PART 4 INPUT METHODOLOGIES REVIEW 2023

CROSS SUBMISSION ON DRAFT DECISION

9 August 2023

INTRODUCTION

1. This is a cross submission by the NZ Airports Association ("**NZ Airports**") on the Commerce Commission's ("**Commission**") Draft Decision – Cost of Capital on the IM Review 2023 ("**Draft Decision**"). NZ Airports' cross submission focuses on the submissions on the Draft Decision's proposals for asset beta.

2. Auckland, Wellington and Christchurch Airports are parties to this submission.

3. This cross submission is accompanied by the following independent export report:

   (a) "Review of submissions on asset beta estimates for airports" (9 August 2023) prepared by Dr Tom Hird of Competition Economists Group ("CEG") - NZ Airports requested Dr Tom Hird to provide independent expert advice on the submissions on the Draft Decision ("**Second CEG Report**").

4. NZ Airports provided its submissions on the Draft Decision on 19 July 2023 ("**NZ Airports Submission**"). The submission was accompanied by an independent expert report by CEG titled "Critique of 2023 IM Draft Decision on Asset Beta for NZ Airports" ("**First CEG Report**"), alongside other independent expert reports.

5. There is no confidential information in this submission, and it can be published in full on the Commission's website.

6. NZ Airport's contact for this submission is:

   Billie Moore
   Chief Executive
   [redacted]

EXECUTIVE SUMMARY

7. Following our review of the submissions on the Draft Decision's proposals for asset beta, our assessment of the situation is as follows:

   (a) Airlines and their economic experts have not provided any substantive economic evidence to support the Draft Decision proposals. Instead, they have congratulated the Draft Decision on proposing an outcome that is favourable to airlines, on an assumption that it will result in lower aeronautical charges. There is no evidence that airlines will share lower aeronautical charges with passengers, so it is a reasonable assumption that the net impact would be a wealth transfer to airlines to increase their profitability.

   (b) Independent economists who have carefully assessed the Draft Decision have identified numerous flaws in its proposals. They are very concerned about the significant regulatory uncertainty due to the amount of unexplained subjectivity in the Draft Decision, which materially departs from an established and principled methodology. There is a widely held view that, if the Draft Decision's proposals are adopted, then it will be impossible to predict how the Commission will estimate asset beta in the future.

(c) Airport investors are very concerned about the regulatory uncertainty and they believe that the proposed methodology will under compensate them for the risk they bear.

8. If the Draft Decision is maintained, it will be based primarily on a Qantas submission (without supporting economic evidence) and the incorrect application of TDB Advisory's advice to select a sample of smaller standalone airports (as explained in NZ Airport's submission on the Draft Decision, dated 19 July 2023). We encourage the Commission to carefully consider, in light of all submissions received, whether the views provided in the airlines' submissions and the Draft Decision are sufficient to justify the proposed changes to the asset beta IM. NZ Airports submits that the proposals in the Draft Decision remain unsupported by evidence. If, in response to the current weight of expert evidence against the Draft Decision, the Commission decides to commission independent expert advice to advise on the Draft Decision's proposals, then it will be important to provide an opportunity for interested parties to comment on that advice.

9. Aspects of the submissions illustrate that the Draft Decision has caused confusion and is not easily understood. For example, airline submissions purport to agree with the Draft Decision that COVID-19 has had limited impact on systematic risk and/or pandemics will be captured in future asset beta observations. On the other hand, NZ Airports understands that the Draft Decision agrees that pandemics have a material impact on systematic risk that will not be captured in asset bata observations from periods unaffected by pandemics (our difference in view is how the very real pandemic systematic risk should appropriately be incorporated into asset beta estimates). In the interests of regulatory certainty, it will be important for the Final Decision to more clearly explain and evidence its reasoning.

10. If the Commission confirms the Draft Decision on asset beta, it will result in enduring contention, debate, and uncertainty over the exercise of subjective judgement. In this regard, NZ Airports remains of the view that the Draft Decision on asset beta is materially worse that the existing asset beta IM at meeting both the Part 4 purpose (which, among other things, promotes suppliers having incentives to invest) and the purpose of input methodologies, which is to promote regulatory certainty for suppliers and consumers.

11. These problems could be easily avoided by adhering to the existing asset beta IM. Not only would that deliver the most accurate asset beta estimate for New Zealand airports consistent with the Part 4 purpose, but it will also restore certainty to the regulatory regime.

12. Specific points of note from the submissions, on which this cross-submission comments, include the following:

Comparator sample

(a) Castalia, for Air New Zealand, states that it is difficult to assess whether the sample selection criteria have been applied consistently and appropriately given the exercise of judgement and lack of data. It advises that asset beta unreliability and MRP should not be used as criteria to narrow the sample.[1] NZ Airports agrees with these points.

(b) Airlines have noted that it is inconsistent to include Beijing but exclude all other Chinese airports. NZ Airports agrees that this is one example of an inconsistent application of flawed selection criteria.

---

[1] Castalia (report prepared for Air New Zealand) "Comments on the Commerce Commission Cost of Capital Input Methodologies Draft Decision for Regulated Airport Services" (19 July 2023), at pages 4–5 [**Castalia Report**].

(c) TDB Advisory does not revisit its previous advice that the sample set should be comprised of smaller standalone airports. Instead, it has now sought to justify the smaller sample set on the basis that the airports are more squarely focussed on aeronautical activities. However, in the context of the downward adjustment, it also argues that the comparator sample is quite mixed in the activities undertaken.[2] NZ Airports is unable to reconcile TDB Advisory's submission on the Draft Decision with the conflicting views it has presented at different stages of the IM Review.

(d) Air New Zealand does not revisit its 2010 submissions, or the expert advice it commissioned at the time, in support of a larger comparator sample. Given the close similarities between the draft 2010 sample set and the Draft Decision sample set, a consistent and logical application of Air New Zealand's historic position results in a principled conclusion that the Draft Decision sample set is not a good comparator for New Zealand airports. However, Air New Zealand still defends the Draft Decision.[3]

(e) Overall, it remains the case that the Draft Decision proposes a small sample set using criteria that are not relevant to an assessment of systematic risk. The result is a sample set that is a poor comparator for the systematic risk of New Zealand airports – and materially worse than the large comparator set under the existing asset beta IM. The Second CEG Report discusses selection criteria that are relevant to systematic risk of New Zealand airports and demonstrates that when applied they result in a sample set with significantly higher asset beta – as could be expected.[4]

COVID adjustment

(f) Dr Martin Lally, a leading expert on WACC and previously adviser to the Commission, has provided an independent report that has not been commissioned by any party. Dr Lally advises that:[5]

(i) the merits of applying a COVID-19 adjustment are contentious; and

(ii) the Draft Decision incorrectly applies the Flint / UK CAA adjustment mechanism.

(g) It is apparent that other submitters, such as TDB Advisory, are operating under the incorrect belief that the Draft Decision correctly applies the UK CAA method to adjust for COVID-19. As set out in NZ Airports Submission and the First CEG Report, if the Final Decision persists with this method, then it is important that it is correctly applied. At present, it is not, as further explained in the Second CEG Report.[6]

---

2 TDB Advisory (report prepared for BARNZ) "NZ Commerce Commission: Part 4 Input Methodologies Review 2023 – Draft Decision (July 2023) [**TDB Advisory Report**]**.**

3 Air New Zealand "Submission on Part 4 Input Methodologies Review 2023 – Draft Decision – Cost of Capital Paper" (19 July 2023) [**Air New Zealand Submission**]**.**

4 Dr Tom Hird of Competition Economists Group (report prepared for NZ Airports) "NZCC comments on asset beta estimates for airports" (August 2023), at section 6 [**Second CEG Report**].

5 Dr Martin Lally of Capital Financial Consultants "The Impact of Future Covid Scenarios on Beta" (22 June 2023) [**Dr Lally Submission**].

6 Second CEG Report, at section 4.

Reasonableness checks

(h) Submitters have placed weight on RAB multiples as a reason for considering that the asset beta and resulting WACC signalled by the Draft Decision is reasonable. This is in contrast to decisions by other regulators and independent expert advice – including in the Second CEG Report - that RAB multiples are unreliable indicators and are highly sensitive to assumptions changing.[7] NZ Airports submits that RAB multiples are especially unreliable for airports, where their aeronautical RAB is materially different to the assets and revenue included in a whole of business enterprise value. It is notable that the Draft Decision does not consider this factor or any other reasons why analysts' RAB multiples provide limited comfort that the asset beta and/or WACC implied by the Draft Decision is reasonable for the regulated aeronautical business. It merely states that the limitations in RAB multiples are not sufficient to undermine their usefulness as an indicator.

(i) In terms of other reasonableness checks, the Second CEG Report urges the Commission to consider the asset betas produced by comparator samples compiled using criteria relevant to the asset beta of New Zealand airports as a cross check.[8] Those asset betas are significantly higher than the Draft Decision.

(j) As explained in the NZ Airports Submission and First CEG Report, the Draft Decision also does not pass the following reasonableness checks:

(i) The asset beta for New Zealand airports should be significantly higher than Heathrow Airport given Heathrow has materially lower systematic risk.

(ii) A COVID-19 adjustment for airports should be materially higher than the adjustment for the energy sector, given that the energy sector did not suffer demand shocks during the pandemic.

INVESTMENT UNCERTAINTY

13. Airport investors are very concerned about regulatory uncertainty, and they believe that the proposed methodology in the Draft Decision will undercompensate them for the risk they bear.

14. Infratil (manager of the majority stake in Wellington Airport) believes that the changes to the Commission's approach to determining the asset beta for airports, as applied in the Draft Decision, are not "methodologically sound" and harm incentives to invest, increasing regulatory risk for investors.[9] Further, Infratil argues that the application of the Commission's existing approach (ie determining the comparator set using a broad, geographically diverse, sample of international airports, including Auckland Airport) in a consistent manner gives investors certainty to invest in New Zealand businesses, and gives investors confidence that they can invest and will earn a required rate of return commensurate with regulatory and commercial risks.[10]

7 Second CEG Report, at section 8.

8 Second CEG Report, at section 6.

9 Infratil "Infratil Response to the Commerce Commission's draft Input Methodologies Review 2023" (19 July 2023) at paragraph 5 [**Infratil Submission**].

10 Infratil Submission, at paragraph 17.2.

15. Similarly, Morrison & Co notes that the Commission's existing approach gives a "good measure of industry-wide systematic risk", and through this reasoned approach over time, the Commission has:[11]

> ... demonstrated its commitment to regulatory principles and has helped cement New Zealand's reputation internationally as having a reasonable, stable, and predictable regulatory environment, which has promoted investment in New Zealand infrastructure.

16. NZ Airports agrees with both submissions.

COMPARATOR SAMPLE

17. The airlines and their economists do not provide any new evidence to support the Draft Decision's comparator sample and their support for the Draft Decision contradicts historic positions.

18. NZ Airports remains of the view that the key problem with the criteria used in the Draft Decision, as supported by airlines, is that they are irrelevant to systematic risk. The result is that the smaller comparator sample is materially less comparable to the systematic risk of New Zealand airports compared to the sample under the existing asset beta IM – making it materially worse at meeting the Part 4 purpose statement.

19. This outcome is contrary to the Draft Decision's observation that it is "common practice among regulators to ensure companies in the sample are trading in markets that are comparable to the host country, **that is have similar systematic risk**" (emphasis added).[12]

20. The Second CEG Report discusses potential criteria that could be used to narrow the sample to make it more comparable to the systematic risk of New Zealand airports. This would be more consistent with the Draft Decision's observation on regulatory practice and TDB Advisory's earlier advice, which said airports in the comparator sample should be smaller standalone airports like New Zealand airports.[13]

21. The Second CEG Report uses criteria that best reflect the markets that New Zealand airports operate in, such as number of routes and diversity of routes. Such criteria produce comparator samples with significantly higher asset betas compared to the Draft Decision, as would be expected. The range of asset betas under various criteria is 0.82 to 1.08.[14]

22. To be clear, NZ Airports and CEG are not submitting that the criteria proposed should be used to select a smaller sample. Our point is that if the Commission remains of the view that the sample should be narrowed to ensure greater comparability to the systematic risk of New Zealand airports, then it should use criteria that are relevant to systematic risk. The Draft Decision's criteria are not relevant in that respect, which contributes to it producing an unreliable and inaccurate estimate and therefore being materially worse at meeting the Part 4 purpose statement.

---

[11] Morrison & Co "Morrison & Co response to the Commerce Commission's draft Input Methodologies Review 2023" (19 July 2023), at paragraphs 7 and 9.

[12] Commerce Commission "Cost of capital topic paper: Part 4 Input Methodologies Review 2023 – Draft Decision" (14 June 2023), at paragraph 4.41 [**Draft Decision**].

[13] Second CEG Report, at sections 6.1 and 6.2.

[14] Second CEG Report, at sections 6.1 and 6.2.

Air New Zealand and Castalia

23. Castalia observes that the application of the Draft Decision's selection criteria is difficult to assess:[15]

> The use of judgement and lack of underlying data provided makes it difficult to independently verify the Commission's application of its stated method for removing unsuitable firms.

24. NZ Airports agrees.

25. On the indicators used in the Draft Decision, Castalia states:[16]

> … we would encourage the Commission to consider whether it has applied these Indicators consistently and appropriately.
>
> We do not support the Commission's use of Indicator 2, because we are not aware of any theoretical or empirical grounding for improving the accuracy of beta estimation by excluding potential comparator firms from a sample based purely on measures of beta volatility. We therefore recommend the Commission should not rely on Indicator 2 in deciding which firms should be removed from the sample.

26. NZ Airports agrees. NZ Airports also notes that Castalia agrees with the First CEG Report that observations on market risk premium should have no bearing on whether to retain a firm in the sample.[17]

27. Castalia's advice demonstrates the opaqueness of the Draft Decision's application of selection criteria. On its face, if Castalia's advice was followed, Malaysia Airports and Malta would remain in the sample as they are the only airports in the Draft Decision that have been excluded solely for beta unreliability reasons. However, Castalia points out that both airports do not meet the developed country criterion.

28. It is worth noting that if the developed country criterion was legitimate (it is not), then the other criteria are irrelevant for all but four of the excluded airports. Toscana, Copenhagen, Bologna and HNA are the only excluded airports from developed countries. As noted in the NZ Airports Submission, the High Court rejected this criterion as a legitimate reason for making adjustments to the comparator set.

29. We refer to the NZ Airports Submission and the First CEG Report[18] for reasons why we disagree with Castalia that the other selection criteria are appropriate.

30. Air New Zealand states that it considers reducing the comparator sample from 26 to 8 airports "produces a more robust and reliable outcome".[19] This contradicts its historic position, where it argued for the inclusion of additional airports (in order to lower the asset beta estimate). In 2010, Air New Zealand engaged Europe Economics to advise on the Commission's then draft comparator set, which is similar to the Draft Decision's now proposed comparator set (see appendix B of NZ Airport's submission). The difficulty for Air New Zealand at the time was that airports such as AdP, Vienna, Zurich and Fraport had

---

15 Castalia Report, at page 5.

16 Castalia Report, at page 5.

17 Castalia Report, at page 5–6; Dr Tom Hird of Competition Economists Group (report prepared for NZ Airports) "Critique of 2023 IM Draft Decision on Asset Beta for NZ Airports" (July 2023), at section 6.1.1 [**First CEG Report**].

18 First CEG Report.

19 Air New Zealand Submission, at page 2.

betas that were similar to Auckland Airport - it was therefore aiming to expand the sample set to include lower asset beta airports.

31. Air New Zealand also engaged SFG Consulting in 2010, which submitted a larger sample including those airports identified by Air New Zealand as "close comparators" to New Zealand airports.[20] SFG noted that its estimation process was commensurate with the Commission's process, meaning that "any difference in final beta estimates will result only from differences in the set of comparable firms that are used", and that:[21]

> If a larger set of firms that are classified as operating in the airports, flying fields and airport terminal services industry (SIC 458) are used, the resulting equity beta estimate is lower than that adopted by the Commission.

32. As Europe Economics also advised Air New Zealand:[22]

> As explained above we do not consider the comparator set chosen by the CC in which to calculate the service-wide asset beta to be particularly good comparators for the three New Zealand airports. This is due to a number of reasons including the large number or large airport groups chosen; the inclusion of airports from countries which may face very different systematic risks resulting from the financial/political environment and the low number of airports with high proportions of domestic traffic included.

33. NZ Airports emphasises that given the close similarities between the draft 2010 sample set (on which Europe Economics and SFT Consulting were providing advice) and the Draft Decision sample set, a consistent and logical application of the advice from SFG Consulting and Europe Economic leads to a conclusion that the airports in the Draft Decision sample set are not good comparators for New Zealand airports.

34. The Europe Economics and SFG Reports are enclosed for convenience.

35. It would seem that Air New Zealand has reversed its previous position and is not following the expert advice it previously commissioned because a smaller sample now delivers a lower asset beta. It will likely reverse its position again in the future when it perceives that a larger sample can deliver a lower asset beta. Conversely, NZ Airports accepts that retaining the existing asset beta IM will likely in the future produce an asset beta that is more aligned with the interests of airlines. However, NZ Airports believes that regulatory certainty and predictability regarding the IM is far more important than seeking to game the IM to produce favourable outcomes.

36. Air New Zealand, based on Castalia's advice, submits that Beijing Capital Airport should be removed from the comparator set on the same basis as other Chinese airports.[23] NZ Airports agrees that including Beijing is one example of the Draft Decision's inconsistent application of flawed selection criteria.

---

[20] NZ Airports "Submission on Part 4 Input Methodologies Review 2023 – Draft Decision" (19 July 2023), at paragraph 41(b), Appendix A and Appendix B [**NZ Airports Submission**].

[21] SFG "Airport beta estimates: Report prepared for Air New Zealand" (11 July 2010), at paragraph 25.

[22] Europe Economics "Report for Air New Zealand by Europe Economics: Critique of Commerce Commission's asset beta analysis" (9 July 2010), at paragraph 3.35.

[23] Air NZ Submission, at page 2.

37. Other examples of the Draft Decision's inconsistent application of its selection criteria are the inclusion of Vienna, FRA, and AdP. We refer to the First CEG Report, which argued these airports should have been excluded under the Draft Decision's criteria.[24]

BARNZ and TDB Advisory

38. It is difficult to reconcile TDB Advisory's submission, which provides little substantive analysis, with the conflicting views it has presented at different stages of the IM Review.

39. TDB Advisory does not seek to reconcile the Draft Decision's comparator set with its previous advice that:[25]

> On balance, we would prefer that a smaller sample of more comparable firms be used. **We suggest that, in the Commission's current sample, the smaller operators that have primary responsibility for just one airport are likely to be more similar to their NZ counterparts than the very large, and often regional or even national, operators that are also included in the sample.**
>
> [Emphasis added]

40. As discussed above, the Second CEG Report discusses selection criteria that would be aligned with this advice from TDB Advisory.[26]

41. In its submission on the Draft Decision, TDB Advisory generally supports the use of a smaller set of comparators and confines itself to broad assertions without explanation. For example:

(a) It states that the smaller set:[27]

> ... provides a more uniform and reliable basis for comparison, with some of the anomalies and inconsistencies arising in the previous sample removed.

but does not explain how the sample is more uniform and reliable, or what anomalies and inconsistencies have been removed.

(b) It states that:[28]

> We strongly support the Commission's draft decision to use a smaller set of **more comparable airport companies** in its comparator sample
>
> [Emphasis added]

but does not explain how the airports are more comparable, given that the predominantly large multi-national airports in the sample contravene its previous

24 First CEG Report, at sections 2.3.2, 6.3.1, and 6.3.2.

25 TDB Advisory (report prepared for BARNZ) "NZ Commerce Commission: Part 4 Input Methodologies Review 2023 – Process and Issues and Draft Framework Papers, May 2022" (11 July 2022), at page 7.

26 Second CEG Report, at section 6.1 and 6.2.

27 TDB Advisory Report, at page 3.

28 TDB Advisory Report, at page 5.

advice that "the smaller operators that have primary responsibility for just one airport are likely to be more similar to their NZ counterparts".[29]

(c) TDB Advisory presents a new rationale for comparability:[30]

> We agree that the comparators now proposed are squarely focused on providing core aeronautical services; that is their key role and identity.

but later says in the context of downward adjustments:[31]

> The new comparator sample proposed by the Commission in its draft decision paper is still quite varied regarding the mix of aeronautical and non-aeronautical services within the group. Definitive conclusions can't be drawn about the relationship between these proportions and the associated asset betas.

42. TDB Advisory's view that the comparators are more squarely focused on core aeronautical services also appears to be contradicted by IATA, who in the context of arguing for the retention of the downward adjustment suggests that "airports included in the sample all have activities that could increase their business risk that should not be included in the calculation of the beta for NZ airports".[32] IATA provides the following examples:

(a) AENA, FRA ZRG and ADP operate airport concessions in developing countries (such as Brazil, Peru, India and Chile), which exposes them to risks that are not borne by airports in mature / developed markets such as New Zealand. NZ Airports agrees these airports are not close comparators for New Zealand airports and refers to the NZ Airports Submission and the First CEG Report in this respect.[33] The point made by IATA demonstrates that seeking to apply a developed country filter is an arbitrary exercise when airports remaining in the comparator sample have such extensive operations in developing countries.

(b) FRA operates a large ground handling business. NZ Airports agrees that this adds to the reasons why FRA is not a close comparator for New Zealand airports.

43. The inconsistency between TDB Advisory and IATA demonstrates the danger in seeking to select comparators on the basis that they are closer comparators to New Zealand airports. Superficial analysis can lead to very different results – even among parties who have a common objective.

Qantas

44. Qantas, again without the aid of independent expert advice, submits that Auckland Airport should be removed from the comparator sample.

---

29 TDB Advisory (report prepared for BARNZ) "NZ Commerce Commission: Part 4 Input Methodologies Review 2023 – Process and Issues and Draft Framework Papers, May 2022" (11 July 2022), at page 7.

30 TDB Advisory Report, at page 5.

31 TDB Advisory Report, at page 6.

32 AITA "Input Methodologies (IM) Review – AITA Comments on the Draft Decisions and Amendments Relevant to Specified Airport Services" (19 July 2023), at section 1 [**AITA Submission**].

33 NZ Airports Submission, at paragraph 87; First CEG Report at section 2.3 and 6.3.2.

45. In effect, it says that the best and closest comparator for New Zealand airports should be removed from the sample set. We expect that the Commission will disagree with such an unreasonable outcome.

46. The First CEG Report addresses Qantas' incorrect claim that Auckland Airport has an upward bias due to it comprising 6% of the NZX50 index and being the second largest stock by market capitalisation.[34] Instead, applying Qantas' own logic, Auckland Airport ought to have a downward bias because it has a measured equity beta well above 1.0. Furthermore, Auckland Airport's weight in the New Zealand index is a "fact of life for airport investors in New Zealand", which means it does not create an upward or downward bias.[35]

47. The Second CEG Report also explains why the extent of diversification in the NZX and / or Auckland Airport's proportion of the market do not provide reasons to doubt the accuracy of Auckland Airport's observed asset beta over time.[36]

48. NZ Airports remains firmly of the view that the best comparator sample will reduce the "noise" arising from solely relying on Auckland Airport's asset beta while tracking Auckland Airport's asset beta to a reasonable degree over time. The First CEG Report demonstrated that the large comparator sample under the existing asset beta IM was materially better than the Draft Decision sample in this respect.[37]

COVID ADJUSTMENT

49. NZ Airports agrees with Castalia that:[38]

    (a) A large portion of the risk created by the COVID-19 pandemic, and any possible future pandemic, is clearly systematic; and

    (b) COVID-19, as the first global pandemic event of this scale in the time of mass air travel, likely fundamentally shifted market perceptions of pandemic risks.

50. We therefore disagree with IATA and TDB Advisory that the pandemic was not a systematic event. They are outliers with their submissions in that respect. It appears to be common ground among all submitters and the Commission that COVID-19 and the threat of future pandemics is a material systematic risk.

51. The debate is what method should be adopted to ensure the asset beta estimate appropriately incorporates that risk. NZ Airports submits that the weight of independent economic expert evidence is firmly against the Draft Decision's proposal.

52. Dr Martin Lally has a long history of being commissioned by the Commission to provide independent expert advice on WACC matters. Our understanding is that his submission on this occasion was proactive, and not a direct response to a Commission (or other stakeholder's) request for advice.

53. Dr Lally notes that the Draft Decision estimates the beta for a future period by placing weights on beta estimates from the pre COVID-19 and COVID-19 periods, with the weights equal to the probabilities of these two scenarios arising in the future.[39]

---

34 First CEG Report, at section 4.5.
35 First CEG Report, at section 4.5.
36 Second CEG Report, at section 7.
37 First CEG Report, at section 4.2.1.
38 Castalia Report, at page 2.
39 Dr Lally Submission, at page 2.

54. Dr Lally first notes:[40]

> The merits of applying such treatment to selected events are contentious, especially when the probability of a recurrence of the event is hard to estimate and any such recurrences may be materially more or less severe.

55. We expect that the Commission will carefully consider this advice and give it the weight it commands. As Dr Lally focuses on critiquing the adjustment method used in the Draft Decision (discussed below), he does not provide views on what the appropriate alternative approach is in the absence of the proposed COVID-19 adjustment mechanism. NZ Airports reiterates its submission that applying the existing asset beta IM is the correct approach which, among other things, will avoid the need for an arbitrary and contentious adjustment that materially increases regulatory uncertainty.

56. Dr Lally discusses the key flaw in the method used in the Draft Decision. Essentially, it assumes that expected returns and variance of market returns in the COVID-19 and non-COVID-19 scenarios are the same. Dr Lally explains this is wrong because:[41]

> By their very nature, covid type scenarios could be presumed to involve a higher variance of market returns. Consistent with this presumption, the variance of market returns was significantly elevated in the three-month period commencing on 1 March 2020. So, the second assumption appears to be false. In addition, the covid scenario may involve a lower expected return, and therefore the first assumption may also be false.

57. NZ Airports refers to the First CEG Report, which explained this flaw in further depth.[42] The Second CEG Report points out that Dr Lally's views are consistent with the First CEG Report.[43]

58. Dr Lally points out that if it is assumed that that variance in COVID periods is twice that of non-COVID periods, the weight on a Covid beta would rise from 0.075 to 0.14.[44] Using the Draft Decision's estimates of 0.53 (pre-Covid) and 0.93 (Covid), the beta would be 0.59 rather than 0.56.[45]

59. Dr Lally advises that the approach used by Flint, which avoids the problems of the Draft Decision's methodology, is to weight returns data from Covid and non-Covid scenarios to generate a single beta estimate (ie not weight two separate beta estimates). Dr Lally states that this is the preferred method.[46] We refer also to the First CEG Report and Second CEG Report for further discussion on the correct application of the Flint approach.[47]

60. In contrast, Oxera, who has also previously advised the Commission on WACC issues, is more absolute in advising against the Covid-19 adjustment mechanism:[48]

---

40 Dr Lally Submission, at page 2.

41 Dr Lally Submission, at pages 3–4.

42 First CEG Report, at section 8.2.2.

43 Second CEG Report, at section 4.1.

44 Dr Lally Submission, at page 4.

45 Dr Lally Submission, at page 4.

46 Dr Lally Submission, at page 5.

47 First CEG Report, at 8.2.2 and 8.2.3; Second CEG Report, at section 4.

48 Oxera ”Response to the New Zealand Commerce Commission’s draft decision for Part 4 Input Methodologies Review 2023 on the cost of capital – Prepare for the New Zealand electrivity distribution business” (19 July 2023) at pages 3–4 **[Oxera Report**].

We consider that the beta estimates affected by the COVID-19 pandemic provide valuable information about the companies' risks, in the same way as any other event causing market volatility would. Accordingly, we see no reason for the COVID-19 pandemic period to be treated differently (from, for example, the period of the global financial crisis) and for it to lead to the change in the NZCC's approach as part of this IMs review. We find the NZCC's approach concerning, as it introduces non-justified non-replicable methodological steps and, in so doing, deviates from the NZCC's principles-based approach and reduces the stability and predictability of the regulatory regime.

61. Oxera advises that the existing asset beta IM should be retained – with betas based on the two latest five-year windows and summarises its reasons as follows:[49]

In summary, we note that:

- although the NZCC follows regulatory precedent from the UK aviation sector in its approach to the COVID-19 returns treatment, it is currently under appeal, and it goes against many other regulatory precedents;
- the NZCC's estimate is sensitive to assumptions about the length and frequency of pandemic-like events, which are not well explained;
- the NZCC's estimate is even more sensitive to the choice of the representative pandemic and non-pandemic periods;
- the NZCC double-counts the impact of the pre-pandemic asset beta estimate;
- the NZCC does not explain its choice of the point estimate within the range;
- by treating the COVID-19 data differently (from any other period, including periods of significant market volatility such as that of the global financial crisis), the NZCC deviates from its principles-based approach and introduces a large degree of subjectivity that undermines the robustness of the analysis and increases regulatory risk;
- using the NZCC's standard approach would apply the same treatment to the observations during the COVID-19 pandemic, which is a common approach to outliers that contain important information.

62. In particular, Oxera explains that the UK CAA decision has been appealed to the CMA, which has a precedent of not applying a Covid-19 adjustment:[50]

We observe that events in March 2020 did lead to a sharp move in the prices of the water company shares and the overall market index level. However, as we consider the COVID-19 impact to be predominately an example of systematic risk, we do not think it is automatically appropriate to exclude data from this period.

---

49 Oxera Report, at page 47.

50 Competition and Markets Authority "Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations. Final report" (17 March 2021), at paragraph 9.468, as quoted in Oxera Report, at page 48.

63. Oxera also provides examples of other regulatory precedent against ad hoc adjustments for Covid-19.[51] It makes the logical point that the Draft Decision's approach implies that regulated entities were underfunded for pandemic risk in the past.

64. Again, NZ Airports encourages the Commission to carefully consider this advice from international experts. It would be concerning if the Commission persisted with an approach contrary to advice from renowned experts, and instead follows the suggestions of Qantas (with a natural incentive to achieve the lowest asset beta possible, and without the aid of independent expert advice) and TDB Advisory (whose views have been shown to be inconsistent and incorrect).

65. In contrast to the carefully reasoned and evidenced contributions of Dr Lally, Oxera and CEG, TDB Advisory states that:[52]

> We fully agree with the approach the Commission proposes to take to estimate the systematic impact of COVID-19 on the asset beta for airports through the next regulatory period.
>
> …
>
> As a result, we think the Commission is fully justified in departing from its previous practice of estimating the asset beta mainly from the average for the comparator sample over the last two five-year periods. In the current context, that would involve fully factoring into the average the abnormally high betas over the COVID-19 period. As a result, the average would significantly overstate the likely systematic impact of the pandemic going forward. It would thereby provide a poor basis for estimating the beta and hence the overall cost of capital in the forthcoming regulatory period.
>
> Instead, the Commission proposes adding a "premium" to the long-term pre-COVID average beta, the premium based on an assumed 20- to 50-year recurrence of Covid-like events and reflecting the systematic impact of the pandemic.

66. It is very difficult to reconcile this position with TDB Advisory's more extensively reasoned July 2022 report, where it strongly advocated against any adjustments due to Covid-19:[53]

> In TDB's view, the Commission should maintain its principles-based approach to valuing the cost of equity. In particular, we think the Commission should resist pressures that might arise from airports for "compensation" for the effects of the Covid-19 pandemic, whether through increases in the TAMRP or in the equity and asset betas. We draw on several arguments in support of this view.
>
> The Commission has maintained from the outset of its IM approach that it would not accommodate adjustments to the cost of capital for unsystematic or asymmetric risks. In its IM Reasons paper of December 2010, the Commission explicitly ruled out adjusting the cost of capital for risks such as pandemics. It based this view in part on the difficulties of quantifying these risks, determining the implied adjustment in the cost of capital, and guaranteeing to customers that increased revenues suppliers might receive from such an adjustment were "ring

51 Oxera Report, at page 48.

52 TBD Advisory Submission, at section 2.3.3.

53 TDB Advisory (report prepared for BARNZ) "NZ Commerce Commission: Part 4 Input Methodologies Review 2023 – Process and Issues and Draft Framework Papers, May 2022" (11 July 2022), at section 2.1.

> fenced" for self-insurance against asymmetric risk rather than used for other purposes. We suggest that these arguments continue to hold.
>
> …
>
> As a result, the conceptual "well balanced" equity portfolio that underpins the IM approach to valuing equity will have provided sufficient diversification to largely compensate investors for the more prolonged weaknesses in some specific sectors, without the need for additional adjustments. Furthermore, in line with its intended focus on ex-ante market returns, the Commission should be looking at what is essentially a post-Covid world rather than considering adjustment to the cost of equity that might be attributed to Covid.
>
> As part of the argument outlined above, we think that the Commission should resist Covid-related arguments for adjustments in the equity or asset betas. We note that the beta estimates reflect the fact that airports' sensitivity to systematic risk is less than that of the market as a whole. Such estimates are inherently made over a lengthy period of time.
>
> Risk episodes, when they actually happen, are almost by definition a shock and surprise. That has also been the case with Covid-19. But whether or not any specific risk eventuates, airports' cost of capital determinations implicitly reflect their possibility. These risks, among many other factors, are built into the airports' beta. To pursue further ex-post adjustments in equity or asset betas to compensate for risk events (like Covid) that have actually arisen would in effect be double counting the risk assessment elements in the cost of capital methodology.

67. NZ Airports agrees that no adjustments for pandemic risk should be implemented. The existing asset beta IM, which uses the most recent 10 years of data, should be applied on a principled basis. TDB Advisory's reversal of its previous position, which was firmly against a COVID-19 adjustment, is not explained.

68. If an adjustment is to be applied (despite our submission), then it must be done correctly. As discussed in the Second CEG Report, TDB Advisory's support for the Draft Decision appears not to appreciate that the Draft Decision incorrectly implements the UK CAA / Flint approach.[54] Further, CEG is unable to explain why TDB Advisory's previous application of the UK CAA / Flint uplift results in such a low uplift.

69. The First CEG Report and Second CEG Report explain that if the UK CAA / Flint method is correctly applied, the uplift would be significantly higher (0.08 instead of 0.02).[55]

Underestimation of future risk

Government policy

70. Castalia and TDB Advisory appear to base their advice that a small uplift is justified on a belief that a future Government's response to pandemics will be less devastating for the aviation sector. For example, Castalia states:[56]

---

54 Second CEG Report, at section 4.2.

55 First CEG Report, at Table 2-4 and page 26; Second CEG Report, at section 4.2.

56 Castalia Submission, at pages 3 – 4.

Governments and the air travel sector have learnt lessons on how the sector may need to respond to future pandemics. Reviews of the policy responses to COVID-19 are now increasingly concluding that strict extensive lockdowns are bad policy both from a health perspective and from an economics one. Even if lockdowns are imposed in future, they are likely to be shorter and more targeted, the air services sector is much more prepared to handle the impact than it was before COVID-19. Therefore, while the risk of global pandemics has remained the same, the market now understands that risk much better, and the risk of extensive lockdowns in future pandemics is arguably lower than it was during the COVID-19 pandemic.

71. We caveat our submissions in this section with the overarching point that it is a fraught exercise to seek to predict how future pandemics will be managed by governments. We simply do not know. However, we have very recent experience that management of pandemic risk can be catastrophic for the aviation sector. Airports in New Zealand certainly do not have any comfort that future pandemics will be any less catastrophic.

72. We note that the studies referred to by Castalia discussed domestic lockdowns (one discusses policy and the other is a theoretical analysis of the impact of lockdowns on containing pandemics) – not international border closures. Further, they do not discuss how lockdowns may be modified in the future – the point of both articles is to argue that they are ineffective or undesirable in any form. Clearly, such thinking does not currently represent the weight of global policy. For every study that suggests lockdowns are bad policy, there will be one or more that says they are good policy. Perhaps most importantly, leading epidemiologists are strongly in favour of comprehensive border closures to achieve an objective of elimination.[57]

73. It also seems premature to suggest that the Government has learned lessons from the response to COVID-19 and / or that those lessons will inform future responses. The Government has established a Royal Commission of Inquiry called "Covid-19 Lessons Learned". Its purpose is to "learn from our experience of the pandemic to prepare for the future".[58] The Royal Commission is currently in an information gathering phase, with public submissions opening in November 2023, and is due to report by 26 June 2024. It would seem sensible to await the Royal Commission's report before reaching views on lessons learnt. We also note the following points from the Royal Commission's Terms of Reference:[59]

(a) Prior to COVID-19, existing pandemic planning was based on influenza, which was not appropriate for COVID-19;

(b) The measures New Zealand put in place to respond to COVID-19 generally enjoyed high levels of public support and were positively reviewed by independent experts.

(c) Perhaps most pertinently for considering future responses and risk to aviation:

---

57 See for example: Michael Baker, David Durrheim, Li Yang Hsu and Nick Wilson "The costly lesson from Covid-19: Why elimination should be the default strategy for future pandemics" *NZ Herald* (22 January 2023) https://www.nzherald.co.nz/nz/the-costly-lesson-from-covid-19-why-elimination-should-be-the-default-global-strategy-for-future-pandemics/ZYJYOEYUNNAD3P25ZZRK3CVGIE/; Michael Baker, David Durrheim, Li Yang Hsu and Nick Wilson "COVID-19 and other pandemics require a coherent response strategy" *The Lancet* (13 January 2023) https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)02489-8/fulltext.

58 NZ Royal Commission COVID-19 Lessons Learned - Te Tira Ārai Urutā "Home" (2023) https://www.covid19lessons.royalcommission.nz.

59 Royal Commission of Inquiry (COVID-19 Lessons) Order 2022, cl 8 and Schedule.

> There will be future pandemics. They will not be exactly the same as COVID-19 and New Zealand's preparation for future pandemics needs to be flexible enough to respond effectively to a broad range of potential events. It is necessary and timely to inform our preparedness for such events by considering New Zealand's response to COVID-19, synthesising the lessons captured in existing investigations, reports, and reviews, both domestic and international, and drawing on institutional knowledge about those matters while it is still fresh in our minds.

74. Essentially, the terms of reference say COVID-19 was different to past pandemics, and future pandemics will be different to COVID-19. Therefore, flexibility is required, and the precise response to future pandemics is unknown.

75. That said, it is not difficult to find studies that suggest border closures had some impact on reducing the spread of COVID-19.[60] Further, total border closures were more effective than targeted border closures.

76. It may (or may not) be the case that future Governments in New Zealand are more reluctant to confine New Zealanders to their homes under strict lockdown. It does not follow that it will rule out border closures and / or subjecting domestic aviation to restrictions – especially if such measures will reduce the need for lockdowns.

77. TDB Advisory does not cite any evidence to support its view – it simply states:[61]

> As we and others have argued previously, the COVID-19 pandemic was an extraordinary event, including in its economic, social and public policy impact. While future shocks of this nature shouldn't be ruled out, we maintain the hope and expectation that these are relatively rare events and ones that would be met by policy measures that are informed by the experiences of recent years.

78. We all hope that pandemics are rare events – indeed, that they never occur. But history tells us that they will (and the Royal Commission has been set up on the basis that they will). Further, there is no basis to expect that policy interventions in the future will be less severe. The article cited by Castalia points out that the predominant response to the Spanish flu was not to impose lockdowns. Other articles point out that widespread border closures were unprecedented prior to COVID-19. This begs the question why some 100 years later lockdowns and border closures were a predominant response. Intuitively, the nature of the COVID-19 virus, technology, connectivity and politics all played a role – lockdowns were deemed necessary from a public health perspective and could be imposed without bringing economies to a standstill or completely disconnecting people. The Royal Commission of Inquiry terms of reference point out that the response enjoyed strong public support. It was therefore good politics to "go hard and early" to implement decisive action against the pandemic.

79. No one knows what will happen during future pandemics, but it is equally arguable that extensive border closures and domestic travel restrictions will be imposed if the Government believes that it is politically the best course of action and technology allows economies to run and people to stay connected – ie if the Government believes border closures and domestic travel restrictions are a politically acceptable mechanism to buy time for a domestic health

60 See for example: Mathieu J P Poirier, Susan Rogers Van Katwyk, Gigi Lin, Steven J Hoffman "Quasi-experimental evaluation of national border closures on COVID-19 transmission" (2023) 3(2) PLOS Global Public Health, https://doi.org/10.1371/journal.pgph.0000980.

61 TDB Advisory Report, at page 5.

response (eg procurement and deployment of vaccines) and to provide New Zealanders with relative freedom within their communities (eg avoiding heavy lockdowns to the greatest extent possible). The New Zealand Government has indicated that partial or complete border closures remain part of their current toolbox of reserve measures to respond to COVID-19, even though in circumstances of lower risk the Government has been managing COVID-19 using baseline measures, such as maximising population immunity through vaccinations.[62] This demonstrates that the risk to airports of border closures remains, and border closures are likely to be in the toolbox to respond to any new pandemic in the future, but the actual Government response will depend on the circumstances.

80. Unarguable points are that:

(a) COVID-19 has established a new precedent of widespread border closures and lockdowns being imposed in response to pandemics.

(b) Decisions to impose lockdowns and border closures were made with an understanding of the major economic and social consequences – but the Government's judgement was that prioritising public health and pursuing an elimination strategy was the correct option.

(c) New Zealand's extensive total border closures and lockdowns were successful in containing the virus.

81. We do not claim to know what will happen in the future, but there is no current reason to believe that same judgement on border closures would not be exercised again by the New Zealand government. It seems just as likely that this new precedent makes it easier to impose travel restrictions and border closures in the future, meaning they are just as likely rather than less likely.

82. It is also notable that New Zealand’s border controls during the pandemic were tighter and more enduring than most countries. According to data from the Oxford COVID-19 Government Response Tracker, New Zealand’s borders were closed for 709 days (this data appears to include the Trans-Tasman and Pacific Islands bubbles in this period) during the pandemic, or 801 days where borders were closed to high-risk regions.[63] The only countries with borders closed for longer than New Zealand were Turkmenistan, Palestine, and Tonga.

83. The First CEG Report discusses the arbitrary decisions required to predict the risks of future pandemics in order to make a COVID-19 adjustment – including in relation to the duration of any pandemic.[64] The Draft Decision uses assumptions of 3 months and 18 months, which is materially shorter than the duration of actual border closures in New Zealand and the UK CAA / Flint assumptions of 17 months and 39 months. The UK had border closures for 356 days (or 572 days including high risk regions), which suggests UK CAA / Flint modelled a scenario of future pandemics resulting in materially longer adverse impacts on airports than the border lockdowns that actually occurred during COVID-19. On the same approach, assumptions for a New Zealand scenario should be substantially higher than 39 months, leading to a substantially higher COVID-19 adjustment.[65]

---

62 Cabinet Paper "October 2022 Review of Remaining COVID-19 Measures under the New Approach" (25 October 2022) CAB-22-SUB-0443; Regulatory Impact Statement "October review of remaining COVID-19 measures under the new approach" (14 October 2022).

63 Oxford "International travel controls during the COVID-10 pandemic" (March 9 2022) https://ourworldindata.org/grapher/international-travel-covid?time=2022-03-09.

64 First CEG Report, at section 8.4.

65 Oxford "International travel controls during the COVID-10 pandemic" (March 9 2022) https://ourworldindata.org/grapher/international-travel-covid?time=2022-03-09.

84. In summary, arguments that future pandemics are likely to be managed with more lenient infection control measures, therefore posing less risk of border closures or other travel restrictions that will affect airport revenue, are based on hope rather than evidence. Airports must continue to invest and plan on the basis that they face the very real risk of being required to continue to operate during future pandemics while experiencing catastrophic drops in aeronautical revenue. Based on precedent, they must also plan for New Zealand border closures to be more extensive than in the parts of the world covered by the comparator sample, which points to the COVID-19 adjustment needing to be higher for New Zealand airports.

Systematic risk is not "priced in"

85. It is common ground that the observed asset beta estimates during the COVID-19 affected period show a strong upwards spike, which is now reduced following resumption of air travel.

86. Castalia and TDB Advisory appear to believe that this pattern shows that the risk of future pandemics is now "priced in" the market, such that this is reflected in the actual betas of listed companies. Castalia purports to agree with the Draft Decision in this respect, while TDB Advisory says that it agrees with the Draft Decision's assessment that the pattern shows COVID-19 has had a limited systematic impact.

87. NZ Airports does not understand this to be the position in the Draft Decision. In particular, the Draft Decision notes that "the spike in the asset beta during the early stages of COVID-19 would be repeated in future pandemics".[66] Accordingly, the point that investors may have repriced and reweighted airports in their portfolio is logically a separate point to asset beta observations. The Draft Decision appears to say that even if investors may have repriced, there will still be a spike in asset betas if another pandemic hits. NZ Airports agrees.

88. The fact that the Draft Decision considers investors will have taken steps to adjust their portfolios, yet pandemics will still cause asset beta spikes, is why it concludes that a premium for pandemic systematic risk is still required. In other words, pandemic risk is not "priced in" to asset beta. However, the Draft Decision is reluctant to simply use the last 10 years of data because of a view (which NZ Airports and CEG disagrees with) that this will overstate the risk of a pandemic occurring again. Put another way, the difference between NZ Airports and the Draft Decision is how to appropriately reflect pandemic risk in the asset beta estimate – and not whether it exists as systematic risk or not. TDB Advisory is an outlier in suggesting that pandemics are not significant pandemic risks and is wrong to suggest that the Draft Decision finds that the pandemic has limited systematic impact.

89. Castalia's position appears to be that, although pandemics are clearly systematic risks, the best way to incorporate that risk in asset beta estimates is to exclude the periods affected by the risk, on the basis that post-pandemic observations more accurately reflect "priced-in" pandemic risk. An adjustment is only required in this IM Review because the first-best option of using actual post-COVID data is not available since the sample period is currently too short and well below the usual 10-year period. The implication appears to be that because 10 years of data (or close to it) will be available at the next IM review, a COVID-19 adjustment will not be required at that stage.

90. The Second CEG Report explains that Castalia's position starts from a misunderstanding – asset beta observations do not measure investor perception of risk based on "pricing in".[67] Rather, they are observations of how the market actually reacts to systematic risk events.

---

66 Draft Decision, at paragraph 4.67.

67 Second CEG Report, at section 5.1.

Accordingly, it is incorrect to think that post-pandemic period observations include pandemic systematic risk. As discussed above, we understand that to be the Draft Decision's position also.

91. As explained in the First CEG Report:[68]

(a) The best approach in this IM Review is to use the most recent ten-year period, in accordance with the existing asset beta IM. That is the most accurate way to ensure that the systematic impact of COVID-19 on asset beta is included in the asset beta estimate. On that approach, the common ground with Castalia is that COVID-19 period data would at the next IM Review be largely excluded from the asset beta estimate.

(b) If, instead of adhering to the existing asset beta IM, an adjustment is to be made as proposed in the Draft Decision, then it must be permanent.

92. NZ Airports reiterates its submission the existing asset beta IM is a materially better at meeting the Part 4 purpose statement – it accurately incorporates observations on how markets reacted to a pandemic event. That important data is excluded under the Draft Decision's proposal as well as Castalia's and TDB Advisory's advice.

DOWNWARD ADJUSTMENT

93. IATA asks for a reconsideration of the Draft Decision's proposed elimination of the downward adjustment. As discussed above, IATA's rationale is that the sample includes airports with activities that increase their business risk in comparison to New Zealand airports. IATA also asserts that non-aeronautical activities are more volatile. It does not provide any evidence to support its views.[69] NZ Airports submits that IATA's submission does not provide any reason for the Commission to reconsider its position in light of the extensive evidence provided by CEG and LJK Consulting.

94. Qantas submits that that a downward adjustment remains justified. It claims that Auckland Airport is an outlier because it has low aeronautical revenue and high asset beta compared to other airports in the comparator sample.[70]

95. The Second CEG Report explains that Auckland Airport is not an outlier in Qantas' chart seeking to illustrate its point – it is actually a driver of the trend claimed by Qantas. CEG demonstrates that if the errors in Qantas' calculations are corrected, there is no discernible relationship between aeronautical revenues and asset beta.[71]

96. NZ Airports submits that Auckland Airport is an outlier in the comparator sample because the other airports have materially lower systematic risk. We refer to the NZ Airports Submission and the First CEG Report on this point.[72]

---

68 First CEG Report, at sections 9.1, 9.4 and 9.6.

69 AITA Submission, at section 1.

70 Qantas Submission, page 2.

71 Second CEG Report, at section 3.1.

72 NZ Airports Submission, at paragraph 136–139; First CEG Report, at section 5.

REASONABLENESS CHECKS

RAB multiples

97. Castalia says that RAB multiples and share price analysis appears to support a view that the Draft Decision will not jeopardise Auckland Airport's ability to earn a reasonable return. It qualifies this view by noting that:[73]

> However, given the light-handed nature of the regulatory regime, it is hard to know the extent to which the implied RAB multiple reflects the implications of the Commission's views on the appropriate cost of capital, as opposed to investors' views of the regulatory regime as a whole.

98. Air New Zealand also notes that:[74]

> In the case of Auckland Airport's observed estimations, it can be surmised that the presence of the non-regulated, non-aeronautical till is likely a key factor in perceived (out)-performance. Having a relatively stable and guaranteed regulated income stream underpinning the ability to achieve superior returns in the non-regulated parts of the business would provide significant comfort to investors.

99. We do not accept that Air New Zealand and Castalia are correct, but if they were, their logic appears to be that RAB multiples are not a reliable indicator of whether the aeronautical WACC is reasonable, because the non-regulated business and/or the regulatory regime as a whole are key reasons that investors find Auckland Airport attractive. Put another way, they seem to be saying that any deficiencies in the aeronautical WACC could be offset by other factors. However, the Commission's regulatory task under Part 4 of the Commerce Act is to ensure that the aeronautical WACC meets the Part 4 purpose statement on a standalone basis.

100. In contrast to the relative caution expressed by Castalia (and other evidence as discussed below), TDB Advisory is more bullish on the value of RAB multiples in assessing aeronautical returns:[75]

> However, we view the RAB multiples reported by the Commission as providing the most robust test of the reasonableness of its WACC estimate. The RAB multiples are the best market-based test of the reasonableness of the WACC estimate as they provide evidence on what return investors are willing to accept in reality when they put their money at stake.

101. Similarly, Qantas believes that RAB multiples are important and encourages the Commission to further investigate RAB multiples. Qantas refers to AER guidance on the use of RAB multiples:[76]

> … Qantas recommends that the NZCC investigate the RAB further.
>
> The NZCC's RAB multiple range of 1.3-1.9x is high by industry standards and well above a reasonable range of 0.9-1.3x, as detailed in the AER 2018 WACC

---

73 Castalia Submission, at page 7.

74 Air NZ Submission, at page 4.

75 TDB Advisory Report, at page 7.

76 Qantas "RE: Part 4 Input Methodologies Review 2023 – Draft decision" (19 July 2023), at page 3.

review. A range consistently in excess of 1.0 signals that the current WACC outcomes may be too high …

102. Qantas references Dr Darryl Biggar's report from February 2018 for AER in support of its observations.[77] Dr Biggar found that the RAB multiple could "play a role as a trigger for further investigation" which "would seek to explore the factors which might be driving the RAB multiple".[78] Overall, he concluded that there is "scope" for the regulator to consider RAB multiples as a reasonableness check.[79]Ultimately, Dr Biggar’s paper cited by Qantas shows that RAB multiples are unreliable indicators in themselves, but a persistently high (or low) RAB multiple can be cause for further investigation to rule out problems with the regulatory regime.

103. Importantly, Dr Biggar’s paper that Qantas has cited was published by AER only at the **start** of its 2018 review of the rate of return.[80] It does not represent AER's final decision on using RAB multiples.

104. In its final decision on the use of RAB multiples in 2018, AER concluded that:[81]

> The substantial difficulty in disaggregating the information contained in RAB multiples and historical profitability measures means that this information cannot currently be used to reliably determine the degree of outperformance of the allowed rate of return. However, they may provide contextual information that can assist our investigation of other evidence and our risk-cost trade-off assessment.

105. In NZ Airport's view, it is an uncontroversial proposition that RAB multiples provide limited guidance for regulatory decisions, because they are highly sensitive to assumptions. This is evidenced by further expert evidence, commissioned by the AER. For example, CEPA was commissioned by the AER in 2022 to undertake analysis of EV / RAB multiples. It advised that:[82]

> EV/RAB has been taken by some commentators to be a direct indicator of the cost of capital. However, there are a range of other factors that can affect the ratio. These relate to:
>
> - The measurement of EV/RAB. The EV/RAB must be measured for the same assets, with estimates of the value of other assets to be excluded from EV. The EV should reflect the market value of all securities. Consideration should be given to the value of regulatory promises on the cost of debt, which in the case of the AER is the trailing average approach to the cost of debt allowance.
>
> - The inferences that can be drawn from a particular EV/RAB ratio. This requires assumptions about expected outperformance of regulatory expectations, as well as the expected growth of the RAB.

106. In response to the CEPA report, Frontier Economics advised:[83]

---

77 Darryl Biggar "Understanding the Role of RAB Multiples in Regulatory Processes“ (AER, 20 February 2018) [**Dr Biggar Report**].

78 Dr Biggar Report, at page 13.

79 Dr Biggar Report, at page 16.

80 It was published after the initial consultation paper and issues papers, as a part of one of the evidence sessions. See Australian Energy Regulation – Rate of Return Instrument "Initiation" https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-instrument-2018/initiation.

81 AER "Rate of return instrument: Explanatory Statement” (December 2018), at section 12.1.5.

82 CEPA (report prepared for AER) "EV/RAB multiples" (10 May 2022).

83 Frontier Economics "Analysis of RAB multiples, Response to the May 2022 CEPA report” (27 May 2022), at page 1.

The RAB multiple can only provide a reliable indication of the adequacy of the allowed return on equity after the effects of all other items are removed from the estimate of the enterprise value.

That is the objective of the CEPA report – to disaggregate the enterprise value into its component pieces such that the RAB multiple might provide some information about the adequacy of the allowed return on equity.

Our view is that a reliable disaggregation of the RAB multiple is an impossible task. A large number of assumptions is required to even attempt such a disaggregation. We show below that changes to a small number of assumptions (to more reasonable and plausible figures) produces material changes to the disaggregated RAB multiple. In particular, we show that the disaggregated RAB multiple for AusNet – based on a set of assumptions consistent with the Grant Samuel independent expert report and other evidence – is 0.87.

107. More recently, AER again reiterated its stance on using RAB multiples in a rate of return review in February 2023. In this review, AER noted that:[84]

> There is disagreement among stakeholders and experts about the merit of using RAB multiples as a cross-check. This disagreement arises because RAB multiples can be influenced by a range of factors beyond the regulated rate of return and return on equity. These factors include:
>
> - Firms undertaking business activities beyond the regulated element (‘unregulated business’)
> - control premium, overpayment or ‘winner’s curse’
> - incentive rewards and outperforming price control targets
> - expected growth in unregulated business and/or incentive rewards or outperformance.
>
> We accept that care is needed in the interpretation of RAB multiples. Where businesses have a large proportion of their revenue derived from regulated activities, we think the rate of return and the return on equity are likely to be material contributions to the value of the firm and this will be reflected in the RAB multiples.

108. As part of this review, AER attempted to disaggregate some of the components implicit in RAB multiples. Despite undertaking significant work doing so, AER ultimately concluded that:[85]

> However, in view of the limitations with this type of analysis, we do not consider the evidence is sufficiently strong to make an adjustment to the position we have reached in our consideration of individual parameters.

109. The use of RAB multiples as a cross-check was also discredited in a recent report prepared by KPMG for Water UK. Notably, KPMG looked to AER as precedent:[86]

> The AER decided not to rely on [RAB multiples], given the level of subjectivity and uncertainty in the assumptions used to disaggregate observed ratios. It concluded that it

[84] AER "Rate of Return Instrument – Explanatory Statement“ (February 2023), at pages 24–25.

[85] AER "Rate of Return Instrument – Explanatory Statement" (February 2023), at page 26. See also CEPA ”Report to the AER – EV:RAB multiples" (AER, May 2022); CEPA "Report to the AER – EV:RAB multiples" (AER, October 2022).

[86] KPMG (report prepared for Water UK) "Use of Market-to-asset ratios (MARs) as a cross-check in the context of regulatory price controls" (September 2022), at page 9. Note that KPMG refers to RAB multiples as 'market-to-asset ratios' or MARs in this context.

was not appropriate to inform its rate of return forecast. The AER deduced that there was a need to control for many factors, including any interaction between them, such as outperformance of expenditure, unregulated revenue, control premium, possible over-optimism of assumptions and the economic circumstances at the time of the transaction.

110. After surveying a broad range of regulatory precedent, KPMG concluded that there was no consensus among regulators as to whether it was appropriate to use RAB multiples as a cross-check. KPMG observed that:[87]

> It appears that all parties recognise [RAB multiples'] limitations in informing the allowed rate of return. This includes lack of transparency as all the data required to draw such inferences is almost never available; subjectivity, as it is affected by other factors such as control premium or unregulated businesses; the uncertainty in the assumptions used to disaggregate observed ratios; the difficulty in interpreting the observed values; potential presence of optimistic or unrealistic investors' assumptions or 'noise' that could not be observed and finally its degree of reliability. At the same time there is certain apparent appeal of [RAB multiples] as direct market evidence that regulators are keen to explore.
>
> Regulators have used [RAB multiples] on occasions to respond to criticisms that the allowed rates of return they set are too low. In the regulatory precedent, [RAB multiples] have not been used deterministically to inform the cost of equity estimate and the analysis of precedents indicates that, when [RAB multiple] as a cross-check was used, it was always heavily criticised by at least some stakeholders and was used as a part of a cross-check suite rather than on its own.

111. A common theme of the advice is there are many reasons why RAB multiples may not provide a reliable check of regulatory WACC, and a key reason is the difference between assets included in enterprise values and RABs. This highlights a key matter for airports – their regulatory RABs are materially different to their enterprise value assets, meaning RAB multiples provide little guidance on regulatory WACC – let alone asset beta.

112. Oxera's response to the Draft Decision's use of RAB multiples is as follows:[88]

> In this report, we explain that many factors need to be accounted for when interpreting RAB multiples, and that conclusions are sensitive to the assumptions. Therefore, we do not consider RAB multiples to be a reliable check of the reasonableness of the WACC allowance.[89]

113. We note that the Draft Decision does not cite any international regulatory precedent to support the view that RAB multiples can be a useful indicator of whether the allowed rate of return has been set at a sufficient level to adequately compensate investors for putting their capital at risk.[90]

114. All of the above evidence demonstrates that Qantas' request for further investigation in relation to RAB multiples as a reasonableness check would require a significant amount of time, resource and calculations, based on arguable inputs and assumptions, and any such analysis is unlikely to provide any insightful information on the asset beta specifically or regulatory WACC more broadly.

---

87 KPMG (report prepared for Water UK) "Use of Market-to-asset ratios (MARs) as a cross-check in the context of regulatory price controls" (September 2022), at page 11.

88 Oxera R, at page 5.

89 Oxera submission at 5.

90 Draft Decision, paragraph 7.44.

115. For airports, the Draft Decision states that given Auckland Airport is publicly listed, "we have simply reported RAB multiples estimated by research analysts at the New Zealand investment banks".[91] Forsyth Barr's estimate is 1.9 and UBS's estimate is 1.3.[92] NZ Airports submits that the material variances in those estimates starkly demonstrates the extent to which RAB multiples are sensitive to input assumptions and how unreliable they are in terms of providing any useful indication of the sufficiency of regulatory WACC. As discussed in the Second CEG Report, the Forsyth Barr and UBS estimates of RAB multiples are likely to include various assumptions about the regulated and non-regulated businesses in order to produce a market value for each.[93] They are not based on observed market values and are therefore unreliable RAB multiple estimates for regulatory cross-check purposes. This unreliability exists prior to any further consideration of the fact that any RAB multiple provides limited information on the reasonableness of regulatory WACC in any event.[94]

116. In summary, NZ Airports submits that RAB multiple checks do not provide a reliable basis for any finding that the asset beta estimate or resulting aeronautical WACC is reasonable.

Other checks

117. TDB Advisory argues that core economic infrastructure entities tend to have lower asset betas than those that are more dependent on discretionary, consumer-driven preferences.[95] Air New Zealand also supports this submission.[96]

118. TDB Advisory refers to a table drawn from a database compiled by Aswath Damodaran. TDB Advisory notes that airports are not identified but suggests that their aeronautical activities would be closer in risk profile to lower-beta utility and infrastructure providers – with a range of 0.44 to 0.54.[97]

119. We have briefly reviewed Aswath Damodaran's data as at 5 January 2023.[98] We note that Auckland Airport and Air New Zealand are included in the air transport industry sector. It is unclear why TDB Advisory does not include this category in its table. Vector is included in general utilities. TDB Advisory appears to have extracted values from the global table, using the "unlevered beta corrected for cash" column.

120. At a global level, the estimates are 0.76 for air transport and 0.45 for general utilities. For Australia, NZ and Canada, the estimates are 0.66 for air transport and 0.23 for general utilities.

121. NZ Airports submits that these categories are imperfect proxies and do not provide any useful information for checking the reasonableness of the Draft Decision's asset beta for airports. However, to the extent they demonstrate anything, it is that airports are in a category with materially higher asset betas that general utilities. Accordingly, there is no basis for the conclusions drawn by TDB Advisory to the effect that airports are positioned near the utilities category or that the Draft Decision estimate of 0.55 is reasonable. To the contrary, if the Draft Decision had applied the approximate 0.31 to 0.43 margin (between the utilities and air transport sectors as per Aswath Damodaran’s data) to the Draft Decision’s

91 Draft Decision, at paragraph 7.48.
92 Draft Decision, at paragraph 7.49.
93 Second CEG Report, at section 8.
94 Second CEG Report, at section 8.
95 TDB Advisory Report, at page 6.
96 Air NZ Submission, at pages 2–3.
97 TDB Advisory Report, at page 6.
98 Aswath Damodaran "Beta by Sector (US)" (Data used as of January 2023) https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/Betas.html.

energy sector asset beta (we are not suggesting it should have), the asset beta for airports would have been in the range of 0.66 to 0.78.

122. We note that the discussion of reasonableness checks in the Draft Decision and airline submissions relate to WACC generally. The Draft Decision did not undertake reasonableness checks specifically in relation to asset beta, as it did in 2016,[99] and we query why this is the case.

123. For reasonableness checks specifically for asset beta, NZ Airports refers to its submission and the First CEG Report where it is explained that the Draft Decision does not pass the following reasonableness checks:

(a) Asset beta for New Zealand airports should be significantly higher than the asset beta for Heathrow Airport, given that it has materially lower systematic risk; and

(b) A COVID-19 uplift for airports should be significantly higher than an uplift for the energy sector, given that the energy sector did not suffer catastrophic demand shocks during the pandemic.

124. Further, the Second CEG Report includes analysis of how the comparator sample can be appropriately adjusted using criteria that better reflect systematic risk of New Zealand airports, which produces comparator samples with significantly higher asset beta estimates compared to the Draft Decision. CEG urges the Commission to use this analysis as a cross check. NZ Airports submits that this analysis serves as a robust reasonableness cross-check for asset beta and demonstrates that the Draft Decision's estimate is unreasonable because it is materially lower than asset betas of comparator samples with airports that are more closely comparable to the systematic risk profile of New Zealand airports.

99 See Figure 12 – Reasonableness checks on our asset beta estimate for airports at paragraph 487 of Commerce Commission *Input Methodologies review draft decisions – Topic paper 4: Cost of capital issues* (16 June 2016).