24 August 2021

Milk Price Group Response to CEPA asset beta report

Executive Summary

We address in this submission three matters raised in CEPA's review of the Milk Price Group's (MPG's) report on an appropriate asset beta and specific risk premium for use in the Farmgate Milk Price for the 2021 – 2024 seasons, provided to the Commerce Commission as Attachment 6 to Fonterra's Reasons Paper in support of the 2020/21 base milk price (the MPG report):

1. Matters relevant to the calculation methodology, and resulting differences between the calculated MPG and CEPA asset betas.
2. The composition of the 'core' comparator set, and the relevance of the extended set.
3. The MPG's concluded 'downward adjustment' of 5 basis points.

We agree with CEPA's and the Commission's conclusions on asset stranding risk and the specific risk premium and have no comments on these matters.

In summary:

- While the Commerce Commission typically references prior-period asset betas in its regulatory work, we do not consider there is a strong argument for placing any weight on comparator asset betas estimated over the 2010-15 period. There is no reason to consider the estimates for the 2015-20 period do not represent sound estimates of potential asset betas for the comparator set over the 2021 – 2024 period, and it is possible that some of the comparator firms would not have had operations which satisfied the new DIRA test over the 2010-15 period (or that other differences to their more recent operations would have meant their beta estimates were less relevant).
- There is a 3bp difference between the MPG's estimated average asset betas at 31 December 2020 (0.47) and CEPA's average estimate (o.50). We have reviewed the detailed information made public by the Commission on 10 August, and determined that 1bp of the difference is due to differences in estimated equity betas, potentially because the MPG has used dividend-adjusted share prices in its calculation and CEPA has not, and that the balance is due to differences in calculated gearing ratios. This is likely due to differences in the definitions of net debt employed by Capital IQ and Bloomberg, but we do not have any basis for assessing whether one or the other is technically superior.
- CEPA suggests that our adjustment to net debt to include capitalised lease obligations under IFRS 16 may not be consistent with standard regulatory approaches. We do not have a strong view on this matter, and note that removing the adjustment reduces our average calculated asset beta by 1bp to 0.46 when averaged across all methods at 31 December 2021.
- CEPA and the Commission both express a preference for our 'core' comparator set, comprising firms with some operations which appear to fully satisfy the new DIRA tests. We agree with this preference.
- CEPA suggest five additional firms for inclusion in our core comparator set. We agree with three of these (Freedom Foods, Beston and WHL Group), but not with the inclusion of Murray Goulburn (which was delisted in 2018) or Mengniu Yili, which only satisfied the DIRA tests subsequent to its acquisition of Westland Dairy in 2019. These adjustments result in a small reduction in our average asset betas at 31 December 2020, to 0.46 and 0.47 (with and

without the IFRS 16 adjustment), compared to 0.47 and 0.48 respectively for our original core comparator set.

- Since our selected asset beta is 0.45, not much hinges on whether or not the Commission considers we have made a sufficiently strong case in support of a downward adjustment to the average of the comparator asset betas. Nevertheless, we explain that we disagree with CEPA's conclusion in their summary letter that "we do not consider a strong justification has been put forward for a downward adjustment from the sample average".
- In support of our position:
    - We present additional evidence in support of the proposition that Fonterra's share price is typically established by participants in the unrestricted market for units in the Fonterra Shareholders' Fund, who do not face any of the constraints faced by farmer participants in the market for shares in Fonterra Co-operative Group. Changes in the unit and share prices will therefore have reflected the judgement of diversified investors, and it is consequently valid to use the Fonterra share price (or FSF unit price) as a control for the possibility of changes in the level of systematic risk attached to the dairy sector in our a2 Milk / Synlait analysis.
    - We also present additional evidence demonstrating the strong likelihood that a2's nutritionals business was the primary determinant of its asset beta over the 2016 – 2020 period focused on in our a2 / Synlait analysis.
    - We explain why there are good reasons to believe that CEPA's 2018 conclusion that the notional milk price business likely faced a lower exposure to systematic risk than the typical comparator still holds given the updates to the comparator set.
    - Similarly, we note that at that time the Commission also concluded the notional milk price business likely faced less exposure to systematic risk than the comparator firms, and that some downward adjustment was therefore supportable. This conclusion relied on CEPA's analysis, and therefore remains valid with the updated comparator set.
- We conclude by noting that an alternative approach to our a2 / Synlait analysis is to use it as the basis for substituting an estimate of Synlait's 'commodity divisional' asset beta for its overall asset beta in our comparator set. This approach would result in an average comparator asset beta, without any further adjustments, of 0.45 at 31 December 2020.

Introduction

We address in this submission the following matters raised in the summary CEPA letter dated 21 July 2021 and in CEPA's accompanying PowerPoint deck, informed where relevant by views expressed by the Commerce Commission in its draft 2020/21 base milk price report dated 16 August 2021:

1. Matters relevant to the calculation methodology, and resulting differences between the calculated MPG and CEPA asset betas.
2. The composition of the 'core' comparator set, and the relevance of the extended set.
3. The MPG's concluded 'downward' adjustment of 5 basis points.

We agree with CEPA's and the Commission's conclusions on asset stranding risk and the specific risk premium and have no comments on these matters.

Calculation methodology

CEPA notes:

- That our selected estimation periods (five-year periods ending on nine different dates between December 2018 and December 2020) are not consistent with the Commission's "past … emphasis on the last 10 years".
- Its view that an adjustment to net debt, to include capitalised debt obligations as calculated under IFRS 16, may "deviate from common regulatory approaches".
- A number of generally minor differences between CEPA's and the MPG's estimated asset betas, with CEPA estimating average (across methods) asset betas of 0.50 (with net debt adjusted for IFRS16 and 0.49 (without an IFRS 16 adjustment) at 31 December 2020 for our core comparator set, compared to our average estimates of 0.47 and 0.46, with and without an IFRS 16 adjustment to net debt.

Estimation periods

The Commission's most recent statement of its position on estimation periods is in the Fibre Input Methodologies Final Reason Paper from October 2020, where the Commission does not appear to express a clear preference for averaging across the two most recent five year periods. Instead, the Commission notes the pros and cons of different approaches but concludes that different approaches had little impact on the Commission's overall estimates. We understand the Commission established its approach of considering estimates over the two most recent non-overlapping five year period subsequent to the GFC, when it was concerned that estimates of asset beta using data over the GFC period might not provide good estimates of future systematic risk. There were not any similar instances of market disruption over the 2015 – 2020 period. As the Commission has noted there is an increased risk that prior-period estimates may capture the impact of historic differences in comparator firm operations and business characteristics. While there is potentially some value in examining estimates over the 2010 – 2015 period as a cross-check on our more recent estimates, we do not see a case for weighting these equally with more recent estimates, as CEPA has done in its reported average asset beta of 0.53. (In contrast, we see a stronger case for considering more recent estimates over different periods, such as our calculations for periods ending between 2018 and 2020, since this provides a practical way of controlling for the potentially random impact of relying on a single estimation date.)

IFRS16 adjustment to net debt

We do not have a strong view on the use of IFRS 16-adjusted net debt in our delevering calculations. As CEPA notes, this has only a minor impact, with our estimates of non-adjusted asset betas being slightly lower than our adjusted estimates.

Differences between the MPG's and CEPA's calculated asset betas

We have examined the additional detail provided by CEPA on their calculated equity betas, asset betas, and calculation methodology, in an attempt to determine why their average estimates are slightly higher than ours, but have not been able to reach any definitive conclusions. We note:

- As explained above, there is a 3bp difference between the average of CEPA's estimates and the MPG estimates at 31 December 2020. 1bp of this average difference is due to differences in our estimated equity betas, and 2bp is due to differences in calculated gearing ratios.

- The generally minor differences in calculated equity betas potentially reflect our use of dividend-adjusted share prices, whereas CEPA appears to use unadjusted closing share prices. Since we care about covariances in total returns, not just changes in share price, we consider our approach is technically superior, noting however the immaterial consequences of using one approach rather than the other.
- The 2bp impact of differences in calculated gearing ratios appears to reflect differences in the definition of net debt employed by Capital IQ and Bloomberg, but we have not been able to confirm this supposition.

The comparator set

The Commission and CEPA both express a preference for our 'core' comparator set, comprising firms with some operations which appear to fully meet the new DIRA test, over our extended set, which also includes firms with operations which come close to satisfying the DIRA test (but which do not fully satisfy the test). We are comfortable with CEPA's and the Commission's position.

CEPA highlights five additional firms (two of which we also noted) which it considers may qualify for the core comparator set, and the Commission has recommended that we include four of them (but not Murray Goulburn, which was delisted in 2018). We are comfortable with the inclusion of Freedom Foods, WHL and Beston,[1] but not Mengniu Yili, which has only owned operations consistent with the DIRA test since its acquisition of Westland Dairy in 2019 – we consider firms should only be considered for inclusion in the comparator set if they have had operations consistent with the DIRA test for most, and preferably all, of the estimation period.

Tables 1 and 2 present our asset betas for our comparator set updated to include Freedom Foods, Beston and WHL Group, with and without adjustments to net debt for the IFRS 16. The revisions to the comparator set result in a small reduction in our average asset betas at 31 December 2020, to 0.46 and 0.47 (with and without the IFRS 16 adjustment), compared to 0.47 and 0.48 respectively for our original core comparator set.

We also present estimated asset betas for the period 2010-15 in Tables 1 and 2 but note that we have not undertaken a detailed review of the operations of the comparator firms over this period.[2]

[1] Beston was listed in 2015 and is therefore not included in our 2010 – 2015 estimates.

[2] Synlait constitutes the single exception to this statement. As discussed in Attachment 6 to our reasons paper, in the period to 2016 Synlait was primarily a commodity processor, but its business has subsequently evolved to include significant non-commodity earnings. If we were to assume that Synlait's average asset beta at December 2015 represented a reasonable proxy for the asset beta attaching to Synlait's commodity business, and substitute it for the actual Synlait asset beta in our December 2020 calculations, the overall average at December 2020 would reduce to 0.44.

Table 1: Asset beta estimates for updated core comparator set - IFRS 16-adjusted net debt

2020 / 2015 COMPARISON	**DAILY**		**WEEKLY**		**4-WEEKLY**	
Core Comparator Set	**31/12/2020**	**31/12/2015**	**31/12/2020**	**31/12/2015**	**31/12/2020**	**31/12/2015**
BRF S.A.	0.49	0.44	0.54	0.43	0.54	0.42
Fonterra	0.11	0.22	0.13	0.10	0.11	0.30
Graincorp	0.46	0.44	0.47	0.49	0.41	0.53
Bega	0.68	0.42	0.78	0.46	0.26	0.66
Olam International	0.26	0.52	0.23	0.52	0.31	0.47
Wilmar	0.44	0.48	0.39	0.48	0.37	0.50
Saputo	0.62	0.57	0.60	0.56	0.57	0.54
ADM	0.72	0.84	0.73	0.87	0.71	0.88
Bunge	0.53	0.58	0.45	0.63	0.60	0.66
Synlait	0.77	0.43	0.77	0.26	0.98	0.25
Savencia SA	0.11	0.10	0.06	0.16	0.33	0.24
Glanbia	0.53	0.40	0.47	0.42	0.43	0.52
Golden Agri-Resources Ltd	0.50	0.88	0.61	0.83	0.53	0.74
HOCHDORF Holdings	0.31	0.17	0.27	0.26	0.52	0.30
Kerry Group plc	0.46	0.47	0.52	0.56	0.43	0.53
ASTARTA Holding N.V	0.25	0.36	0.09	0.53	0.46	0.36
First Resources Limited	0.62	0.79	0.61	0.88	0.82	0.98
Ros Agro PLC	0.28	0.09	0.18	0.17	0.61	0.24
Seaboard Corporation	0.48	1.24	0.71	0.94	0.70	0.94
WH Group	0.85	0.65	0.74	0.84	0.87	0.99
Beston Global Foods Company	- 0.05		0.31		0.24	
Freedom Foods Group Limited	0.55	0.25	0.43	0.51	0.16	0.65
Average	**0.45**	**0.49**	**0.46**	**0.52**	**0.50**	**0.56**

Summary across all methods	**31/12/2020**	**31/12/2015**
Primary Comparator Set	0.47	0.52

Table 2: Asset beta estimates for updated core comparator set - without IFRS 16 adjustment to net debt

2020 / 2015 COMPARISON	**DAILY**		**WEEKLY**		**4-WEEKLY**	
Core Comparator Set	**31/12/2020**	**31/12/2015**	**31/12/2020**	**31/12/2015**	**31/12/2020**	**31/12/2015**
BRF S.A.	0.48	0.44	0.52	0.43	0.53	0.42
Fonterra	0.11	0.22	0.13	0.10	0.11	0.30
Graincorp	0.45	0.44	0.47	0.49	0.39	0.53
Bega	0.68	0.42	0.78	0.46	0.26	0.66
Olam International	0.26	0.52	0.23	0.52	0.31	0.47
Wilmar	0.44	0.48	0.39	0.48	0.37	0.50
Saputo	0.62	0.57	0.60	0.56	0.57	0.54
ADM	0.72	0.84	0.73	0.87	0.70	0.88
Bunge	0.52	0.58	0.44	0.63	0.59	0.66
Synlait	0.77	0.43	0.77	0.26	0.98	0.25
Savencia SA	0.10	0.10	0.06	0.16	0.33	0.24
Glanbia	0.53	0.40	0.47	0.42	0.43	0.52
Golden Agri-Resources Ltd	0.50	0.88	0.61	0.83	0.53	0.74
HOCHDORF Holdings	0.31	0.17	0.27	0.26	0.52	0.30
Kerry Group plc	0.46	0.47	0.52	0.56	0.42	0.53
ASTARTA Holding N.V	0.20	0.36	0.08	0.53	0.37	0.36
First Resources Limited	0.62	0.79	0.61	0.88	0.82	0.98
Ros Agro PLC	0.28	0.09	0.18	0.17	0.60	0.24
Seaboard Corporation	0.47	1.24	0.71	0.94	0.69	0.94
WH Group	0.84	0.65	0.74	0.84	0.86	0.99
Beston Global Foods Company	- 0.05		0.31		0.24	
Freedom Foods Group Limited	0.52	0.25	0.43	0.51	0.16	0.65
Average	**0.45**	**0.49**	**0.46**	**0.52**	**0.49**	**0.56**

Summary across all methods	**31/12/2020**	**31/12/2015**
Primary Comparator Set	0.46	0.52

The case for a downward adjustment

Given the average asset beta for our updated core comparator set at 31 December 2020 is 0.46 or 0.47. depending on whether net debt is adjusted for IFRS 16, and our selected asset beta is 0.45, not much hinges on whether or not the Commission considers we have made a sufficiently strong case in support of an adjustment. Nevertheless, we explain in this section why we disagree with CEPA's conclusion in their summary letter that "we do not consider a strong justification has been put forward for a downward adjustment from the sample average". CEPA presents three arguments in support of its position:

> MPG have argued that a downward adjustment to the asset beta obtained from their sample average should be considered. They highlight three circumstances where the Commission has in principle accepted that there should be an adjustment:
>
> - An adjustment downwards should be made because of the impact of multi-divisional betas. MPG presents evidence implying that Synlait's implied commodity asset beta is between 0.3 and 0.4 compared to Synlait's observed asset beta of between 0.39 to 0.48. We do not consider the evidence presented to be robust.
> - An adjustment downwards should be made due to the regulatory differences between Fonterra and the comparator set. In our 2018 report we considered that changes in the value of growth opportunities in response to changes in economic conditions would be similar between companies in the comparator sample and a NP. We see no reason to deviate from this conclusion. We also concluded that there is insufficient evidence to conclude that regulation in general impacts beta. Furthermore, while our regulated milk price sub-sample provides a lower asset beta range it is based on a sample of just two comparators.
> - An adjustment downwards due to differences in systematic risk between services. Specifically, MPG argue that our 2018 report showed that Fonterra's NP business had less risk than other comparators. However, the comparator sample being considered by MPG is not the same as the comparator set we considered in 2018.

We consider these three arguments in turn below.

The robustness of the Synlait and a2 Milk analysis

In our paper we presented "analysis demonstrating the likely impact of Synlait's evolving commercial relationship with a2, which strongly suggests that systematic risk attaching to Synlait's commodity operations is materially less than the systematic risk attaching to its non-commodity operations. This analysis illustrates that at least some of the non-commodity operations of the comparator firms have materially higher systematic risk than their commodity operations, and that for these firms their 'commodity division' asset betas would likely be lower than their overall asset betas."

CEPA summarises the MPG's analysis, and sets out the arguments in support of their position that the analysis "may not" be robust, as follows:

> MPG's estimation of multi divisional betas:
>
> - The 2010 IMs (Airport services) reasons paper explains that a company's overall beta can be viewed as a weighted average of the betas of its component businesses.
> - MPG estimated divisional betas (for commodity and non-commodity operations) for Synlait.
> - MPG assumed that a2's asset beta would be a suitable proxy for Synlaits non-commodity operations. This is because from 2015 to 2016 a large percentage of Synlait's non-commodity business was generated through manufacturing infant formula for a2.
> - Found an implied commodity beta for Synlait of around 0.3-0.4 in 2015, compared to Synlait's asset beta of 0.39-0.48.
>
> Our view is that this method may not provide robust evidence:

- MPG used Fonterra's share price performance as a proxy for overall performance of the dairy industry. Fonterra's shares trade in a restricted market for cooperative members only, with arrangements for liquidity using related securities from non-members of the cooperative (which have been suspended in 2021). We don't consider movements in the share price to reflect dairy industry conditions (a fuller explanation of this is given in our 2018 commentary on submissions).
- The assumption that a2's asset beta would be a suitable proxy for Synlait's non-commodity business. a2 sells a wide range of consumer goods, the systematic risk of their entire business does not necessarily represent the systematic risk of one of their products (infant nutrition).

We consider these arguments separately below.

1. Fonterra's share price performance

We explained in Attachment 6 to our reasons paper that:

> We included Fonterra [in our regressions of percentage changes in Synlait's share price on percentage changes in the NZX index and in a2 Milk's share price] to address the possibility that covariance between changes in a2's and Synlait's share prices reflected broader dairy industry-specific factors. For example, if commodity price or FX movements were perceived to have a significant impact on both Fonterra's and Synlait's earnings – and therefore, potentially, their systematic risk – we would expect to see a statistically significant relationship between movements in the two firms' share prices, but did not find such a relationship.

Our view is that the significant business relationship between Synlait and a2 provides an obvious explanation for the covariance in the Synlait and a2 Milk share prices, and asset betas, such that that the 'reliability' of the Fonterra share price as a proxy for industry-wide systematic risk is of little consequence. We note, however, that we disagree with CEPA's assertions with respect to the relevance of the Fonterra share price.[3]

The Trading Among Farmers (TAF) structure introduced in 2012 was intended to result in the Fonterra share price being set, in effect, by participants in the NZX-listed Fonterra Shareholder's Fund (FSF), who are not subject to the minimum shareholding requirements and market restrictions applicable to farmer participants in the direct market for Fonterra (FCG) shares. Prior to the effective suspension of transferability between FCG shares and FSF units in May of this year, there was significant evidence that participants in the unrestricted FSF market did indeed set the FCG share price at the margin. Prices realised in the respective markets since May further support this point, as illustrated in Figure 1.[4]

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[3] We also draw the Commission's attention to our previous rebuttal of CEPA's arguments regarding the determinants of Fonterra's share price, in our submission dated 2 September 2019 on the Commission's draft report on the 2018/19 base milk price. See https://comcom.govt.nz/__data/assets/pdf_file/0024/173823/Fonterra-Submission-on-review-of-Fonterra-base-milk-price-calculation-draft-report-2-September-2019.pdf .

[4] There is also good evidence of liquidity in both the FSF and FCG markets, with, for example, bid-ask spreads in May 2021 in the FSF market averaging less than 0.5% of asking prices. Trades have occurred in both markets on every trading day since the introduction of TAF.

Figure 1: Fonterra Shareholders' Fund and Fonterra Cooperative Group share prices

Subsequent to the effective suspension of convertibility of shares into units (implemented through a cap on the Fund size) in early May, the FSF unit price has consistently exceeded the FCG price, indicating that participants in the FSF market would have been the marginal price setters had units and shares been exchangeable at that point. More generally, we would typically expect unit holders to be the marginal price setters given the lack of restrictions on their ability to holder FSF units relative to alternative investments and the likelihood that they are in more general more fully diversified than participants in the farmer market.

2. Does a2 Milk's asset beta reflect the systematic risk of a2's nutritional business?

As noted above, CEPA asserts that a2's asset beta will not necessarily be "a suitable proxy for Synlait's non-commodity business [since] a2 sells a wide range of consumer goods, [so] the systematic risk of their entire business does not necessarily represent the systematic risk of one of their products (infant nutrition)."

We present in Table 3 below summary information on trends in a2's revenue mix, its asset beta, and its enterprise value over the period 2014 – 2020.

Table 3: a2 Milk revenue composition and asset beta FY14 - FY20

Revenue	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Liquid milk	97	113	120	126	142	171	222
Infant nutrition	11	42	214	394	724	1,064	1,424
Other nutritional	2	1	18	30	56	66	85
Revenue share							
Liquid milk	87.8%	72.5%	34.1%	22.9%	15.4%	13.2%	12.8%
Infant nutrition	10.0%	26.9%	60.8%	71.7%	78.5%	81.8%	82.3%
Other nutritional	2.2%	0.6%	5.1%	5.4%	6.1%	5.1%	4.9%
Asset beta							
Daily beta	1.06	0.74	1.12	1.44	2.01	2.28	1.57
Weekly beta	0.87	0.85	1.40	1.33	1.70	2.10	1.32
4-weekly beta	0.76	0.82	1.45	1.02	0.91	1.32	0.92
Average	0.90	0.80	1.32	1.26	1.54	1.90	1.27
Market cap ($m)	383	469	1,364	3,795	8,653	10,887	15,907
EV ($m)	367	463	1,295	3,674	8,312	10,422	15,070
Implied EV/revenue multiple (x)	3.3	3.0	3.7	6.7	9.0	8.0	8.7

We note:

- Over the FY16 – FY20 period used in the analysis presented in our paper, the contribution of a2's nutritional powders business to total revenue increased from 66% to 87%. The increase in a2's enterprise value over that period is consistent with the market valuing a2's liquid milk business at ~2x revenue and its nutritionals business at ~9x revenue, implying that between FY16 – FY20 a2's nutritionals business was contributing ~95% to its enterprise value. (As a sense check, we note that between FY15 and FY20, a2's enterprise value increased by 33x and nutritionals revenue increased by 35x, but revenue from liquid milk increased by only 2x.)
- a2's average asset beta increased from 0.85 in FY14 – FY15 to 1.45 in FY16 – FY18, presumably because the systematic risk attaching to a2's nutritionals business was perceived by the market to be materially higher than the systematic risk attaching to its liquid milk business.
- In particular, under the simplifying assumptions that the asset betas attaching to a2's liquid milk and nutritionals businesses remained constant over time, and that the market consistently valued the liquids business at 2x revenue and the nutritionals business at 9x revenue, the implied divisional asset betas would be in the vicinity of 0.60 for the liquid milk business and 1.50 for the nutritionals business. These simplifying assumptions will not of course be fully valid, but we can nonetheless conclude with a high degree of confidence that (a) the asset beta applying to a2's nutritional business is materially higher that the asset beta applying to its liquid milk business (b) in the latter portion of the period summarised in Table 3 a2's asset beta primarily reflected the systematic risk attaching to its nutritionals business, and (c) a2's overall asset beta will, on average, have represented a conservative estimate of the asset beta applicable to a2's nutritionals business.

With respect to our a2 / Synlait analysis more generally:

- In Table 1 on p.32 of Attachment 6, we show that the contribution of Synlait's commodity powder and creams business to gross profit decreased from 92% ins FY15 to 66% in F20, while the contribution of its consumer packaged business (a large proportion of which relates to its a2 relationship) increased from 3% to 20%. Over the same period Synlait's average asset beta increased from 0.44 to 0.85 (averaged across daily, weekly and four-weekly estimates).

- There is a strong highly statistically-significant relationship between percentage changes in Synlait's asset beta and a2's asset beta (and, equivalently, between percentage changes in the Synlait and a2 share prices after controlling for general market movements).
- Irrespective of the weight placed on our use of Fonterra to control for the impact of changes in the systematic risk attaching to the NZ dairy sector, we note there have not been any market-wide developments which would imply an increase in systematic risk attaching to the NZ dairy sector consistent with the near-doubling in Synlait's average asset beta between FY16 and FY20. (Indeed, the more conservative outlook for NZ's long term milk supply highlighted in Fonterra's capital structure consultation material, and noted by the Commission in its draft report, by itself implies a reduction in value of the sector's growth options.)
- Instead, the obvious explanation is that the systematic risk attaching to Synlait's nutritionals business is higher than the risk attaching to its commodity business. And since a2's asset beta primarily reflects the risk attaching to its nutritionals business (albeit an apparently downwardly-biased estimate), we continue to consider it reasonable to view a2's asset beta as representing a valid proxy for the systematic risk attaching to Synlait's non-commodity business.[5]

The impact of regulatory differences between Fonterra and the comparator set

CEPA presents two arguments in support of its position that 'regulatory' differences between Fonterra (or the notional processor) and the comparators do not support a downward adjustment:

> - In our 2018 report we considered that changes in the value of growth opportunities in response to changes in economic conditions would be similar between companies in the comparator sample and a NP. We see no reason to deviate from this conclusion.
> - We also concluded that there is insufficient evidence to conclude that regulation in general impacts beta.

With respect to CEPA's claim that there is no reason to expect any difference in the range of growth options, available to the notional processor relative to the comparator firms, or on the value placed by shareholders on those options, CEPA has failed to engage with our position as summarised on pp.33 of Attachment 6:

> The combination of DIRA and the Milk Price Manual … create more certainty over the value to investors of any growth options related to the RCP business: where net returns from the exercise of any option will accrue to the Milk Price investors will only recover costs, including a WACC return on any capital expenditures, related to the exercise of the option, and should therefore value the relevant growth options at nil. In contrast investors in any other commodity food processing business can normally be expected to assume the business holds some NPV-positive growth options, and it is similarly reasonable to assume changes in the

[5] As an aside we note that a2 Milk may qualify for inclusion in our core comparator set for our next reset in 2024, given its recent acquisition of a 75% stake in Mataura Valley Milk for $268.5m, if the Mataura Valley facilities continue to be used to manufacture some commodity product for sale on global markets. Since the purchase price represents ~5% of a2's current market capitalisation of ~$5b, we suspect the purchase is unlikely to have a significant impact on a2's asset beta, which will continue to primarily reflect the systematic risk attaching to a nutritional powders business.

value of at least some of these options will be positively correlated to changes in the value of the market as a whole.

We also explained in a footnote to this passage that:

> Martin Lally, in *Review of WACC Issues*, 25 February 2016, prepared for the Commerce Commission, makes the point in the context of gas pipeline businesses that growth options (in this case the option to expand) will be valued less by investors in businesses subject to formal regulation than by investors in businesses which are merely subject to the threat of formal regulation.
>
> The Commerce Commission has previously argued that Fonterra's milk price is not formally controlled by the Commission and that investors may therefore impute value to growth options perceived to be available to the RCP business.[6] We have two responses to this argument:
>
> - First, since 2008 Fonterra has voluntarily submitted to a form of quasi-formal regulation, and the fact it has held to this commitment for 13 years means investors can be expected to form their assessments of expected returns 'as if' the business were actually subject to regulation, rather than merely faced the 'threat' of future regulation.
> - Secondly, as noted above, milk suppliers should not be penalised, via a lower Milk Price, for any increment to the cost of capital attributable to the existence of growth options if the returns to the exercise of those options will accrue to investors rather than the future Milk Price. Alternatively, if there was an expectation that returns from the exercise of growth options would flow to the Milk Price the options would have a nil NPV to investors (in all states of the world) and their value would therefore not co-vary with the market.

We have also previously addressed CEPA's claim "that there is insufficient evidence to conclude that regulation in general impacts beta". CEPA's primary support for this claim was a paper prepared for the Commission by Dr Martin Lally. In in our submission of 2 September 2019 on the Commission's draft report on the 2018/19 base milk price we explained that:

> On page 10, the Commission explains that in its framework for estimating asset beta it uses "the sample average as a starting point, and only depart[s] from it where there are sound reasons for doing so", and adds a footnote to this sentence stating that "regarding any adjustments for regulatory differences, Dr Lally concluded that 'there is no empirical study that provides a clear conclusion on the effect of regulation on asset beta'". The Commission does not explain the relevance of the footnote, but an obvious interpretation is that the Commission considers it supports an argument that the fact that the milk price is derived under a quasi-regulatory framework, unlike the milk price of any of the dairy comparators, does not by itself imply a downward adjustment may be warranted. If our interpretation is correct, we believe the Commission's position is mistaken. The focus of the Lally paper, and

[6] See, for example, paras B28 – B29 of the Final 2017/18 base milk price report, at https://comcom.govt.nz/__data/assets/pdf_file/0027/96606/Final-report-Review-of-Fonterras-2017-18-base-milk-price-calculation-14-September-2018.pdf .

the papers surveyed in it, is on whether there is empirical support for the proposition that differences in the form of regulation imply differences in asset beta; not on the impact of 'regulation' versus 'no regulation'. Lally concludes that there are strong theoretical reasons for believing different regulatory models will imply different asset betas, but that (primarily data-related) limitations in the relevant literature mean he cannot find empirical support for this proposition. While the sentence cited by the Commission reads as stated, it is clear from the context that the appropriate interpretation is that Lally's position is simply that 'there is no empirical study that provides a clear conclusion on the effect of [form of] regulation on asset beta'.

In its Final Report on the 2018/19 base milk price the Commission acknowledged our submission, explaining that it did not intend the relevant footnote to imply that the Commission considered that regulation had no impact on asset beta.[7]

Downward adjustment for differences in systematic risk

Finally, CEPA asserts that there we have not demonstrated that differences in systematic risk between the notional processor and the comparator firms support a downward adjustment: "MPG argue that our 2018 report showed that Fonterra's NP business had less risk than other comparators. However, the comparator sample being considered by MPG is not the same as the comparator set we considered in 2018."

Given the extensive analysis of this issue in the past by various parties, including CEPA, it is disappointing that CEPA has not considered whether the key points raised in this analysis still hold despite the change in the composition of the comparator set. For the purposes of this submission, we simply note:

- That the relative risk analysis presented by CEPA on pp.38 – 41 of its 2018 report is sufficiently general to clearly still be applicable to the updated comparator set.[8]
- Similarly, that the Commerce Commission's conclusion on pp.39-40 of its 2017/18 final base milk price report is also clearly still relevant when comparing the notional processor to firms in the revised comparator set (most of which were also in the 2018 comparator set):

> B94 We accept that the NP does face less risk than most other dairy companies and, in particular, that it is able to transfer price and commodity risk more completely to farmers than most other processors can. To the extent that this reflects systematic risk then it is likely that the NP would have a lower asset beta than the average dairy company. That is, to that extent, the NP may have an asset beta lower than the midpoint (average) estimate of beta estimated for a sample of other dairy processors.
>
> B110 While we conclude that the commodity price and volume risk is generally not systematic in nature, we cannot rule out the possibility that there is a small systematic risk component. To

[7] More specifically, the Commission summarised Fonterra's submission as follows: "Regarding the footnote on page 10 which references Dr Lally's work on the effect of regulation on asset beta - The focus of the Lally paper is on whether there is empirical support for the proposition that differences in the form of regulation imply differences in asset beta; not on the impact of 'regulation' versus 'no regulation'." The Commission then explained that: "The footnote is not intended to be read in the way Fonterra suggests. We have clarified this in our final report." We have not however been able to locate a clarifying statement from the Commission in the final report.

[8] In particular, CEPA's arguments about the notional processor's lower exposure to risk from fluctuations in revenue, exchange rates, variations in demand on operational leverage, counterparty risk and financing risk self-evidently all apply to the current core comparator set.

> 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.

The case for a downward adjustment – concluding comments

As noted above, both CEPA and the Commission have previously concluded that a supportable case can be made for a downward adjustment from an average comparator asset beta of ~0.50, and our position is that the update to the comparator set does not affect the strength or relevance of the reasoning underpinning this conclusions.

As noted above, the Synlait / a2 analysis demonstrates that the asset beta attaching to Synlait's commodity business is lower than the asset beta attaching to its non-commodity business. Instead of using this conclusion to support a downward adjustment to the average comparator asset beta, we can alternatively use it as a basis for substituting an estimate of Synlait's 'commodity division' asset beta for Synlait's actual asset beta. For an estimate of Synlait's commodity division asset beta, we can alternatively take Synlait's actual average asset beta at December 2015 (0.32) or the average of the estimates presented in Table 1 on p.32 of Attachment 6 to our reasons paper (0.46).

Table 4: Average comparator asset beta at 31 December 2020 with alternative estimtes of Synlait's commodity division asset beta

Estimate of Synlait's 'commodity division' asset beta	No IFRS 16 adjustment to net debt	IFRS 16 adjustment to net debt
0.32	0.441	0.447
0.46	0.446	0.451

Either of these alternatives would result in an average asset beta equal to our concluded value, without any requirement for a downward adjustment.