CAA referral to the CC regarding the proposed price controls for Heathrow and Gatwick Airports

Note by National Grid

Introduction

1. The CAA is currently reviewing the price controls for Heathrow and Gatwick Airports and has referred the case to the CC to carry out a statutory review of the proposals.

2. National Grid is an interested party because the outcome of this review is likely to be used in a wider regulatory context. We are keen to support the CC's development of principles that will provide a consistent and robust framework for regulation across the UK economy. Our attention was particularly drawn to the cost of capital proposals being mooted by the CAA. The big change in the cost of capital seems to depart from a policy of providing regulatory consistency and is therefore bound to impact on investors' confidence in the stability of the regulatory regime.

3. This paper represents National Grid's views on certain elements of the cost of capital proposals by the CAA for Heathrow and Gatwick. In particular, the following areas are discussed:

   i. The risk free rate
   ii. The debt premium
   iii. Overall methodology for estimation of cost of capital
   iv. Index-linked cost of capital allowance

Executive Summary

4. Based on market evidence and recent regulatory precedent, National Grid believes that the CAA's recommendations on risk free rate and debt premium are too low. The weaknesses in the risk free rate analysis carried out by the CAA have been highlighted in a report by NERA on behalf of EdF and Central Networks. National Grid endorses this analysis.

5. The CAA has recommended a debt premium of 1% for Heathrow and Gatwick which was based on recent, historically low corporate spreads. Ofgem's determination in the Transmission Price Control Review (TPCR), allowed a debt premium of 1.25% based on maintaining a comfortably investment grade position. This was estimated using analysis of long term averages on corporate spreads, based on the expectation that rates would not remain at recent historically low levels throughout the period of the price control. Market expectations of corporate spreads are that the current historically low rates will not last indefinitely and will revert to long term average levels over the next few years. Therefore National Grid believe that it would be inappropriate to allow a debt premium of less than 1.25% for Heathrow and Gatwick

6. National Grid believe that, although the Capital Asset Pricing Model (CAPM) forms an essential part of the process of estimating cost of capital in a price review, the methodology has its weaknesses. Therefore we believe it is important that the CC should recognise that other methodologies as well as the CAPM are valuable in the process of estimating the cost of capital and that, more importantly, it would be inappropriate to use the CAPM in isolation from other methodologies.

7. The CAA has specifically requested views from the CC on the issue of linking cost of capital allowances to indexation. National Grid is still considering this issue in the context of the ongoing Gas Distribution Price Control Review (GDPCR). While such an approach might appear to have attractions, there are practical issues to be worked through and

unintended consequences to consider. This leads National Grid to strongly question the benefits of indexation.

Section I: Risk free rate

8. National Grid fully supports the analysis on risk free rate carried out by NERA on behalf of EdF and Central Networks. We endorsed this work through a letter sent to the CC by the Energy Networks Association (ENA) and we do not propose to repeat the points made in this letter or in the NERA report.

Section II: Debt premium

9. In the "Smithers & Co" report on cost of capital, carried out for Ofgem in September 2006, Smithers conclude that corporate bonds appear to be essentially "commoditised". Smithers state that once information about a company's credit rating and other key characteristics of the bond (including maturity) are known, there appears to be no evidence of any company specific effect on yields that is not captured by these characteristics.

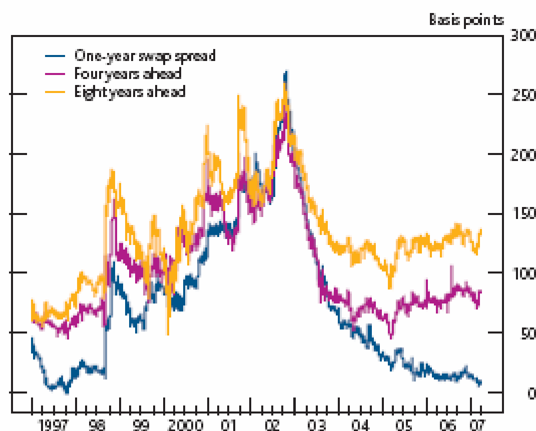
10. The CAA considers that on the basis of its analysis of forward looking utility spreads, a debt premium of 1% is likely to be consistent with a mix of different term borrowings at credit ratings comfortably within investment grade.

11. National Grid's debt book is similarly "comfortably within investment grade". In Ofgem's Final Proposals for the Transmission price control review (TPCR) in December 2006, Ofgem noted that the observable premium on utility debt is at historically low levels (with the range 98 to 130 basis points for A and BB rated debt respectively). However, Ofgem determined that it was not clear that such low levels could be expected to persist over the entire period of the price control and they therefore used a cost of debt figure above that implied by current market levels. Based on their analysis of long term average spreads, a final point estimate of 1.25% for the debt premium was used in the final proposals.

12. Ofgem's use of long term averages rather than the current, historically low spreads represented an appropriate reflection of market expectations on corporate bond spreads driven largely by corporate default rates. The Bank of England "Financial Stability Report" for April 2007 states:

"The high availability of credit is supporting corporate performance. Benign macroeconomic conditions, strong profit growth and high cash balances in recent years have contributed to historically very low global corporate default rates.….

Chart 1.13 US implied forward corporate credit spreads[a]



Sources: Merrill Lynch and Bank calculations.

(a) One-year forward spread over swaps for BBB US corporate bonds.

…..But this unusually low level of corporate defaults is not expected to continue indefinitely. The chart (above) shows the one-year cost of borrowing currently and that implied in four and eight years' time. This suggests that markets expect corporate default rates to remain low in the near term, before rising back towards historical levels over the next few years."

13. On this basis, National Grid would urge the CC to consider that it would be inappropriate to allow the debt premium for Heathrow and Gatwick to be based on the current, historically low corporate bond spreads and that therefore a debt premium of no less than 1.25% based on longer term averages would be appropriate.

Section III: Overall methodology for estimation of cost of capital

14. In its recommendations, the CAA states that it has developed its views, building on the CAPM which has become the "de facto" standard for economic regulation.

15. National Grid would like to highlight that in setting its Final Proposals in the recent TPCR, Ofgem placed more weight on aggregate market return on equity rather than the building block approach of the CAPM. We believe that it is important that the CC recognises other methodologies, as well as the CAPM, are valuable in the process of estimating the cost of capital.

16. One of the key weaknesses of the CAPM is the difficulty in determining robust estimates for the equity beta of a business. One of the main reasons for this is that it is difficult to draw any definitive conclusions from historic UK utility data at the present time because of the distorting effects of the Asian Crisis and the Dot Com boom between the years 1998 – 2002. The following chart is an extract from the work done by National Grid for the TPCR and demonstrates that UK utility betas suddenly halved in 1998 and remained at that level until the end of the Dot Com boom in 2002. Since that time, equity betas have increased substantially to levels recorded in the mid 1990s:

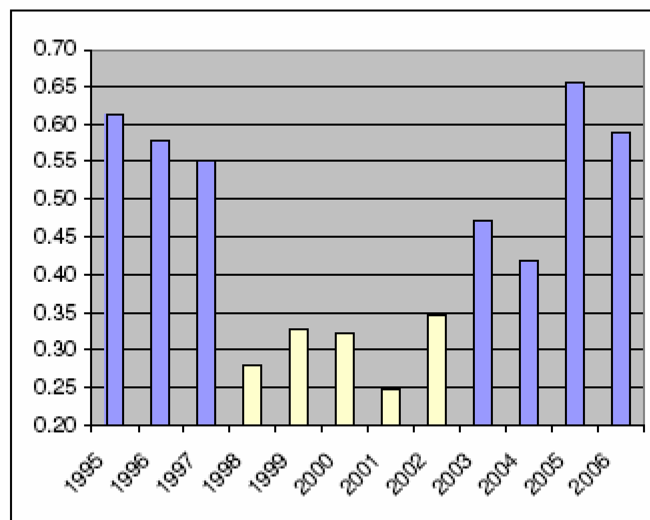


Fig 1. UK utility calendar year equity betas based on daily data

Five year rolling beta estimates have therefore underestimated risk in the UK utility sector for eight years. Data for years outside of this range is either too old or of too short duration to be used in making robust estimates.

17. Other methodologies that could be employed (and indeed were considered by the CAA in its analysis) in addition to CAPM are:

i. alternative “bottom-up” approaches such as the Fama French model

ii. “top-down” methodologies such as utilising the market value to RAV ratio to determine whether expected rate of return is in line with the required rate of return. (This analysis needs to be carried out using examples where investors have had a high degree of certainty about the medium term cash flows of the company in question).

18. In conclusion, National Grid supports the use of the CAPM as an important part of the process of estimating cost of capital. However, given the weaknesses of this approach, we believe that it is important that the CC recognise that it would be inappropriate to use CAPM alone and in isolation from other methodologies.

Section IV: Index-linked cost of capital allowance

19. One of BAA’s customer’s has proposed that the allowed cost of capital should be linked to market information. However, based on the recommendations of its advisors, the CAA has recommended a fixed cost of debt for the whole of the price review. This is subject to the views of the CC.

20. National Grid is still considering this issue within the context of the ongoing Gas Distribution Price Control Review (GDPCR). However, our initial views are that we concur with the CAA’s advisors in that we believe there may be practical difficulties associated with the implementation of an index-linked allowance. Further, given the already strong incentives on companies to gear-up, we also agree that it is not clear whether such a mechanism would encourage increasing leverage. This could therefore contradict the generally accepted principle of regulators that high levels of gearing are inappropriate.

21. The key practical consideration to be made in introducing an index-linked allowance would be which components of cost of capital should be indexed and to which type of bonds. In addition, the treatment of embedded debt would not be straight forward.

22. National Grid believes that a downward adjustment to the cost of equity as a result of the indexing of debt allowance would be inappropriate. Any proposed calculation of an adjustment to the cost of equity to reflect the new mechanism would be extremely problematic.

23. From a customer perspective, the proposition would have the effect of removing the buffer by which they are currently afforded protection against sharp increases in interest rates. Given the recent interest rate hikes by the Bank of England, it is unclear whether the removal of this buffer would actually be in the best interests of customers.

24. In conclusion, National Grid believe that it is unclear, in a rising interest rate environment, whether customers would actually benefit from such a mechanism. This, in conjunction with the difficulties of implementing the indexing, leads National Grid to strongly question the benefits of indexation.