

4 July 2018

Keston Ruxton  
Manager  
EAD Regulation Development Regulation Branch  
regulation.branch@comcom.govt.nz

Dear Keston

### **EMERGING VIEWS ON ASSET BETA**

This submission is Westland Milk Product's (Westland's) response to the Commerce Commission's (the Commission's) document "*Review of Fonterra's 2017/18 base milk price calculation. Emerging views on asset beta*" published on 14 June 2018.

#### **Asset beta**

- (1) The Commission requested submissions with respect to its emerging views on asset beta, and with respect to Cambridge Economic Policy Associates' (CEPA's) response to submissions.
- (2) The asset beta is a measure of systematic risk, which is the extent to which changes in the value of a company are related to changes in the value of the stock market as whole. The asset beta therefore reflects the way that investors view the company.
- (3) The Commission's approach to estimating asset betas is to look at the asset betas of a sample of companies operating in the same sector. In this case: **milk processing companies that produce commodity products that have a substantial exposure to international markets.**

#### **Comparator set**

- (4) By design, the risks faced by the notional processor (NP) are limited. In particular, the NP passes all commodity price risk back through to farmers via the Farm Gate Milk Price (FGMP) calculation and therefore the NP does not bear this price risk.
- (5) **Fonterra argues that the NP's cash flows are less like a comparable international dairy company** and more like an electricity lines business (ELB) that faces price / revenue cap regulation, and therefore ELBs are a more appropriate comparator set.
- (6) The comparison with ELBs follows an argument that the NP's true systematic risk profile is unobservable, so ELBs, which face price / revenue regulation by the Commission, are a more appropriate proxy for the NP due to certain similar characteristics.
- (7) The asset beta employed by Fonterra, therefore, includes a downward adjustment because the cash flows for the NP are less like a comparable international dairy company and more like an ELB that faces price/revenue cap regulation.

- (8) The key question CEPA tried to answer was: which comparator set is more relevant and therefore appropriate – a sample set of companies operating in the same sector or some other sample set of companies?
- (9) **Westland agrees with the Commission’s conclusion that the comparator set of international milk processing companies is more appropriate.** Therefore, given the asset beta range of that comparator set of 0.48 to 0.52, **an asset beta of 0.38 is unlikely to be practically feasible for an efficient processor.**
- (10) Given the CEPA’s analysis, we agree that there is little evidence, theoretical or empirical, that justifies using an asset beta significantly below the lower bound of the asset beta range applicable to the comparator set of international milk processing companies; as Fonterra has done in its estimation of the NP’s WACC.
- (11) **We think that the Commission’s emerging views on asset beta are comprehensive and very well considered.** We find the Commission’s logic compelling.

### Framework

- (12) The framework for the review of the milk price is set out in Section 150A. The purpose of Subpart 5A of the Dairy Industry Restructuring Act 2001 (the DIRA) is:

150A Purpose of this subpart:

- (1) The purpose of this subpart is to **promote the setting of a base milk price that provides an incentive to new co-op to operate efficiently while providing for contestability** in the market for the purchase of milk from farmers.
- (2) For the purposes of this subpart, the setting of a base milk price provides for **contestability** in the market for the purchase of milk from farmers if any notional costs, revenues, or other assumptions taken into account in calculating the base milk price are practically feasible for **an** efficient processor. (Our emphasis.)
- (13) The Commission notes that the terms ‘practically feasible’ and ‘efficient processor’ are not defined in the DIRA.
- (14) The Commission notes that, from its reviews of the milk price in previous seasons, it is satisfied that the estimate of asset beta used by Fonterra to estimate the FGMP provides Fonterra with an incentive to operate efficiently, satisfying that aspect of s150A(1). So, the **outstanding issue is the extent to which the value of the asset beta used by Fonterra is providing for contestability in the market for the purchase of milk from farmers.**
- (15) With respect to 150A(2), the key to providing for **contestability** is the provision of a milk price that is “practically feasible for **an** efficient processor”. In other words, in the context of this paper, **the asset beta has to be that of an efficient processor, not the efficient processor.**
- (16) This emphasis is important. **In our opinion, it directs that the asset beta be derived from a comparator set derived from those contesting the market.** It does not state that the asset beta should be that of the notional processor (NP), especially as a difference between the NP and those contesting the market is that the NP can pass commodity-price risk back to farmers. The competition may or may not be able to do so.

## Commodity price risk

- (17) The Commission states that it has concluded, in its reviews to date of Fonterra's Milk Price Manual, that the Manual has been largely consistent with the statutory purpose set out in s150A of the Act. And that inherent to the Manual is an assumption that the NP (***or any other New Zealand commodity milk processor***) can shift the risk of changes in international commodity product prices to farmer suppliers via changes in the base milk price. [Our emphasis.]
- (18) The Commission also states that it has also previously concluded that this risk allocation under the Manual is consistent with the basis on which the base milk price is required to be determined under the Act; namely, the difference between the revenues achieved for sales of commodities ***at the times that those commodities are contracted to be sold by Fonterra*** and the efficient costs of producing and selling those commodities. [Our emphasis.]
- (19) We disagree with the Commission regarding the ability of any commodity milk processor to shift changes in international commodity product prices to farmer suppliers via changes in the base milk price. **Processors face an enormous amount of commodity-price risk because of the intra-season volatility of commodity prices. Unless a processor sells its commodities at the same time as the NP and in the same proportions as the NP, then its ability to pay a milk price that is close to the FGMP could be seriously threatened.** See Annex 1. Annex 1 shows the variation in the NZD price of the reference commodity products since the establishment of the Global Dairy Trade auction platform. It also shows the July 31 end of each season. **It is clear from Annex 1 that the correct sales phasing is absolutely critical to the ability of the contesting market to pay the FGMP.**
- (20) Milk processors do not know what the NP's sales phasing has actually been, until Fonterra publishes its Farmgate Milk Price Statement after the end of each season. **Even then, this retrospective view can only be an estimate within bounds.** The sales phasing of the last season then becomes the industry's best estimate of the sales phasing for the next season.
- (21) The milk processors would typically use this estimate to manage their commodity-price risk going into the next season but **there will inevitably be occasions when milk processors take a "view" that commodity prices are going to fall and therefore make a deliberate decision to get ahead of the NP from a sales phasing perspective only to find that their view is wrong and that commodity prices actually increase or vice versa.**
- (22) It is our observation that **Fonterra is not (or, at least, is not always) able to pass commodity-price risk back to farmers.** See Table 1 below. According to Fonterra's own financial disclosures, in the 2016 financial year, a year in which the calculated FGMP was \$3.90, Fonterra actually only achieved a milk price of \$3.84 from the sales of reference commodity products and therefore had to absorb \$0.06 per kgMS of commodity price risk that it could not pass back to suppliers. Similarly, in the 2017 financial year, a year in which the calculated FGMP was \$6.13 and the announced FGMP was \$6.12, **Fonterra actually only achieved a milk price of \$5.79 from sales of the reference commodity products. In other words, Fonterra had to absorb \$0.33 per kgMS of commodity-price risk that it could not pass back to farmers.** See Annex 2.

Table 1 Fonterra's disclosed milk price in FY2017 versus the FGMP

	FY2017			
	Hypothetical Efficient Processor	Hypothetical Efficient Processor	NZ Fonterra Ingredients Reference Products	NZ Fonterra Ingredients Reference Products
	(\$Ms)	(\$/kgMS)	(\$Ms)	(\$/kgMS)
Revenue	12,400	8.13	7,846	7.39
Lactose (or other ingredients)	415	0.27		
Net Revenue	11,985	7.85		
Milk Cost (FGMP)	9,349	6.13	6,147	5.79
Gross Profit	2,636	1.73		
Cash Costs	1,763	1.16		
EBITDA	873	0.57		
Depreciation	265	0.17		
EBIT	608	0.40		
Interest	175	0.11		
OPBT	433	0.28		
Tax	121	0.08		
NPAT	312	0.20		
Volume (millions kgMS)	1,526		1,061	

- (23) Given the words used in section 150A and our observations that the ability of milk processors to pass commodity-price back to farmers is, at best, limited, **it seems unreasonable that the asset beta used to establish the FGMP would be estimated in some way other than using those contesting the market.**

#### Systematic risk

- (24) In any case, the Commission states that, based on the available evidence, it does not currently consider that differences in these risks (i.e. the ability to transfer commodity-price risk or not) are necessarily systematic in nature or are **sufficiently significant to explain the difference in asset beta between that found empirically by CEPA of 0.48 to 0.52, and the estimate of asset beta used by Fonterra of 0.38.**
- (25) That being the case, in our view the **discussion about the difference** in risk profile between the NP and the comparator set of globally listed processing companies **is largely redundant.**
- (26) We agree with the Commission that when assessing the practical feasibility of Fonterra's estimate of asset beta, **Fonterra itself is not an appropriate point of comparison because of the seasonality reasons given by the Commission.**
- (27) **Fonterra farmers' decisions to buy or sell Fonterra shares have more to do with their milk production decisions and less to do with Fonterra's forecast earnings performance.** The timing of their share sales and purchases are driven by Fonterra's rules.

## Fonterra's response to the CEPA Report

- (28) We disagree with all of the points raised by Fonterra in response to CEPA's report for the reasons stated above.
- (29) Fonterra considered:
- a) The CEPA Report does not properly consider the unique characteristics of the NP and its ability to pass on systematic risk through prices to a materially greater extent than companies in the CEPA sample.
    - i. **We don't agree that the regulations require the asset beta to be that of the NP.**
  - b) Under any approach to estimating asset beta under the DIRA (including the Input Methodologies approach), it is important for the comparator sample to be a good indicator of the NP's systematic risk.
    - i. **We don't agree that the regulations require the asset beta to be that of the NP.**
  - c) The sample used by CEPA is not the correct starting point to estimate asset beta, because it is not a good indicator of the NP's systematic risk.
    - i. **We don't agree that the regulations require the asset beta to be that of the NP.**
  - d) The asset beta for EDBs is a better comparator, as EDBs provide the best indicator of the NP's systematic risk.
    - i. **We don't agree that the regulations require the asset beta to be that of the NP.**
  - e) Although the CEPA Report acknowledges a downward adjustment from the CEPA sample is warranted under its use of the IM approach, its failure to fully identify the differences between the systematic risk of companies in the CEPA sample and the NP means it has materially understated the adjustment required.
    - i. **We don't agree that the regulations require the asset beta to be that of the NP.**
  - f) The CEPA Report should not have excluded from consideration Fonterra's asset beta (recently calculated as range of 0.14 (weekly) to 0.28 (monthly)), which is lower than the NP's.
    - i. **We agree with the Commission's response; that the seasonality aspect of Fonterra's share price excludes it from consideration.**
- (30) We absolutely agree with CEPA's view that the NP's risk profile, and therefore asset beta, is only achievable if the NP benefits from its position of market power and a lack of competition. **This makes it difficult to align to the requirement that the asset beta should reflect that of a practically feasible efficient processor.** That goes to the very core of DIRA. **The DIRA exists to encourage competition at the farm and factory gates, and to incentivise Fonterra's efficiency to the extent that it cannot be inefficient and still be competitive.**

## Conclusion

- (31) We agree that, by design, **the risks faced by the NP are limited.** In particular, under the DIRA, the NP's price risk is passed through to farmers via the farmgate milk price calculation and so the NP does not bear price risk. However, the very fact that the NP does not bear any price risk means that all other milk processors, including Fonterra do. Unless they can match the NP's

revenues and costs in every respect, and especially sales timing, they will be taking the risk that they will have to bear some portion of the commodity-price risk. **That means it is unreasonable and inequitable for the asset beta used in the FGMP calculation to be that of the NP.**

- (32) We have not tried to verify CEPA's findings regarding the fact that commodity-price risk may not be systematic. However, if correct, that conclusion clearly strengthens the case that **an asset beta derived from a different industry that is below the lower bound of those contesting the market is unreasonable, inequitable, and incorrect.**
- (33) The Commission states that, while it concludes that the commodity price and volume risk is generally not systematic in nature, it cannot rule out the possibility that there is a small systematic risk component. To the extent that there is a systematic component, then the NP's superior relative ability to transfer commodity risk to farmers, could reduce its systematic risk relative to other processors, and accord it a lower asset beta than those processors. If so, **then the question becomes what level of downward adjustment to the asset beta can be justified for the NP, relative to the average for the comparators?**
- (34) We would contend that the **regulations do not require (or even contemplate) that the asset beta would be that of the NP and that it, in fact, requires that the asset beta be that of the contesting market.** Therefore, there is no adjustment for systematic risk to be made.
- (35) The suggestion that **firms with a substantial exposure to overseas markets have a marginally higher asset beta is significant.** Given less than 5% of New Zealand's milk production is consumed domestically, it is obvious that all domestic milk processors have a substantial exposure to overseas markets. Interestingly, on a proportional basis, given Fonterra supplies the vast majority of the milk that goes into the domestic market, **the milk processor that has the least exposure to overseas markets is Fonterra.**

If you would like to discuss any of these issues further please do not hesitate to contact me.



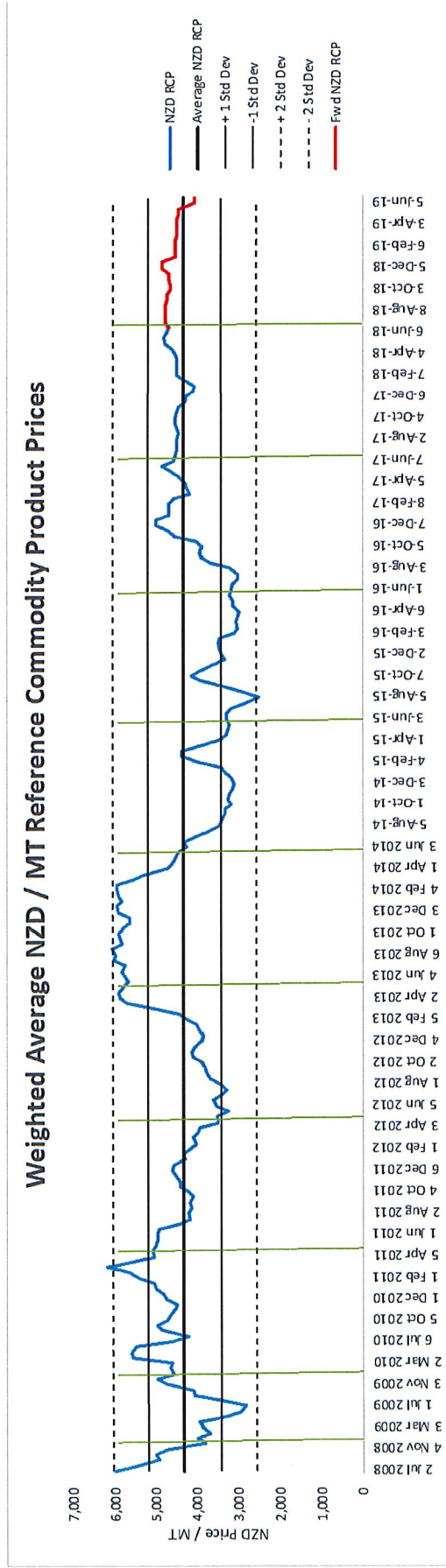
Craig Betty  
**CHIEF OPERATING OFFICER**

## ANNEX DOCUMENTS

### Annex 1 NZD reference commodity product prices since the establishment of the Global Dairy Trade auction platform

The graph below shows the weighted average NZD price per tonne of the reference commodity products sold by Fonterra on Global Dairy Trade since the auction platform was established in July 2008. The NZD price has been estimated by converting the USD price at the daily average spot rate for the month of the auction.

Figure 1 Weighted average NZD / MT Reference Commodity Product Prices



The green vertical lines mark the end of each milk season and therefore the graph illustrates the extent of intra-season price volatility. The current season is the only season since the auctions began that price changes have been within one standard deviation.

## Annex 2 Fonterra Annual Results 2017 Performance Review<sup>1</sup>

The Table 3 below is a screenshot of page 36 of Fonterra's 2017 annual results presentation. The notes below the table give us the information we need to derive the milk prices shown in Table 1.

Table 2 Page 36 of Fonterra's 2017 Annual results presentation

	Full Year ended 31 July 2017	Full Year ended 31 July 2017	Full Year ended 31 July 2016	Full Year ended 31 July 2016
	\$ per MT		\$ per MT	
<b>Sales volume (000 MT)</b>				
Reference products	1,841	-	1,920	-
Non-reference products	696	-	720	-
<b>Revenue (\$ million)</b>				
Reference products	7,846	4,262	6,290	3,276
Non-reference products	3,875	5,567	3,580	4,972
<b>Cost of milk (\$ million)</b>				
Reference products	6,147	3,339	4,163	2,168
Non-reference products	2,337	3,359	1,708	2,371
<b>Gross margin (\$ million)</b>				
Reference products	428	232	634	330
Non-reference products	811	1,165	971	1,348

Note: Reference products are products used in the calculation of the Farmgate Milk Price – WMP, SMP, BMP, Butter, AMF; Milk solids used in the products sold were 1,061m kgMS reference and 441m kgMS non-reference (year ended 31 July 2016 was 1,083m kgMS reference and 423m non-reference); Excludes bulk liquid milk volumes of 76,000 MT of kgMS equivalent (year ended 31 July 2016 was 77,000 MT); Excludes Foodservice volumes to China and Latin America of 143,000 MT (year ended 31 July 2016 was 92,000 MT)  
Page 36 © Fonterra Co-operative Group Ltd.

(1)

<sup>1</sup> [https://www.fonterra.com/content/dam/fonterra-public-website/pdf/Fonterra\\_Annual\\_Results\\_presentation\\_2017\\_NZX.pdf](https://www.fonterra.com/content/dam/fonterra-public-website/pdf/Fonterra_Annual_Results_presentation_2017_NZX.pdf)