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Dairy Mergers and the National Interest[1]

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Abstract

In the normal course of events, the merger of the two major dairy cooperative companies and the Dairy Board would require the approval of the Commerce Commission. The Commission, in a preliminary determination in 1999, rejected the case for the merger in terms of the Commerce Act. Subsequently, in December 2000, the cooperatives by-passed the Commerce Commission by presenting their case for the merger and the absorption of the Dairy Board directly to Government. In April (2001), the Government announced that it had accepted the case put forward and, at the time of writing, was still awaiting the results of the required referendum of the dairy farm-suppliers ("the shareholders") for their approval. Legislation is to follow.
In this paper, I want to examine the arguments for and against the merger from the national point of view and the proposed regulations that would make the merger more acceptable. We could allow a case that the merger brought some private benefits to dairy farmers if efficiencies can be gained and market returns enhanced above what they would have been. This would be all to their good and possibly benefit people in industries downstream from the farms.
The question for the government is what action is in the national good?. This involves an analysis of all the market inter-actions that would follow the merger and how they would affect the different groups in society as a whole. In its preliminary determination, the Commerce Commission weighed up these negative and positive effects and found the negative case predominated. Hence the subsequent approach to government. At the time of writing, government has agreed to the merger, presumably after due analysis of the arguments for and against. Read on for more details of the case presented and the government's response to it.

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The Commerce Commission Approach

The first application for approval of the merger was put to the Commerce Commission in 1999. In terms of the Commerce Act 1986 the Commission is required to look at any acquisition in terms of increased market dominance (s 67(3)(a)), and failing that test in terms of whether the public benefits that might follow would justify the acquisition or merger in this case (s 67(3)(b)). *"The authorisation procedure requires the Commission to identify and weigh the detriments likely to flow from the acquiring of a dominant position in the relevant* *markets, and to balance those against the identified and weighed public benefits likely to flow from the proposed merger"* (Determination, p.84). This is equivalent to what we would call the national point of view or the national interest. Their analysis gives a good preliminary idea of the scope of such an analysis and the effects which can be documented[3].

Their examination is preceded by an interesting discussion of the *status quo*, i.e. what it is that the future is to be compared with. Two counterfactuals are thus developed and utilised. This bit of discussion is something agricultural economists can get their teeth into. It is followed by a discussion of the particular markets which might be affected.

(1) The ***status quo* counterfactual** is not regarded as a standstill in time. Rather, the Commission asks what events would have taken place *in the absence of the merger* and then puts them in the *status quo* scenario. Thus the Commission assumes a continuation of the current industry structure (pp.90-91) and of the single desk seller for exports, and that efforts at further structural change within that structure and regulatory framework will continue. Structural changes were thought to include the following:

- the unbundling of the payout to suppliers;
- improvements to the internal pricing and product allocation mechanism; and
- further joint venture developments.

Structural change was thought not to include fair value entry and exit, several commercial developments and any further amalgamation (including loss of competition in domestic markets).

(2) There is also a ***deregulation counterfactual**.* This envisages the deregulation of the Dairy Board export monopoly, and the emergence of two powerful competing cooperative companies, possibly with overseas links, heavily involved in marketing in competition. In such a process, this counterfactual would include the unbundling of payout to suppliers, improvement to the internal pricing systems, and joint venture developments.

The Commission then proceeded to an examination of the *detriments* of the proposed merger and the possible benefits against these two counterfactuals. They looked at allocative and productive efficiency changes in the NZ domestic market as a whole. It is worth while spending a minute defining how the Commission saw the different sub-markets involved[4].

Allocative inefficiency and monopsonistic buying of raw milk: The case concerns the potential detriment arising from the loss of competition between dairy cooperatives in the two geographic markets for the acquisition of raw milk. Using its monopsonistic power, the merged companies could force down the price of milk. This would lead to a restriction of output compared to the competitive outcome. The Commission concluded that, with the information currently available, the fall in the price of raw milk would be in the order of 5-10%.[5]

Allocative inefficiency and the domestic dairy products market: About 8% of the raw milk is used by the dairy industry to process products for sale in the domestic market. The merged company would acquire a dominant position in this market except that involving butter. This would give it the power to raise prices and restrict quantity in either counterfactual. There would be a transfer of wealth from consumers to producers as a result. The market size was thought to be about $775m. The Commission concluded that the price rise in the domestic dairy market in which dominance would be acquired was likely to be between 10-20% [6].

Productive inefficiency and industry costs: This conveys the idea that a monopoly producer, in the case of the merged company, may let organizational slack creep into its operation and raise its costs higher than they would otherwise be in a competitive environment. The Commission saw all costs within NZ as exposed to this detriment totalling $1920m a year (collection of milk from farms, manufacturing for export, marketing costs). The degree of exposure was greatest when set against the deregulation counterfactual (competition between the giants would be greater). The Commission concluded (after considerable discussion (pp.103-104)), that these cost increases would be of the order of 5-10% of the relevant costs.

Dynamic inefficiency and new technology: Improved new products allow costs of supply to be reduced and also meets buyer's wants more fully. Competition acts as a stimulus to greater rates of adoption of new technology. The NZIER considered that the pressure to satisfy overseas customers' demands with respect to price, quality and timeliness would help maintain dynamic efficiency. The Commission arrives at an estimate of the shift in demand foregone of 1% of quantity (p.107). To this must be added losses in production systems innovation and in domestic product development and processing. The Commission concludes that foregone efficiency gains could possibly vary between 1-5% of the total costs in each segment.

Box 1:Summary of Preliminary Estimates of Annual Detriments ($m)

Category	***Status quo* counterfactual Range**		**Deregulation counterfactual Range**	
Allocative inefficiency	2.4	10.0	2.4	10.0
Productive inefficiency	75.5	151.0	96.0	192.0
Dynamic inefficiency	60.0	300.0	65.0	325.0
Total	137.9	461.0	163.4	527.0
			(Determination, p.109)	

The Commission reached the preliminary view, based on the limited information currently before it, that the potential detriments from changes in the allocation of resources would be each likely to be moderate to large, although their actual magnitudes would be clouded in uncertainty (p.109). The detriments would fall between $138m and about $461m against the *status quo* counterfactual, and between about $163m and about $527m against the deregulation counterfactual (Box 1).

Public Benefits

The NZIER identified four groups of public benefits (Determination, p.109-110):

- promotion of industry change
    - cessation of pay-out bundling;
    - integration of marketing and processing stages.
- promotion of processing and structural efficiencies
    - reduction of duplication in ancillary activities;
    - plant production flexibility;
    - deferral of capital expenditure.
- preservation of single seller marketing
- industry development
    - best practices transfers across dairy cooperatives
    - funding of "industry good" research.
    - [overseas competitive advantages][7]

***Promotion of industry change**:* Gains from the unbundling of returns are rejected by the Commission. A high payout may obscure a low marginal value for milk. It was claimed that there could be an allocative efficiency loss of $20m. The Commission reasoned that its *status quo* counterfactual allowed for gradual change which would thus include the effects, if any, of unbundling.

The other industry change is integration of marketing and processing. This refers to the transaction costs involved in the present system involving delays in filling orders and negotiating supply contracts with the cooperatives. NZIER estimated savings of $20m for the *status quo* counterfactual only but the Commission thought the effect over-rated and reduced this to the range $5-15m.

***Promotion of processing and structural efficiencies**:* There are a number of these:

- overseas marketing network economies (accepted)
- administrative function savings in dairy cooperatives (accepted in part)
- administrative function savings in the Dairy Board (accepted in part)
- savings in directors' fees (accepted in small part)
- savings in insurance (unacceptable)
- savings in financing costs (unacceptable)
- rationalisation of laboratory testing (unacceptable)
- research and development savings (acceptable in part)
- input purchasing savings (acceptable in part though not quantified).

In summary, the savings from a reduction in duplication are estimated to be between $21m and $41m when assessed against the *status quo* counterfactual and between $35.5m and $60.5m against the deregulation counterfactual (pp.117-118). In some cases the reasoning was turned down through lack of supporting data.

***Plant production flexibility**:* These benefits relate to the industry's product mix and the allocation of production between manufacturing plants. NZIER suggested $10m savings through product mix efficiencies of which the Commission accepted half for the deregulation scenario alone. On the allocation efficiencies the Commission was not prepared to allow more than $6m savings against the deregulation scenario given that they were possible without the merger.

Deferral of capital expenditure: Here the question was whether the merger would allow greater rationalisation of plants and peak flow so that the combined capital expenditure programme could be deferred. Most of the detail on the programme is deleted in the report. NZIER estimated that an annuity worth $13m would well represent the cost of the programme. The Commission found the general reasoning unacceptable as the savings could be made by other means.

Preservation of single seller marketing: This relates to premiums that might be obtained in foreign markets by single control of the marketing process (overcoming weak selling or undercutting). It only relates to the deregulation counterfactual as the *status quo* conterfactual would preserve the Dairy Board export monopoly. The Board itself made a strong submission (p.126) on the possibilities of extracting price premiums. The Commission thought the strength of the argument presented was diminished by the possibility of new domestic competitors arising in the market place and hence reduced the claimed saving from $40m to $0-20m.

Industry development: NZIER put forward two arguments under this heading: best practice transfers across dairy cooperatives and funding of "industry good" research. The Commission did not see that practice could be improved any more under a merger than it was under present informal methods. Industry good research relates to research on the farm together with TB and purely dairy-related disease control and is partly funded outside the industry through FRST. NZIER argued that in the deregulation counterfactual the merger would *prevent* a weakening of the industry's funding contribution. The Commission found that there could be a benefit related to the preservation of industry good research but was unclear how it could be quantified.

Overseas competitive advantage: This component related to submissions by the Dairy Board. They considered that the merger "will bring significant benefits to NZ from having a world-leading multinational based here, and would also assist in raising NZ's international profile, and in retaining talented and highly skilled NZers in the country" (p.128). The plan involves entering into alliances with overseas dairy multinationals through joint ventures or exchange of equity. But "neither the applicant nor the dairy Board has attempted to outline to the Commission the public benefits that might flow from these arrangements, nor explain why the proposed merger is required to meet them. On the basis of the present very limited information, the Commission is not able to attach much weight to the benefits advocated under this heading" (p.129).

Box 2: Summary of Preliminary Estimates of Public Benefits per year ($m)

Category	**Status Quo Counterfactual Claimed**	**Accepted**	**Deregulation Counterfactual Claimed**	**Accepted**
Cessation of payout bundling	20.0	0	0	0
Integration of mark'ing & proc	20.0	5-15	0	0
Reduction of duplication	113.6	21-41	123.2	35.5-60.5
Plant flexibility & rationalization	23.1	0	23.1	11
Deferral of cap expenditure	13.8	0	13.8	0
Single seller effect	0	0	40	0-20
Best practice transfers	N/Q	0	N/Q	0
Change in industry good res	0	0	29	0
Overseas trading premiums	N/Q	0	N/Q	0
Total	**190.5** N/Q = Not quantified	**26-56**	**229.1** (Determination, p.130)	**46.5-91.5**

Commission's summary: The Commission did not think that the savings would be secured in the first year but would be spread over several years. It could not accept on a preliminary basis many of the claimed benefits on several grounds: it was not convinced that they would not be gained in the absence of the proposed merger, insufficient information was provided to substantiate the argument, and there were likely to be pecuniary economies. The benefits obtained were likely to be between $26m and $56m assessed against the *status quo* counterfactual and $46.5m to $91.5m assessed against the deregulation counterfactual (Box 2). These fall short of the detriments assessed earlier (Box 3).

Box 3: Summary of Preliminary Estimates of Detriments and Benefits ($m per year)

Category	**Status Quo counterfactual**	**Deregulation counterfactual**
Benefit	26-56	47-92
Detriment	138-461	163-527 (Determination, p.131)

Author's Assessment

I had to ask myself what would have been the benefits I would have *expected* from the merger. Economies of scale, reduced transaction costs with the Dairy Board, rationalisation of peak production, better signals from unbundling, and dynamic energy and direction from offshore activities. So I was surprised that the Commission rejected the case for payout bundling, deferral of capital expenditure, and overseas competitive advantage. In other categories they took a more conservative line on the size of the savings than those submitted. In the event, the merger protagonists decided not to re-submit to the Commission but to approach Government directly with a different proposal that avoided further attempts at estimation and justification on quantitative grounds.

The quantitative analysis undertaken by the Commission (and the evidence submitted) demonstrated what the main economic arguments were for the merger proposal and where detriments were likely. These detriments, in turn, revealed the market failures where Government might be expected to intervene in terms of the national interest. In late January 2001, Government instructed officials to work with the applicants to resolve those issues which would require continuing regulatory controls, including reference to the Commerce Commission, before final consideration being given by Cabinet.

The Future Role of the Commerce Commission

On 21 December 2000, the Dairy Industry announced a fresh proposal for a merger to create Global Dairy Company (GDC). Key features of the new proposal included:

- avoidance of Commerce Commission scrutiny;
- the divesture of Dairy Foods to create competition in the domestic market;

- the creation of mechanisms for the establishment of the fair value of the capital invested by suppliers and the use of capital notes to pay out the capital investment of suppliers who wish to switch to other suppliers;
- the creation of a Shareholders' and Suppliers' Council to protect the interests of farmers
- provision after 3 years for the Commerce Commission to review both the domestic wholesale price and the fair value entry and exit price.

The major issue at this point thus concerned the future role of the Commerce Commission. The new proposal may well have met some of the objections raised in the previous Determination and change the balance of benefits and costs. But more importantly, there was now a *principle* at stake as to whether the merger regulations embedded in the Commerce Act could be avoided in this case?

Officials commissioned a review of the proposal from outside consultants particularly to assess the possible role of the Commerce Commission (Economics and Law Consulting Limited, 11 January 2001). The consultants' report, made available on the Internet, observed that the new proposal was more convincing than the arguments presented in 1999. It argued that the Dairy Board was an effective way to maximise the returns from international marketing when there were 400 cooperatives, but that now, this structure was inefficient. Further the costs of splitting the structures between two cooperatives are so high that a merger with the Dairy Board provides the only practical way of achieving vertical integration in the industry. The proposal claims that there are very large benefits from size, full vertical integration and industry wide coordination of manufacturing and marketing strategies.

The proposed changes to the merger plan in terms of the impact on the Commerce Commission's previous conclusions were assessed as follows:

- specification, for inclusion in legislation, of a method for fair valuation of capital on entry and exit to remove barriers to switching [positive]
- clearer and more credible specifications of the gains from the merger [positive]
- proposed Shareholders' and Suppliers' Council [weak positive]
- proposed for 3 year review by the CC [neutral]
- allocation of all quota rights to the merged company [negative]
- lack of a proposal for tradable shares and payment unbundling [negative] (Exec Summary p.iii)

The consultants concluded that the new proposal would not have a strong positive or negative impact on the views of the Commission. The proposal did not meet the key concerns of competition policy: the need to create a structure within which viable competition will be present within two years." The proposal does not represent the best deal for New Zealand"! The proposal should be scrutinised by the Commerce Commission for a second time. No doubt this information was available at the end of January when officials reported to Cabinet and were given instructions to negotiate with the protagonists of the proposal on a direct basis with no further reference to the Commerce Commission.

The Regulatory Issues raised by the Proposal

On 26 January the Minister announced that the government accepted the request by the proposed Global Dairy Company (GDC) to avoid the Commerce Commission and stated that a working party would be established to work out a joint approach to the necessary legislation[8].

In economic terms, the joint working party was charged with the task of putting forward acceptable rules for the conduct of the different markets which were crucial to the national interest view. In summary these were:

- provision for suppliers to choose their own processor;
- provision for entry of possible competitors at the processing level;
- restrictions on any monopolistic buying behaviour of the merged company; and
- maintenance of an unfettered market at the wholesale point of sale.

It was clearly emerging that freedom of entry and exit to the industry was crucial to official clearance of the merger. Suppliers must be able to change companies without loss so no impediment could be placed in the way of a competitive entrant at the wholesale level obtaining milk supply. The GDC proposal had already proposed mechanisms for the valuation of the capital invested by suppliers and the use of capital notes to make payment under certain conditions. Previously, under the cooperative system, easy access to the capital tied up in the cooperative was constrained by the legislation.

Officials commissioned an outside review of entry and exit conditions in their review of the GDC proposals post 26 January 2001. On 6 April 2001, consultants reported back to Government on mechanisms for ensuring fair prices for equity shares by the proposed Global Dairy Company (Report of Charles River Associates).

The consultants' view was that GDC had the necessary information to calculate the fair value exit and entry price for its shares. If there were no barriers to entering or exit, then GDC will have the incentives to calculate the fair value price and to implement it. Farmers have to be able to respond to GDC's price signals and GDC has to control entry *only* through the payout and exit-entry capital requirements that apply to all farmers.

Secondly, the GDC should, in its own interest, endeavour to set a wholesale price for milk that was fair to all suppliers and represented the true value of milk before processing. To set it too high or too low would risk too much milk coming in, on the one hand, or not enough milk as suppliers defected to new wholesalers, on the other. This was a fine judgement that the new company had to make. Once determined on an appropriate basis, the milk price and the fair capital values posted by GDC would provide the basis for the negotiation of contracts between GDC and other firms in the dairy industry.

The Regulatory Package

On the 9th April the Prime Minister and the Minister for Agriculture announced that Cabinet had approved the merger waiver. A comprehensive regulatory package had been developed in consultation with dairy industry officials in order to mitigate any potential negative consequences of the merger. *"The dairy industry is unique in its highly regulated structure, marketing and commercial arrangements. Any change will require legislation to give it effect. Exempting the merger from the business acquisition provisions of the Commerce Act would facilitate the early and certain reform of the industry's regulated environment"*.

The main points of the regulatory package are:

(a) removal of the Dairy Board's sole export rights and repeal of the Dairy Board Act;

(b) the application of the Commerce Act is retained after the merger;

(c) regulations will provide for entry processes, exit processes, provision for new entrants and provisions for share liquidity;

(d) protection for farmers in their role as suppliers;

(e) protection for NZ consumers and processors;

(f) duration of the regulations[9];

(g) export rights to designated markets;

(h) industry good provisions;

(i) other matters.

I will comment on those issues which have been raised in the previous paragraphs above.

Openness of milk supply market: The issue here is freedom of switching to another processor without value loss or penalties. "The regulations will require that the price for shares, milk and capacity notes for new entrants, and the price for exiters, must be the same, at any time and any given region. This is designed to produce a market based equilibrium between supply and demand for both processing facilities and milk". The merged company must accept all new suppliers who make application subject to capacity constraints as notified. Suppliers may exit by giving notice by the end of February in any year.

The new entrant or exiter will have the option to secure the entry and exit share prices .....as established by [an independent valuer] the Board. Exiting shareholders will have all their shares, capacity notes and supply redemption rights redeemed in cash or capital notes within 30 working days of the end of the season.

Monopsonistic buying of raw milk: The issue here is that, as the CC surmised, a merged company could pay out less than the "true" market price. The regulations will therefore provide for all farmers to be paid the same price for milk in a given catchment area or region. Contracts to supply must be available to all suppliers. A supplier may supply one or more processors. A supplier in a region must be accepted as long as his transport costs are no greater than any other supplier.

Monopsonistic control over supply to the domestic market: The issue here was the merged company could raise charges to domestic users of milk. The NZ Dairy Groups' shareholding in NZ Dairy Foods must be sold[10]. Mainland will be retained. Dairy processors will be protected by a requirement that the merged company sell a certain volume of raw milk each year at a *price equal to the price paid to suppliers.* It must also supply milk to anyone who seeks it in NZ (up to 110% of the volume of current sales). Provisions will be made for winter milk supply.

These provisions closely follow the Rivers report though it appears they had already been settled somewhat earlier. The key parameters are the exit prices for shares independently valued and the wholesale price of milk. The latter appears to be set at the old farm gate equivalent of each cooperative's area payout. It is not unbundled as the Rivers Report points out. Government has indicated that it would like to see a wholesale market for milk and could regulate to encourage the establishment of such a market.

The Rivers report thought that unbundling was not necessary to maintain efficiency in the industry. There are two cases. The first is bundling the return on processing in the payout to farmers. "This need not be predisposed to economic inefficiency because farmers will consider their supply cost of raw milk and their capital requirements as their (marginal) cost of entry. Entry may be too low, too high or just right depending upon a number of factors that include economies of scale . There is no requirement for products to be sold in competitive (commodity) markets for this result to hold. It remains valid *providing that the cooperative is earning a competitive return in processing marketing and product differentiation investment and there is open entry and exit*." (Report p.4).

The second form of bundling is where the returns from milk in high value markets are bundled together with returns from milk in commodity markets and result in a bundled price to farmers that will predispose inefficient over-production. But the efficient price to farmers is the price in its lowest value use. Any higher returns will be reflected in returns to processing and marketing and therefore reflected in the valuation of these activities. "Cooperative shareholdings are also tied to the milk that farmers supply, but if the value of any excess returns is *reflected in the capital required of farmers for entry or exit* then efficiency can be approximated under the cooperative structure".[11]

Comment

Public opinion (as discussed in the newspapers) appears to accept that the merged company will exploit the local market. "Consumers and food manufacturers want government law changes to limit price rises" (Evening Post April 14). "They say that with 95 % of dairy produce being exported manufacturing and consumers face hikes as the price of milk used domestically keeps pace with offshore markets". "Independent dairy manufacturers ....have asked Jim Sutton and the GDC Board to require the company to keep local prices about where they are now". This argument appears to be asking for some kind of wedge between export returns and local wholesale prices, an arrangement that has never happened in the past. At some stage, it was even suggested that a "Kiwi share" in the company be created to protect domestic consumers (Evening Post April 24).

The chairman of Dairy Foods (John Storey) fears market manipulation in the merger (Dominion April 18). Dairy Foods directors' main concern was that Global could advantage Mainland at the expense of Dairy Foods in access to milk, cheese, butter and ingredients and their pricing[12]. "Given the monopoly status of GDC, Dairy Foods will be a taker of price and terms, making it uncompetitive with Mainland". In an earlier statement Dairy Foods had argued that "GlobalCo has given itself room in its proposal to change the price it offers for milk from area to area, and industry sources fear it will use the provision to up the price of milk and strangle competition" (Dominion April 6).

The wider issue which has not been dealt with concerns the quantification of offshore benefits of the merger. GDC has kept to its own version of the benefits (not unrelated to the original McKinsey propositions). "The business case identifies annual benefits in the order of $310m by the end of the third year following the merger comprising the following:

- annual costs savings of around $120m from the elimination of duplicated facilities and activities. These savings are estimated to be achievable immediately but in the first year are offset by one-off rationalisation costs of around $100m;
- annual revenue enhancements and productivity improvements of around $70m from the second year of operation. This is due to greater economies of scale and scope through the integration of manufacturing activities with marketing and distribution functions;
- the merger also provides the industry with fresh strategic impetus and the ability to exploit new markets, technology and biotech opportunities. From the third year of operation, it is estimated that Global dairy will realise additional benefits in the order of $120m per year" (*Merger Summary* p.7).

There has not been a lot of material made available to back up these forecasts especially the third one. Unfortunately, the details of the original McKinsey propositions are not available either. We know that these considered overseas amalgamations and the introduction of foreign equity[13]. Of the latter there is no further word but of the former we know discussions have been going on between the Dairy Board and *Bonlac* in Australia. Perhaps there are a number of others?

I revert to my original position and put forward that it is the dynamic changes in offshore organisation and strategies that will be crucial to the success of the merger. Obviously, officials were thinking somewhat along similar lines and had commissioned another overseas consultants' report on international forces shaping the NZ dairy industry (www.maf.govt.nz/dairymerger.htm). In the second week of May a press release was put out only taken up by Radio NZ (as far as I heard). Promar International (UK-based) was asked to comment on whether GDC would make the NZ dairy industry better placed to compete internationally?.

After reviewing major international trends in milk markets, the consultants stressed that the major international companies were undergoing a major period of re-organisation and concentration. Their focus was on the US and EU markets. There was, therefore, a window of opportunity for NZ to develop market positions in developing dairy markets (Latin America, Asia and the former Soviet Union). The consultants stressed that this opportunity should be taken before it was closed off (by the major internationals). The additional point was made that the old (NZ) structure was too small to operate successfully in these developments. They mentioned the carrying of risks in different markets, resource availability, costs of goods and access to funds. GDC would be able [in all probability] to meet the key bases of competition, and start to achieve the minimum levels of scale required[14].

Now if McKinsey had isolated these factors we do not know. But having isolated these particular attributes of international markets, we are faced with a new counterfactual. *What would have happened to the industry's fortunes in the absence of any change in structures and strategic direction?* I think that this counterfactual points downwards[15] and thus alters the whole benefit/detriment balance pursued by the NZ authorities based on the evidence submitted. Neglecting this component is why the detriments exceeded the benefits in all the presentations for a period lasting over two years! This suggests to me that the proponents did not present their case in the most favourable light or could not quantify what they visualised might emerge.

Conclusions

1. The preservation of and the rules for an unfettered wholesale milk market appears to have been achieved between government and the company representatives.

2. The basis of fair entry and exit values on an independent but market-related basis appears to have been established.

3. Major importance attaches to future strategic directions taken by the marketing arm of the merged company, including the introduction of outside capital.

4. These directions are fundamental to any analysis of the detriments and the benefits of the merger in a national interest analysis.

5. There is not enough detail available to make a final judgement on the basis of the agreement for the company values pre- and post-merger, though the rules for agreement were agreed between the parties and the question resolved.

On the question of detriments to the national interest, I have the following opinions:

a. *the sole buyer of milk*: the price fall of 5-10% implies the company is prepared to cook the books and screw the suppliers;

b. *the sole wholesaler of milk*: the price rise in the domestic market of 10-20% implies the export parity formula would not be preserved or observed;

c: *operational slack*: the cost increases of 5-10% imply that the present factories under the new management regime would perform less well than they are at present;

d: *foregone efficiency gains from competition*: `lack of competition would dull the zest for innovation' suggests that the investment programme in new factories would be less productive than going at innovation separately.

In short, I think the detriments case was a pretty weak one and the proper case for the national benefits was never made!

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Appendix: The Mechanics of the Merger Process

In my previous paper I set out the analytics of the merger in terms of equal treatment of the shareholder members (Johnson 2000). This had been a sticking point between the respective cooperative companies. The evidence available in the public domain was very limited but hearsay indicated that the NZ Dairy Coop believed it was in a stronger position to bargain and thought that Kiwi suppliers should pay a premium to join the merged company. (This convention had already been utilised when Kiwi took over the Tui company). Later in 2000, the companies agreed on an independent assessment of the merger premiums which might be needed to bring "values" of the respective companies to equality.

I wrote a letter to the Evening Post in Wellington challenging an editorial view that the Kiwi company had effectively taken over the NZ Dairy company (See Box A1). The burden of my argument was that the accounting figures available all pointed in the direction of the NZ Coop having a 25-50 cent per kg ms higher "value" than the Kiwi company. To this the Editor replied (or one of her minions): "Figures, in our view, don't tell the whole story. Kiwi's dominance is in politics and philosophy - in other words, commercial imperatives will be of secondary priority". (Evening Post, December 22).

Box A1: Letter to Editor of the Evening Post

I refer to the second editorial on December 22nd concerning the merger of the two large dairy companies. You say Kiwi Dairies effectively took over the larger Hamilton-based NZDG in what dairying politicians say is the deal of the century. How can this be so when in the 1999-00 trading year Kiwi only had earnings before interest and tax (ebit) of $51.8m. compared with NZDG's of $293m.? Even allowing for the fact that Kiwi paid a higher price to its suppliers of 382 cents per kilogram of milk solids compared to NZDG's 375 cents, NZDG was operating at lower cost levels than the Kiwi company. In fact the aggregate earnings to shareholders, combining the ebit with the milk supply payment was 396 cents per kg for Kiwi compared with 426 cents for the NZDG company. While there are a number of problems to be solved, as your editorial notes, I do not believe that the Kiwi company is as dominant in the merger as some pundits would have it.

In December, 2000, the two companies published a Merger Package, where, among other things, the procedure for an independent valuation was set out (Merger Agreement, pp.5-6):

(a) “Arthur Anderson has been commissioned to determine the respective value ranges of each company expressed as a value range per kilogram of estimated milk solids (ms) supplied to each company by its supplying share holders in the season ending on 31 May 2001. The valuation will take account of:

(i) maintainable annual earnings before finance charges based on historical data provided by each company, and an appropriate P:E multiple determined by reference to a range of companies that are comparable to NZ Dairy and Kiwi, and further adjusted by subtracting the relevant company debt;

(ii) present values of estimated future cash flows of each company based on current information provided by each company and projected forecasts on the basis of common assumptions for the two companies; and will incorporate adjustments for one off items, differences in accounting policies, differences in forecast assumptions and agreed post balance day items.

(b) If there is a difference between the respective mid points of those valuation ranges of:

(i) 50 cents or more, then the Agreement will terminate.....

(ii) 20 cents or less, then shares will be issued by GDC [equally] ....on the basis of one share for each kg of ms supplied.......

(iii) between 20 and 50 cents, then the parties shall make such payments .....so that the difference calculated as "A" in the following formula is eliminated....:

A = (B - C) * D

where

B = ...mid point of the value range ...[between the parties]
C = 20 cents
D = estimated total no of kgs of ms supplied......by the party with the lower mid point value......season ending 31 May 2001."

Readers will recall the mechanics for this were set out in my paper to the Society last year. The Arthur Anderson Report (AA) was released on January 27, 2001, and they found "Dairy giants' values nicely in sync" (Evening Post, 27 Jan). AA valued Kiwi as being worth between $4.52 and $4.96 per kg of ms supplied, and NZDG as being worth between $4.63 and $4.95 per kg ms. AA "used two methodologies to value the cooperative companies whose annual accounts independent accountants and economists find difficult to analyse because of their complexity and cooperative nature" (Dominion). "The chairmen say that under one methodology, Dairy Group was valued 1 cent a share higher than Kiwi, while the other measure put Kiwi 3 cents ahead. When the values were expressed as a value range ......one methodology put the Dairy Group 5c ahead and the other put Kiwi 4 cents ahead."

In the Evening Post report it was stated *" ...AA directors... said the outcome wasn't surprising given the existing state of the industry under which the export production of both companies was exclusively marketed through the Dairy Board and the two companies accounted for almost all production and had strong incentives to match the other's performance."* This appears to refer to the Kiwi case that the Dairy Board payout should be treated as common and the *value added* by each company should only be taken into account (see Box A2)(see Proceedings pp.54-58).

Box A2: Kiwi View of Comparative Performance

"After presentation of the paper at Blenheim, the Kiwi Cooperative Dairy Company have pointed out that the two measures of EBIT used in the paper are not comparing like with like. They have suggested that since the NZ Dairy Board Commodity Milk price (CMP) is common to both companies, a suitable comparison of performance would be the margin earned above the CMP. In terms of the 1998-99 balance sheets, the margin per kg of milk solids turn out to be remarkably similar, viz.:

	Kiwi		**NZDG**	
	$m	**cent/kg**	**$m**	**cents/kg**
Margin above CMP	184.3	73.8	301.2	78.0
plus Interest	43.5	17.4	29.7	7.7
less loss on year	(14.0)	(5.6)	(7.9)	(2.0)
Total margin before Interest	213.8	85.5	323.0	83.7”

Since then the annual reports for 1999-2000 have become available. The comparative estimates are:

	Kiwi (1999-2000)		**NZDG (1999-2000)**	
	$m	**cent/kg**	**$m**	**cents/kg**

Margin above CMP	317.1	84.0	439.1	77.0
plus Interest	44.9	11.9	43.5	8.4
less profit/loss on year	1.3	0.3	0.8	0.15
Total margin before Interest	363.5	96.2	481.6	85.5

My view was that the EBITs were so different between the companies that it was unlikely that Kiwi had any advantage over NZDC. It now appears that in terms of whatever data that the companies supplied, and the forecasts of earnings therein, over whatever period, and whatever base, that there is little difference in the discounted value of future earnings per kg solids supplied between the companies. Without further access to the data supplied, I can really go no further than state that *past* EBITs all pointed to an advantage for NZDC. Certainly, if one accepts the Kiwi model based on the Dairy Board payout base, then the prospects for *value added* may not be so different for the two companies (as my end-note indicated).

End Notes

[1] Prepared for the New Zealand Agricultural and Resource Economics Society Conference, Blenheim, July 6-7, 2001. John Pryde has provided helpful comments and Bryan Smith with documentation.

[2] Consulting Economist, Wellington (johnsonr@clear.net.nz)

[3] One market not examined is that of the demand for dairy farming land. If bundled payouts disguise the true return to the land factor, then an artificial demand for land suitable for dairy farming is created compared with other land uses. The merger proposal includes the creation of a market for the merged companies' shares. To a certain extent, this could amount to a *de facto* unbundling. See footnote 11.

[4] The applicants, assisted by NZIER, made submissions on these questions, and may indeed have defined the markets I am discussing here.

[5] This seems to be a transfer from the farmers as suppliers to farmers as owners of the cooperative.

[6] They thus discounted the generally accepted hypothesis that the transfer takes place at the average price of export milk (p.100).

[7] Added by the Commission.

[8] This was not without dissent. Treasury reports at the time were discouraging and a number of prominent personalities expressed their views in the papers (e.g. Tony Baldwin). From what I can gather, Treasury objected because (a) it would set a precedent (b) would increase pressure from other industries (c) would increase the risk of bad decisions being made, and (d) ignored the Commerce Commission when it was capable and responsible for carrying out the necessary analysis (E. Post, 21/05/01).

[9] The regulations restricting GDC's activities would be lifted on an island by island basis where practical, once GDC's market power was reduced. The thresholds in terms of output are actually stated in the Cabinet Paper Two (at para 25).

[10] I wonder if this was really necessary given the freedom of switching. Perhaps it was needed to supply a certain critical mass of independent processors at the early stages of the new market situation. Given that officials forced the industry to allow competitive processing, did the industry really need to offer up Dairy Foods as a pawn? A new processor will not have access to quota markets for 6 years.

[11] This assumes new entrants are paying an `economic' entry fee (shares). This seems to effectively `unbundle' the payout at the margin. In turn, it will be new entrants who will drive asset prices such as land. One exception is those existing farmers who are paying high prices for additional land.

[12] It is not clear if Dairy Foods is able to buy milk directly from farmers; who will buy the shares given up; and whether it will have freedom to export. Its shares are not traded.

[13] The dairy industy strategy formed in the late 1990s (developed in conjunction with McKinsey and Co) identified three things which must be done:

- defend and enhance our competitive advantage as a low cost producer of dairy products;
- improve the performance of existing businesses;
- pursue aggressive growth opportunities.

With regard to the latter the strategy identified global opportunities that the industry could capture. The key elements were to develop a global ingredients business to dominate global niche markets and to optimise the ingredients network by selling both NZ and non-NZ dairy products. The project team identified the need for the consumer business to be operated independently of the ingredients business with the flexibility to attract external equity in the the future if that became desirable (*Merger Summary p.5).*

[14] In Cabinet Paper One, it states at para 18 :"On balance, the GDC merger and the associated regulatory package is better than a continuation of the current status quo, a view supported by research commissioned by officials into the dynamics of the global dairy industry".

[15] Officials think so too: "The available evidence indicates that the proposed GDC merger would produce greater net benefits than the current unsustainable industry structure" at para 5.

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