Water 2020: consultation on the approach to the cost of debt

Heathrow's response

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Contents

Executive Summary

1. Heathrow welcomes the opportunity to respond to Ofwat's consultation on the approach to the cost of debt for PR19. Ofwat's consultation builds upon a report from CEPA commissioned jointly by Ofwat and the CAA. For this reason, Heathrow has studied CEPA's report, and is pleased to submit its comments.

2. CEPA's report assess different approaches to setting the regulatory cost of debt for PR19 and H7, rightly putting the benefits to consumers as the key objective. Consumer benefit is not just a matter of minimising customer bills. It will also require dependable debt and equity investment in the regulated company, and so it is important that economic regulation is stable and predictable, and minimises intrusion and complexity. Regulators need to bear this in mind before implementing changes, as having a consistent and non-intrusive economic regulation is important to both debt and equity investors.

3. In respect to embedded debt, we agree with both CEPA and Ofwat, that this should continue to be treated as a fixed allowance. Whilst we fully see the logic for of basing the fixed allowance with reference to a notional index, we do not believe it will be possible to find an index sufficiently close to Heathrow's idiosyncratic debt characteristics. In the case of Heathrow, therefore, we do not agree that greater weight should be placed on a notional index to set this allowance, but this is an issue that we will discuss further with the CAA.

4. We do disagree with CEPA's conclusion that, in aviation, more weight should be put on notional index benchmarks when assessing the cost of embedded debt, but this is an issue we shall return to with the CAA. In particular, any assumption on the "notional timing" of debt issuance, without reference to actual timing, will be highly inaccurate (especially where there is a large capital programme over an extended period of time) and lead to a seriously distorted embedded debt allowance.

5. CEPA's high level recommendations in favour of indexation of new debt is worthy of further exploration and development in the context of an extended regulatory period and/or a material and sustained change in the level at which new debt will be issued (as would be the case for Heathrow expansion). However, any benefits must be balanced against the increased complexity of the regulatory system, and additional volatility in consumer prices.

6. Critical issues will be:

- definition of the precise index or indices to use. We are not convinced that the particular iBoxx index recommended by CEPA for Heathrow (A and BBB credit rating non-financial corporates 10-15 years' maturity) is, alone, sufficient or appropriate;
- adjustments made to the index to better reflect the nature and riskiness of the debt of the regulated company;
- the risk associated with using a notional timing assumption when capital plans over an extended period may be fluid;

- adjustments made to the index to fully reflect the efficient debt platform costs of the company under the notional capital structure.

7. We agree with CEPA that an explicit allowance should be made to the cost of debt for transaction and, more generally, debt platform costs including revolving credit facilities. This is an area that as yet has not been treated rigorously by regulators, whilst a considerable amount of empirical evidence is available as to the nature, structure and magnitude of these costs.

8. CEPA's argument that a new issue premium is not required as investors can match the profile of their bonds to their liabilities, and that "this is likely to be reflected in the interest rate", makes little sense, and contradicts empirical evidence on the existence and magnitude of the new issue premium for companies such as Heathrow, and presumably water companies also.

9. Comparing the overall cost of Heathrow's debt to a notional index is a difficult task, requiring careful treatment of non-GBP debt. We have a number of issues with the analysis that CEPA has undertaken which lead to potentially misleading results for whether an index can be applied with or without adjustment. It will be important that any chosen index is carefully matched with the actual cost of debt of the company (taking account of debt platform costs).

10. The consultation also discusses risk sharing for changes in interest rate costs. We agree that this is best left to individual companies to discuss with stakeholders based on individual appetites for risk.

A. Introduction

11. Heathrow Airport Limited (Heathrow) welcomes the opportunity to respond to Ofwat's consultation on the approach to the cost of debt for PR19. Although Heathrow has no direct interest in PR19, Ofwat's consultation builds upon a report from CEPA (Cambridge Economic Policy Associates) commissioned jointly by Ofwat and the CAA (Civil Aviation Authority). This report contains analysis and conclusions applying to both Ofwat's PR19 and the CAA's H7 price reviews. For this reason, Heathrow has studied CEPA's report, and is pleased to submit its comments.

12. It is important to note that the Ofwat consultative document specifically leaves aside issue of company specific adjustments to debt allowances to a later stage in the price review process.[1] If, as Ofwat suggest, company specific issues are important in the water sector, they are of even greater importance in the airports sector. We will separately respond the CAA on the implications specifically for H7 and Heathrow.

13. Our response will be structured as follows:

- In Section B we comment on various technical issues with CEPA's analysis and interpretation of data;
- In Section C we comment on CEPA's policy conclusion, insofar as they apply to both PR19 and H7;
- In Section D we comment on Ofwat's specific consultation questions, insofar they apply to both PR19 and H7.

B. Technical issues with CEPA's analysis

Numeric comparisons of actual cost of debt vs. indices

14. CEPA present a number of tables, purporting to show the relationship between actual debt costs of the regulated companies and returns on CEPA's preferred iBoxx indices. There are a number of serious caveats with these comparisons that need to be borne in mind before Ofwat or the CAA draw any conclusions on the appropriateness of any iBoxx index.

15. Table 2.2 of CEPA's report shows that Heathrow's actual cost of debt has been both above and below CEPA's preferred iBoxx index at different points in time. This observation accords with our own analysis. However, CEPA then erroneously show an alternative table based on weighted coupon costs. In fact, as stated by CEPA in the associated footnote, especially for publicly traded bonds, the weighted average coupon systematically understates the true cost of debt as it does not include costs associated with the bond discounts, etc. It also does not capture the full range of Heathrow's debt. No inferences can be made from Table 2.3. Rather Table 2.2 shows a fairer comparison,

[1] Ofwat Consultation Document, page 22, "Our focus in this paper is on the efficient cost of debt for the sector and we leave the issue of company specific adjustments to debt allowances to the 2019 price review methodology consultation."

and should caution against concluding that there is a fixed relationship between Heathrow's actual costs of debt the CEPA's chosen iBoxx index.

16. Similarly, Table 2.6 attempts to analyse the impact of Heathrow's non-GBP debt on Heathrow's overall cost of debt. This table also presents an erroneous comparison. As recognised by CEPA itself, foreign denominated currency bonds will pay a coupon in that currency. Rates in different currencies can't be compared without considering the basic swap costs that, amongst other things, allow for differences in interest rate and currency devaluation expectations between the two currencies. For example, if an investor is willing to swap a 10-year Euro bond today with a coupon of 2.0% back to GBP, she would need to pay circa 3% due to the difference in the interest rate expectation between Euro and GBP funds and expected currency devaluation. Swap costs will be on top of the coupon costs shown in Table 2.6.

Halo effect

17. CEPA have not adequately justified their findings on a "halo effect". As we mention above, it is quite possible that any apparent halo is caused by sectors or companies within the selected index going through particular investment or funding cycles.

18. These detailed issues of bond return data are important since they have potential to lead to misleading conclusions on the appropriateness of any individual iBoxx index, or what scale of adjustments should be made to the index to align with the actual returns of the regulated entity.

19. CEPA carried out a halo effect analysis comparing Heathrow's senior GBP bond yield with the iBoxx yield and concluded that Heathrow has, at times, outperformed the index overall. CEPA's comparison focussed on Heathrow's GBP denominated senior nominal bonds (A-) and limits the sample to bonds not issued in exchange of other bonds. As the analysis does not control for rating differences and does not fully control for tenor difference, we cannot rely upon CEPA's estimates of halo effect.

Reasons for divergences between the actual costs of debt and indices

20. CEPA proposes a number of reasons why the actual cost of debt of a company may differ from aggregate indices: these are various "on the day" factors, and timing assumptions. CEPA conclude that:

> *It is very difficult to precisely identify the causes for differences between actual and notional debt costs…"*[2]

21. The reason it is "very difficult" is that the debt of individual companies (in individual sectors such as aviation) are subject to idiosyncratic sector or company factors. For example, Heathrow's own debt will be affected by developments in the overall aviation sector such as fuel prices, as well as its own sector and regulatory developments (e.g. changes to the security regime that impact on the airports cost base or passenger throughput). These factors will all have at least some influence on the cost of debt that

[2] CEPA Report, page 49.

will drive variances compared to any aggregate index. We believe there should be more acknowledgement of this within the CEPA report.

C. CEPA's policy conclusions

22. CEPA's report assess different approaches to setting the regulatory cost of debt for PR19 and H7, rightly putting the benefits to consumers as the key objective. Consumer benefit is not just a matter of minimising customer bills. It will also require dependable debt and equity investment in the regulated company, and so it is important that economic regulation is stable and predictable, and minimises intrusion and complexity. This should be borne in mind when considering CEPA's proposals. Debt indexation would be a change in the regulatory model in both water and aviation sectors, and would introduce some additional complexity, and possibly intrusion into debt financing plans in order to determine index weights. Regulators need to bear this in mind before implementing changes, as having a consistent and non-intrusive economic regulation is important to both debt and equity investors.

Embedded debt

23. We agree with both CEPA and Ofwat, that the cost of embedded should continue to be treated as a fixed allowance. We fully support Ofwat's conclusions that:

> *"The same forecasting issue does not apply to embedded debt, so we prefer to retain the approach from previous price reviews, based on evidence of the cost of embedded debt from benchmarks and evidence on efficient sector costs".*[3]

24. Whilst we fully see the logic for of basing the fixed allowance with reference to a notional index, we do not believe it will be possible to find an index sufficiently close to Heathrow's idiosyncratic debt characteristics. We disagree, therefore, with CEPA's conclusion that, in aviation, more weight should be put on notional index benchmarks when assessing the cost of embedded debt, but this is an issue we shall return to with the CAA. In particular, any assumption on the "notional timing" of debt issuance, without reference to actual timing, will be inaccurate (especially where there is a large capital programme over an extended period of time) and lead to a seriously distorted embedded debt allowance.

New debt

25. The CEPA Report proposes indexation for the cost of new debt in the water and airport sectors, to mitigate forecasting error during a price control period.

26. At a high level, CEPA's recommendation in favour of indexation of new debt is worthy of further exploration and development in the context of an extended regulatory period and/or a material and sustained change in the level at which new debt will be issued (as would be the case for Heathrow expansion). However, it by no means cancels all interest rate risk. Companies will still face the risk between the average index for the year and

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[3] Ofwat Consultation Document, page 29.

the index yield at the time of issuing new debt. This is a very difficult risk to hedge compared to a fixed allowance.

27. Critical issues will be:

- definition of the precise index or indices to use. There is a risk that the index is biased by companies or industries within the index that may be going through structurally different cycles to the regulated company, or may be experiencing periods of funding difficulties that effect their debt yields. It follows that the structural components of the index will need to be carefully considered, including the situation of companies or sectors that carry major weight within the index, rather than relying simply on an apparent correlation. These factors could explain the apparent "hallo effect" reported by CEPA;
- We are not convinced that the particular iBoxx index recommended by CEPA for Heathrow (GBP denominated, A and BBB credit rating non-financial corporates 10-15 years' maturity) is, alone, sufficient or appropriate. In particular, it takes no account of non-GBP funding, or the cost of swapping back non-GBP debt into GBP. We also believe that it will be very difficult to find an index with a sufficiently close match to the maturity of Heathrow's actual debt;
- adjustments made to the index to better reflect the nature and riskiness of the debt of the regulated company;
- the risk associated with using a notional timing assumption when capital plans over an extended period may be fluid;
- adjustments made to the index to fully reflect the efficient debt platform costs of the company under the notional capital structure.

28. Further discussion of these issues will be specific to Heathrow and so beyond the scope of this Ofwat consultation.

29. We do agree with CEPA that, in applying forward rates to corporate bonds, a matching unitary multiple to government bonds should be used, rather than the 0.8 multiple applied by PwC in PR14 and Q6.[4] There were significant difficulties in PwC's analysis including a mismatch of the maturities of the government gilt and corporate bond yields used in the analysis, as well as a fundamental instability in the relationships over time between yields of government and corporate bonds.

30. Set against any perceived advantages debt indexation will introduce significant additional complexity to the regulatory system. These will include, determining an acceptable index, determining adjustments needed to be made to the index to align with the cost of debt of the regulated company including debt platform costs not captured by the index, and designing a means of incorporating the adjustments into the price cap mechanisms, including any true-ups. It is important to see this additional complexity in the context of the benefits. In the case of Heathrow (not too dissimilar from many water companies), in the current regulatory period new debt is 30% of all debt costs, and regulatory gearing is set at 60%. Therefore, new debt consists are just 18% of the total funding of the regulatory asset base, and only 82p (or 4.3%) of the passenger charge is

[4] Ofwat Consultation Document, pages 113 and 115, and footnote 81.

impacted by the over or under-forecasting of the new debt allowance.[5] The materiality will be higher if airport expansion proceeds and new debt becomes a greater proportion of the funding structure, but in its absence the complexity of new debt indexation will need to be justified against the small benefit in the context of a regulatory period that does not foresee any major shift in the level of capital investment.

Debt platform costs

31. We agree with CEPA that an explicit allowance should be made to the cost of debt for transactions and, more generally, debt platform costs including revolving credit facilities. This is an area that in the past has not been treated rigorously by regulators. In fact, a considerable amount of empirical evidence is available on the nature, structure and magnitude of these costs, and regulators should use this to ensure the totality of debt platform costs are captured, insofar as they apply to the notional capital structure.

32. We disagree with CEPA on the new issue premium. CEPA's argument that a new issue premium is not required as investors can match the profile of their bonds to their liabilities, and that "this is likely to be reflected in the interest rate", makes little sense, and contradicts empirical evidence on the existence and magnitude of the new issue premium for companies such as Heathrow, and presumably water companies also.

Volatility of prices

33. Finally, we believe that CEPA have under-estimated the problem of bill volatility under debt indexation. This is clearly an issue in the water sector, but will also be a particular issue in airports where the "bill payers" (the airlines) are themselves highly geared in many cases.[6] Debt indexation will, therefore, have a seriously compounding impact on these airlines, and possibly water customers as well.

34. CEPA argue that "end of price control" adjustments will reduce volatility. This is only true if there is a degree of mean reversion in interest rates, or if the adjustment is added into the regulated asset base and gradually unwound over a period of years in the next regulatory period. It could also be a concern that making adjustments through the regulated asset base will have knock-on consequences for the funding ratios that the company has to maintain, and put a risk to covenant arrangements.

Impact on cost of equity

35. Although the remit for the CEPA report is regulatory treatment of cost of debt, CEPA does suggest that its proposals to reduce risk in cost of debt will also have the benefit of reducing the cost of equity.[7] This is unlikely to be true. Under the current fixed allowance approach regulators aim-up the cost of debt to cover the additional risk of unexpected movement in interest rates. This preserves the cost of equity. Removal of

[5] Calculation for 2018, using data for Q6 final decision on regulatory building blocks, and 2.5% cost of new debt.
[6] For example, gearing Debt/(Debt+Equity) levels are IAG 51%, Lufthansa 63%, Air France – KLM 96%.
[7] CEPA Report, page 166.

this margin would logically increase the cost of equity by as much as indexation would reduce it.

D. Ofwat's questions for consultation

Q1: Do you agree that the cost of debt allowance should be set on the basis of a notional capital structure and notional cost of debt for all companies as opposed to being based on the actual capital structure and debt costs of each company?

See Section C.

We agree with the existing practise of regulating companies on a notional capital structure.

In deciding whether notional or actual costs should be used, regulators should take account of the degree of uniqueness of each company or companies being regulated. For example, in the case of Heathrow as the sole price regulated airport in the UK, and idiosyncratic risk factors of both the aviation sector and Heathrow in particular, actual costs should be used.

Q2: We do not propose to introduce a specific benefit sharing arrangement for companies with securitised capital structures. Do you agree with this approach?

We agree with this approach. Companies should carry their own risks and benefits for any securitised structure.

Q3: Do you agree to the introduction of indexation for the allowance for the cost of new debt?

We have concerns over whether an index can be developed to reflect the precise risk characteristics of the regulated company's debt. If it is used it should be limited to new debt (as Ofwat propose), and appropriate step ups/downs made to the index to align with the company's actual cost.

Q4: Do you agree that indexation of the new debt allowance should have an end of period adjustment?

This needs more consideration once the form of any indexation is determined.

Q5: Do you agree to an adjustment to the inflation estimate to reflect out-turn inflation and so mitigate inflation forecast error for new debt only?

This needs more consideration once the form of any indexation is determined.

Q6: Do you agree that we should leave companies to develop their own risk company specific risk mechanisms on a voluntary basis for the 2019 price review and we should not mandate a company specific risk sharing mechanism?

Risk sharing is best left to individual companies to discuss with stakeholders based on individual appetites for risk. The quality of these discussions, and the way the outcome is incorporated into company proposals, can be monitored by customer challenge groups and taken into account by the regulator.

Q7: What are the potential advantages and disadvantages of a menu based approach to the cost of equity, compared with the approach adopted by Ofwat at PR14?

This issue was not discussed in the CEPA report, and is not applicable to Heathrow. Therefore, we have no view.