PRODUCTIVITY COMMISSION

Productivity Commission Submission to the Victorian Dairy Industry Review

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As part of their commitments under the Competition Principles Agreement, a number of the States and the ACT have completed reviews of their regulatory arrangements for the dairy industry. In other States, including Victoria, reviews are in progress.

The Commission has made submissions to the New South Wales, Queensland, Tasmanian and ACT dairy reviews (IC 1997a, b, c and PC 1998a, b).

Many of the issues canvassed in those submissions are equally relevant to the Victorian review. However, the Victorian review has wider national significance and therefore warrants a separate submission:

- Victoria is the dominant milk producer in Australia. As noted in the Issues Paper for the review (CIE 1999), Victoria accounts for more than 62 per cent by volume and 54 per cent by value of Australia's milk production.
- The outcome of this review could have major implications for dairy industries in some of the other States. Specifically, were Victoria to deregulate its market (drinking) milk arrangements, it would be difficult for States such as New South Wales to retain their regulated pricing structures. The significance of Victoria's decision has been recognised in a number of the other State reviews.

In making this submission, the Commission has not sought to replicate its submissions to the previous reviews. Rather, it has highlighted a handful of key issues raised in those submissions which it sees as particularly germane to the Victorian review. These issues relate solely to the farm-gate regulations applying to market milk. To assist the review's assessment of the impacts of these regulations, the submission also provides estimates of assistance to the Victorian dairy industry.

1 Some key features of the Victorian dairy industry

In broad terms, farm-gate regulation of the dairy industry in Victoria is much the same as in the other States. The Victorian Dairy Industry Authority sets a minimum farm-gate price for market milk which is above the price that would prevail in an unregulated market. It is also well above the price of physically identical milk used in manufactured dairy products. By raising the price of market milk, the regulations increase dairy farmers' incomes.

However, in looking at the benefits and costs of these regulations, it is important to have regard to some specific features of the Victorian regulations and the Victorian dairy industry.

- The price pooling system used to distribute the higher returns from market milk benefits all Victorian dairy farmers, irrespective of whether their milk is used for drinking or for manufactured dairy products. Price pooling arrangements, which also operate in Tasmania, South Australia and North Queensland, have different efficiency impacts from the quota arrangements that apply in New South Wales, South East and Central Queensland and Western Australia (see PC 1998b).
- As in Tasmania and South Australia, the bulk (over 90 per cent) of Victoria's milk output is used in manufacturing. Hence, the benefits to dairy farmers and their communities of higher prices for market milk are proportionately much less significant than in, say, New South Wales and Queensland (see section 2). This has important implications for the assessment of whether the current regulations are warranted on public interest grounds (see section 4).

2 Assistance to the Victorian dairy industry

To aid the review, the Commission has prepared estimates of the assistance afforded Victorian dairy farmers by the price setting arrangements for market milk. To provide a picture of overall support for the industry, it has also estimated assistance to farmers from the Domestic Market Support scheme for manufacturing milk.

The Commission has calculated four summary measures of assistance: the nominal rate of assistance, the price distortion, the producer transfer and the effective rate of assistance (see box 1).

Market milk

The assistance estimates for market milk are derived from the difference between the regulated farm-gate price and an estimated price for that milk in an unregulated market. The 'benchmark' unregulated price is calculated as:

- the Australian average price for manufacturing milk, using State shares of total *market milk* sales to weight State prices (23.1 cents a litre in 1997–98);

Box 1 **The Commission's assistance measures**

The nominal rate is an estimate of assistance to an industry's outputs. It measures the percentage increase in gross per unit returns attributable to that assistance.

The effective rate is an estimate *of* assistance to an industry's value added. It measures the increase in unit value added, after accounting for the benefits of assistance on outputs and inputs, and the tax effect of any tariffs and other policy-induced cost imposts on inputs.

The price distortion is an estimate of the price-raising impact of assistance to an industry at the ex-factory or farm-gate level. (If all assistance to an industry's outputs increases prices and all production is sold domestically, then the nominal rate and the percentage price distortion will be the same.)

The producer transfer is an estimate of the dollar value to producers of assistance on an industry's outputs. While such transfers are not directly comparable across industries, they indicate the significance of government support for a particular activity.

- less an 'Australian-average' allowance of 2 cents a litre for the cost of transporting milk to processors;
- plus a 20 per cent loading (4.2 cents a litre in 1997–98) for the cost of assuring out-of-season supply.

This gives a benchmark market milk price of 25.3 cents a litre for 1997–98.

In determining the regulated market milk price to farmers, the Commission again deducts a margin for transport costs. In contrast to the 'Australian-average' margin embodied in the unregulated price benchmark, this transport margin is state-specific, based on information collected by the Australian Dairy Corporation. For Victoria, the deduction is 1.9 cents a litre. The Commission has also deducted a further 1.9 cents a litre from the regulated price in lieu of the levy imposed on market milk to help fund support payments for manufacturing milk — see below. (This is in contrast to the estimates provided to the New South Wales and Queensland reviews, where no deductions for the levy were made). These deductions give a regulated market milk price to Victoria farmers in 1997–98 of 39.3 cents a litre.

As is apparent from table 1, assistance to Victorian market milk production is several times greater than the average level of assistance for agricultural activities. That said, assistance is well below the national average for market milk — the estimated price premium in Victoria in 1997–98 was 14 cents a litre (equivalent to around 10 per cent of the retail price), compared to the Australian average of 21 cents a litre. Indeed, assistance to Victorian market milk production was the lowest of all the States by a considerable margin.

Manufacturing milk

Assistance for manufacturing milk is provided through the Commonwealth market support arrangements (see IC 1997a for details). As shown in table 1, assistance to Victorian manufacturing milk production is close to the national average.

Table 1: Assistance to milk production in Victoria and Australia, 1997–98

	Victoria	*Australia*
Market milk		
– price distortion (cents/litre)	14	21
– producer transfer ($m)	62	394
– nominal rate (per cent)	43	67
– effective rate (per cent)	>200	>200
Manufacturing milk[a]		
– nominal rate (per cent)	7	8
– effective rate (per cent)	18	21
All milk		
– nominal rate (per cent)	11	23
– effective rate (per cent)	29	73
Average for agriculture		
– nominal rate (per cent)	ne	3
– effective rate (per cent)	ne	10

a The nominal rate estimates for manufacturing milk are calculated by applying estimated Commonwealth market support payments to the value of manufacturing milk output. If instead, the per litre support payment was expressed as a proportion of the average manufacturing milk price (less the 2 cents a litre transport cost allowance), the resulting nominal (and hence effective) rates would be marginally higher.

ne not estimated

Source: Commission estimates

In dollar terms, the benefit to Victorian farmers from the Domestic Market Support scheme is significant. In 1997–98, payments to Victorian farmers under the scheme, net of the levies on their market milk production, were more than $80 million, equivalent to some $10 300 a farm.

Some caveats on the assistance estimates

The Commission's assistance framework is designed to allow comparison of assistance across industries. To facilitate this, the framework employs simplifying assumptions of varying applicability to individual industries (see IC 1997a). Altering some of these assumptions could change the precise assistance estimates for certain industries. However, such 'fine-tuning' would be unlikely to produce significant change in the extent of divergences in assistance across industries. Importantly, it is these divergences, rather than absolute levels of assistance provided to particular industries, which are an indicator of resource misallocation.

The validity of some of the industry-specific assumptions underlying the Commission’s assistance estimates for milk production can also be debated. For example, previous reviews have questioned whether a 20 per cent price premium for market milk would be sufficient to assure out of season supply in a deregulated market.

More generally, participants in the New South Wales and Queensland reviews argued that the industry’s year-round production costs exceed the Commission’s deregulated benchmark price. Underlying this argument is the contention that regulated price premiums for market milk are cross subsidising sales of milk for manufacturing. Again, the implication is that the price which would prevail in a deregulated market exceeds the Commission’s benchmark price. In this regard, Economic Insights (1998, pp. 54–59) — consultants to the Queensland Review — estimated that the price raising effects of the farm-gate regulations in that State were less than half the Commission’s price distortion estimate.

Of course, there are a number of counter arguments to these views which have particular relevance in Victoria.

- Notwithstanding the strong seasonality in Victorian milk production, total supplies in the winter trough months still considerably exceed market milk requirements. While this is not to deny the possibility of some price premium for market milk in a deregulated environment, it suggests that the 20 per cent premium allowed for in the Commission’s assistance estimates is quite generous.
- In Victoria, more than 90 per cent of total milk production goes to manufacturing, compared to less than 60 per cent in Queensland and New South Wales. Thus, even disregarding the conceptual problems with the argument that higher returns for market milk are required to support sales of manufacturing milk (see IC 1997b, pp. 9–10, IC 1997c, p. 9), the cross subsidy argument is quantitatively less relevant in Victoria than in the other two States. Indeed, the Commission observes that the current price premium for market milk represents only around 1.4 cents a litre averaged over total milk supply.

Therefore, in the Commission’s view, the current manufacturing milk price plus a modest premium for assuring out-of-season supply should give a reasonable indication of the likely farm-gate price for market milk in Victoria in a deregulated environment. This in turn suggests that an end to the current price setting arrangements would see farm-gate prices fall considerably — probably by more than 10 cents a litre. The more contentious issue is how much of the price fall would be passed on to final consumers (see below).

Finally, the Commission emphasises that the increases in farm-gate prices, and the associated income transfers to farmers, are not measures of the efficiency costs of the current market milk controls. Indeed, the static efficiency costs (see below) are only a fraction of the producer transfer estimates reported in table 1.

Flow on to retail prices

Around Australia, deregulation beyond the farm-gate has led to increases in retail milk prices. This has seen some argue that farm-gate deregulation will likewise increase, rather than lower, retail prices.

However, in the Commission's view, this argument is inappropriate as it draws a parallel between two sets of regulation with quite different objectives. The objective of post farm-gate regulation was to keep processing and retailing margins 'tight' and arguably below competitive market levels. In contrast, farm-gate regulation is explicitly designed to maintain returns to farmers at above competitive market levels. Hence, the same market pressures that have contributed to higher retail prices following deregulation beyond the farm-gate, would create the potential for retail price falls in the event of farm-gate deregulation.

The extent to which this potential will be realised depends importantly on the degree of competition in the processing and retailing sectors. Reference to aggregate profitability in the retailing and processing sectors may give some broad indication of the level of competition therein (see IC 1997a, p. 10, Light 1999, p. 31). However, given the multiplicity of factors which influence the pricing of individual grocery items in the retail sector and the complexity of the relationships between different parts of the supply chain, such analysis is unlikely to permit strong conclusions to be drawn on precisely how farm-gate deregulation will influence milk prices. For the same reasons, comparing current retail margins on milk with those on other processed foods is unlikely to be particularly helpful. The possibility of changes in the structure of milk receivers/manufacturers and market milk processors following deregulation at the farm-gate further complicates prospective price assessments.

In sum, the Commission considers that the precise extent to which consumers would benefit from the falls in farm-gate prices is unlikely to be resolvable in advance of deregulation. However, it draws the review's attention to some salient findings from the consultants who undertook the public benefit test for the Queensland review:

- it is unreasonable to assume that none of the fall in farm-gate prices will be passed on to consumers;
- the scope for supermarkets to sustain margins above competitive levels for any length of time is likely to be limited; and
- while there is likely to be greater scope for the exercise of market power in the processing sector, even a monopolist processor would have a financial incentive to pass on some of the price falls to retailers/consumers (Economic Insights 1998, pp. 51–2).

Against this background, the Commission is confident that farm-gate deregulation would provide price benefits to Victorian milk consumers. As noted above, if the current 14 cent a litre price distortion was passed on in full to consumers, then retail milk prices would fall by around 10 per cent.

3 Efficiency effects of the current controls

The Commission's submissions to previous reviews discussed the claimed efficiency benefits of regulated farm-gate prices and found them to be wanting. Significantly, the Queensland review concurred that counteracting 'corrupt' world markets and encouraging stable prices and year round milk supply are not major considerations in the public benefit test (QDLRC 1998, pp. 39–40, 147).

The Commission's submissions also used the standard 'excess burden' methodology to quantify the consumption efficiency cost associated with reduced milk consumption, and the production efficiency cost stemming from an inefficient expansion in total milk output. While this methodology focuses only on static efficiency effects, it has the advantage of netting out income transfers.

Application of this approach to the Victorian market milk sector suggests that, as in other States, the static efficiency costs of the farm-gate regulations are very small.

- Given a retail milk price of $1.39 a litre, and assuming a price elasticity of demand of -0.15 (IC 1991) and that the full 14 cent a litre price distortion estimated above would be passed on to consumers in the event of deregulation, then the ongoing *consumption efficiency cost* of the current controls would be a little less than $500 000 a year. If only half of the price benefit were passed on to consumers, then the cost would be around $120 000 a year.
- As noted, under the price pooling system, average and marginal returns on Victorian milk production were around 1.4 cents a litre above the manufacturing milk price in 1997–98. Assuming a fairly conservative supply elasticity of 0.9 and that, in the absence of farm-gate regulation, market and manufacturing milk prices would be the same, then the implied increase in milk output for 1997–98 would have been around 330 million litres. The ongoing associated *production efficiency cost* would be around $2.3 million a year. For a less conservative supply elasticity of 1.5 used by the Commission in submissions to previous reviews, the ongoing production efficiency cost would be around $3.9 million a year. But even the higher estimate is equivalent to less than 0.3 per cent of the annual farm-gate value of Victorian milk production of some $1.4 billion.

Of course, as the Issues Paper for the review points out, the efficiency costs of the farm gate regulations are not limited to these static production and consumption costs.

- At a national level, the state-based farm-gate controls may have contributed to an inappropriate distribution of milk production across Australia. That is, regulated price setting, together with the restrictions on interstate trade in market milk, has effectively led each State to invest in enough capacity to meet all of its drinking milk requirements. Particularly in the Eastern States, deregulation could facilitate cross-border trade in market milk and, thereby, a more efficient pattern of production Australia-wide. That said, given the costs of transporting milk relative to State differences in production costs, it is debatable whether cross-border trade would be significant. Indeed, as the Issues Paper alludes to, shifts in regional production patterns within Victoria following deregulation could possibly offer larger efficiency gains.
- The regulatory arrangements may have supported cost inefficiencies in the farming and processing sectors and reduced their responsiveness to new opportunities. During industry visits for the Commission's current inquiry into the impact of competition policy reforms on rural and regional Australia, dairy interests provided examples of the so called *dynamic efficiency* costs of the current regulatory regime. For example, the United Dairy Farmers of Victoria said that herd improvement is over-serviced and there is too much processing plant in some towns. Similarly, there is evidence that previous regulation of post-farm gate margins discouraged innovation and the development of new

markets in the processing sector (see IC 1997a, p. 47, Shoebridge 1999, p. 46). Indeed, deregulation beyond the farm-gate has encouraged considerable rationalisation in the processing and distribution sectors — both to reduce costs and to facilitate national rather than state-based product marketing.

- The administrative, enforcement and compliance costs associated with the regulations should also be recognised in the benefit cost calculus.

4 Regional and adjustment issues

If efficiency benefits and costs were the only consideration in the public benefit test, then the case for terminating the Victorian farm-gate controls would seemingly be clear cut.

However, other factors come into play, including regional impacts and the short term adjustment costs that would accompany deregulation.

In its submissions to the previous reviews, the Commission made a number of general observations on regional and adjustment issues.

- In a broad sense, there is no net regional benefit from farm-gate controls in the dairy industry. That is, the benefits to dairy regions are matched by reduced income elsewhere.
- But the regional benefits are more concentrated than the regional costs. The controls contribute significantly to income in dairy communities, whereas the increased cost of drinking milk is spread across the whole of a State.
- That said, regional concentration of the benefits is not an argument for retaining the controls. The production of virtually all goods and services is more concentrated than their consumption. Taken to its extreme, regional concentration of production would be an argument for universal support to industries, which would be self defeating.
- Moreover, the extent of the benefit provided to dairy communities by the controls will depend on the scope for farmers to diversify into other activities. The greater the scope for diversification, the smaller will be the longer term reduction in income in dairy regions resulting from farm-gate deregulation.
- Similarly, the ease of transferring resources into other activities will be the main determinant of the severity of the short-term adjustment costs accompanying deregulation.

The significance of these general observations will of course depend on individual circumstances. Thus, for Victoria, the regional impacts and short-term adjustment costs of farm-gate deregulation are likely to be less of a concern than in States such as Queensland and New South Wales. As noted earlier, abolition of the current controls would see the average return to Victorian farmers on their milk production fall by a *maximum* of 1.4 cents a litre, or some 6 per cent. While not trivial, such falls would be far less significant than in States were production is more heavily oriented to the fresh milk market. Moreover, some in the Victorian industry see the opportunity to penetrate interstate markets as offsetting the impacts of slightly lower per unit returns on their milk production.

If farm-gate deregulation accelerates the current rationalisation in the milk processing sector, then more significant regional concerns may arise. In this regard, the United Dairy Farmers of Victoria told the Commission’s inquiry into the impact of competition policy reforms on rural and regional Australia that rationalisation of excess processing capacity will hurt towns such as Maffra and Leongatha.

However, there will presumably be pressure to address such excess capacity even if the farm-gate controls are retained. At least in this sense, the regional impacts of rationalisation in the processing sector are separable from the impacts of deregulation of the pricing controls.

The Commission also observes that supporting dairy regions through a hidden tax on milk does not sit comfortably with the National Competition Policy. Amongst other things, that policy encourages governments to fund support for particular groups in the community in a transparent and explicit fashion. Thus, were the current farm-gate controls to be retained on regional development or adjustment grounds, it would be incumbent on the Victorian Government at least to inform consumers that a component of retail milk prices was a tax earmarked for boosting dairy farmers’ incomes.

Finally, the Commission’s submissions to previous reviews have commented in general terms on ways to minimise the adjustment burden in the event that State Governments decide to deregulate their dairy industries. Again, the relatively small impact that farm-gate deregulation would have on average milk prices in Victoria suggests that specific adjustment measures for Victorian dairy regions are unlikely to be necessary. However, given the likely flow-on effects for other States of any decision to deregulate in Victoria, there may be a case for looking at ways to coordinate the deregulatory process across jurisdictions.

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