INDUSTRY COMMISSION SUBMISSION TO THE SUGAR INDUSTRY REVIEW

September 1996

©   Commonwealth of Australia 1996

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, this work may be reproduced in whole or in part for study or training purposes, subject to the inclusion of an acknowledgment of the source. Reproduction for commercial usage or sale requires prior written permission from the Australian Government Publishing Service. Requests and inquiries concerning reproduction and rights should be addressed to the Manager, Commonwealth Information Services, Australian Government Publishing Service, GPO Box 84, Canberra, ACT, 2601.

ISBN: 0 642 25911 9

Industry Commission
Level 28, Collins Tower
35 Collinns Street
Melbourne VIC 3000

Copies of this submission are available from Ms Nucol Benson by telephone on 03 9653 2221 or fax 03 9653 2302.

Forming the Productivity Commission

The Industry Commission, the former Bureau of Industry Economics and the Economic Planning Advisory Commission have amalgamated on an administrative basis to prepare for the formation of the Productivity Commission. Legislation formally establishing the new Commission is before Parliament.

CONTENTS

	Page
EXECUTIVE SUMMARY	**iii**
1 INTRODUCTION	**1**
1.1 National Competition Policy principles	1
1.2 Industry Commission inquiry into the Australian sugar industry	2
2 THE AUSTRALIAN SUGAR INDUSTRY	**5**
2.1 Sugar cane growing and milling in Queensland	5
2.1.1 Assignment system	8
2.1.2 Cane price formula	8
2.2 Tariffs	9
2.3 Statutory marketing of Queensland sugar	10
2.3.1 Two pool pricing system	11
2.3.2 Rebates and domestic sales	11
2.3.3 Bulk terminals	12
2.4 New South Wales industry	12
2.5 Refining	12
3 THE COMMISSION'S 1992 REPORT	**15**
3.1 Findings on production controls	15
3.2 Findings on tariffs	17
3.3 Findings on statutory marketing	17
3.4 Recommendations	19
3.5 Impact of reforms on growers and millers	20
4 SIGNIFICANT DEVELOPMENTS SINCE THE COMMISSION'S REPORT	**23**
4.1 The Government's 1993 package	23

4.2 Increases in assignment 24
4.3 Shortages in milling capacity 25

5 EFFECTS OF RECENT DEVELOPMENTS 27

5.1 Developments relevant to production controls 27
5.1.1 Industry growth 27
5.1.2 Economies of scale and cost efficiencies 29
5.1.3 Responsiveness to change 29
5.1.4 Economic power of mills versus growers 30
5.2 Developments relevant to tariffs 35
5.3 Developments relevant to statutory marketing 36
5.3.1 The Corporation's price setting power 36
5.3.2 Economies of scale in marketing 38
5.3.3 Effect of statutory marketing on competition and innoovation in milling 38
5.3.4 Effect of statutory marketing on innovation 40
5.3.5 Effect of statutory marketing on refining 41
5.3.6 Bulk sugar terminals 42

REFERENCES 45

LIST OF TABLES, BOXES AND FIGURES

Table 1 Raw and refined sugar exports: Australia and other leading exporters, 1994-95 5
Figure 1 Destinaton of Australian raw sugar exports, 1994-95 6
Figure 2 Location of the Queensland sugar industry 7
Figure 3 World sugar prices, 1980-81 to 1994-95 10
Figure 4 Case assignment by mill area, 1991-95 25
Box 1 The effect of increased competition in sugar refining 40

EXECUTIVE SUMMARY

The Industry Commission calls for:

- the repeal of the land assignment system in Queensland for sugar growing;
- the introduction of competition in the marketing of Queensland sugar; and;
- the removal of tariffs on raw and refined sugar.

Assignment system

The land assignment system for sugar growing is too cumbersome and inflexible to accommodate a fast growing industry like sugar. This has been demonstrated by the shortages in milling capacity in recent years when cane growing expanded in response to the liberalisation of the assignment system. Mill shortages now threaten the industry's continued expansion.

Shortages of milling capacity are now so severe that in June the Queensland Government postponed indefinitely land sales in the Burdekin, Queensland's premier sugar growing region. This shows the costs created by the assignment system - new farmers are prevented from buying land and making a living out of cane, new investment in milling is stifled and local communities suffer as a result.

To grow sustainably and efficiently, regulations specific to sugar production must be repealed to allow the market to work. Growers and millers should be allowed to negotiate prices and supply arrangements individually and mills should be able to compete to attract cane supply. In short, the sugar industry should be allowed to operate like other Australian industries.

Statutory marketing

Currently Queensland growers and millers have no choice but tomarket their sugar through the Queensland Sugar Corporation. The Commission considers the Corporation should continue to market sugar but it should do so in competition with other marketers. Growers and millers should be free to market sugar themselves or to use the Corporation or any other marketer.

Competition would give marketers the incentive to seek the highest return for Queensland's sugar and to minimise costs. It would provide the impetus for achieving lasting efficiencies and cost savings - the key to the industry's long term future. This has been the experience in the sugar refining industry since deregulation.

The Commission also calls for the abolition of statutory marketing because it:

- inflates domestic prices;
- suppresses competition in milling; and
- retards the development of an export-oriented refining industry.

Some argue that statutory marketing enables Australia to capture a 'Far East Premium' increasing returns to sugar producers. However, the existence of a premium dependent on statutory marketing has not been established conclusively. If it does exist, it could encourage higher production generally in the region, potentially reducing Australia's market share or returns in the longer term. Given the disadvantages of statutory marketing, the Commission considers it would be unwise to structure marketing arrangements around an assumed price premium.

Tariffs

The Australian sugar industry is protected by a $55 per tonne import tariff. The industry is internationally competitive. Consequently, the case for assistance for the small and declining proportion of Australian sugar sold on the domestic market is weak.

In conjunction with statutory marketing, tariffs increase domestic sugar prices. This is tantamount to taxing consumers and downstream manufacturers to increase the income of sugar producers. The Commonwealth Government should remove the tariff on imported sugar.

1 INTRODUCTION

This is a submission to the review of Queensland's sugar industry regulatory arrangements and the sugar tariff. The review was commissioned by the Queensland and Commonwealth governments in 1995, and is being undertaken by the Sugar Industry Review Working Party. It comprises representatives of industry, sugar users and government. The Working Party has appointed Boston Consulting Group to assist with the analysis of the issues subject to review. The Working Party is due to report to the two governments by 29 November 1996, with changes, if any, to the existing arrangements applying from 1 July 1997.

The review's terms of reference are to:

- review the need for a tariff on raw and refined sugar;
- review current legislative arrangements for the promotion and regulation of the sugar industry in Queensland; and
- investigate alternative arrangements.

1.1 National Competition Policy principles

The terms of reference state that the review will be undertaken within the context of the National Competition Policy principles. These principles were agreed to by all Australian governments in April 1995, and commit governments to a program of legislative review and reform. The guiding principle is that legislation (including regulations) should not restrict competition unless it can be demonstrated that:

- the benefits of the restriction to the community as a whole outweigh the costs; and
- the objectives of the legislation can only be achieved by restricting competition.

Governments have committed to reforming anti-competitive legislation that can not be justified on public interest grounds by the year 2000.

The Competition Principles Agreement indicates that, where relevant, the following shall be taken into account when balancing the benefits and costs:

- government legislation and policies relating to ecologicallysustainable development;
- social welfare and equity considerations, including community service obligations;
- government legislation and policies relating to matters such as occupational health and safety, industrial relations and access and equity;
- economic and regional development, including employment and investment growth;
- the interests of consumers generally or of a class of consumers;
- the competitiveness of Australian businesses; and
- the efficient allocation of resources.

Thus, non-economic and social objectives must be taken into account when assessing whether particular regulatory action is in the public interest.

With the implementation of the Competition Principles Agreement, the Commonwealth has agreed to make additional general purpose payments (called Competition Payments) to the States and Territories. These substantial payments are conditional on each government meeting certain obligations, including meeting the deadlines for regulatory review and reform. The National Competition Council will advise the Commonwealth on whether the conditions for payment have been met by each State or Territory.

1.2 Industry Commission inquiry into the Australian sugar industry

The Industry Commission completed a major public review of the Australian sugar industry in 1992. The review assessed production and regulatory arrangements subject to influence by governments, particularly the marketing arrangements in Queensland and NSW, and tariffs on imported sugar, from the perspective of overall Australian welfare.

In its 1992 report, the Commission found that the most significant factor impeding the achievement of higher levels of efficiency in the Australian sugar industry was state regulation governing the Queensland industry.

The three main areas where the Commission called for reform were:

- changes to the regulations in Queensland controlling production in that State;

- statutory marketing of Queensland sugar;
- and tariffs on sugar.

This submission:

- provides an overview of the Australian sugar industry focusing on the arrangements applying in Queensland (Section 2);
- outlines the findings and recommendations of the Commission's 1992 report in the three main areas of production controls, statutory marketing and tariffs (Section 2);
- reviews significant developments since the Commission's 1992 report, including the 1993 sugar industry package (Section 4); and
- analyses developments since the Commission's 1992 report (Section 5).

2 THE AUSTRALIAN SUGAR INDUSTRY

The sugar industry consists of three sectors:

- the growing of sugar cane;
- the milling of cane to produce raw sugar; and
- the refining of raw sugar.

In 1994-95, Australia produced 5.1 million tonnes (Mt) of raw sugar worth $1 944 million. About 70 per cent of this production was exported, and the rest was refined, principally for domestic consumption.

While Australia is the largest exporter of raw sugar in the world, it is not a significant exporter of refined sugar (see Table 1. Exports of sugar products and honey account for about 2 per cent of the total value of Australian exports, and are about half as large as meat exports (by value). The destination of Australia's raw sugar exports is shown in Figure 1.

Table 1 Raw and refined sugar exports: Australia and other leading exporters, 1994-95[a]

Net raw sugar exports		*Net refined sugar export*	
Country	*Quantity (Mt)*	*Country*	*Quantity (Mt)*
Australia	3.98	European Union	5.40
Cuba	3.84	Brazil	3.88
Thailand	2.61	Ukraine	1.64
Brazil	1.1	Australia	0.07

a Preliminary figures.

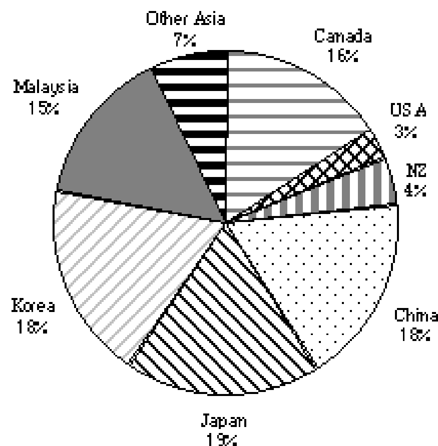
Source: ABARE 1995, p.214, 218-9.

The Australian sugar industry has been growing strongly, especially this decade. Raw sugar production has doubled since the early 1970s, and increased by 45 per cent between 1990-91 and 1994-95.

Queensland is Australia's main sugar growing region, and the source of all raw sugar exports. It produces around 4.7 million tonnes of raw sugar annually, equivalent to about 95 per cent of Australia's raw sugar output. The other major sugar producing area is northern NSW. The NSW industry only supplies the domestic market, and has about one-quarter of this market.

A small mill has been built in the Ord River region of WA which is expected to produce about 70 000 tonnes of raw sugar once full production commences.

Figure 1 Destination of Australian raw sugar exports, 1994-95



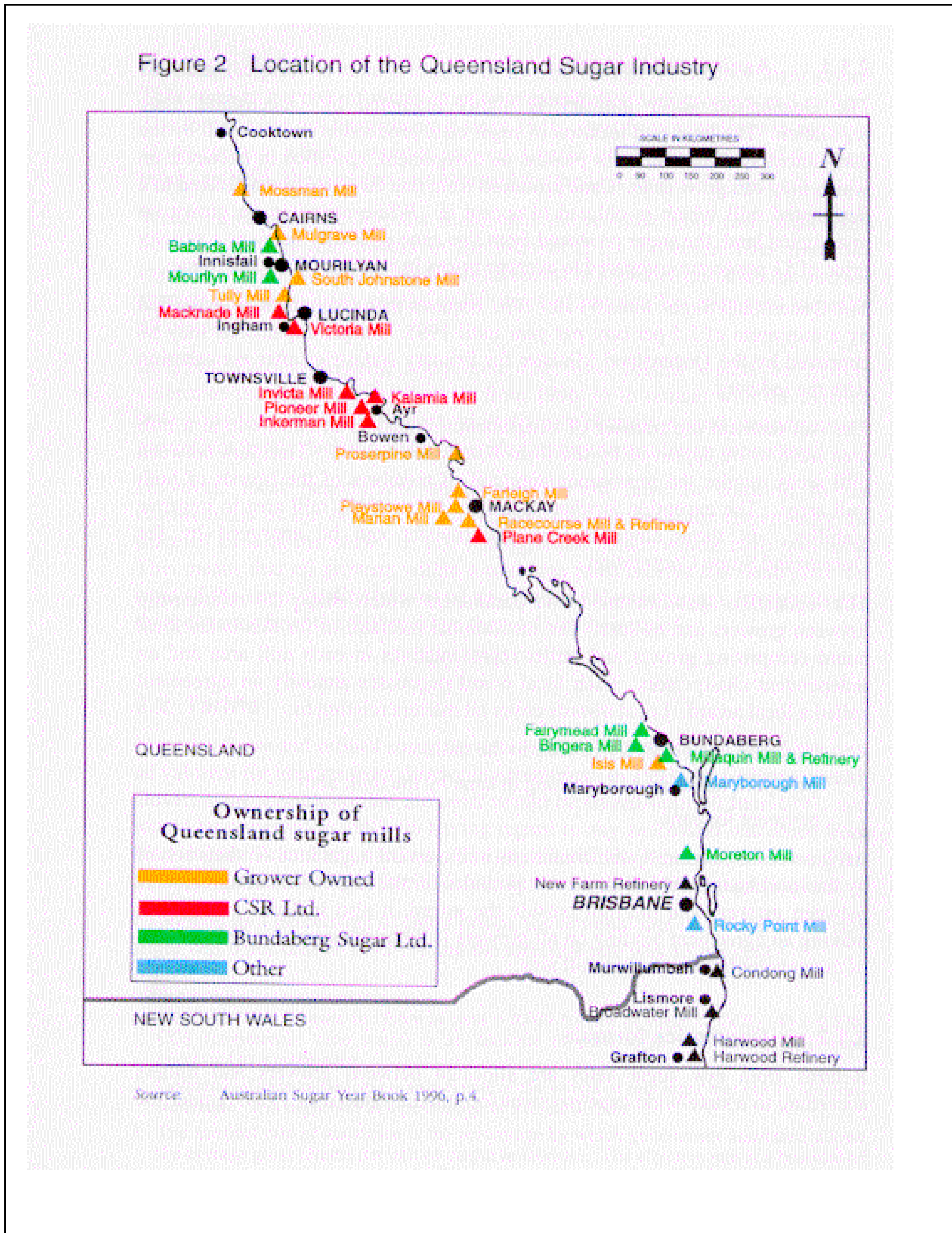
Source: ABARE 1995, p.214, 218-9.

2.1 Sugar cane growing and milling in Queensland

Sugar cane is grown along most of the Queensland coast (see Figure 2</A>). The growing and milling sectors of the industry are characterised by a large number of growers (over 6 000) and a smaller number of millers. The major millers are CSR Ltd, Bundaberg Sugar Ltd and Mackay Sugar Co-operative Association. Together these three millers own 17 of Queensland's 25 mills. Most other mills are owned by growers' co-operatives (see Figure 2).

The major millers tend to be geographically concentrated. For example, CSR owns the four mills in the Burdekin region south of Townsville. Bundaberg Sugar Ltd owns three of the four mills around Bundaberg, and the Mackay Sugar Co-operative owns four of the five mills around Mackay.

Figure 2 Location of Queensland Sugar Industry



Source: Australian Sugar Year Book 1996, p.4

2.1.1 Assignment system

The Queensland sugar industry is highly regulated by Queensland State legislation. The level and location of sugar cane production is controlled by the assignment system. Growers possess an assignment, specified in hectares, on which they can grow cane. Cane produced from that land must be delivered to a designated mill which is obliged to accept it. While cane can be grown on unassigned land, the sugar produced from this cane generally receives a penalty price of $1 per tonne compared to average prices in excess of $300 per tonne.

The Queensland *Sugar Industry Act 1991* requires that assignment be expanded by a minimum of 2.5 per cent per year until 1995. Larger expansions may be approved by the Queensland Minister for Primary Industries after consultation with the industry.

The Act restricts the transfer of assignment. Transfers or sales within a mill area have to be approved by the local board (see below). Transfers between mill areas require the unanimous approval of members of the boards of both mill areas. The exception is where a grower is switching mill area to improve viability. In these circumstances, the transfer can be approved by the Queensland Sugar Corporation.

The legislation specifies the broad parameters which shape the relationship between growers and millers. The institutional mechanism for this is the local board comprising grower and miller representatives in each mill area and an independent chairperson. Each local board negotiates annually an agreement called a local award. Local awards cover all matters relating to:

- harvesting and delivery of cane to the mill;
- transport, handling and crushing of cane by the mill; and
- payment for cane.

All growers are bound by the conditions in the award negotiated on their behalf by the local board. Although the Act provides for the negotiation of agreements between growers and the mill outside the award, it also includes a provision making an agreement binding on all growers if it has the support of 85 per cent of assignment holders in that mill area.

2.1.2 Cane price formula

Returns from raw sugar sales are allocated between growers and millers according to a state-wide cane payment formula introduced in 1916. Under the

formula, the price of cane is expressed as a percentage of the raw sugar price [1]. This spreads the risk of world price movements between growers and millers. The formula has not been changed since 1916, apart from variations in the level of the constant which guarantee growers a basic return irrespective of the sugar price. In 1994, the constant was changed for the first time in 45 years.

When introduced, the formula distributed the revenue from raw sugar sales between growers and millers in the ratio of 2:1. However, over time, the capacity of mills to extract sugar has increased at a greater rate than the sucrose content in cane. Consequently, mills' share of revenue has increased to nearly 40 per cent.

In 1994, the Government announced that local boards would be free to determine their own pricing formula from 1996, or to remain with the existing state-wide formula. The Queensland Parliament recently passed amendments to give effect to this decision and to provide for dispute resolution procedures.

However, local negotiations on price will still have to conform to the requirements of the Act. The Act requires that the basis for determining the price of cane is the same for every assignment holder within each mill area. This means that all growers within a mill area must receive the same price for cane of the same quality (measured as commercial cane sugar), irrespective of their distance from the mill or when they deliver their cane. [2]

2.2 Tariffs

Imports of raw and refined sugar attract a tariff of $55 per tonne, less 5 per cent ad valorem for imports from developing countries. In 1993, the Commonwealth Government announced that the tariff would be frozen until 30 June 1997, and would be reviewed in 1995-96 having regard to any successful outcomes from the Uruguay Round negotiations. The sugar tariff has been phased down from $115 per tonne in 1989, before which there was an embargo on sugar imports.

[1] The cane price formula is: Price of cane = 0.009 * Price of sugar * (CCS - 4) + 0.578. CCC (commercial cane sugar) is an estimate of pure sugar recoverable from cane expressed as a percentage.

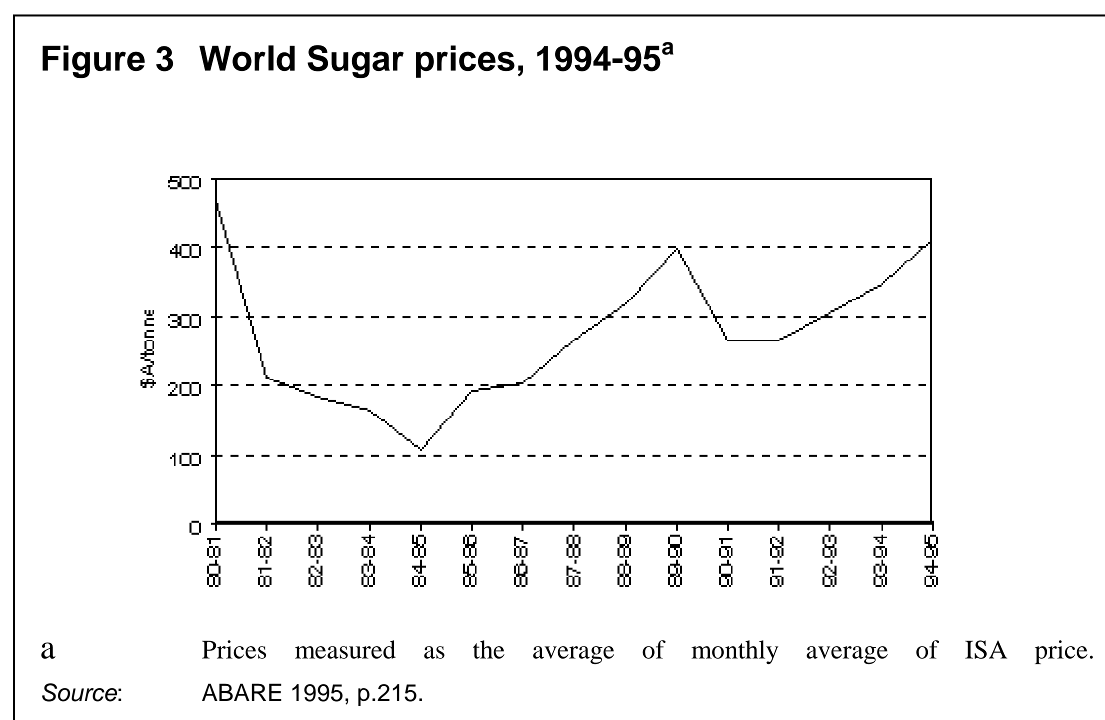
[2] Commercial cane sugar (ccs) is an estimate of the weight of raw sugar that can be obtained from cane. It is expressed as a percentage of a tonne of cane.

Expressed as a percentage of sugar prices, the nominal rate of assistance on raw sugar was 5 per cent in 1993-94 and the effective rate was 15 per cent. [3]

World sugar prices are highly volatile (see Figure 3). Consequently, the value of the tariff in percentage terms varies from year to year, and is greatest when world prices are low.

Under the Uruguay Round outcome, Australia is required to reduce tariffs on sugar to $70 per tonne by the year 2000. Australia has already achieved this level. Australia is also committed to reducing its overall level of domestic support to the agricultural sector, on measures which distort agricultural trade, from a total of $589 million to $471 million by the year 2000. The base of $589 million includes $64 million in assistance to the sugar industry. [4]

Figure 3 World Sugar prices, 1994-95[a]



a Prices measured as the average of monthly average of ISA price.

Source: ABARE 1995, p.215.

---

[3] The nominal rate of assistance is the percentage by which government assistance allows the average gross returns per unit of output to increase. The effective rate is a measure of the net level of assistance provided to an industry. It takes account the taxing effect of assistance on inputs as well as the beneficial effects of assistance to outputs. More precisely, it is the percentage by which returns to value added factors (land, labour and capital) are increased relative to the situation of no assistance.

[4] Based on advice received from the Department of Foreign Affairs and Trade.

2.3 Statutory marketing of Queensland sugar

The marketing of all raw sugar produced in Queensland is the responsibility of the Queensland Sugar Corporation ('the Corporation'). The Corporation's role is underpinned by Queensland legislation giving it the power to acquire compulsorily all raw sugar produced in Queensland. The Corporation is responsible for export and domestic marketing. Its mission is to optimise returns to the Queensland raw sugar industry. As all of Australia's raw sugar exports emanate from Queensland, the Corporation controls effectively all Australian raw sugar exports.

Revenue from domestic and export sales is distributed to mills in Queensland after the costs associated with sales and the Corporation's expenses (such as bulk handling, shipping and waterfront costs) are deducted. This revenue is then distributed between growers and mills according to the cane payment formula.

2.3.1 Two pool pricing system

The distribution of revenue among mills also reflects a two pool pricing system. Some production receives the higher Pool 1 price, while the rest receives the lower Pool 2 price. Growers are allocated a farm peak which specifies their entitlement to receive the Pool 1 price. Some small, older farms have peak entitlements equivalent to 100 per cent of production. Other farms have considerably less. As farm peaks have been frozen since 1982, new farms rely entirely on the lower Pool 2 price. As a result, the proportion of production receiving the Pool 2 price increased from 22 per cent in 1992 to 35 per cent in 1994.

At the time of the Commission's 1992 inquiry, the Pool 1 price was 12 per cent higher than the Pool 2 price. In 1993, the Queensland Government announced that this price difference would be phased down to 6 per cent by 1995. In 1994 (the latest year for which data are available) when the price differential was 8 per cent, returns to new growers were 5 per cent lower than if a single price prevailed. Returns to established growers were 3 per cent higher.

2.3.2 Rebates and domestic sales

The Corporation prices domestic raw sugar sales at the duty paid import parity price. This is significantly higher than the price that would prevail if compulsory acquisition were abolished, in which case competition between mills would drive domestic prices down to export parity. While the Corporation

could face competition from the NSW industry, in practice the NSW industry follows the Corporation's pricing lead.

The Corporation provides rebates for exporters of refined sugar and Australian manufacturers who export products containing sugar. The rebates are intended to offset the tariff component incorporated in the Corporation's domestic prices.

2.3.3 Rebates and domestic sales

The Corporation is responsible for managing infrastructure such as the bulk sugar terminals. In 1992, the book value of the terminals was $213 million, although their replacement cost was considerably greater.

At the time of the Commission's inquiry, the terminals were nominally owned by the Harbour Boards, although they were managed and financed by the Corporation from the proceeds of sugar sales. In 1993,
the Commonwealth and Queensland Governments agreed that ownership of bulk sugar terminals would be transferred to the industry and managed as a whole. The Queensland Minister for Primary Industries announced subsequently that ownership would be transferred to the Corporation by 1 July 1996.

2.3.4 New South Wales industry

All sugar cane grown in NSW is milled by the NSW Sugar Milling Co-operative to which all NSW sugar cane growers belong. The Co-operative was formed in 1978 to purchase the three local sugar mills from CSR. In 1989, the Co-operative entered into a joint venture with the Manildra group of companies to build and operate a refinery at Harwood in northern NSW. Raw sugar produced by the Co-operative is now sold to Manildra Harwood Sugars.

In the past, the Queensland Government purchased all raw sugar produced in NSW and marketed it with that of the Queensland industry. However, in 1989 the NSW industry decided to take responsibility for its own marketing.

In contrast to Queensland, the NSW sugar industry's production and marketing arrangements are not underpinned by State government legislation. In fact, the major form of government intervention occurs at the Commonwealth level, in the form of tariff protection against imported sugar. This is because the NSW industry sells all of its output on the domestic market and therefore benefits from tariff assistance on all of its sales.

2.3.5 Refining

Four companies refine sugar in Australia. They are CSR, Mackay Refined Sugars, Manildra Harwood Sugars and Bundaberg Sugar Ltd (in order of size). The most recent entrant, Mackay Refined Sugars, commenced production in 1994.

While each of these companies has extensive milling interests, the effect of Queensland's statutory marketing arrangements is that the Corporation is interposed between the milling and refining interests of CSR, Mackay Refined Sugars and Bundaberg Sugar Ltd. For example, CSR is obliged to sell all of its raw sugar to the Corporation, and then to buy it back to supply its refineries at a price inflated by the Corporation's marketing costs.

Most of Australia's refined sugar is sold on the domestic market. The principal buyers are the manufacturers of non-alcoholic beverages, the retail industry and the confectionary industry.

3 THE COMMISSION'S 1992 REPORT

The Commission's 1992 report made findings and recommendations in three main areas, namely production controls, tariffs and statutory marketing of raw sugar. This section presents the findings in each of these areas and the major recommendations.

3.1 Findings on production controls

In its 1992 report, the Commission found that the assignment system had provided a degree of stability for both growers and millers as each group had been insulated from competitive pressures from the other. However, these benefits were not without cost to the industry, Queensland and the Australian economy.

The size of one of Australia's most internationally competitive industries had been administratively constrained by the assignment system. As a result, export opportunities for raw sugar, and possibly refined sugar, had been lost.

The Commission found that the two pool pricing system inhibited industry growth by reducing returns to new growers. The differential was tantamount to a tax on new growers and industry expansion.

The assignment system also reduced the industry's efficiency and increased its cost structure by:

- perpetuating small scale cane farming; and
- encouraging the use of marginal land at the expense of land in other areas better suited to cane growing.

Restrictions on the transfer of assignment had inhibited growers from creating larger farms by buying out other growers. Evidence presented to the Commission's 1992 inquiry indicated that unit cost savings of one-third were possible by increasing the size of cane farms from 65 to 300 hectares [1]. In the Burdekin, production costs were lowest when farms were 700 hectares. Despite this, almost a half of all cane farms in Queensland were smaller than 50 hectares and 84 per cent were smaller than 100 hectares.

[1] This evidence was presented by Davco Farming (1992). These estimates were in line with the findings of O'Sullivan (1990).

The binding nature of awards negotiated by local boards eliminated competition between growers to supply mills. Furthermore, local boards' control of harvesting, delivery and pricing of cane, and their control over expansions in assignment, provided a mechanism for established growers to commercially disadvantage new, expanding or innovative growers.

The legislative requirement that growers receive the same price for cane of the same quality (measured as ccs) prevented mills from offering higher prices for cane delivered at the beginning and end of the season. This prevented mills from offering growers incentives to extend the length of the season which would increase mill utilisation and reduce milling costs. Instead growers had an incentive to pressure mills to expand capacity, so that cane could be harvested over a shorter period, maximising its sugar content and returns to growers.

The requirement that all growers receive the same price for cane did not allow differential transport costs to be reflected in the prices growers received. This failed to deter the establishment of farms in distant locations, lifting overall transport costs, and reducing industry efficiency.

The cane price formula provided inflexible incentives for cane growing and mill expansion. The Commission's 1992 report argued that if cane production were to increase significantly, the revenue sharing arrangements may not be sufficiently flexible to handle the pressures generated. In particular, mills may be reluctant to expand capacity, constraining industry growth.

Constraints on land use had discouraged growers from using best agronomic practices. It had also encouraged practices which may have adverse environmental consequences such as greater use of fertilisers and pesticides per hectare to raise yields.

Overall, the output of the Australian economy had been suppressed because the sugar industry had not been as efficient as it could have been. Significant employment opportunities had also been foregone. One study estimated that employment across the whole economy would increase by at least 3000 if the sugar industry was not constrained by Queensland regulation.

The Commission found that the stability and certainty provided by the assignment system could be provided by a system of contracts. Such an approach would provide the benefits of State regulation without the costs. This approach is used in a number of other rural industries which produce perishable products.

The Commission considers that its findings about the negative and anti-competitive effects of the assignment system are as relevant today as they were in 1992. The following sections will demonstrate that the incremental reforms implemented by the Queensland Government, have not addressed the fundamental problems identified by the Commission.

3.2 Findings on tariffs

In its 1992 report, the Commission found that the Australian sugar industry was competitive in export markets. Consequently, the case for assistance for the small and declining proportion of Australian sugar sold on the domestic market was weak.

The main arguments advanced in favour of the tariff were that it helped overcome the lack of micro-economic reform elsewhere in the Australian economy and that it counteracted corrupt world prices. However, the Commission found that tariffs were inappropriate for addressing these problems.

As a small country operating independently in the world market, Australia must operate within the prices that currently exist and adapt to those prices. If prices are low because of natural factors, or low because of massive subsidies, it makes little differences to the choices facing Australia. Australia is better off to adjust to these prices, rather than attempt to deny or compensate for them.

It is also not clear that trade reform would increase world sugar prices. In particular, if Brazil were to abandon its heavily subsidised ethanol program, the large increase in raw sugar on world markets would depress prices.

In its 1992 report, the Commission noted that the Commonwealth Government was committed to generally reducing assistance to industry. Indeed, most tariffs were being reduced to 5 per cent by 1996. Given these circumstances, the Commission was unable to identify any factors which would warrant special treatment being afforded to the Australian sugar industry.

Section 5 demonstrates that since 1992 nothing has changed to alter the Commission's findings on tariffs.

3.3 Findings on statutory marketing of raw sugar

The main benefit of statutory marketing is that it can potentially enable countries which dominate world supply of particular commodities to manipulate markets to their advantage. However, during the Commission's 1992 inquiry, the Queensland Sugar Corporation agreed that it had little influence over world prices. This was supported by empirical work by ABARE which found that a one per cent rise in Australia's exports would lead to an estimated decline in world prices of only 0.13-0.27 per cent in the long run.

In 1992, the Commission was unable to establish whether the Corporation's marketing services enabled it to attract a price premium, and if so, whether this was sufficient to compensate the industry for the costs it imposed. However, it was clear that the lack of competition in the marketing of Australian sugar reduced the discipline on the Corporation to seek the highest market return or to minimise costs.

In its 1992 report, the Commission found that the statutory marketing arrangements were not necessary to offset the countervailing market power of large international buyers. Sugar traders were well informed about prices throughout the world, reducing the likelihood that an Australian company would sell below the world price. Australian sugar was also unlikely to be marketed by a large number of 'vulnerable' companies. Over 70 per cent of Queensland's rawsugar was produced by three organisations, two of which (CSR and Tate and Lyle) were directly involved in the international marketing of sugar.

Major problems with the statutory marketing arrangements included:

- the pooling mechanism;
- the lack of flexibility inherent in the arrangements; and
- import parity pricing.

The pooling of revenue did not reward growers and mills for providing higher quality product (although higher ccs is rewarded). This removed incentives for growers and mills to improve their product. The pooling of terminal operating costs and freight did not reward the regions with the most efficient terminals or which were optimally located to supply particular markets. The Corporation's two pool pricing system effectively taxed industry expansion.

The statutory marketing arrangements locked all participants into a prescribed set of practices. For example, growers and millers were prevented from selling raw sugar or from negotiating with buyers.

The statutory marketing arrangements enabled the Corporation to inflate domestic prices above export prices. In 1990-1991, the domestic price of raw sugar was about 54 per cent higher than the export price. This imposed a cost on user industries and final consumers of about $100 million a year.

The Commission's 1992 report also noted that inflated domestic raw sugar prices may have inhibited the development of an export oriented refining sector in Australia.

The Commission considers that these findings about the adverse effects of statutory marketing are as relevant today as they were in 1992. The question of whether the Corporation can now influence international prices is discussed in Section 5.

3.4 Recommendations

The Commission's 1992 report recommended:

- staged removal of all production controls specifically targeted at the sugar industry;
- termination of tariffs on raw and refined sugar;
- removal of the Queensland Sugar Corporation's compulsory acquisition powers and sole marketer status; and
- modification of arrangements applying to bulk sugar terminals.

In relation to production controls, the Commission specifically recommended that:

- the *Sugar Industry Act 1991* be amended to abolish the assignment system. This would ensure that no constraints were placed on land that could be used to grow sugar cane or the mill to which cane was delivered, and mills would no longer be required to accept cane;
- delivery terms and conditions should be negotiated between growers and mills, rather than being set by local awards; and
- the returns to sugar sales should reflect actual prices and marketing costs, rather than a two pool pricing arrangement.

As a transitional measure, the Commission recommended that the Corporation should retain the right to compulsorily acquire sufficient sugar to fulfil all existing long-term contracts. However, compulsory acquisition should cease at the conclusion of these contracts.

To ease adjustment to zero tariffs, the Commission recommended that a single transitional payment be made to growers and millers. The payment would be made as soon as practicable after the ending of compulsory acquisition. Until compulsory acquisition ceased, the tariffs on raw and refined sugar should remain, but they should be reduced by 10 per cent per year to zero. Together, the reduction in tariffs and the cessation of statutory marketing would enable competition in the supply of raw sugar to the domestic market which would drive domestic prices down to export parity.

In relation to bulk terminals, the Commission recommended that:

- terminals be privately owned and operated on a commercial basis;
- equity in each terminal company reflect the contributions to infrastructure made by growers and millers; and
- each terminal provide non-discriminatory access to all parties.

This package of reforms would enable growers, millers and marketers to evaluate alternative strategies and enter into those arrangements which best suited their individual needs. Competitive pressures would provide a strong incentive to ensure that production and marketing activities were undertaken as efficiently as possible.

The staged removal of the regulations would not necessarily lead to the abandonment of many current practices. Experience in NSW demonstrates that millers and groups of growers can voluntarily maintain many features of the regulated system. Queensland growers and millers could, for instance, choose to continue many of the present harvesting and delivery arrangements, particularly in those areas where mills are co-operatively owned. The Corporation could remain as a marketer of sugar and continue to perform many of its current functions in competition with other sellers. Producers would be free to market their sugar as they wished, including the option of continuing to deliver to the Corporation.

3.5 Impact of reforms on growers and millers

Producers as a whole would be better off as a result of the removal of statutory production and marketing controls, although some would be worse off.

Higher cost growers who faced competitive pressures from existing or new growers may elect to sell out to more efficient growers. While mills may not be

subject to the same pressures as growers, some mills would in the longer term stand to lose throughput or face the risk of takeover.

The profitability of sugar production would generally not be diminished (and could be increased). Thus land and other assets devoted to sugar production should retain their value.

Returns to growers who hold peak entitlements would be reduced, although this would be offset by higher returns to growers who receive only Pool 2 prices.

The removal of the tariff and statutory marketing arrangements would drive domestic prices down to export parity. This would have a small impact on returns to Queensland growers and a larger impact on NSW growers. As tariff assistance has not been available to other rural producers in export oriented industries, the eventual removal of assistance would place sugar producers on a similar footing to other rural producers.

Growers and millers would benefit from the Commission's proposals to transfer ownership of bulk sugar terminals to the industry. The Commission estimated that the value of share entitlements for growers would be, on average, $25,000. Mills' entitlement would range in value from around $1 million to $5 million (in 1992 dollars).

4 SIGNIFICANT DEVELOPMENTS SINCE THE COMMISSION'S REPORT

There have been a number of significant developments in the sugar industry since the Commission's 1992 report. Section 2 of this submission outlined a number of developments, such as:

- the entry of a new refiner, Mackay Refined Sugars, in 1994;
- a small change in the cane price formula in 1994; and
- the emergence of the Ord River as a sugar growing region.

This section describes a number of other significant developments since the Commission's 1992 report, namely:

- the Commonwealth Government's 1993 sugar industry package;
- an expansion in land under assignment; and
- the emergence of shortages in milling capacity.

4.1 The Government's 1993 package

In February 1993, the Commonwealth Government announced a package of measures for the sugar industry. The package had the agreement of the Queensland Government. Key elements of the package included:

- retention of the sugar tariff at $55 per tonne for a minimum of three seasons. A review of the tariff to commence in 1995-96, having regard to any successful outcomes from the Uruguay Round negotiations;
- continuation of the assignment system but with matters relating to expansion being largely determined at the local level. Agreed expansion plans to be negotiated between mills and growers in each area. These plans to be amalgamated and coordinated by the Queensland Sugar Corporation, and approved by the Queensland Minister, subject to there being sufficient infrastructure to accommodate expansion;the emergence of shortages in milling capacity.
- continuation of the statutory marketing arrangements for both domestic and export markets. These arrangements to be reviewed in 1996 as part of the Queensland Government's review of the *Sugar Industry Act 1991*
- phasing down of the difference between Pool 1 and Pool 2 prices from 12 per cent in 1992 to 6 per cent in 1995;

- government funding of $40 million over four years to support infrastructure projects associated with the further development of the sugar industry. This involves a Commonwealth contribution of $20 million matched by the Queensland Government; and
- in-principle agreement between the Commonwealth and Queensland Governments that ownership of bulk terminals should be transferred to the industry and managed as a whole.

However, the package did not lead to any significant changes in the three main areas where the Commission called for reform:

- Queensland regulations controlling production were maintained, although their administration was made more flexible;
- statutory marketing of Queensland sugar was not changed, apart from the reduction in the differential between Pool 1 and 2 prices; and
- tariffs on sugar were frozen at existing levels.

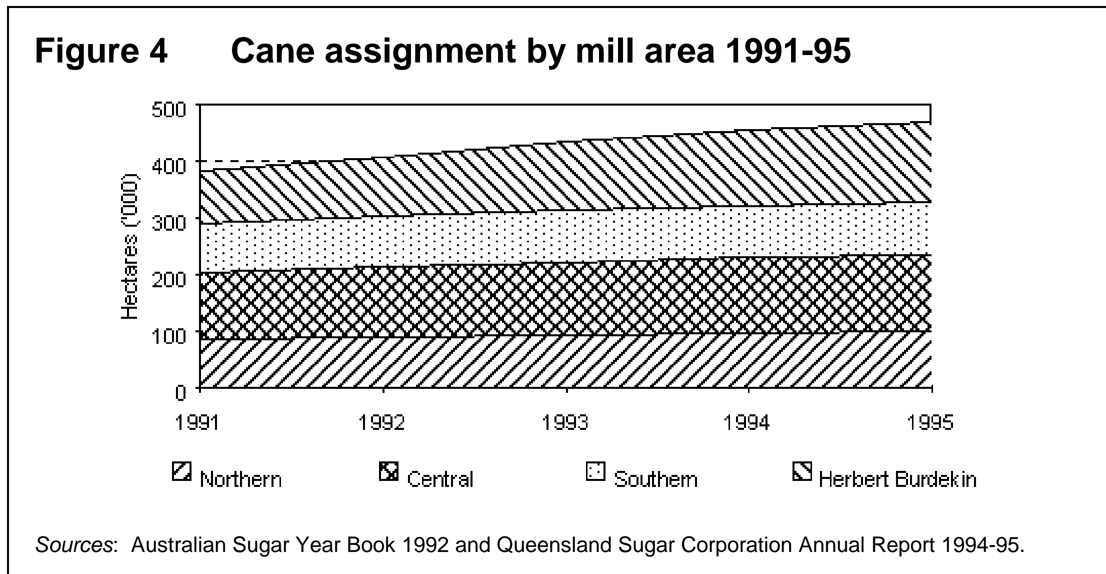
4.2 Increases in assignment

Increases in assignment since the Commission's 1992 report have contributed to strong growth in the Queensland sugar industry. Between 1991-92 and 1994-95, the area under assignment increased by 22 per cent (see Figure 4). This is significantly greater than the 13 per cent minimum increase required under the *Sugar Industry Act 1991*. Queensland raw sugar production increased by 65 per cent between the 1991 and 1994 seasons. Raw sugar exports increased by 82 per cent between 1991-92 and 1994-95.

Increases in assignment have facilitated the entry of new growers. Over the period 1991-1995, the number of growers in the industry has increased by 10 per cent.

The more flexible administration of the assignment system has enabled Queensland's sugar producing regions to grow at different rates. For example, the Herbert/Burdekin region has grown by 49 per cent, but the Southern region has grown by only 8 per cent. This contrasts with previous years where assignment increases were allocated on a pro-rata basis to regions. Differences in the growth rate of regions may also reflect transfers of assignment between regions. In 1991-92, 1 650 such transfers were registered with the Corporation.

Figure 4 Cane assignment by mill area 1991-95



Sources: Australian Sugar Year Book 1992 and Queensland Sugar Corporation Annual Report 1994-95.

4.3 Shortages in milling capacity

Mills have accommodated industry expansion by increasing capacity at existing sites and moving to continuous crushing. By 1995, 72 per cent of mills had moved to continuous crushing.

Introducing continuous crushing is a cheaper way of increasing throughput than increasing hourly crushing rates which requires new capital. However, the scope for this cheaper form of expansion has now largely been exhausted. Further expansion will require either a lengthening of the crushing season or the installation of new capacity which could only be justified by higher returns. The *Courier Mail* recently reported that in some mill areas, the season's starting date had been brought forward by one month (Collie 1996).

Since at least 1993, growers have been expressing concern that milling capacity has not kept pace with expansions in assignment and is impeding efficient industry growth (Australian Sugar Year Book 1994). In announcing an expansion in assignment in late 1992, the Queensland Primary Industries Minister recognised that some Queensland regions were close to exceeding their mill capacity.

The mismatch between sugar cane production and milling capacity had worsened by 1995. Some local boards have had to limit assignment increases because of a lack of milling capacity. The Canegrowers' Chairman is reported

to have said that it was disheartening for growers who had responded to government calls for an expanded and more competitive industry to discover their local mill was unable to handle their increased output. The Canegrowers' Chairman claimed that growers' capital investment into expansion was not being matched by the mills, and that in some areas growers were talking about reining in expansion until additional milling capacity was in place (Australian Sugar Year Book 1996.

In the Burdekin, there is plenty of suitable land to support future expansion in cane growing. However CSR, which controls the region's four mills, indicated that it will be out of capacity by 1998, despite having recently doubled capacity in one of its Burdekin mills at a cost of $185 million (Australian Sugar Year Book 1996).

CSR is reported to have proposed a 2-3 week extension in the crushing season to overcome future shortages (Niesche 1996. However, this has been opposed by <I>Canegrowers Burdekin</I> who want CSR to expand the capacity of the mills. At the request of both parties, the Queensland Minister for Natural Resources has suspended further land sales in the region until the dispute is resolved.

New mills are difficult to accommodate within the current legislative environment. No new mill has been built in Queensland since 1925. This is because land is assigned to specific mills and sugar produced from unassigned land receives penalty prices. The Queensland Parliament has recently passed amendments to the *Sugar Industry Act 1991* to deal with the issues raised by the establishment of new mills. This follows Bundaberg Sugar's proposal to build a small satellite mill on the Atherton Tablelands which would undertake initial processing of sugar cane.

5 EFFECTS OF RECENT DEVELOPMENTS

This section analyses how developments since the Commission's 1992 report bear on the Commission's findings and recommendations on production controls, tariffs and statutory marketing.

5.1 Developments relevant to production controls

5.1.1 Industry growth

More liberal administration of the assignment system since the Commission's 1992 report has lessened the system's negative impact on industry growth. Area under assignment has increased significantly and different mill areas have grown at different rates.

The signinicant expansion in cane growing within the context of the retention of the assignment system has created shortages in milling capacity. Whereas in the past restrictions on assignment constrained industry growth, now shortages in milling capacity (or the length of the season) curtail industry growth.

In a competitive market, these shortages would lead either to entry by new mills, if returns were sufficient, or increases in returns to mills if this was necessary to encourage new investment. Increased returns could be in the form of millers getting a larger share of sugar monies or a longer season. Competition between mills and the threat of entry by new mills would constrain the extent to which mills could negotiate excessively high prices from growers.

However, Queensland regulation has impeded the entry of new mills and prevented prices from reflecting these changed demand and supply conditions. The cane price formula has remained largely unchanged since 1916. The Canegrowers information handbook describes the history of the formula as follows:

> Cane payment in Queensland is based on a recovery formula originally designed to allocate the net proceeds from sugar sales between millers and growers so that profits were shared on roughly the ratio of their assets (Canegrowers 1996, p.41).

As the cost of building new mills has changed markedly since 1916, it would be an extraordinary coincidence if the formula still reflected the ratio of assets at

replacement value - the relevant pricing signal for industry expansion. While improvements in sugar extraction rates have increased mills' share of returns, there is no reason why these returns should have matched those necessary to provide the right incentives for the industry's ongoing expansion.

The Queensland Minister's decision to allow local boards to negotiate their own cane payment formula from 1996 is a step in the right direction. However, the new arrangements could still stifle innovation by individual growers as the legislative provisions imposing local awards on all growers remain. Also, the varying interests of growers mean there are no guarantees that the arrangements will provide adequate incentives to sustain industry growth.

For example, while low cost, expanding growers may be willing to accept price cuts to secure additional milling capacity, high cost growers may not. These high cost growers could use their numbers to impose the award on low cost growers. This would prevent large growers from undertaking profitable expansion.

The assignment system impedes the establishment of new mills because new mills cannot get sufficient assignment to be viable, as all existing assignment is tied to specific mills.

In the case of the proposed new mill on the Atherton Tablelands, growers have supported the reassignment of land from existing mills to the proposed new mill. However, this has been opposed by the developer, Bundaberg Sugar Ltd, as inconsistent with a comprehensively regulated industry. It undermines security of cane supply and mill investment in an industry where commercial options for mills are heavily constrained. Provisions in the Act allowing transfers in assignment between mill areas have also reduced mills' security of raw material supply.

The shortage of milling capacity demonstrates the problems that arise when a fast growing industry is comprehensively regulated, and market signals are suppressed. More liberal administration of the assignment system has allowed cane growing to expand. However, rigid prices have not given mills the incentive to match this growth. Proposals for reassigning land to facilitate new investment in milling have the perverse effect of increasing therisk of milling investments, thereby discouraging investment.

In this way, reforms that have addressed some problems have created others. The net effect is that the industry's growth has been curtailed. This is already

evident in the Burdekin where the Minister has postponed indefinitely further expansion, until growers and mills have resolved their dispute over mill capacity. CSR argued:

> The industry needs to develop new financial arrangements that provide attractive financial returns to sugar mills if further expansion can proceed. Less restrictive and fewer uneconomic controls are important priorities if the sugar industry is to reach its potential (CSR 1996, p.18).

5.1.2 Economies of scale and cost efficiencies

Evidence on farm size indicates that the industry is still not taking advantage of the potential cost savings of larger scale operation. This reduces profitability which in turn curtails industry growth and export income. The average assignment per grower increased from 66 hectares to 75 hectares between 1991 and 1996. In the Herbert/Burdekin region, the average assignment is 89 hectares. This is well below the minimum efficient scale of cane farming of 300 hectares.

Anecdotal evidence continues to point to the potential for scale economies. The *Australian Sugar Year Book 1995* cites the case of a new owner of a 140 hectare Burdekin property, who has employed a local grower to manage his property. The local grower, who has his own assignment of 300 hectares, claims there is no additional cost in relation to machinery or manpower from managing the new property. He is using the same equipment on the combined 400 hectare farm as he would need on an 80 hectare farm (Australian Sugar Year Book 1995).

5.1.3 Responsiveness to change

In rapidly changing world markets growth comes from responding quickly to market opportunities. Examples of responding to market opportunities include expanding production when world prices are high, increasing milling capacity when returns are attractive, and closing mills when technology is outdated and costs are high.

However, the web of State regulation governing the Queensland sugar industry prevents growers and millers from responding quickly to opportunities. For example, amendments to the *Sugar Industry Act 1991* were necessary to accommodate a proposal to build a new mill on the Atherton Tablelands. Similarly, the *Sugar Milling Rationalisation Act 1991* was necessary to accommodate closures of mills. This Act states that mill owners must apply in

writing to the Queensland Sugar Corporation seeking its consent to the closure of the mill.

As the drafting and passage of legislation necessarily takes time, this prevents the industry from responding quickly to opportunities. Elsewhere in the economy it is rare for investments to require specific legislation or for businesses to require the approval of government authorities prior to closing.

The protracted negotiations over the cane payment formula provide another example of the slowness of the industry's processes. The industry took two years to negotiate a one per cent change in the cane price. In other industries, price negotiations of this complexity would rarely take so long. The cost of drawing out these negotiations was that the industry lost time in securing additional milling capacity to meet future crushing requirements.

5.1.4 Economic power of mills versus growers

During the Commission's 1992 inquiry, growers voiced concerns about the economic power of mills in the absence of the assignment system. Growers were concerned that mills would use their monopoly position to squeeze growers' margins.

The assignment system both counters and perpetuates the economic power of mills. The cane price formula and the requirement that mills must accept all cane grown on assigned land in their area counter the economic power of mills by preventing them from reducing prices to growers.

However, the assignment system entrenches mills' economic power by protecting them from competition from each other and new entrants. For example, mills can refuse to install extra crushing capacity because they know that growers do not have the option of having their cane crushed at another mill. This leaves growers with little option other than to capitulate to an extension in the season.

If a number of different companies owned mills in an area, then growers would be less concerned about mills' power. But in many areas this is not the case. This problem has largely been created by the assignment system. By preventing the entry of new mills, the assignment system has ensured that additional crushing capacity can only be met by expansions at existing mills, entrenching the position of incumbents. For example, CSR has duplicated its mill at Invicta to meet increased demand for crushing capacity in the Burdekin. Until the

assignment system is abolished, the geographic concentration of mills will remain.

Supply contracts between growers and mills

In the absence of the assignment system, the grower-miller relationship could be governed by a system of contracts. This is the practice in NSW where arrangements for harvesting and crushing are specified in a five year contract between mill owners and individual cane growers. It is also the practice in other agricultural industries such as the wine industry where over one-third of grapes grown are sold by grape growers to wine makers under contracts generally ranging from 3-5 years.

The Commission expects that growers and mills would contract in advance on the price and terms for crushing or selling cane. To provide a degree of stability, it is likely that contracts would extend over a minimum period of about 3-5 years and could include annual roll-over provisions. In the short run, contracts would probably reflect existing local awards. However, over time, growers and millers would have greater flexibility than previously existed to tailor delivery terms and conditions to accommodate their particular needs.

It is difficult to predict the form that contracts might take - this would be determined by growers and millers in each area. However, the Commission envisages at least three options:

- growers and millers could enter into revenue sharing arrangements where returns reflected world sugar prices, like the current cane payment formula;
- growers could retain ownership of cane and raw sugar and pay mills a crushing fee; or
- growers could sell their cane to mills at a negotiated price.

The first approach would spread the risk of world price movements between growers and millers. The second approach would concentrate risk (and potential returns on risk) on growers. The third approach would concentrate risk (and returns on risk) on mills. However, in each case, parties could use financial instruments such as futures contracts to manage their risk.

Contracts would overcome the problem of mills using the perishability of cane to exploit growers. Contracts could include provisions for resolving disputes such as independent arbitration of disputes about cane quality.

Boston findings

The Boston Consulting Group (1996) argued that there is limited scope for competition between mills because of the high costs of transporting cane. It suggested that this would place mills in a strong bargaining position relative to growers, enabling mills to capture all of the profits associated with cane growing and milling.

Boston argued that the high profits potentially earned by mills would not be competed away through competitive entry. It suggested that growers would not have the capital to form co-operative mills and new mills would not enter existing mill areas.

The Commission disagrees with this assessment. In the Commission's view, a number of factors will constrain the economic power of mills in the absence of the assignment system, namely:

- co-operative ownership of mills;
- competition between existing mills for cane; and
- the threat of competition from the entry of new mills.

Co-operative ownership of mills

Forty per cent of Queensland's mills are owned by growers' co-operatives (see Figure 2). In these regions, the economic power of mills is not an issue as the profits of mills are shared among growers. It makes little financial difference to growers whether they receive returns in the form of high prices for cane or high dividends from mill investments.

Ownership of mills by growers' co-operatives is a form of vertical integration. This is a common strategy used throughout industry to overcome the potential problems associated with two highly inter-dependent sectors.

Competition between mills

Competition between mills for the supply of cane would also prevent mills from exploiting growers. Figure 2 shows that in the Mourilyan, Mackay and Bundaberg regions there are mills of different ownership in close proximity to each other. This makes it feasible for mills to expand output by offering attractive terms to growers currently supplying other mills. As the profitability

of mills is highly sensitive to throughput, this imposes a strong competitive discipline on mills. In evidence to the Commission's 1992 inquiry, CSR argued:

> The economics of milling are highly sensitive to the throughput of cane. If growers were to constrain their aggregate production by, say, 10 per cent it would have a calamitous effect on the mills' profitability. We have experienced this effect this year in that the fall in crop alone, which in our mills has been of the order of 25 per cent, has reduced CSR's sugar milling profits by at least 75 per cent (IC 1992, p.229).

Transport costs will provide mills with a degree of 'natural protection' from competition. However, this is likely to be whittled away over time. For example, a mill that was keen to expand might seek access to competitors' train lines to reduce the cost of transporting cane. Such a mill might also construct interconnections to link train systems.

If the Queensland Government were concerned that transport costs were a barrier to competition between mills, it could legislate to establish an access regime for the sugar rail network. This would enhance competition between mills and reduce the scope for the exercise of monopsony power. The Queensland Government has already provided for such an approach in relation to access to oil and gas pipelines, electricity transmission and the state rail network.

Threat of new entry of new mills

In some regions such as the Burdekin, there is little scope for competition from existing mills because all the mills are owned by the same company. Distance also precludes competition from mills in other regions. However, the Commission considers that even in these areas, there will be little scope for mills to exercise economic power over the longer term because of the threat of new entry. If mills force up crushing charges to inflate profits, they will attract new entry. This will compete crushing charges down to competitive levels.

New entry could be in the form of growers forming a co-operative to establish a new mill or buying their local mill. Precedents for this exist in the sugar industry. For example, in 1978 NSW sugar cane growers formed a co-operative to purchase the three local mills from CSR. The decision of the Mackay Sugar Co-operative Association Ltd to establish a refinery is another example of the willingness of growers to make an investment in other parts of the sugar industry.

New entry could also come from existing millers or new companies wishing to invest in the sugar industry. The offers by Bundaberg Sugar Ltd to take over the South Johnstone and Tully mills indicate that at least one existing miller is keen to increase its stake in the industry.

It is likely that there would be considerable new entry into milling if the assignment system was abolished. This is borne out by the experience of the refining sector where there has been considerable new entry since deregulation (see Box 1). State regulation has insulated mills from competitive pressures to maximise efficiency making them vulnerable to competition from efficient entrants. The substantial growth in the industry and the current shortage of milling capacity also provide opportunities for new entrants.

New entry would also be a more effective way of resolving disputes between growers and millers about the level of crushing capacity. For example, the current dispute in the Burdekin is jeopardising the continued growth of the local economy by placing a halt on industry expansion. One of the reasons for the stand-off is that growers have no benchmark by which to assess CSR's claim that higher returns are necessary for further investment. They also have limited leverage over CSR other than to halt industry expansion.

If the industry were deregulated, the offers of new entrants would provide a benchmark against which to assess CSR's terms. The risk that parties might enter into contracts with competitors would provide an incentive for the speedy resolution of disputes. In this way deregulation would enable market forces to resolve impasses which currently constrain or slow the industry's growth. It would also ensure that growers and local economies were not captive to the demands of their local mill.

The preceding discussion highlights the importance of giving the industry notice prior to abolishing the assignment system. This would give growers, millers and potential entrants time to assess market opportunities and to negotiate long term contracts. In its 1992 report, the Commission recommended that the industry be given three years notice.

Other ways of countering the economic power of mills

The Commission believes that competition will prevent mills from exercising market power, especially in the long term. As discussed above, in many regions mills are owned by growers' co-operatives, and elsewhere there is the potential

for competition between mills or from new entrants once the assignment system is removed.

Even if mills could exercise market power, the Commission considers the problem should be addressed at source rather than through the assignment system. This is the approach being adopted in other deregulating industries, such as electricity, where regulation has created and entrenched market power. The problem with the assignment system is that it perpetuates regional concentration by preventing new entry.

5.2 Developments relevant to tariffs

There has been no change in the Government's policy on the level of the sugar tariff since the Commission's 1992 report. In that time, nothing has occurred to alter the Commission's recommendation that tariffs on sugar should be cut to zero.

Tariffs distort production. This is particularly relevant in relation to the NSW sugar industry which sells all its output on the domestic market. The sugar industry's overall nominal rate of assistance of 5 per cent in 1993-94 masked the much higher level of assistance afforded to the NSW industry. In 1993-94, NSW producers enjoyed a nominal rate of assistance of 19 per cent which was significantly higher than tariffs applying to other parts of Australian industry.

While the overall rate of assistance to the sugar industry is currently relatively low, it fluctuates with world sugar prices. Although this provides sugar producers with greater protection when world prices are low, it reduces the competitiveness of import competing industries that use sugar in production.

In conjunction with statutory marketing, tariffs increase domestic sugar prices. This is tantamount to taxing consumers and downstream manufacturers to increase the income of sugar producers. The size of this tax in 1993-94 was estimated at $57 million.

In a survey by the Bureau of Industry Economics, only 3 per cent of confectionery firms reported that reforms to sugar statutory marketing arrangements had been positive for their operations (BIE 1996). The main reform was the replacement of the embargo on sugar imports with a tariff. The BIE reported that the result reflected the higher than world market price paid by confectioners for sugar - an important input in confectionery production.

The Commission's 1992 report, *Raw Material Pricing for Domestic Use* found that the loss in GDP as a result of tariffs and statutory marketing for sugar was $0.9 million. The loss was small because demand for refined sugar was virtually insensitive to price changes. Therefore, high domestic sugar prices did not significantly distort resource allocation. However, while the loss in GDP is small, the size of the transfer from consumers and manufacturers to sugar producers is large, as outlined above. It is not clear what the social justification for this tax-transfer is.

In contrast to other industries, a reduction in tariffs in the sugar industry would not lead to higher imports. Rather it would reduce the tax that tariffs impose on Australian consumers of sugar and may lead to the displacement of some output from marginal NSW producers with output from more efficient Queensland producers.

Retention of the tariff may also weaken Australia's position in advocating for the liberalisation of world trade in agriculture. The Department of Foreign Affairs and Trade noted:

> ... where Australia has already taken unilateral policy action to liberalise markets, it is in a much stronger position to advocate similar reforms by our trading partners (1996 p.1).

5.3 Developments relevant to statutory marketing

5.3.1 The Corporation's price setting power

In evidence to the Commission's 1992 inquiry, the Corporation agreed that it had little influence over world prices. However, the Commission understands that the Corporation now argues that it can take advantage of higher prices in the Asian market, the destination of about three-quarters of Australia's sugar exports, by controlling the allocation of sugar between markets. The purported difference between higher sugar prices in Asia and the rest of the world is referred to as the 'Far East Premium'.

Given the right market circumstances, it would be possible for Australia to take advantage of higher prices in the Asian market (to the extent they exist) and achieve higher average returns for Australian sugar sales. This strategy depends on:

- alternative suppliers to the market from outside the region incurring high freight costs to supply the Asian market - this is what lies behind the 'Far East Premium'; and
- Asian demand for sugar (at the world price plus freight) being greater than Asian supply excluding Australia, but less than Asian supply including Australia.

This last condition determines whether controlled marketing is necessary to capture the freight premium. If Asian demand for sugar were greater than Asian supply including Australia, then Australia could extract any 'Far East Premium' even if it had competitive exporting. Competition between millers to supply the market would not compete away the premium.

If Asian demand is less than Asian supply including Australia, then Australia could only capture the freight premium if it restricted supply to the Asian market. This would require some degree of monopoly marketing.

It is an empirical question whether these market conditions exist. The data presented by the Boston Consulting Group (1996) suggest that they do. However, the Commission has concerns about the analysis and data:

- Boston do not adequately explain the role of Thailand, the region's second largest net supplier, which accounts for 29 per cent of Asian net imports and which is also a significant supplier to countries outside of Asia;
- the evidence in support of a 'Far East Premium' is not conclusive; and
- the longer term durability of any 'Far East Premium' should be questioned in light of the incentive it would provide to alternative suppliers.

ABARE data illustrates that Thailand exported 2.3 million tonnes of raw sugar in 1993-94 and 2.6 million tonnes in 1994-95 (ABARE 1996). However, the Boston data states that Thailand only exported 1.9 million tonnes of raw sugar to Asia in 1994 (Boston 1996. If there is a premium in the Asian market, why did Thailand send a significant share of its exports to countries outside Asia?

Boston's report implies that Thai sugar is marketed competitively through 'intermediary traders'. If this is the case, then it is unlikely that Thailand would be deliberately restricting supply into Asia. And if Thailand is restricting exports to Asia, is there an agreement between Australia and Thai exporters to

share the exports? The Boston report does not adequately explain the marketing practices that would result in Australia capturing the 'Far East Premium'.

Even if a 'Far East Premium' currently exists, the question remains whether Australia should structure its marketing arrangements around it. The existence of a 'Far East Premium' depends on Asian demand and supply conditions and transport costs - all of which change over time. If a premium exists now, there is no guarantee that it will continue to exist in the future. The Corporation's evidence to the Commission's 1992 inquiry indicated that the premium did not exist at that time.

Indeed the very existence of a premium will encourage an increase in production by competitive exporters in the region, reducing Australia's share of the Asian market.

The short term benefit of structuring marketing arrangements to take advantage of a possible price premium needs to be compared with the longer term costs. These costs, which are discussed further in subsequent sections, include:

- precluding competition in marketing which removes incentives to adopt innovative marketing approaches such as product differentiation;
- a less efficient and less dynamic milling sector as a result of protection from competition; and
- possible less efficient operation of infrastructure such as bulk terminals.

These costs undermine the international competitiveness of the Australian sugar industry. This is of serious concern because ultimately the future of the Australian sugar industry depends on its international competitiveness. While statutory marketing may enable the industry to take advantage of a short term price premium, it removes the impetus provided by competition for achieving lasting efficiencies and cost savings - the key to the industry's long term future.

If Queensland's statutory marketing arrangements were dismantled, the Queensland Sugar Corporation could continue to market sugar, although it would do this in competition with other marketers. If it was a competitive and efficient marketer, its future would be assured.

5.3.2 Economies of scale in marketing

Statutory marketing is not necessary to realise the cost efficiencies of economies of scale in marketing. If marketing were deregulated, economies of scale would provide an incentive for marketers to seek higher volumes, and competition would provide an incentive for them to pass savings on to mills and growers. For example, if freight costs are lower for high volume marketers, then these marketers will be able to offer a more attractive deal to mills, thereby attracting greater volumes.

It is also likely that international marketers would compete for the business of Australian mills. This would give Australian growers and mills access to even greater marketing economies than they enjoy now, as Australia makes up only 12 per cent of world sugar trade.

5.3.3 Effect of statutory marketing on competition and innovation in milling

In 1995, the BIE surveyed firms in the agri-food industry (including sugar) about the impact of microeconomic reform on factors such as competition. The BIE noted that many microeconomic reform initiatives have been directed at promoting greater competition with the underlying aim of encouraging firms to become more productive.

Overall, almost 75 per cent of respondent firms from 12 agri-food industries indicated that the level of domestic competition they had faced since July 1989 had increased - in most cases substantially. This result was spread fairly evenly across the agri-food industries, with more than 60 per cent of firms in each industry reporting an increase in the level of competition. The exception was the sugar manufacturing industry, where 8 of the 10 respondents, most of whom were millers, reported no change in the level of competition since 1989 (1996).

The BIE found a link between increased competition and dynamic behaviour:

> Overall, respondent firms faced with increases in competition were more dynamic and productive than those reporting no change in the level of domestic competition. Firms reporting changes to their operating structure, major investments and substantial sales growth - often involving an emphasis on growing exports - were more likely to have reported an increase in the level of competition facing them in the domestic market. Firms experiencing increases in productivity were also more likely to have experienced increased competitive pressures (BIE 1996, p.xxiii).

The link between competition and dynamic behaviour is borne out by changes in the refining sector. While there have been a large number of changes in the refining industry since deregulation (see <A HREF="#box1">Box 1</A>), progress in the milling and cane growing sectors has been less dramatic. No new mill has been established and there has been little change in the scale of cane farming, despite the opportunities to cut costs. This is likely to reflect that while reforms have facilitated industry expansion, they have done little to increase competition in milling and cane growing.

Box 1 Destination of Australian raw sugar exports, 1994-95

Until 1989, the Queensland Sugar Board had a monopoly over the sale of refined sugar in Australia and there was an embargo on imports. Raw sugar was refined on a toll (contract) basis by CSR and Bundaberg Sugar Ltd, with the Queensland Government retaining ownership throughout the refining process.

However, in 1989 refining was deregulated. Raw sugar was sold to domestic refiners and the embargo on sugar imports was replaced with a tariff.

Since deregulation, two new refiners have entered the market. In 1989, the NSW Sugar Milling Co-operative entered into a joint venture to establish a refinery at Harwood. Then in 1993, Mackay Refined Sugars committed $100 million to the construction of a refinery at Mackay. This development has lifted Australia's refining capacity to 1.2 million tonnes, around 350 000 - 400 000 tonnes in excess of domestic consumption requirements.

The entry of Mackay Refined Sugars has sparked a price cutting war which has driven domestic refined sugar prices below the duty paid import parity price. In response to this competition, CSR has rationalised its refining capacity. It has closed its refinery in Sydney and upgraded its refinery in Melbourne.

CSR's changes indicate that the Corporation's monopoly over refining before 1989 allowed inefficient production of refined sugar. Competition has given CSR the incentive to improve its efficiency.

5.3.4 Effect of statutory marketing on innovation

There are numerous examples throughout the economy which illustrate how companies have used innovative marketing approaches to broaden their customer appeal, to expand their market and to earn premiums on their products. Examples include the way companies:

- differentiate their products to cater for market niches;

- adopt just-in-time production arrangements to improve the quality and responsiveness of their service; and
- customise payment arrangements to best accommodate the client.

However, statutory marketing has removed both the incentive and the opportunity for growers and mills to adopt innovative marketing approaches by preventing them from marketing their own sugar. A current example illustrates how this affects industry development.

Brazil has started marketing a new type of raw sugar called Brazilian crystals. The crystals have a very low impurity level which makes them cheaper to refine than Queensland sugar. They are also more costly to produce. Despite this, the Brazilians are not seeking a price premium for the product (Frawley 1996).

The issue for the Queensland industry is whether to match this competition and market the new product, or whether to continue offering the same range of products. Under the current statutory marketing arrangements, this decision can only be made centrally - by the Queensland Sugar Corporation. There is no scope for individual mills to assess opportunities, invest and take the necessary risks.

This example also illustrates how the statutory marketing arrangements separate those who make the decisions from those who bear their financial consequences. The Corporation cannot be held commercially accountable for its decisions - whether these be decisions about sugar varieties or infrastructure investments. If the Corporation makes an unprofitable decision, the losses will be shared by the whole industry despite members of the industry having little influence over the Corporation's decisions. While this occurs elsewhere in the corporate world - for example, company boards make decisions, the costs of which are borne by shareholders - the difference is that parties choose to be shareholders and can remove directors, whereas Queensland sugar producers have no choice but to bear the costs of the Corporation.

5.3.5 Effect of statutory marketing on refining

Statutory marketing is likely to impede the development of an export oriented refining industry in Australia by:

- inflating the cost of raw sugar to refiners; and

- preventing companies from fully integrating their milling and refining operations.

The Corporation's 1994-95 Annual Report states that refiners and manufacturers are rebated for "the tariff component of the domestic price" (p.17). By omission, this suggests that rebates do not cover the transport cost difference between export and import parity prices. If there were competitive marketing of raw sugar, refiners and other users of raw sugar would be able to purchase at export parity, not import parity (net of tariff). If transport costs are not rebated, then statutory marketing is denying Australian refiners of the natural advantage of being located close to raw material supply. This impedes the development of export oriented refining and sugar using industries in Australia.

Even if the rebate fully compensates refiners, unless the Corporation has made contractual commitments to retain this policy for the life of refinery investments, uncertainty about the long term level of rebates could still be inhibiting investment.

Statutory marketing prevents companies from fully integrating their milling and refining operations. For example, refiners cannot use their own ships to transport sugar from their mills to their refineries. If a company wanted to establish a refinery offshore it could not supply its own raw sugar. Instead, it would be required to sell its raw sugar to the Corporation and to buy it back again to supply its refinery. Other countries' trade barriers and the higher costs of transporting refined sugar than raw sugar, may make locating refineries offshore a better export strategy for Australian producers than refining in Australia. However, the compulsory acquisition arrangements preclude companies from taking advantage of these vertical integration opportunities.

5.3.6 Bulk sugar terminals

The Queensland Government's decision to transfer ownership of bulk sugar terminals from port authorities to the Corporation is unlikely to improve the efficiency of bulk terminals significantly. The Corporation has been managing the terminals for many years and has been responsible for new investment.

Simply transferring ownership of the terminals to the Corporation will not achieve the objective of separating equity in bulk terminals, and returns on that equity, from the payment for sugar to mills and growers. Management of the terminals as a group will also forgo the benefits of separate and independent management of terminals. These benefits are:

- economic efficiency would be enhanced if port charges reflected the actual cost incurred in shipping from each regional port;
- investment decisions would be based on the financial viability of each port and would not be influenced by cross subsidies between ports;
- producers would have an incentive to pressure their port to minimise costs; and
- competition between ports to attract producers from adjacent regions would encourage efficiency.

In 1992, the Commission recommended that the terminals be privatised and that each terminal provide non-discriminatory access to all parties. Since then amendments to the <I>Trade Practices Act 1974</I> have established a legislative framework for third party access to the services of essential facilities, which could include bulk terminals. States are also introducing legislation to establish access regimes. These developments will facilitate implementation of the Commission's 1992 recommendation.

REFERENCES

Australian Bureau of Agricultural and Resource Economics (ABARE) 1995, *Australian Commodity Statistics 1995*.

Australian Sugar Year Book (various years), Rural Press Queensland Pty Ltd.

Boston Consulting Group 1996, *Report to the Sugar Industry Review Working Party: Analysis of Issues and Identification of Possible Options*, 5 July.

Bureau of Industry Economics 1996, *Agri-food Case Study, Micro Reform - Impacts on Firms*, Report 96-11, May, AGPS, Canberra.

Canegrowers 1996, *Information Handbook* - 1996.

Collie, G. 1996, 'Sugar tonnage set at hit record level', *The Courier Mail*, p.13, 29 May.

Committee of Inquiry into the Winegrape and Wine Industry 1995, *Winegrape and Wine Industry in Australia*, 30 June, AGPS, Canberra.

CSR 1996, *Annual Report for the year ended 31 March 1996*.

Davco 1992, *Submission to the Industry Commission inquiry into the Australian Sugar Industry*, Submission no. 24.

Department of Foreign Affairs and Trade 1996, *Briefing Paper provided to the Productivity Commission Stocktake of progress in microeconomic reform*.

Frawley, Peter T. 1996, *Speech to the ACFA Annual Meeting, 28 March 1996* (unpublished).

Industry Commission 1992, *The Australian Sugar Industry*, Report No. 19, 6 March, AGPS, Canberra.

___1992, *Raw Material Pricing for Domestic Use*, Report no. 21, 1 April, AGPS, Canberra.

___1995, *Annual Report 1994-95*, AGPS, Canberra.

Niesche, C. 1996, 'Mill row halts auctions', *Weekend Australian*, p.10, Property, 29 June.

O'Sullivan, M. H. 1990, *Sugar Cane: Biological and Environmental Considerations, Alternative Uses and Economies of Scale*, Contributed paper presented to Agricultural Economics Society Conference, Brisbane 12-15 February.

Queensland Sugar Corporation *Annual Report* (various years).