Online forum
Rate of return working papers

Rate of return and cashflows in a low interest rate environment

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23 June 2021, 2.00 pm to 4.30 pm

Agenda

Time	Duration	Item	Presenter
14:00	5 min	Check in period	
14:05	5 min	Welcome and Introduction	Warwick Anderson (Chair)
14:10	15 min	Overview of working paper	Eric Groom, PSM, AER Board member
14:25	40 min	Stakeholder presentations	CRG, RRG
15:05	10 min	Break	
15:15	60 min	Stakeholder Presentations	ENA, APGA, Morgan Stanley, NSG
16:15	15 min	Questions and next steps	Warwick Anderson

Overview of the working paper

Eric Groom, PSM, AER Board member

Context and background

- Working paper program so far:

	Title	Draft paper	Forum	Subs close	Final paper
2020 working papers					
1	Energy networks debt data	26 Jun	29 Jul	14 Aug	18 Nov
2	International regulatory approaches to rate of return	27 Aug	16 Sep	9 Oct	16 Dec
3	Capital asset pricing model and alternative return on equity models	27 Aug	16 Sep	9 Oct	16 Dec
2021 working papers					
4	Term of the rate of return	21 May	15 Jun	2 Jul	Sep
5	Rate of return and cashflows in a low interest rate environment	21 May	23 Jun	2 Jul	Sep

Objectives

- National electricity objective (NEO)
  - To promote **efficient investment** in, and **efficient operation** and use of, electricity services for the **long term interests of consumers** of electricity with respect to:
    - price, quality, safety and reliability and security of supply of electricity
    - the reliability, safety and security of the national electricity system.
- Hearing – and understanding – stakeholder views is essential to our ability to advance the NEO and NGO
  - Also constructive for stakeholders to listen to each other's perspectives

Purpose of the Rate of return and cashflows in low interest rate environment draft working paper

- Interest rates paid on debt by government and corporate issuers have declined over the past decade for both shorter term debt and longer term debt.
- Changes in interest rates affect both the level of revenues and prices that we allow the regulated networks to charge, and the costs that the networks face in providing services and ultimately the prices consumers pay.
- As part of the 2020 Inflation review and some of our other recent processes, we received a number of submissions from networks and their investors expressing concerns about lower interest rates, cash flows and financeability.

Scope of the working paper

As part of this draft working paper we consider three broad questions:

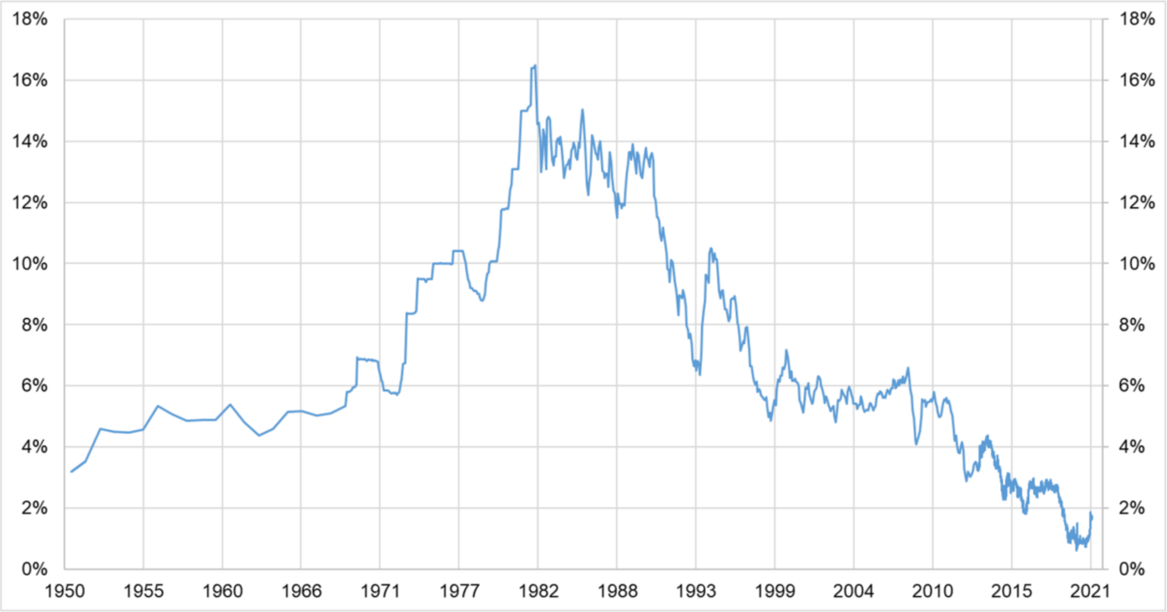
1. Whether we are in a low interest rate environment;
2. If we are, what are the consequences of lower interest rates; and finally,
3. Does this suggest that there is something that needs to be addressed?

Ultimately, we want to assess, as part of setting the 2022 Rate of Return Instrument, whether our rate of return instrument is appropriate in a lower interest rate environment.

Q1: Are we in a low interest rate environment?

- There has been a prolonged decline in interest rates and key measures of interest rates are lower than they have been for some time.

Historic Australian interest rates on 10 years Government bond yields



Source: RBA

Q1: Are we in a low interest rate environment? (cont.)

- Recent interest rates and large movements in interest rates are not without precedence over the long term.
- However, there has been a sustained downward trend in real and nominal interest rates since the 1980's/early 1990's.
- … and key interest rates are lower than they have been for some time.
- Conclusion: We agree that we are in a low interest rate environment.
  - But it is important to understand what may be the factors behind the fall in interest rates.

Q2: What are the consequences of interest rates being low?

- Our total ROR is a weighted average of the estimates of the cost of debt and the return on equity, using an estimated gearing level.
- Effects of lower interest rates on the total rate of return are an aggregate of the effects on these measures.
- Our estimates of cost of debt have declined with the fall in observed interest rates over the past decade.
  - The impact is smoothed through the trailing average
  - This has also been observed in networks' actual debt costs.
- Our estimates of return on equity have also declined over this period as they are directly linked to the interest on Commonwealth Government Securities.
- As a result, our estimates of the total rate of return have also fallen with the decline in interest rates.
  - For equity it has been a one-for-one change (subject to some adjustments in the estimate of the MRP and beta at periodic reviews)

Q2: What are the consequences of interest rates being low? (cont.)

- This lower estimate has also had a flow on impact onto the networks' cash flows. As revenues have declined, so have measures related to cash flows such as:
  - Net profit after tax (NPAT) and
  - Funds from operations (FFO) to net debt.
- This can be attributed to lower estimates of return on equity and our RAB indexation adjustments to cash flows.

Q3: Does this suggest that there is something that needs to be addressed?

After careful consideration:

- We are comfortable with:
  - Ability to continue to observe estimates of return on debt
  - Using Commonwealth Government Securities as a proxy for the risk free rate
- We consider that decisions about how to manage cash flows and financeability are primarily for the individual networks

At this preliminary stage, we are intending to more deeply explore in:

- Return on equity draft and final working papers - The relationship between the return on equity and the risk free rate. We have engaged CEPA to provide advice on this subject matter.
- Overall rate of return draft and final working papers - Reconsider any role for financeability in setting our rate of return instrument.

On estimating the Return on Equity

- The task is to estimate expectations for the long term efficient return on equity for assets with comparable risks
- We build this up on the basis of:
  - The risk free rate (using CGS yields)
  - Estimates of the expected MRP
  - Estimates of sector beta
- In 2018 we concluded that the expectations for the MRP may vary over time but that the long term historic realised MRP provides the best estimate of long term expectations.
- Key questions are:
  - Is that conclusion affected by the current low interest rate environment
  - If so, is there a robust alternative given that:
    - Under the RORI changes during period must be mechanical
    - It must provide the best estimate through the period not just at the start of the period

Key areas for stakeholder comment

- What is the relationship between the risk free rate and the market risk premium?
- Are there other parameters that could be affected by the low interest rate environment or relationships to explore?
- The regulatory suitability or practicality of implementing a relationship between the risk free rate and parameters in the 2022 rate of return Instrument.
- Submissions on this issue will be considered in the final equity paper.

Stakeholder presentations

Thank you

Submissions close on **2 July 2021**

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