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# The story of deregulation in the dairy industry†

Geoff Edwards\*

The deregulation of dairy marketing that occurred on 1 July 2000 is a fascinating case study in microeconomic reform. The role of interacting industry and institutional features in the movement to deregulation is explained, with political realities being recognised. A key part of the deregulation bundle was an unprecedented “structural adjustment” package valued at about one and a half billion dollars (in 1998–1999). Questions are raised about the rationale for this package, the process of determining it and the means of funding it.

## 1. Introduction

The dairy industry was long one of the most highly assisted and regulated industries in Australia. The effective rates of assistance in 1999–2000 were 19 per cent for manufacturing milk and more than 200 per cent for market milk, compared with an average effective rate of assistance for the entire agricultural sector of 6 per cent (Productivity Commission 2001a). Because of the regulation Australia had six separate dairy industries, one in each state, rather than a national industry. Further, within each state there was an artificial separation of market milk and manufacturing milk. This fragmentation of the national market was precisely what the founding fathers, who saw federation removing barriers to trade between the colonies and establishing a common Australian market, sought a century ago to end.

All this changed on 1 July 2000. July 1 was D-day – deregulation day! This day saw the end of monopoly marketing for table milk by the state government statutory marketing authorities. That meant not only the introduction of competition to areas where many elderly farmers, government officials and commercially-oriented employees in value-adding firms had

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\* Geoff Edwards, Department of Economics and Finance, La Trobe University, Victoria, Australia. The work on this paper was undertaken partly while the author was a Visiting Researcher at the Productivity Commission in the second half of 2001. He is grateful for the opportunity provided by the Commission, and for research assistance provided by Gabrielle Young of the Commission library. However, the Commission does not necessarily agree with views expressed in the paper.

known only its absence, but also the abolition of longstanding institutions. The separate Domestic Market Support (DMS) scheme for manufacturing milk, an ingenious regulatory creation of the Commonwealth Government, also ended on 30 June, 2000.

With marketing deregulation, the strong tendency for prices for all Australian milk to be pulled towards its international price – the value of milk in making butter, cheese and other products for export – could exert itself. This key characteristic of a competitive Australian milk market was thwarted under regulation.

In the present paper I try to tell the story of how deregulation came about. A sufficient reason for doing this is that the story of deregulation is a fascinating and complex one, with several interacting industry and institutional factors at work. These make the dairy industry a very interesting case study in deregulation – as it had earlier been an interesting study in regulation.

A feature of the deregulation bundle is an unprecedented ‘structural adjustment’ package of approximately \$1.5 billion dollars in 1998–1999 prices. The rationale for this package, the process of determining it, and the means of funding it warrant questioning – both from the view of assessing the efficacy of the package provided to the dairy industry, and from the view of possible relevance of the dairy model to policy for the remaining highly protected areas of manufacturing.

In the following sections of the paper an outline is first provided of the complex regulatory interventions in the dairy industry. Then an account is given of how deregulation was achieved. Questions of interest in that account include the roles of the Commonwealth and State Governments in the deregulation process and the part played by National Competition Policy. Here and elsewhere the political context is not neglected. The penultimate section comprises some questions that arise in thinking about dairy deregulation in a public policy context. Those questions relate especially to the large structural adjustment package, facilitated by the Commonwealth Government at the request of the dairy industry. Finally, there is a concluding comment.

## **2. Regulation of the dairy industry**

The outline of regulation is provided first for market milk and then for manufacturing milk.

### **2.1 Market milk: State Governments help farmers milk consumers**

The State Governments, which under Australia’s Constitution have responsibility for price controls and food quality, are the main policy makers for

the market milk – also called table milk or fresh milk – sector. They license dairy farmers to produce milk and they regulate milk quality. Statutory Marketing Authorities (SMA) were established in each state to administer the regulation of the market milk sector. In Victoria, the SMA was the Victorian Dairy Industry Authority and in New South Wales it was the NSW Dairy Corporation. These bodies had a monopoly on the primary-level marketing of milk in their states and traditionally they regulated milk marketing at subsequent stages of the chain. Except in Queensland and South Australia, the SMA had vesting power (i.e., ownership of milk passed to the SMA, usually at the farm-gate) over all milk production, although this power was not exercised in all states (Industry Commission 1991a).

The State Governments set farmer prices for market milk well above export parity – approximately 21 cents a litre higher on average, or approximately double, in 1997–1998 according to the Productivity Commission (1999a).<sup>1</sup> Because of the low price elasticity of demand for fresh milk – Freebairn (1992) assumed  $-0.05$ , the Industry Commission (1991a) used  $-0.15$  – holding prices up was an effective way to transfer income from consumers to milk producers – not that this was a specified objective of the various state acts. The estimated transfer in 1999–2000 was \$311 million (see Table 1), approximately \$25 000 on average for each of Australia's 13 000 dairy farms.

**Table 1** Net subsidy equivalent for dairying

	Manufacturing milk (\$m)	Market milk (\$m)	Total milk (\$m) <sup>a</sup>
1990–1991	171	412	583
1991–1992	150	386	535
1992–1993	122	260	382
1993–1994	117	264	380
1994–1995	130	326	455
1995–1996	167	323	490
1996–1997	170	384	554
1997–1998	140	374	514
1998–1999	143	310	453
1999–2000	152	311	463

<sup>a</sup> Previous columns may not add exactly to total due to rounding.

Source: Productivity Commission (2000).

<sup>1</sup> A reviewer suggested that when statutory price discrimination in milk marketing was introduced in the 1930s a price premium for that milk may have been warranted by the higher sanitary standards applying to it than to milk for manufacturing and by higher costs of year-round milk production. In recent times, however, there has been no difference at farm-gate in the characteristics of milk destined for table use and milk for manufacturing, so there has been no economic rationale for a price difference at farm-gate.

**Table 2** Milk production and its allocation between market milk and manufacturing milk: by state (1999–2000)

	Market milk (L/million)†	Manufacturing milk (L/million)	Total production (L/million)	Share of market milk (%)
NSW	596	799	1 395	43
Vic	440	6 430	6 870	6
Qld	383	465	848	45
SA	185	528	713	26
WA	190	222	412	46
Tas	48	561	609	8
Aust	1 936	8 911	10 847	18

Source: Australian Dairy Corporation (2001). †Milk traded interstate is excluded from state figures and included in national figure.

With the price for market milk held so high, it was necessary to have a means of rationing farmers' access to this lucrative market. Australia-wide, market milk sales account for approximately 18 per cent of total milk production (see Table 2). In Victoria, which produces more than 60 per cent of Australia's milk, only 6 per cent goes to the high-priced market milk outlet. In NSW, the next biggest producer with 13 per cent of national production, approximately 43 per cent is sold as market milk.

Victoria used a system of 'equitable marketing' to allocate the large-price premium for fresh milk proportionately to all farmers. Under that system, each farmer was paid as though 6 per cent of his/her milk entered the fresh milk market and 94 per cent the manufacturing market. This approach was used also in other states, Tasmania and South Australia, where market milk is a small proportion of total milk production. This 'equalised price' approach encouraged farmers to produce more milk than the efficient amount, but because the influence of the market milk component on price was small, the excess production was relatively small.

In New South Wales, and also Queensland and Western Australia, where market milk approaches half of total production, market milk quotas were used. Farmers needed to have quota to obtain access to the premiums available for fresh milk. In NSW these quotas were tradeable, with some restrictions, since the start of the 1990s; previously quota was attached to individual parcels of dairy land, and had to be transferred with the land. For many NSW dairy farmers the value of their milk quota was several hundred thousand dollars – a strong reason to oppose deregulation of farm-gate market milk prices.

The SMA used their monopoly powers to restrict interstate trade in milk, which would have undermined the market-milk premiums. More is said later about how that was done.

The pricing policies of state governments also hindered innovations in marketing. For example, the growth in the use of milk treated at ultra high temperatures (UHT milk) to extend shelf-life, was retarded by the policy of selling it to milk processors at prices in excess of those for manufacturing milk. The state regulators saw this as appropriate to maintain sales of the high-premium market milk.<sup>2</sup>

The idea of the State Governments attaching the milking machines to consumers' pockets and siphoning the proceeds to dairy farmers is an apt metaphor for longstanding market-milk policies in each state. The price-inelastic demand for market milk made it well-suited to price discrimination. In the most insightful analysis undertaken of Australia's agricultural pricing policies, Sieper (1982) spoke of farmers 'owning their domestic demand curve', meaning governments were well disposed to intervening to allow farmers to extract the economic rents available with regulated departures from competition in the presence of inelastic demand.

It should be noted that the heavy regulatory regime for market milk existed until the end of June 2000 only for farmer prices. The previous regulation of milk marketing beyond the farm-gate was gradually removed in all states over the previous two decades. That regulation had included wholesale and retail prices – often both maximum and minimum prices – and milk transport.<sup>3</sup>

## 2.2 Manufacturing milk: the Commonwealth helps with the milking

For manufacturing milk, long-term features of policy have been measures to:

- support domestic prices
- restrict imports
- subsidise exports and/or production
- before the last quarter of the twentieth century, restrict substitutes.

It is the Commonwealth Government that has been the key legislator for policy for manufacturing milk. This is because of the Commonwealth's powers under the constitution over international trade and taxation.

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<sup>2</sup> In the late 1990s milk for UHT could be sourced at the manufacturing milk price in Western Australia, making it profitable to transport UHT milk from there to the eastern states (Centre for International Economics 1999).

<sup>3</sup> Another reviewer noted that in New South Wales and perhaps in the other quota states, regulation of the distribution margins was very important, and that there is an argument it was retailers rather than consumers who were the primary providers of subsidies to milk producers.

However, production quotas for margarine, lifted in the mid-1970s, were the creation of the states.<sup>4</sup>

The focus here is on the period from 1 July 1986. On that date the Kerin plan came into existence. The essence of the price support mechanism under the Kerin plan was:

- A levy (tax) was paid by farmers on all milk, market milk as well as manufacturing milk. (Legally, this was an excise tax.)
- The proceeds of the tax were distributed to farmers as an export subsidy on manufactured dairy products.

If 50 per cent of milk was used in export produce, a levy of 2 cents a litre on all milk could fund a subsidy of 4 cents a litre on milk exported in manufactured products. By making it profitable for firms exporting dairy products to divert sales from the domestic market, the export subsidy raised the price farmers received domestically, as well as for exports.

Industry leaders saw this DMS arrangement as an 'industry-funded' export subsidy and distinguished it from a conventional taxpayer-funded export subsidy. The reality was that the levy was largely passed on to domestic consumers of milk and manufactured dairy products. Moreover, domestic consumers of manufactured products experienced a price rise as a result of the subsidy component of the package, just as they would have if the revenue to pay the subsidy had been raised in other ways.

Because Victoria, Tasmania and South Australia used most of their milk for manufacturing for export, DMS involved a transfer to those states of revenue from farmers – and consumers – in the market milk-oriented states. In 1997–1998, \$81 million of the \$91 million of net payments from DMS accrued to Victoria (Senate Rural and Regional Affairs and Transport References Committee 1999). Tasmania and SA received the remainder of the net payments, while the market milk states together made a small net payment rather than receiving one. The existence of the interstate transfer to manufacturing milk states that was built into DMS, was probably a major factor in Victoria not moving into the big New South Wales fresh-milk market years ago. That move would have caused New South Wales to be less supportive of DMS, making it less likely to have lasted as long as it did.

To the uninitiated it might seem that the Kerin plan was a poor deal for farmers in New South Wales and Queensland. This is not so. Another feature of the Kerin package was the 'comfort clause', allowing a state whose market milk premium was threatened by milk inflows from interstate, to

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<sup>4</sup> The Commonwealth contributed to restricting the competition faced by butter from margarine by introducing in 1940 the requirement that imports contain alkanet root, giving the spread an unappetising pink appearance (Lloyd 1982).

communicate to the Commonwealth that it should terminate the all-milk levy, which would end the price supports for manufactured milk. The comfort clause was part of the political deal to get the support of New South Wales for a plan that was less attractive to it than to the manufacturing milk-oriented states.<sup>5</sup>

The Kerin plan provided for progressive reductions in the level of price support for manufactured dairy products to the level of import parity for competing products from New Zealand.

Mauldon (1990) pointed out that the Kerin plan involved a more efficient application than previously of the tax/subsidy approach to supporting prices, so that domestic prices for manufactured products were related more closely to world prices. (Previously there had been differential price support across manufactured products; differential support for a given product sold in low-price and high-price export markets; equalisation of prices for manufactured products in the domestic and export markets; and pooling of some marketing costs through a system of 'allowances'). Because it imposed a uniform tax on all milk, the Kerin plan reduced the regulated separation of the liquid and manufacturing milk sectors.

It needs to be appreciated that the Kerin plan was not imposed unilaterally by the Commonwealth, although the necessary legislation was the responsibility of the Commonwealth Government. The plan, like other developments in policy for the manufacturing sector before and since 1986, was the product of extensive discussion and politicking between the state and Commonwealth agriculture ministers in the regular meetings of the Agricultural and Resource Management Council of Australia and New Zealand.

Subsequent developments in manufacturing milk policy announced by Federal Primary Industries Minister Simon Crean in April 1992 continued the phasing down of market support of the Kerin plan and retained the levy/subsidy principle, although there were some administrative changes. Importantly, Minister Crean announced that the DMS scheme would end on 30 June 2000, with no legislated support for manufacturing milk beyond that date.

Further changes in the DMS arrangements after the Uruguay round of multilateral trade negotiations, and operative from 1 July 1995, were announced by Bob Collins – Simon Crean's successor in the Primary Industries portfolio – with the statement, 'Australia has met and exceeded its Uruguay Round export subsidy commitments on dairy products by terminating export subsidies completely from 1 July 1995' (Collins 1994).

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<sup>5</sup> The comfort clause was invoked twice by New South Wales in 1987, when milk from Victoria was sold in New South Wales at less than prescribed prices. But talks between the dairy industry authorities in the two states resulted in a limit on the volume of Victorian milk sold in Sydney, resolving the situation without suspension of the levy (Industry Commission 1991b).

In reality, the export subsidy was retained, but in a more indirect manner.<sup>6</sup> The Industry Commission said the replacement arrangement 'is not technically an export subsidy in terms of the GATT but provides a similar level of incentive to export, and of assistance to manufacturing dairy products' (Industry Commission 1995). The 're-jigged' policy was queried by the USA, Japan and New Zealand (Personal communication, Department of Agriculture, Fisheries and Forestry). The absence of a formal protest through the WTO may have been due to strategic considerations in association with the planned 'sunsetting' of the DMS scheme in mid-2000.

An unintentional effect of DMS was to make it more attractive for other countries to export dairy products to Australia. This was of special significance for New Zealand, with whom Australia had a free trade agreement. With the liberalisation of dairy trade between New Zealand and Australia, imports from New Zealand displaced Australian sales in the domestic market. This development was facilitated by New Zealand's single-desk exporting set-up. It forced extra Australian produce onto the export market, reducing the rate of export subsidy that could be provided from a given levy on milk production. The interaction between Australia's price supports for manufactured dairy products and Closer Economic Relations was estimated by Beare *et al.* (1989) to cause Australia to experience a loss of approximately \$7 million a year from liberalisation of trans-Tasman dairy trade, with gains of \$21 million to consumers being outweighed by a liberalisation-induced loss of \$28 million because of the price support to New Zealand producers. However, it is reasonable to judge that Australia's international agreement with New Zealand contributed more to competition in the dairy market than did Section 92 – the 'free trade clause' – of the Constitution.

### 3. Move to a deregulated market

The Kerin plan of 1986 set in train a series of developments that culminated in deregulation of the manufacturing and market milk sectors 14 years later. The commitment to phasing down assistance for the manufacturing sector of the dairy industry in the Kerin plan reflected the economic rationalism of the Hawke Labor governments. It was consistent with reductions in protection initiated in other rural industries and in manufacturing. The reduction in assistance was a significant development, which had implications for the market milk sector also, although industry leaders and state governments seemed often not to recognise this.

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<sup>6</sup> Instead of taxing all milk and subsidising exports of manufactured products as under the Crean (and Kerin) plans, the Collins adjustment exempted milk used in manufacturing for export from tax, and used the tax revenue to subsidise production of all manufacturing milk.

Not all developments post-Kerin plan were deregulatory, however. The comfort clause, outlined earlier, was discontinued under the Crean plan. That reflected not a liberalisation of thinking on interstate trade in milk, but the development of alternative, more effective means of restricting such flows. Because of concerns about the effectiveness of the comfort clause, the Victorian Government in November 1987 had amended Section 38 of the Victorian Dairy Industry Authority Act 1984. The amendment made Victorian milk processors wanting to sell milk interstate pay the market-milk price for it. As the Industry Commission (1991a) said, 'The amendment effectively removed the incentive for Victorian processors to trade processed milk interstate and so helped preserve the benefits to New South Wales dairy farmers from their higher priced fresh milk market'. Other states, apart from Western Australia, had equivalent 'Section 38' provisions (New South Wales Government Review Group 1997).

Interestingly, the Attorney General's Department advised the Industry Commission that it considered the use of Section 38 legislation to be contrary to Section 92 of the Constitution (Industry Commission 1991b). Why did an enterprising milk processor not challenge the legislation? Part of the answer may lie in the cost of litigation. But part lies in the reality that a processor doing this would have been viewed not as enterprising, but as traitorous by large numbers of farmers in Victoria, New South Wales and elsewhere who would have seen, accurately, the threat of prices for all milk falling to the unsupported manufacturing-price level.

The Industry Commission, whose 1991 report was an input into the Crean plan, emphasised the need for the price of market milk to fall relative to the price of manufacturing milk before the end of the DMS scheme. It suggested the target of phasing down and removing state farm-gate price controls and supply quotas by July 1999 – which would have effectively eliminated the value of quotas in New South Wales, Queensland and Western Australia. That course found no attraction with the industry or state governments, and was not followed.

Nevertheless, it is clear that the decision to phase down and end price support for manufacturing milk foreshadowed the likely ending of regulation for market milk. What incentive would Victoria have to stay out of interstate table milk markets once it lost the net transfer to its farmers under the DMS scheme?

### **3.1 National Competition Policy process**

The continuation of the prized market-milk premium was therefore doubtful even before all states, territories and the Commonwealth entered the Competition Principles Agreement (CPA) in 1995, committing to review all

laws restricting competition by 2000. The guiding principle for reviews under the CPA was that competition should not be restricted unless it could be demonstrated that:

- The benefits of the restriction to the community as a whole exceeded the costs
- The benefits of the legislation could only be achieved by restricting competition.

These are tough tests for regulatory legislation to pass, although the absence of an agreed common approach in undertaking reviews makes them less tough. The National Competition Council (NCC), responsible for overseeing the implementation of national competition policy (NCP) states: 'The principle underpinning the NCP is that reform should be introduced when it serves the overall community interest' (NCC 1999). Further, 'The NCP does not prescribe what constitutes the community interest, but rather recognises that it can encompass a range of possible factors that are likely to vary from case-to-case'.

The review of Victoria's Dairy Industry Act 1992 under the NCP was carried out by the Centre for International Economics (CIE), a prominent pro-liberalisation consulting firm. The stated objectives of the Act included:

- Ensuring the supply of sufficient milk to market processors
- Equitably sharing the returns from market milk among all dairy farmers
- Maximising opportunities for sales of market milk
- Ensuring standards of public health and consumer protection.

The CIE saw policies to achieve the first three objectives being against the public interest (CIE 1999). It reached this conclusion using standard social cost benefit analysis. However, CIE did see a large net community benefit in a statutory dairy industry-specific food safety body.

The CIE's recommendation to deregulate marketing at the farm-gate level was perhaps easier to reach and certainly to implement, due to the support for deregulation by the main dairy farmer organisation (the United Dairy Farmers of Victoria Association), and by the value-adding sector – the market milk processors and export-oriented manufacturers – and it was accepted by the Kennett government in July 1999. The industry saw the gains from reduced costs in farming and value-adding with deregulation, and from opportunities to sell market milk interstate, offsetting the loss of revenue from the market-milk premium.

This was the opposite decision to the one reached earlier in New South Wales (New South Wales Government Review Group 1997). The New South Wales review team, comprising a majority of members who saw their allegiance to the dairy industry or the Minister for Agriculture, had split on

whether the farm-gate price regulation and supply controls was in the public interest, the industry-based majority finding that it was. The majority in the New South Wales review report put much weight on favourable regional income effects of regulation in dairying regions, disregarding off-setting effects elsewhere. The New South Wales government accepted the Review Group's majority recommendation to retain the price regulation and quota arrangements.

The other states in their NCP reviews of market milk regulation recognised the inevitability of deregulation as a result of the pro-deregulation forces in Victoria, but they sought to delay its introduction.

Under the NCP, much leeway is left to the states to decide how they conduct their reviews. The freedom to determine the composition of review groups is an important element of this. It is unlikely that a review of the New South Wales Act would have produced the same recommendations had it been undertaken by CIE. By contrast, given the support for deregulation by the dairy industry in the Victorian review, a (Victorian) industry-dominated review of the Victorian dairy industry legislation would likely have led to the same outcome as the CIE review did.

Given the composition of the New South Wales Review Group, it was probably inevitable that it would not be able to reach agreement on their recommendations. The diverse interests of group members was somewhat reminiscent of that for members of the Sugar Industry Task Force set up by Primary Industries Minister Simon Crean in April 1992 to help him decide how to respond to an Industry Commission report with a deregulatory thrust (Edwards 1993). Unlike the sugar task force, however, the New South Wales Review Group included members from the Cabinet Office and the Treasury who might be expected to see consumer interests as important.

The National Competition Council was critical of the New South Wales review: 'The Council has some concerns with this review, given the differences of view between the dairy industry representatives and the independent members advocating reform, and is pursuing these with NSW' (NCC 1999). In the event, deficiencies in the New South Wales review process were downgraded in policy-relevance with the subsequent Victorian decision, which forced deregulation on the other eastern mainland states.

### **3.2 Structural adjustment package**

During and following the Victorian review there was much political activity directed to winning financial assistance for dairy farmers in association with deregulation. In the course of this interaction the Federal Government asked the dairy industry, through the Australian Dairy Industry Council (ADIC), to consider options for its future. The ADIC accepted, before the

end of the Victorian review, that the winding up of DMS and commercial pressures made deregulation of market milk inevitable, and that the priority was to achieve it in an orderly manner. On 28 September 1999 the Federal Minister for Agriculture, Fisheries and Forestry, Warren Truss said, 'The Government had been approached by the dairy industry for support for a transition package. The Federal Government is prepared to implement a \$1.8 billion structural adjustment package for the dairy industry, should all States decide to make deregulation legislative changes from 1 July, 2000 ... the package would assist restructure of the industry by helping farmers improve their efficiency and competitiveness after deregulation' (Truss 1999).<sup>7</sup>

More than \$1.6 billion of the package comprises payments under the Dairy Structural Adjustment Program (DSAP) to those in dairy farming on 28 September 1999. Payments are at the rate of 46.23c per litre on farmers' deliveries of market milk in 1998–1999 and for manufacturing milk, on a fat and protein basis, a national average of 8.96c a litre on 1998–1999 deliveries. The legislation provides for payments to be made in quarterly instalments over 8 years, with the payments being transferable to primary producers (Truss 2000).<sup>8</sup> Almost half the total payments go to Victoria, while New South Wales receives about one-fifth – \$582 million and \$259 million respectively in 1998–1999 prices (see Table 3). The average payment to dairy farmers in New South Wales and Victoria under the package is estimated at \$143 000 and \$72 000, respectively, in 1998–1999 prices. The larger payments per farm in New South Wales reflect the greater importance of the more highly supported market milk outlet for farmers in that state.

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<sup>7</sup> The ADIC's original proposal in April 1999 was for a package of \$1.25 billion, to be borrowed commercially by the industry using a discretionary trust and repaid with the proceeds of a levy (excise tax) on all market milk. The proposal was that the payments to farmers be non-taxable. Senator Troeth, Parliamentary Secretary to the Minister for Agriculture, explained why that proposal could not be enacted by the Government, 'We were not prepared to set a precedent under tax law and provide tax-free payments. Recognising the large tax impost that would be associated with a lump sum payment and against the background that a single up-front payment would be illegal under WTO arrangements [preventing Australia meeting its committed reductions in its Aggregate Measure of Support], the government agreed to payments being over eight years to ease the tax burden on recipients. The agreement to \$1.74 billion is an approximation in present value terms of the original \$1.25 billion single payment proposal' (Troeth 2000). The part of the Government in determining dairy industry policy was elucidated as follows, 'The government's role ... has been to facilitate the process, to listen to the industry, to hear what it had to say and then put into place a workable operation which would provide industry with what it needs' (Troeth 2000).

<sup>8</sup> Independently of the Government, ADIC initiated a competitive tender process for a commercial industry facility to allow farmers to borrow against the security of their restructure payments (ADIC 2000). The Commonwealth Bank was chosen as the provider of this facility, which is the ADIC-endorsed way, although not the only way, for dairy farmers to receive their DSAP payments up-front.

**Table 3** Distribution of the dairy industry restructure package

State	\$million in 1998–1999 prices			% of Total	Average payment per farm (\$000)
	Market milk	Manufacturing milk	Total		
Vic	178	404	582	46.6	72
NSW	210	49	259	20.8	143
Qld	137	33	170	13.6	104
SA	72	28	100	8.0	134
WA	67	15	82	6.6	186
Tas	17	37	55	4.4	74
Total	681	567	1248 <sup>a</sup>	NA	NA

<sup>a</sup> Payments over eight years total \$1.63 billion in current prices (Truss 2000).  
Source: Senate Committee (1999).

There were two other components of the package. First, exit payments of up to \$45 000 were made available for farmers choosing to leave dairying. Second, late in the passage of the legislation, a Dairy Regional Assistance Program (DRAP) was added, providing \$45 million over three years to help dairy-dependent communities affected by deregulation.<sup>9</sup>

In his second reading speech, Minister Truss (2000) said, ‘This package is not about providing compensation for removal of quotas and regulation, or about providing income support’. Rather, the package was said to be about facilitating adjustment, and improving industry performance – which, in turn, were seen as increasing employment and incomes in regional dairying areas.

The funding of the adjustment package is not from consolidated revenue, but by a ‘levy’ of 11 cents a litre on all retail milk sales for 8 years.

In present value terms, the adjustment package was equivalent to approximately three recent years of transfers to dairy farmers, as shown in Table 1. Although the package was criticised as inadequate by dairy farmers in some states, especially New South Wales and Queensland, all eventually accepted it. It was clear to the realists that the choice was between deregulation with a package and deregulation without. Only in Western Australia did the state government decide to make a substantial supplementary contribution to offsetting the effects of deregulation on dairy farmers.

On 21 May 2001, Warren Truss announced a \$140 million supplementary package of assistance for dairy farmers and dairy communities most

<sup>9</sup> Senator Michael Forshaw (Labor, NSW) pointed out that \$1.5 million from DRAP went to a meatworks at Gympie, in the electorate of the Minister for Agriculture, \$220 000 to developing a polocrosse field and equestrian centre in Beaudesert, and \$55 000 to a wine appreciation course at Ipswich Grammar School (Forshaw 2001).

affected by deregulation. He said the Government was doing this following a report by the Australian Bureau of Agricultural and Resource Economics (ABARE) that showed ‘... the decline in market milk prices has been greater than many farmers expected, particularly in the former quota states of NSW, Queensland and Western Australia’ (Truss 2001a). The package provided \$100 million to eligible dairy enterprises, with a cap of \$60 000 per enterprise. Only people for whom market milk was more than 35 per cent of total deliveries in 1998–1999 – that is, a sub-set of producers in the quota states – were eligible for the supplementary payment. The package included \$20 million for expanding the DRAP and \$20 million for discretionary payments to those judged by the Dairy Adjustment Authority – the body responsible for administering the adjustment package – to have received rough justice in the initial allocation of adjustment funds. It was revealed subsequently that the supplementary assistance package would be funded by extending the consumer tax on milk for an estimated 7–10 months (Truss 2001b).

#### **4. Some public policy issues**

The focus here is not on the economic case for deregulating the dairy industry. That case has been put by economists for decades (see e.g. Lloyd 1982 and references there, Industry Commission 1991a), most recently by CIE (1999) in its NCP review of Victoria’s regulation of market milk. Rather, the approach here is to think about the very large and highly unusual adjustment package for the dairy industry from a public policy perspective.

##### **4.1 How sound was the case for adjustment assistance?**

The first point to be made is that the adjustment pressures consequent upon deregulation need to be seen against the context of the adjustment that the dairy industry has undergone under the regulatory regime of the last several decades (see Table 4). The number of dairy farms fell by 70 per cent in the last 30 years; more than 80 per cent in Queensland and South Australia. The number of dairy cows fell nearly 40 per cent in the 1970s and 1980s, and then increased 30 per cent in the 1990s. The average farm herd increased from 92 in 1971 to 168 in 2000, with most of the increase occurring in the 1990s. Average milk produced per cow almost doubled from 1971 to 2000. Notwithstanding the concerns expressed about the adjustment consequences of deregulation, the potential reduction in number of dairy farms is much smaller than the reductions that occurred under regulation in the 1970s and 1980s. This perspective is not to deny

**Table 4** Dairy farm numbers, herd size and production per cow

	Number of dairy farms				Number of dairy cows ('000 head)				Average farm herd				Average production (L per cow)			
	1971	1980	1990	2000	1970	1980	1990	2000	1971	1980	1990	2000	1971	1980	1990	2000
NSW	7 735	3 601	2 220	1 725	654	311	238	289	97	97	99	168	2 257	2 870	3 602	4 811
Vic	18 991	11 467	8 840	7 806	1 271	1 045	968	1 377	98	102	118	176	3 263	3 012	3 920	4 989
Qld	8 123	3 052	1 970	1 545	492	247	201	195	73	82	92	126	1 707	1 984	3 122	4 370
WA	1 491	622	496	411	108	71	64	65	100	120	105	158	2 586	3 105	4 205	6 337
SA	3 836	1 730	969	667	149	103	89	105	75	77	87	157	3 406	3 163	3 934	6 800
Tas	3 117	1 522	901	734	160	103	92	139	73	79	105	189	2 922	2 958	3 791	4 379
Aust	43 293	21 984	14 728	12 888	2 833	1 882	1 654	2 170	92	96	109	168	2 609	2 848	3 781	5 000

Sources: Industry Commission (1991) and Australian Dairy Corporation (2001).

that dairy farmers in particular states, especially the quota states, will experience significant pressure with deregulation – and would experience more in the absence of the package.<sup>10</sup>

Adopting another line of thinking, the question is especially pertinent for manufacturing milk. Eight years notice was given of the end of price supports for manufacturing milk. Giving notice of the end of a support program is widely seen as obviating any case for providing recipients with a quid pro quo for its removal. The Senate Committee inquiring into dairy deregulation saw adjustment assistance in relation to manufacturing milk – a little under half the total package (see Table 3) – as ‘inequitable, given that the sunset of the DMS had been foreshadowed well beforehand’ (Senate Committee 1999).<sup>11</sup>

The case for adjustment assistance can be challenged for market milk also, given the reasonable expectation that the end of DMS would presage an end to Victoria’s incentive to prevent its milk flowing across state borders. The reason is that the end of the market-milk premium upon the termination of the support scheme for manufacturing milk in mid-2000 might have been anticipated from the time of Simon Crean’s statement in April 1992. Moreover, the dairy industry in Victoria, the predominant milk state, supported deregulation of the market-milk industry before it was known that there would be an adjustment package.

#### **4.2 Is a retail tax on milk an equitable way of funding assistance to dairy farmers?**

Viewing the economic policy making process as a search for Pareto-improvements (and near-Pareto-improvements) as Stiglitz (2000) and others do, the idea that the consumers of milk who gain from deregulation-induced price reductions should pay for the assistance that is necessary to persuade milk producers to accept deregulation may seem attractive. (Granted, the idea of providing assistance in this or other ways would be more relevant if deregulation had come as ‘a bolt out of the blue’, an unanticipated ending of milk producers’ property rights in state-provided largesse, rather than with nearly a decade’s notice). Moreover, the notion of government facilitating payment of producers by consumers for the right to cease supporting them might be viewed as a corollary of Sieper’s

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<sup>10</sup> A broader perspective would reveal that some farmers who lose from deregulation of milk marketing have gained considerably from developments outside the milk market, including increases in the value of their land for hobby farm and residential purposes.

<sup>11</sup> However, no Senator or Member argued in the parliamentary debate on the adjustment package that assistance should be paid only in respect of market milk.

proposition – noted earlier – about governments facilitating transfers from the politically weak to the politically strong.<sup>12</sup> As with the idea of the search for Pareto-improvements, however, the corollary holds up less well if notice of the end of a support policy has been given.

From the perspective of choosing the funding method for a politically-determined payment to the dairy industry as part of a deregulation package, economics offers no clear ‘scientific’ answer. Value judgements are likely to prove more useful. The Senate Committee’s (1999) value judgement was that the consumer levy was ‘opportunistic’: the Committee ‘was at a loss to understand why consumers should fund the package’ (p. 167). Nevertheless, it was a very different value judgement by senators and members that informed the decision on funding the adjustment package, the legislation ultimately receiving support from both sides of Parliament.

Perhaps the most problematical use of the regressive tax on milk consumers is the funding of \$65 million of projects in dairying regions through DRAP. Along with many projects that provide counselling and exploration of development possibilities for communities impacted by dairy deregulation, large sums have been provided to private businesses. Examples are \$27 000 for a rabbit farm at Dungog, \$220 000 for an eel nursery in the Beaudesert region, \$220 000 for a plastic moulding facility at Morwell and \$770 000 for plant upgrade at a Bega cheese factory.<sup>13</sup> There are fundamental questions about the equity of milk consumers paying higher prices to make grants to businesses such as these, as well as questions about the consistency of free development money with efficient investment decisions. There is also the question ‘is it possible for the bucket of DRAP money to be allocated consistently and without fear or favour?’.

The use of a consumer levy to fund assistance to dairy farmers upon removal of their price supports gives rise to a fascinating question about policy in other contexts. The question can be put starkly as follows: Would there be support for a policy of reducing tariffs on motor vehicles, or on textiles, clothing and footwear, and making payments to producers based on their production in a recent past period, funded by taxes on consumers of the items for, say, 8 years? If the answer is that a policy of this type is

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<sup>12</sup> In a political economy study of dairy industry policy from the introduction of the Kerin Plan in 1986 to the legislating of the Crean Plan in 1992, Dwyer concluded that ‘no single political economy theory appears to capture the Byzantine nature of dairy policy ... The dairy industry appears to have continually adapted to the changing political landscape and has used its resources effectively to try to achieve private interest outcomes for its members.’ (Dwyer 1995).

<sup>13</sup> Details of the allocations under DRAP are given on the web-site of the administering agency, the Department of Transport and Regional Services, at: <http://www.dotars.gov.au/regional/drap>

appropriate for dairying but not for highly protected manufacturing industries, what is the reasoning behind the answer?

#### **4.3 Was it disingenuous for the Government and ADIC to argue that the levy would not increase the retail price of milk?**

'The 11c per litre levy is not expected, of itself, to lead to increased milk prices with deregulation' (Truss 2000. See also ADIC 1999; Truss 1999). Certainly, the removal of the regulated farm-gate price was expected to, and did, reduce the retail price more than the levy increased it. But isn't the relevant counterfactual deregulation of the farm-gate price without a consumer levy? Even though the ACCC found that supermarket prices for plain milk fell by an average of 22 cents per litre (considering all pack sizes and brands) in the first 6 months of a deregulated market (ACCC 2001), a much lower price could have been expected under deregulation without the levy. Roughly speaking, each milk consumer will pay an extra \$100 over eight years due to the levy – \$600 for a family of six – compared with deregulation without the levy, and assuming the levy is fully passed on. (Given the very low price elasticity of demand for milk it is reasonable to expect that nearly all of the levy will be borne by consumers).

#### **4.4 Is it reasonable to view the package of nearly \$2 billion as 'adjustment assistance'?**

Is the package better regarded as compensation for the loss of income due to changes in policies that were known 8 years in advance in the case of DMS, and a likely consequence of the ending of DMS in the case of market milk? The Minister insists the money is to help farmers adjust to the deregulated environment. However, no attempt has been made to target assistance in accordance with the need for adjustment to ensure financial viability, or with a commitment to undertake adjustment initiatives.<sup>14</sup> The requirement that farmers, or their advisers, go through a simple simulation of their financial situation under different assumptions about milk prices to qualify for their payment provides no assurance that the money will be used for efficiency-increasing purposes. Some farmers will use their payment to reduce debt, increase the size of their farm, or install a more modern dairy, all of which can be viewed as structural adjustment. Others will use the money for consumption purposes.

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<sup>14</sup> For recent policy-oriented discussion of the provision of adjustment assistance see Productivity Commission 1999b and 2001b.

It is not suggested that the freedom of farmers to use the funds from the package as they choose is inappropriate on efficiency grounds. Moreover, the lump-sum way in which the assistance is paid to farmers is consistent with allowing freedom in its use. The question is not whether it would be better to use adjustment-related criteria for targeting assistance, but whether in the absence of such criteria, it would be more accurate to view the payments as compensation?<sup>15</sup>

#### **4.5 Was the policy process used to develop the structural adjustment package a sound one?**

Why did the Government rely so heavily on the peak policy body of the dairy industry for advice on adjustment assistance? Was it reasonable to expect ADIC to take a balanced view, giving serious consideration to the interests of consumers? Why was the Productivity Commission, the Government's main adviser on microeconomic reform, not asked to report on adjustment assistance for the dairy industry?<sup>16</sup>

Taking a political economy view, perhaps the point that is most relevant in thinking about these questions is the well-known weakness of the consumer voice in comparison with that of producers. An important requirement of the Productivity Commission, like the Industry Commission and the Industries Assistance Commission before it, is to ensure that a balanced view is taken in considering policy reforms, with the impacts on no groups neglected because of their lack of political clout. Did political imperatives preclude a reference to the Productivity Commission on this occasion? It would have been easier for the Government to make that judgement as a result of the decision of the Australian Consumers' Association (ACA

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<sup>15</sup> The Prime Minister, unlike his Minister for Agriculture, appears to answer this question in the affirmative. Responding to claims by One Nation leader Pauline Hanson that dairy deregulation was a factor in the poor performance of the Coalition parties in the Queensland election in February 2001, John Howard said, 'Do you allow deregulation to happen in a chaotic fashion or do you try and manage it with compensation, which we've done' (Howard 2001). According to the Productivity Commission, even the AFFA web-site stated in October 2000 that the payments to farmers were '... to compensate them for reductions in their incomes', as well as 'to allow farmers to manage the transition to production in a deregulated environment' Productivity Commission (2000).

<sup>16</sup> The Productivity Commission Act 1998 omits the requirement of the Industry Commission Act 1989 that the Government obtains a report from the Commission before making decisions on a range of industry assistance matters. However, it appears that a report on the assistance package for the dairy industry would not have been mandated in the Industry Commission era either because, under Section 11 (3) of the 1989 Act, financial assistance for an industry was exempted from the requirement of a report if the money was raised by a tax on the industry.

2000) not to treat the consumer tax on milk as a priority issue.<sup>17</sup> Interestingly, too, the new Victorian Labor government gave dairy farmers the opportunity to indicate their view on deregulation in a plebiscite, but did not give a corresponding opportunity to milk consumers. The Victorian Minister for Agriculture called the plebiscite an ‘exercise in agricultural democracy’ (Hamilton 2000).<sup>18</sup>

#### **4.6 Why did the Commonwealth Government not require the State Governments to contribute to the adjustment package?**

If the view is taken that a case for adjustment assistance can be made only for market milk, it might be argued that the state governments should bear the complete bill, because it is they that have been responsible for policy for market milk. Moreover, the states were aware of the pressures that would be exerted on the market-milk premium with the phasing out of the Commonwealth’s DMS scheme, yet they chose not to reduce farmer prices for market milk in anticipation of this. It is also relevant that the states have received large amounts from the Commonwealth for their participation in the NCP reforms. Why was this not viewed by the states, and especially the Commonwealth, as an appropriate source of funds for any adjustment assistance payments?<sup>19</sup>

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<sup>17</sup> The ACA’s Annual Report 2000 did not mention dairy deregulation or the 11 cent a litre levy.

<sup>18</sup> The commitment to a plebiscite was made by the Labor Party before the Victorian election. At that time there was no assistance package on offer. The prospects for consumer gains from deregulation were therefore better and consumer support for deregulation presumably stronger, than after the levy-funded assistance package was announced. By the time the plebiscite was taken (December 1999), the assistance package had been announced. No wonder that Victorian dairy farmers who, in the main, supported deregulation in the NCP review without a package, voted overwhelmingly – 89 per cent of those voting (Truss 2000) – for deregulation with the package.

<sup>19</sup> The behaviour of the Commonwealth might be likened to that of a parent who tells his/her children that they are responsible for doing certain things, only to do them him/herself when the children show no intention of doing them. This comparison seems especially apt for the supplementary assistance package. In announcing that package in May 2001, Warren Truss said, ‘The continuing refusal of the Queensland and NSW State Governments to provide compensation (sic) for removing the State-based milk price support arrangements has forced the Federal government to once again step in to help those most affected by deregulation’ (Truss 2001a). Notwithstanding Minister Truss’s criticism of the states for their failure to provide compensation, he insisted that the Commonwealth’s supplementary package, like the initial one, was ‘not about providing compensation or income support. It is to help with adjustment by those farmers who are most in need, thereby easing their transition to a deregulated market and providing wider public benefits to regional communities’ (Truss 2001b).

### 5. Concluding comment

The deregulation of the dairy industry on 1 July 2001 was a very important microeconomic reform, removing arguably the worst remaining policy failure in Australia's rural sector.<sup>20</sup> The story of long-enduring and heavy regulation in the industry, and of ultimate deregulation, is a complex one. In thinking about the 'why' of regulation, there is no doubt that advisers of governments in earlier times believed that farmers' lack of market power, the need to offset costs to farmers of mandating health safety standards for table milk and of guaranteeing stable supplies at stable prices throughout the year, the uncertainty about world prices, the existence of protection for other industries, and the balance of payments constraint justified government intervention in the dairy market. However, especially in recent decades, when the level of understanding of microeconomic policy has been higher and reforms made in industry policy and the foreign exchange market have greatly weakened if not eliminated 'second best' arguments for assisting particular industries, the political economy concept of industries 'capturing' governments and persuading them to facilitate large transfers from consumers – and, at times, general taxpayers – appears very relevant in explaining the regulation. This is especially so of the state governments' regulation of market milk. Until deregulation, the states showed little interest in reducing the highly-supported market milk prices, or in alerting farmers to the implications of the phasing out of the Commonwealth's DMS scheme, although they were aware of the likely resultant pressures on market milk prices.

Why did deregulation come? The removal of regulation and assistance for manufacturing milk occurred because through the Kerin plan – and successor plans under subsequent Labor Agriculture Ministers Crean and Collins – the dairy industry was subjected to a phasing out of its support that was broadly consistent with the policy of the Hawke governments for making industries in the tradeables sector face international market realities. This policy involved a shift in the attitude of the federal government away from helping the rent-seeking efforts of dairying and other industries. It is harder to see such a change in the attitude of state governments implementing regulatory policies for market milk. Because I have argued that even without NCP the demise of the Commonwealth's DMS scheme would have led Victoria to deregulate its market milk sector out of

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<sup>20</sup> The other main contender for this dubious honour is pricing and property rights for water.

self-interest, it is clear to whom I award most plaudits for dairy deregulation; John Kerin.<sup>21</sup>

The questions raised in the previous section about the assistance package that accompanied dairy deregulation may be useful in thinking about compensation and adjustment in other contexts, including the remaining highly protected areas of Australia's manufacturing sector. Of particular interest is whether the dairy industry model of ending price support and implementing a consumer-funded assistance package could have a role in the motor vehicle and textile, clothing and footwear industries.

In thinking about those questions, politics cannot be neglected. The votes of dairy farmers and people dependent on associated value-adding activities have the potential to swing the outcome in several electorates around Australia. This facilitated the very effective lobbying by the dairy industry, especially through the ADIC, for the assistance package.<sup>22</sup> Dairy farmers in Victoria, and elsewhere, gained from the washup in Canberra of the Kennett Government's loss of support in rural areas and its subsequent defeat. One Nation, which has not-a-few supporters in dairying electorates, may have been an important factor. Alistair Watson (2000) has suggested that every dairy farmer say thank you by naming their favourite cow 'Pauline'.

### References

- Australian Dairy Corporation (ADC) 2001, *Dairy Compendium 2000*, ADC, Melbourne.  
 Australian Dairy Industry Council (ADIC) 1999, 'Facts about Deregulation and the Restructure Package', The Australian Dairyfarmer November–December.  
 Australian Dairy Industry Council (ADIC) 2000, Annual Report, ADIC, Melbourne.  
 Australian Dairy Industry Council (ADIC) 2001, Annual Report, ADIC, Melbourne.  
 Australian Competition and Consumer Commission (ACCC) 2001, 'Dairy deregulation and the Australian milk market', *ACCC Journal*, iss. 33, pp. 18–20.  
 Australian Consumers' Association 2000, *Annual Report 2000*, ACA, Marrickville, NSW.  
 Beare, S., Domine, L. and Lembit, M. 1989, 'Trans-Tasman trade in manufactured dairy products: a mathematical programming model of imperfect sectoral competition', paper

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<sup>21</sup> Dairy industry leaders, commentators and Agriculture Minister Truss (2000) have paid special tribute to the Chairman of ADIC, Pat Rowley from Queensland, in achieving co-ordinated Australia-wide deregulation and the assistance package. According to Rowley, the 'restructure package was a miracle (rivaling that of the Biblical loaves and fishes), achieved by a basically united industry' (ADIC 2001).

<sup>22</sup> Federal Agriculture Minister Warren Truss represents the electorate of Wide Bay in Queensland, which experienced one of the largest reductions in milk industry revenue with deregulation. Notwithstanding the large assistance package won by the industry, Wide Bay was one of ten Queensland and New South Wales seats targeted by the 2000-member Australian Milk Producers Association at the 2001 Federal election. APMA campaigned with the former National Party MP Bob Katter, who lead an alliance of independents (Doherty 2001). Katter (Independent) won the electorate of Kennedy.

- presented at 33<sup>rd</sup> Annual Conference of Australian Agricultural Economics Society, Lincoln College, Christchurch, New Zealand, February 7–9.
- Centre for International Economics (CIE) 1999, 'National Competition Policy Review of the Dairy Industry Act 1992', Centre for International Economics, Canberra.
- Collins, B. 1994, 'New Dairy Support Arrangements', media release, DPIE 94/87C, November 29.
- Doherty, L. 2001, 'Desperate Dairy Farmers to Stand in 10 Federal Seats', *Sydney Morning Herald*, August 2.
- Dwyer, G. 1995, 'The Political Economy of Australian Dairy Industry Policy 1986–1992', M.Ag.Sc. thesis, University of Melbourne.
- Edwards, G. 1993, 'Two government failures? A tale of sugar and wool', *Review of Marketing and Agricultural Economics*, vol. 61, pp. 97–112.
- Forshaw, M. 2001, 'Dairy Produce Legislation Amendment (Supplementary Assistance) Bill 2001', Hansard, Senate, June 25, 24, 945–24, 948.
- Freebairn, J. 1992, 'Dairy industry policy', *Review of Marketing and Agricultural Economics* vol. 60, pp. 23–41.
- Hamilton, K. 2000, 'Dairy Bill', second reading speech, *VICHANSARD* 4 May, 1323–1326.
- Howard, J. 2001, 'Prime Minister Reviews Queensland Result', ABC transcript of AM broadcast, February 19.
- Industries Assistance Commission 1983, *The Dairy Industry*, report 333, AGPS, Canberra.
- Industry Commission 1991a, *Statutory Marketing arrangements for Primary Products*, AGPS, Canberra.
- Industry Commission 1991b, *Australian Dairy Industry*, Report 14, AGPS, Canberra.
- Industry Commission 1995, *Annual Report 1994–95*, AGPS, Canberra.
- Lloyd, A. 1982, 'Agricultural Price Policy', in D.B. Williams (ed.), *Agriculture in the Australian Economy*, 2<sup>nd</sup> ed. Sydney University Press, Sydney.
- Mauldon, R. 1990, 'Price Policy', in D.B. Williams (ed.) *Agriculture in the Australian Economy*, 3<sup>rd</sup> ed. Sydney University Press, Sydney.
- McNamara, P. 1999, 'Victorian Government Supports Deregulation of Dairy Industry', news release, July 13.
- National Competition Council 1999, [Online]. Available: <http://www.ncc.gov.au>
- New South Wales Government Review Group 1997, *Review of the NSW Dairy Industry Act 1979*. Government of NSW.
- Productivity Commission 1999a, Submission to the Victorian Dairy Industry Review.
- Productivity Commission 1999b, *Impact of Competition Policy Reforms on Rural and Regional Australia*, Report 8, Ausinfo, Canberra.
- Productivity Commission 2000, *Trade and Assistance Review 2000–01*, Annual Report Series 2000–2001, AusInfo, Canberra.
- Productivity Commission 2001a, *Trade and Assistance Review 2000–01*, Annual Report Series 2000–2001, AusInfo, Canberra.
- Productivity Commission 2001b, *Structural Adjustment-Key Policy Issues*, Commission Research Report, Ausinfo, Canberra.
- Senate Rural and Regional Affairs and Transport References Committee 1999, *Deregulation of the Australian Dairy Industry*, Canberra.
- Sieper, E. 1982, *Rationalising Rustic Regulation*, Centre for Independent Studies, St Leonards.
- Stiglitz, J. 2000, *Economics of the Public Sector*, 3<sup>rd</sup> ed. Norton.
- Truss, W. 1999, 'Dairy Industry Restructure Package', media release, September 28.
- Truss, W. 2000, 'Dairy Industry Adjustment Bill 2000', second reading speech, H.R. Hansard, February 16.

- Truss, W. 2001a, 'Truss Announces an Extra \$140 Million for Dairy Farmers and their Communities', media release, May 21.
- Truss, W. 2001b, 'Dairy Produce Legislation Amendment (Supplementary Assistance) Bill 2001', second reading speech, H.R. Hansard, May 24.
- Watson, A.S. 2000, 'Good and bad reasons for disliking National Competition Policy', paper prepared for Deregulation, Competition Policy and Regional Australia symposium, Australian Agricultural and Resource Economics Society, Brisbane, Queensland, September 1.