Don't use the weighted trailing average!!!!

Graham Partington

Session 2: 10 February 1.30 to 4.00pm

Fundamentals

CAUSALITY ➡

- E(Return on **ASSETS**) = E(Return on portfolio of issued securities)

⬅ MEASUREMENT INSTRUMENT (WACC)

- Present Value = MV assets = MV security portfolio

⬇

- Expected cash flow from the **asset** discounted at

  - The **CURRENT** equilibrium expected (required) return for the asset

    = The **CURRENT opportunity CoC** as determined by the capital market. Neither determined by what networks do, or did, about financing, nor by the history of interest rates.

You'll Never Walk Alone (Gerry & the Pacemakers, Liverpool FC)
If You Find Other support

- Accepted principle in finance textbooks: use the current cost of debt in calculating the WACC.

- The AER in, *Assessing the Long Term Interests of Consumers,* strongly makes the case that the **allowed rate of return** should be an **estimate of investor's expected returns**:

  "If the **expected rate of return** *(estimate of allowed return)* deviates from **the market cost of capital** then it may not promote efficient investment in, and use of, the service provider's energy network in the long term interests of consumers.

  Therefore, the best possible estimate of the **expected rate of return**, will promote efficient investment in, and efficient operation and use of, energy network services for the long term interests of consumers.

  - And also quotes the 2017 Federal Court Decision on consumers interests: "…this in turn requires prices to reflect the long run cost of supply and to support efficient investment, providing investors with a return which covers **the opportunity cost of capital** required to deliver the services."

  (In quotes it is my emphasis in bold and my addition in italics)

Conclusions

- Historic costs of debt are not an expected return

- Historic costs of debt are not the opportunity cost of debt

- Use of historic costs of debt is fundamentally inconsistent with the expected return and hence the NPV= 0 criterion.

- The weighting "mismatch" issue arises from using the wrong cost of debt to begin with.

  - The problem in a rising interest rate environment will be a current cost of debt higher than the historic weighted average.

  - A separate asset base for "new investment" and really applying the expected return (not some weighted trailing average) is a solution to the problem.

Simple valuation illustration (with perpetuities): Historic cost of debt v Current market cost of debt

$$\frac{Historic\ cost\ of\ debt\ \times\ Face\ value\ debt}{Historic\ cost\ of\ debt} = Face\ value\ debt$$

$$\frac{10\%\ \times\$1\ Million}{10\%} = \$1\ Million$$

Tautology so any arbitrary value for historic cost of debt will give the same result

$$\frac{Historic\ cost\ of\ debt\ \times\ Face\ value\ debt}{Current\ market\ cost\ of\ debt} = Market\ value\ of\ debt$$

$$\frac{10\%\ \times\ \$1\ Million}{5\%} = \$2\ Million$$

Changes in the market value of debt cause a wealth transfer between shareholders and debt holders.