# ISSUE ANALYSIS



No. 45 25 March 2004

# **Sweet and Sour Pork Barrelling**

# The Case of Queensland Sugar

# **Alex Robson**

he Queensland sugar industry is once again pleading for government assistance. Cane farmers claim they need up to \$600 million, not only to cope with low world sugar prices and increased competition from countries like Brazil, but also to compensate for being denied concessional access to the American market under the Australia-United States Free Trade Agreement. The federal government has indicated that farmers will have to settle for less, although the details of its 'sugar package' have yet to be announced.

This is classic 'pork barrel' politics—when geographically concentrated groups (such as sugar farmers) and local political representatives in key electoral seats demand taxpayer-funded projects or transfers that benefit their own narrow constituency but diffuse the costs to the general population.

For nearly 100 years such pork barrelling has propped up a recalcitrant industry that has refused to reform despite evidence that deregulation would lead to higher profits. Now the negative side effects of federal and state regulation and intervention have built up to crisis point. The industry has become chronically uncompetitive. Indeed, the current set of regulatory arrangements inflicts such massive costs and inefficiencies on the industry that if any individual farmers happen to be profitable at all, it is in spite of, rather than because of, these regulations.

More than any other agricultural industry in Australia, sugar production resembles a system of old-style agrarian socialism. The size and location of individual farms, as well as the amount and type of cane that can be grown, are determined collectively. Upon its manufacture, all sugar produced in Queensland then becomes the property of Queensland Sugar Limited (QSL). QSL effectively controls all aspects of supply and marketing, and distributes the proceeds of sales. Such collective decision-making taxes efficiency and subsidises inefficiency by transferring wealth from profitable to unprofitable growers.

Legislative reforms currently before the Queensland parliament propose abolishing the cane production area system and compulsory collective decision-making described above and allowing for individual and collective contracts, although single desk or monopoly selling arrangements would remain largely in place. These reforms are welcome and could make the industry much better off, thus reducing the need for the industry to be given further taxpayer-funded assistance by the Federal government.

'Assistance' or 'rescue' packages tend to make matters worse by generating perverse incentives for new inefficient producers to enter the industry (in the hope of obtaining future compensation) and for current inefficient producers to reject compensation offers and hold out for higher packages in the future, instead of leaving the industry because they are not making a profit. The net effect is to create a greater political demand for future 'assistance' packages. Like most government intervention, sugar subsidies create their own lobby that perpetuates the reason for the intervention. The best course of action may therefore be to abandon the notion of targeted regional 'assistance' package, and return funds to where they have their greatest economic value: in the hands of taxpayers.

#### INTRODUCTION

The Queensland sugar industry is once again begging for government assistance. Cane farmers have attempted to justify their latest demand for a \$600 million package by pointing to low world sugar prices and increased competition from countries like Brazil, as well as the recent failure to gain concessional access to the American market under the Australia-United States Free Trade Agreement. Yet other industries in Australia have had to adjust to changing world markets and increased competition, many with much less assistance than that traditionally enjoyed by the sugar industry.

The long history of lobbying federal and state governments for 'assistance' has enabled the tightly organised sugar industry to resist pressures for change by contesting and rejecting reform proposals, even though evidence suggests that regulatory reforms would benefit the industry. For example, a 1991 study estimated that federal and state government regulation of the industry cost about \$500 million annually in lost sales and \$200 million in income. More recent estimates show that reforms would make industry profits at least \$350 million higher than without reform. In other words, deregulation would make the industry as a whole better off.

Current regulations benefit inefficient sugar producers at the expense of domestic consumers, downstream producers in the food and beverage industries, profitable sugar growers, and federal and state taxpayers. Why have successive governments promised taxpayer funds while allowing this situation to persist? The reason is that promises of ongoing and one-off assistance packages yield significant rewards to special interest groups. The temptation to intervene is particularly acute when recipients of government largesse are well organised, highly vocal and located in specific geographical areas. The concentration of benefits (to a specific geographic constituency) and diffusion of costs (to general taxpayers and consumers) present significant patronage opportunities to political representatives and other government officials.

Such patronage—colloquially known as 'pork barrelling'3—is not uncommon in Australian politics. Recent examples include federal assistance to the car industry in South Australia and other forms of government assistance under the guise of 'industry policy', environmental projects, federal road spending, defence procurement, and federal and state spending on agriculture, sport and regional universities.

Ongoing assistance to the Queensland sugar industry is another example of 'pork barrelling'. The majority of sugar farmers and mills are geographically concentrated along the north and central Queensland coast. For nearly 100 years,<sup>4</sup> the sugar industry has enjoyed federal and state government assistance in the form of compulsory government acquisition of sugar, single desk (or monopoly) selling arrangements, import embargos, quotas, tariffs, consumer levies, simple transfers, and other direct and indirect packages. Recently, more exotic schemes involving significant economic costs and dubious economic benefits have begun to emerge, such as the proposal to mandate ethanol in automobile fuel.<sup>5</sup> Yet this proposal merely presents a similarly attractive pork barrelling opportunity, because the costs are not easy to observe and are diffused among car users and petrol companies.<sup>6</sup>

This paper examines how Australia's broader economic interests have been held hostage by the narrow interests of sugar lobbyists and local political representatives. It argues that challenging the political power of the sugar lobby is difficult but not impossible. The lobby's influence is likely to endure unless some key regulatory arrangements are changed. In particular, the current land assignment system enshrined in Queensland legislation, in addition to creating large economic costs, gives industry participants strategic and collective control of the land devoted to sugarcane growing in key electoral seats.

Earlier this month, the sugar industry and the Queensland government reached agreement on a number of legislative reforms, currently before the Queensland parliament, that propose getting rid of the cane production area system and collective decision-making. These reforms are to be welcomed. Abolishing the land assignment system would benefit efficient sugar producers, creating an important political constituency for further industry restructuring. It is therefore a crucial reform that would lead to substantial economic benefits for the industry and consumers as well as significant political returns.

Taxpayers should not have to 'compensate' a recalcitrant industry that has refused to reform in the past and that will likely make higher profits as a result of deregulation.

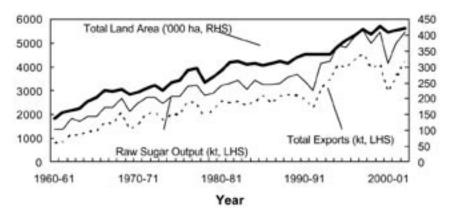
#### **ECONOMIC MYTHS AND REALITIES**

The negative side effects of federal and state regulation of, and intervention in, the sugar industry have built up to crisis point. What follows is an analysis of the future viability of the industry and why it is in its current state of crisis.

# **Efficiency and profitability**

How technologically efficient is the Queensland sugar industry? As Chart 1 shows, even using an imperfect indicator such as average land productivity, few efficiency gains have been made.<sup>8</sup> It is true that many sugar growers and sugar mills have adopted cost-reducing machinery and farming techniques, but willingness to adopt new equipment or farming methods is only a partial indicator of overall technological efficiency. Other indicators include responsiveness to market conditions, farm scale and scope and the ability to diversify, flexibility in land management practices,<sup>9</sup> the absence of artificial barriers to entry and exit, and the presence of low transactions costs along the supply chain. As a result of regulatory arrangements, however, the industry as a whole has performed poorly in all of these areas.

Chart 1. Expansion in the Australian Sugar Industry, 1960-2003



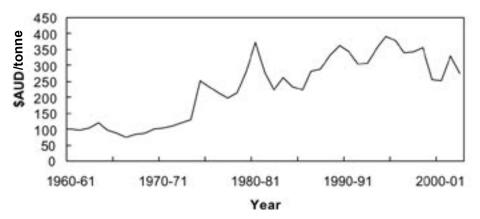
Source: Australian Bureau of Agricultural and Resource Economics (ABARE), Australian Commodity Statistics (Canberra: Australian Government Printing Service, 2003), Table 203, p.209.

It is questionable whether many industry participants are profitable on a sustainable basis. For example, in a 2002 industry assessment, Clive Hildebrand used 1994-1996 data from the four Queensland canegrowing regions to estimate grower returns. Even in the best scenarios, he found that average total production costs exceeded estimated returns in all four regions. Using this data, he concluded that at current prices (Chart 2 overleaf), large parts of the sugarcane farming sector are not profitable. He provided projections of future returns based on implausibly optimistic exchange rate assumptions (AUD\$1=US\$0.50-0.60) and found that average costs will still likely exceed returns.<sup>10</sup>

Lack of profitability has not prevented expansion of the industry. Contrary to popular belief, in terms of land area devoted to production, total cane crushed, total sugar production and total exports, the history of the Australian sugar industry is one of continuing expansion, not contraction. This expansion in the absence of ongoing profits is a direct result of regulatory interventions. Under competitive market conditions, unprofitable marginal growers would probably leave the industry so that less land would be devoted to sugar growing as some farmers 'sold up' or tried something else. But there is no evidence of a significant contraction or even a levelling off in the total land area devoted to canegrowing in the last 40 years.

Expansion [of the industry] in the absence of ongoing profits is a direct result of regulatory interventions.

## Chart 2. Number 1 Pool Price of Sugar, 1960-2003



Source: Australian Bureau of Agricultural and Resource Economics (ABARE), Australian Commodity Statistics (Canberra: Australian Government Printing Service, 2003), Table 203, p.209.

## Current regulations, transaction costs and inefficiencies

More than any other agricultural industry in Australia, sugar production resembles oldstyle agrarian socialism. Queensland legislation dictates that individual farm location and size as well as sugar output is determined on a collective basis by growers and mills, and until very recently even regulated the varieties of cane that can be grown.<sup>11</sup>

Upon its manufacture, all sugar produced in Queensland automatically becomes the property of Queensland Sugar Limited (QSL), <sup>12</sup> which is then required to compensate millers and growers for this compulsory acquisition of property. QSL effectively controls all aspects of sugar production from mills, including storage, ultimate location and delivery of supply, and may even direct a mill to produce a particular brand of sugar. QSL also controls the marketing of raw sugar.

The argument for the collective running of the sugar industry is that growers and processors of sugar cane have to be tightly coordinated because cane cannot be transported far and has to be processed within 16 hours of harvest or its sweetness (and therefore commercial value) declines. The argument would apply to other industries—it was applied to milk prior to the successful milk deregulation of recent years—but it is not convincing. Just-in-time delivery is nowadays handled effectively by many industrial complexes, such as assembly or retailing.

#### Inefficiencies at the local level

Marketable raw sugar can be regarded as a joint product of canegrowers and mills (the 'mill area'). <sup>13</sup> In the past these technological realities have dictated some degree of vertical integration between the two points in the supply chain. As a result of this joint production, some industry observers have claimed that 'there is no market for sugarcane, only for products of its manufacture.' <sup>14</sup> This is true only to the extent that intervention has prevented a market for raw sugarcane from emerging and flourishing. At the most basic level, farmers want to ensure that local mills will buy their cane at an acceptable return, and mills have to match milling capacity to cane supply to ensure future profitability. To the trained economist, this sounds suspiciously like a market but for the existence of stifling regulations.

Whether growers also engage in milling or vice versa (or both specialise completely) depends on the costs and benefits of integration versus the costs and benefits of dealing with each other at 'arms length' through contracts or other negotiated arrangements. In the absence of negotiating or transactions costs, it would not matter whether millers and growers sought to enter into permanent cooperative arrangements or whether negotiations over price, output and so on occurred on an irregular, ad-hoc basis.<sup>15</sup>

More than any other agricultural industry in Australia, sugar production resembles oldstyle agrarian socialism.

On the other hand, if transactions costs are high, the allocation of legal rights to production, output and so on will matter for overall productive efficiency. Efficient regulatory arrangements minimise the effect of these transactions costs but, as the record of regulation in the sugar industry indicates, inappropriate regulatory regimes can themselves become a significant source of transactions costs. <sup>16</sup> Conversely, deregulation will oblige growers and mills to find trust-inspiring forms of contractual agreements similar to other industries.

At the micro level, Queensland legislation establishes *cane production areas* (CPAs), which entitle growers to enter into agreements to supply a mill with cane grown on a certain number of hectares situated within a particular description of land. The granting, transfer, cancellation, and variation of these CPAs is governed by cumbersome collective consent processes using majority rule voting arrangements, and decisions are made by groups of local farmers and millers on the basis of 'farmer equity', rather than by individual farmers and millers on the basis of individual cost or profitability.

From a political point of view, the cane production area scheme achieves at least three objectives, all of which are crucial in any rent-seeking situation:

- 1. They are a form of barrier to entry. When the government supports sugar growers directly through embargos, quotas, tariffs, compulsory acquisition and single desk or monopoly selling arrangements, this creates artificially high prices. If farmers could freely enter the industry, they would expand production until these rents were dissipated. Land assignment prevents this from happening.<sup>17</sup>
- 2. The land assignment system discourages exit. When world sugar prices drop by a sufficiently large amount, some land allocated to canegrowing becomes unprofitable. In the long run, profit considerations would normally dictate that the land be withdrawn from canegrowing and devoted to its next most profitable use; for example, fruit growing. However, if farmers leave the industry this reduces their political clout, as a higher number of farmers represents more votes that local political representatives could potentially lose, therefore increasing the political influence of the sugar lobby. The assignment system restricts changes in land use into other industries. Indeed, transitions into alternative land uses out of sugarcane are extremely rare.
- 3. By tightly controlling entry and exit, the land assignment system allows industry participants to strategically expand sugarcane growing in key electoral seats.

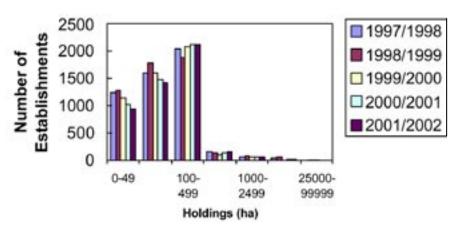
If all farmers were equally efficient, these regulatory arrangements would not have such serious consequences for overall industry efficiency. However, the evidence suggests that (i) there may be significant economies of scale in sugarcane growing and (ii) there are important variations in unit costs among different farms in the same growing area (which cannot be explained by external effects like disease or weather). This variation translates into significant differences in individual output and profitability. The effect of collective decision-making is to transfer wealth from profitable to unprofitable growers, lowering the incentive for further increases in productivity and profitability. In other words, collective decision-making taxes efficiency and subsidises inefficiency.

### The effect of voting arrangements and a simple alternative

Local collective decision-making is based on simple majority rule and the one-vote, one value principle for each grower. When collective decisions on individual issues are made by simple majority rule, outcomes are ultimately determined by the median voter.<sup>19</sup> For example, if half of the members of a local collective produce 20% of the cane supply, the vote of this 20% is decisive in the determination of any issue before the collective. As the median voter becomes more inefficient and unprofitable relative to the average grower at the local level, his preference for higher levels of wealth transfers or 'farmer equity' increases, which further weakens incentives.<sup>20</sup> As Chart 3 overleaf shows, between 1997-1998 and 2000-2001, the median sugarcane grower owned land holdings of between 50 and 99 hectares. If economies of scale exist, as is probable, this data suggests that in the typical growing area, the median voter is a relatively high cost producer.

Collective decision-making taxes efficiency and subsidises inefficiency.

Chart 3. Distribution of Sugar Cane Growing Land Holdings, 1997-2002



Source: Australian Bureau of Statistics, Agricultural Commodities, ABS Catalogue No.7121.0 (Canberra: Australian Government Printing Service, 1997-98 to 2001-02), Table 3: 'Establishments With Agricultural Activity by Area'.

Hildebrand argues that individual voting power should be more closely tied to the financial interests of farmers, for example as measured by tonnes delivered by mills.<sup>21</sup> But this is an output-focused approach rather than an efficiency or profitability-focused approach, and there is little guarantee that it would improve matters. Indeed, given current regulatory arrangements it may encourage high cost farmers to expand even further.

An alternative method of allocating voting rights would be to assign votes in accordance with farm profitability or cost efficiency rather than output. But then, because more efficient farmers would be willing to accept lower prices for raw sugarcane, industry participants may as well abandon collective decision-making altogether and base individual decisions on price and cost variables. In the absence of voting and collectivised decision-making, farmers could truly compete on price, quality and other margins and would face greater incentives to innovate and cut costs.

If individual contracting arrangements and the resulting prices were permitted to influence the demand and supply of sugar, there would be no need to vote over who produces what and in what amounts. The informational costs would also be considerably lower. Prices would act as signals to tell individual growers and mills how they should act in the future, even though these individuals would not know (or care) why prices were changing. This would be a true democracy of the market based on the principle of voting with one's feet, rather than the ill-defined principle of 'farmer equity', which tends to reward mediocrity rather than individual excellence and progressiveness.

# Inefficiencies at the industry-wide level

These problems at the local level are exacerbated by macro or industry-wide arrangements. Between 1925 and 1999, membership of the Queensland Cane Growers Organisation (also known as 'Canegrowers') was compulsory for every sugarcane farmer. As Hildebrand notes, Canegrowers operates like an 'older style trade union' with respect to representation of its members.<sup>22</sup> Although membership is no longer compulsory, 93% of growers are still members, and Canegrowers' members have able to develop and sustain considerable input into, and control over, local group decision-making processes.

The other institutional arrangement that creates significant industry-wide costs (and which creates costs for the wider economy) is the single-desk or monopoly selling arrangements. Proposed legislative changes currently before Queensland parliament allow for exemptions from this arrangement, but only in line with what the legislation specifies.

The ill-defined principle of 'farmer equity' tends to reward mediocrity rather than individual excellence.

As mentioned earlier, Queensland Sugar Limited markets all raw sugar produced in Queensland, and distributes the proceeds to farmers and mills. It is often claimed that the establishment of QSL provides substantial cost savings to farmers and millers. However, if this were true, why compel growers and mills to participate in a scheme which purportedly saves them money? The costs of the current arrangements are that mills are separated from markets, and producers are separated from consumers. QSL also averages proceeds of sales, which weakens price signals between producers and the ultimate consumers. This is a form of protection for inefficient growers and mills, at the expense of efficient producers, and also prevents mills from competing.

A further argument for monopoly acquisition is to take advantage of market power and increase returns to the industry above competitive levels. However, because sugar prices are determined on world markets and because Australia is a relatively small producer, it is doubtful that QSL possesses such market power.<sup>23</sup> In any case, even if QSL did possess market power, this has adverse consequences for final users. In addition to being used as an input by many industries (confectionary, beverages, etc), raw sugar can be transformed into many final products, including white sugar, caster sugar, brown sugar, coffee sugar, pure icing, icing mixture, organic sugar, liquid sugar, golden syrup, chemicals, alcohol (rum) and molasses. The latter is produced as a by-product of the sugar milling process, and is used as an input into other primary industries. Any increases in price achieved by QSL must be borne by final users, and, ultimately, by consumers of sugar. However, even if the single-desk selling arrangement were abolished, consumers would still face unnecessarily high prices due to inefficiencies created by other regulatory arrangements.

# THE POLITICS OF CONTINUED ASSISTANCE TO THE SUGAR INDUSTRY

The current set of regulatory arrangements inflicts such massive transaction costs and inefficiencies on the sugar industry that if any individual farmers happen to be profitable at all, it is in spite of, rather than because of, these regulations. Marginal producers who would otherwise leave the industry demand and receive help in the form of taxpayer-funded assistance,<sup>24</sup> which makes the industry rigid and prevents the usual adjustments to changing demands, technologies, resources and competitors. Despite Australia-wide reforms in other industries, major reform of the sugar industry has yet to occur. Why are broader economic interests being held hostage by the narrow interests of sugar lobbyists and local political representatives?

## Credit claiming and pork barrelling

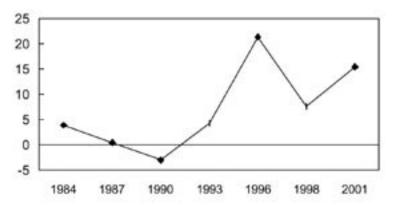
The lack of viability and ongoing demand for assistance presents two kinds of political opportunities: *credit claiming* and *pork barrelling*. A credit claiming opportunity is said to exist when a politician can make a highly visible, one-off political decision to help certain constituents and this substantially increases his or her chances for reelection, even though the assistance may not be justified on a broader cost-benefit basis. Alternatives to one-off assistance packages (such as ongoing entitlement programmes like unemployment benefits) destroy credit claiming opportunities because this kind of assistance is neither highly visible nor particularly rare. Credit claiming appeases the 'what have you done for me lately' constituency.<sup>25</sup>

'One-off' compensation packages are an example of credit claiming. Although they often have desirable short-term political effects, evidence suggests that they often have unintended, negative long-term consequences. One-off compensation payments create incentives for new, inefficient producers to enter the industry (in the hope of obtaining future compensation) and for current inefficient producers to reject the current offer of compensation and hold out for higher packages in the future. In combination with other compensation measures such as interest rate subsidies on loans, the promise of compensation packages can have an even more devastating effect. Interest rate subsidies

Despite Australia-wide reforms in other industries, major reform of the sugar industry has yet to occur. Like most government interventions, sugar subsidies create their own lobby that perpetuates the reason for the intervention. encourage inefficient producers to expand and finance new production by resorting to debt markets, and creditors are willing to lend larger sums because of the promise of future compensation packages and bailouts. The net effect is to create a greater political demand for future assistance packages.<sup>27</sup> Like most government interventions, sugar subsidies create their own lobby that perpetuates the reason for the intervention.

The other political opportunity that regulations create is *pork barrelling*. One underlying cause of pork barrelling is political districting. The creation of electorates in various geographical locations is essentially arbitrary from an economic point of view, but districting has important consequences for overall spending levels and the design of specific spending proposals. When sugar assistance and other programmes are financed out of general taxation revenue representatives compete for these funds, with competition fiercest between representatives in marginal electorates.<sup>28</sup> Taxpayer funds are wasted on inefficient assistance packages because the revenue costs of each project are spread among general taxpayers rather being met by the constituents of each sugar electorate. This is against the broader economic interest and reduces overall economic welfare, but is politically beneficial to local representatives because it may reduce the marginality of their electorates. Chart 4 shows that the Federal coalition's winning margin has increased in Queensland 'sugar electorates', although the degree of marginality has been somewhat volatile in the last 20 years.

Chart 4. Average Coalition Winning Margin in Queensland Sugar Seats, 1984-2001



Note: Queensland sugar seats are Hinkler, Kennedy, Dawson, Leichhardt, Herbert and Wide Bay. The Coalition currently holds all seats except Leichhardt, with Kennedy held by Bob Katter (formerly of the Nationals). Source: Australian Electoral Commission, Election Statistics (Canberra: Australian Government Printing Service, 1984-2001).

## The essence of the sugar pork barrel

Even if Australia was a single electorate, the sugar pork barrel would still exist. The essence of pork barrelling is that the *political definitions* of costs and benefits never coincide with *economic definitions*. When the government subsidises sugar producers, the individuals and their families in the specific geographic constituency clearly benefit directly in proportion to the amount of cash assistance. If the 'assistance' allows farmers to sustain or increase sugar production and sales or if the government compulsorily acquires the sugar and sells it using a single desk, then the revenue from these sugar sales received by growers and mills also counts as a direct benefit to them.<sup>29</sup>

Assistance is also likely to increase the returns to marginal and inframarginal inputs used in sugar growing, such as land and wages. Although sugar lobbyists often argue that these indirect pecuniary benefits are significant, they are in fact largely irrelevant. Although increased returns must be counted as benefits to land and other factor owners, they represent costs to those who would have otherwise purchased the factors, such as other employers in the region or other land users. Instead of 'creating' employment, assistance simply *diverts* employment. In fact, in most cases, the next best alternative

use of a sugar farm or sugar workers is still in sugar growing, but by a more efficient producer using lower cost techniques or management practices. To the extent that assistance to inefficient producers pushes up land values and wages, it increases costs for efficient producers. Such 'assistance' reduces, rather than increases, economic welfare in sugar growing regions. In particular, the losses are borne by efficient sugar producers and other local firms in the area.

Perhaps the best example of this double counting is the widespread use of 'multiplier' or 'flow-on' effects or 'indirect benefits' of public projects, which are frequently touted by political representatives, lobbyists, the media, and even some ill-informed economists. Because 'multipliers' do not consider possible alternative uses of resources such as land and labour, they are only able to measure net benefits of sugar assistance if the resources used in sugar production would otherwise not be used at all. If propping up the sugar industry can occur only by bidding resources away from other industries or more efficient sugar producers, then the true net multiplier effect is zero.<sup>30</sup>

In other words, pecuniary gains that are mediated through the price system are, in most cases, offset by pecuniary losses.<sup>31</sup> That they may not *exactly* be offset, due to the presence of other distortions such as taxes or subsidies or otherwise unemployed factors of production is beside the point. The essence of pork barrel politics is that pecuniary gains are counted but pecuniary losses are not.<sup>32</sup> The end result is that costs are understated, benefits are overstated, assistance is undertaken, and public funds are wasted. Thus, the estimation of 'multiplier effects' and 'indirect benefits' only serves to exacerbate the pork barrelling problem.<sup>33</sup>

#### CONCLUSION

Federal and state regulation of the Queensland sugar industry has hindered competition, stifled innovation and almost completely eliminated incentives for sugar farmers to lower production costs. Regulations obstruct the new entry or expansion of low cost farms, hinder the contraction or exit of high cost farms from the industry, prevent low cost growers from negotiating more favourable terms with competing mills, and hamper low cost mills in negotiations of more promising terms with low cost growers and in their attempts to abandon arrangements with high cost growers. In these respects, the regulations are a significant source of inefficiency, both at the local level and in the industry as a whole.

If the purpose of sugar industry 'assistance' is to increase regional employment of idle resources such as land and labour in Queensland coastal towns, then the appropriate course of action would be to compare the net employment effects of expansion of the sugar against the employment effects of assistance to other industries such as tourism.<sup>34</sup> For example, because sugar is only cut for a fraction of the year, much of the employment in the sugar industry is seasonal. Even if ongoing sugar 'assistance' boosts demand for otherwise idle land and labour, it is unclear why this 'assistance' is more desirable and more effective than other projects that the federal government could spend taxpayer funds on. Indeed, the best course of action may be to abandon the notion of a targeted regional 'assistance' package, and return funds to where they have their greatest economic value: in the hands of taxpayers.

#### **Endnotes**

- <sup>1</sup> B. Borrell, D. Quirke and D. Vincent, *Sugar: Winning in a Corrupt World* (Canberra: Centre for International Economics, 1991).
- Centre for International Economics (CIE), Cleaning Up the Act: Impacts of Changes to the Sugar Industry Act 1999, Report Prepared for State Development Queensland (Canberra: CIE, 2002), p.iii.
- The term 'pork barrel' comes from early American history, when a barrel of salt pork was given to slaves as a reward for their work. The slaves had to compete among themselves to get their piece of the handout. Although pork barrelling has a long and undistinguished history in Australia, to my knowledge there has been no detailed, systematic economic analysis of the

The best course of action may be to abandon the notion of targeted regional 'assistance' packages.

- phenomenon. The sole exception appears to be a series of reports written for The Centre for Independent Studies by Wolfgang Kasper since 2001. See www.cis.org.au/Economics/efw/efwhome.htm.
- Current regulatory arrangements can be traced directly back to 1915 legislation. For a detailed history of regulations, see the Industry Commission, *The Australian Sugar Industry*, Report No.19 (Canberra: Australian Government Printing Service, 1992).
- For an analysis of the social costs of this programme, see K. Rask, 'The Social Costs of Ethanol Production in Brazil: 1978-1987', *Economic Development and Cultural Change* 43:3 (1995), pp.627-649. For a history of similarly dubious schemes in the United States, see G. Libecap, 'Agricultural Programmes with Dubious Environmental Benefits: The Political Economy of Ethanol', in *Agricultural Policy and the Environment*, ed. Roger E. Meiners and Bruce Yandle (Lanham, MD: Rowman and Littlefield, 2003) and R. Johnson and G. Libecap, 'Information Distortion and Competitive Remedies in Government Transfer Programs: The Case of Ethanol', *The Economics of Governance* 2 (2001), pp.101-134.
- In a recently leaked report, the CSIRO found that the proposed ethanol policy could cost up to \$504,000 per job. C. Wallace, 'Ethanol To Cost Us \$500,000 Per Job', *The Australian* (8 December 2003), p.1.
- My approach is inspired by Anne Krueger's classic paper on sugar controls, in which she examined sugar regulation in the United States from a public choice perspective. However, because Krueger does not study the geographical incidence of the costs and benefits of sugar policies in great detail, she does not examine these controls in the light of pork barrelling. See A. Krueger, 'The Political Economy of Controls: American Sugar', in *Public Policy and Economic Development*, ed. M. Scott and D. Lal (Oxford: Clarendon Press, 1991).
- There are many other factors of production used in sugar-growing besides land. Other costs include irrigation, fertiliser, labour, harvesting equipment, interest on debt, and so on. Strictly speaking, it is *marginal* productivity of inputs rather than average productivity that is relevant for technological efficiency. Marginal productivity of each individual factor depends on the mix of other factors employed in production, as well as technological considerations, including management practices within firms. When factor prices (such as wage rates for labour or land rental prices), technology and management structures differ across countries, a cross-country comparison of average productivities is basically meaningless. In the sugar industry, as far as world markets are concerned, what matters is the per unit cost of raw sugar. This varies considerably in the industry.
- Management practices such as crop rotation, irrigation system management, nutrient management, planting density, the use of harvester capacity, harvester speed, and diversification into other profitable activities such as co-generation of electricity and bioplastics vary widely in the industry. Hildebrand argues that there is a general lack of the full suite of business management skills in the industry because the industry is more production-oriented than profit-oriented. C. Hildebrand, *Report of the Independent Assessment of the Sugar Industry* (Canberra: Australian Government Printing Service, 2002), p.26.
- Exchange rate movements are another important determinant of short-term returns. Due to interventions that originated early in 20th century, the domestic supply of raw sugar is in vast excess of domestic demand. As a result, between 80% to 85% of Australian raw sugar is exported to international markets. Most raw sugar traded on world markets is priced via futures prices quoted on the New York Board of Trade NY No.11 futures contract, which is the basic reference price in the international market to price physical sales contracts. The major international influence on short-term returns to Australian growers and millers are this reference price and the exchange rate. Cane growers benefited greatly from Australia's low exchange rate in the late 1990s.
- The industry is currently governed by the Sugar Industry Act (Qld) (1999), with amendments in force as of 1 December 2003, but earlier legal arrangements have a very similar flavour to the current Act.
- <sup>12</sup> QSL is not a statutory body, but it performs statutory functions and the Queensland government can give written directions with which QSL must comply. The Trade Practices Act (Cth) specifically allows states to vest of ownership of agricultural produce in legislation.
- Until 1999, Queensland legislation provided for a 'cane payment formula' to growers, which was based, among other things, on Commercial Cane Sweetness (CCS), a measure of sugarcane quality or sugar content. Although this formula was no longer specified in legislation after 1999, the Centre for International Economics (CIE) argues that the old legislated formula still remains in all mill areas. CIE, Cleaning Up the Act: Impacts of Changes to the Sugar Industry Act 1999, p.50.

- Hildebrand makes this claim. C. Hildebrand, Report of the Independent Assessment of the Sugar Industry.
- <sup>15</sup> R. Coase, 'The Problem of Social Cost', *Journal of Law and Economics* 3 (1960), pp.1-44.
- Insecure or ill-defined property rights can lead to resources being wasted in order to clarify those rights (in courts or tribunals etc.) and can therefore also emerge as an important source of (endogenous) transactions costs in their own right. For a formal analysis, see A. Robson and S. Skaperdas, 'Costly Enforcement of Property Rights and the Coase Theorem', CESIFO Working Paper No. 762 (August 2002), http://papers.ssrn.com/abstract=341400
- George Stigler points to this condition as being crucial in the sustenance of rent seeking opportunities. G. J. Stigler, 'The Economic Theory of Regulation', *Bell Journal of Economics and Management Science* 3 (1971), pp. 3-21.
- The Centre for International Economics (CIE) report examines land productivity variations due to management and suggests that even on this measure alone, average productivity may be only 75% of potential. CIE, *Cleaning Up the Act: Impacts of Changes to the Sugar Industry Act 1999*, p.3.
- This result holds under reasonable sets of conditions. See D. Mueller, *Public Choice III* (Cambridge: Cambridge University Press, 2003), pp. 85-86.
- See, for example, Alan H. Meltzer and Scott F. Richard, 'Why Government Grows (and Grows) in a Democracy', *The Public Interest* 52 (1978), pp.111-118. For a more formal treatment, see Alan H. Melzer and Scott F. Richard, 'A Rational Theory of the Size of Government', *Journal of Political Economy* 89 (1981), pp. 914-927.
- <sup>21</sup> C. Hildebrand, Report of the Independent Assessment of the Sugar Industry, p.25.
- <sup>22</sup> C. Hildebrand, Report of the Independent Assessment of the Sugar Industry, p.43
- <sup>23</sup> See the Industry Commission, *The Australian Sugar Industry*.
- Hildebrand provides a 'selection' of Commonwealth and State programmes that are potentially available to sugar producers. His partial list is long, and contains details of some 29 government assistance programmes. He also provides details of government funded research assistance to universities and the CSIRO relating to the sugar industry. C. Hildebrand, Report of the Independent Assessment of the Sugar Industry, Appendix B, pp.14-18.
- Credit claiming was first defined and examined in detail by D. Mayhew, Congress: The Electoral Connection (New Haven: Yale University Press, 1974), pp.52-61. Not all credit claims are pork barrels, and not all pork barrels are credit claims. A credit claim does not necessarily have to be linked to a specific geographic constituency, so it may not be a pork barrel. And a pork barrel may involve ongoing assistance not tied to any specific policy announcement, so it may not be a credit claim. On the other hand, the two are not mutually exclusive: the Australian sugar industry provides opportunities for both kinds of political maneuvers to be undertaken simultaneously.
- The political economy of one-off compensation packages is not well understood. For example, the Industry Commission, in its review of the sugar industry, argues on page 11 that 'a single payment... would have no bearing on producers' decisions concerning future levels of output'. (See Industry Commission, *The Australian Sugar Industry*.) In hindsight, given the subsequent expansion of the sugar industry, this seems to be a remarkably shortsighted view.
- Both kinds of phenomena are observable in the sugar industry. For example, under a 2002 Memorandum of Understanding between the Federal and Queensland State governments, the former agreed to provide up to \$120 million in compensation. According to *The Canegrowers Annual Report* (2003), 4,524 individuals had already received \$60.79 million in an earlier assistance package. Part of the recent package involved \$45,000 exit payments for farmers choosing to leave the industry. In other words, taxpayer funds were to be used to pay individuals *not* to grow sugar. The costs of this arrangement are borne by Australian consumers, with the scheme financed by a 3c per kg levy on domestic sales. By June 2003, 1,413 growers had received income support under the new scheme and 1,593 had successfully applied for interest rate subsidies on replanting costs. However, as at June 2003, not a single farmer accepted the lump sum payment to leave the industry. See www.canegrowers.com.au/annualreport/2003.pdf.
- There are six Queensland seats in the Federal House of Representatives with varying degrees of attachment to the sugar industry: the electorates of Leichhardt, Kennedy, Herbert, Dawson, Hinkler and Wide Bay. Herbert, based around Townsville, only has a limited direct sugar-growing connection, although according to the Townsville Port Authority, on the basis of weight, 29% of the port's exports in the last decade were sugar. See www.townsville-port.com.au/commerce/stats/EOY\_2002-2003\_Summary\_Table.pdf. Based on 2001 election results, on a two party preferred basis, only two of these seats—Hinkler and Herbert—are currently classified by the Australian Electoral Commission as 'marginal' (where the winning candidate obtained less than 56% of the two party preferred vote). See www.aec.gov.au/\_content/when/past/2001/seat.htm

- <sup>29</sup> Hildebrand reports that 'lifestyle' was also mentioned as one of the benefits of cane farming. As frivolous as such benefits might sound, the economist must count them as a direct benefit of assistance. C. Hildebrand, *Report of the Independent Assessment of the Sugar Industry*.
- Sugar lobbyists often argue that reform would lead many to exit the industry and would create 'ghost towns' in sugar growing areas. Interestingly, since 1979 all cane in Queensland has been harvested mechanically instead of by hand. One wonders what the 'indirect employment effects' or 'flow on costs' of this change in technology brought about. Whatever the employment effects were, they apparently did not result in any sugar towns becoming 'ghost towns'.
- This appears to be particularly relevant for farming as a whole. The Australian Bureau of Statistics reports that between 1986 and 2001 the number of farmers leaving agriculture increased when land values were high and expansion and consolidation of farming occurred. In other words, pecuniary gains were realised, but were offset by the pecuniary losses of buyers of agricultural land facing higher prices. ABS, *Agricultural Commodities*, Cat No. 7121.0 2001-02 (Canberra: ABS, 15 July 2003).
- This is the main result of Weingast, Shepsle and Johnsen (1981) in their classic theoretical study of pork barrelling. B. Weingast, K. Shepsle, and C. Johnsen, 'The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics', *Journal of Political Economy* 89:4 (1981), pp.642-664.
- Apparently, the Commonwealth Department of Finance and the NSW Treasury do not count indirect benefits in cost-benefit analyses unless there are very special circumstances.
- Hildebrand reports that light industry and associated infrastructure have flourished on former cane lands or in close proximity to cane farms and sugar mills. Many other industries have been established around sugar areas. Tourism on the Great Barrier Reef and in the Wet Tropics Rainforests is also now a large industry in North Queensland. C. Hildebrand, Report of the Independent Assessment of the Sugar Industry, p.30.

Publications in the Issue Analysis series are subject to a reviewing process.

© Copyright The Centre for Independent Studies 2004. May be freely reproduced provided due acknowledgement is given.

