

Memo

To: Peter Fraser, MAF
Date: 26 June 2008
From: Lewis Evans, James Mellsop and William Taylor
Subject: Commerce Commission Submission on Raw Milk Review

1. Introduction

The Commerce Commission has filed a submission (dated 4 June 2008) in respect of the MAF-led review of the Dairy Industry Restructuring (Raw Milk) Regulations 2001 (“**the Raw Milk Regulations**”). The Commission expresses a number of concerns in respect of the proposed options, and you have asked for our comments on these concerns.

2. Summary of the Commission’s Position

The Commission takes the view that the very large market share of Fonterra means that competition must be encouraged further, and by regulatory means if that is what it takes. Broadly, in our view the Commission has not paid sufficient attention to the cooperative organisational structure of Fonterra or to overall efficiency issues. Under the Commerce Act competition is the means to an end, rather than the end itself.

In Appendix A we list the 19 specific recommendations of the Commission and briefly comment on each of them. In the text that follows we comment on the key issues that underlie them.

3. Background – Fonterra in the New Zealand Market

The literature on cooperatives versus investor-owned firms is extensive. All we need note here is that cooperatives do have different characteristics that solve particular contracting and market power problems, that supplier cooperatives have their best chance of success when the input supplied is homogeneous and that the best way to resolve the question as to whether cooperative or investor firms perform relatively well is for them to compete on a level playing field.¹ Their structure means that cooperatives face governance problems as between shareholders and management, and over capital raising and, relatedly, investor scrutiny.

¹ The playing field is level in New Zealand with the exception that cooperative firms do not have such strict information-provision requirements relating to the issuance of securities.

While Fonterra has a huge share of the raw milk market, it faces competitive tensions that are exaggerated by the Dairy Industry Restructuring Act 2001 (“**the DIRA**”). Fonterra’s suppliers and shareholders are one and the same and so their switching to another firm is a greater threat to the performance of Fonterra than it would be for an investor firm. While Fonterra's structure means that its monopsony power in the market for raw milk with respect to its suppliers is eliminated, it still has every reason to vigorously compete with other processors.

Fonterra exports some 95% of the milk it processes, and this means that a public benefits test is particularly important in considering competition policy issues. This test emphasises economic efficiency which includes producers’ surplus; in this case surplus arising largely from foreign operations. This remark is not to downplay the desirability of a domestically competitive market, but rather to acknowledge that there is an unknown desirable point in the tradeoff between domestic competition and foreign competitiveness that affects the nature and degree of domestic dairy competition. It is a trade-off to be discovered rather than foisted on the economy, and one that was recognised at the time the DIRA was formed, and indeed motivated the structure of it.

The Commission does not give recognition to these issues. For example, paragraphs 68 and 69 of its submission do not mention the export issue, and seem to be suggesting that entrants be assisted because Fonterra has, the Commission presumes, economies of scale.

Fonterra has a large share of the raw milk market and is organised as a network industry and yet has little in common with investor owned network industries. Its confluence of investors and suppliers, its sales into foreign markets and absence of direct network externalities render it quite different. Its organisation as a network industry reflects its requirement as a cooperative to treat suppliers equally unless it is demonstrably costly to do so, and the efficiency of large logistical networks. The equal treatment of member suppliers is often a critical element of governance of a supplier cooperative, and can constrain its set of strategies.

Fonterra’s market share is approaching the trigger points in both the North and South Islands, at which point the relevant provisions of the DIRA expire. There has been considerable entry of powder-milk processors in both islands, as well as firms such as Open Country Cheese. These entrants have been using milk supplied by Fonterra under the DIRA, and from contracted suppliers. The position of Fonterra is illustrated for this period – using public information – in Appendix B. It is summarised in Figure 1.

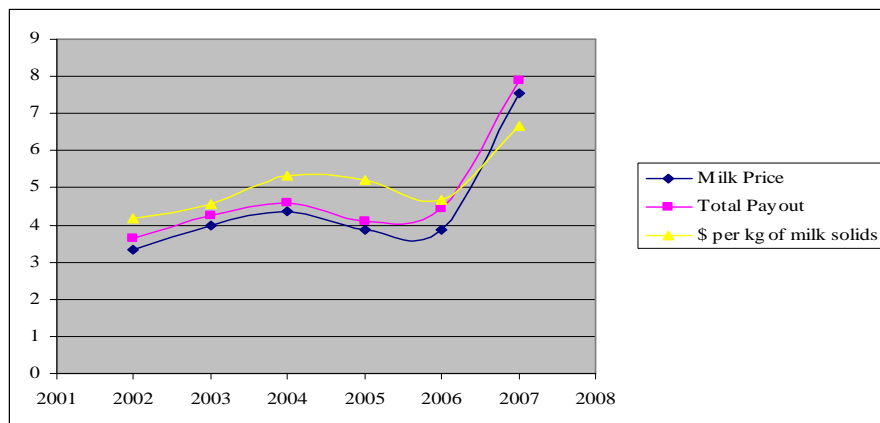
Figure 1: Fonterra Supplier Returns

Figure 1 illustrates that:

- The dividend payment has been very small relative to the milk price (which, incidentally, should not be taken as a critique of its level or of manufacturing performance);
- The milk price to 2006² showed relatively little variation, yet it is variation that is large relative to the quantum of the dividend. The change in the milk price beyond 2006 reflects the jump in milk-product prices in foreign markets; and
- The total return to suppliers per kilogram of milk solids is the total of the milk price, the dividends and the capital gain in the share value. It is the total \$ line in Figure 1 and it illustrates that the returns to suppliers have been smoother than the milk price and dividend imply. In 2007 the higher milk price was offset by a somewhat lower dividend and a fall in the share price.

Figure 1 reflects the *modus operandi* of a supplier cooperative; it is constrained by the supplier-investor relationship. For example, it does not have a war-chest of profits that it can use in competition: indeed to get such backing would require investment by the shareholder suppliers, who themselves are (particularly under the DIRA) free to switch processors and are part of the competitive tension the cooperative faces. As mentioned, it is particularly constrained by the overall need to treat suppliers equally.

To be concrete, suppose that there is concern that a supplier cooperative has the resources to fund pricing strategies aimed at limiting entry of other processors by limiting their acquisition of

² The milk price is calculated as the commodity milk price that is the residual payment for milk after all manufacturing and distribution costs have been subtracted from the final sales price. It purposefully sets out to mimic the farm-gate price that would arise for raw milk in a competitive dairy market.

suppliers. It can only do this by paying an excessively high milk price to suppliers. However, it is constrained from doing so by the revenue generated in foreign markets, its costs of production and distribution. As Figure 1 shows in the case of Fonterra, there is very little scope to reduce the dividend to raise the milk price. Further, if it does lower the dividend then the share price falls and the suppliers suffer capital loss as a consequence. The effect of such a capital loss will depend on the expectations, position and intentions of actual and potential suppliers and it is difficult to forecast. It may exacerbate the cooperative's position if it induces supplier expectations of capital loss and consequent exit – or obversely entry, if capital gains are anticipated. However, the capital write down will introduce questions about the cooperative's standing in capital markets potentially further constraining its investment and competitive strategies.

4. ECPR

The Commission is concerned that in the absence of the Raw Milk Regulations, Fonterra would be able to charge ECPR under the Commerce Act, and that in the Commission's view would lead to a high access price and reduced entry.

Firstly, we note that a high ECPR may well be justifiable on the grounds of a public benefits test; since it may well be efficient.³ It may be at the margin that the ECPR is substantial, and concomitantly that Fonterra is competing to utilize fully its existing plant.

However, with respect to competition it is not at all clear that Fonterra could actually charge ECPR. Unlike the (traditional) bottlenecks in telecommunications or rail (for which ECPR was designed), in the present case "bypass" is feasible (and economic), and indeed constantly occurring, i.e., farmers are switching to independent processors ("IPs").

Suppose that the farm gate price was \$7, and the ECPR price to an IP was \$10. Then it would be in the interests of both the IP and farmers to agree on a supply contract at some price between \$7 and \$10.⁴

Admittedly this type of bypass is facilitated by the entry and exit provisions of the DIRA, and the Commission is putting its statement in the absence of the DIRA. Nevertheless, it is not at all obvious that Fonterra will be able to impose entry and exit restrictions on suppliers absent the DIRA under the Commerce Act, in which case Fonterra will have supplier constraints on its milk offer prices.

³ The ECPR is designed so that only firms that are at least as efficient as the incumbent will enter.

⁴ A modified version of the ECPR, known as M-ECPR, had been proposed to take account of the situation where there may be alternatives to obtaining the input from the incumbent. See Sidak, J Gregory and Daniel F Spulber (1997) "The Tragedy of the Telecommons: Government Pricing of Unbundled Network Elements under the Telecommunications Act of 1996", *Columbia Law Review*, 97, 1081-1161.

Furthermore, it seems to us that the Commission overstates the difficulties of entry into milk processing – we understand that IPs such as OCC and NZ Dairies are signing up material numbers of suppliers, although it is possible (indeed, likely in the case of OCC) that those firms have benefited from the presence of the Raw Milk Regulations. The Commission quotes a milk powder plant of an entrant at \$90m as if this and its specific use were a material barrier to entry (footnote 6). However, the fact that so much construction of this type is occurring suggests that this is not a barrier. Furthermore other entrants have constructed plants of \$40m, and firms with sizable financial backing and logistical networks have entered. Entrants seem to have obtained sites for which resource consents have been (relatively) readily obtained in key dairying regions of New Zealand.

5. Tensions on Fonterra

The Commission has concerns with the proposal that the regulated price should be set at the farm gate price (at paragraphs 36, 38 and 39), because it believes that Fonterra would manipulate the farm gate price in order to raise rivals' costs. The Commission argues that (paragraph 36):

“... Fonterra’s payouts are fully fungible between the dividends paid to shareholders and the price of milk. This means Fonterra’s shareholders would be indifferent if it lowered dividend payouts and commensurately increased the farmgate price of milk.”

We have addressed this possibility above, where the main points are:

- There is little scope for Fonterra to do so as the dividend is very small relative to the milk price; indeed it is small relative to the volatility in the milk price over time. It is unlikely that a potential processor's entry decision would be based upon other than competing against a milk price as high as total Fonterra payout; and
- It is unlikely that Fonterra's shareholders would be indifferent, because changes in the farm gate milk price also affect the value of Fonterra's shares. In particular, an increase in the farm gate price would lower the NPV of Fonterra and therefore the fair value of its shares.

The latter point is important also for the Commission's submission regarding "extraordinary" items (at paragraphs 40 to 47). There is no free lunch for the owner-suppliers of Fonterra; they either benefit/lose from the milk price or from share returns. From an economics perspective, we know of no efficiency or even competition argument that extraordinary losses should be translated into the milk price as opposed to changes in the share price. The argument reviewed by the Commission in paragraphs 40 - 47 is symptomatic of debates about regulated prices. This issue would not arise under MAF's proposal that the price simply be the farm gate price Fonterra pays its suppliers.

6. The "X"

The Commission objects to the addition of an "X" over and above the farm gate price, primarily on the basis that this would make entry harder.

In our view, the primary benefit of the auction would be to allocate excess demand so that raw milk ends up in the hands of the most efficient users. An upshot of that may be a premium (X) over the farm gate price, but this is the rationing mechanism at work.

Regarding the X in respect of options 1 and 2, it is not clear that the Commission has correctly interpreted MAF's rationale for it. For example, the Commission equates the "supply chain management costs" to transport costs, even though the consultation document states that this is not the case.

Nevertheless, the Commission raises some useful questions in respect of the role of the X under options 1 and 2, e.g., the difficulty of determining it. We interpret the rationale for the X to be a reflection of the price of raw milk in a competitive market – more specifically, X represents the switching and transaction costs that would exist in a workably competitive raw milk market, perhaps including a buy-sell price spread. However, the Commission's view is that the objective of the Raw Milk Regulations is to assist entry, which would be undermined by adding the X.

7. Changing the Triggers

The Commission suggests that the triggers for the repeal of the relevant provisions of the DIRA should be altered, so that the regulatory strictures apply until Fonterra has a lower market share than is currently implied (e.g., 87.5% in the North Island).

It is important to keep in mind the long-term costs of undoing what was in effect a regulatory bargain between the Government and Fonterra. Only if the benefit was demonstrably substantial should it be contemplated.

While we have some sympathy for the Commission's view, we note that because Fonterra is a cooperative and exports 95% of its milk throughput, the standard competition thresholds may well not be efficient to apply, and we have seen no analysis of this. It would, for example, have informed analysis in this context for the Commission to have considered the set of open entry and exit strictures it thought would be permissible under the Commerce Act at the market shares of the triggers. Further, we wonder whether it is desirable to treat all non-Fonterra processors as one homogeneous group.

The Commission seems to assume that Fonterra should continue providing milk at regulated prices to IPs, beyond the present trigger points. While we have a concern that firms such as Goodman Fielder (which are important for domestic competition) may be placed in a difficult bargaining position "post-DIRA" while Fonterra continues to have a high market share (the

Commission itself alludes to this at paragraph 17), we are much less concerned about firms competing for milk to process and export.⁵

All entrants to dairy processing would have known the essential terms of the DIRA and would be imprudent to not factor in the limit to regulated milk availability and the possible expiry of the DIRA; this is true for all IPs, and particularly for those seeking significant throughput to meet processing for expanding exports. While there may be an argument for, perhaps grandfathered, contracts for domestic fresh milk processors, any broader argument that regulated milk should be extended beyond the triggers has not yet been made; given the characteristics of the industry already described. Significant competition to Fonterra is already arising and the present trigger points allow the concept of the mega cooperative to be tested by competition.

It is a legal judgment whether Fonterra would be able to increase its market share back above the trigger levels post-DIRA, without the DIRA restrictions re-applying. We would be unlikely to support this irreversibility of the removal of the DIRA.

8. The Auction

The Commission expresses a concern that an auction (option 3) would lead to prices above the farm gate price. The Commission's concern seems to be that any premium paid pursuant to an auction would raise the cost of entry, which would "conflict with the role of the regulated price in facilitating the contestability of dairy processing markets" (paragraph 53).

However, assuming that the quantity of regulated raw milk is fixed, there is no conflict – the auction mechanism would simply ration excess demand to the most efficient IPs, at a price in respect of which they can enter and still expect to make a profit (otherwise they would not pay it). In other words, the auction does not upset contestability, but rather ensures that only the most efficient firms enter.

The Commission is also concerned that the introduction of an auction would substantially change the Regulations, "increasing uncertainty, and deterring entry and expansion by independent processors" (paragraph 89). However, some sort of change is necessary, given that the Regulations as currently drafted do not contain a mechanism to deal with excess demand.

The Commission proposes that a regulated quantum of milk should be allocated among those that demand it; but it proposes no mechanism that will ensure allocation of milk efficiently in the event of excess demand.

⁵ We recognize that the division may be somewhat arbitrary, but there are reasonable ways of drawing the distinction.

9. Commission's Alternative Scheme

The Commission proposes an administrative form of allocation mechanism. At this point we have not carefully analysed the Commission's proposed allocation mechanism against other potential forms of administrative allocative mechanisms. Rather we simply note that if practical, an auction is likely to lead to a more efficient allocation of property rights, and in our view an auction is practical in the present case.

In contrast, administrative mechanisms are subject to gaming and lobbying, often resulting in material inefficiencies.

The fact that changes to the existing rules are being suggested demonstrates that regulation is seldom long-lived and therefore credible, and it is most unlikely that new rules would have these features.

A further advantage of an auction in the present case is that it would allocate a scarce resource in a way that provided the basis of transactional processes that have some chance of usefully surviving beyond the end of the DIRA. Interestingly the Commission appears to accept this – see paragraph 97.

There may continue to be a demand for the auction, but the decision to force IPs to sell raw milk through the auction platform post the DIRA would need to be considered very carefully, as in fact would a decision to continue regulating Fonterra post-DIRA. One option that has been floated is to create a dairy “universal service obligation”, which would involve all large dairy processors (Fonterra and large IPs, probably the exporting ones) selling a certain quantity of milk through the auction platform. It may well be that the only group for which regulation might be efficiently promulgated at times beyond when the triggers are met, is that of the non-export focused firms mentioned above. Such a group may or may not justify the cost of an auction since their demands are relatively small.

Appendix A. Specific Responses to Commission Recommendations

A.1. Recommendation 1

“The Review should first and foremost keep in mind the goals of the DIRA and the Regulations: the enhancement of the contestability of domestic dairy markets.”

Response: The goals may actually be broader than this and, in particular, include the ultimate goal of economic efficiency, but enhancement of the contestability of domestic dairy markets is a key one.

A.2. Recommendation 2

“Sections 147 to 150 of the DIRA should be reviewed, and the competition triggers should be revised upwards.”

Response: We consider it reasonable to pose this view, and we have particular concerns about the bargaining position of firms such as Goodman Fielder post-DIRA. However, we note that:

- There are very likely be long-term costs from undoing what is in effect a regulatory bargain between the Government and Fonterra; and
- Significant competition to Fonterra is already developing and the level of competition even at existing triggers yields information about the desirable structure of the New Zealand dairy market. Put another way, the application of the Commerce Act at the triggers has not been analysed and so the case for revision has not been clearly made.

A.3. Recommendation 3

“Once the triggers set out in sections 147 and 148 of the DIRA are reached, a further review of the Regulations should be signaled.”

Response: Keeping in mind the long-term costs from undoing what is in effect a regulatory bargain between the Government and Fonterra, if the Regulations are to be reviewed, it would provide more certainty to do so now, rather than wait until the triggers are reached.

A.4. Recommendation 4

“Once the triggers set out in sections 147 and 148 of the DIRA are reached, access to regulated milk should be phased out gradually - over a period of five years, say - rather than be withdrawn abruptly.”

Response: Exporting IPs have entered understanding that access to regulated raw milk will cease once the triggers are reached, and accordingly a phase-out period seems unnecessary (keeping in mind that a phase-out would not be costless, being an amendment to what is in effect a regulatory bargain between the Government and Fonterra). We do however consider that there is a legitimate issue in respect of ongoing access to milk by competing domestic firms such as Goodman Fielder.

A.5. Recommendation 5

“The price of regulated milk should not be equated with Fonterra's farm-gate price unless Fonterra's ownership structure changes in such a way that true unbundling of payments for equity and raw milk occurs.”

Response: Fonterra's farm gate price is a reasonable price for regulated milk. Fonterra has little ability to manipulate this price in order to raise rivals' costs because of its cooperative structure and:

- The dividend is very small relative to the milk price; indeed it is small relative to the volatility in the milk price over time. It is unlikely that a potential processor's entry decision will be based upon other than competing against a milk price as high as total payout; and
- It is unlikely that Fonterra's shareholders would be indifferent to a lowering of the dividend in exchange for a higher milk price, because changes in the farm gate milk price also affect the value of Fonterra's shares. In particular, an increase in the farm gate price would lower the NPV of Fonterra and therefore the fair value of its shares.

A.6. Recommendation 6

“The wholesale milk price formula, suitably adjusted for greater clarity, should be retained in the Regulations.”

Response: We disagree. The wholesale milk price formula has been contentious, and the farm gate price forms a more appropriate benchmark.

A.7. Recommendation 7

“Regulation 3(1) should be amended to read:

new co-op retention -

(a) means the after-tax profit or loss generated from the milk processing activities of new co-op for a season that is retained by new co-op and not paid to shareholding farmers; but

(b) does not include retentions for extraordinary items.”

Response: The provisions of regulation 3(1) would be irrelevant if the regulated price becomes the farm gate price.

A.8. Recommendation 8

“In the interests of promoting the contestability of domestic dairy markets, no X-premium should be added to, or incorporated into, the price of regulated milk.”

Response: In respect of option 3, the X is simply the result of the (auction) rationing mechanism - the auction does not upset contestability, but rather ensures that only the most efficient firms enter. In respect of options 1 and 2, determining the appropriate X would be difficult, and we are sympathetic with the Commission’s concerns.

A.9. Recommendation 9

“The total volume of regulated milk should be raised to 750 million litres per annum.”

Response: It is not clear that raising the total volume of regulated milk will lead to greater efficiency, or indeed greater (domestic) competition. We also note that it does not necessarily follow that Fonterra’s power in the domestic output market is increasing just because the quantity of regulated milk is decreasing as a percentage of total milk production. It might be that, for example, all of the increased milk production is being exported, and that Fonterra’s share of the domestic market has remained static. In fact, much of the entry and use of regulated milk (at least on a large scale) has been by exporting IPs.

It is important to note that IPs also purchase unregulated milk and thus a focus purely on regulated milk does not necessarily portray the true state of the relevant markets. For example, it is possible that through acquiring their own farmers, the IP share of the total milk supply has gone up despite the fact that the regulated share has gone down.

A.10. Recommendation 10

“The size of the total processor cap should be reviewed periodically to ensure that it represents roughly 5% of the total volume of milk collected by Fonterra.”

Response: See our comments above.

A.11. Recommendation 11

“Allocation rules to manage excess demand should be set out in the Regulations, and an expert regulator should be given discretion to adjust these rules in response to any unforeseen circumstances, to best achieve the purpose of the DIRA.”

Response: The devil is in the details and in the administration of them: the Commission suggests a variety of allocation rules, but none that would ensure the efficient rationing of excess demand. As is suggested by the evidence in the meat industry (in respect of quota), administrative allocations of property rights can lead to material inefficiencies and gaming. If practical, an auction is a preferable mechanism to allocate excess demand, and we think that an auction is practical in the present case.

A.12. Recommendation 12

“The Review should recognise that it takes time for independent processors to build the scale necessary to source unregulated milk economically, under commercial terms.”

Response: It is not clear to us that this is correct – our understanding is that at least some types of IPs are able to source milk very early on in their development. However, we have not analysed the evidence carefully.

A.13. Recommendation 13

“To reduce dependency on regulated milk over the long-run, the Regulations should provide each independent processor with an allocation of default milk that gradually declines to zero over time.”

Response: This would not be consistent with an auction, which is our preferred allocation mechanism. Further, we question whether the implementation of this rule would be sustainable.

It is also useful to consider the different types of IPs. Most of the large scale entry since the DIRA has been by export-focused IPs, which have entered in the knowledge that access to raw milk would end abruptly when the triggers are reached. On the other hand, Goodman Fielder is Fonterra’s key domestic competitor, and is much more likely to be detrimentally affected by an abrupt end of access to regulated milk. It would also be detrimentally affected by the Commission’s proposal to gradually reduce allocations to zero.

A.14. Recommendation 14

“The “own-supply” rule should not be implemented.”

Response: At least conceptually, access to raw milk can be difficult for an entrant IP because:

- Dairy processing assets are sunk – therefore investors will be reticent to invest without a certain raw milk supply; but
- Suppliers also have sunk assets and a non-storable output, and they will be reticent to contract with an entrant before that entrant’s plant is built and a track record established.

Once a firm has 10m litres of its own supply, it is likely to have its plant built and a reputation with suppliers. Therefore we think that restricting any supply of regulated milk to IPs that have not reached this threshold would be a legitimate policy decision.

The proposition that IPs would have the incentive to reduce their use of “own supply milk” implies that IPs are not indifferent between “own supplied” and regulated milk. If this is true, it would suggest that regulated milk is priced incorrectly. If milk is priced correctly and there is a “level playing field” then this concern disappears because established IPs will be indifferent between regulated and “own supplied milk”.

A.15. Recommendation 15

“New entrants should be allowed to access 75 million litres of regulated milk for three seasons, with their allocations declining gradually each year beyond the third season.”

Response: If an administrative allocation mechanism is to be adopted, then it is appropriate to reserve a certain proportion of the milk for new entrants.

A.16. Recommendation 16

“No auction mechanism should be employed to allocate regulated milk at this point in time.”

Response: We disagree with this recommendation – if there is excess demand for regulated milk, then an auction is the most efficient method for allocating the milk to the highest value users. In the present case, an auction is also practical.

A.17. Recommendation 17

“A process for smooth transition away from regulation should be put in place, in anticipation of the expiry of the Regulations.”

Response: The Commission proposes an auction platform, and we agree that this approach has merit. The Commission has not really analysed the effect of competition law strictures on actions and contracts of Fonterra with a large market share. This will be important for the transition.

A.18. Recommendation 18

“Regulation 9(2) should be amended to read:

If new co-op does not use a cost of equity capital rate in calculating the price of a co-operative share, the Commission must set a discount rate for calculating annualised share value and new co-op must use that rate.”

Response: At this stage we have not carefully considered this recommendation.

A.19. Recommendation 19

“The 20% rule should be adopted.”

Response: At this stage we have not carefully considered this recommendation.

Appendix B. Fonterra Returns to Owner Suppliers⁶

Figure 2: Composition of Total Payout per kg MS

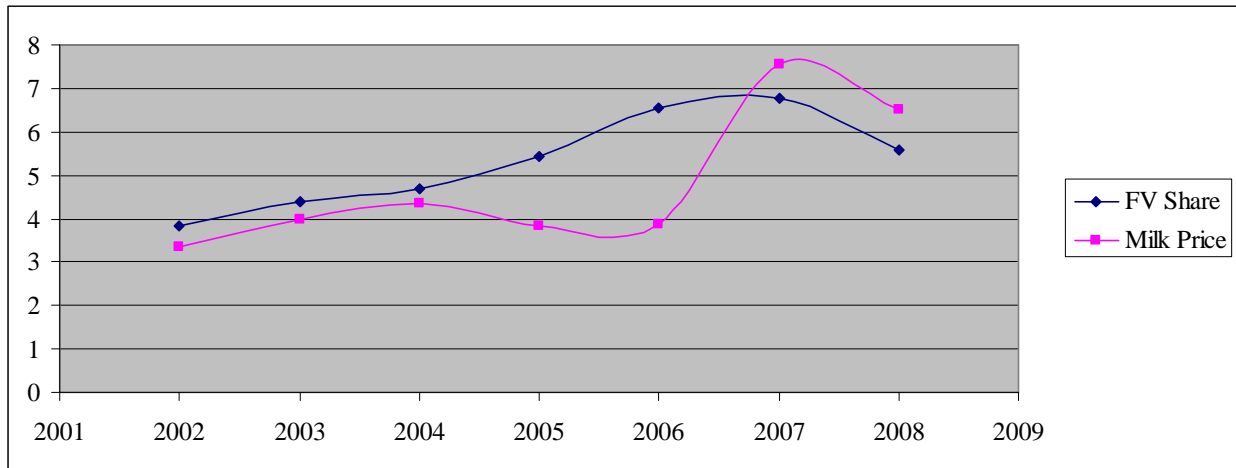


Figure 3: Total Rate of Return to Supplier Investment in Fonterra Processing (dividend plus capital gain)

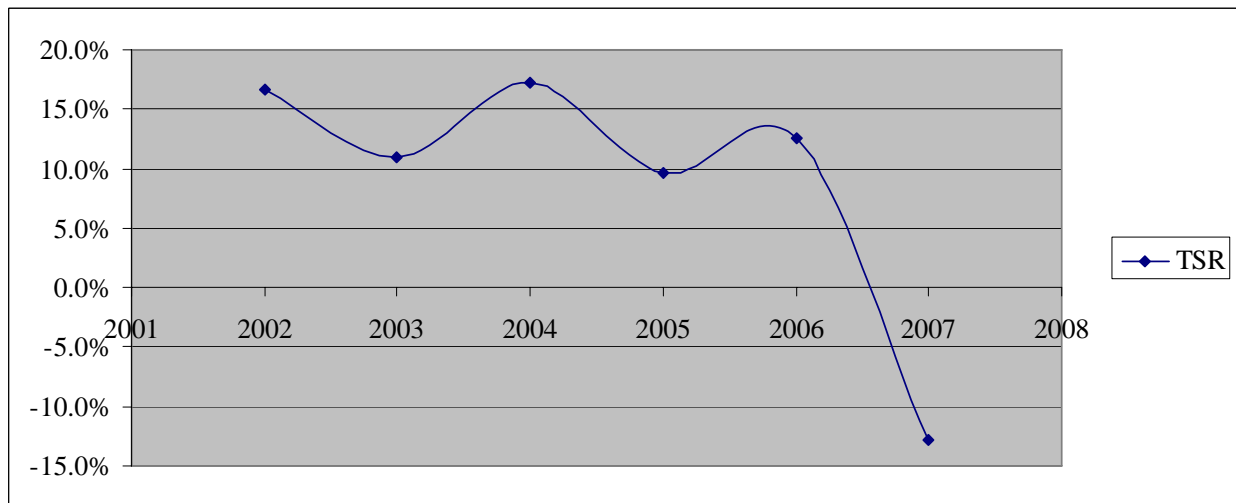


Figure 4: Total Annual Fonterra Financial Reward for Owner-Suppliers

⁶ The TSR figures are provided in Fonterra's 2006/2007 annual report. The TSR for the 2007 season uses the recently announced fair value share price for the coming season. The milk price and dividend for next season are calculated by taking their historical average % of total payout and applying this to the forecast payout of \$7.

