AER Consumer Reference Group

CRG response to the AER's 2022 Draft Rate of Return Instrument

CRG presentation to public forum

(Technical perspective)

7 September 2022

Agenda

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1. Introduction & overview of our position
2. Return on debt
3. Market risk premium
4. Beta
5. Equity premium
6. WACC
7. Term
8. Cross-checks

Regulatory judgement & bias

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Our focus: The consequences of the AER's proposed draft decision

Our finding: Systemic upward bias arising from AER's regulatory judgement

Exercise of regulatory discretion

- Choice of methodology
- Choice of data set
- Choice of preferred point estimate
- Assessment of efficiency of preferred estimate (i.e., not too high, not too low)

Sources of biased decisions (in DD)

- Not giving proper regard to the evidence it has collected (beta)
- Disregarding its own findings of upwardly biased estimates (MRP, RoD)
- Failing to recognise inconsistencies between different parts of its proposed decision (Equity premium, WACC)

Return on debt

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- AER to retain 2018 approach: 10 year equal weighted trailing average benchmark of 1/3 AAA, 2/3 BBB 10 year bonds
  - Difference this time is more robust EICISI
  - 18bp outperformance – AER judges not material or persistent
- Material and persistent not objective standards. Not clear whether/how applied consistently across parameters
- Outperformance should be shared with consumers. Multiple options, e.g.
  - Shorter term per WATMI (no transition required)
  - Direct adjustment for halo effect
  - Change blend of AAA/BBB
  - Direct use of EICISI (per Independent Panel)
  - Cap mechanism (AER previous suggestion)

Failure to capture at least some of the outperformance reflects upward bias in the exercise of the AER's regulatory judgement

Market Risk Premium – AER preferred position

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AER's preferred approach

- Historical excess returns from 1988-2021, arithmetic average, deduct 5-year risk free rate

CRG's concerns with AER's preferred approach

- Inconsistent with beta approach where same point-estimate retained despite updated data
- AER indicates it is using unconditional estimate (CRG supports) but then uses relatively short sample period
- Update to 2021 captures "high water mark" of ASX
- Ignores geometric average
- Other factors tend to upwardly bias HER estimates: interim dividends, survivorship bias

*

- AER specifically states that "the arithmetic average is likely to be subject to a small upward bias", but then does nothing to correct this bias
- As the AER has tested 2018 RoRI for adequacy (see cross-checks such as RAB multiples, financeability), 6.4% (i.e. 6.1% on a 10-year term basis) should be the upper bound of a reasonable MRP estimate

A point estimate of MRP=6.8 reflects upward bias in the exercise of the AER's regulatory judgement

MRP – AER alternative

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- 50/50 HER and AER’s 3 stage dividend growth model (DGM)
  - Update annually – apply for full determination
- But DGMs have issues that have yet to be satisfactorily resolved
  - DGM outputs are volatile, because inputs change
  - DGMs tend to upward bias
    - Analyst optimism
    - Use of ASX 200
  - AER has not fully tested potential ranges
  - AER’s model has not been considered in detail to date
  - 50:50 weighting is arbitrary
  - Calibrated DGM does not address these issues

Use of DGM estimates in setting MRP would not be in long-term interests of customers

Beta

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The 2018 decision on beta observed …

- “long-term estimates for firms with the greatest per cent of regulated revenue are below 0.5” – with special mention of APA
- Shorter estimates “spans a more limited range of market conditions and is less representative of full business or market”
- Predictability and stability implies “gradual approach to changing parameter values consistent with empirical evidence
- So, β=0.6 was not justified by the data but the AER exercised its regulatory judgement to temper the reduction (i.e. from 0.7 to 0.6)

2022 draft ES proposes to maintain same approach and estimate (0.6), but …

- Estimated beta ranges similar or lower than in 2018
- Significant weight must be placed on firms with low regulated revenues and short-term estimates to justify 0.6
- Predictability and stability now means ‘no change’ rather than gradual change

A point estimate of β=0.6 despite the evidence and the AER’s previous commentary reflects upward bias in the exercise of the AER’s regulatory judgement

Equity premium

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- Table 6-1: Return on equity components using 10 and 5-year estimation terms (February 2022)

Term	Risk-free rate	MRP	Beta (β)	Return on Equity risk-free rate + (β x MRP)	Equity Premium (β x MRP)
10-year	2.12	6.5	0.6	6.02	3.90
5-year	1.82	6.8	0.6	5.90	4.08

- The 5-year equity premium is higher than the 10-year equity premium.
  - Contrary to expectations (and theory as described in the ES)
  - Not discussed (explained) in the ES

Proceeding with this odd outcome would represent an upward bias in the exercise of the AER's regulatory judgement

We expect this anomaly would be corrected by the AER addressing the biases we have identified in the estimates of MRP and beta (but requires checking)

WACC (or overall RoR)

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AER's reasons given for adopting a 5-year RoE and 10-year RoD

- Network's existing debt financing practices
- Refinancing cost and risk
- Implementation difficulties
- Avoiding additional volatility

CRG concerns with the AER's approach

- The above four reasons do not support the AER's conclusion
- They are inconsistent with the AER's acceptance of the proposition that the regulatory task is equivalent to setting a 5-year "coupon rate"
- It may (?) produce a lower a regulatory allowance for equity than debt
- It ignores consequence of changing the *relative* prices of equity and debt (noting draft RORI leaves gearing ratio unchanged)
- Treats debt as a cost rather than a substitute for equity – as implied by WACC-based regulatory methodology

Applying a longer estimation terms for debt than equity introduces an upward bias into the AER's estimated rate of return

Our position on term

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Our chapter on term has two objectives

1. To retrace the debate over the past two years and explain why it's unrealistic for the AER to pose the matter as a question about which of 5- or 10- year estimates is more in line with consumers' interest

2. To outline our final position on the matter – which is conditional on whether the AER retains an open mind about the options available to it

   - We consider the AER has four options our support (or not) for different options is conditional on the actions of the AER

   - The four options depend on:

     - Which of the biases we've identified the AER removes or remedies

     - Which estimation terms the AER is open to considering

The CRG's final position

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Four options

CRG Position

π	E	D
10	10	10

Supported ***subject to*** the AER
- removing biases in its estimates of beta, MRP and RoD.

π	E	D
5	10	10

Not supported

π	E	D
5	5	10

Supported ***if and only if*** the AER:
- removes biases in its estimates of beta, MRP and RoD
- remedies the upward bias in the WACC

π	E	D
5	5	5

Supported ***subject to*** AER the AER
- removing biases in its estimates of beta and MRP, and
- identifying a transition mechanism required (for RoD)

Cross-checks on the overall rate of return

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- AER's overall RoR decision includes multiple assumptions on data and methodology
  - Judgement is required at each step
  - Risk of cumulative error
  - Cross-checks act as a sense-check – they are not determinative
- Essential features of effective cross-checks
  - Holistic approach – evidence from multiple tests
  - Symmetrical application
  - Relevance – including outcomes of 2018 rate of return (Independent Panel critique)
  - Data availability
- Categorising cross-checks
  - Forward looking cross-checks (e.g., RAB multiples)
  - Outcome cross-checks (e.g., financial outcomes, operational outcomes)
  - Consumer-based cross-checks (e.g., trends in utilisation of network assets)

Conclusions

- Use multiple cross-check measures for overall assessment of rate of return decision
- Specify ex-ante response to evidence of over- or under-estimation of rate of return
- Stylised modelling of financeability is of questionable relevance

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Indicative bill impacts

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Element	Change	Bill impact ($/year savings)
Risk free rate	10 years to 5 years	$10
Market risk premium	6.8% to 6.5%	$10
Beta	0.6 to 0.5	$22
Return on Debt	Use EICSI instead of bond data	$9

Return on debt

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