Our Ref: RM:LW: D21 / 0147076

5 October 2021

Russell Silver-Thomas
Queensland Competition Authority
GPO Box 2257
Brisbane QLD 4001

www.qca.org.au/submissions

Dear Russell

Rate of return review: Draft report

Thank you for the opportunity to provide a submission in response to the QCA's draft report in relation to the Rate of Return Review. Seqwater agrees that a review of the QCA's approach to setting allowed returns is both timely and important to ensure that the regulatory approach is robust to the unprecedented conditions in financial markets. Never before have government bond yields been driven to further historical lows by targeted interventions from the central bank. So, it is important to consider whether an approach that sets regulatory allowances by adding a fixed margin to the prevailing government bond yield remains fit for purpose.

As a general framework to guide the regulatory task, Seqwater agrees with the AER's recent conclusion that the long-run interests of consumers are best promoted by setting the regulatory allowance for the return on capital equal to the best possible unbiased estimate of the market cost of capital at the time of each determination.[1] The QCA has recognised a similar point, noting that the allowed rate of return should be set in line with the rate of return required by investors to avoid (a) consumers paying more than the efficient price for regulated services, as a consequence of the allowed return being set too high, and (b) consumers suffering harm from underinvestment in capacity and service quality if the allowed return being set too low.[2]

Within this framework, each regulatory decision can be made in terms of whether it assists in producing the best unbiased estimate of the market cost of equity at the time of the determination.

Seqwater agrees with a number of the changes that are proposed in the draft report, and notes that these changes move the QCA towards mainstream regulatory and commercial practice and are focused on providing an appropriate allowance for a benchmark efficient entity. In particular:

- Seqwater agrees that a 10-year term should be used for the risk-free rate. A 10-year term is standard regulatory and commercial practice and reflects the rate that is used by investors and market practitioners.

- Seqwater agrees that the Siegel and Survey approaches have no useful role to play in estimating the MRP.

- Seqwater supports the QCA's proposed approach to estimating equity beta, but for the issue of low-beta bias set out below.

---

[1] AER, May 2021, *Assessing the long term interests of consumers*, p. 1.

[2] QCA, June 2021, *Rate of return review*, Draft report, p. 1. (QCA draft report).

SOURCE   STORE   SUPPLY

- Seqwater supports the QCA's proposed approach to gearing.

The remainder of this brief submission documents the few areas where Seqwater considers the final report could benefit from more analysis and detail.

The proposed top-down assessment of reasonableness

Seqwater notes that the Ibbotson approach provides an estimate of the MRP in average market conditions. By definition, this approach reflects the average market conditions over the historical period that is used (1958 to present).

The Ibbotson estimate would be appropriate if the prevailing market conditions at the time of a determination are close to the average conditions since 1958.

By contrast, exclusive reliance on the Ibbotson estimate would be inappropriate if the prevailing market conditions are historically unique (e.g., because government bond yields are at historical lows and being driven down further by unprecedented central bank interventions).

The draft report indicates that, in the latter case, the QCA would consider some sort of 'top down' adjustment to its allowed return on equity. In lieu of a more reliable estimate of the MRP being obtained directly, some sort of adjustment would clearly be required, but the draft report provides little detail about the precise circumstances in which such an adjustment would be warranted, how the adjustment would be made and the likely size of any such adjustment.

Seqwater submits that the final report should contain a number of examples to illustrate how the QCA would have exercised its judgment, given the evidence available at a particular point in time. For example, the final report should contain a full example to show the out-workings of the top-down adjustment for a firm with a beta of 1.0 as at the time of the final report, as well as a number of other plausible scenarios for the risk-free rate.

The approaches to estimating the MRP

The AER is currently conducting a consultation process in relation to its 2022 Rate of Return Instrument. As part of that process, the AER has commissioned a number of consultant reports:

- CEPA has advised the AER that there "is not good evidence" to support the Ibbotson approach – recommending that the Wright or a hybrid approach should be considered;[3]

- Brattle has advised the AER that its approach of relying on the Ibbotson approach to estimate the MRP is "not as effective as the approaches of other regulators";[4] and

- Both CEPA and Brattle recommend that the AER should have regard to forward-looking DGM evidence (which the draft report proposes will no longer be relied upon by the QCA).

That evidence, commissioned by the AER, has direct relevance to the QCA's task in estimating the MRP.

Energy Networks Australia (ENA) has made a submission to the AER that concurs with CEPA's and Brattle's key findings and explains how the recommendations made by the AER's two advisers could be implemented in practice.[5]

---

[3] CEPA, June 2021, *Relationship between RFR and MRP*, pp. 6-7.

[4] Brattle, June 2020, *A review of international approaches to regulated rates of return*.

[5] ENA, September 2021, *ENA response to equity omnibus paper*.

Seqwater submits that the QCA's final report should consider in detail the expert reports and the detailed ENA submission that have been submitted to the AER – insofar as those materials relate to the task of estimating the MRP, and the QCA's proposal to rely exclusively on the Ibbotson approach.

The interpretation of gamma

The draft report proposes to adopt the 'utilisation' interpretation of gamma rather than the 'market value' interpretation. Seqwater maintains the view that the market value interpretation is appropriate.[6]

Because the QCA's regulatory framework reduces the allowed dividends and capital gains by the estimated value of imputation credits, what is required is an estimate of the market value of dividend imputation credits – the amount of dividends and capital gains that investors would be prepared to give up to receive a dollar of imputation credits.

The market value approach posits that gamma should be estimated from the observed prices of traded securities in the same way that other WACC parameters are estimated. This approach produces an estimate of the extent to which investors value credits relative to the dividends and capital gains that those credits will replace. It is an estimate of the value of imputation credits relative to the dividends and capital gains that they will replace.

Seqwater submits that the QCA's final report should contain a clear statement about gamma in the context of the following simple example. Suppose the utilisation rate is 50% (i.e., 50% of credits are redeemed) and the market value is 25 cents (i.e., investors value a dollar of credits as being equal to 25 cents of return from dividends or capital gains). If a regulated firm creates a dollar of imputation credits, should the allowed return be reduced by 25 cents or 50 cents? Which would make the investor just whole?

The evidence of low-beta bias

The draft report notes that Seqwater has submitted evidence of the existence of low-beta bias in developed markets (including Australia) over several decades. Seqwater considers the evidence of low-beta bias to be among the most compelling evidence that any stakeholder could submit into a regulatory process. That evidence has been documented in the very top peer-reviewed journals by leading finance scholars (including Nobel laureates) over several decades in a number of developed markets. It is so well-accepted that it is documented in standard undergraduate finance textbooks.[7]

The draft report does not question the veracity of this evidence, but suggests that it may be due to the realised returns (which can be observed) differing from investor expectations:

Importantly, however, it is the expected return of investors that is relevant to the CAPM (rather than the realised return). There may be several reasons why realised returns depart from expected returns. For instance, falling interest rates, the over-pricing of high beta stocks, and economic shocks are all reasons that could cause realised returns to exceed returns implied by the CAPM for low beta stocks.[8]

---

[6] Frontier Economics, June 2021, *The role of gamma in the regulatory process*, submitted by Seqwater.

[7] Black, F., M.C. Jensen, and M. Scholes, 1972, "The Capital Asset Pricing Model: Some empirical tests," in *Studies in the Theory of Capital Markets,* Michael C. Jensen, ed., New York: Praeger, 79–121. Friend, I., and M. Blume, 1970, "Measurement of portfolio performance under uncertainty," *American Economic Review*, 60, 561–75. Fama, E.F., and J.D. MacBeth, 1973, "Risk, return, and equilibrium: Empirical tests," *Journal of Political Economy*, 81, 607–636. Fama, E.F., and K. French, 2004, "The Capital Asset Pricing Model: Theory and evidence," *Journal of Economic Perspectives*, 18, 25–46. Berk, J. and P. DeMarzo, 2014, *Corporate Finance,* 3rd global ed., Pearson. Brealey, R.A., S.C. Myers, and F. Allen, 2011, *Principles of Corporate Finance,* 10th ed., McGraw-Hill Irwin.

[8] QCA draft report, p. 71.

That is, the QCA suggests that it is possible that investors were expecting returns to be in accordance with the CAPM and were surprised by the higher returns to low-beta stocks that eventuated. But the evidence spans all developed markets using data that covers many decades. It is implausible that several generations of investors around the world have been consistently surprised by the returns on low-beta stocks consistently exceeding CAPM estimates. The more plausible scenario is that the simple CAPM does not perfectly describe stock returns.

More importantly, it cannot simultaneously be the case that observed stock returns *do not* reflect investor expectations when considering low-beta bias, but those same stock returns *do* reflect investor expectations when estimating MRP. The draft report notes that the Ibbotson method:

> *assumes that investors use historical excess returns to inform their expectations of achievable future returns.* [9]

It is difficult to reconcile how investors might use historical returns to inform their expectations about future expected returns when estimating MRP and all aspects of beta other than the evidence of low-beta bias. Historical returns either embed investor expectations, on average, or they do not.

Seqwater submits that the final report should contain a clear indication about whether past stock returns can be taken, on average, to reflect investor expectations.

Once again, we congratulate the QCA for the steps that have been taken to move Queensland regulatory approach towards mainstream regulatory and commercial practice, and we thank the QCA for the opportunity to provide this submission. Seqwater looks forward to participating throughout the remainder of this review process. In the meantime, please do not hesitate to contact Lisa Welsh, Manager – Commercial and Customer Direction at Lisa.Welsh@seqwater.com.au to further discuss Seqwater's submission.

Yours sincerely

Ross Muir
General Manager – Customer, Strategy and Planning

cc: Lisa Welsh, Manager – Commercial and Customer Direction

---

[9] QCA draft report, p. 48.