Dear Leighton

Open Country Dairy Response to the Commerce Commission's Emerging Views on Asset Beta

Open Country Dairy (Open Country) is pleased to make this submission on the Commerce Commission's (Commission) Emerging Views on Asset Beta, and on Transparency.

1 Purpose

The Commission's acceptance of an artificially low beta estimate from Fonterra will lead to an overestimated milk price—an increase of five cents by the Commission's own estimates. An artificially high milk price will harm the dairy sector by suppressing the independent processors' (IPs) ability to compete with Fonterra. This, in turn, will move away from market contestability and reduce incentives for efficiency by weakening competitive pressure on Fonterra.

Fonterra has a strong incentive to under-estimate the costs of the Notional Processor, and hence to over-estimate the milk price. Since the DIRA process only involves the Commission in reviewing Fonterra's calculations, a thorough review must recognise the underlying incentives and address them head on.

This paper calls for a more robust and even-handed approach to reviewing Fonterra's assumptions, inputs and process, and for rigorous evidence to support a company comparator set, a mid-point estimate, and any departure from it. In its paper, the Commission emphasises its wish to adhere to its robust approach for determining WACC used in other sectors, and that it would need to be thoroughly convinced before departing from that approach in relation to the dairy sector. We welcome this statement of principle, but are concerned that the Commission's emerging views appear to signal just such a significant departure without any obvious justification.

In this paper, we describe:

- The incentives on Fonterra with respect to the asset beta and the effect of such incentives (Section 2)
- The importance of the Commission taking a balanced approach to the evidence presented by interested parties (Section 3)
- The need for the Commission to conclude on the asset beta to mitigate uncertainty (Section 4)
- The approach that ought to be taken in reviewing any move from the mid-point range (Section 5)
- Our views on the right approach to the comparator sample set (Section 6), and
- Our response to the Commission's views on the transparency of the DIRA regime (Section 7).

2 Fonterra has a strong incentive to under-estimate the asset beta

An incorrect asset beta will have a significant effect on the dairy industry. The Commission rightly recognises that Fonterra reducing its asset beta estimate to 0.38 is a substantial departure from the sample mean, and increases the milk price by around five cents. This amount will have a material effect on the incentive of IPs to invest and compete.

In theory, getting the milk price right would be beneficial both for cooperatives (such as Fonterra) and for IPs. Within a cooperative, the split of the pay-out between the milk price and the dividend can have an important effect on the farmers' incentives and on the capital structure of the cooperative. For example, we recognise that a high milk price—and hence a lower dividend—reduces the cost of entry into the cooperative. This may encourage over-supply, while lower cooperative share valuation could leave the cooperative with insufficient equity capital, hence increasing its risks.

So, why do we believe that Fonterra has an incentive to systematically over-estimate the milk price by under-estimating the costs of the Notional Processor? The reason is that it is difficult to get the estimate exactly right, but the effects of errors are asymmetrical.

If Fonterra over-estimates the costs of the Notional Processor, resulting in a lower milk price calculation, it would:

- Encourage competitive entry by IPs, hence causing headaches and threats for itself
- Create barriers to entry into the cooperative by increasing the value of the supply share, but
- Slightly strengthen its capital structure and lower its borrowing costs.

By contrast, if Fonterra under-estimates the costs of the Notional Processor, resulting in a persistently inflated milk price, it would:

- Slightly weaken its capital structure by reducing the amount of equity paid in by suppliers. This may also lead to slightly higher borrowing costs
- Overall, reduce contestability and the threat of competition from efficient IPs
- Reduce the cost of Fonterra shares, thus both easing entry into the cooperative and reducing the cost for existing suppliers of increasing (share-backed) milk supply; this helps ensure a secure supply of milk for Fonterra's sunk investment in capacity. Security of milk supply is crucially important for dairy processor survival.

In our view, Fonterra's incentives overwhelmingly lie towards making sure that the costs of the Notional Processor are systematically under-estimated. The consequence of such systematic error for the market is also asymmetrical: a systematically inflated milk price would cause more damage to efficiency than a systematically lower one.

This is because while too low a milk price may at the margin encourage some inefficient entry by IPs, a persistently inflated price will discourage efficient entry. Since additional entry into the market promotes contestability, innovation and experimentation and helps the New Zealand dairy sector diversify its risks, the dynamic efficiency loss from artificially limiting entry would more than outweigh any static efficiency losses from encouraging a little bit too much entry.

Fonterra's dominant incentive is to act in ways that reduce competition for raw milk and reduce competition in downstream markets which use raw milk as an input.[1] Setting an artificially high milk price is one of the most direct ways for Fonterra to respond to that incentive. And, under the mechanics of the regime, underestimating the WACC provides Fonterra with a simple device for justifying an inflated milk price.

[1] Evans, Lew., & Quigley, Neil 'Watershed for New Zealand Dairy Industry', July 2001 *ISCR Monographic Series*, accessible at http://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/3949/Dairy_Monograph2.pdf?sequence=1

It is crucial for the Commission to take a balanced view of the evidence presented by all interested parties, and to come to its own view, backed by robust and transparent reasoning.

3 The Commission Needs to be Even-Handed in Reviewing the Evidence

Open Country recognises that DIRA allows Fonterra to conduct the WACC calculation, and provides the Commission with a review role. However, we do not believe this role in practice allows the Commission to perform its analysis in a way that is materially different from the way it analyses WACC in other sectors. We are concerned about any suggestion that the review role reduces the Commission's statutory duty to simply confirming that Fonterra's estimate falls within the range of all possible estimates, no matter how unlikely. Rather, as part of its statutory duty, the Commission needs to recognise and respond to Fonterra's and the IPs' clearly conflicting incentives.

Under DIRA, the Commission's role is to review "the extent to which the assumptions adopted and the inputs and process used by new co-op in calculating the base milk price for the season are consistent with the [150A subpart] purpose".[2] Hence, the Commission's statutory role is not materially different from its role under other regimes simply because it exercises a review function under the DIRA regime.

While Fonterra is tasked with undertaking the milk price calculation, the Commission remains the primary regulatory decision-maker. This may not amount to an "advocacy or educative function",[3] but the review function must give full effect to the objectives of the DIRA regulatory regime. In other words, the relevant legal question for the Commission is not "What does 'review' literally mean?" but "How can the Commission's review function best promote efficiency and contestability in dairy sector markets?"

We support the Commission's assertion that, in respect of determining the asset beta, this is most effectively answered by adhering to a cross-sectoral methodology, including the Commission's Input Methodologies, which ensures a bottom-up, rigorous, and even-handed approach to reviewing the asset beta inputs and process. The Commission is the primary regulatory decision-maker under the regime, and so needs to have the same level of confidence as for other regulatory processes.

When determining the asset beta for other regulated sectors, the Commission typically draws on the most relevant comparator companies and a consistent set of principles, to cut through the 'noise' in the ranges and evidence presented by industry. Similarly, in reviewing the inputs and process to calculate the Notional Producer asset beta, we would expect the Commission to signpost what it regards as the most relevant comparator companies and processes leading to the most appropriate asset beta, and to use this as a benchmark to review Fonterra's approach. There is nothing in the statutory framework that changes the nature of the analysis that the Commission is required to undertake.

We therefore find it surprising that the Commission has, instead, opted to confer significant weight to the parameters of the evidence presented by Fonterra. The evidence needs to be extensively queried because it has not been tested in the same way that the Commission usually tests its evidence when acting as the primary decision maker. Specifically, we would expect the Commission to strenuously query:

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[2] Paragraph 1, Subpart 150P, DIRA.

[3] Commerce Commission "Concerns on practical feasibility and transparency" (19 July 2017) at para [17].

- the comparator companies presented by Fonterra, and
- Fonterra's reasoning to bring the asset beta downwards from the sample mean.

3.1 Commission should not accept comparator company set presented by Fonterra

We do not understand why the Commission accepts that the starting point is Fonterra's sample mean.[4] Many of the sample companies are only partially involved in the dairy industry, and there are inconsistencies with the Commission's best practice promoted in the Input Methodologies.

For instance, one criterion the Commission applies to other regulated sectors is that only the most relevant company should be considered if a parent and subsidiary company are both captured in a sample,[5] so we would expect the Commission to query Dr. Marsden's inclusion of both Synlait and Bright Dairy & Food Co in his comparator set of 40 companies.[6]

3.2 Commission should not accept Fonterra's reasoning for departing from the sample mean

We do not believe a strong case has been made at all, and the Commission accepting such a reduction is particularly concerning, given the incentives for Fonterra to draw heavily on evidence that brings the asset beta downwards.

The proposed reduction should be robustly queried using exactly the type of analysis and evidence that the Commission employs in other regulated sectors. More importantly, we believe the downwards adjustment has been unjustified for some time and we strongly believe the Commission should finally conclude this is unreasonable.

The Commission stated at the end of the previous Milk Price Calculation Review that it was unable to conclude on Fonterra's downwards adjustment from the comparator company mid-point (0.51) to the asset beta adopted (0.38), because Fonterra had provided no evidence for this.

Prior to the recent workshop, Dr. Marsden circulated a new paper to address this, which stated the Commission should instead consider the gap between Fonterra's asset beta (0.44) and the adopted asset beta (0.38). However, this proved to be a logical circularity, because the asset beta under scrutiny (0.38) had been fed into Fonterra's calculated asset beta (0.44), making comparison between them meaningless. Further, Dr. Marsden's downward justification of 0.06 was weak; he cited a previous downwards adjustment made by the Commission which was a different number (0.05) relating to a very different industry (airports).

The Commission has made it clear that it remains unconvinced by Fonterra's argument, and has responded by trying to refine the comparator company sample to see if it can be manipulated to justify the downwards adjustment. This is a puzzling approach: we would expect the Commission to pull together its own comparator set only as a means of benchmarking the quality of Fonterra's comparator set, thereby being able to conclude on whether Fonterra's inputs and process (as well as the final assumption) are practically feasible (as per the DIRA requirements).

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[4] Commerce Commission "Emerging Views on Asset Beta" (20 July 2017), para 35.

[5] Commerce Commission "Input methodologies review decisions – Topic paper 4: cost of capital issues" (20 December 2016), para 282.

[6] Bright Dairy & Food Co is the parent company of Synlait.

The approach used by the Commission—which essentially says that as long as Fonterra's point estimate falls within the Commission's comparator set range, the Commission has to accept that point estimate—has no logical basis. This approach could only be used if the Commission did not need to consider whether an outcome is likely, only if it is possible. We believe such an approach is unlikely to satisfy the practical feasibility requirement of the Commission's statutory review, since an unlikely estimate would not meet the objects of DIRA just because it lies within a vaguely plausible range.

We are also concerned with the Commission's refined comparator set itself, because the Commission sought additional pricing information for some of the companies to understand how systematic risk is transferred, yet accepted Fonterra only providing this for 50 percent of the firms in the sample.[7]

4 The Commission's current approach is driving uncertainty

Perhaps in view of these shortcomings, the Commission has concluded that its own comparator sample set is not sufficient to justify the downward-adjusted asset beta. Given this, we do not understand why the Commission is unable to conclude on the matter. It has rejected Fonterra's reasoning. It is unconvinced by its own reasoning. A downwards-adjusted asset beta is having a material impact on the healthy functioning of the dairy market, without a justified reason. The Commission should formally conclude that the reduction is not practically feasible.

We cannot see the purpose of the statutory review process if the Commission is not prepared to make a finding on the evidence before it. We are concerned that an uncertain, ambiguous conclusion actually serves to increase the regulatory risk faced by independent processors, which undermines the objective of promoting contestability.

5 If departing from the mid-point estimate, the Commission should err upward, rather than downward

The Commission's position is particularly concerning because the Commission's best practice in other sectors is that the point estimate should err on the side of caution. When picking a point in a range, the Commission's own past practice shows it is usual to select the mid-point, unless the costs of error are asymmetric. In such a case, the point estimate should compensate for that, by moving in the direction from the midpoint that minimises the cost of error.

We believe the task at hand is similar. The question is: *are the risks greater if the asset beta estimate is lower or higher than the true value?* This is a separate consideration to the fact that Fonterra's incentives skew their evidence to a lower asset beta. As we discussed above, the answer is: the risks of underestimating the asset beta are *more* harmful than the costs of overestimating the asset beta.

Because the risks are asymmetric and greater with underestimating the asset beta than overestimating, if the mid-point is to be adjusted at all, we believe it would be consistent with the Commission's best practice to adjust the asset beta upwards from the mid-point.

Turning to the interpretation of 'practical feasibility' can help in weighing up these risks in the face of uncertainty. In our view, the 'practical feasibility' standard was included to recognise that Fonterra's milk price shapes the entire sector, not just Fonterra, and that it is inappropriate to incorporate unrealistically high levels of capital cost efficiency for the Notional Processor.

[7] Commerce Commission "Emerging Views on Asset Beta" (20 July 2017), para 43.

Practical feasibility suggests that, where there is uncertainty as to the asset beta, the Commission should relax its expectations of hypothetical efficiency and ensure that any estimates are demonstrably realistic given the economic and commercial context in which they take effect.

We encourage the Commission to strenuously question any move away from the mid-point range, particularly in the presence of competing interests from interested parties, and the impacts this has on the evidence being presented. It would be very difficult to advance a credible justification to support a downwards adjustment. We would ask the Commission to mitigate risk by erring to the least harmful side of the mid-point, which is upwards.

6 The Commission Should Take a Sceptical View of the Comparator Sample

The usual approach to estimating company betas relies on finding the largest possible sample of observable comparators. In practice, there is always a trade-off: on the one hand, increasing the sample size should improve the accuracy of the estimate; on the other hand, increasing the sample size runs the risk that it could reduce the accuracy of the estimate by introducing increasingly less relevant comparators.

In this case, we believe the Commission should be particularly cautious about any gains from increasing the size of the sample set given the unique characteristics and the specifics of the Notional Processor's risk profile within the context of the New Zealand market.

Our starting position is that Synlait—which as a listed entity has an observable beta—provides the most relevant and robust information:

- It has a narrow business profile including substantial business which matches the profile of the Notional Processor
- It is exposed to all the systematic risks of the New Zealand market, and has exactly the same ability as the Notional Processor to diversify and manage various market risks (e.g. its ability to hedge foreign exchange risk is specific to New Zealand, given the liquidity of various hedge instruments and hedging costs)
- Its observable beta is relative to the New Zealand market—which is critical given that the New Zealand market's composition and risk profile (and hence its Market Risk Premium) is materially different to the securities markets in other jurisdictions. Observed betas from other markets—even if the security is a perfect comparator—always have to be adjusted by considering what the covariance is relative to.

The 5-year average for Synlait (using 4-weekly data) as reported by Dr Marsden is 0.52. We note that Dr Marsden averages weekly estimates using 2 years of data and 4-weekly estimates using 5 years of data. While reducing the frequency of observations from weekly to 4-weekly would obviously somewhat lower the accuracy of the estimate, we believe the shortening of the time period significantly damages the quality of the estimates. Since MRP estimates are long-term, it is essential that beta estimates also cover the longest possible period. We see no gain in precision from averaging the two sets of estimates, since all it does is give greater weight to a random 2-year interval.

The obvious next question is whether Fonterra's Shareholders' Fund units should be included in the sample, since they are also traded in New Zealand. In our view, inclusion of Fonterra itself actually reduces the accuracy of the estimate:

- The number of units in the Shareholders' Fund changes through redemptions and allotments. While the Fund has a size risk management policy designed to allow for a graduated response, changes in the number of shares traded will influence value, and will have some effect on the covariance of total returns with the market

- Fonterra's overall business is significantly different from the Notional Processor's, so that Fonterra's beta may be more reflective of its global consumer goods business than of the Notional Processor
- Fonterra as an actual processor has considerably greater ability to pass risk to its milk suppliers compared to a practically feasible Notional Processor.

Similarly, we have grave doubts about the effect of including increasingly less relevant international comparators on the robustness of the estimate. For example, most US processors are subject to milk marketing orders, or similar State systems, that set minimum milk prices by reference to major dairy commodity prices. We believe their ability to match input and output prices and to pass risk back to farmers is similar to what would be practically feasible in the New Zealand market. There are several US firms in the sample set, but many of them will have an asset beta severely influenced by extraneous variables (in addition to the fact that their measured beta is relative to the US market).[8]

Given the difficulty in constructing a useful and relevant comparator sample, we believe the Commission should carefully consider whether it is possible to improve on the accuracy of simply observing Synlait's beta over the longest possible time period.

7 Transparency

We consider that the Commission may have adopted an unduly narrow approach to its understanding of its DIRA functions and we ask the Commission to take the following points into account.

On information availability to allow IPs to input to the Commission's review process, we recognise that there is no provision in the Act that entitles IPs to specific information from Fonterra. Yet there are other steps the Commission can take that go some way towards addressing our concerns.

At the very least, the Commission ought to draw reasonable inferences about Fonterra's milk price calculation from the lack of transparency over that process for the wider industry. This goes directly to the issue of the credibility of Fonterra's decisions, and in turn the degree of scepticism or deference that the Commission ought to adopt.

On regulatory risk from a lack of transparency, we were disappointed that the Commission noted our argument that this has material adverse consequences for efficiency and market contestability, and yet still concluded the Commission has a limited role in assuring transparency. We recognise that the Commission cannot compel Fonterra to increase the public availability of

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[8] For instance:

Danone has a large global footprint and the relevant subsidiary would be the US-based Dannon. Unfortunately, Dannon does not constitute a large enough share of its parent group's revenue to justify using Danone's asset beta.

Kraft Heinz sells multiple products. Cheese and dairy based products only account for 21 percent of total revenues (see: https://www.statista.com/statistics/525262/net-sales-of-the-kraft-heinz-company-by-category/), suggesting the asset beta will be heavily influenced by non-dairy markets.

Mead Johnson has a large global footprint: only two of its eight factories worldwide are in the US.

Dairy-based products are only a small part of the business of Archer-Daniel-Midland, Bunge, ConAgra Foods, Ingredion Incorporated, General Mills, and Kellogg.

information (though we are not seeking propriety or other commercially sensitive information). But there are things the Commission can do.

For example, the Commission can review the degree of flexibility or ambiguity that Fonterra builds into the Milk Price Manual to ensure that Fonterra's response to emerging market conditions over the course of the season is likely to be reasonably predictable to other participants in the sector. In addition, the Commission can review Fonterra's calculation of the milk price ex-post to ensure that any residual flexibility within the Manual has been interpreted and applied reasonably by Fonterra.

Incorporating these elements into the existing review processes will promote stability and consistency, and reduce regulatory risk in the sector. These outcomes actively promote contestability among sector participants.

The Commission also fulfils a role in encouraging information transparency to promote market contestability; we urge the Commission to recognise the regulatory risk from lack of transparency in the next Milk Price Calculation Review, and to explicitly cite this—and its effect on market contestability—as the reason for encouraging transparency.

8 Final remarks and meeting request

Thank you for the opportunity to make this submission. We want to continue engaging with the Commission as part the Milk Price Calculation Review, and would like to request a meeting to discuss our submission in further detail. We look forward to hearing from you.

Best regards,

Steve Koekemoer

Chief Executive Officer

Open Country Dairy Ltd