frontier economics

Updated RAB multiple analysis

Report | 9 November 2022

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1 Executive summary

This note provides our response to the CEPA RAB Multiples report of 24 October 2022.

The central analysis continues to employ highly contestable assumptions which differ materially from independent market evidence.

As examples of this:

- The Grant Samuel estimate of the value of the DFN business (from a detailed discounted cash flow analysis considering seven potential scenarios) should be preferred to the CEPA estimate (obtained by multiplying the previous year's revenues by 2). This one change reduces the disaggregated RAB multiple to 1.06.
- CEPA's original terminal multiple assumption of 1.1 has been replaced with a new assumption about the level of excess returns after 2050. In our view these assumptions are not strongly supported by evidence and should be replaced by the observed figures.

The October 2022 CEPA report adopts a different analytical approach which does not report a fully disaggregated RAB multiple – the key output sought by the Panel and AER.

CEPA have undertaken a different task which is distinct from the development of a decomposed or disaggregated multiple. This separate analysis does not provide new direct evidence or information on the key focus of RAB multiple discussions in the review, stakeholder discussions and the Panel's report.

For example, the October 2022 CEPA report does not contain any estimate of the disaggregated RAB multiple. That is, there is no analysis directed at estimating a revised RAB multiple that reflects only the value of the standard regulatory allowance on the existing RAB, taking into account comments on its May report, in a way that is consistent with the AER's rate of return approach.

The approach adopted in CEPA's May report, and identified as of interest by the Independent Panel, is not pursued in the recent CEPA report. Rather, CEPA's significant focus appears to have been to derive an estimate of a separate concept of "excess equity return". This concept is further detailed in Appendix A.

Applying the new analytical approach in the October 2022 CEPA report results in implausible outcomes.

The estimate of the market cost of capital derived from the application of CEPA's concept of "excess equity returns" to standard AER parameters leads to an implausibly low market cost of capital estimate. Application of the October 2022 CEPA report methodology would suggest that investors require a real return on equity in the order of 0.5%. This suggests the new analytical approach has critical weaknesses which at this time make it unable to be informative to the AER's task more broadly, or as a cross-check.

The key result of previous sensitivity testing of CEPA's approach to highly contestable inputs remain unchanged

Our May 2022 report on RAB multiples showed that:

- CEPA's estimate of the disaggregated RAB multiple reduces to 1.06 if we make one change – replacing the CEPA estimate of the value of the unregulated assets business with the Grant Samuel estimate from the independent expert report; and
- The 1.06 figure reduces to less than 1 if three additional and sensible changes are made.

We demonstrate that these findings remain robust in the Appendix B – including documenting which cells to change in CEPA's model to demonstrate these findings.

2 CEPA's response to the Frontier Economics analysis

CEPA has recently prepared a new report[1] that:

- Contains some responses to the analysis and conclusions set out in our report of May 2022;[2] and
- Sets out a new, and fundamentally different, approach to analysing the data associated with the AusNet and Spark transactions.

In this section, we consider CEPA's response to our May 2022 report. We address CEPA's new approach in the subsequent parts of this report.

2.1 Context - Independent Panel consideration of RAB multiple evidence

The July 2022 report of the AER-appointed Independent Panel contained a number of recommendations relating to the role and use of RAB multiple evidence in AER decision-making. The Panel concluded:

> *If it is to be used to inform decisions on the cost of capital considered alone, the RAB multiple* ***must be decomposed using evidence that attempts to quantify the extent to which the ratio is affected by the above issues, and to remove the effects*** *from sources other than the cost of capital estimate.*[3]

The Panel further recommended (Recommendation 29) that the AER:

> *Expedites the process of consulting on and using the decomposition of RAB ratios and completes it before the RORI is finalised.*[4]

Based on these findings, stakeholders will have expected further analysis to focus on the task of reaching a robustly decomposed RAB multiple, taking into account the responses to CEPA's report of May 2022. However, as discussed below, the October CEPA report does not pursue the decomposition of RAB multiples, but instead develops a new metric termed the "excess equity return."

2.2 Value of the unregulated DFN business

Our previous report noted that CEPA estimated the value of the Ausnet DFN business at $370 million (mid-point estimate). By contrast, in its independent expert report, Grant Samuel adopts

[1] CEPA, 24 October 2022, EV:RAB multiples, Report for the AER.

[2] Frontier Economics, May 2022, Analysis of RAB multiples.

[3] AER Independent Panel Report, July 2022, p. 52.

[4] AER Independent Panel Report, July 2022, p. 56.

an estimate of $3,150 million (mid-point estimate). That is, the Grant Samuel independent expert estimate is more than 8 times higher than the CEPA estimate.

Our previous report also noted that Grant Samuel had prepared a detailed analysis that modelled seven different future scenarios. By contrast, the CEPA central estimate was effectively obtained by multiplying the previous year's revenues by 2.

The Grant Samuel analysis was prepared as an independent expert valuation report as part of the process of a live multi-billion-dollar commercial transaction. Such reports are subject to statutory and regulatory oversight to ensure they provide a robust basis for shareholder assessment of the proposed transaction.

For example, ASIC has provided guidance on the preparation of independent expert reports in its Regulatory Guide 111 and 112, and the Corporations Act (2001) and ASX Listing Rules require that such reports must be prepared by "experts" that are truly "independent," where those terms are further defined by the Act, Rules, and ASIC Guidance. ASIC Regulatory Guide 11 also notes that ASIC can take regulatory action if there are material concerns about the adequacy and completeness of an independent expert report or if ASIC has concerns about the independence of an expert. In summary, independent experts operate within a strict statutory regime that is designed to ensure independence, expertise, rigour and transparency.

Consequently, Grant Samuel has a statutory requirement to produce what it considers to be the best possible estimate of the value of the DFN businesses. Grant Samuel has a strong reputation in valuation and transaction advisory issues and extensive experience in performing similar valuations.

In its October report, CEPA states that Grant Samuel's purpose was different from theirs.[5] However, it is not clear how the purposes differ given that both reports aim to provide the best possible estimate of the value of the DFN business.

Our May 2022 report also notes that the Grant Samuel independent expert report (p. 27) identifies that the DFN business currently holds:

a. A lessor receivable of $318.9 million in relation to unregulated customer connection assets; and

b. A license receivable of $161.9 million in relation to the Victorian Desalination Plant.

The value of these assets, recorded at market value in AusNet's accounts under AASB16, is already materially higher than the CEPA estimate of total value. Although CEPA's October report questions the status of some contracted assets,[6] the two figures above are sufficiently certain to have been recorded at fair value in a set of formal financial statements. Those figures alone exceed the value ascribed in the CEPA May report.

In this regard, we note that AusNet's recent half-year results report a value of $913 million for DFN assets that are contracted or currently under construction as at 30 September 2021.[7]

Despite this evidence, the CEPA analysis continues to employ its own estimate. This estimate is obtained by multiplying the previous year's revenues by 2. The updated CEPA analysis does

[5] CEPA, 24 October 2022, EV:RAB multiples, Report for the AER, p. 5.

[6] CEPA, 24 October 2022, EV:RAB multiples, Report for the AER, p. 10.

[7] https://www.ausnetservices.com.au/-/media/project/ausnet/corporate-website/files/about/investors/company-results/202122/half-year-2022-results.pdf, at slide 33.

consider the Grant Samuel estimate as an upper bound. However, in its updated report, CEPA appears to suggest that Grant Samuel has not accounted for future regulatory or competitive responses in relation to these assets.[8]

It is unclear how this suggestion is consistent with obligations under the statutory regime for independent expert valuation reports. Without substantial contrary evidence, an independent expert valuation – which would typically encounter these types of assessments when estimating likely future cashflows – should be assumed to have taken all relevant matters into account.

In our view, it is unsafe for significant reliance to be placed on the CEPA estimate of the DFN business, compared to the mid-point results of the Grant Samuel valuation.

2.3 CEPA assumption of zero CAPEX

In its recent report, CEPA appears to question the contention that its previous analysis was based on the assumption of 0% net CAPEX, such that the RAB steadily reduces to near 0 over 50 years.[9]

However, as noted above, that assumption is evident on the **Controls tab, Row 11**, the **REV – AED tab, Row 39**, and the corresponding rows of the **REV – ANT** and **REV – AGD** tabs of the model distributed with the CEPA May report, which has been published.

The primary figure (Figure 4.3) and the headline disaggregated RAB multiple of 1.35 both depend on this assumption.[10]

2.4 CEPA assumption about terminal multiple

In our May 2022 report, we noted that CEPA's base case analysis assumed a terminal RAB multiple of 1.1 and that CEPA did not explain the origin or the rationale for that figure.

We also noted that the sources of value that CEPA identified in its Figure 4.3 (above) produce a RAB multiple of 1.41.[11] That is, the value of incentive payments, OPEX outperformance, and so on result in the enterprise value being 41% higher than the RAB.

By adopting a terminal RAB multiple of 1.1, CEPA is assuming that, although these items are currently a source of significant value, they will not be a source of significant value in the future.

No rationale was provided for such an assumption. We consider a more reasonable base case assumption is to adopt a terminal RAB multiple in line with the current observed multiple (perhaps with sensitivity testing around that value).

However, we note that our conclusions are not sensitive to the assumed terminal RAB multiple. In particular, Table 3 in our earlier report[12] shows that the disaggregated RAB multiple falls below 1 if a small number of changes are made to CEPA's original model. One of the changes made in

[8] CEPA, 24 October 2022, EV:RAB multiples, Report for the AER, pp. 9-10.

[9] CEPA, 24 October 2022, EV:RAB multiples, Report for the AER, p. 12.

[10] CEPA subsequently performs a sensitivity analysis using different assumptions about net CAPEX, however the base case, the key figure and the headline disaggregated RAB multiple are all based on zero CAPEX and a steady decline in the value of the RAB.

[11] This figure is based on the Grant Samuel estimate of the DFN business and CEPA estimates of the other sources of value, as explained in our previous report.

[12] Frontier Economics, May 2022, Analysis of RAB multiples, p. 11.

that analysis was to increase the terminal RAB multiple from 1.1 to 1.41. However, even if the terminal RAB multiple is maintained at 1.1, the disaggregated RAB multiple (using the CEPA model) remains below 1.

2.5 Tax base step-up

CEPA's May base case analysis assumed that there are no tax benefits associated with the AusNet transaction. However, CEPA notes that the independent expert report that was produced in relation to that transaction adopted a 'step-up' in the tax base.[13] CEPA is correct that this 'step-up' is a source of value that is a component of the transaction price and have consequently provided for such a step-up in their model. We inserted the independent expert estimates of the value of this step-up into the relevant cells in the CEPA model[14] as this is the most accurate available estimate of the value.

2.6 Conclusions

In our view, CEPA's latest report contains the following shortcomings, most of which were also contained in their previous analysis:

- The Grant Samuel estimate of the value of the DFN business (from a detailed discounted cash flow analysis considering seven potential scenarios) should be preferred to the CEPA estimate (obtained by multiplying the previous year's revenues by 2). This one change reduces the disaggregated RAB multiple to 1.06.
- CEPA's May report is clearly is based on the assumption of 0% CAPEX such that the value of the RAB falls towards zero over time. This implausible assumption should be replaced, as in our May 2022 report.
- CEPA's arbitrary terminal multiple of 1.1 has now been replaced with an equally arbitrary assumption about the level of excess returns after 2050. These arbitrary assumptions should be replaced by the observed figures, as in our May 2022 report.
- Grant Samuel's estimate of the value of a 'step up' in the tax base should be included.
- Making these three changes reduces the disaggregated RAB multiple to less than 1. And the disaggregated RAB multiple remains below 1 even if a terminal multiple of 1.1 is maintained.

As in our May 2022 report, we do not suggest that our estimate of the disaggregated RAB multiple is precise or that it should be relied upon by the AER in any way. Rather, we demonstrate that a very small number of changes to the analysis – replacing CEPA's assumptions with more reasonable ones – produces a disaggregated RAB multiple below 1.

Consequently, it would be unreasonable to conclude that RAB multiples provide useful information about the adequacy of the AER's allowed return.

[13] CEPA, May 2022, EV/RAB multiple, report for the AER, report, p. 22.

[14] Row 36 on the Controls sheet of the CEPA – Inference Model.xlsx spreadsheet model.

3 CEPA's new approach: Estimation of an implied 'excess equity return'

3.1 CEPA's new analysis

The October 2022 CEPA report does not contain a revised estimate of the disaggregated RAB multiple, in response to the feedback received on the original May report.

The updated report does not seek to estimate a decomposed or disaggregated RAB multiple – one that reflects only the value of the standard regulatory allowance on the existing RAB. That is, the approach adopted in CEPA's May report, and identified by the Independent Panel, is not pursued further in the October CEPA report.

Rather, CEPA has undertaken a different analytical approach in its October report. CEPA's new approach is to derive an estimate of what is termed an "excess equity return."

The derivation of the excess equity return is set out in a four-step process.[15] The net effect of the four steps is quite straightforward. The appendix to this report shows that the excess equity return is determined as the difference between:

- CEPA's estimate of the AER's allowed return on equity; and
- CEPA's estimate of the return that equity investors require.

CEPA concludes that, for Ausnet, the AER's allowed return on equity is 3.8% p.a. above the return that equity investors require.[16]

3.2 Assessing the implications of CEPA's new analysis

The plausibility of the results of central case of the updated CEPA approach can best be assessed by considering its necessary implications for estimates of the required return on equity.

At the time of the Ausnet transaction, the AER's allowed return on equity for Ausnet Distribution was 5.12% (nominal return).[17]

The suggestion that this allowed return could be 3.8% above the return that equity investors actually require would appear, on its face, to be implausible.

Moreover, in its independent expert valuation report, Grant Samuel concluded that equity investors required a return of 7% p.a.[18] That is, Grant Samuel concluded that the required return

[15] CEPA, 24 October 2022, EV:RAB multiples, Report for the AER, p. 28.

[16] CEPA, 24 October 2022, EV:RAB multiples, Report for the AER, p. 30.

[17] https://www.aer.gov.au/system/files/AER%20-%20Final%20decision%20-%20AusNet%20Services%20distribution%20determination%202021%E2%80%9326%20-%20Attachment%203%20-%20Rate%20of%20return%20-%20April%202021.pdf.

[18] Grant Samuel, December 2021, Independent expert's report, Appendix 3: Selection of discount rate, p. 15.

on equity is materially above the AER's allowance, whereas CEPA concludes that the required return on equity is less than half of the AER's allowance.

In our view, unless an aspect of the CEPA analysis has been misunderstood, the fact that the outputs are implausible should mean that no specific weight should be attached to the updated analysis in AER considerations.

3.3 Applying the 'excess equity returns' approach

This section explains how the results discussed above – which appear extreme – can be generated.

CEPA implements its analysis as follows (all references are to the model distributed with CEPA's October 2022 report):

- The estimate of the AER's allowed return on equity is based on:
    - A nominal risk-free rate rising to 3.2% in 2027-28 and remaining fixed thereafter;[19] and
    - A constant risk premium of 3.66%, reflecting a beta of 0.6 and MRP of 6.1%;[20] which produces
    - An estimate of the AER's allowed return on equity of 6.86% for 2028-29 and every subsequent year.[21]
- The estimate of the return that equity investors require is computed by CEPA by:
    - Modelling the total free cash flow to the firm (FCFF) each year including incentives, outperformance and so on;[22] and
    - Solving for the reduction to the AER's allowed return on equity that must be applied in order that the present value of those FCFF equals the estimated transaction price;[23] which produces
    - An estimate of the required return on equity of 3.02% for 2028-29 and every subsequent year.[24]

These estimates are summarised in **Table 1** below.

[19] WACC tab, Row 8. This is based on a Consensus Economics forecast of nominal bond yields increasing to 3.0%, but adjusted by subtracting the Consensus Economics forecast of 2.3% inflation and adding the CEPA forecast of 2.5% inflation.

[20] WACC tab, Cells O16:O17.

[21] WACC tab, Rows 11-13.

[22] For example, see Row 413 of the REV – AED tab.

[23] For example, the present value calculation is in Cell H427 of the REV – AED tab, the solved for Excess Equity Return is in Cell F31 of the Controls tab, the reduced estimate of the required return on equity is in Row52 of the WACC tab, which is then used in the present value calculation. The resulting present value in Cell H427 of the REV – AED tab is also presented in Cell I15 on the Summary – AST tab.

[24] WACC tab, Row 52.

Table 1: CEPA required return on equity estimates

Model parameter	Estimate
CEPA estimate of AER allowance	6.86%
CEPA estimate of required return on equity	3.02%
CEPA estimate of 'excess equity return'	3.84%

Source: CEPA – RAB Inference Model – 24 October 20222_0_xlsm, for years 2028-29 and beyond.

Table 2 below shows that the CEPA estimate of the long-run required return on equity is materially lower than its estimate of the long-run required return on debt in the same firm.

Table 2: CEPA estimates of required return on debt and equity

Model parameter	CEPA estimate
CEPA estimate of long-run required return on debt[25]	5.11%
CEPA estimate of long-run required return on equity	3.02%

Source: CEPA – RAB Inference Model – 24 October 20222_0_xlsm, for years 2028-29 and beyond.

Table 3 below shows that the CEPA estimate of the required real return on equity is in the order of 0.5%.

Table 3: CEPA estimate of required real return on equity

Model parameter	CEPA estimate
CEPA estimate of required return on equity (nominal)	3.02%
CEPA estimate of expected inflation[26]	2.50%
CEPA estimate of required return on equity (real)	0.51%

Source: CEPA – RAB Inference Model – 24 October 20222_0_xlsm, for years 2028-29 and beyond.

The results in the tables above are all in conflict with standard financial models, and other evidence of the required return on equity. This being the case, we consider the safest course is to place no reliance on this updated analysis.

This raises the question of how such apparently extreme results which are in conflict with other sources of evidence might be generated. The answer to this question is that if the quantum of

[25] WACC tab, Row 10.

[26] WACC tab, Cell O24.

other sources of value (incentives, outperformance, unregulated assets, and so on) is significantly under-estimated, the mathematical result of this analytical approach will be a significantly under-estimated discount rate.

4 Appendix A: Explanation of CEPA's new approach

The derivation of CEPA's new approach is set out on p. 28 of its October report.

Steps 1 and 2 provide that:

$$\underset{return}{Achieved} = \underset{return}{Allowed} + \underset{return}{Excess\ allowance}$$

where the Excess Allowance Return represents the return from incentive arrangements and outperformance.

Step 3 provides that:

$$\underset{return}{Achieved} - \underset{return}{Implied} = \underset{on\ equity}{Excess\ return}$$

where the Implied Return is CEPA's estimate of the return that equity holders require.

Step 4 then defines the Excess Equity Return as:

$$\underset{return}{Excess\ equity} = \underset{on\ equity}{Excess\ return} - \underset{return}{Excess\ allowance}.$$

Substituting in the definitions from above yields:

$$\begin{aligned}\underset{return}{Excess\ equity} &= \left(\underset{return}{Achieved} - \underset{return}{Implied}\right) - \left(\underset{return}{Achieved} - \underset{return}{Allowed}\right) \\ &= \underset{return}{Allowed} - \underset{return}{Implied}.\end{aligned}$$

5 Appendix B - The analysis of RAB multiples in May 2022

5.1 The CEPA May 2022 report[27]

The RAB multiple is generally defined as:

$$RAB\ multiple = \frac{Enterprise\ value}{RAB}.$$

It is well known that there are many reasons why a regulated firm may have a RAB multiple in excess of 1.

One possibility is that the regulatory allowance is expected to exceed the market cost of capital (the true return that investors require).

But there are many other reasons. The Enterprise Value may also reflect the value of unregulated assets, the value of potential new investments, the value of expected incentive payments, the value of expected efficiencies, the value of tax benefits associated with a transaction, and so on. These other sources of value can be very material, as confirmed by the Expert Reports supporting the Spark and AusNet transactions, which are the subject of CEPAs analysis.

CEPA's May 2022 report produce disaggregated RAB multiples for the Spark and AusNet transactions. This involves a disaggregation of the Enterprise Value into its various component pieces. The various other sources of value are deducted from the total Enterprise Value to leave only the component that relates to the regulatory allowance on the existing RAB.

Only then will the numerator and denominator of the above equation be estimated on a like-for-like basis such that a meaningful interpretation can be made.

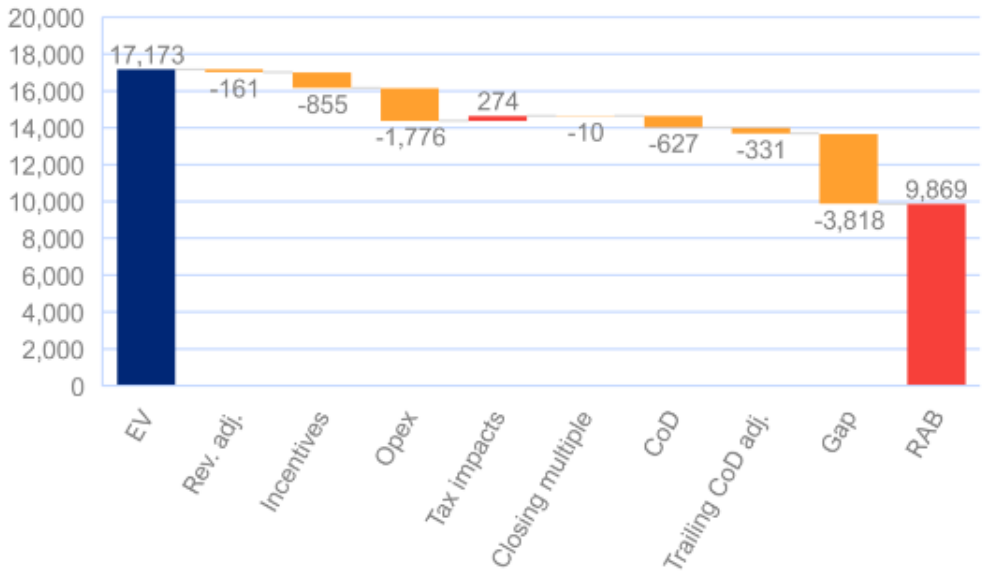
CEPA's main result for AusNet was summarised in its Figure 4.3, which is reproduced below. CEPA's conclusion from this analysis was that, after making deductions for other sources of value, there remained an unexplained "Gap" of $3.8 billion. This was interpreted as the extent to which investors valued the regulatory allowances on the existing RAB in excess of the book value of the RAB.

CEPA concluded that the disaggregated RAB multiple (after removing other sources of value) was 1.35. [28]

[27] CEPA, May 2022, EV/RAB multiples, Report for the AER.

[28] CEPA, May 2022, EV/RAB multiples, Report for the AER, p.20.

Figure 4.3: Difference between RAB and EV by driver for AST ($ million)



Source: CEPA analysis of AER data from PTRMs and AER RIN data

We have prepared a version of CEPA's spreadsheet model that produces the above figure which will be provided separately. We note that:

- The above figure appears on the **Summary – AST tab**; and
- It is based on zero CAPEX – not even replacement CAPEX. The result is that the RAB asymptotes towards zero. This is evident on the **Controls tab, Row 11**, the **REV – AED tab, Row 39**, and the corresponding rows of the **REV – ANT** and **REV – AGD** tabs.

5.2 The Frontier Economics May 2022 report[29]

In our May 2022 report, we used the CEPA model to demonstrate that:

- The disaggregated RAB multiple of 1.35 figure reduces to 1.06 if we make one change – replacing the CEPA estimate of the value of the unregulated assets business with the Grant Samuel estimate from the independent expert report;[30] and
- The 1.06 figure reduces to less than 1 if three additional changes are made:
    - Replace the assumption of 0% CAPEX (such that the RAB reduces to near 0 over 50 years) to 4% (which is conservative in that the RAB still declines slowly over time);[31]
    - Replace the assumed terminal multiple of 1.1, with the observed sale multiple of 1.41;[32] and

[29] Frontier Economics, May 2022, Analysis of RAB multiples.

[30] This change is implemented by changing cell **K18** on the **Summary – AST** tab to 13,919.

[31] This change is implemented by changing cells **F11:H11** on the **Controls** tab to 4%.

[32] This change is implemented by changing cells **F36:H36** on the **Controls** tab to 1.41.

- Include Grant Samuel's estimate of the value of a 'step up' in the tax base.

All of these findings remain robust. Those few changes to CEPA's own model (attached to its May report) produce the results set out above.

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