9 May 2018

Fonterra Co-operative Group Limited
Fonterra Centre, 109 Fanshawe Street
Auckland 1010
New Zealand

www.fonterra.com

Keston Ruxton
Manager EAD Regulation Development
Regulation Branch
Commerce Commission
WELLINGTON
By email: regulation@comcom.govt.nz

FONTERRA CO-OPERATIVE GROUP LIMITED (*FONTERRA*) – SUBMISSION ON INDEPENDENT REPORT ON DAIRY NOTIONAL PROCESSORS' ASSET BETA BY CAMBRIDGE ECONOMIC POLICY ASSOCIATES PTY LTD

Introduction

1. Fonterra appreciates the opportunity to provide a submission in response to the report "Dairy Notional Processors' Asset Beta" by Cambridge Economic Policy Associates in association with Freshagenda Pty Ltd ("**CEPA Report"**). The CEPA Report was commissioned by the Commerce Commission ("**Commission**") as part of its statutory review of Fonterra's calculation of the base milk price for the 2017/2018 season.

2. In this submission we explain why Fonterra:

   (a) continues to believe that Fonterra's approach to estimating asset beta for the Notional Processor ("**NP**") is consistent with the purpose of the Dairy Industry Restructuring Act ("**DIRA**") milk price monitoring regime; and

   (b) disagrees with a number of the CEPA Report's observations and conclusions.

3. Fonterra has sought expert advice on the CEPA Report, and includes the following reports as part of this submission:

   (a) "Asset Beta for Notional Processor: Response to the Cambridge Report" by Dr Alastair Marsden of the University of Auckland Business School ("**UOA Report**"). The UOA Report explains why the CEPA Report was incorrect to conclude that its sample of comparator companies was the best comparator for the NP's systematic risk, and why it remains the case that electricity distribution businesses ("**EDBs"**) are more reliable comparators for the NP's systematic risk; and

   (b) "Estimating beta for the "Notional Processor"" by NERA Economic Consulting ("**NERA Report"**). The NERA Report explains the economic differences between DIRA and regulation under Part 4 of the Commerce Act, and why it is appropriate to use EDBs as a comparator for the NP when estimating asset beta under the DIRA framework.

Executive Summary

4. The CEPA Report states that the Commission sought advice on "whether a downward (or any) adjustment is required to the average beta calculated from the sample of 'comparable' companies."[1]

5. The CEPA Report therefore proceeds on the basis that the Commission's input methodologies for estimating asset beta under Part 4 of the Commerce Act ("**IM approach"**) should be tightly followed. It concluded that there was insufficient evidence to support a downward adjustment from its comparator sample (**"CEPA sample")** to justify Fonterra's asset beta estimate of 0.38.

6. Fonterra disagrees with CEPA Report's analysis and conclusion:

   (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.

   (b) Under any approach to estimating asset beta under DIRA (including the IM approach), it is important for the comparator sample to be a good indicator of the NP's systematic risk:

      (i) the CEPA sample is not the correct starting point to estimate asset beta, because it is not a good indicator of the NP's systematic risk; and

      (ii) the asset beta for EDBs is a better comparator – as EDBs provide the best indicator of the NP's systematic risk.

   (c) 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.

   (d) 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.

7. Under DIRA it is appropriate for Fonterra to determine a practically feasible asset beta by exercising judgement on the most relevant comparator evidence, which it has done. As explained in the NERA Report:

   (a) Fonterra's balanced incentives when setting milk prices in accordance with the Milk Price Manual, and the uniqueness of the NP and the DIRA milk price monitoring regime, mean that a more flexible application of the IM approach, or different estimation approaches, are warranted;

   (b) there is evidence that independent processors continue to invest and earn reasonable returns, which suggests that the asset beta is feeding into a Fonterra milk price that promotes contestability; and

   (c) using the asset beta for EDBs as the primary comparator for the NP is appropriate under the DIRA framework.

[1] CEPA, *Dairy Notional Processors' Asset Beta – New Zealand Commerce Commission,* 28 March 2018 at 1.

8. The material flaws in the CEPA Report's analysis of the NP's systematic risk relative to EDBs and the CEPA sample are fully canvassed in the UOA Report. Using the CEPA Report's own analysis of comparative systematic risk, the UOA Report demonstrates that the NP has materially lower systematic risk than companies in the CEPA sample, and is closest to the systematic risk of EDBs. UOA remains of the view that 0.38 is a practically feasible asset beta for the NP. In particular, the UOA Report concludes that:[2]

   (a) whether or not the IM approach to primarily or solely draw upon asset beta estimates from the same industry is used is not the right question. The key task is to estimate the asset beta for the NP, which requires judgement as to what evidence is the best evidence to inform that estimate;

   (b) EDBs provide more reliable and suitable comparators since the NP and EDBs have a more similar systematic risk profile;

   (c) the CEPA sample should receive less weight, because the systematic risk profile of companies in the sample is materially different to the NP. In particular, the UOA Report disagrees with a statement by CEPA that infers that processors in the CEPA sample can shift commodity price risk to farmers in the same way that the NP can; and

   (d) if the Commission nevertheless remains committed to using the CEPA sample as the starting point, a significant downward adjustment is required to account for differences in processing characteristics and the NP's unique ability to pass on 100% of commodity revenue (price and volume) risk.

9. In any event, the CEPA Report's opinion that its application of the IM approach produces a better asset beta estimate does not mean that Fonterra's estimate is inconsistent with the DIRA purpose.

10. Ultimately, the Commission must assess whether, based on all of the relevant evidence, Fonterra's asset beta estimate is consistent with providing incentives for efficiency and contestability (and the contestability limb is satisfied if the asset beta is practically feasible for an efficient processor). There is no single "correct" asset beta that provides those incentives – a plausible range of estimates will do so. The Commission's role is to assess whether Fonterra's estimate is within that range – and the Commission has previously accepted that it was (in accordance with the advice of its commissioned expert Dr Lally).

11. Fonterra notes that the CEPA Report has not provided advice on a range of practically feasible estimates beyond the range produced by the CEPA sample in accordance with the IM approach.

The Commission's approach to estimating asset beta

The IM approach and DIRA

12. As the Commission is aware, asset beta is not directly observable. It is "notoriously difficult to estimate".[3]

13. As acknowledged by the Commission:

[2] University of Auckland, Asset Beta for Notional Processor: Response to the Cambridge Report, 9 May 2018 at section 3.
[3] See *Wellington International Airport Ltd v Commerce Commission* [2013] NZHC 3289, at [1102].

(a) Significant judgement is required to establish an estimate of asset beta. An even greater degree of judgement is required when estimating asset beta for a single company compared to a sector.[4]

(b) As a result, experts can legitimately have different and equally credible views on the best estimate of asset beta.[5]

14. Accordingly, it should not be a surprise to the Commission that the CEPA Report estimate differs from UOA's and Dr Martin Lally's – who previously advised the Commission that Fonterra's estimate of asset beta was practically feasible for the NP.

15. For entities that are regulated under Part 4 of the Commerce Act, where the Commission sets prices (or return benchmarks), the Commission's preferred approach to estimating asset beta is to derive an estimate from a set of relevant comparators. It then considers whether adjustments from the mid-point are required (for example, it adjusts down for airports and up for gas businesses). The Commission has advised that it wishes to use this IM approach for all sectors that it regulates and does not lightly depart from it.[6]

16. Under the IM approach, it is important to qualitatively assess, based on all relevant evidence, what the best comparator sample is. That is, what comparator set mostly closely resembles the systematic risk of the firm(s) for which asset beta is being estimated? As acknowledged in the CEPA Report, it is possible that firms from a different sector may be the best comparators.[7]

17. Under DIRA, the characteristics of the NP have remained constant, and there has been no suggestion that market dynamics have changed in a manner that should impact on the NP's asset beta. Yet the Commission's view on Fonterra's milk price asset beta has materially changed over time:

(a) Informed by the expert advice of Dr Lally, the Commission concluded in its draft report for the 2015/2016 Milk Price Review that an asset beta of 0.38 is practically feasible for an efficient processor (i.e. it promotes contestability), because it was within a reasonable range for a business with the NP's features. Following the lead of UOA, Dr Lally focussed on EDBs as the appropriate comparator, and the Commission accepted that EDBs "have broadly similar risk profiles to the notional producer". The Commission also noted that submissions in favour of using industry comparators as a starting point had not suggested how adjustments should be made to account for differences in systematic risk between those comparators and the NP.[8]

(b) The Commission later changed its position to being that it could not conclude that the asset beta was not practically feasible – more information was required. It appears that the Commission's view on the practical feasibility of Fonterra's asset beta changed because it now preferred a method for identifying comparators based on the IM approach, which in its view required companies from the relevant

---

[4] See Commerce Commission *Input Methodology (Airport Services) Reasons Paper* 22 December 2010 at [E8.10].

[5] Commerce Commission, *Final Report – Review of Fonterra's 2015/2016 base milk price calculation*, 15 September 2016 at [4.46].

[6] Commerce Commission, *Review of Fonterra's 2016/17 base milk price calculation – emerging views on asset beta*, 20 July 2017 at [34].

[7] CEPA, *Dairy Notional Processors' Asset Beta – New Zealand Commerce Commission,* 28 March 2018 at 8.

[8] Commerce Commission, *Draft report – Review of Fonterra's 2015/2016 base milk price calculation*, 15 August 2016 at [4.44].

industry to form the comparator sample.[9] The Commission also thought that EDBs had different characteristics to dairy processors, meaning care was required before concluding they would have the same or similar beta.[10]

(c) The Commission then commissioned the CEPA Report - to advise on an appropriate asset beta estimate calculated solely in accordance with the IM approach.

18. Fonterra is concerned that the Commission's view on asset beta fundamentally changed primarily because its view on its preferred methodology for estimating asset beta changed. There was no suggestion that new empirical evidence required Fonterra's estimate to be revised, and the Commission has not sought to establish that DIRA requires the IM approach to be adopted.

The IM approach requires judgement to be exercised

19. Further, it appears that the CEPA Report is applying the IM approach in an unduly inflexible manner. In particular, under the IM approach it is important for the "starting point" comparator(s) to be carefully selected, and it should not be presumed that firms nominally in the same sector provide the best comparator of systematic risk. To illustrate:

(a) The Commission has previously considered using estimates of a regulated company's own asset beta. When setting prices for Chorus' regulated services (after the IMs were set), the Commission received advice from international economists that more weight should be placed on estimates of Chorus' asset beta, and less weight on an international comparator set given that the characteristics of the comparator companies were materially different to Chorus. The Commission had noted in its Technical Consultation Paper for Chorus' regulated services that there were a lack of suitable comparators for UCLL and UBA, and that a flexible approach might be required:[11]

> In the cost of capital IMs we estimated asset beta empirically, using a sample of relevant comparator firms. However, this approach may be challenging for the UCLL and UBA services. The multi-divisional/multi-service nature of telecommunications companies means that, when considering possible comparators, it is likely to be difficult to empirically isolate beta for services with similar exposure to systematic risk as UCLL and/or UBA.

The Commission acknowledged in its draft determination that the Chorus estimate was the closest comparator to the hypothetical efficient operator that it was modelling. Although the Commission ultimately applied its IM approach, this was in part due to the fact that the estimate for Chorus was based on less than three years of trading data and was likely to be subject to "significant measurement error."

(b) The Commission used a broad comparator sample of *energy* (i.e. electricity and gas) businesses for estimating an asset beta for gas businesses. This was despite

[9] Commerce Commission, *Final Report – Review of Fonterra's 2015/2016 base milk price calculation*, 15 September 2016 at [4.48].
[10] Commerce Commission, *Final Report – Review of Fonterra's 2015/2016 base milk price calculation*, 15 September 2016 at [4.57].
[11] Commerce Commission, *Technical Consultation Paper – Determining Cost of Capital for UCLL and UBA,* 7 March 2014 at [82].

advice from experts that the Commission should use a gas sub-sample only. The Commission determined that the gas sub-sample was insufficiently reliable.[12] The gas sub-sample was relatively small (17 firms), was comprised entirely of US gas companies, and had a greater level of statistical uncertainty than the whole energy sample.[13]

(c) Prior to the introduction of the IM regime, the Commission was flexible in determining appropriate comparators.[14] In particular, as part of its inquiry into airfield activities at Auckland, Wellington and Christchurch International Airports, the Commission decided that electricity companies were relevant comparators.[15] The Commission noted:[16]

> There is considerable latitude when using comparable firm data to assess the appropriate asset beta for airports. The question as to which firms are most comparable and which factors should receive the most weight in the assessment is open to debate.

20. In light of the precedent of flexibility established by the Commission, Fonterra does not understand the IM approach to have established that the best comparators will always be from the same industry as the regulated firm. Further, it is not established that the IM approach is mechanical in nature to the exclusion of reasonable judgement, or is the only legitimate way to estimate asset beta for different sectors under different regulatory frameworks. In particular:

(a) The task for the Commission under Part 4 of the Commerce Act was to set an IM approach that promoted outcomes consistent with outcomes in workably competitive markets. It did this on an industry-wide basis.

(b) It was never suggested by the Commission, or accepted by regulated entities, that the IM approach was a mechanical task and/or produced the "true" asset beta. In fact:

(i) the Commission noted that estimating asset beta required significant exercise of judgement.[17] It decided against company-specific asset betas as that would require even greater judgement to be exercised; and

(ii) the Commission emphasised that asset beta estimates were inherently uncertain, and that using a percentile adjustment within a WACC range was to compensate for the risk of asset beta estimation error (among other things). That is, it acknowledged that the IM approach to estimating asset beta was subject to error.

[12] Commerce Commission, *Input Methodologies Review Decision Topic 4 – Cost of Capital Issues*, 20 December 2016 at [277].
[13] Commerce Commission, *Input Methodologies Review Decision Topic 4 – Cost of Capital Issues*, 20 December 2016 at [367.1].
[14] Commerce Commission*, Inquiry into Airfield Activities at Auckland, Wellington and Christchurch International Airports*, 1 August 2002 at [6.50].
[15] Specifically US firms engaged in electricity generation and/or distribution that are subject to rate-of-return regulation (which almost guarantees them a certain rate of return) and electricity firms in the United Kingdom subject to CPI-X price caps.
[16] Commerce Commission*, Inquiry into Airfield Activities at Auckland, Wellington and Christchurch International Airports*, 1 August 2002 at [6.43].
[17] See for example - Commerce Commission, *Input Methodologies – Gas Pipeline Services Draft Reasons Paper*, June 2010 at [6.9.150].

21. The Commission summed up its IM approach by noting that:[18]

> While the Commission uses empirical methods wherever possible, **the Commission's approach is not mechanical. Rather the Commission weighs the empirical results against other considerations, and exercises its judgement to best estimate the cost of capital and satisfy the Part 4 Purpose**.
>
> (emphasis added)

22. The need to maintain flexibility in approach when choosing comparators is illustrated by international regulatory approaches. The NERA Report points out that:[19]

(a) CEPA itself has advised Ofgem that UK water utilities are a more appropriate comparator for UK energy networks than using international energy firms, as it is most appropriate to focus on UK-based evidence; and

(b) for multidivisional firms, some regulators place particular weight on the beta of the regulated company itself, and also look to comparators from different sectors. For example, Ofcom estimates BT's beta using BT's share price data. To estimate the asset beta for Openreach (the access division), Ofcom used regulated energy and water networks as comparators for the lower bound of its range and BT group's market asset beta as the upper bound.

23. So, while the IM approach is intended to provide comfort to regulated entities that the Commission seeks to follow a transparent and consistent approach to estimation of asset beta, the exercise of judgement in each case is unavoidable. The key purpose of any method used should be to take into account all relevant evidence to choose the best comparators, and make the best estimate of asset beta.

24. The same considerations apply to Fonterra when it estimates asset beta in accordance with the Milk Price Manual. In performing its review role under DIRA, the question for the Commission to consider is the extent to which Fonterra has exercised its judgement in a manner consistent with the purpose of the DIRA milk price monitoring regime. The fact that the Commission may have a different view on the best method for estimating asset beta (or, indeed, the best estimate of asset beta) is not sufficient to find inconsistency with the purpose of the DIRA milk price monitoring regime.

Asset Beta under DIRA

DIRA is different to Part 4

25. The policy and legislative history of the DIRA milk price monitoring regime clearly demonstrate that it was not intended that the Commission should form a view of what the "correct" milk price would be, or any specific component of that pricing calculation preferred by the Commission. Fonterra was already setting prices in accordance with the Milk Price Manual when the legislation was passed, so Fonterra's incentives to use a building blocks approach to calculate the milk price were already established prior to the legislation. In that context, the intent of the statutory monitoring regime was to formalise monitoring by the Commission of the principles and process for setting the milk price as described in the

[18] Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, 22 December 10 at [6.529].

[19] NERA Economic Consulting, *Estimating asset beta for the "Notional Processor"*, 9 May 2018 at [34] and [36].

Milk Price Manual, and then to assess whether the milk price was set in a manner consistent with the Milk Price Manual - which would also promote transparency.[20]

26. The policy and legislative intent is materially different to that which drives the regulation of firms under Part 4 (electricity and gas distribution/transmission and airports). As described in the NERA Report:[21]

(a) Monopoly firms regulated under Part 4 have an unambiguous incentive to raise prices above the competitive level in output markets.

(b) Fonterra however has balanced incentives:

(i) The DIRA regime applies to its behaviour in input rather than output markets.

(ii) As it is a co-operative, it does not have an incentive to exercise its market power by lowering the farm gate milk price against its shareholder suppliers as suppliers ultimately control the decisions of the company.

(iii) Features of Fonterra's governance and shareholder and investor-base (i.e. the Trading Among Farmers ("TAF") scheme, including the Fonterra Shareholders' Fund, and dry shareholders) limit its incentives to raise the farm gate milk price above the competitive level, an effect of which might be a reduction in contestability by independent processors.

27. In this context, DIRA was intended to be a light-handed regime, with the Commission having a limited monitoring role. Under subpart 5A the only functions of the Commission are to (a) review the Milk Price Manual and (b) review the milk price, and in each case, report on the extent of their consistency with the purpose of DIRA milk price monitoring regime. There are some key differences between Part 4 and the DIRA milk price monitoring regime that make it clear that the DIRA milk price monitoring regime is materially less invasive:

(a) There is no power for the Commission to set input methodologies under DIRA. Specifically, there is no power to set a WACC IM for monitoring purposes. To the contrary, section 150P(3)(b) of DIRA specifically provides that the Commission must not state the amount of the base milk price according to its own calculations. The intent is that the Commission must not seek to determine a single "correct" approach to milk price assumptions or calculations, and/or seek to influence Fonterra to use its preferred approaches.

(b) The purpose of the DIRA milk price monitoring regime is different to the Part 4 purpose of promoting outcomes consistent with outcomes in workably competitive markets. The Part 4 purpose statement also requires the Commission to promote specific objectives, such as limiting excessive profits, promoting investment and innovation, and efficient prices. The DIRA purpose to promote incentives for efficiency and contestability reflects that Fonterra actually competes to acquire milk (entities regulated under Part 4 do not compete), such that there is less need for a regulator to seek to promote a list of specific outcomes (and greater risk to competition in markets if it were to do so).

[20] See for example - Cabinet Economic Growth and Infrastructure, *Dairy Regulatory Framework – Fonterra's Milk Price Setting (Paper 1)* at [11].
[21] NERA Economic Consulting, *Estimating asset beta for the "Notional Processor"*, 9 May 2018 at [4] – [5].

28. As explained by MPI at the time the monitoring regime was introduced:[22]

> A price monitoring regime, involving an assessment by the Commission against a legislative purpose, **would provide greater external scrutiny while remaining relatively light handed (as Fonterra would continue to set and pay a milk price the way it sees fit).** Such a regime would also be less costly than other, heavy-handed, regulatory tools, e.g. a regulatory price control.
>
> (emphasis added)

29. Importantly, MPI confirmed in a response to a submission from Fonterra that the Commission's reporting requirements did not change the fact that a range of different approaches could be adopted that were consistent with the purpose statement:[23]

> The requirements for the Commerce Commission to report on whether the milk price manual or application of the milk price manual are consistent with the purpose **are not limiting in that a range of different approaches could be consistent.**
>
> (emphasis added)

Evidence of contestability

30. As explained in the NERA Report:[24]

(a) Fonterra has estimated the asset beta for the NP as 0.38 since the 2014/15 season and, since that date, independent processors have continued to invest, and Fonterra has lost suppliers to independent processors, which suggests continued contestability; and

(b) the Commission's *Competition Review* corroborates these points, as the Commission noted that Fonterra is growing at a slower rate than its competitors and most of the large independent processors are planning to expand their operations.

31. In light of such evidence, and the apparent policy intent to have more trust in Fonterra's estimate, the NERA Report advises that:[25]

> …the Commission should be open to asset beta estimation approaches adopted by Fonterra, even if they are not in accordance with the Commission's application of the IM in the present case, provided those approaches are robust. In particular, if there are good reasons for it, the Commission should be open to the comparator set including non-dairy companies, or indeed excluding dairy companies.
>
> Relatedly, the Commission should also be open to considering a range, defined by robust estimation approaches, rather than requiring a point estimate (as it does under the cost of capital IM).

[22] Ministry for Primary Industries, *Dairy Industry Restructuring Amendment Bill – Departmental Report for the Primary Production Select Committee*, May 2012 at 17.
[23] Ministry for Primary Industries, *Dairy Industry Restructuring Amendment Bill – Departmental Report for the Primary Production Select Committee*, May 2012 at 65.
[24] NERA Economic Consulting, *Estimating asset beta for the "Notional Processor"* 9 May 2018 at [18] – [21].
[25] NERA Economic Consulting, *Estimating asset beta for the "Notional Processor"* 9 May 2018 at [23] – [24].

32. Indeed, the evidence might also suggest that the asset beta for the NP is conservative (e.g. an asset beta closer to Fonterra's actual asset beta might also be consistent with the purpose statement), given the level of investment that has occurred by independent processors over the period that the asset beta for the NP has been used. It certainly suggests that the asset beta for the NP is well within the range of possible asset betas that promote both contestability and efficiency.

Implications of DIRA framework for estimating asset beta

33. Accordingly, in comparison to monitoring of pricing under Part 4 of the Commerce Act:

(a) the Commission should have much greater confidence that Fonterra is setting milk price components consistently with the DIRA milk price monitoring purpose statement; and

(b) Parliament was purposely creating a regime that sought to minimise the Commission "second guessing" Fonterra and/or seeking to influence or pressure Fonterra to use particular methods to set prices – unless the methods used by Fonterra were demonstrably inconsistent with the purpose.

34. The Commission has correctly accepted that it does not have the power to determine Fonterra's milk price asset beta:[26]

> We note that it is not our role to determine what the asset beta and specific risk premium should be. Rather, our role is to review the assumptions adopted, the inputs and processes used by Fonterra in calculating the milk price for consistency with the s 150A purpose.

35. Under DIRA, it is for Fonterra to determine a milk price asset beta, which is then reviewed by the Commission for consistency with the purpose statement. The Commission is currently focussed on whether the asset beta promotes contestability – i.e. it is "practically feasible for an efficient processor." It has previously accepted that the asset beta promotes efficiency.

36. Nevertheless, the natural tension between each limb of the purpose statement is relevant to considering the contestability dimension now. A milk price (or asset beta) that promotes efficiency may weaken incentives for contestability, and vice versa. There is no perfect equilibrium milk price (or asset beta). Rather, a range of milk prices (and asset beta estimates) are capable of providing incentives to promote efficiency and contestability.

37. In summary, Fonterra's view is that under DIRA:

(a) a range of milk price asset beta estimates are practically feasible, consistent with the DIRA purposes, and the fact that estimating asset beta is notoriously difficult and involves estimation error (no matter what method is used, as accepted by the Commission); and

(b) there is nothing in DIRA that requires the IM approach to be applied when estimating asset beta for the NP – or suggests that it is the better approach. Accordingly, changing its preferred estimation approach is not a valid reason for the Commission to accept the CEPA Report's advice or otherwise reverse its

[26] Commerce Commission, *Draft report – Review of Fonterra's 2015/2016 base milk price calculation*, 15 August 2016 at [4.28].

previous view that Fonterra's asset beta was consistent with the DIRA milk price monitoring purpose.

CERA Report analysis is problematic

Overview

38. Fonterra strongly believes that the CEPA Report does not provide a reasonable basis to reach a view that Fonterra's asset beta estimate is not practically feasible for an efficient processor:

(a) The CEPA Report appears not to fully understand the NP's unique characteristics.

(b) The analysis of relative systematic risk between the NP and the CEPA sample is flawed. It does not undermine UOA's and Fonterra's view that EDBs are the best comparator.

(c) It should not have excluded consideration of Fonterra's own asset beta.

(d) The CEPA report appears to determine a preferred asset beta estimate under a narrow application of the IM approach rather than address the key question of whether, based on all relevant evidence, Fonterra's asset beta is within a plausible practically feasible range.

The characteristics of the NP

39. The NP is a notional subset of Fonterra's business. It is assumed to be a business that manufactures and sells milk powder-based commodity products (referred to in the Milk Price Manual as “Reference Commodity Products”, or “RCPs”) both on and off Global Dairy Trade. The NP's cost of milk, or the farmgate milk price, is set in accordance with the Milk Price Manual.

40. As described in the NERA report:[27]

> The various constraints/assumptions used to define the NP mean it bears little relation to any real-world dairy firm outside of New Zealand. For example, the NP is constrained to only sell the “Reference Commodity Products” (“RCPs”) and is able to completely pass through price and volume risk to suppliers *ex post*. The uniqueness of the NP makes the standard approach to estimating the asset beta by finding “comparable” firms a difficult exercise.

41. CEPA appreciates that the NP is "aligned entirely with the milk price manual calculation",[28] but then also says that it may be reasonable to assume that non-New Zealand processors can pass on systematic risk in prices in the same way the NP can.[29] This incorrect assumption may have resulted in CEPA taking false comfort from the CEPA sample and/or underestimating the NP's (and other NZ processors') low systematic risk.[30]

---

[27] NERA Economic Consulting, *Estimating asset beta for the "Notional Processor"* 9 May 2018 at [25].

[28] CEPA, *Dairy Notional Processors' Asset Beta – New Zealand Commerce Commission,* 28 March 2018 at 12.

[29] CEPA, *Dairy Notional Processors' Asset Beta – New Zealand Commerce Commission,* 28 March 2018 at 13.

[30] Refer to Fonterra *Submission on review of Fonterra base milk price calculation draft report,* 1 September 2017 at [16] to the effect that other NZ processors can also pass on systematic risk in the same way as the NP.

42. The UOA Report explains why it should not be assumed that non-New Zealand processors can pass on systematic risk in the same way as the NP:[31]

(a) UOA is not aware of any listed companies in the CB Sample set, other than Synlait and potentially Murray Goulburn, which have the ability to make ex-post adjustments to pass through all material revenue variances between forecast and actual performance, to the milk price.

(b) The rules of the Milk Price Manual mean that the NP passes on nearly all milk price and volume risk back to the supplier farmers.

(c) The structure of the milk market in NZ and DIRA regulatory framework is materially different to other countries in which companies in the CEPA Sample are domiciled.

(d) The NP is subject to limited competition and may have a high degree of market power in setting the farmgate milk price. That is, even in the absence of "regulation" or other forms of market control, the NP would have the ability to pass milk price and volume risk and other input costs back to the milk supplier. However, in markets where there are many processors that actively compete for milk supply, the ability to fully pass back milk price and volume risk to suppliers may be more limited.

(e) In markets where processors have less market power or absent specific regulations, processors may be subject to "hold-up" risk because investment in dairy processing assets has features of high asset specificity, where assets have little alternative value other than processing of raw milk. In a competitive market with a number of processing companies, to ensure ongoing supply by farmers of milk to a processing factory (and to avoid significant costs associated with idle plant or risk of asset stranding), individual processors may be limited in their ability to pay lower raw input costs or milk prices to supplier farmers in the event of any downturn in the market.

(f) Similarly, in an unregulated environment, a processor may have greater bargaining power than the farmer and subject the supplier farmers to "hold-up" risk, since raw milk cannot be stored but must be immediately processed. In this case the processor can exercise market power not to pass on raw commodity price increases to the supplier farmers, who have little choice but to supply milk to the dominant processor.

43. Accordingly, compared to an industry like electricity lines where it makes more sense (albeit not free of difficulty) to place heavy reliance on industry comparators, the uniqueness of DIRA and the NP make it far less obvious that industry comparators are helpful.[32]

44. In summary, Fonterra is concerned that the CEPA Report has underestimated the extent to which the characteristics of the NP as a regulatory construct mean it can pass on systematic risk in milk prices to a greater degree than processors in the CEPA sample. This difference means there is good reason to rely on different industry comparators (such as EDBs) if they provide the best systematic comparator, rather than assuming that comparators nominally in the same industry are most reliable.

[31] University of Auckland, *Asset Beta for Notional Processor: Response to the Cambridge* Report, 9 May 2018 at [6.2].
[32] NERA Economic Consulting, *Estimating asset beta for the "Notional Processor"* 9 May 2018 at [29] – [30].

The choice of primary comparator(s)

45. The CEPA Report states that Fonterra's approach to estimating asset beta appears to differ from the IM approach due to "Fonterra making a large downward adjustment, using the Commission's asset beta estimate of ELBs, to its estimated mid-point of its comparator sample."[33]

46. This is incorrect. In determining asset beta, Fonterra has appropriately exercised its judgement based on relevant evidence and expert advice. UOA and Fonterra have used a number of data points to inform the estimate of asset beta for the NP, and reasonably exercised judgement regarding the weight to place on available evidence.

47. As explained in the UOA Report:[34]

(a) Whether or not the Commission's IM approach to primarily or solely draw upon asset beta estimates from the same industry is used is not the right question.

(b) The key task is to estimate the asset beta for the NP, which requires judgement as to what evidence is the best evidence to inform that estimate.

(c) EDBs provide more reliable and suitable comparators since the NP and EDBs have a more similar systematic risk profile. EDBs provide the best evidence of NP's asset beta, because their systematic risk is most comparable.

(d) The CEPA Sample should receive less weight, because their systematic risk profile differs materially to that of the NP.

(e) If the Commission nevertheless remains committed to using the CEPA Sample as the starting point because it believes that the IM approach requires this and under DIRA the IM approach should be applied, then a significant downward adjustment to the asset betas of the CEPA sample (to determine the asset beta of the NP) is warranted on account of two factors:

(i) The CEPA Sample comprises a mixture of companies with processing operations and a value-added business component. In contrast, the NP is a 100% processing operation. This warrants a downward adjustment to asset beta in the same manner as the Commission adjusted the asset beta for airports downwards, based on airports owning both aeronautical and non-aeronautical assets.

(ii) A further downward adjustment is warranted to reflect that none of the companies in the CEPA Sample have the ability to fully pass back systematic commodity revenue (both price and volume) risk to supplier farmers. In addition, the CEPA Sample of companies face higher risks of asset stranding, capex / investment risk and are less protected against shocks to the discount rate that increase asset beta.

Comparing systematic risk

48. The core difference between UOA (and Dr Lally) and CEPA is that UOA (and Dr Lally) have reasonably determined that EDBs provide the best indicator of systematic risk for the

[33] CEPA, *Dairy Notional Processors' Asset Beta – New Zealand Commerce Commission,* 28 March 2018 at [1.2].

[34] University of Auckland, *Asset Beta for Notional Processor: Response to the Cambridge* Report, 9 May 2018 at section 3.

NP. Accordingly, international dairy comparators are relevant evidence, but not the primary comparator evidence.

49. The CEPA Report has sought to demonstrate that UOA and Dr Lally were wrong to take that approach. However, as explained in the UOA Report, the CEPA Report's analysis of the relative systematic risk of the notional processor, EDBs and the CEPA sample is flawed. There is every reason to think that the NP will have lower systematic risk than companies in the CEPA sample, and that EDBs are closest to the NP's systematic risk. In particular:[35]

(a) the NP has less systematic risk exposure to revenue risk relative to *all* groups of companies in the CEPA sample (which includes commodity exposed companies, commodity with price pass through and regulated milk price companies). Revenue risk is more aligned to EDBs;

(b) the NP has less operational leverage, capex investment, asset stranding, counterparty risk and financial risk compared to the CEPA sample. For each risk factor, the NP is more closely or equally aligned with EDBs; and

(c) in respect of relative exposure to opex (excluding raw milk) and exchange rate risk, the volatility of earnings may be greater for the CEPA sample, although any relative risk differential for beta is unclear.

50. The NERA Report agrees with the UOA Report that EDBs are the best comparators for the NP's systematic risk. The NERA Report also finds that there is an important way in which the systematic risks facing the NP may be lower than those facing EDBs – unlike the NP, even an EDB with a revenue cap can face some revenue risk.[36]

Further evidence on differences between NZ and non-NZ processors' ability to pass on risk

51. In Fonterra's submission of 1 September 2017 on the Commission's draft report on the 2016/17 base milk price ("**2017 Submission**"), we explained that the structure of the New Zealand dairy market is unique, and that the homogeneity of New Zealand dairy processors is not replicated anywhere else in the world. , The consequence is that New Zealand processors have a unique ability to pass their (unusually common) exposure to their most significant sources of earnings risk through into their milk prices. The CEPA Report does not directly address the points raised in the 2017 Submission.

52. In our 2017 Submission we identified the conditions that would have to hold for the non-New Zealand companies in the comparator set to be able to pass their exposure to systematic risk, either in full or with respect to specific parts of their businesses, on to suppliers of raw milk, and provided examples of the failure of these conditions to hold with respect to many of the businesses in the comparator set. These conditions included:

(a) Raw milk comprising a sufficiently large share of a comparator's inputs for raw milk suppliers to in fact be able to absorb the comparator's systematic risk. We noted that raw milk constitutes a significantly smaller proportion of total inputs for all other comparators for which information was readily available than for Fonterra or Synlait.

[35] University of Auckland, *Asset Beta for Notional Processor: Response to the Cambridge* Report, 9 May 2018 at [2.2].
[36] NERA Economic Consulting, *Estimating asset beta for the "Notional Processor"* 9 May 2018 at [38] – [39].

(b) There would have to be no regulatory constraints on passing systematic risk through into milk prices. A number of the comparators operate in markets in which milk prices are highly regulated. As we explain below, a case can be made that Australian processors have generally not passed through to farmers their full exposure to global commodity prices out of concern that doing so would give rise to adverse regulatory consequences.

(c) Where a number of processors compete for milk in a market, it will only be feasible for most of them to pass systematic risk onto suppliers if they also compete in largely the same markets for their output. This condition holds for New Zealand processors but does not appear to hold for most (if not all) of the comparators.[37]

(d) More generally, there are a number of other aspects of market structure that would have to be present for most processors in a market to be able to pass on their exposure to systematic risk. We identified a number of instances where these aspects do not appear to be present.

(e) We explained that the transfer pricing mechanisms that are prevalent in vertically integrated dairy businesses are also not conducive to the pass through of non-commodity systematic risk into milk prices.

53. Based on our analysis of the dairy comparators against these conditions, we concluded most of them had limited ability to pass their exposure to systematic risk onto their suppliers, supporting our position that the non-New Zealand comparators are of limited relevance in deriving the asset beta for the NP. The CEPA Report does not address, nor does it rebut, our analysis.

ACCC final report on its inquiry into the Australian dairy industry

54. On 30 April 2018, the ACCC released its final report on its inquiry into the Australian dairy industry.[38] The report provides an in-depth assessment of the structural characteristics of the Australian dairy market, including analyses of the relative bargaining power of supermarkets, processors and farmers. Among other things, the report includes a detailed analysis of both processors' ability to pass risk onto farmers and on the extent to which they actually do so. The ACCC's analysis usefully informs an assessment of the differences between the risks faced by the listed Australian dairy processors in the comparator sample and NZ processors. Because Australia ranks second globally behind New Zealand in terms of the proportion of its milk that is exported, the ACCC's assessment provides valuable insight into the extent to which New Zealand dairy processors ability to pass risk through into their milk prices differs from their foreign counterparts.

55. In particular:

(a) The ACCC finds that farm gate milk prices paid by export-focused processors, including the Australian processors in the comparator set, Saputo, Bega and Murray Goulburn, reflect global commodity prices. However, the ACCC also finds that processors have historically "generally not passed on the full extent of volatility in export markets despite having the discretion to do so".[39]

[37] All New Zealand processors with their own raw milk supply export in excess of 95% of their production and compete primarily in the sale of RCPs in global commodity markets. In calendar year 2017, for example, WMP and SMP comprised 53.6% of Fonterra's exports by volume and 45.6% of independent processors' exports by volume (data sourced from NZ Customs).

[38] Australian Competition and Consumer Commission, *Dairy Inquiry – Final Report*, 30 April 2018.

[39] Australian Competition and Consumer Commission, *Dairy Inquiry – Final Report*, 30 April 2018 at 41.

(b) The ACCC argues that as a matter of policy, processors should be restricted from passing into milk prices the consequences of within-year decreases in global commodity prices through 'step downs' in previously announced milk prices.[40] The ACCC's forward looking position is not directly relevant to an assessment of processors' historic pricing behaviour, but it does raise the possibility that processors' general historic reluctance to decrease their announced milk prices (and therefore pass downside risk onto famers) may have been influenced by concerns about the potential regulatory consequences of doing so.

(c) Export-focused processors in aggregate derived only 30 – 35% of their revenue in the 2014 – 2016 financial years from exports.[41] Consequently, domestic market dynamics are the more significant determinant of even export-focused processors returns and of their ability to pass risk onto farmers.

(d) The ACCC's analysis strongly supports a conclusion that processors do not have an unconstrained ability to pass sources of variation in domestic market returns onto farmers. For example, the report finds that margins on branded products "vary by type of dairy product and by individual processor", implying that individual processors are generally unable to pass on the full impact of price or cost shocks so as to maintain margins.[42]

(e) The report also finds that average domestic gross margins on branded dairy products have been either stable or declining overall since 2009, further implying that processors as a group have also been unable to fully pass on the impact of cost and price changes.

(f) The ACCC demonstrates that domestic prices for exportable products such as cheese and butter are correlated with export prices, but that domestic price fluctuations are lower than global market price changes.[43] So a processor that based its farm gate milk price on export prices would still be exposed to margin risk with respect to its domestic sales of exportable products.

(g) With respect to fresh dairy products, the report notes that wholesale prices have generally been flat, but that costs (and therefore margins) vary with changes in farm gate milk prices, indicating that processors operating in this category are also exposed to margin risk.

56. Overall, the ACCC's report paints a picture of an industry in which dairy processors are exposed to a range of price and cost pressures, some but not all of which they are able to pass onto farmers through the farm-gate milk price. While Australian processors have a similar ability to New Zealand processors to pass onto farmers the risks arising from their exposure to global commodity markets, they have historically not fully acted on this ability. In any case, however, export-focused Australian dairy processors generate a far smaller proportion of their total revenue from global commodity markets than their New Zealand counterparts, implying their ability to pass on global commodity-related risk has a much lower impact on their ability to maintain margins than is the case for New Zealand dairy processors.

The CEPA Report's 'commodity exposed' sub-sample

[40] Australian Competition and Consumer Commission, *Dairy Inquiry – Final Report*, 30 April 2018 at 52.
[41] Australian Competition and Consumer Commission, *Dairy Inquiry – Final Report*, 30 April 2018 at Figure 6.12, 129.
[42] Australian Competition and Consumer Commission, *Dairy Inquiry – Final Report*, 30 April 2018 at 130.
[43] Australian Competition and Consumer Commission, *Dairy Inquiry – Final Report*, 30 April 2018 at 133.

57. The CEPA Report identifies ten comparators that it asserts have "the majority of their revenue coming from commodities".[44] The CEPA Report calculates average asset betas for this sample that are only slightly lower than for the full sample (e.g. 0.49 vs 0.50 for the weekly estimates to 15 January 2018 and 0.52 vs 0.56 for the four weekly estimates over the same period). However, Fonterra has previously provided evidence to the Commission that demonstrates that none of the dairy companies in this sample, other than Synlait, in fact derive the majority of their revenue from the sale of commodity products:

(a) Bega's 2016 Annual Report showed that 78% of Bega's 2016 revenue was from the sale of consumer packaged goods and nutritional products.[45]

(b) Dairy Crest disposed of its liquid milk business in 2015 and its business has subsequently primarily comprised branded cheese and butter.[46]

(c) Murray Goulburn's ingredients sales comprised just 33% of total revenue in the first half of the 2016/17 financial year [47]

(d) Saputo's dairy ingredients sales comprise just (circa) 2% of Canadian revenue and 6% of US revenue, with the balance from retail and foodservice.[48]

Fonterra's asset beta

58. The CEPA Report excludes Fonterra from the CEPA sample, on the basis that trading liquidity is low and Fonterra is different to the NP. Fonterra's view is that Fonterra is the closest comparator to the NP. The UOA Report states that:[49]

(a) it is not clear that trading liquidity is a strong reason to exclude Fonterra;[50] and

(b) despite the CEPA Report's view to the contrary, Fonterra has clear incentives to maximise dividends and capital gains for all stakeholders (i.e., farmer suppliers and unit holders) to maximise value for these investors.

59. It is not clear to Fonterra why the CEPA Report believes it is appropriate to exclude Fonterra's asset beta on such grounds, yet insists on relying on a comparator sample of entities that are less comparable to the NP.

60. Fonterra remains of the view that Fonterra's measured asset beta is a good (but not decisive) indicator of a practically feasible asset beta for the NP. Fonterra has recently calculated an asset beta range of 0.14 (weekly) to 0.28 (monthly) over the five-year period to 15 January 2018, and using the same method as CEPA. The UOA Report expects the empirical beta estimate for Fonterra (that comprises both the business of the NP and value-added ingredients business) will be an upward biased "empirical" estimate of the

[44] CEPA *Dairy Notional Processors' Asset Beta – New Zealand Commerce Commission,* 28 March 2018 at 23.

[45] Fonterra *2016/17 Base milk price calculation review workshop – responses to Commission's request for follow-up comments*, 13 June 2017 at 4.

[46] Fonterra *Submission on review of Fonterra base milk price calculation draft report,* 1 September 2017 at [17].

[47] Fonterra, *2016/17 base milk price calculation review workshop – responses to Commission's request for follow-up comments*, 13 June 2017 at 5.

[48] Fonterra, *2016/17 base milk price calculation review workshop – responses to Commission's request for follow-up comments*, 13 June 2017 at 8.

[49] University of Auckland, *Asset Beta for Notional Processor: Response to the Cambridge* Report, 9 May 2018 at [8.16] – [8.17].

[50] In determining the asset beta for EDBs, the Commission excluded just one company (Jersey Electricity) from its energy sample due to illiquidity. Jersey Electricity traded on average on only 36% of possible trading days over the relevant period. Both Fonterra Co-operative Group and the Fonterra Shareholders' Fund traded on 100% of possible trading days over the five-year period to 15 January 2018.

beta for the NP (Fonterra has in fact estimated a higher asset beta for the NP, based on EDB evidence).[51]

61. Again, under DIRA it is appropriate for Fonterra to consider all relevant evidence that helps to establish a plausible range of practically feasible asset betas, which includes the estimate for Fonterra's business as a whole.

How investors value NZ dairy processors

62. The CEPA Report supports (in part) its conclusion that "the comparator set is the most appropriate reference point for the asset beta of the NP" with the assertion that "there are significant differences between the dairy sector and the energy sector in … how investors' value the industries".[52] In particular, the CEPA report argues "we believe that investors will value the future revenue streams from milk processors differently to other sectors because they are likely to have a different relationship with macro-economic factors, and therefore systematic risks".[53] Again, we agree with this argument with respect to the non-New Zealand comparators, but not with respect to the NP. For the reasons explained above, the NP and EDBs face a similar and modest exposure to the impact of macro-economic factors on both their current year earnings and the expected present value of future earnings:

(a) The primary determinant of both the NP's and EDBs' current-year earnings is the product of the (quasi, for the NP) regulated rate of return and the opening regulated asset base, with both facing only a small exposure to the impact of any macro factors.

(b) Similarly, the expected present value of both the NP's and EDBs' future earnings streams will be closely aligned to the book values of their end-of-period regulated asset bases, with movements between market values and book values in both cases being primarily a function of divergences between the market's required rate of return and the 'regulated' rate of return, and / or changes in expectations regarding the likelihood of stranded assets (i.e. volume shocks).

63. New Zealand equity analysts are familiar with the quasi-regulatory nature of Fonterra's New Zealand commodity manufacturing business, and some analysts value this portion of the business 'as if' it was a regulated utility. For example, a 2017 report prepared by Macquarie Research provides a breakdown of the NZ Ingredient's business's FY16 earnings by reference to various adjustments to the 'regulated return' of $680 million provided to the business under the Manual.[54]

Conclusion

64. For all of the above reasons, Fonterra submits that the CEPA Report does not establish that Fonterra's estimate of asset beta for the NP is inconsistent with the contestability purpose. Fonterra maintains that its estimate will promote contestability whether characterised as:

(a) being based on an appropriate choice of primary comparators in accordance with the IM approach;

[51] University of Auckland, *Asset Beta for Notional Processor: Response to the Cambridge* Report, 9 May 2018 at [8.18].
[52] CEPA, *Dairy Notional Processors' Asset Beta – New Zealand Commerce Commission,* 28 March 2018 at 23.
[53] CEPA, *Dairy Notional Processors' Asset Beta – New Zealand Commerce Commission,* 28 March 2018 at 42.
[54] Macquarie Research, *Fonterra Shareholders' Fund – Ingredients: More than just milk powder and a regulated return*, 8 February 2017.

(b) a legitimate downward adjustment from the mid-point of CEPA's comparator sample; or

(c) an exercise of judgement based on all relevant evidence.

Andrew Cordner
Director of Legal