to national objectives and that an adjustment problem does in fact exist...A perceived or sub-optimal rate of adjustment may be due to inevitable time lags accompanying the dynamic process of adjustment, or the uniqueness of benefits to producers from resources under their control which provide them with effective incomes substantially in excess of those reported through farm surveys...A genuine adjustment 'problem' does exist when impediments or imperfections in the market system can be identified which effectively prevent resources from moving to their best use...Where governments perceive the rate of adjustment to be unacceptably low or excessively high, then an adjustment 'problem' will be identified...Such a 'problem' is only a true problem if obstacles...can be identified, or society judges the outcome as undesirable'.

Concerning the efficiency-based case for adjustment assistance, the Bureau (pp 3.7-8) identifies four relevant arguments. First, the presence of assistance to high cost industries in the rural and non-rural sectors suggests that a reduction in assistance received by low cost rural industries may result in an overall efficiency loss due to the likely movement of resources from lower to higher cost activities. Second, the identification of market imperfections may warrant the provision of assistance in circumstances whereby a first-best solution (ie. removal of the imperfection) is not possible. The major imperfections suggested by the Bureau are related to the rural credit market where it is argued that farmers credit requirements remain unsatisfied due to the regulatory nature of the financial system. Third, the 'resources-retention' argument discussed in several other BAE submissions is also suggested to be relevant in the context of adjustment assistance. It is argued (see p. 3.13) that

both bankers and farmers may take an unnecessarily pessimistic view of the prospects for farm businesses, thereby causing inappropriate resource movements from the viewpoint of national economic efficiency. Finally, the Bureau cites (p. 3.14) the risky and long-term nature of agricultural investment as requiring flexibility in credit facilities. It is suggested that institutional rigidities in the banking system may deny farmers of access to their credit needs.

The broad applicability of these arguments to most Australian farmers raises, in the Bureau's opinion, some doubts about their use for justification of intervention to promote adjustment at the margin such as that encouraged by RAS ⁽³⁾. Indeed, the Bureau suggests (p. 3.16) that '...the efficiency case applies equally to all farmers and not specifically to a marginally 'viable' set of producers facing particular adjustment problems'. Moreover, the Bureau notes that the benefits of adjustment assistance will be maximised by conferring assistance on those farmers who are most capable of generating the largest efficiency pay-off. The latter group is likely to be farmers in the upper income group rather than those currently assisted for adjustment purposes.

In regard to the welfare case for rural adjustment assistance the Bureau refers (p. 3.18) to the 'safety net' concept of providing a minimum level of farm income. While the Bureau acknowledges RAS to be a welfare scheme designed to assist groups of farmers to improve their incomes, it also suggests that a rural adjustment scheme may be an inappropriate institution within which to house a welfare policy. Rather, it may be more appropriate to look towards broad economy-wide measures to achieve hardship and intra/intersectoral equity objectives.

Having rejected the efficiency case and criticized the welfare case for marginal adjustment assistance, the Bureau concludes that the decision to continue or terminate RAS must be regarded as a political judgement. In the event that adjustment assistance is regarded as appropriate, the Bureau suggests the use of a set of criteria to assess the adequacy of existing and alternative adjustment policy instruments.

The criteria against which RAS provisions are assessed include:

- (1) Resource flows into agriculture;
- (2) Resource flows out of agriculture;
- (3) Resource flows within agriculture;
- (4) Efficiency of national resource use;
- (5) Economic hardship or poverty;
- (6) Inter and intrasectoral equity; and
- (7) Administration and the cost-effectiveness of the intervention.

The Bureau's evaluation of RAS against the abovementioned criteria leads to the conclusion that most RAS funds are used to promote intrasectoral adjustment. Only 5.5 per cent of RAS funds are allocated for farm build up, household support and rehabilitation purposes, thereby suggesting that further attention may need to be given to funding of resource outflows from agriculture. Also, the Bureau concludes that the welfare provisions of RAS appear, at present, to be less than effective.

The remedies for the inadequacies of RAS suggested by the Bureau are twofold. First, redress of any imbalance in the adjustment provisions of RAS could be achieved by a modification of the proportion of funds allocated to specific measures, or by changes in the provisions themselves. However, the Bureau warns (see p. 14) that because objective measurement of the correct inflow or outflow of resources in agriculture is not possible, any decisions concerning the nature and extent of an imbalance must remain judgemental. Nevertheless, the Bureau suggests that a review mechanism may go some way towards ensuring that RAS funds are employed effectively. Second, the Bureau recommends that the existing household support provision of RAS be terminated and replaced by a household expenditure loan plan (HELP) which would raise farm income to the level of the unemployment benefit. The latter scheme is a carry-on loan provision for household expenditure purposes whereby farmers repay a loan if they choose to remain in their present employment. However, should farmers choose to leave farming within a year of receiving their latest payment then HELP payments could be converted to a grant. It is clear, therefore, that HELP is a welfare provision whose benefits are tied to adjustment choices of the recipient.

The analytical framework and conclusions presented by the Bureau in this submission raise several issues which are also discussed in other Bureau submissions to IAC inquiries and related reports. These include (i) the 'existence principle'; (ii) the 'correct' rate of adjustment; (iii) the extent of failure in the capital market; and (iv) the measurement and provision for farmer and household welfare.

5.2.1 The Existence Principle

This principle (referred to earlier in Chapter 4) is a corollary of the tariff compensation argument. It suggests that in a second-best world, reductions or withdrawal of assistance already afforded an activity may cause resources to flow to higher cost activities. In the context of the Bureau's Longer Term Rural Adjustment submission it is put forward as one of several reasons why there may be a general case for maintaining rural assistance. However, the Bureau does not regard the principle as being particularly relevant to RAS because this scheme confers benefits on farmers at the margin rather than the rural sector as a whole. This proposition appears to be inconsistent with the economic logic of the 'existence principle' as discussed in the text of the Bureau's submission and above. For if RAS were to be withdrawn, it follows that some resources currently employed on farms operating at the margin may find improved rewards in higher cost industries elsewhere in the rural and non-rural sectors. Therefore, even though RAS confers benefits on a well defined subset of the farming population and the tariff compensation argument has potential applicability to a wider group of farmers, the 'existence principle' may provide some justification, from an economic efficiency perspective, for retaining RAS.

5.2.2 The 'Correct' Rate of Adjustment

The Bureau's comments on the use of RAS funds for intrasectoral rather than inward and outward resource movements raises the difficult issue of just how RAS funds might be most usefully employed. The Bureau notes (see p.6.1) that the nature of the adjustment problem stems from a perception by government that the rate of farm adjustment is unacceptably low such that intervention is required. An adjustment policy must, therefore, be sufficiently flexible to respond to a range

of resource movements. For example, the Bureau refers to the potential for RAS to respond to a diminished role of agriculture in the economy and the subsequent demand for assistance to facilitate the outward movement of resources. Given a budget constraint, the use of RAS funds for promoting resource movements out of agriculture will be at the expense of other resource adjustment options. The point is, according to the Bureau, that a mechanism must be in place to switch funds between competing uses, the direction of switching depending upon political judgements. This view seems to contrast markedly with other arguments put forward by the Bureau in other submissions to the IAC. For example, in its submission to the IAC inquiry into short-term assistance to the canning fruit industry the Bureau (1982c) recommended the introduction of a tree-pull scheme because of a demonstrated need to accelerate the process of adjustment. The 'demonstrated need' arose from a 'number of factors peculiar to orcharding'. Also, in its 1975 dried vine fruits submission to IAC, the Bureau stressed the inadequacies of the market in the amalgamation of fruit blocks.

5.2.3 The Extent of Failure in the Capital Market

Amongst the factors considered by the Bureau in its assessment of an efficiency-based case for adjustment assistance is the argument that the rural credit market operates imperfectly such that farmers are unable to service their adjustment needs. The major source of this imperfection is non-price rationing of agricultural credit, though it is acknowledged by the Bureau, that for various reasons, the extent of this market imperfection is unclear.

The Bureau considers two remedies for imperfections in the rural credit market. The preferred remedy (a 'first-best solution') is to remove the market failure responsible for farmers being unable to obtain sufficient credit. The second-best remedy, which is recommended in the event that a first-best solution is not possible, is government intervention to assist farmers to secure their credit needs which would be demanded in the absence of regulation of the financial system. In this way, the Bureau argues (see p. 3.12), '...the efficiency of national resource allocation may be increased and would certainly not be reduced unless the countervailing assistance granted the sector overcompensated for the market imperfection rather than only neutralised it'.

The Bureau's analysis of the rural credit market touches on three issues which have been considered in other BAE submissions and related reports. These include the nature of the facts pertaining to failure in the capital market, how to handle a market imperfection in an otherwise first-best world and how to handle a market imperfection in a second-best world.

The Bureau's first major investigation of the adequacy of rural credit facilities was published in 1972 (BAE 1972). This report concluded that, although short and medium-term credit facilities were adequate, there was a gap between the supply and demand for long term credit. A second study which touched on the rural credit market was prepared by the Bureau (BAE 1974b) following a request by the Government for the Department of Agriculture and the Treasury to formulate proposals which may be necessary to assist the beef cattle industry. A key result of this study (1974b, p. 45) is that the lending criteria applied by commercial lenders would almost have certainly resulted in some viable beef producers being denied access to carry-on finance ⁽⁴⁾. A further analysis of rural credit arrangements was published by the Bureau in 1977 (BAE 1977d). It noted the considerable changes in the sources and types of rural credit made available since the early 1970s and concluded that additional credit would probably only be demanded if it were available on terms and conditions involving some concessional element. In 1983, however, the Bureau has again found significant inadequacies present in the rural credit market. Of course, it is possible that the rural credit market has changed to the extent indicated by the Bureau over the past decade. It is also possible, however, that the adequacy of rural credit facilities has not changed quite so markedly as suggested by BAE publications.

Regardless of the extent of capital market imperfections, there is the further issue regarding an efficient response to such imperfections. While the solution is straightforward in an otherwise distortion-free setting (ie. remove the imperfection), the Bureau argues, in its 1983 submission on Longer Term Rural Adjustment, that the same solution is the most preferred in a world where other distortions would remain subsequent to removal of the imperfection of interest. This latter approach is significantly different to that

outlined in other Bureau submissions. For example, in its 1977 submission on wheat stabilization (BAE 1977a), the Bureau emphasises that caution must be exercised before variations to assistance arrangements are proposed because it is not always clear that such variations will result in an economically more efficient solution than the status quo. In the case of alleged capital market imperfections this criterion would suggest that the Bureau would have to be confident that resources will not flow from lower to higher cost uses as a result of deregulation of the credit market in the presence of a range of distortions elsewhere in the economy.

5.2.4 Measurement and Provision for Farmer and Household Welfare

The Bureau's proposal for a household expenditure loan plan (HELP) is based on the assessment that existing unemployment benefits and provisions of RAS are inadequate to cope with the welfare problems of farmers with low incomes. The unemployment benefit, while of some use to those farmers who derive a significant proportion of their income from off-farm work, is unable to serve the welfare needs of self-employed individuals who cannot satisfy the work test and other eligibility criteria for this welfare provision as determined by the courts ⁽⁵⁾. So long as criteria such as the work-test continue to be applied (and the Bureau suggests at p. 5.56 that there are several reasons why this a preferable strategy) then there will be some farmers and other self-employed individuals who are unable to obtain social welfare support available to others elsewhere in the community. Therefore, the use of alternative measures such as the household support provision of RAS, to support impoverished farmers, becomes a major consideration in any discussion of rural welfare.

Under the existing provisions of RAS, a farmer may apply for household support ⁽⁶⁾ if the farm is assessed as non-viable. The Bureau's HELP scheme dispenses with the viability criterion and attempts to raise household income of eligible farmers and self-employed persons up to the level of the unemployment benefit. Interestingly, HELP also dispenses with the work-test which the Bureau thought should be retained in the case of the unemployment benefit scheme.

Although the eligibility tests for welfare benefits under HELP are flexible enough to make the scheme applicable to a wide range of farmers experiencing different levels of personal and family hardship, the magnitude of assistance offered under the scheme is linked to considerations other than welfare. In particular, the benefits of HELP are significantly less for those farmers who choose to remain in farming rather than obtain employment elsewhere. However, in contrast to an earlier Bureau study on structural adjustment (Kingma and Samuel 1977, p.214), there is no provision in HELP for a cost-benefit analysis of the adjustment response to assistance afforded under the scheme. That is, the scheme seeks to achieve adjustment objectives and affords benefits in direct proportion to the extent which participants satisfy these objectives but does not distinguish, in sign or magnitude, between the respective sizes of participants' net gains expressed in terms of resource use efficiency. It was in a not dissimilar situation that Kingma and Samuel (1977, p.214) argued that welfare payments should be dissociated from structural adjustment objectives.

PART 3

ASSESSMENT OF INCONSISTENCIES CONTAINED IN
BAE SUBMISSIONS TO IAC INQUIRIES

In Part 3 of this study the data considered in the previous three chapters are examined with a view to assessing any inconsistencies contained in BAE submissions to IAC inquiries over the past decade. Attention is focussed, in Chapter 6, on two aspects of consistency in policy evaluation. First, there is the question of whether the Bureau has been consistent with respect to the arguments considered in its submissions to IAC. Second, there is the further question of whether the Bureau has been consistent with respect to the application of those arguments considered in its various submissions. Both of these questions are addressed in Chapter 6 together with any implications their respective answers may have for the hypotheses outlined in Chapter 2. In the final chapter of this study (Chapter 7) a summary and some concluding remarks are presented.

CHAPTER 6

INCONSISTENCIES IN THE FRAMEWORK CONSIDERED AND APPLIED BY BAE

In this chapter any inconsistencies present in the policy evaluation framework considered and applied by the BAE in its submissions to the IAC and related reports are discussed. The Chapter is presented in four sections. In section 6.1 the economic arguments used by the Bureau in its various rural industry submissions are summarised for use in the remainder of the chapter. Following this, in section 6.2, is an evaluation of the consistency of the policy evaluation framework considered by the Bureau. In section 6.3 the question of whether or not the application of each of the economic principles, summarised in section 6.1, to the range of industry assistance issues addressed by the Bureau is consistent is examined. Finally, in section 6.4, the results of the analysis are discussed with respect to the hypotheses outlined in Chapter 2.

6.1 Summary of Arguments Contained in BAE Submissions

The reviews in Chapters 3,4 and 5 of economic principles put forward by the BAE in its submissions to the IAC and related reports suggest nine major arguments of relevance to the industry assistance debate. These are discussed briefly below.

6.1.1 IAC Criteria for Short-Term Industry Assistance

The criteria for short term industry assistance outlined by IAC (1976) in its 1975-76 Annual Report are used for the purpose of minimising inconsistencies which might arise in the treatment of industries seeking such assistance. They are presented in this study in section 3.1 of Chapter 3 and are referred to by the BAE in its submissions to the IAC on short-term assistance for sugar (BAE 1982b) and the south-east fishing trawl (BAE 1982d).

6.1.2 Tariff Compensation and the Existence Principle

The 'tariff compensation' argument (see Harris 1975) is that, whilst obstacles remain to the removal of assistance to high cost

industries, a second best approach of assistance to Australian agricultural and other export and low-cost import competing industries should be adopted. The argument has been cited in many of the Bureau's submissions to the IAC (see BAE 1982e, 1983a, c and d for recent examples) as have the practical difficulties of its implementation. In particular, the Bureau has noted (see, for example, Easter et al. 1982) the problems in identifying those firms which should be compensated and estimating the appropriate amount of compensation. As a result it is difficult to be confident that compensation policies will effect a movement of resources from high to lower cost activities. A corollary of the 'tariff compensation' argument is the 'existence principle'. The latter principle is relevant in situations whereby withdrawal or reduction of an industry's existing assistance is contemplated. Unless it is known that such action is likely to result in a movement of resources from higher to lower cost industries there is a strong efficiency-based case for retaining the industry's existing assistance (see Easter et al. 1982 p. 49).

6.1.3 The Trading-in Argument

'Trading-in' of assistance refers, as the label suggests, to the withdrawal of existing industry assistance and replacement with alternative assistance measures. Thus, the Bureau's arguments in its 1982 wheat and 1983 sugar submissions (BAE 1982e, 1983a) represent 'trade-in' arrangements where the effective rate of assistance may not change substantially over time but the composition of support measures alters significantly. 'Trading-in' of assistance is usually considered in low-cost activities where there may be no case for withdrawing or reducing existing assistance but it is envisaged that gains in resource-use efficiency can be obtained by substituting policy instruments.

6.1.4 The Resource Retention Argument

The 'resource retention' argument has been considered by the Bureau in several of its submissions to the IAC (eg. see BAE 1975h, 1982b, 1983c and d). The thrust of the argument is that in the event of a temporary economic downturn in an industry's market outlook, assistance is warranted to prevent an outward movement of resources.

Such a movement, the argument suggests, would be contrary to national interests because of the temporary nature of the adverse economic circumstances confronting the industry.

6.1.5 Output Price Uncertainty

There are two reasons commonly advanced in BAE submissions to the IAC as to why the removal of output price uncertainty might be warranted. First, price instability, resulting in end product price uncertainty, is alleged to have undesirable resource allocative effects at the farm level (see BAE's 1977 submission to the IAC on wheat price stabilisation). These undesirable effects arise, so the argument goes, from the impact of price instability on the structural features of farm production. In particular, the producer may need to adopt measures such as product diversification, a higher liquid compared to non-liquid capital structure and a more versatile input mix. Also, output price uncertainty may influence the willingness of producers to borrow and to adopt available sources of output raising and cost reducing technology. Second, it is suggested (see BAE's 1983 submission to the IAC on assistance to the dairy industry) that modification of output price uncertainty (via export price underwriting, for example) may be justified as an income support measure.

6.1.6 Imperfections in the Capital Market

Of the market imperfections which might be considered as obstacles to the attainment of efficient resource allocation, none has been more prominent in Bureau submissions to the IAC than failure in the capital market (see, for example, BAE 1983a and d). The nature of this market imperfection is the suggestion that banks participate in non-price credit rationing which may be caused by '...conservative, short-term perceptions or risk averse strategies of institutional lenders with respect to the longer term prospects of the rural sector and potential farm viability' (BAE 1983d, p. 3.11).

6.1.7 Inadequate Structural Adjustment

The view that the market-determined rate of industry adjustment

may be less than socially desirable is examined in several submissions by the BAE to the IAC, including canning fruit (BAE 1982c), longer term rural adjustment (BAE 1983d) and dried vine fruit (BAE 1975h). It appears that the autonomous rate of adjustment may be inadequate due to market related factors (BAE 1975h, 1982c), political judgements (BAE 1983d) and welfare considerations (BAE 1982f).

6.1.8 Minimum Level of Welfare

BAE has often expressed the view that intervention may be warranted to ensure that rural welfare is maintained at or above some minimum community standard (eg. see BAE 1977a, 1983d). The concept of affording the entire community a 'safety-net' continues to be of relevance to the rural sector as BAE (1983d, p.3.19) has estimated that around 13 to 16 per cent of farmers were continually in a poverty situation throughout the 1970s. ⁽¹⁾

6.1.9 Conservative Social Welfare Function

While the 'minimum level of welfare' argument is concerned with an absolute standard of living, there is a further concept in welfare economics which addresses a reduction in real incomes of a section of the community. The latter concept is known as the 'conservative social welfare function' (see Corden 1974). In terms of welfare weights this function gives relatively low and high weights to increases and decreases in income respectively such that a decline in income of a particular community group is avoided. A useful illustration of the relevance of the concept to rural welfare problems is provided in the Bureau's submission to IAC on Long-Term Assistance to the Australian Sugar Industry (BAE 1983a).

6.2 Consistency in the Framework Considered by the BAE in Submissions to the IAC

In most of the BAE submissions to the IAC discussed in Part 2 of this study, only a few of the abovementioned economic principles are considered. An understanding of which arguments were considered in each of the submissions can be obtained from inspection of Table 6.1.

TABLE 6.1: SUMMARY OF ARGUMENTS CONSIDERED IN BAE SUBMISSIONS TO THE IAC, 1974-83

X1	REF	SUGAR	CANNING FRUIT	SOUTH-EAST TRAPL	DAIRY	FERTILISERS	DRIED FRUIT	FERTILISERS	CITRUS	WHEAT	WOOD	CITRUS	FERTILISERS	WHEAT	CANNING FRUIT	SUGAR	DAIRY	RURAL ADJUSTMENT
(1)	(1975b)	(1982b)	(1982c)	(1982d)	(1975c-d)	(19751)	(1975b)	(1976b)	(1977c)	(1977a)	(1980b)	(1981)	(1982)	(1982e)	(1982f)	(1983a)	(1983c)	(1983d)
(2)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
TC-EP (1)	YES	YES	NO*	NO	YES	YES	NO*	YES	NO*	YES	YES	YES	YES	YES	YES	YES	YES	YES
T1 (2)	NO	NO	NO	NO	NO	NO	NO	NO*	NO	NO	NO	NO	YES	YES	NO	YES	NO	YES
RR (3)	YES	YES	NO	NO	NO	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO*	YES	YES
PR (4)	NO	YES	NO	NO	YES	NO	NO	NO	NO*	YES	YES	NO*	NO	NO	NO	YES	YES	NO
TKM (5)	NO	NC	NO	NO	NO*	YES	YES	YES	NO*	NO	NO*	NO*	NO	NO	NO*	YES	NO*	YES
ISA (6)	NO	NO	YES	NO	NO*	NO	NO	YES	YES	NO	NO	NO*	YES	NO	NO*	NO	NO	YES
MM (7)	YES	YES	YES	YES	YES	YES	NO	YES	YES	YES	NO	YES	YES	YES	YES	NO	YES	YES
CSMF (8)	NO*	NO	NO*	NO*	NO	NO	NC	NO	NO	NO	NO	YES	YES	NO*	YES	YES	YES	YES
ST IAC (9)	NO	YES	NO*	YES	N.A. (b)	N.A. (b)	N.A. (b)	N.A. (b)	N.A. (b)	N.A. (b)	N.A. (b)	N.A. (b)	N.A. (b)	N.A. (b)	N.A. (b)	N.A. (b)	N.A. (b)	N.A. (b)

NOTES

(a) TC-EP - Tariff Compensation - Existence Principle (see 6.1.2)

T1 - Trading-In (see 6.1.3)

RR - Resource Retention (see 6.1.4)

PR - Output Price Uncertainty (see 6.1.5)

TKM - Imperfect Capital Market (see 6.1.6)

ISA - Inadequate Structural Adjustment (see 6.1.7)

MM - Minimum Level of Welfare (see 6.1.8)

CSMF - Conservative Social Welfare Function (see 6.1.9)

ST IAC - Short Term IAC Criteria (see 6.1.1)

(b) NA - Not applicable

(c) see Easter et al (1982)

The fact that particular arguments were not considered in all BAE submissions to the IAC does not, of course, suggest by itself that inconsistent considerations of relevant policy evaluation principles have occurred. In many of the cases where particular arguments were not considered, the economic circumstances of the industry or the terms of reference governing the inquiry meant that it was inappropriate to raise particular principles. However, it could be argued that the policy evaluation framework is inconsistent if it can be demonstrated that there were no such mitigating circumstances.

Inspection of Table 6.1 identifies 9 economic principles (Y_i) and 18 BAE submissions to IAC inquiries (X_i) over the period 1974-83. Because the IAC criteria for short term assistance (Y_9) are relevant to only four of these submissions (X_{1-4}), Table 6.1 is a matrix containing 148 observations. Of these observations 41 and 59 per cent are in the 'Yes' and 'No' categories respectively.

An asterisk on the 'No' observations is used to denote those submissions where it may have been appropriate to consider particular economic arguments which were raised in similar economic circumstances in other submissions. (2) There are 22 No* observations in Table 6.1, although this assessment is based solely on the economic circumstances described in the submissions themselves which are sometimes insufficient for the purpose of evaluating whether or not conditions in one industry were essentially the same as in another where particular economic argument(s) are considered. Therefore, it is possible that there are cases, in addition to those discussed below, where industry circumstances were such that it may have been appropriate to consider particular argument(s) given that they had been raised in fundamentally similar circumstances elsewhere. Of course, it should also be mentioned that unlike many of the studies classified in Table 6.1, this study has been carried out with the benefit of hindsight. Many of the Bureau's submissions would have been prepared prior to recognition and development of particular arguments in the Bureau and elsewhere in the agricultural economics literature.

In regard to those 'No' observations which are assigned an asterisk in Table 6.1, it is appropriate to comment briefly on the means by which each of them have been identified. The analysis proceeds down the rows of Table 6.1.

Concerning 'tariff compensation' and the 'existence principle' (Y_1), inconsistencies in the policy framework considered by BAE have been located in the canning fruit (Y_1X_3), dried vine fruit (Y_1X_7) and citrus (Y_1X_9) submissions. In all three cases the Bureau concludes that there are sufficient grounds for adjustment assistance to be provided but the economic principles enunciated in other Bureau submissions where the 'tariff compensation' argument is discussed suggest that it may have been appropriate for the Bureau to consider the flow of resources from lower to higher cost industries that may have resulted following the provision of adjustment assistance.

Only one inconsistency has been identified in the Bureau's consideration of the 'trading-in' argument. This occurs in the 1976 fertilisers submission to the IAC (Y_2X_8) where it is concluded that a superphosphate bounty is not an appropriate instrument to achieve an improvement in resource use efficiency. As mentioned in Chapter 5, this conclusion stems mainly from the inelastic nature of superphosphate demand at both the regional and aggregate grazing industry levels. However, the circumstances surrounding the preparation of the 1976 fertilisers study might be regarded as being very similar to those which prevailed in 1982 when the Bureau prepared a further submission to an IAC inquiry into fertiliser subsidies. In the latter submission the Bureau also found that a fertiliser subsidy is not an appropriate instrument for achieving an improvement in efficiency but recommended it should be retained unless a more effective method of promoting national income and welfare could be identified. It would seem that the possibility of an assistance 'trade-in' would also have been relevant to the Bureau's 1976 fertiliser submission to the IAC.

Concerning the 'resources retention' argument (Y_3), it appears that the economic circumstances prevailing at the time the Bureau prepared its 1983 submission to the IAC into long term assistance to the sugar industry (Y_3X_{16}) were such that the argument may have been

relevant to the debate on the industry's level of government support. In particular, the Bureau (1983a, p.30) notes, in its discussion of an underwriting scheme for the sugar industry, that such a scheme would provide assistance when it is most needed (ie. in times of market downturn). The 'resources retention' argument may have been relevant to an analysis of such a scheme because of the likelihood of resources flowing out of this relatively low cost industry during a temporary decline in its economic prospects. This argument had been raised in similar circumstances on several other occasions identified in Table 6.1.

While the 'output price uncertainty' argument (Y_4) for government intervention is considered in many of the Bureau's submissions to the IAC, it is not raised in either of the citrus industry reports (see Y_4X_9 and Y_4X_{12} .) As mentioned in sub-section 6.1.5, a central feature of this argument is that intervention may be warranted to avoid the adverse impact of price instability on resource allocation. Given the short term variability in citrus prices that occur due to phenomena such as the 'Florida Freeze' (BAE 1977c, p. 44) it seems that the 'output price uncertainty' argument may have been relevant to the Bureau's submissions to IAC inquiries into assistance arrangements for the industry.

In regard to consideration by the Bureau of 'imperfections in the capital market' as an argument (Y_5) relevant to the provision of industry assistance, there are several instances documented in Table 6.1 where, given the circumstances under which the argument is raised elsewhere, it may have also been considered. The suggestion that the argument (see sub-section 6.1.6 for details) may be relevant to the case for government intervention is put strongly, for example, in the Bureau's submission to the IAC's inquiry into long term assistance for the sugar industry where it is noted that '...capital markets do not efficiently accommodate risks associated with fluctuations in prices and production' (BAE 1983a, p.17). Some of the other inquiries where the same argument may have been relevant include dairy (Y_5X_5 and Y_5X_{17}), citrus (Y_5X_9 and Y_5X_{12}), wood (Y_5X_{11}), wheat (Y_5X_{14}) and canning fruit (Y_5X_{15}).

An inadequate rate of structural adjustment is a further argument (Y_6) considered in several BAE submissions to the IAC as possible grounds for government intervention. In the Bureau's submission to the IAC on Longer Term Rural Adjustment (Y_6X_{18}) the Bureau referred to the 'imperfect capital market' argument as one reason why government intervention may be required to promote the rate of rural adjustment. Other reasons cited by the Bureau as to why the market determined rate of adjustment may be unsatisfactory from a social perspective include the 'demonstrated need' in some industries to promote adjustment, a desire by governments to accelerate the autonomous rate of adjustment and the household hardship that confronts those with an adjustment problem.

The argument that the capital market may be imperfect and farmers may be unable, therefore, to secure their capital requirements for adjustment purposes appears to have some relevance for several other submissions classified in Table 6.1. These include the 1975 dairy (Y_6X_5), 1981 citrus (Y_6X_{12}) and 1982 canning fruit (long term assistance - Y_6X_{15}) submissions. At the time the Bureau prepared these submissions, all of these industries were confronted with contractionary pressures and in the case of the 1975 dairy submissions, the Bureau (1972) had identified, only a few years earlier, several inadequacies in the longer-term credit market.

The 'demonstrated need' to promote adjustment arises from a number of farm characteristics documented in the Bureau's 1982 submission to the IAC inquiry into short term assistance to the canning fruit industry. These characteristics (see section 3.4) may have also been relevant to the Bureau's citrus and canning fruit (long term assistance) industry submissions. In the latter submission a tree-pull scheme is examined but it is based on welfare arguments rather than the set of farm production characteristics outlined in the Bureau's short term assistance submission to the IAC on canning fruit.

While the author could not identify any inconsistencies in the framework considered by the Bureau in relation to minimum levels of rural welfare (see sub-section 6.1.8), there are several occasions mentioned in Table 6.1 where the conservative social welfare function (see sub-section 6.1.9) might have been, but was not, discussed.

These include beef (Y_8X_1), canning fruit (Y_8X_3 and Y_8X_{15}) and the south eastern trawl Fishery (Y_8X_4). In all of these cases, industry incomes had undergone or were expected to experience significant reductions, thereby raising the possibility of government action. Such intervention is discussed, for example, in the Bureau's 1982 submission to the IAC inquiry into long term assistance to the sugar industry where it is noted that deregulation of the domestic market may result in capital and revenue losses to existing producers (see section 4.3).

The final argument in Table 6.1 is the IAC's set of criteria for inquiries relating to the provision of short term assistance (see section 6.1.1). Of the four submissions by the Bureau to such inquiries there is one occasion (canning fruit - Y_9X_3) where the criteria are not discussed. (3)

6.3 Consistency in the Application of Economic Principles

In this section of the analysis attention is focussed on the identification of any inconsistencies which might be present in the BAE's application rather than consideration of economic principles. Of particular interest is whether or not arguments classified in Table 6.1 are uniformly accepted or rejected in the various BAE submissions to inquiries conducted by the IAC. The discussion proceeds, as in the previous section, in the order of the arguments listed in Table 6.1.

'Tariff compensation' and the 'existence principle' are considered in 14 of the Bureau's submissions classified in Table 6.1. In all cases the arguments are regarded by the Bureau as providing a potential basis for providing or maintaining existing assistance to rural industries. However, there are significant differences between the submissions with respect to the amount of detailed information considered necessary to be confident of an improvement in resource use efficiency when assistance arrangements are varied. For example, in some submissions (eg. beef - X_1 and sugar - X_{16}) there is minimal concern for resource movements between industries following changes to assistance arrangements whilst in others (eg. dairy - X_{17} and wheat - X_{10}) emphasis is placed on likely net movements in GNP caused by

amendments to the assistance regime. Furthermore, there are differences between the Bureau's submissions with respect to the implications for industry assistance of accepting the 'tariff compensation' argument and the 'existence principle'. For example, in its 1983 submission to the IAC's inquiry on longer term structural adjustment the Bureau argued that 'tariff compensation', while a strong argument for sector-wide assistance, could not be invoked validly for the purpose of retaining adjustment assistance to a marginal group of farmers. This approach contrasts markedly with the typical industry (partial) evaluation of industry assistance undertaken by the BAE and the IAC.

The concept of 'trading-in' existing for alternative assistance measures has appeared in 4 of the Bureau's more recent submissions to IAC inquiries (see Table 6.1). In all of these cases the Bureau attempts to identify superior means of assistance from efficiency and/or welfare perspectives. There are two points of interest so far as differences in the application of the 'trading-in' argument are concerned. First, there is the question of the target level of assistance before and after the 'trade-in'. Second, there is the critical issue of the amount of attention focussed on inter-industry movement of resources following an amendment to the assistance structure, a subject which is also addressed above in the discussion of the Bureau's application of the 'tariff compensation' argument and the 'existence principle'.

Concerning the level of assistance afforded an industry or group of producers before and after a 'trade-in', the Bureau has adopted several approaches. In the case of the Bureau's 1982 wheat submission to the IAC (X_{14}) it is argued that the current level of assistance should be maintained and attention should be focussed on '...the effectiveness of assistance arrangements'. This approach contrasts with that adopted in sugar (X_{16}) and longer term structural adjustment (X_{18}) where there is no suggestion as to what may be the appropriate target level of assistance and fertilisers (X_{13}) where it is recommended that public expenditure saved through removal of the fertiliser subsidies might be reinvested elsewhere in the form of '...more efficacious rural assistance measures'. Of course, the

latter simple reallocation of public expenditure on one form of assistance to another may not result in the effective rate of assistance being maintained.

In regard to the effort made by the Bureau to examine the likely changes in resource use following the implementation of a 'trade-in', all 4 submissions say very little about prospective variations in consumption or production of the assisted output or input and their respective substitutes and complements. Of course, such analyses are often not possible in the time made available by IAC inquiries but it is significant to note that several submissions classified in Table 6.1 (wheat - X_{10} , canning fruit - X_{15} and dairy - X_{17}) do examine, in the context of 'tariff compensation', the likely pattern of inter-industry resource movements following a change in assistance arrangements.

The 'resources retention' argument is evaluated in 6 of the Bureau's submissions classified in Table 6.1. Interestingly, the Bureau's attitude towards the 'resources retention' argument varies significantly between the submissions. At one extreme are the Bureau's thoughts in its submission to the IAC on longer term rural adjustment (X_{18}) where it is argued (p. 3.14) that the 'resources retention argument' provides '... prima facie support for intervention in the adjustment process...'. At the other is the view expressed in the Bureau's 1982 submission to IAC's inquiry into short-term assistance for the sugar industry (see section 3.3) where serious reservations are expressed about the validity of the 'resources retention' argument. In between these two extremes is a spectrum of attitudes towards the 'resources retention' argument including tentative acceptance (dairy - X_{17}), acceptance in principle but support for government intervention only in the event of demonstrable net economic benefits (wheat - X_{10} and dried vine fruit - X_7) and acceptance in principle but rejection of government intervention except for dissemination of market outlook information to the industry of interest (beef - X_1).

The 'output price uncertainty' argument appears in 6 of the Bureau's submissions classified in Table 6.1. Sometimes it is considered together with the 'resources retention' argument as a possible efficiency oriented basis for government intervention (see,

for example, wheat - X_{10} and dairy - X_{17}). However, it differs from the 'resources retention' argument in that it is more concerned with the effect of price instability on the trade-off between producer security and profits and underinvestment rather than the movement of resources in response to a temporary economic downturn (see subsections 6.1.4 and 6.1.5).

Inspection of the 6 submissions where the 'output price uncertainty' argument is considered reveals several Bureau perspectives on its validity. In both the dairy submissions (X_5 and X_{17}) it is suggested that output price uncertainty may lead to a less than optimum use of resources. A similar view is expressed in the Bureau's 1980 submission to the IAC inquiry into wood and wood products (X_{11}) where it is noted that it may be appropriate to provide a more certain production and investment environment. The effects of output price uncertainty on production and investment are also referred to in the Bureau's 1983 sugar submission (X_{16}) but it is an inadequate capital market which denies producers the opportunity to cope with the effects of price instability rather than output price instability per se which is identified as the basis for government intervention. A more circumspect approach is advocated in the Bureau's 1977 wheat submission (X_{10}). In particular, it is argued that price instability has undesirable effects at the farm level but before stabilisation policies are implemented, the Bureau recommends that net benefits of such intervention need to be identified. In the case of the wheat industry the Bureau (1977a, p. VII. 7) concludes that such benefits may not be present because of the possibility of other low cost industries competing for resources and diminishing returns to expanded wheat production. Finally, output price uncertainty, as a basis for government intervention, is raised in the Bureau's 1982 submission to IAC on short term assistance for the sugar industry. (X_2). On this occasion the Bureau (p. 25) recognises that there is also an opposing school of thought to the view that export price uncertainty may affect adversely the levels of output and investment in the sugar industry. Presumably, the Bureau is referring to the work of Demsetz (1969) and others (eg. Lloyd 1977) who have argued that risk reduction is an economic good which must be incorporated into the notion of efficiency. As it turns out, the

Bureau finds it unnecessary to commit itself to acceptance or rejection of the 'output price uncertainty' argument in this short term assistance submission because of the longer term rather than temporary nature of export price uncertainty in the sugar market.

'Imperfections in the capital market' are considered as a possible basis for government intervention in 5 of the Bureau's submissions classified in Table 6.1. On all occasions (fertilisers - X_6 and X_8 , dried vine fruit - X_7 , sugar - X_{16} and longer term rural adjustment - X_{18}) the Bureau is of the opinion that if such imperfections are present they should be acted upon, preferably directly rather than indirectly through manipulation of some other output or input price. Nevertheless, it is of interest to note that the Bureau has published several assessments of the rural credit market which suggest that, at various times over the past decade, rural credit facilities have been burdened with market imperfections. Indeed, according to the BAE, rural credit arrangements have moved from being inadequate in 1972 to satisfactory in 1977 but possibly inadequate again in 1983.

'An inadequate rate of structural adjustment' is considered as an argument for industry assistance in five of the Bureau's submissions to the IAC. On two occasions (fertilisers - X_8 and X_{13}) it is considered simply in the context of a government policy objective. On two others (citrus - X_9 and canning fruit - X_3) it is discussed in a resource use efficiency context and in one (longer term rural adjustment - X_{18}) it is evaluated on both efficiency and welfare grounds. As the Bureau's approach to adjustment assistance, in a welfare context, is outlined only once in the submissions classified in Table 6.1, discussion of the Bureau's comments on welfare assistance, in its longer term rural adjustment submission, is left to later in this section where general welfare based assistance is examined.

The notion of providing assistance to accelerate the rate of structural adjustment and thereby improve resource use efficiency is not uniformly accepted by the Bureau. In its submission on longer term rural adjustment (X_{18}) the Bureau acknowledges a general case for assistance to agriculture on efficiency grounds but concludes that

there are no substantive grounds for providing selective assistance to marginal units rather than more efficient farms. In fact, the Bureau concludes that a decision to continue or terminate RAS must be regarded as a political judgement. In contrast, the Bureau, in its 1977 citrus (X_9) and 1982 canning fruit submissions (X_3), identifies particular industries which exhibit characteristics that make it clear that there is a 'demonstrated need' to promote adjustment. Furthermore, the factors identified in these submissions as being responsible for the 'demonstrated need' to accelerate adjustment do not coincide with the efficiency based case for adjustment assistance outlined in the Bureau's longer term rural adjustment submission. In particular, in the latter submission the Bureau (1983d, p. 4) remarks that 'Care is required that a perception of an adjustment 'problem' is well founded ...' and '...apparent divergence between the sale and offer prices for rural labour and assets may be entirely consistent with traditional economic principles of efficient resource allocation'. These comments appear to be relevant to both the canning fruit and citrus submissions where it is argued that a number of factors peculiar to orcharding (eg. small properties, fixed investments and long investment/production lags) may justify government assistance.

The concept of affording welfare assistance to farmers so that a minimum standard of living is maintained is put forward in 14 of the Bureau's submissions classified in Table 6.1. While there is general agreement concerning the justification for intervention to relieve hardship, there are two aspects of the welfare assistance debate that are not treated uniformly in the submissions. The first is the choice by the Bureau of variables to measure farm household welfare. The second is the selection of instruments to handle identified welfare problems.

In regard to the measurement of household welfare the most popular criterion is farm income. This measure is adopted in many submissions including beef (X_1), canning fruit (X_3), the south eastern trawl fishery (X_4), fertilisers (X_8 , X_{13}), citrus (X_{12}) and longer-term rural adjustment (X_{18}). Recognition that household welfare might be influenced by other variables (in particular, net worth) is given in four of the Bureau's submissions classified in

Table 6.1 (sugar - X_2 , dairy - X_5 , citrus - X_9 and longer term rural adjustment X_{18}) and three other papers published by the Bureau (Cuthbertson et al. 1974, Stoeckel et al. 1974 and Martin and Farquharson 1982). Cuthbertson et al (1974) attempted to measure family welfare in terms of the flow of goods and services a family can command. Factors relevant to this criterion are said to include annual money income, non-pecuniary income, family assets and the influence of public sector services on family consumption levels. The significance of including both income and net worth in measurements of household welfare is noted in Stoeckel et al. (1974) where it is found that farm families, while earning lower incomes than non-farm families tend to possess relatively greater wealth. Consequently, conversion of wealth into an income flow and adding it to income could be expected to reduce any inequalities between family well being of farm and non-farm households.

Concerning the selection of instruments to deal with rural welfare problems there are basically two approaches outlined in BAE submissions to the IAC. First, there are those submissions which stress the need to focus on the welfare problem itself when considering alternative policy instruments. Included in this category are the Bureau's 1977 wheat submission (X_{10}) where it is argued that welfare goals are pursued more appropriately through broadly based direct measures rather than wheat price stabilisation and the two fertiliser submissions (X_8 and X_{13}) which refer to the superiority of direct measures over input subsidies as welfare policy instruments. In contrast, several other Bureau submissions outline proposals which do not work directly on household welfare. In the two canning fruit submissions (X_3 and X_{15}) a tree-pull scheme is recommended as a welfare instrument. It is clear that under such a scheme benefits accruing to producers would be directly proportional to the number of trees pulled and may bear little relationship to the income status of individuals. Also, the Bureau's 1983 dairy submission (X_{17}) outlines a market underwriting scheme designed, amongst other things, to address welfare problems of dairy industry households. Such a scheme could be expected to confer benefits in direct proportion to the size of a farm's output rather than the adequacy of a household's income. Finally, in the Bureau's 1983 submission to the IAC on longer term rural adjustment, a household expenditure loan plan which raises

household income of eligible farmers to the level of the unemployment benefit, is proposed. This scheme works on income but affords benefits in proportion to the adjustment choices of farmers. In particular, benefits of the proposal are smaller for those farmers who choose to remain in farming rather than obtain employment elsewhere.

Use is made of the conservative social welfare function in three submissions classified in Table 6.1. These include sugar (X_{16}), longer term rural adjustment (X_{18}) and citrus (X_{12}). In all three submissions the Bureau recognises that a decision to offset capital or revenue losses caused by variations in assistance arrangements or some adverse development in an industry's economic environment must be politically determined. There are no inconsistencies in the application of this argument.

The final argument listed in Table 6.1 concerns the Bureau's application of the criteria for short term assistance developed by the IAC and first published in its 1975-76 Annual Report (see section 3.1). These criteria are considered in two Bureau submissions, namely sugar (X_2) and the south eastern trawl fishery (X_4). In both submissions the Bureau considers it appropriate to assess the case for short-term assistance in terms of the Commission's published criteria. However, only in sugar does the Bureau present an independent perspective on efficiency aspects of short-term assistance. In fact, in sugar, the Bureau concludes that even though it does not support a case for short term assistance on efficiency grounds, it is appropriate to evaluate the industry against the IAC's criteria in order to achieve a consistent approach to temporary assistance policy.

6.4 Discussion of Results and Hypotheses

In the previous two sections the Bureau's consideration and application of industry assistance arguments are examined respectively with emphasis placed on the consistency perspective. A useful extension of this analysis may have been to examine the extent to which the conclusions of BAE submissions to IAC inquiries are affected when inconsistencies present in the policy evaluation framework are removed. However, a decision was taken by the author not to pursue

such an analysis because of differences in the Bureau's attitude to many of the industry assistance arguments. That is, it is not possible to decide whether the arguments listed in Table 6.1 would have been accepted or rejected in those submissions where economic circumstances suggested they should at least have been considered.

Although no attempt is made here to compare the conclusions of BAE submissions to IAC inquiries with and without any inconsistencies identified in the previous two sections, there are a number of comments to be made in relation to the hypotheses outlined in section 2.4 of Chapter 2. For convenience, these hypotheses are repeated below:

- (1) BAE does not contribute to any inconsistency and uncertainty which might characterise the policy evaluation principles and policies relating to rural industry assistance; and
- (2) BAE does not discriminate between rural industries in its application of policy evaluation procedures.

While it is not possible to examine hypotheses (1) and (2) via formal significance testing methods, the results discussed in this chapter do suggest that the BAE may have contributed to the level of uncertainty surrounding rural industry assistance, policy evaluation.⁽⁴⁾ Moreover, it is clear that many inconsistencies reported in sections 6.2 and 6.3 occur between industry submissions, thereby suggesting some discriminatory treatment of assistance to rural activities.

There are, however, several qualifications that need to be made to the abovementioned remarks before summarising the principal results. First, the structure of this study is such that attention is focussed on the Bureau's negative contribution to consistency, uncertainty and discriminatory treatment of industry assistance. Of course, this approach is useful in that it facilitates identification of those areas of policy evaluation which may require further attention. Nevertheless, it is important to exercise caution when using the results reported in this study for the purpose of addressing the overall consistency of the framework adopted in the Bureau's

submissions to the IAC and related reports. Second, there is no suggestion that inconsistencies and any consequent industry discrimination discussed in this chapter are intentional. There is a host of reasons including developments in the discipline, personnel changes and varying terms of reference and reporting times in the IAC inquiries themselves which could account for discrimination in the policy evaluation process. Finally, it is unlikely that inconsistencies in policy evaluation are confined to BAE submissions to IAC inquiries. Indeed, Edwards (1980) has noted the presence of inconsistencies in IAC reports but nevertheless points to the important contribution the IAC has made to our understanding of rural industry assistance problems. In a similar vein the author of this study is confident that the quality of IAC rural reports and policy making would suffer without the contribution of the BAE to the industry assistance inquiry process.

Much of the evidence concerning hypotheses (1) and (2) has already been discussed in sections 6.2 and 6.3. Hence, attention is now focussed on summarising those results in a form of direct relevance to hypotheses (1) and (2).

Concerning hypothesis (1) it is clear that inconsistencies stem from two sources. First, there are quite a few occasions documented in Table 6.1 and described in section 6.2 where economic circumstances of an industry under inquiry were sufficiently similar to those prevailing in other industries which were also the subject of IAC inquiries, thereby suggesting that arguments concerning assistance put forward on these latter occasions may have also been relevant to the former group of submissions where they are not raised. The incidence of these inconsistencies ranges across all of the arguments classified in Table 6.1 except for the 'minimum level of welfare' argument which is consistently raised by the Bureau whenever circumstances warrant it. Second, inconsistencies arise with respect to the Bureau's application of industry assistance arguments. These are varied in nature but a simple classification would include the following components:

- . Inconsistencies with respect to validity of arguments ('resource retention', 'inadequate structural adjustment' and 'output price uncertainty');

- . Inconsistencies concerning the amount of information required to be confident of an improvement in resource use efficiency following intervention ('tariff compensation', the 'existence principle' and 'trading in');
- . Possibly conflicting assessments of the nature and extent of market imperfections ('imperfect capital market');
- . Inconsistencies concerning the implications of accepting a case for retaining assistance ('existence principle' and 'trading-in');
- . Varying treatment of the target level of assistance when applying the 'trading-in' argument;
- . Differences in the choice of measure for assessing rural welfare and the selection of instruments to address welfare problems; and
- . Variations in adherence to IAC criteria for provision of short-term assistance.

The summary of relevant results for hypothesis (1) is also pertinent to hypothesis (2) because many of these inconsistencies occur between different industry submissions. This point can be verified by inspection of the results discussed in sections 6.2 and 6.3.

Having discussed inconsistencies present in BAE submissions to IAC inquiries it is appropriate to refer back to Chapter 2 where Kaufmann's proposals for solution of inconsistencies are outlined. In particular, pursuit of a consistent policy evaluation framework, as defined by Kaufmann, would require the elimination of all arguments inconsistent with other arguments accepted into the policy evaluation framework. Applying Kaufmann's guidelines to the present study suggests two courses of action. The first concerns those inconsistencies identified in the Bureau's consideration of economic arguments relevant to the industry assistance debate. Given that the recognition of an argument in some submissions and the neglect of it

in others where economic circumstances are similar may be seen as an inconsistency in the form of a disagreement over the relevance of that argument, it follows that there may be a case for careful co-ordination of industry submissions. Such co-ordination may ensure that arguments are at least considered when particular circumstances arise. In a policy evaluation framework which can be expected to change with progress in the discipline itself this may be a formidable task but the benefits in the form of reduced uncertainty and a less discriminatory treatment of industry assistance may justify such an undertaking. The second concerns inconsistencies identified in the application of the Bureau's industry assistance arguments. Following Kaufmann, it may be appropriate to take stock regularly of alternative viewpoints on the necessary and sufficient conditions for government intervention on efficiency and welfare related grounds. The principle benefit of such an exercise would be the use of a common set of principles at any point in time, though it is acknowledged that there may be a considerable research effort necessary for its execution.

CHAPTER 7

SUMMARY AND CONCLUSIONS

The main concern of this study is consistency in industry assistance policy evaluation with particular reference to the submissions made by the BAE to the public inquiry process conducted by the IAC. The definition of consistency adopted in this study is that outlined by Kaufmann. It focusses on the identification of incompatible propositions with a view to the removal of contradictions from an analytical framework.

In Chapter 2 the significance of consistency in policy evaluation is outlined. Particular attention is given to equity and efficiency as motives for maintaining a consistent approach to industry assistance. It is argued that the IAC appears to be concerned primarily with equity in its attempts to extend a single advisory process to all sectors and that any discriminatory treatment of entities affected by the industry assistance, public inquiry process may prejudice an industry's claims for public support. In addition, it is noted that consistency in the use of industry assistance criteria minimises the level of uncertainty in the market for assistance and related producer and consumer markets. Inspection of both the theoretical and empirical literature on risk and uncertainty suggests that inconsistencies in policy evaluation may affect the behaviour of the household and the firm, factor demand and national income.

A review of policy evaluation arguments contained in BAE submissions to the IAC and related reports is presented in Part 2 of the study. The purposes of this review are to identify the major economic arguments perceived by the Bureau to be relevant to the provision of rural industry assistance and to compare and contrast these arguments in preparation for the more detailed analysis of Part 3 of the study. The discussion is presented in three chapters which deal respectively with short-term assistance, longer term assistance for rural outputs and assistance for the use of inputs and structural adjustment.

From the review in Part 2, 9 economic arguments relevant to rural industry assistance are distilled in Chapter 6. These include:

- . IAC criteria for short-term industry assistance;
- . tariff compensation and the existence principle;
- . trading-in;
- . resource retention;
- . output price uncertainty;
- . imperfections in the capital market;
- . inadequate structural adjustment;
- . minimum level of welfare; and
- . conservative social welfare function.

A detailed assessment of the Bureau's consideration and application of these arguments is also presented in Chapter 6. It was found (see section 6.2) that there are quite a few occasions where economic circumstances of an industry under inquiry were sufficiently similar to those prevailing in other industries which were also the subject of IAC inquiries, thereby suggesting that arguments put forward on these latter occasions may have also been relevant to the former submissions where they were not raised. Also, a variety of inconsistencies arise with respect to the Bureau's application of industry assistance arguments. These are discussed in section 6.3 and summarised in section 6.4.

While it is concluded that the BAE may have contributed to the level of uncertainty surrounding rural industry assistance, policy evaluation and be responsible for some discriminatory treatment of arguments pertaining to assistance to rural activities, there are several qualifications that need to be made with respect to the main results. First, the results come from a study which focusses attention on the Bureau's negative contribution to consistency, uncertainty and discriminatory treatment of industry assistance and cannot, therefore, be used for the purpose of addressing the overall consistency of the framework adopted in the Bureau's submissions to the IAC and related reports. Second, there is no suggestion that identified inconsistencies are intentional. Indeed, inconsistencies may arise from a variety of sources documented in section 6.4. Finally, it is likely that many organisations involved over a period

of time with policy evaluation arguments will exhibit inconsistencies in their work. This alone cannot be used as a performance measure and, in the case of the Bureau, it is relevant to recall Warhurst's comments (see Chapter 2) that the BAE is an agency '...of the highest status...' whose work is '...crucial to a successful IAC inquiry into primary industry'. Nevertheless, the inconsistencies identified in this study do emphasise the substantial benefits that may be associated with careful co-ordination and regular stock-taking of necessary and sufficient grounds for industry assistance.

FOOTNOTES

CHAPTER 2

1. Technically, the IAC could initiate an inquiry into aspects of government assistance to an industry which has not been examined for some years. However, Warhurst (1983, p. 75) notes that this power was never utilised.
2. Kaldor (1959) and Hicks (1940) proposed alternatives to the Pareto criterion. Kaldor sought to overcome the restrictive requirements of the Pareto criterion whereby a social welfare improvement could only result if a policy improved the welfare of all members of a community. In particular, Kaldor introduced the hypothetical compensation principle which suggested that a policy is desirable if as a result, '...it is possible to make some people better off ...without making anybody worse off...' (Kaldor 1959, p. 550). Hicks developed this approach by suggesting that a policy may be regarded as desirable if it would be impossible in the prepolicy situation to make all individuals at least as well off as they will be as a result of introduction of the policy. Scitovsky (1941) noted that the Kaldor criterion could lead to a contradiction whereby the absence of compensatory payments following a policy change could lead to the conclusion that implementation and abandonment of a policy may be desirable simultaneously. Scitovsky proposed that this problem could be overcome by the requirement that a policy must satisfy both the Kaldor and Hicks criteria. That is, a policy could be socially desirable if (a) it would be possible as a result, to make some people better off without making anyone else worse off and (b) it would be impossible, by reversing the policy, to make everyone at least as well off.
3. These measures are discussed in detail in IAC (1983).
4. For analysis of the effects of uncertainty on output in the cases of duopoly and oligopoly see Hey (1979) and Cyert and Degroot (1970a and b).

CHAPTER 3

1. The final principle was discussed in the 1975-76 Annual Report of the IAC but not listed formally in the set of criteria for short-term assistance. However, it is listed in the set of criteria made available for witnesses intending to present evidence to inquiries on short-term assistance. See, for example, IAC (1982)
2. The effective rate of protection measures net assistance to an industry's value adding activities afforded by the assistance structure. It may be defined as the difference between value added per unit measured in assisted and unassisted prices, expressed as a percentage of value added per unit measured in unassisted prices.

CHAPTER 4

1. Details of assistance afforded to growers on the domestic market are described in Appendix A.1 of BAE (1982e).
2. This recommendation was deleted in the Bureau's subsequent publication on assistance to the plywood industry (see Parsons et al 1982).
3. In 1980-81 the effective rates of assistance for fruit and vegetable activities ranged from -5 per cent for dried vine fruits to 37 per cent for wine grapes.
4. The Bureau estimated the effective rate of protection for the citrus enterprise to be 60 per cent in 1974-75.

CHAPTER 5

1. The household welfare issues considered in the Bureau's 1982 report are largely the same as those outlined in its 1976 report.
2. Of course, it is true that the demand elasticity for superphosphate is non-zero (estimated by BAE (1976b to be -0.3) which suggests that there will be some reduction in superphosphate use following withdrawal of the subsidy. There is, therefore, a problem of deciding how inelastic the demand for an input must be before it is decided that variations in price will not significantly affect the quantity demanded. Some guidance might be obtained from Easter et al. (1982, p. 43) where it is concluded that '...fertiliser subsidies are not likely to be effective in stimulating increased use'
3. The main provisions of the Rural Adjustment Scheme (RAS) are outlined in Appendix 2.
4. The major reasons underlying this assessment are that the trading banks did not normally lend against the security of livestock mortgages and the pastoral houses viewed financing as an activity ancillary to their major functions as stock agents, wool brokers and suppliers of farm inputs. Other credit institutions such as the CDB and the rural reconstruction authorities were more involved with longer term credit although an expansion in their short term debt refinancing could release funds provided by traditional lenders for normal carry-on purposes.
5. The Bureau (1983d, p. 5.54) notes that recent legal action suggests that farmers, in order to be eligible for unemployment benefits, must demonstrate a lack of permanent further commitment to farming.
6. Details of household support are provided in Appendix 1.

CHAPTER 6

1. A further aspect of welfare not discussed here but considered by the Bureau (see BAF 1983d) is the distribution of income and wealth between groups in the community.

2. A decision was taken by the author to use the 'Yes' rather than the 'No' observations of Table 6.1 as the basis for identifying inconsistencies in policy evaluation arguments considered by the Bureau. An alternative procedure is to begin with the 'No' cells of Table 6.1 but this was not adopted because of the variations in the economic circumstances underlying these observations. In contrast, the economic circumstances underlying those submissions where particular arguments are considered are reasonably uniform, thereby making it somewhat less difficult to identify inconsistencies. While it can be expected that the results will display some sensitivity to the choice of a 'starting point' for the analysis, it is clear that both methods of analysis are capable of addressing the issues discussed earlier in the section.
3. The Bureau's 1975 submission to the IAC inquiry into short term assistance to the beef industry was prior to the Commission's publication (in 1976) of its short-term assistance criteria.
4. Recall from Chapter 2 that BAE submissions are only an input into the industry assistance inquiry process conducted by the IAC. Therefore, the reflection of any inconsistencies contained in BAE submissions in reports published by the IAC will depend upon how presiding IAC Commissioners regard the relevance and persuasiveness of BAE arguments.

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APPENDIX 1

INDUSTRY ASSISTANCE ARRANGEMENTS

In this appendix assistance afforded to each of the rural industries covered in Part 2 of the study is outlined. Much of the material presented here is drawn from IAC (1983) and may not, therefore, be an accurate description of assistance arrangements prevailing at the time the BAE prepared its respective submissions. Nevertheless, readers may find it convenient to refer to this appendix in order to obtain some understanding of industry assistance arrangements. For further details on current and historical rural industry assistance the reader is referred to IAC (1983) and the respective IAC inquiry publications.

A1.1 Beef Cattle Grazing

In most years the production of beef and veal has received little assistance. However, over the period 1970-71 to 1980-81, the effective rate of assistance has fluctuated substantially (from 26 per cent in 1977-78 to 2 per cent in 1979-80).

Measures currently assisting the production of beef and veal include:

- . government contributions towards the costs associated with inspection of beef and veal exports;
- . contributions towards cattle research through the Meat Research Trust Account administered by the Australian Meat Research Committee and also through research carried out by the Commonwealth Scientific Industrial Research Organisation (CSIRO);
- . reduced fertiliser costs through the operation of the phosphate fertiliser bounty; and
- . general concessions available to agricultural activities such as access to concessional credit and income taxation concessions.

Major assistance to beef cattle grazing was provided through the Beef Industry Incentive Payments Scheme - \$85 million in 1977-78 and \$32 million in 1978-79. In addition, beef producers have been major recipients of assistance provided by joint Commonwealth/State schemes such as the current RAS and the campaign for the eradication of bovine brucellosis and tuberculosis. Commonwealth funding has also been provided in recent years to help develop a Beef Carcase Classification Scheme.

A1.2 Dairying

Dairying is considered as being comprised of two sectors; market milk for human consumption and manufacturing milk used for the production of dairy products. This separation is largely determined by the nature of State regulation of the market milk sector, supported by the Commonwealth in its funding of assistance measures and through its unproclaimed legislation relating to the current marketing arrangements. Regulation of the market milk sector varies from State to State and is designed to restrict supply of market milk, thereby maintaining market milk prices above the equivalent price of milk for manufacturing purposes. Marketing arrangements for manufacturing milk operate within this framework and allow for manufactured dairy products to be sold on the domestic market at prices which differ from those on export markets.

In addition to the assistance effects of marketing arrangements, dairying has benefited from specific Commonwealth outlays and general assistance measures for agricultural activities. General measures include Commonwealth contributions to research and extension services and fertiliser subsidies. The sector has also benefited from adjustment schemes such as the Marginal Dairy Farms Reconstruction Scheme and the Dairy Adjustment Programme which applied to dairying and others such as the Rural Reconstruction Scheme and the RAS which apply to the entire agricultural sector. Commonwealth contributions to the bovine brucellosis and tuberculosis eradication campaign have also benefited dairying.

The manufacturing milk sector has received Commonwealth support through Budget outlays to a much greater extent than the market milk

sector. Devaluation compensation has been paid in particular years, including \$12.7 million in 1970-71 and \$2.6 million 1971-72. Production bounties for butter, cheese and processed milk products were paid until 1975-76, partly as an inducement to maintain a voluntary price difference between export and domestic markets. The amounts paid totalled over \$144 million for the period covered. More recently, the Commonwealth has underwritten the prices received for dairy products. Amounts paid out under this scheme were \$5.2 million in 1977-78, \$12.4 million in 1978-79, \$17.7 million in 1979-80, and \$1.6 million in 1980-81.

A1.3 Wheat Growing

Rates of assistance accorded this activity have fluctuated substantially. For example, in each of the years 1970-71 to 1972-73, effective rates of assistance for wheat growing exceeded 30 per cent. In contrast, since 1973-74, the effective rates of assistance have not been above 10 per cent and in several years have been negative.

The major factors determining the level of assistance to wheat growing are the marketing arrangements which have provided for domestic prices to be set administratively and for minimum returns to growers. Price discrimination between domestic and export markets for wheat is facilitated by an embargo on wheat imports. Operation of the home consumption pricing arrangements has assisted wheat growing in some years and penalised it in others - depending upon whether domestic prices are above or below export prices. Wheat returns have also been subject to either price guarantees or underwriting. Commonwealth payments to support wheat returns were made in 1970-71 and 1972-73.

The Australian Wheat Board (AWB) sells wheat at a uniform price in all Australian capital cities. To finance the costs of shipping wheat to Tasmania, a loading is imposed by the AWB on all domestic (mainland) sales of wheat for human consumption: in 1980-81 this amounted to \$2.78 per tonne.

Wheat growing has benefited substantially from the AWB's access to concessional credit through the Rural Credits Department of the Reserve Bank. The first advance payments to wheatgrowers under the Wheat Stabilisation Plans were financed by loans at concessional rates of interest. However, since 1979-80, the AWB has been requested by the Government to partly finance its first advance payments to growers from commercial borrowings. Consequently, the AWB has over recent years obtained an increasing proportion of its seasonal finance by the issue of promissory notes and bank-accepted commercial bills. In 1981-82, for the first time, the AWB's total requirements were obtained from commercial sources. To offset the additional costs incurred by the AWB, the Government has reimbursed the AWB from Budget appropriations.

Wheat growing has also been assisted in recent years by general forms of assistance available to the agricultural sector such as government contributions to export inspection services, agricultural extension services, scientific research, fertiliser subsidies, and schemes designed to facilitate structural adjustment/reconstruction.

A1.4 Grape growing for dried vine fruits

Assistance afforded the growing of grapes for processing into dried vine fruits has fluctuated, with effective rates of assistance ranging from 73 per cent in 1970-71 to -5 per cent in 1980-81.

These variations in the levels of assistance arise mainly due to fluctuations in producer transfers resulting from movements in the administered domestic price and export prices of dried vine fruits. Industry control of domestic prices and supplies of fruit and a tariff on imports (currently set at a general rate of \$0.08 per kg plus 7 per cent ad valorem) has enabled a considerable margin to be established between export and domestic prices in most years.

Under the operation of the stabilisation scheme, Government contributions have been made in those years when there were insufficient funds available to make the required stabilisation payments. Government net contributions totalling \$3.1 million were made in 1971-72, 1972-73, 1973-74, 1976-77 and 1977-80. In other years, returns were in excess of support prices.

Since 1978 a levy/disbursement mechanism has operated to maintain the domestic prices of dried vine fruits. Since 1982 underwriting arrangements have replaced the stabilisation scheme.

Additional minor assistance has been provided to dried vine fruits by measures designed to assist the agricultural sector generally, such as subsidised agricultural extension services, fertiliser subsidies and schemes funded by the Commonwealth to facilitate adjustment of agricultural activities.

A1.5 Citrus Fruit Growing

Australian citrus fruit growing has been a relatively highly assisted agricultural activity. Since 1977-78 this activity has had an effective rate of assistance of over 60 per cent. Oranges are the main citrus crop. One-half of the oranges produced are processed - predominantly into juice. Orange juice concentrate is the main citrus commodity traded internationally.

Tariffs on citrus juices are the major form of assistance benefiting citrus growing. Prior to 1977, imports of citrus juices, especially orange and tangerine juices, were subject to high specific rates of duty (and tariff quotas during 1976). In 1977 a 65 per cent ad valorem tariff was imposed on orange juice (one of the highest customs duties in the Australian Tariff Schedule). This was replaced by a variable tariff on orange and tangerine juices from 13 April 1979. The 'threshold price' for purposes of determining the variable tariff, which operated over the remainder of the period, was \$2.40 per kilogram of total soluble solids in orange and tangerine juices. The ad valorem equivalent of the variable tariff has been estimated as being approximately 70 per cent. The Fruit Industry Sugar Concession Committee (FISCC) provides a concession on the price of sugar for fruit processors if those processors have paid prices determined by the FISCC on all fruit purchased.

Most fruit juice products, including those made from citrus, are exempt from sales tax. The exemption applies to domestically produced juice products and to imports that are blended with locally produced

juices in accordance with specified minimum local content requirements. This arrangement can thus provide assistance to the domestic fruit growing activity.

Citrus growing also benefits from Commonwealth outlays generally available to the agricultural sector such as for research and extension, adjustment assistance and for fertiliser subsidies.

A1.6 Deciduous Canning Fruit Growing

Deciduous canning fruit growing includes apricots, peaches and pears used for canning. Estimated effective rates of assistance have fluctuated between a high of 26 per cent in 1975-76 to a low of 3 per cent in 1979-80.

Apart from the general assistance measures available to the agricultural sector, canning fruit growing has also benefited from commodity specific forms of assistance. These forms of assistance include tariffs, a home consumption price scheme and government loans to canneries.

From 1 January 1980, the Australian Canned Fruits Corporation (ACFC) was established and empowered to acquire and sell Australian canned fruits production. The ACFC is responsible for determining prices, terms and conditions for sales in domestic and export markets. Returns from the various markets are equalised. Prior to the establishment of the compulsory scheme, certain voluntary schemes operated with exemption from the provisions of the Trade Practices Act. Not all canneries participated in these voluntary schemes and, consequently, enforcement of discriminatory domestic pricing was sometimes ineffective.

A1.7 Sugar Cane Growing

Sugar cane growing has received negative effective rates of assistance in all years since 1973-74.

Domestic marketing arrangements operate for the sugar industry which result in administered prices being set for refined sugar products. This home consumption pricing scheme is facilitated by an embargo on the import of sugar and sugar products under the Sugar Agreements between the Commonwealth and Queensland Governments. Consequently, the domestic market is reserved entirely for sugar produced in Australia.

Under the various Sugar Agreements, the sugar industry provides a rebate (currently \$15 per tonne) to fruit processors using sugar in the manufacture of certain fruit products. In order to qualify for the rebate, fruit processors must comply with certain prescribed conditions, including that they pay not less than specified minimum prices for fresh fruit. These minimum prices are determined by the Fruit Industry Sugar Concession Committee (FISCC) which administers the domestic rebate.

The Sugar Agreement also makes provision for the establishment of the Export Sugar Committee (ESC) to administer the payment of a rebate to exporters of products containing sugar. The aim of the scheme is to reduce the cost of sugar to these exporters to a level comparable with prevailing world sugar prices when the administered home consumption price is higher.

The sugar industry also receives assistance from measures which are generally available to the agricultural sector. These include subsidies on fertilisers, income tax concessions and, to a lesser extent, rural adjustment finance and access to facilities supplying concessional credit.

Farmers in Queensland, the main producing State, face a number of constraints which control the growing of sugar cane. The main ones are that:

- . sugar additional to the amount The Sugar Board has agreed to accept for marketing, or has been manufactured from sugar cane grown on land which has not been assigned for cane growing, is paid for at a penalty rate of \$1 per tonne;

- . market (delivery) quotas operate for individual farms and for each sugar mill;
- . market (delivery) quotas for farmers can be sold or transferred separately from the assigned land but only subject to the approval of the Central Sugar Cane Prices Board; and
- . the grower can only deliver his cane to the mill to which his land is assigned and at times and delivery points provided for in the award established by the Local Sugar Cane Prices Board. Variations in this award have occasionally occurred but only with the approval of the Local Board.

A1.8 Fisheries and Fish Processing

Government assistance for the catching and processing of fish, crustaceans and molluscs has been provided through expenditure on research and exploration, expenditure on export inspection services, tariffs and other restraints on imports. The industry has also been assisted by general measures such as investment allowances, some sales tax exemptions and taxation concessions generally available to primary producers.

A1.9 Wood-Based Panel Products

IAC (1981b) provides details of assistance to this industry. Imports from general sources of particleboard and hardboard are dutiable at 30 per cent, plywood at 40 per cent and most other panelboards at 15 per cent. Veneers are dutiable at 15 per cent. Imports of particleboard and hardboard from Papua New Guinea are dutiable at 30 per cent with most other products duty free. A 15 per cent margin of preference is afforded most imports of New Zealand origin, the most significant exception being plywood which enters free.

Three quota arrangements apply to plywood. A tariff quota was imposed on imports of thick plywood from 1 July 1976 and expired on 30 June 1982. Imports within the annual quota of 10 000 cubic metres are

dutiable at 40 per cent (General). Over-quota imports from General rate sources are dutiable at 40 per cent plus \$0.35 per square metre for each mm, or part thereof of thickness in excess of 5.5 mm. Different rates apply to imports from Papua New Guinea or Canada.

Imports of plywood from New Zealand are duty free and not subject to any quota restrictions.

Imports of up to 7135 cubic metres annually of 'high moisture resistant' plywood from Papua New Guinea have been permitted duty free entry since 1957.

A third quota was established recently under the South Pacific Regional Trade and Economic Co-operation Agreement. Australia has undertaken to permit duty free entry from Fiji of 2000 cubic metres of plywood each year.

A1.10 Fertiliser Bounties/Subsidies

Subsidies for the consumption of phosphatic and nitrogenous fertilisers were first introduced in the 1930s. The current assistance arrangements for phosphatic fertilisers have (with the exception of 1975) operated continuously since 1963 under the Phosphate Fertilizers Bounty Act and for nitrogenous fertilisers since 1966 under the Nitrogenous Fertilizers Subsidy Act.

Under these Acts, payments are made to Australian manufacturers of eligible fertilisers. The Acts require manufacturers of eligible fertilisers to pass on the subsidy to users by charging lower fertiliser prices. In 1980-81 the bounty rate for phosphatic fertilisers was \$12 per tonne and the subsidy rate for nitrogenous fertilisers was \$20 per tonne.

A1.11 Rural Adjustment

The adjustment schemes introduced in the early seventies were reviewed by the IAC in 1975. Subsequently, the Commonwealth Government introduced a single scheme, known as the RAS, to provide adjustment assistance to all agricultural activities.

As stated in the general principles to the RAS '...the over-riding objective is to help restore to viability those farms and farmers with the capacity to maintain viability once achieved'. The majority of farms (over 90 per cent) in Australia are operated as family businesses. It has been recognised that, in providing assistance, close interrelationships exist between the viability of the farm as a business and the welfare of the farm as a household. Almost without exception, the reconstruction/adjustment schemes have sought to confine the benefits of assistance to existing farmers experiencing financial difficulties. Farmers not in need, or with suitable commercial finance available, new entrants, and part-time and corporate farmers have been ineligible.

The main types of assistance included in RAS are:

- . Debt reconstruction has been designed to assist farmers in financial difficulties and likely to be forced to sell their property or farm assets to meet their commitments, but who, with assistance, have reasonable prospects of long term commercial viability. The assistance is by way of long term concessional loans that enable them to reschedule established debt repayments.
- . Carry-on loans are essentially for similar purposes. However, they are only available for limited periods to farmers in a specified activity agreed, from time to time, between Commonwealth and State Governments to be suffering a severe market downturn or similar situation.
- . Farm build-up assistance, as the name implies, allows some farmers to increase the size of their properties. It is to encourage the amalgamation of small non-viable properties, or the purchase of additional land by a farmer whose property has become too small to remain viable. The assistance is by way of long term concessional loans.
- . Farm development assistance provides long term concessional loans to finance improvements of a property where commercial finance is unavailable and where there are prospects of restoring long term commercial viability.

- . Rehabilitation assistance is a form of welfare assistance which applies to farmers who have been refused debt reconstruction assistance on the grounds that their farms lack adequate prospects of long term viability. It also applies to farmers who have had their properties purchased under the provisions of farm build-up assistance and who leave farming under conditions of financial hardship. It provides loans, convertible to grants, to those leaving their farms.

- . Household support is an additional welfare support measure that was introduced with the RAS. It provides grants, and loans convertible to grants, to give farmers who were judged to be operating non-viable farms and therefore suffering personal and family hardship, a 'breathing space' in which to assess their long term options. It is designed to bring the net household income of a farmer to the level he would have if he had been eligible under the current unemployment benefit scheme.