ElectraNet SA
electricity transmission network

TransGrid Revenue Cap Draft Decision

Public Forum

18 June 2004

Presentation Purpose/ Outline

- To highlight/ comment on a number of issues raised by the ACCC's draft decision
  - Opex efficiency incentives/ adjustment
  - Non-insured risks
  - Asset base roll forward
  - Cost of capital
- NOT to comment on the appropriateness or otherwise of TransGrid's revenue cap

Significance of Revenue Cap Decision in relation to DRP Review

- The ACCC is reviewing its Draft Regulatory Principles at the same time as the TransGrid and EnergyAustralia revenue reset processes
- Need to be careful that “regulatory principles” are not being developed “on the run” as part of the revenue reset processes without the benefit of wider consultation as part of the DRP review

Opex Efficiency Incentives

- The Draft Decision says (p24):
  - *"… in the current regime there is no explicit 'efficiency carry-forward' mechanism"*
  - *"… the ACCC has consulted on changes to the regulatory regime for opex that could … strengthen opex efficiency incentives"*
  - *"However, this matter is still under consideration as part of finalisation of the DRP"*
  - Concludes that a carry-forward mechanism did not apply in the current regulatory period and will not apply in the next

Opex Efficiency Incentives

- BUT… the DRP says (Statement S7.2 on p97):
  - Opex savings will have a straight-line glide path applied over the next regulatory period
  - and describes in some detail how the glide path will be implemented (p90-91)
- ElectraNet understands that the opex (and capex) efficiency incentives that apply in current regulatory periods are those set out in the 1999 DRP
- ElectraNet assumes, therefore, that the ACCC's treatment of TransGrid is peculiar to TransGrid

Opex Efficiency Adjustment

- The ACCC has chosen to apply a 2% real per annum "efficiency adjustment" in setting the opex allowance (p31):
  - *"The ACCC notes that in other countries where incentive regulation has been applied over a long period, large real reductions in opex have been achieved"*
- If this is incentive regulation then it is incentive regulation by "stick" rather than "carrot"
- Efficiency gains are being imposed in place of allowing efficiency incentives to work

Opex Efficiency Adjustment

- Under this arrangement the regulated company does not share in the benefits of the imposed opex efficiencies during the regulatory period
- ElectraNet questions whether this approach is consistent with the benefit sharing objectives set out in the Code
- Does an opex “efficiency adjustment” imply that opex efficiency incentives have failed and therefore need to be strengthened?

Non-insured Risks

- The Draft Decision says (p32):
  - Actual expenditure arising from non-insured risks should be included as a pass through
  - *"self insurance allowance… will only be allowed upon receipt of a TransGrid Board Resolution to self insure as per the ACCC's Guidelines on this matter"*
- ElectraNet is unaware of any official ACCC Guidelines on this matter

Non-insured Risks

- ACCC's August 2003 DRP Discussion Paper says
  - "*a resolution to self-insure would also be expected to explicitly acknowledge the assumed risks of self-insuring… (e.g. if a 1 in a 100 year event occurs in year 1 then the business will need to … restore assets out of its own resources)*"
- However, consumers would also benefit from a "price smoothing" provision that avoids price shocks in comparison to treating non-insured events as a pass through

Non-insured Risks

- i.e. actual expenditure arising from non-insured risks would be funded by the provision up to the balance of the provision – costs in excess of this would be treated as a pass through
- This is the basis of the “self-insurance” provision the ACCC allowed in the ElectraNet revenue cap decision

Asset Base Roll Forward

- The Draft Decision says (p43-45):
  - Notwithstanding the approach adopted for TransGrid, some issues are outstanding such as how to take account of out-turn figures as opposed to forecast figures
  - *"At issue is whether the roll-forward calculation should reflect… 'decision depreciation' on the basis of forecast capex, or whether it should be recalculated based on actual (prudent) capex. In present value terms the two approaches should be equal"*

Asset Base Roll Forward

- ElectraNet reiterates its support for rolling forward the asset base using out-turn depreciation to maintain consistency with treatment in the regulatory accounts
- Could the Regulatory Principles allow TNSPs to choose between alternative approaches for implementing roll forward?

Forward Capex

- ElectraNet has previously submitted that it is comfortable with the current capex framework; i.e. capex allowance and ex-post prudency review
- However, ElectraNet supports in principle the ACCC's proposal to strengthen incentives for capex efficiencies through an ex-ante capex framework
- ElectraNet, therefore, supports the extended timetable for reformulating the forward capex assessment under an ex-ante regime

Cost of Capital

- The Draft Decision WACC parameters are essentially equivalent to those applied in previous decisions (equity beta, MRP, gamma)
- Robust international comparison of risk adjusted (as opposed to reported) rates of return has shown that Australian rates are low by international standards (with the exception of the UK)
- Rates of return (margin over the risk free rate) have fallen consistently over the past 3-4 years – there is no basis for further reducing regulated rates of return

Cost of Capital

- Some comparative studies (often quoted) of regulated rates of return contain fundamental errors/ deficiencies; e.g.
  - failure to adjust for the different risk free rate (interest rates) in the various jurisdictions
  - failure to take account of gearing differences
  - failure to adjust for differences in the way regulators quote WACC; e.g. comparing vanilla WACC to post-tax nominal WACC (analogous to comparing profit before tax with profit after tax – figures that are reconcilable but cannot be directly compared without adjustment)

Cost of Capital

- Fundamental errors/ deficiencies continued…
  - failure to recognise differences in MRP between jurisdictions due to differences in market composition, taxation, country specific risk etc.
  - failure to subject beta estimates to diagnostic tests to determine their statistical validity – hence drawing inferences from unreliable data
  - selection biases in terms of the range of firms selected as well as the time period over which analysis is conducted (as betas are time varying a beta calculated in one period may not be representative of another)

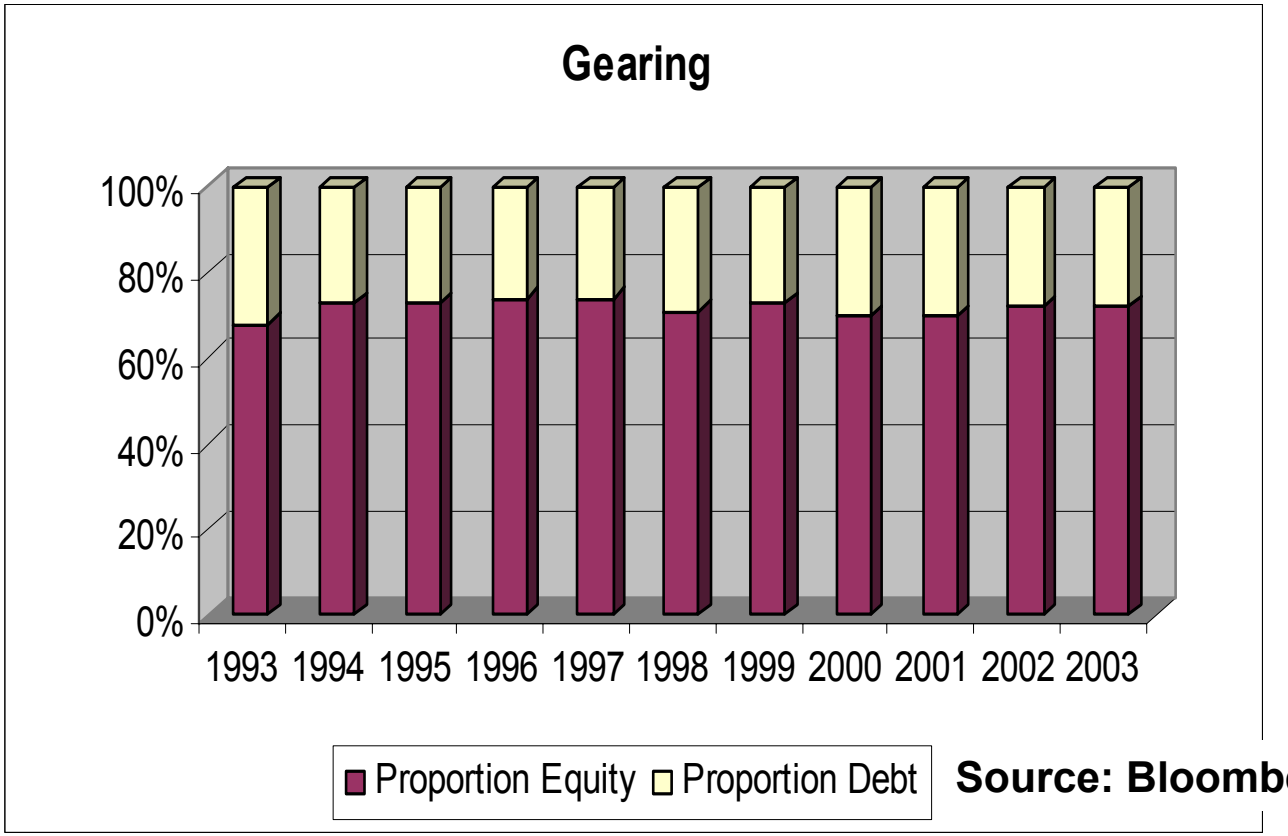
Cost of Capital

- Fundamental errors/ deficiencies continued…
  - inferring equity betas by comparing returns over time rather than from regression analysis that is required to measure the covariance of returns with the market
  - Relying on accounting data which empirical studies suggest contributes to only around on half of the movement in share prices over time

Cost of Capital – Equity beta

- Equity beta is a measure of the covariance between the returns of an investment and the returns of the market as a whole
- An equity beta reflects:
  - the systematic risk of a business; and
  - its capital structure (gearing)
- An equity beta of one indicates that a business has a risk similar to the market as a whole
- BUT… only for similar levels of gearing

Cost of Capital – Equity beta



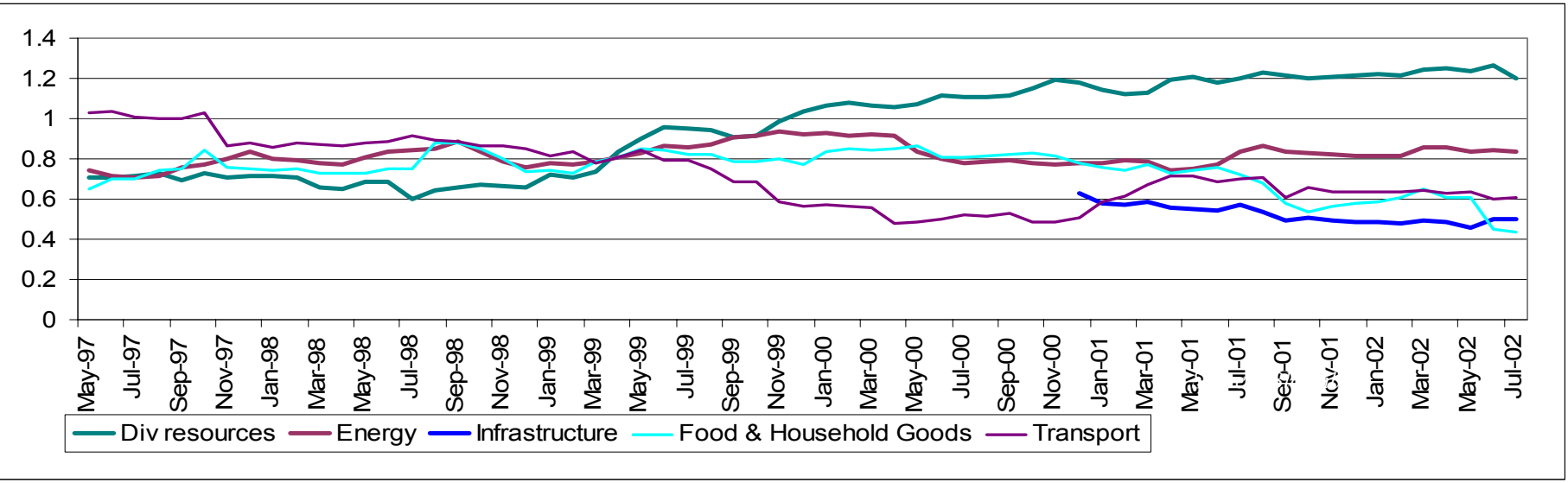
Source: Bloomberg

- Gearing levels of listed companies in Australia over the last decade have been approx. 30%

Cost of Capital – Equity beta

- When comparing equity betas it is critical to take gearing into account
- A TNSP's equity beta of 1 is often referred to in comparison with the market average, but assuming 60% gearing requires an equity beta of 1.4 to reflect the market average

Equity betas are volatile



- equity betas of various indices of listed companies on ASX – indices should be much more stable than individual company equity betas
- yet, even these indices are highly volatile over time
- problem is that this volatility cannot be hedged against

Caution required

Considerable caution is required in drawing statistically valid inferences from beta data

Company	Raw equity beta	Standard error	T-stat	R^2
Alinta Gas	0.13	0.40	0.33	0.01
Australian Gas Light	0.09	0.31	0.29	0.00
Australian Pipeline Trust	0.25	0.27	0.93	0.03
Envestra	0.31	0.27	1.15	0.03
United Energy	0.18	0.47	0.38	0.00

Source: AGSM data on equity betas – September 2002

t stat <2 suggests caution in drawing statistical inferences

R^2 approaching zero suggests no relevant relationship exists

Market Risk Premium

- the size of the market risk premium is unknown ex ante
- the MRP is time varying being sensitive to the measurement period
- the MRP exhibits considerable volatility – the shorter the estimation period the greater the volatility
- we know that the long run average (of 100 years) is around 8%
- the current short term MRP is below the long run average - may be partially due to the cost of diversification reducing
- however, there is no basis to reduce the MRP below 6% and a strong case for a MRP of 7%

Comparison of Returns

- User representatives have sought to compare regulated returns with accounting data such as EBIT by assuming that a strong relationship exists between this data and market valuations (and in turn WACC inputs)
- While relevant to valuations, accounting data is but one of the information sources that is relied upon to inform valuation decisions
- Accounting is about the historical information - valuation is about expectations of future cash flows and risks

Comparison of Returns

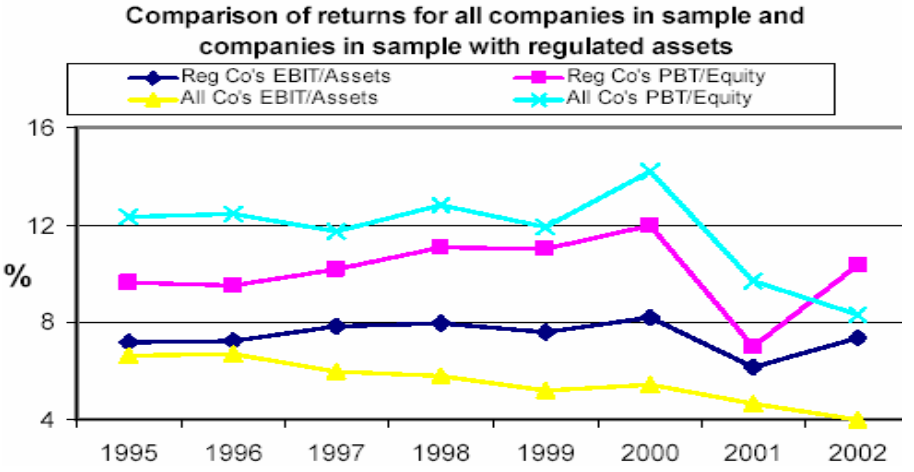
- Accounting data says little about how a company is positioned to respond to competitive threats that are likely to emerge over time, about trends in market share or the quality of strategies to grow revenue etc.
- Yet these expectations about future earnings are issues that determine how companies are valued
- Hence, market values and expected cashflows may or may not be correlated to book values and accounting information

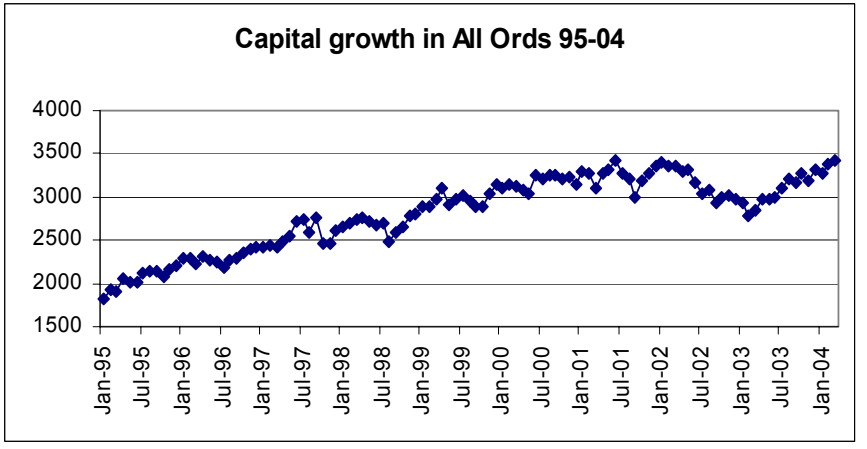
Comparison of Returns

- The assumption that a strong relationship exists between market values and accounting information leads to incorrect inferences about regulated rates of return
- Finance professionals use market returns (i.e. dividends plus capital gains) to measure historical returns to investors
- Reliance on accounting data flies in the face of well accepted finance theory and practice

Comparison of Returns

- User representatives have compared high yield assets (utilities) with growth stocks to suggest that returns on utilities stocks are high relative to the market
- However, a major component of the return on growth stocks is the increase in share price that is ignored in the analysis
- Between 1995 and 2004, All Ords has approximately doubled – suggests compounding growth of around 12%
- This suggests total return for the market of 12% over this period - 8% growth in price plus yield of 4%





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