Joseph Highet

Senior Analyst

Regulation Branch

Commerce Commission

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RE: Dairy asset beta – response to the second round of submissions

Dear Joseph

Cambridge Economic Policy Associates (CEPA) have prepared this letter in response to the Commerce Commission's (the Commission's) request to give our views on two points raised in Fonterra's submission dated 5 July 2018 and the accompanying Appendix prepared by University of Auckland (UOA).

The two points that the Commission has sought our views on are:

- **Stranding risk.** Paragraph 5.14 to 5.16 of UOA's report.
- **Decomposition of asset beta into short-term cash flow risk and longer-term risk and growth options.** Paragraphs 2.10 to 2.17 of UOA's report.

Our response to these are given below.

Stranding risk

UOA's view

In UOA's view, removal of the oldest assets first from the asset base, if some assets are no longer required, lowers downside risk faced by the Notional Processor (NP). This is because these oldest assets are likely to have the lowest book ("regulatory") value in the NP's financial accounts. The removal of these low value assets will have a smaller impact on the NP's remaining asset base compared to the removal or asset stranding of higher value (younger) assets.

UOA is not clear why, in our second report, we conclude that we are "confident" that the asset stranding risk profile (where asset stranding can reflect risks other than just "Foot and

Mouth") of the sample[1] is more likely to be similar to the NP than electricity lines businesses (ELBs), when the NP has a significant degree of protection against asset stranding risk under the rules in the Milk Price Manual. Also, based upon its discussions with Fonterra, UOA states that it is not aware of any companies in the sample of companies that benefit from similar protection against asset stranding risk.

Our view and response

Forcing the NP to reduce the book value by removing the oldest assets first is not necessarily the best approach to reduce stranding risk. In our view, rather than prescriptively removing the oldest asset the NP should remove the assets that are forecast to generate the least value. Therefore, we do not believe that this approach would reduce the asset beta to the extent that UOA and Fonterra state.

Regardless, the NP faces stranding risk as it removes assets from its asset base. ELBs have a RAB that is effectively guaranteed through regulation. In addition, as set out in our response to the first round of submissions, the asset beta is about systematic risks. In our view, UOA and Fonterra have still not provided reasons why ELBs' and the NP's asset stranding requirements would respond to the movement in the market returns in the same way. We are confident that risk to the NP's valuation from asset stranding would be more similar to those risks faced by companies in the sample rather than ELBs. This is because the times when the NP's assets and the sample companies' assets might be stranded are more likely to be similar, whereas ELB asset stranding would be determined by different factors and therefore may occur at different times.

Decomposition of the asset beta

UOA's view

UOA considers that there are three factors that could affect the value at the end of a regulatory period (Ve) and would therefore affect beta. These are:

- the value of growth options;
- errors in the setting of the cost of capital; and
- other shocks to the discount rate.

UOA considers that there is no variability in the value of growth options. This is because by the construction of the NP, returns on investment will be set at the cost of capital so that the NPV of that investment is zero. This zero value will not vary and therefore the beta associated with changes in the value of growth options is zero.

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[1] The sample used in our report was based on the sample originally presented in Uniservices' [a UOA subsidiary] 2014 report for Fonterra, Uniservices, *Asset beta for Fonterra's New Zealand-based Commodity Manufacturing Businesses and Specific Risk Premium for Fonterra's Notional Business*, December 2014.

UOA considers that errors in setting the cost of capital by the regulator are a source of positive systematic risk. It constructs a narrative that there is a lag between changes in the MRP and market expectations of a regulatory reaction to the changes in the MRP. Investors would expect falls (/rises) in the MRP not to be reflected in regulatory determinations of the MRP at the next review, and therefore the value of the business would rise (/fall), which would therefore be positively correlated with the market.

The third risk considered by UOA reflects “other” shocks to the discount rate. UOA considers that any other shocks to the discount rate would be accurately reflected in the cost of capital determination at the next review, and therefore such shocks would have a very small effect on the cost of capital.

UOA’s assertion is that the contribution to beta from long term cash flows is all transmitted through errors in setting the cost of capital. From this assertion, UOA infers that the contribution to beta for the NP is more like regulated businesses in unrelated industries rather than businesses in similar industries.

Our view and response

By construction, UOA’s third type of contribution to beta from long term cash flows is zero. These are changes that are reflected in the returns for the NP at the next review, and therefore will cause no change in value. We therefore discuss them no further.

If errors in the cost of capital are the main source of long term systematic risk, these apply both to existing assets and to new assets.

UOA has constructed a narrative on investors’ approach to forming expectations about future returns in response to changes in the risk premium and from this infer a positive systematic risk from this factor. However, if changes in the market risk premium affect the value of existing assets because returns on these assets will change compared to the cost of capital, the value of assets yet to be built will also change in response to changes in the cost of capital.

UOA provides no evidence that investors don’t value growth options.

UOA’s only evidence that the market doesn’t value growth options is a narrative that the regulator will set the cost of capital at a level that ensures that the NPV of future investments is zero. However, that does not mean that investors do think in that way. That is why UOA’s argument is “theoretical” – it draws conclusions based on how it believes investors should invest rather than how they actually do.

There is evidence that investors do value investment growth.

There is evidence that suggests that investors do value growth in regulated activities.

Firstly, the Commission has made a judgement that "the consequences for consumers of under- and over-estimating the WACC are asymmetric", and so sets the allowed return based

on the 67th percentile of the probability distribution of WACC estimates.[3] This means that on average it should afford companies an excess return over investor requirements i.e. have a positive NPV even before any consideration of outperformance of regulatory expectations. This implies that if expectations of investment activity are correlated with economic activity, there would be a positive contribution to systematic risk.

Secondly, stock market commentary on regulated businesses and the value of asset growth indicate that the market places a higher value on regulated businesses with investment growth prospects.

Thirdly, the evidence from asset betas in regulated industries indictates that these are sufficiently high that changes in the value of the business in the long-term must be the main contributor to the asset beta. This is because the NPV of short term cash flows is low compared to the value of the business. The size of the "long-term" beta is also too large to be caused by regulatory errors in the cost of capital lasting for a regulatory period or two. So, changes in the value of future opportunities must make a material contribution to beta.

Fourthly, the asset betas for different regulated industries with different growth opportunities but the same type of price control is different. Industries with prospects that are more highly correlated to the economy have higher asset betas even though the approach to and structure of price controls is similar.

We hope the preceding responses sufficiently address your request.

Yours sincerely,

Dr Jonathan Mirrlees-Black

Director

Joel Cook

Principal

[3] New Zealand Commerce Commission (2016) IM review final reasons papers, quoting the 2014 WACC percentile decision.