Draft decision: Rate of return

About the Rate of return

We regulate electricity poles and wires and gas pipelines. These networks are monopolies that supply essential services and, without regulation, the owners of these networks could charge excessive prices. This would damage the broader economy and the interests of consumers.

Part of our regulation of these networks is setting the amount of revenue they can earn, including a reward for the money they have invested in their poles, wires and pipelines. This reward is a bit like the dividend that is paid when you invest in the share market. We call this the rate of return on capital invested (or rate of return for short).

Rate of return

The rate of return is a key component of revenue that networks recover from customers. We aim to set the rate of return to reflect the cost an efficient network would incur to raise its capital (both debt and equity) in the financial markets.

This means a rate of return should be high enough to encourage network owners to build the electricity and gas networks that are needed to supply you with electricity and gas, but not so high that you pay too much.

The rate of return we set is like the interest rate on a variable home loan – it moves up and down depending on the state of the economy.

When we set the rate of return, we are looking into the future, but the tools and data available to undertake this task are imperfect. We need to make judgement calls in determining the appropriate level.

2022 draft decision

We re-examine the rate of return every 4 years. We check whether our approach will still set it at the right level or whether adjustments are needed. We have just done this as part of our recent draft decision.

In reaching this draft decision, we engaged extensively with stakeholders. We:

- set up a consumer reference group to advise on consumer engagement and actively engage consumers and provide us with their insights
- set up a retailer reference group and an investor reference group to provide direct and ongoing feedback during instrument development
- published 8 working papers on a range of key topics to analyse key aspects of the rate of return and assist stakeholders make submissions
- held 2 concurrent evidence sessions to hear expert opinions on a range of key topics to inform our decision.

Our conclusion is that our current approach to setting the rate of return remains largely appropriate. We are seeing good levels of interest in investing in energy networks, while at the same time the return does not appear excessively high.

Our draft decision is largely consistent with our 2018 approach to setting the rate of return, with one substantive change to the term we use when estimating the return on equity.

Setting the rate of return

When a person buys a house, a portion of the purchase price is paid out of savings (or equity) and a larger portion is paid from debt (such as a bank loan). This mixture of equity and debt is similar to the way network owners fund network infrastructure investment.

The rate of return is composed of the returns the owners of equity and lenders (such as banks) expect for their money. The overall required return is a weighted average of the return required on the equity and the return required on the debt used to fund the network investment.

We do not set the rate of return with a specific network or project in mind. Instead, we set a benchmark across the sector. This provides incentives for networks to raise their capital at the lowest cost possible. We use information about the regulated networks to decide what a benchmark network might look like.

Based on our review of published financial reports, we set the benchmark network to have around 60% debt to 40% equity in their capital structure.

Estimating the return on equity

We cannot ask owners of networks how much return they expect from their investment, because they might ask for too much. Instead, we look to finance theory and market information to estimate what return a benchmark network business would require on its equity investment.

A common approach in finance theory is to think of the return on equity or debt as a sum of two components – the base rate (risk-free rate) and the risk premium. The base rate reflects the time value of money. If I lend you my money then I can't use it so I want you to compensate me for the amount of time you hold on to my money. Also, returns from regulated networks are not riskless. To be willing to invest, investors need to be compensated above the base rate. In the financial market, investors receive a risk premium – the margin between their required return and the base rate.

We estimate the base rate from what investors receive when they lend money to the Australian Government.

We estimate the equity risk premium in two steps:

1. There is a general level of risk that applies to all firms. We call it market risk. You face this risk whenever you invest in the share market. A risk premium for the market risk is called the market risk premium. We estimate the market risk premium by looking at annual Australian stock market returns above the base return across years.
2. Not all companies are exposed to the market risk to the same extent. To reflect that, we adjust the risk premium by a factor called equity beta. We estimate the equity beta by

looking at the relative riskiness of returns of a number of network businesses in comparison to the overall stock market. The networks we regulate tend to be low risk and so need lower returns than an average company on the stock market.

Compared with our 2018 decision, our 2022 draft decision has a similar base rate, a higher market risk premium and the same equity beta. Overall, this results in a very similar return on equity estimate.

Estimating the return on debt

Unlike equity, we can directly look at market information to estimate the interest rate on debt (including loans). The interest rate on debt depends on how long the borrower intends to borrow the money for and how likely the borrower is to pay off all of its debt, including the interest (reflected in its credit rating). It also varies over time with the overall economic conditions.

When a bank lends money, the interest rate it charges depends on the risk that the company does not pay back in full. Credit rating of a company measures this risk. The networks we regulate have strong credit ratings and can get loans over a long repayment period (10 years). Therefore, they can borrow at reasonably low interest rates over long periods.

Our proposed approach to determining the return on debt is unchanged from the 2018 Rate of Return Instrument.

Next steps

We will host a public forum on 27 July 2022 to go through the draft decision. Interested stakeholders will also present their views and there will be an opportunity for questions.

We have established an independent panel to review the draft decision and produce a report. This report will be published around the end of July 2022.

We request submissions on our draft decision and the independent panel report by 2 September 2022.

We will host a second public forum on 7 September 2022 to allow stakeholders to present their submissions and to give us and other stakeholders an opportunity to ask questions.

The final Rate of Return Instrument decision will be published on 16 December 2022. All determinations made after this date will have the 2022 Instrument applied to them.

Submissions and comments

We invite interested parties to make submissions or comments on our draft Rate of Return Instrument. To have your say prior to us publishing the final Instrument, send your submission or comments to us by close of business **2 September 2022**. For more details on how to provide your submission, see Rate of Return Instrument 2022 or email us at rateofreturn@aer.gov.au.