Review of the State of Competition in the Dairy Industry

Comments following submissions on substantive issues

Report to Open Country Dairy

August 2015

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1 Introduction

The Commerce Commission (Commission) has received submissions on its second consultation paper in relation to substantive issues as part of its review of the state of competition in the New Zealand dairy industry (substantive issues paper).[1] Submissions commented on both the state of competition as well as how the Dairy Industry Restructuring Act 2001 (DIRA) should evolve to most efficiently regulate the dairy industry.

We submitted a report on the Commission's process and approach paper (our July report) that provided our opinion on how the Commission should analyse potential changes to dairy industry regulation under DIRA.

Open Country has now commissioned Castalia to assess how submissions on substantive issues impact on our view of the design and application of the following core components of DIRA:

- Open entry and exit (and non-discrimination)
- The milk price regulatory oversight regime.

Table 1.1 provides a summary of our findings along with their key implications.

Table 1.1: Summary of Findings

Findings	Implications
There is not yet workable competition in the farm gate and factory gate markets	We agree with submissions that the farm gate and factory gate markets are not yet workably competitive, and that Fonterra retains significant market power across much of the country. As a result, deregulation (in particular, removing DIRA's open entry and exit provisions) is likely to reduce efficiency compared to the outcomes expected under DIRA. This is particularly given the ways Fonterra would be expected to act.
No changes are required to open entry	There are significant competition benefits from open entry and exit. Further, Fonterra should already have sufficient ability to apply transport surcharges for milk collection, meaning no changes are required to open entry. If the Commission considers that Fonterra's ability under DIRA to charge non-uniform prices is insufficient, then the Commission should consider a more targeted approach to allowing Fonterra to reject milk. This could, for example, involve amending DIRA to allow Fonterra to reject supply where collection costs are in the upper quartile of costs rather than exceed its current highest cost.
The Commission's role in overseeing the milk price should be strengthened	Support for the Commission's ongoing role in overseeing the milk price calculation is well-founded and the Commission should assess the impact of strengthening this role. This is particularly where the Commission can increase independence in the milk price calculation and is best-placed to determine inputs, such as the weighted average cost of capital.

[1] Commerce Commission 'Consultation on substantive issues – review of competition in the dairy Industry' 20 July 2015.

2 Open Entry and Exit (and Non-Discrimination)

Our view is that while the market is not yet workably competitive, open entry should remain to give farmers the confidence to leave Fonterra and supply independent processors. In addition, DIRA already enables Fonterra to manage the risk of having to collect milk where farmers impose high transport costs on Fonterra because Fonterra can impose transport surcharges. If the Commission was convinced that Fonterra's existing ability to impose transport surcharges is insufficient, then we suggest the Commission explore a targeted approach to this concern. Any such approach should also not undermine open entry's role in promoting contestability in the market for milk.

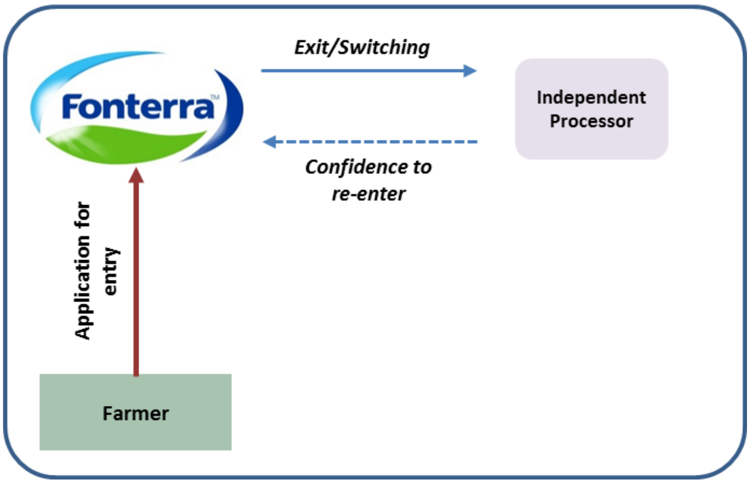
Open entry plays two roles in helping grow competition

The role of open entry is twofold–to:

- **Provide confidence to farmers to switch to independent processors**. Even if farmers can leave Fonterra (because of open exit), without the confidence to re-enter Fonterra, many farmers would not switch to supplying an independent processor. NERA discusses the importance of open entry in driving switching in its reports to both the Ministry of Agriculture and Forestry (MAF) in 2010 and to Fonterra in the current review[2]
- **Allow new farmers or conversions to be able to enter Fonterra and sell their milk**. This ensures distributional equity between existing and new farmers and acts as an enabler of growth in the dairy industry.

These two roles are illustrated in Figure 2.1.

Figure 2.1: Open Entry's Two Roles



Fonterra's main concern appears to be that it cannot manage the risk of having to accept new milk from conversions that have high supply costs

Fonterra is concerned that it must accept milk supply from new conversions even when the incremental cost of accepting the milk exceeds the marginal revenue from processing it (and Fonterra is unable to charge a surcharge to recover additional costs). This concern

[2] See NERA's 2010 report to the Ministry of Agriculture and Forestry "An Assessment of the DIRA Triggers" as well as NERA's 2015 report to Fonterra "Assessment of Competition in Raw Milk Markets and Costs and Benefits of the DIRA provisions".

is really one of open entry and exit when combined with uniform pricing. If this concern is valid, it would likely:

- Reduce Fonterra's competitiveness
- Incentivise inefficient entry by independent processors (by reducing the benchmark milk price due to increased costs)
- Cause Fonterra to need to invest in greater capacity than would be efficient
- Lead to inefficient conversion as farms do not bear the full transport costs they impose on Fonterra[3]
- Limit the ability for independent processors to compete in more marginal areas being converted to dairy. This is because when Fonterra uses a uniform price, it means that the milk price is higher in marginal areas (because the higher costs of collection are subsidised by farmers in lower cost areas). Accordingly, charging a non-uniform price would decrease the milk price in marginal areas and increase the potential for competition—allowing independent processors to attract supply where their transport surcharges would be less than any surcharge rationally imposed by Fonterra (This is equivalent to expanding the size of Area A in Figure 2.2 below).

Fonterra is also concerned that open entry gives farmers the 'free option' to 're-enter' Fonterra, imposing costs because of the associated uncertainty of supply.

As a result of these concerns, Fonterra argues that open entry should be removed altogether. Fonterra's advisors NERA, on the other hand, suggest strengthening Fonterra's discretion to accept new entrants (from conversions). As part of this, NERA also suggests imposing a time limit on re-entry for those that switch/exit Fonterra and supply an independent processor (for example, open entry for 3 years after leaving).

For either of Fonterra or NERA's proposed options, the Commission would need to be satisfied that any costs associated with open entry outweigh the benefits of uniformly supporting a contestable market. The Commission would also need to be satisfied that that alternative ways to regulate Fonterra do not provide greater net benefits.

The benefits of open re-entry likely outweigh the costs

Taking re-entry first, our view is that open entry should remain to ensure farmers have confidence that they can re-enter Fonterra and therefore switch to supplying an independent processor while the market is not yet workably competitive.

While Fonterra highlights the costs imposed by 'open re-entry', calling these inefficiencies is inappropriate given that the costs must be weighed against the benefits of promoting contestability. Our view is that while Fonterra has market power the benefits from open re-entry are likely to outweigh the costs imposed on Fonterra. This is consistent with the views expressed by NERA in its report on the substantive issues paper, and the economics literature (cited by NERA in its 2010 report to MAF) that suggests that the primary limit on co-operatives exercising market power is the threat of entry into the co-operative.[4]

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[3] This is something we also raised in our July report at p.3.

[4] See the following cited by NERA: Jesse, E., Johnson, A., Marion, B., & Manchester, A. (1982) 'Interpreting and Enforcing Section 2 of the Capper-Volstead Act' *American Journal of Agricultural Economics*, 64(3), 431-443; and Sexton, R. (1990) 'Imperfect Competition in Agricultural Markets and the Role of Cooperatives: A Spatial Analysis' *American Journal of Agricultural Economics*, 72(3), 709-720.

In its report on the substantive issues paper, NERA refers to limiting the right of re-entry to 3 years. NERA do not provide any rationale or analysis supporting this limit. Accordingly, this reference is likely merely an example of how to distinguish re-entry from conversions. It is unclear to us that 3 years is a sufficient period of time to give farmers the confidence to leave the co-operative and supply an independent processor. In any case, our view is that this proposed limit on re-entry is an unnecessary further restriction.

If the Commission agrees with Castalia and NERA that free re-entry should remain, and additionally accepts that re-entry is the core concept (not the period of time), then any amendment to DIRA should simply make this clear. We also suggest that if there is a strong case for further exclusions from open-entry, these need to be specifically articulated and targeted solutions considered (rather than the 'bright line' time limit NERA proposes—for which there is no evidence of increasing efficiency).

Fonterra likely already has sufficient ability to manage the risk of conversions with high transport costs

While Fonterra raises the concern that it cannot manage the risk of conversions with high transport costs, our view is that Fonterra already has sufficient abilities to do so. Even if Fonterra does not, the Commission should recommend a targeted approach to addressing any concern that does not undermine open entry's role in promoting contestability.

In the absence of any wider economic benefits or public policy justifications, NERA's view has merit that Fonterra should not be required to accept milk if there are situations where it cannot apply a transport surcharge needed to recover incremental costs.

What this means in terms of potential reform depends on Fonterra's current powers. It appears Fonterra currently has the ability to:

- **Reject new supply**, including where the cost of transporting milk for a new entrant exceeds the highest cost of transporting another shareholding farmer's milk to the same factory
- **Charge surcharges** that reflect clear differences in circumstances (for example, transport costs).

Accordingly, reform is only required if these abilities do not provide Fonterra with sufficient legal powers to mitigate the economic cost of having to accept milk supply where incremental costs exceed incremental revenues.

DIRA does not require Fonterra to pay a uniform milk price, so Fonterra has at least some power to pay different prices where this reflects underlying differences in the cost of collecting and processing milk. Section 106 of DIRA provides that the terms of supply applying to a new entrant must be the same as a shareholding farmer "in the same circumstances". Accordingly, it appears that where farmers' circumstances differ, Fonterra can treat farmers differently. Further, sections 94 and 95 of DIRA set out exceptions whereby Fonterra is not required to accept new entry.

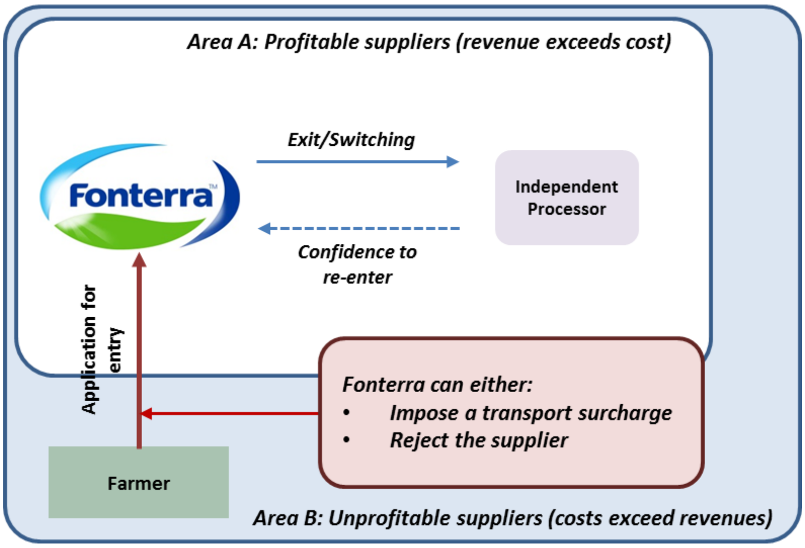
This is consistent with Fonterra's conduct in practice. We note the Commission has previously investigated Fonterra undertaking tactical pricing, and accepted that it had taken place—though that it did not breach section 36 of the Commerce Act.[5] In addition,

[5] Commerce Commission 'Fonterra Did Not Breach Commerce Act' Media Release, 24 December 2008 accessible here.

in its submission, Tatua Co-operative Dairy Company Limited (Tatua) identifies instances of tactical or differentiated pricing by Fonterra. Tatua notes pricing varied by region (based on level of competition) in one case and commitment or certainty on the other (Guaranteed Milk Price). Tatua (and implicitly NERA) note that knowledge and acceptance by shareholders appears to be the main constraint on Fonterra' ability to differentiate its pricing in practice.

Figure 2.2 illustrates why it is not clear to us that reform is required, given Fonterra's ability to charge non-uniform prices that allow it to recover additional transport costs, as well as its ability to reject supply in situations that may be unprofitable. We do not have data on the extent to which Fonterra has suffered actual costs associated with any inability to charge non-uniform prices (if it exists).

Figure 2.2: Fonterra's Ability to Manage Conversions with High Transport Costs



If the Commission was convinced that Fonterra did not have the ability to apply transport surcharges, and this issue materially affects Fonterra's competitiveness, then the Commission should consider targeted approaches that address this concern.

Fonterra argues that in theory its main ability to avoid this economic cost is by refusing to accept supply under the transport cost exception but that it is difficult to use this in practice. The more obvious solution to addressing Fonterra's concern would therefore be lowering the evidentiary bar for assessing when Fonterra can reject supply—for example to the upper quartile of costs. In addition, the Commission could consider providing guidance on the calculation of transport cost components to increase certainty (and potentially reduce complexity).

There may also be scope to extend Fonterra's ability to defer acceptance of new supply. Fonterra notes it can currently only defer supply for one season if it issues a capacity constraint notice. If the Commission deemed this to impose net costs greater than benefits, the Commission could recommend extending the length of this exemption to align more with investment timeframes.

With all options, Fonterra's potential response needs to be assessed

As identified in our July report, the Commission must consider the efficiency consequences of how Fonterra may respond when analysing any potential deregulation options. In particular, we suggest that with deregulation, Fonterra may well put in place barriers to switching that harm productive efficiency by:

- **Restricting farmers' ability to leave Fonterra and supply an independent processor** (such as long terms contracts, exclusivity arrangements, or costs of re-entry). For example, we understand that when Fonterra bought NZ Dairies Ltd it was on the condition that all farmers joined Fonterra and farms were locked in for 6 years
- **Reducing confidence for existing and potential independent processors** that they can attract supply and therefore invest in efficient new plant or plant expansions
- **Reducing confidence for farmers looking to make long-term investments to convert to dairy farming** that they will be able to sell perishable milk at a fair price—and to processors with the capacity to accept the large milk quantities necessary at peak season.

The potential responses to removing (or restricting) open entry rules, and outcomes of these responses, are summarised in Figure 3.1 of our July report.

Fonterra overstates the restrictions that being a co-operative company places on its actions

Fonterra's submission refers to its co-operative structure as restricting its behaviour, and suggests that at least some of the above outcomes would not occur.

However, a co-operative structure does not necessarily impose significant constraints on market behaviour. In principle, there appear limited restrictions that this would place on Fonterra, including in relation to setting a uniform price for milk. In addition the academic literature NERA cited in the 2010 review suggests that "cooperatives with market shares in excess of sixty to seventy-five percent possess, and use, monopoly power".[6]

For example, if a **new farmer** wanted to join Fonterra and the cost of collecting the new farmer's milk was materially higher, then it would be in the existing farmer shareholders' best interests for the new farmer to receive a milk price subject to a transport surcharge. Another example is regarding the acceptance of new supply from **re-entry**. Fonterra state it would always accept farmers entering the co-operative so long as incremental revenues exceed incremental costs. NERA supports this on the basis that this is profit maximising behaviour. However, this ignores the potential value in tactical pricing to discourage exit or imposing terms on suppliers that create barriers to entry, which could conceivably benefit Fonterra (and existing shareholders).

While a number of potential responses may in principle be regulated by the Commerce Act, as discussed in our July submissions we agree with NERA that there are significant transaction costs as well as limits to what this can be expected to achieve in practice compared with DIRA. There are also many cases in which conduct can have both ostensibly legitimate business purposes (such as long term contracts) and accompanying anticompetitive consequences.

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[6] Baumer, D., Masson, R., & Masson, R. (1986). 'Curdling the Competition: An Economic and Legal Analysis of the Antitrust Exemption in Agriculture' *Villanova Law Review*, 31, 183-252.

3 The Milk Price Regulatory Oversight Regime

The Commission's oversight has increased transparency regarding how the farm gate milk price is set. We agree with submitters that the Commission should continue its role in overseeing the calculation of the milk price, and we suggest strengthening this role to further enhance efficiency.

The regime reduces information barriers

Until the market is workably competitive, milk price oversight will continue to play an important role. This includes a role for potential new entrants by decreasing informational barriers to entry. Without workable competition and with Fonterra setting the farm gate market price, greater transparency over this critical industry benchmark has likely helped foster competition to date.

As Fonterra and NERA's submissions state, investors in the Fonterra Shareholders' Fund (FSF) also benefit from the increased transparency around the split between Fonterra's milk price and dividends. We agree that this is also a benefit that should be taken into account. However, as noted below, without milk price regulation the FSF would likely be insufficient to constrain pricing incentives and ensure pricing transparency.

Increasing the Commission's role under the regime has merit

It is worth investigating the benefits of strengthening the Commission's role in overseeing milk pricing. One area where we consider that the Commission's role could be materially strengthened is in how notional inputs to the farm gate milk price are determined. Where inputs are purely notional and the Commission is well-placed, we consider the Commission should have the power to set those inputs.

Allowing Fonterra to set the notional inputs used in the milk price manual gives the dominant market participant too much discretion to set the farm gate milk price in ways that suit its purposes. In contrast, giving an independent party like the Commission the power to determine notional inputs has no apparent drawbacks. The Commission also has:

- A good understanding of the DIRA objectives, the milk price manual, and the role that notional inputs play in determining the farm gate milk price
- Significant experience in determining these inputs for other regulated businesses under Part 4 of the Commerce Act 1986.

The main example of where this transfer of responsibility would be particularly valuable is in setting the weighted average cost of capital (WACC) for the notional producer. The submission process leading to changes in the notional processor's WACC has been lengthy (as summarised in Box 3.1). In addition, as the Commission has acknowledged Fonterra still needs to address a number of practical feasibility concerns—including regarding asset beta and the risk free rate.

Accordingly, giving the Commission the ability to set the notional processor's WACC would:

- Allow the Commission to take decisive action
- Allow the Commission to address practical feasibility concerns with the WACC
- Promote consistency in the treatment of regulated businesses.

Box 3.1: Timeline of the Commission's Engagement on Asset Beta

To illustrate the protracted time it has taken so far to make progress on major concerns with the milk price calculation, we summarise below the timing and nature of engagements on the asset beta by the Commission and Fonterra on Fonterra's milk price calculation.

Date	Engagement
2012	The Commission first raises concerns about the asset beta and treatment of asset stranding risk[7]
2012	Fonterra acknowledges the Commission's concerns but states it is comfortable with its approach[8]
2013	The Commission continues to express concerns about the asset beta and treatment of asset stranding risk[9]
2013	Fonterra acknowledges the Commission's concerns but again states it is comfortable with its approach[10]
2014	Fonterra adjusts the treatment of stranded assets when calculating asset beta in its milk price manual[11]
2014	The Commission continues to express concerns over a lack of information made available on how the asset beta is calculated and its practical feasibility[12]
2014	Fonterra assures the Commission that it is obtaining independent advice on the asset beta[13]
2014	The Commission continues to express concerns over the practical feasibility of the asset beta[14]
2015	Fonterra releases its independent report on the asset beta[15]
2015	The Commission continues to express concerns over the information available and practical feasibility of the asset beta.[16]

We also note that over much shorter time periods the Commission has determined asset betas and calculated a WACC for entities providing electricity transmission and distribution, gas transmission and distribution, and airport services.[17]

7 In the Commission's draft and then final "Report on the dry run review of Fonterra's fame gate milk price" and draft and final "Review of Fonterra's 2012/13 Milk Price Manual", available here and here.

8 In Fonterra's Submission on the Commission Draft Report on Fonterra's 2012/13 Farmgate Milk Price Manual, available here.

9 In the Commission's Draft and Final Reports in its 2013/14 Review of the Milk Price Manual", available here.

10 In Fonterra's Submission on the Commission's Draft Report on Fonterra's 2013/14 Farmgate Milk Price Manual, available here.

11 See Fonterra's Reasons Paper in the Support of Milk Price Manual 2014/15, available here.

12 Commerce Commission "Draft Report on Fonterra's 2014/15 Milk Price Manual", available here.

13 Fonterra "Submission to the Commerce Commission on its Draft Report on Fonterra's 2014/15 Farmgate Milk Price Manual", available here.

14 Commerce Commission "Final Report on Fonterra's 2014/15 Milk Price Manual", available here.

15 As part of Fonterra's reasons paper on the review of the 2014/15 base milk price calculation, see report here.

16 Commerce Commission "Draft Report on Fonterra's 2014/15 Milk Price Calculation", available here.

17 See: http://www.comcom.govt.nz/regulated-industries/input-methodologies-2/cost-of-capital/

Without independent oversight, Fonterra could exercise more discretion than its submission implies

Fonterra states both that the existence of the FSF acts as a discipline on Fonterra's pricing incentives, and also that in the absence of DIRA it would continue to disclose the milk price calculation.

We disagree that the FSF significantly influences Fonterra's pricing decisions compared with the prospect of reducing competition. The FSF only makes up approximately 6 percent of Fonterra's equity, and FSF unitholders do not have any voting rights. This is likely to give FSF unitholders limited influence compared with Fonterra's farmer shareholders. This is supported by Tatua's submission which identifies Fonterra's interest groups and discusses their preference for the milk price and their likely influence.

In DIRA's absence, it is unclear whether Fonterra would continue to disclose the milk price calculation and, if so, the extent of such disclosure. We accept that FSF unitholders benefit from greater transparency on their investment, but it is unclear whether Fonterra might in future reduce the level of disclosure of information. This might particularly be so where information primarily benefits contestability rather than investment analysis.

In addition, the absence of the Commission's oversight would progressively mean that matters which have been independently verified could no longer be relied upon.

Figure 3.2 in our July report summarises the likely efficiency consequences of Fonterra reducing or removing ongoing milk price disclosure:

- It **could raise barriers to entry** for potential processors by increasing uncertainty in the price they will have to pay for raw milk (without the substantial time and cost necessary to fully understand the complexities of the milk processing business)
- It **removes the Commission's main option for ongoing review** of the operation of the dairy industry, and neither the Commission nor the industry will have a ready way of knowing if Fonterra is paying inefficiently high milk prices.

4 Conclusion

Although competition in the dairy industry is growing, there appears to be a consensus that the farm gate and factory gate markets are not yet workably competitive.

There also appears to be consensus that the milk price regulatory oversight regime should continue to apply. Like Tatua, we see potential efficiency benefits from greater independent input into Fonterra's calculated milk price. We suggest there is scope for strengthening the Commission's role in the milk price regulatory oversight regime and that this should be considered as part of this review.

We also suggest that the continued application of open entry and exit has net benefits and will lead to increased competition in the industry. There are existing mechanisms for Fonterra to ensure the milk it collects provides net revenues. However, if there are instances where this is not the case, a targeted approach should be taken to addressing this concern that does not undermine open entry and exit's role in promoting contestability.

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