# Market Risk Premium

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# Historic Market Return Estimates of MRP

- The default method : Data is observable, objective and transparent
  - Assumes history repeats
  - Lots of history required to lower the SE.
    - Measured across many tax systems (e.g., no corporate tax), crises, structurally different economy, data reliability at long horizons?
    - Can't capture MRP changes over the averaging period
    - On average, history more likely to be an overestimate than an underestimate
- Not perfect but still the best option.
  - No reliable alternative to track MRP changes.

# Alternative MRP info: DGMs and the Implied Cost of Equity

- Pro
  - Well developed theoretical model.
  - Has some current use in estimating the market risk premium.
  - Depending on the version of the DGM application can be transparent.
- Con
  - Substantial upward bias in estimates
    - Analysts forecasts of earnings and dividends are upward biased and subject to sluggish adjustment.
    - Cash flow to investors is given by net dividends = Dividend less DRP participation less other equity capital raisings plus repurchases.
      - All substantial relative to dividends so more bias (upwards) from just using dividends
  - Substantial variation in estimates: say 6%.
  - Problems with sticky dividends
    - MRP estimates worst when markets move most
      - No surprise to find inverse relation between interest rate and (mis)implied cost of equity

# Still not walking alone

Officer and Bishop (2008) in a submission from networks and pipelines, argue against the use of the DGM to compute the MRP commenting on Bloomberg's DGM estimates state P15:
"There is, in our view insufficient confidence in the precision of the MRPs derived by the forward looking approach to warrant a move from the historical average approach." and they cite other work that comes to the same conclusion about the DGM.

# Inverse relation between the interest rate and the MRP

- Wright approach: return on market constant
  - One for one offsetting moves in interest rate and MRP
    - Implies prices don't respond to interest rate since discount rate unchanged
    - Fundamentally implausible
      - Are central banks substantially wasting their time?
    - Generally agreed, even by Wright, that it is not 1 for 1.
- So what is it?
  - My recollection of evidence: Empirics for both inverse relation and positive relation and regime shifts/no relation.
  - No consistent reliable evidence for the direction of the relation let alone the magnitude.