

**Cross Submission to the Commerce
Commission**

on the

**Cost of Capital
Workshop**

**Made on Behalf of
17 Electricity Distribution Businesses**

2 December 2009

Cross Submission on the Cost of Capital Workshop

The Commerce Commission (the Commission's) has recently consulted on Input Methodologies (IMs) to be applied in the regulatory mechanisms for electricity lines businesses (ELBs), gas pipeline businesses (GPBs) and major international airports under Part 4 of the Commerce Act 1986 (the Act). On 12 and 13 November 2009, the Commission held a workshop for interested parties to discuss the proposed Cost of Capital Guidelines and the associated Cost of Capital Input Methodology. The Commission has now published a list of questions on relevant matters arising from the workshop.

This paper forms our cross submission on the Cost of Capital workshop including responses to the questions of relevance to us which has been prepared by PricewaterhouseCoopers (PwC) on behalf of the following 17 Electricity Distribution Businesses (EDBs):

- Alpine Energy Limited
- Buller Electricity Limited
- Eastland Network Limited
- Electricity Ashburton Limited
- Electricity Invercargill Limited
- Horizon Energy Distribution Limited
- MainPower New Zealand Limited
- Marlborough Lines Limited
- Nelson Electricity Limited
- Network Tasman Limited
- Northpower Limited
- OtagoNet Joint Venture
- The Lines Company
- The Power Company Limited
- Top Energy Limited
- Waipa Networks Limited
- Westpower Limited.

This group of EDBs together comprises 412,389 connections (or 21% of the total electricity distribution sector), 56,511 system kilometres (or 38% of the total electricity distribution sector) and \$2.0 billion dollars of regulated network fixed assets (or 26% of the total electricity distribution sector).¹ The ownership structures represented include consumer and community trusts, a listed company, local body and co-operative ownership, as well as those managed by management companies. Group members include networks with predominantly urban systems, others that are sparsely populated and a number with significant urban areas combined with rural and remote rural characteristics.

This cross submission initially addresses the questions posed at the conference and concludes with additional comments from PricewaterhouseCoopers views as corporate finance practitioners on the use of cost of capital estimates in practice as well as our comments on the impact of the global financial crisis on estimating the cost of capital for EDBs.

¹ Based on 2009 Information Disclosure Data

I Responses to Questions

Cost of Capital Framework

Q1 Model

1. We note the distinction that was drawn at the conference between the Cost of Capital Guidelines (the Guidelines) and the Cost of Capital Input Methodology (IM) which must be established for the businesses to be regulated under part 4 of the Commerce Act, including EDBs. It is our view that the Guidelines should provide an overarching framework, within which the IM provides a more specific description of the methodologies to be applied. The Guidelines should include guidance and approaches that are not embodied in the IM at any point in time, but which may be applicable to non-IM situations or to the IM in the future. For example, this will allow the Commission to include in the Guidelines consideration of applying approaches (or models) other than the simplified Brennan-Lally CAPM (SBL) for estimating the cost of capital.
2. EDBs typically have lower than average betas, as typically do the other entities to which Part 4 applies. As indicated at the conference, the Capital Asset Pricing Model (CAPM) is generally acknowledged as underestimating the cost of capital for entities with low betas and overestimating it for high beta entities, as demonstrated in various studies, including a Fama French paper published in 2004². Accordingly, the CAPM will tend to underestimate the cost of equity and therefore the cost of capital for low beta entities. As we indicated at the conference this flaw is exaggerated under the SBL CAPM model. This problem has also been noted by Professor Myers, of the Commission's expert panel on the cost of capital³.
3. We submit that in order to, at least partially, address the 'low beta' problem with the CAPM, the Commission should be using the classical CAPM, either as a cross check on or in addition to the SBL CAPM in low beta situations. The Commission could also consider other ways to address the 'low beta' problem:- allowing an increment to the cost

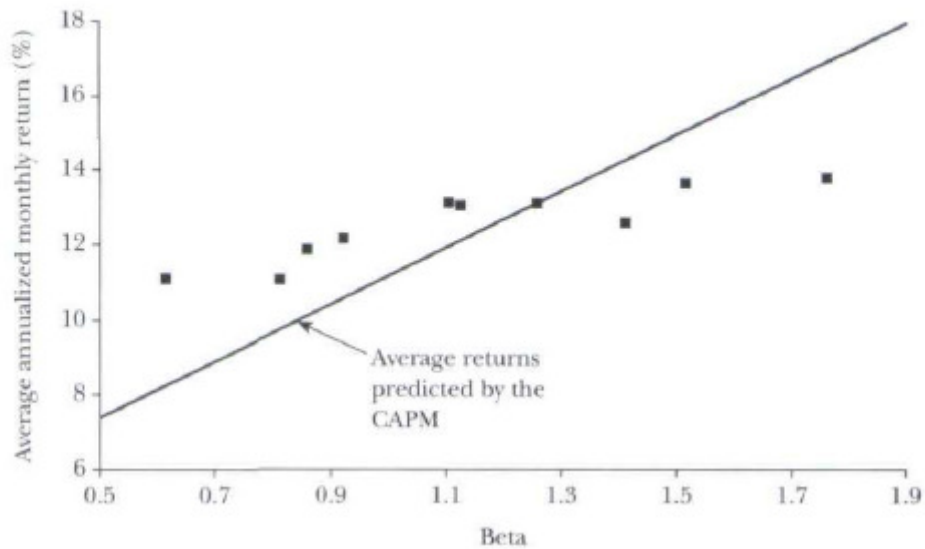
² Fama, E. F. and French, K. R., 2004, "The Capital Asset Pricing Model: Theory and Evidence." *Journal of Economic Perspectives*, vol. 18(3), pp. 25-46. This paper analyses the beta return relationship for the entire universe of listed US stocks, for which data was available, over a 75 year period.

³ Refer paragraph 22, page 9, (Franks, Lally and Myers, 2008, "Recommendations to the Commerce Commission on an Appropriate Cost of Capital Approach"

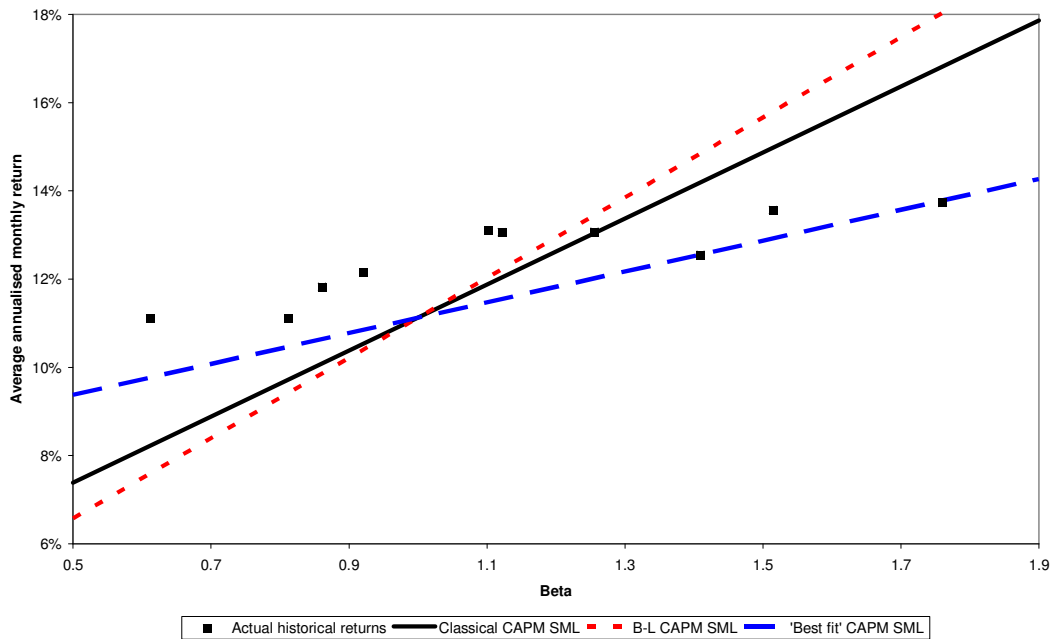
of capital, choosing a cost of capital from a higher point in the range; and/or using estimates from other models to assess the level of model error to help inform the final cost of capital range. Finally an adjustment to the beta to generate a flatter Security Market Line (SML) to align with empirical evidence (for example by averaging the entity's assessed equity beta and the market-wide average equity beta of 1.0) could be considered.

4. The chart below is reproduced from the Fama-French 2004 paper (their figure 2) and shows how the slope of the classical CAPM-based SML is too steep compared to the empirically observed relationship between beta and realised returns.

Average Annualized Monthly Return versus Beta for Value Weight Portfolios Formed on Prior Beta, 1928–2003



5. The next chart is based on the Fama-French 2004 one, but adds the SML that would apply from fitting the SBL to the same chart (assuming an investor tax rate of 30%), with the SML pivoted about the market-average equity beta point of 1.0. In addition an SML that best fits the empirical beta / return points on the chart has been added, again with the SML pivoted about the market-average equity beta point of 1.0.



6. The quantum of the adjustment to the Classical CAPM figures in the chart above, in order to arrive at the 'best fit' SML, is to use an equity beta estimate of 0.53 plus 0.47 of the unadjusted equity beta estimate. The quantum of the adjustment to the Brennan-Lally CAPM figures in the chart above is to use an equity beta estimate of 0.62 plus 0.38 of the unadjusted equity beta estimate. Although such adjustments may not be consistent with the theoretical underpinnings of the CAPM, they are a pragmatic solution to the problem the Commission faces in seeking to apply the CAPM to low beta situations. Similar beta adjustments, titled 'Blume' or 'Merrill Lynch' adjustments, are sometimes made by some academics and practitioners, albeit for different technical reasons.
7. In response to the discussion on the 'low beta' problem with the CAPM, Dr Lally has raised the "errors-in-variables" problem with empirical testing of the CAPM. We note that the Fama-French 2004 paper (and other similar studies) uses well established econometric techniques to control for this problem. For example, by estimating the betas for portfolios rather than individual stocks, sorting the portfolios by beta and using month-by-month cross-section regressions.
8. We also note that from an academic perspective the identification and measurement of the 'market portfolio' is critical for the testing of the CAPM. In practice, however, if the wrong market proxy is used both in testing and in applying the CAPM, then the

information provided by the testing is still useful in understanding how much reliance can be placed on the model by practitioners.

9. We acknowledge the practical difficulty in being able to estimate the parameters required by other models such as the International CAPM, the Dividend Discount (or DCF) model and the Fama-French three factor model. We therefore consider that the Classical and Brennan-Lally CAPMs are the most practical to apply in New Zealand at this time. International market estimates of the cost of capital derived using alternative models, such as the Dividend Discount model and the Fama-French three factor model, may provide useful information by comparison to application of the CAPM in those markets.
10. Finally, in the context of the cost of capital IM for EDBs, we consider that, as a matter of principle, each time the cost of capital is to be applied under Part 4 all of the cost of capital parameters to be applied in the context of the IM should be reviewed (but not necessarily revised). We acknowledge the intention for the Commission to undertake a regular review of the debt premia, however the same factors that will impact on the debt premia are also likely to impact leverage, beta and the market risk premium (MRP).

Q2 Industry wide vs firm specific

11. The EDBs which support this submission agree that an industry-wide cost of capital estimate should be used for information disclosure and Default Price Path Regulation (DPPs) for EDBs. We submit, however that in the context of a Customised Price Path (CPP) it would be appropriate for an EDB to have the option to be able to propose an alternative cost of capital based on business specific parameters including actual leverage and costs of debt. This would provide a pragmatic, cost effective approach.
12. An example of a firm specific issue that might affect asset beta is the obligation to continue supply under Section 62 of the Electricity Act 1992. Such an obligation might increase the operating leverage of the firm concerned, hence raising its asset beta (there may also be financeability issues and broader regulatory considerations involved in this situation).
13. Under the SBL CAPM model the following parameters can be determined as market wide parameters:
 - the risk free rate;
 - the investor tax rate; and
 - the tax adjusted market risk premium (TAMRP).

14. Accordingly, the following parameters should be derived for the electricity distribution industry, as industry-wide parameters for information disclosure and DPP regulation:
- the asset beta, obtained from analysis of the betas for comparable listed EDBs (either in New Zealand or offshore);
 - leverage, from analysis of New Zealand EDBs; and
 - the debt premium, from analysis of New Zealand EDBs and other New Zealand companies of appropriate credit rating with publicly traded bonds.
15. While in principle companies will have unique asset beta values, in practise it will generally be difficult to differentiate the asset betas of individual companies from their industry average. If individual companies have evidence to support using a company-specific asset beta estimate we consider that this is a matter that should be left open for submission (along with company specific leverage and debt premium) in the event a CPP is being determined.

Expectation of Normal Returns

Q3 Expectation of Normal Return, NPV=0

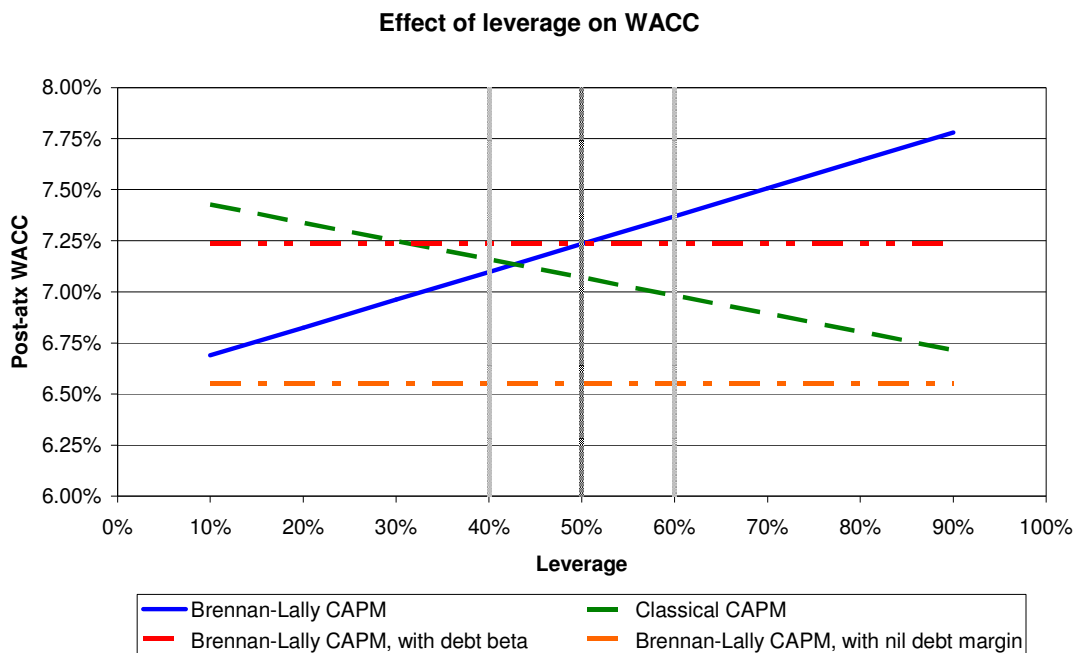
16. The EDBs which support this submission believe that an NPV=0 requirement is a minimum condition which regulators should use when designing regulatory frameworks and specifying regulatory parameters such as cost of capital. This is consistent with the Part 4 Purpose Statement's requirements for incentives for businesses to invest in long term infrastructure and be limited in earning excess profits.
17. We note that in practice this condition is difficult to ensure for EDBs which are subject to DPP type incentive regulation. This is a relatively light handed form of regulation with a 'partial' building blocks element to it, but it also includes efficiency incentives which suggest that for periods of time EDBs may earn above or below a cost of capital benchmark while operating consistent with the required regulatory principles. In addition, we note that it is impossible for EDBs to set prices so as to be able to consistently and precisely generate year on year levels of regulatory profit that are equivalent to a rate of return benchmark. EDBs do not have sufficient control over their revenues or costs to ensure actual returns are the same as budgeted returns. Thus an NPV=0 outcome is highly unlikely to be achieved in practice. The best that can realistically be targeted is an average outcome over a longer period of time, but even then some variation is to be expected.

Leverage

Q7 & 10 Leverage, Debt Beta and WACC under SBL Model

18. As noted above we support an industry-wide leverage assumption for use in information disclosure regulation and the DPP for EDBs. We believe this should be established from observations about listed comparator entities (EDBs) located in New Zealand and overseas, which have conventional ownership structures. Under CPPs we believe that EDBs should be able to propose a divergence from the DPP cost of capital assumptions in respect of business specific leverage and debt premium, if they so choose.
19. With regard to the straw person example circulated by the Commission prior to the workshop, we note that it is important that there is consistency between the assumptions and analysis supporting the assumed level of leverage, the assumed credit rating and the associated debt premium estimate. This level of analysis is not evident in the straw person example.
20. We also refer to the issue discussed at the conference that under the SBL CAPM model the cost of capital increases with leverage. This has been supplemented since the conference by a paper prepared by Dr Lally 'Cost of Capital and Leverage', 17 November, 2009. Dr Lally's analysis supports the comments that we made at the conference – that the SBL WACC is invariant to leverage either if a nil debt margin is assumed or modelled, or if the debt margin is assumed to be fully explained by a debt beta (which is then allowed for in the analysis). The chart below illustrates⁴ the relationship between the WACC and leverage under these alternative modelling assumptions.

⁴ The example follows that provided by the Commission, which uses simplifying assumptions such as the same debt margin applying at different leverage ratios and no allowance being made for the costs of financial distress (which if allowed for would see the slope of all of the WACC curves increase at higher leverage levels). The WACC lines in the chart for the Brennan-Lally CAPM and the Classical CAPM are as per the Commission's example.



21. In our view is it not reasonable to conclude that that use of the SBL CAPM model will incentivise entities to adopt higher leverage, for the following reasons:

- where benchmark cost of capital parameters are used, including the consideration of international evidence, the leverage decisions of individual regulated EDBs in New Zealand are unlikely to impact on industry wide estimates;
- it is unlikely that many EDBs would have sufficient flexibility within their capital structures to manipulate the outcomes in a manner as suggested at the conference. Capital structure decisions reflect a range of factors and are subject to scrutiny by shareholders and lenders; and
- the effects on the cost of capital are small so any incentives are weak.

22. The key point from a practical perspective, and one which then makes the leverage issue insignificant, is to ensure that the regulated entities' cost of capital is estimated using comparable leverage, asset beta and debt margin assumptions as measured for the comparator entities. Dr Lally's analysis concludes that the technically correct WACC specification, using the SBL CAPM, is somewhere between the Commission's current model (the blue solid line on the chart above) and treating the full debt margin as attributable to a debt beta (the red dashed line on the chart above). The difference between these two WACC curves, within the leverage range of 40% to 60% assessed in the straw person example, is not significant - being at most +/- 0.14% in the WACC value.

Term of the Risk-Free Rate

Q11 Term of the Risk Free Rate

23. The risk free rate appears in the WACC formula as a building block for both the cost of debt and the cost of equity. We favour use of a longer term risk free rate in estimating the cost of equity in the cost of capital formula. This is consistent with the investment decisions of EDBs and market convention. Were sufficiently liquid markets in existence for New Zealand government bonds of terms of 10 years or more, we would favour use of a 10 year (or longer) bond rate in estimating the cost of equity using the CAPM. However, the illiquid market in longer term bonds generally results in use of a five year bond as the liquid long term risk free rate benchmark in this country.
24. We note that the Dr Lally's analysis justifying use of a risk free rate matching the regulatory reset period ignores the presence of any term risk premium in the term structure of interest rates. In our view the existence of such a premium invalidates Dr Lally's proof. As investors in long term government bonds demand such a premium, long term equity investors in regulated businesses should also be provided the same premium.
25. Theoretically the term of the risk free rate used in the cost of equity should be the same as that used for estimating the Market Risk Premium (MRP), but in practical applications this may not be a significant issue. We note that some interested parties have suggested that swap rates, rather than government bond yields, could be used as the risk free rate. We support the continued use of government bond yields at this time, but this is an area that the Commission should keep under review.
26. We support the Commission's current practice of averaging the measurement of government bond yields within the one month prior to a regulatory period. However where regulatory decisions are published in advance of the regulatory period to which they apply the Commission should publish as early as possible the specific measurement period and basis it intends to use to determine the risk free rate for regulatory purposes. This would assist EDBs manage any interest rate risk.
27. We note the straw person example does not include the raw data used to derive the risk free rate used in the example. Accordingly it is not possible at this time for us to critique and comment on its derivation, although we do not envisage that there should be any issues with deriving this estimate. Nevertheless, at the time the Commission releases

actual, as opposed to straw person, parameters for consultation it would be helpful if the Commission released all underlying raw data, calculations and a detailed description of methodology in order that interested parties can (more efficiently) review and comment on the estimates.

Debt Premium

Q13 Estimation of the Term of the Debt Premium

28. In principle we submit that the debt premium should be estimated based on the optimal term of borrowings for EDBs assuming credit markets are not constrained⁵. The optimal term of borrowings will be determined by minimising the total cost of borrowing, including facility fees and issue costs, and managing other relevant factors such as refinancing risk. For this reason we favour inclusion of facility fees, issue costs etc. in the debt margin. This also facilitates comparison of the cost of debt from different sources / markets.
29. We understand that the thinking of the Commission, after it has assessed a debt margin based on the optimal borrowing term, is to then notionally reset or hedge the underlying risk free rate to match the term of the regulatory period. In our view if this approach is adopted then the notional interest rate swap costs need to be included in the cost of debt, to make allowance for this assumption. However, we do not believe that it is appropriate to also assume that regulated entities, including EDBs, would be able to swap all of their debt margin to the same assumed notional term.
30. We note the straw person example does not include the raw data used to derive the debt margin estimate used in the example. Accordingly it is not possible at this time for us to critique and comment on its derivation. When the Commission consults on actual estimates it would be helpful for interested parties if the raw data and underlying calculations can be released by the Commission at that time. This will allow for informed consultation to occur in an efficient manner.

⁵ Due to the Global Financial Crisis many companies are reporting that they are experiencing difficulty in accessing longer term debt financing at anything other than prohibitively expense rates. This is forcing companies to maintain a shorter then desired borrowing term.

Q18 Debt Premium and Leverage

31. We support the proposal to adopt a benchmark credit rating for the purpose of determining an industry wide cost of debt. The proposed A-/BBB+ credit rating falls broadly within an appropriate range, but we suggest that a BBB+ credit rating is more likely to be attainable by many EDBs than an A-, were they to operate at the levels of leverage envisaged in the straw person example and seek a credit rating. Indeed current market conditions may mean that even a BBB+ credit rating is difficult for many New Zealand companies to attain at present. The benchmark rating therefore needs to be evaluated in light of then current market conditions and the overall financial health of EDBs at that time. We note that the costs of obtaining a credit rating should be included as part of debt financing costs – this is a cost that is incurred to access (presumably) cheaper public debt markets.
32. We have reviewed some of the debt margins for a number of EDBs in order to make a preliminary assessment of the data that might be available to assist the Commission in estimating an industry-wide debt margin. It is clearly difficult to interpret much of the information available as it pertains to credit market conditions at the time loan facilities were established, which in some cases is several years ago when conditions were very different. In addition, many EDBs operate at lower than might otherwise be expected levels of leverage due to constraints around shareholders providing additional equity capital. Furthermore, some companies advise that they are currently effectively priced out of accessing longer term debt facilities, so their actual debt margins are not reflective of the true costs of borrowing for optimal / longer maturities.
33. In light of the above, we consider that from a practical perspective it will be reasonable for the Commission to evaluate the debt margin implicit in the yields of publicly traded bonds for comparable companies, after allowing for issue costs, as a starting point in its analysis. However, it will be important for the Commission to also augment this information with a review of the then current cost of obtaining debt from other, possibly higher cost, sources (i.e. in order to assess a weighted average debt margin) and to also take into account the effect that firm size may have on the access to and pricing of debt finance.
34. Publicly verifiable information on swap and hedging costs can likely be obtained from trading banks or financial information service providers (e.g. Bloomberg or Reuters).

Financeability

Q19 Actual versus Industry

35. In response to financeability tests, the Commission has proposed four courses of action, in order of preference these are:

- revisit its various regulatory inputs to check if they have been appropriately set;
- consider whether it would be desirable to reduce the notional gearing assumption adopted within its estimate of the cost of capital;
- consider whether the profile of the business's allowed revenues should be accelerated, to allow earlier cost recovery than would otherwise occur, ensuring that NPV-neutrality is maintained; and
- consider adjusting the cost of capital to ensure financeability.

36. The second course of action proposed by the Commission is to reduce the assumed level of gearing. It is our view that this proposed course of action renders financeability tests meaningless – assumed leverage is reduced until the financeability issues simply 'disappear'. Accordingly, this proposed course of action should be dropped. We support the third and fourth courses of action proposed by the Commission (after first checking the building block inputs), being to review the allowed timing of cash flow recovery and to review the allowed cost of capital. We draw the Commission's attention to the fact that it should be cognisant of the effect its decisions on cash flow timing (e.g. regulatory treatment of revaluations, depreciation and taxes) can have on investors' perception of risk.

Market Risk Premium

Q20 Further Issues

37. At the Workshop each of the expert advisers was asked to state the market risk premium (MRP) currently used by themselves in practice in applying the CAPM model. Mr Redmayne for PwC explained that PwC uses a TAMRP of 7.5%. A similar response was given by Dr Marsden and Mr Ireland. Dr Layton responded with 7.0% and Mr Newton 7.75%. We note that the Commission's current assumption of 7% is lower than the median implied by this sample, which coincides with the 7.5% used by PwC. We also note that representatives of Powerco, Auckland International Airport and KPMG indicated that they had recently increased their TAMRP estimates as a result of changes to market conditions brought about by the global financial crisis. Accordingly, we submit

that there is some evidence that practitioner MRP estimates are being revised upwards and it would not be out of line for the Commission to now adopt a higher TAMRP estimate of 7.5% - which would then bring it into line with the median current practice of the finance practitioners surveyed.

Beta (Systematic Risk)

Q21-24 Asset Beta Estimation and Comparable Companies

38. In our view it is necessary for industry betas to be assessed from objective analysis based on the closest group of comparable companies possible. It should not be based on a subjective or qualitative judgement. It will therefore be necessary to ensure that the best sample of comparator companies is chosen for the sample and that the betas for these companies are derived from thorough analysis. Accordingly we do not support the use of beta estimates from other industries or the use of decisions by other regulators for the purpose of the Commission arriving at industry beta estimates. These other sources of information should be limited to informing on the extent of the range around the final cost of capital estimate.
39. If the comparator company group is rigorously selected and analysed using the appropriate econometric techniques, then there is little that can be added by referring to analysis undertaken by others. All it is likely to reveal is that the other analyses may have excluded some relevant companies of interest, may have included non-comparable companies, may have used inadequate or inappropriate econometric techniques and / or may have been undertaken over a different time period. With the current ready access to international capital markets data the Commission should not seek to rely on potentially inadequate or inappropriate beta analysis by other parties. These comments also pertain to the desirability of the Commission avoiding any reliance on 'fair value curves' and the like that are calculated and provided on a proprietary basis by third party service providers.
40. We note the straw person example does not include the raw data used to derive the beta estimates used in the example. Accordingly it is not possible at this time for us to critique and comment on its derivation. As for other parameter estimates, when the Commission consults on actual estimates it would be helpful for interested parties if the raw data and underlying calculations can be released by the Commission at that time. This will allow for informed consultation to occur in an efficient manner.

Estimating the WACC Range

Q25 Estimating the WACC Range using Monte Carlo

41. As we have previously submitted, we believe it is necessary for the Commission to consider and account for both model risk as well as parameter estimation risk when estimating a cost of capital range.
42. At the conference we indicated our support for Monte Carlo simulation as a practical tool for generating the cost of capital range where the individual parameter estimates may be partially correlated and / or have non-normal distributions. We believe it is reasonable to expect that some of the cost of capital parameters will be correlated, such as the debt premium and the MRP, and the risk free rate and the MRP.

Selecting a Point on the Range

Q26 Selecting a Point on the Range

43. It has been acknowledged in the Commission's discussion papers and at the conference that the costs of setting the regulatory cost of capital too low outweigh the costs of setting the regulatory cost of capital too high. Accordingly, the cost of capital should be set above the mid-point of the range. We suggest a default position of the 75th percentile is reasonable⁶.
44. In addition as indicated earlier, the low beta CAPM issue is a factor that the Commission needs to consider in its cost of capital specification. If it is not adjusted for elsewhere in the cost of capital formula, then it is a factor which must be considered when choosing a benchmark cost of capital from the range.

⁶ We note that at the conference Dr Lally stated that in his view that the 75th percentile of the assessed WACC distribution is probably the lower bound at which the regulatory cost of capital should be selected and that one could easily choose a value well above this. (refer lines, 12-14 page 225, conference transcript).

II Other Comments

PricewaterhouseCoopers Approach to Cost of Capital

45. At the conference the Commission asked that valuation practitioners provide publicly verifiable support for their position on cost of capital parameters.

PricewaterhouseCoopers New Zealand publishes quarterly cost of capital estimates on its website (<http://www.pwc.com/nz/en/cost-of-capital/index.jhtml>), with which the Commission is familiar. We use the SBL, although this is arrived at by virtue of applying more detailed tax assumptions to the full Brennan-Lally CAPM. Our current market-wide parameter estimates are an investor tax rate of 30% and a TAMRP of 7.5%. We use this model and market-wide parameters in all of our cost of capital work in New Zealand. We also typically employ a range of cross-checks, including use of the classical CAPM where international investors might be involved.

46. As noted at the conference, our TAMRP estimate is normally applied in valuing long term cash flows (i.e. into perpetuity) so we are less inclined to adjust it in response to shorter term market conditions, which may be mean reverting. However, the position facing the Commission is different in that it is required to estimate the cost of capital for horizons of one to five years.

47. Our TAMRP estimate is primarily based on analysis of historical realised returns in the New Zealand market measured relative to 'short term' government bonds. The data series for the later has typically been for bonds of a term of one to three years. If our historical TAMRP estimate were to be rebased off 'medium term' government bonds, with a term of around five years, then tentative analysis suggests that the historical TAMRP might be in the order of up to 0.1% lower. However, this tentative conclusion is based on analysis of only part of the time period of interest due to data limitations. Moreover, we have regard to other data sources and studies and as a result at the present time we would not conclude that the New Zealand TAMRP should be less than 7.5% if a longer term government bond were being used as the risk free rate in the SBL CAPM.

Global Financial Crisis

48. The Global Financial Crisis has had a significant impact on financial markets, particularly over the past eighteen months which has resulted in observable:

- increases in debt margins;
- increases in market volatility; and
- decreases in the risk free rate (i.e. government bond rates).

In addition, although not directly observable, we expect that over the forthcoming regulatory period there will have been an increase in the equity market risk premium required in the short to medium term.

49. Thus the price of risk has changed and it is now currently likely to be above the historical long run average. This recent increase is relevant for estimating the cost of capital IM as it is the price of risk which applies during this period which must be considered. In addition it is not possible to determine whether the price of risk will reduce in the future back to the levels evident before the Global Financial Crisis or whether this is a long term correction. While in the longer term mean reversion is likely, the period over which this might occur is indeterminate.

50. Accordingly we submit that each of the Commission's Expert Panel members be requested by the Commission to provide current estimates of the TAMRP in New Zealand for a one to five year period.

51. In addition the Global Financial Crisis has changed the debt market and entities wishing to raise or refinance debt or raise equity capital are facing more difficult circumstances. Currently we note that entities are also effectively prevented from accessing long term borrowings partly due to the high cost of long term debt. These factors are currently influencing the cost and term of debt for EDBs and should be reflected in assessing the benchmark cost of debt.

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