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**Revisiting the Development of Proxy
Groups**

& Relative Risk Analysis

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What is the “goal” of sample selection?

Select a sample of companies with comparable business risk.

For regulatory purposes, must meet the requirements of Bluefield Water Works (1923) and Hope Natural Gas (1944) decisions. Returns must be

- Commensurate with investments of corresponding risk,
- Sufficient to attract capital, and
- Adequate to maintain financial integrity.

There is no perfect proxy group

In rate proceedings, there are frequent disputes about whether the sample is appropriate.

- No sample is ever perfect, so expecting perfection is likely to lead to endless disputes.
- However, some samples are likely to be better than others.
- Moreover, FERC has decided not to provide incentive adders for transmission, but instead rely on the upper portion of the “range of reasonableness” so the proxy group has added importance.

What are the characteristics of appropriate sample selection criteria?

Criteria

- should be factors expected to affect either business risk or cost of capital estimates (or both) of the sample companies.
- are designed to screen out companies with factors that may bias cost of capital estimates or make outcome of the estimation models unpredictable.
- should avoid circularity, (e.g., allowed returns in other jurisdictions or attempting to regulate the market-to-book ratio.)

Business Risk - generally companies in the same industry would be expected to have similar business risk.

But, individual companies in the industry may have unique characteristics which could affect the cost of capital estimates such as

- Companies in **financial distress** (credit rating < investment grade)
- Recent **dividend cuts*** - stock prices of companies that cut dividends are affected negatively. Generally regarded as negative information about the future prospects of the company.
- **Percentage of revenues** (or income or assets) from regulated operations, i.e., “pure play” company in the regulated line of business. (This is now much tougher to do than relatively recent past.)
- **Mergers/acquisitions** - affect the company’s stock price more than does developments in the market.
 - ▶ *Dividend cuts refer to reductions in normal dividends, not fluctuations due to stock splits or variations due to special dividends.

Other potential criteria

1. S&P Business Profile (used by FERC)
2. Book capital structure
3. Restructured state (electricity) with or without a PoLR (Provider of Last Resort) obligation.
4. Size as measured by assets, revenues or market capitalization.
5. *Value Line* has a number of potential other criteria including
 - a. Financial strength
 - b. Safety rating
 - c. Price Stability
6. Availability of growth rate forecasts for DCF model

Other potential criteria - Continued

7. Geographical location
8. SIC Code
9. Nuclear generating Assets
10. Accounting fraud or major court proceeding

List is possible criteria is longer than the universe of potential regulated companies, so must restrict our criteria to those most relevant to the cost of capital.

Recommend: companies in the same industry controlled for a) financial distress, b) dividend cuts, c) mergers & acquisitions, and d) with significant involvement in regulated activities. Use remainder of criteria only in specific circumstances.

Sample sizes are declining

The number of companies meeting selection criteria is declining in nearly every regulated industry.

Will probably have to relax some criteria in order to achieve a reasonable sample size.

In general, sample companies will have lower percentage of regulated activities than in relatively recent past.

Requires judgment as to effect of not being “pure play” companies

What if they are few (or no) companies that fit the criteria?

Fewer “pure play” sample companies from which to choose

- With passage of PURPA revision, more holding companies with regulated and unregulated subsidiaries.
- Mergers and acquisitions within the regulated industries.

For example, there are very few “pure play” natural gas pipeline companies in the U.S.

But alternative business forms own natural gas pipelines, such as

- Master Limited Partnerships
- Income Funds in Canada
 - ▶ Taxation of these forms differs from a corporation
 - ▶ Dividend policies result in the frequent payout of > 100% of earnings

Can estimates from these business forms be used?

Are the risks relevant to the cost of capital the same?

One Possible Alternative – Use a Sample from Another Regulated Industry

What about a sample of “pure play” regulated companies in another regulated industry? Is this feasible for use in a natural gas pipeline case?

- Can we “bracket” the cost of capital for the target company by using samples from which we expect reliable results?
- Evaluate the risks of the alternative sample and industry with the risks of the target company.
- Establish benchmarks such as a floor of cost of debt plus a small premium (e.g., FERC - 100 bps).
- Is there currently an alternative sample available? A few months ago, I would have said “yes”, but not sure today.

Cost of equity is a function of *both* business risk and financial risk.

What about differences in financial risk between the sample and the target company?

- How is financial risk measured?
- Is the market to book ratio relevant?
- Taken care of by the not allowing the average book value capital structure of the sample to differ from the target company's regulated capital structure?

Summary

Estimation error is a problem for all cost of equity estimation methods.

Carefully chosen sample(s) can reduce estimation error because the sample companies are expected to have the same business risk and have been screened for factors that are expected to bias estimates.

Must still address differences in financial risk

Summary – Cont'd

If sample of companies in same line of business is small or consists of companies with data issues, consider alternative sample(s) of regulated companies as benchmarks.

- Then compare business risks of the alternative sample to the target company
- Compare cost of capital estimates of the original sample with the alternative sample to judge whether data issues have biased cost of capital estimates

Although somewhat subjective, a reasonable estimate can be achieved.