

AER Low interest rate environment Public Forum

APGA Presentation 23 June 2021



Overview



- Revisiting our questions from 2020
- Low rate of environment and highlighting fragility in equity
 - Note focus on equity as we agree with AER that this is main area of issue in relation to low rates.
 - Disagree on gearing there is such a thing as debt covenants
- Fragility consequences and cures
 - Focus on our views on the logic of the MRP
- Financeability and the right exam question

Revisiting our questions from 2020



1 Unique market conditions

...bond yields are low or negative, stock markets are swinging from lows to highs, recessions are being seen or expected almost everywhere, and people are worried about Covid-19

2 Different risk profiles

...both gas and electricity networks are responding to innovation and market disruption, but the causes and impacts are different (e.g. DER, climate policy etc)

A fresh look at the evidence

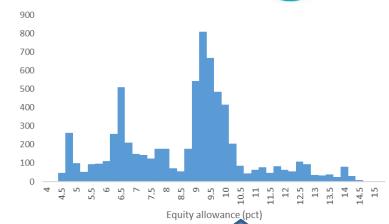
...it is easy to retain past positions and gloss over points raised against them, yet evidence evolves over time and it is important re-assess it from time to time

- Low rates paper recognises that recent market conditions are unique
- AER has taken a fresh look at the evidence- now reconsidering rfr/MRP relationship afresh
- We see 2022 as the time to think more deeply about and respond to fragility in the equity approach that have been highlighted recently
- Changes should not just solve for a low rate perioduse this as an opportunity to "build back better"

Fragility and the return on equity



- Rate on the day + fixed premium
 - APGA doubts whether the Foundation Model has delivered the right return on equity since 2018
 - Businesses boom and bust. Is this what we want to motivate steady, long run investment?
 - Consumers, pricing yo-yo. Is this in consumers long run interests?
- Low or high rate environment makes fragility clear
 - This time around business wore consequences; fix now or wait until consumers wear them?
- Reducing fragility risk-free rate
 - Use long run average (decade+) Netherlands
 - Add/subtract premium when rates low/high some investment bankers
- Reduce fragility MRP
 - Consider links between market returns and rfr
 - Practice of OfGEM and others
 - Consistent argument from industry



10 year CGS 1994-2021 + 2018 RoRI equity risk premium; who can plan rationally for this?

MRP route seems more logical, but you need to start at the right point given interest rate cycle

Logic for the starting MRP



- No view now on where MRP should start (CEPR paper) but logical approach is clear
- 2018 RoRI MRP was unconditional in respect of rfr.
- Appropriate in two circumstances;
 - rfr at or near its long-run average; and/or
 - rfr/market returns relationship is 1 for 1 (1% ↑rfr leads to 1% ↑ in market returns).
- Changes from 2018 to 2021:
 - AER notes rates are at historical lows.
 - AER reconsidering relationship between rfr and market returns (maybe not one-for-one).
- 2 changes together mean 2018 RoRI MRP is now a logical impossibility; either:
 - Lower MRP than 2018 if AER believes market returns move > rfr (relationship greater than one); or
 - Higher MRP than 2018 if AER believes market returns move < rfr (relationship between zero and one).
- Only a 2022 RoRI which starts in the right place can effectively underpin the long run interests of consumers

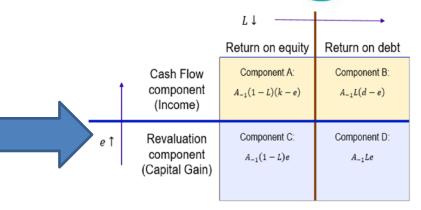
Some initial thoughts on starting MRP @PGA

- We do not know whether the relationship between market returns and the risk-free rate is stable.
 - How much stability is necessary?
 - Do we need to know the relationship exactly to act?
 - Is it better to be approximately right or precisely wrong?
 - Role for regulatory judgement
- We do not know what the relationship is, but we strongly suspect it is between zero and one.
 - Expert panel in 2018
 - Jordà, O Knoll, K, Kuvshinov, D, Schularick, M and Taylor, AM, 2019, "The Rate of Return on Everything, 1870–2015", Quarterly Journal of Economics, 134(3), 1225–98
- We believe a relationship between zero and one reduces fragility and a relationship greater than one increases it
 - More to the decision than balance of empirical literature?

Financeability & the right exam question



- AER examination starts with implicit assumption that rate of return is correct.
 - Finds that financeability changes just shifts returns from cash flow to revaluation.
- Financeability tells you little that is useful because of the starting assumption.
- Financeability tests can tell you something useful, if you let it!
 - But we need to tailor its determinativeness carefully



Where: A = RAB
L = Gearing
e = Inflation
k = return on equity
d = return on debt