

# Better regulation program

# **Consumer reference group**

# **Discussion document**

19 September 2013



No. S. L. No.

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### 1 Purpose

The purpose of this document is to assist discussion at the next face to face meeting of the Consumer Reference Group (CRG) being held on the 19 September 2013.

At this meeting, members of the CRG will discuss the rate of return draft guideline released as part of the Better Regulation program. Comments from CRG members will be taken as submissions on the draft documents.

It is suggested that this document be read in conjunction with the factsheet, draft guideline and explanatory statement: <a href="http://www.aer.gov.au/node/18859">www.aer.gov.au/node/18859</a>

This discussion document sets out the key reasons for the AER's proposed approach.

#### Key issues for discussion

Key aspects	Question for CRG
Benchmark entity	Do CRG members consider our benchmark definition is appropriate?
Return on equity	Does our approach to estimating the return on equity achieve an appropriate balance between transparency, simplicity, certainty and replicability?
Return on debt	Do CRG members support our approach of a transition from the current approach to the trailing average approach?
Gamma	Do CRG members support approach of drawing on a wider range of evidence rather than attempting to identify the 'best' source of evidence to estimate the gamma value?

### 2 Approach to the rate of return in the draft guideline

#### 2.1 Key elements where we would like to hear views from consumers

Our proposed approach in the draft rate of return guideline is:

- To define the benchmark efficient entity as 'a pure play, regulated energy network business operating within Australia'. We propose to only use one benchmark for all regulated energy network businesses.
- To estimate the rate of return on a nominal vanilla basis, as a weighted average of the point estimates of the return on debt and the return on equity.
- To estimate the return on equity having regard to a broad range of material. This includes the informative use of the Sharpe–Lintner CAPM. Moreover, the final return on equity estimate will reflect either the foundation model point estimate, or an alternative value that is a multiple of 25 basis points.
- To estimate the return on debt using a 7-year trailing average. We would update the trailing average annually. The annual estimate of the return on debt would be determined using yield curve data provided by an independent third party data service provider, applying a BBB+ credit rating (or closest proxy thereof) and a 7-year term. We would average the daily yield data over a period of not less than ten days. We would apply a transitional period of 7 years.
- We also consider that given the guideline is non-binding, a transition may prevent service providers from opportunistically seeking to switch from one debt approach to another depending on which approach provides the highest rate of return.
- To apply a value for imputation credits (often labelled gamma) of 0.5. This is a market wide estimate, informed by a broader set of evidence than previously considered (for instance, in the Australian Competition Tribunal decision where gamma was set at 0.25). The regulatory framework applies this adjustment for gamma to the cash flows (i.e. the taxation building block) rather than to the rate of return (which is expressed in a nominal vanilla form). The 0.5 estimate is determined as the product of a payout ratio (0.7) and utilisation rate (0.7).

Importantly:

Consumers will benefit from a less volatile rate of return and

a rate of return that will more closely reflect efficient financing practices than previously.

#### 2.2 Reasons for proposed approach on rate of return

#### 2.2.1 Benchmark efficient entity and implications

The allowed rate of return objective requires that we set the rate of return which is commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk. In assessing whether more than one benchmark is required, we are required to consider the risk characteristics of regulated energy network businesses.

We propose that the benchmark efficient entity is defined as: 'a pure play, regulated energy network business operating within Australia'.

We considered the business and financial risks to which regulated energy network businesses are exposed and the mitigating effect of the regulatory framework on these risks. We consider that the risk exposure for gas and electricity and distribution and transmission businesses is sufficiently similar to warrant a single benchmark. We therefore propose only a single benchmark entity for all regulated network energy businesses.

The allowed rate of return provides an incentive for businesses to undertake efficient financing practices. Where businesses secure a rate of return which is lower than that of the benchmark efficient entity, they keep the difference. Where businesses incur a rate of return which is higher than that of the benchmark efficient entity, they bear the loss.

We propose to estimate the required rate of return for the benchmark efficient entity by applying the proposed definition of the benchmark efficient entity to inform the use of empirical evidence used to estimate the relevant return on equity parameters and return on debt parameters, the gearing level and value of imputation credits.

Having a single benchmark will provide more certainty about the likely outcome of regulatory decisions

#### 2.2.2 Overall rate of return approach

Our proposed approach to determining an allowed rate of return that achieves the allowed rate of return objective includes the following characteristics:

- it estimates the rate of return on a nominal vanilla basis, as a weighted average of the point estimates of the return on debt and the return on equity<sup>1</sup>
- the weight given to the respective point estimates of the return on debt and the return on equity is based on our gearing ratio
- the term of our estimate of the return on debt is seven years, whereas our estimate of the return on equity is based on a 10 year term
- our estimate of the rate of return will be updated annually
- it uses RAB acquisition and trading multiples as reasonableness checks on the overall rate of return.

Notably, our proposed approach to estimating the return on debt adopts a trailing average that is updated annually. Alternatively, our proposed estimation of the return on equity will be determined at the time of a determination, and apply for the duration of the regulatory control period. A key outcome of our proposed approach, therefore, is that our estimate of the rate of return may not be directly comparable to estimates from other regulators or market practitioners. Accordingly, we propose to not consider brokers' or other regulators' estimates of the overall rate of return. We will, however, consider any relevant information at the return on equity level (including the return on equity estimates adopted by brokers and other regulators). We also consider the extent to which RAB acquisition and

<sup>&</sup>lt;sup>1</sup> NER, cl. 6.5.2(d), NER 6A.6.2(d) and NGR, r. 87(4).

trading multiples significantly and persistently differ from unity may be informative of the reasonableness of our overall rate of return estimates over time.

#### Gearing

We propose to maintain the currently adopted benchmark efficient level of gearing of 60 per cent. We consider the empirical evidence supports a benchmark gearing level of 60 per cent.

#### 2.2.3 Return on equity approach

To determine an estimate of the return on equity that is consistent with the allowed rate of return objective, we have proposed an approach based on a single foundation model. This approach also draws on information and estimates from other relevant material. Specifically, our proposed approach to determining a point estimate for the return on equity includes the following characteristics:

- It has regard to a broad range of relevant material.
- Relevant material that may inform our estimate of the return on equity will be assessed against our criteria. This assessment will be used in determining the role of relevant material in estimating the return on equity.
- The Sharpe–Lintner CAPM will be used informatively, rather than determinately, to provide the starting point estimate and range for the final return on equity.
- Input parameter estimates for the Sharpe–Lintner CAPM will be informed by the Black CAPM and dividend growth model estimates. These parameter estimates will also have regard to other theoretical and empirical evidence.
- Regard will also be had to other information to determine the final return on equity point estimate, from within the range set by the Sharpe–Lintner CAPM. This includes an alternative implementation of the Sharpe–Lintner CAPM recommended by Professor Wright, and estimates of the return on equity from valuation reports, brokers and other regulators.<sup>2</sup>
- Given the uncertainty inherent in estimating equity returns, the final return on equity estimate will
  reflect either the foundation model point estimate, or an alternative value that is a multiple of
  25 basis points.<sup>3</sup>

A flowchart outlining our proposed approach is provided below:

<sup>&</sup>lt;sup>2</sup> During the Victorian gas access arrangement review, the Victorian gas service providers commissioned a report from Professor Stephen Wright. In this report, Professor Wright proposed an alternative implementation of the Sharpe– LintNER, CAPM for estimating the return on equity for the benchmark firm. See: Professor Stephen Wright, *Response to Professor Lally's analysis*, November 2012.

<sup>&</sup>lt;sup>3</sup> If the foundation model estimate is used, this estimate will be rounded to a single decimal point.



#### Figure 1 Flowchart of proposed approach to estimating the return on equity

The use of relevant material is outlined in table 1 role of relevant models

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#### (models) and Error! Reference source not found. (other information).

#### Table 1Role of relevant models

Material (step one)	Role (step two)
Sharpe–Lintner CAPM	Foundation model
Black CAPM	Inform foundation model parameter estimates (equity beta)
Dividend growth models	Inform foundation model parameter estimates (market risk premium)
Fama–French three factor model	No role

#### Table 2 Role of other information

Material (step one)	Role (step two)		
Historical excess returns	Inform foundation model parameter estimates (market risk premium)		
Survey evidence of the market risk premium	Inform foundation model parameter estimates (market risk premium)		
Implied volatility	Inform foundation model parameter estimates (market risk premium)		
Other regulators' market risk premium estimates	Inform foundation model parameter estimates (market risk premium)		
Historical equity beta estimates	Inform foundation model parameter estimates (equity beta)		
Commonwealth government securities	Inform foundation model parameter estimates (risk free rate)		
Professor Wright approach	Inform the overall return on equity		
Takeover/valuation reports	Inform the overall return on equity		
Broker return on equity estimates	Inform the overall return on equity		
Other regulators' return on equity estimates	Inform the overall return on equity		
Debt spreads	Inform the overall return on equity		
Dividend yield	Inform the overall return on equity		
Comparison with return on debt	Inform the overall return on equity		
Trading multiples	No role informing return on equity (assess overall rate of return only)		
Asset sales	No role informing return on equity (assess overall rate of return only)		
Brokers' WACC estimates	No role		
Other regulators' WACC estimates	No role		
Finance metrics	No role		

Source: AER analysis.

We consider our proposed approach will contribute to estimates of the rate of return that are consistent with the allowed rate of return objective. In particular, for the following reasons our proposed approach provides a balance between transparency, simplicity, certainty and replicability:

• Our proposed approach has been developed in consultation with a range of stakeholders, including service providers and their industry associations, investors, and consumer groups.

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- Using the foundation model and other information informatively (as opposed to determinately) acknowledges the inherent uncertainty in estimating the return on equity. That is, it recognises that all models are incomplete and that some approaches provide greater insight than others.
- Using the foundation model and other information informatively (in addition to the use of ranges) acknowledges the need for regulatory judgement in estimating the return on equity. Given the breadth of material and range of values that may represent reasonable estimates of the return on equity, the use of judgement is unavoidable.
- Using the foundation model and other information informatively, and selecting a final estimate of the return on equity that is a multiple of 25 basis points (if departing from the foundation model estimate), avoids the pursuit of false precision.
- Using a foundation model, and drawing on other information to determine a final estimate of the return on equity may represent a more replicable and transparent process (than separately estimating and combining alternative models). The estimation of the other information to provide alternative estimates and directional information is also expected to be reasonably intuitive.
- Using a foundation model approach is transparent and simple to implement (particularly relative to combining disparate estimates of multiple models). For example, estimating the Sharpe–Lintner CAPM is a process that stakeholders are likely to already be familiar with (given its widespread use amongst market practitioners and other regulators). This may allow stakeholders to make reasonable estimates of the returns expected to be determined in advance of a determination. This may also allow consumers to actively engage in the consultation process.
- Using the Sharpe–Lintner CAPM as the foundation model reflects our assessment of the model against our criteria. Specifically, we consider it is superior to alternative models (for the purposes of estimating the return on equity for the benchmark efficient entity).

Our proposed approach is also expected to lead to more stable estimates of the return on equity than under our previous approach. The extent of this stability will depend on:

- the extent to which movements in the estimates of the risk free rate and market risk premium in the foundation model offset each other
- the informative value provided by the Wright approach (and other information that provides relatively stable estimates of the return on equity).<sup>4</sup>

Given network assets are long-lived and typically generate stable cash-flows, some stability in the return on equity may be expected. Moreover, we consider that a relatively stable regulatory return on equity would:

- smooth prices faced by consumers
- provide greater certainty to investors about the outcome of the regulatory process.

#### 2.2.4 Return on debt: approach

We are proposing to estimate the allowed return on debt by a trailing average portfolio method following the completion of a transitional arrangement period. In particular, we would apply the following:

<sup>&</sup>lt;sup>4</sup> For example, takeover and valuation reports, and broker return on equity estimates may also be relatively stable.

- a trailing average portfolio approach with the length of the trailing average to be seven years
- equal weights to be applied to all the elements of the trailing average
- the trailing average to be automatically updated every regulatory year within the regulatory control period
- the transitional arrangements to be implemented consistent with the 'QTC method' (an annual repricing of a portion of the notional debt portfolio) and the benchmark term of seven years.

#### Trailing average approach

 We consider that the trailing average model more closely aligns with the efficient debt financing practices of regulated businesses. It recognises that the most efficient financing for the benchmark entity may be to reduce its overall refinancing risk by spreading its borrowing requirements over time.

Adopting a trailing average approach with annual updating should more closely align the allowed cost of debt of a benchmark entity with changes in market conditions.

This approach also smooths movements in the return on debt over a number of years. We expect network businesses and consumers will welcome this increased stability.

This approach is consistent with most submissions we received on our consultation paper. We
consider that adoption of the trailing average portfolio approach to estimation of return on debt is
a major change in the regulatory framework. We arrived at this decision through an extensive
consultation process and analysis.

A major change in regulatory approach requires a strong level of commitment from all stakeholders. We would only move away from this approach if there was compelling evidence provided to us in a determination.

#### **Annual updates**

We propose to update the allowed return on debt each regulatory year, which allows us to incorporate newly revealed market information into the return on debt.

The annual updates will improve the match between the return on debt allowance and the expected required return on debt, which would give a closer reflection of financing practices. It would also reduce the quantum of the step change adjustments we have seen at recent resets.

#### **Transitional period**

We propose a transitional arrangement consistent with the QTC's proposed method. This means that the cost of debt for the entire debt portfolio in the first year of the next determination for each business will be based on the prevailing rates.

In the second year, the benchmark entity retires one seventh of its portfolio and replaces it with newly issued 7 year debt. Then the allowed rate of return is a weighted sum of the prevailing rates in the first and second years (with weights of 6/7 and 1/7), respectively). This process is repeated until in the seventh year, where the cost of debt is an equally weighted sum (with weights of 1/7) of the prevailing rates in the seven years of transition. The transition is complete and the cost of debt reflects a 7 year trailing average.

The transition will provide a gradual adjustment to accommodate for any potential discrepancies between the new approach and the reasonable expectations that consumers, service providers and investors may have formed before the rule change.

This transition method will minimise any disruptions faced by businesses and consumers, and has received the most support from stakeholders throughout our guideline development process. We also consider that given the guideline is non-binding, a transition may prevent service providers from opportunistically seeking to switch from one debt approach to another depending on which approach provides the highest rate of return.

In addition, this method will avoid some practical issues from the immediate implementation of a trailing average portfolio approach (e.g. some elements of the average would be based on historical information that may not be available and we would need to reach agreement on the historical periods used to calculate the trailing average).

#### 2.2.5 Return on debt: implementation

We will estimate the return on debt for BBB+ debt from Standard and Poor's or the equivalent rating from other recognised rating agencies, with a seven year maturity as the benchmark for calculating the trailing average. We will transition to this over seven years, assuming that a benchmark efficient entity will initially refinance its debt portfolio all at once and then progressively refinance a proportion of its debt portfolio at prevailing rates every year until the transition is complete.

A worked example to estimating the return on debt is provided in the draft guideline and this is illustrated in appendix I and J of the explanatory statement.

#### Bond yield provided by independent third party data provider

To estimate the return on debt, we propose to use an independent third-party data service provider. We have a preference for using an independent third party data service provider, where available and where the method for estimating the return on debt is transparent.

There are advantages using a third party data service provider, which include:

- Third party data sources are provided for use by market practitioners and developed independently from the regulatory process
- This data source has been constructed by experts with access to a comprehensive financial database, where judgements are made in terms of debt selection and any necessary adjustments to yields.
- Using an independent third party also reduces the scope for debate on debt instrument selection
  issues and curve fitting or the use of some form of averaging methods to derive the estimate of
  the return on debt.
- It can be more readily implemented in the context of automatically updating a trailing average of the return on debt as required by the NER/NGL

This is also consistent with submissions to our rate of return consultation paper, where many stakeholders preferred an expert source of data that was independent from the regulatory process.

At the same time while we propose to rely on a third party data service provider such as Bloomberg for the estimation of return on debt, we acknowledge the known issues with this dataset or potential issues with using a third party dataset. In particular:

- the third party data service provider may stop publishing data
- the third party data service provider may stop publishing the data at maturities and/or credit ratings that are consistent with the definition of the benchmark efficient entity
- the methodology used by the third party data service provider may not be shared publicly thus reducing transparency.

To address some of these issues, we propose to specify in a service provider's determination how an automatic update to the trailing average can be applied in circumstances where the method of calculating the allowed return on debt is no longer available or has been amended during a service providers regulatory control period.

we also consider the issue of the third party dataset over or under-estimating the regulated service providers return on debt becomes less problematic when the return on debt is estimated using the trailing average of a portfolio of debt. This is because the approach estimates the return on debt as an average of a number of Bloomberg FVC estimates, which may result in periods where the third party dataset over-estimates the benchmark return on debt being offset by periods where it under-estimates the return on debt.

#### Debt term

We propose to use a debt term of seven years. This has implications for the length of the trailing average, making it a 7-year average. It is also the term of the yield curve used for obtaining the yield estimate for calculating the trailing average.

A debt term of seven years was chosen for two reasons:

- The evidence of the likely debt term from industry consultation and submissions is that the term is likely to be less than 10 years
- There is a requirement that annual updating be mechanistic and the use of a seven year term is more likely to be capable of automatic updating

To manage their refinancing risk, service providers hold a portfolio of bank debt and Australian- and offshore-issued bonds. The term of service providers' full debt portfolios, estimated for the 2009 WACC Review, was around seven years. CEG and PwC undertook some analysis using a mixture of Bloomberg/Loan Connector and annual reports. They estimated a 10 year debt term, though their methodology had shortcomings leading us not to rely upon this work.

The rules require that annual updating of the return on debt, if applied, is mechanistic. This is problematic for the current 'paired bond' extrapolation method. Mechanistic updating requires that we specify the extrapolation method in binary terms. There is a trade-off between specifying the term requirements too tightly, such that a pair of bonds is not found, and specifying the term requirements too loosely, such that the yield curve differences for the two terms lead to unacceptable error in the debt premium due to term differences. We considered alternative extrapolation methods, such as using the difference between the 5-year and 7-year BBB Bloomberg fair value curves and the US Bloomberg BBB FVC (swapped backed into AUD) to the AUD seven year Bloomberg BBB FVC, but

considered that these were too unreliable and not translatable due to different market factors respectively.

On the basis that we consider that a debt term is likely to be shorter than 10 years and due to the difficulty in specifying an extrapolation method that may be applied mechanistically and yield robust results, we propose a debt term of seven years.

#### Credit rating

We will continue assuming a benchmark credit rating of BBB+ or its equivalent. For this guideline, we have adopted the definition of the benchmark efficient entity, which is a pure play, regulated energy network business operating within Australia. Implicit in the adoption of 'energy network business' in the proposed definition of the benchmark efficient entity is that there is a single benchmark for electricity and gas, and transmission and distribution networks. A single credit rating of BBB+ is consistent with the definition of the benchmark efficient entity. We understand that rating agencies do not distinguish between gas and electricity and the regulatory regime is significant factor of rating outcomes.

Further, credit risk for regulated utilities is likely to be relatively low. This is because the default risk is small and the risk of credit migrations for utilities is low and stable. This view has been supported by our consultant McKenzie and Partington and rating agencies.

Our empirical analysis based on a full sample (after the excluding government owned businesses and businesses with significant unregulated activities) of regulated networks and historical rating data series does not support a departure from BBB+ as the benchmark credit rating.

Adopting BBB+ as benchmark credit rating is also consistent with recent determinations and the 2009 WACC review. Our assumption in determinations has been a credit rating of BBB+ for electricity and gas networks. We note that a credit rating of BBB+ has been within a range of previously observable credit ratings for private energy businesses (excluding government owned businesses).

#### Averaging period

For each regulatory year in the regulatory control period, we propose to estimate the prevailing return on debt as a simple average of the prevailing rates observed over a period of 10 or more consecutive business days. The averaging period is used to smooth out any short term volatility in the annually updated allowed return on debt. Such an averaging period should satisfy the following conditions:

- It should be specified prior to the commencement of the regulatory control period.
- At the time it is nominated, the averaging period must all take place in the future.
- An averaging period needs to be specified for each regulatory year within a regulatory control period.
- The proposed averaging periods for different regulatory years are not required to be identical.
- The nominal return on debt is to be updated annually using the agreed averaging period for the relevant regulatory year.

The allowed return on debt averaging periods can be either:

proposed by the service provider in its initial regulatory proposal and agreed by the AER; or

 determined by the AER, and notified to the service provider within a reasonable time prior to the commencement of the regulatory control period, if the periods proposed by the service provider are not agreed by the AER.

To minimise the likelihood of regulatory gaming, a service provider must propose future averaging periods for each regulatory year of the regulatory control period in their initial regulatory proposal. The starting date of the first agreed averaging period should be a period after submission of a service provider's regulatory proposal. The ending date for the first agreed averaging period should be no later than a month before the release of the AER's final decision for that service provider. For service providers subject to "preliminary determination with mandatory re-opener",<sup>5</sup> the ending date for the first agreed averaging period should be no later than a month before the release of the AER's final decision for the release of the AER's draft decision for those service providers.

As we are proposing to update a service providers' allowed return on debt estimates on an annual basis, the updated annual return on debt estimates should be submitted and approved by us in advance of a service providers' annual pricing/tariff proposals. Therefore, for the subsequent regulatory years in the regulatory control period, the averaging period for service providers on calendar regulatory years can be any period of 10 or more consecutive business days within the most recently concluded 1 July to 30 June financial year. For the service providers on financial regulatory years, the averaging period can be any period of 10 or more consecutive business days within the most recently concluded 1 January to 31 December calendar year.

#### 2.2.6 Imputation credits (Gamma)

Imputation credits are an additional return to investors, beyond the capital gains and dividends they receive from owning shares. Under the rules, the value of imputation credits is therefore applied as a reduction to the estimated cost of corporate income tax.<sup>6</sup> This is because some the tax that the company pays generates imputation credits. Where investors receive and redeem these imputation credits, the government reduces their tax liability or pays them a cash refund to the face value of the credit.<sup>7</sup>

We propose that the value of imputation credits (often labelled gamma) within the building block revenue framework is an estimate of the expected proportion of company tax which is returned to the representative investor through utilisation of imputation credits.

Applying this conceptual framework, we propose to adopt 0.5 as the value of imputation credits. This is the product of a: $^{8}$ 

- 0.7 payout ratio—the payout ratio is the proportion of imputation credits generated by the benchmark company that are distributed to equity holders.<sup>9</sup>
- 0.7 utilisation rate—the utilisation rate is the value equity holders receive from imputation credits as a proportion of imputation credits received by them,<sup>10</sup>

<sup>&</sup>lt;sup>5</sup> AEMC, *Final rule change determination*, 29 November 2012, p. 214.

<sup>&</sup>lt;sup>6</sup> NGR, r. 87A; NER, cl. 6.5.3 and NER, cl. 6A.6.4.

<sup>&</sup>lt;sup>7</sup> This is correct under the AER's consistent position of estimating parameters after company tax but before personal tax. If we considered parameters after personal tax, we would have to use a different CAPM, and the value of an imputation credit would depend on an investor's marginal tax rate.

<sup>&</sup>lt;sup>8</sup> That is,  $0.7 \times 0.7 = 0.49$ , rounded to 0.5

<sup>&</sup>lt;sup>9</sup> That is, for every \$10 worth of imputation credits generated by the company (and therefore \$10 worth of company tax paid), it distributes \$7 worth of these credits to shareholders (attached to dividends).

#### Historical background

In 2009, the AER conducted a review of the value of imputation credits as part of its WACC review. In that review, we adopted 0.65 as the value for imputation credits, based on:

- a payout ratio of 1
- a utilisation rate of 0.65—calculated as an average of two pieces of evidence: a dividend drop off study by Beggs and Skeels, and a tax statistic study by Handley and Maheswaran.

Decisions using this value were appealed to the Australian Competition Tribunal (Tribunal), and in 2011 it found that the value for imputation credits should be lowered to 0.25, based on:<sup>11</sup>

- a payout ratio of 0.7
- a utilisation rate of 0.35—calculated by reference to one dividend drop off study by SFG, which was specifically commissioned by the Tribunal.

Since 2011, we have used 0.25 as the value of imputation credits in accordance with the Tribunal decision.<sup>12</sup> However, the Tribunal decision did explicitly indicate that the AER should continue to investigate this issue, and that a full review of the value of imputation credits would be helpful (perhaps at the next WACC review). Much of the debate before the Tribunal (including the submissions from the AER) was focused on

#### **Re-evaluation of the conceptual framework**

We have taken this opportunity to re-evaluate the conceptual framework and estimates underpinning the regulatory value of the value of imputation credits. To do so, we have undertaken the following steps:

- Re-evaluated the role of imputation credits within the building block revenue framework, including the relevant academic literature.
- Engaged with the Australian Tax Office (ATO) to discuss the life-cycle of franking credits, and to clarify aspects of their operation.
- Considered new empirical evidence, including expert reports with new estimates (ERA, NERA, SFG) and new related academic studies.<sup>13</sup>
- Considered other evidence, such as surveys of market practice and the relevant Tribunal decisions.

Between the draft guideline and final decision, we intend to continue liaising with experts, the ATO and stakeholders to continually refine our analysis and data sources. In particular, we expect to commission an expert review of our reasoning in this explanatory statement which supports our proposed value in the draft guideline.

<sup>&</sup>lt;sup>10</sup> That is, for every \$10 worth of imputation credits received by the equity holders (attached to dividends they receive), the value they receive from these credits (through reduction in tax or rebate) is worth \$7. This valuation is complicated by the need to consistently express the rate of return in terms that are after company tax but before personal tax.

<sup>&</sup>lt;sup>11</sup> That is,  $0.7 \times 0.35 = 0.245$ , rounded to 0.25.

<sup>&</sup>lt;sup>12</sup> Australian Competition Tribunal, Application by Energex Limited (Gamma)(No 5) [2011] AComptT 9, May 2011, para. 42.

Economic Regulation Authority, Explanatory statement for the draft rate of return guidelines: Meeting the requirements of the National Gas Rules, August 2013, pp. 201–205; NERA, The Payout Ratio, 28 June 2013; SFG, Updated dividend drop-off estimate of theta, 28 June 2013.

#### The payout ratio

There payout ratio we propose (0.7) is based on tax statistic data, which allows us to observe the total amount of company tax paid as well as the remaining balance in firms' franking accounts (which represents undistributed imputation credits). There is relatively little contention over this parameter. The value we propose accords with the previous Tribunal value and the current submissions from NSPs.

#### The utilisation rate

For this proposed guideline, we consider the utilisation rate should be based on the body of utilisation rate estimates with regard to the strengths and weaknesses of each evidence type. This includes the equity ownership approach, tax value studies and implied market value studies. With current evidence, we consider this suggests an utilisation rate of 0.7, based on:

- 70 per cent domestic ownership of Australian equity
- tax value redemption studies pointing to a utilisation rate of 0.45–0.8
- implied market value studies (including dividend drop off studies), suggesting a value from 0 to 1.

This is a departure from the current value for the utilisation rate. The Australian Competition Tribunal determined that the utilisation rate should be 0.35, based on a single dividend drop off study. Submissions from the NSPs to the guideline process also advocate this value.

The newest aspect of this approach is the use of equity ownership data. Imputation credits are distributed from companies to investors. Eligible investors can then redeem these credits. Before personal tax, eligible investors claim back company tax by \$1 per \$1 of credit they receive. In contrast, ineligible investors reduce company tax by \$0 per \$1 of credit they receive.

Therefore, if we estimate the value weighted proportion of eligible investors out of all investors in the Australian market, we have a conceptually sound estimate of the representative investor's expected utilisation rate. As described above, most domestic investors are eligible investors whereas foreign investors are ineligible investors. Based on information from the ABS, the most recent estimate is that 71 per cent of Australian equity is held by domestic investors.<sup>14</sup> Therefore, our starting point is that the representative investor's value weighted average utilisation rate is 0.7.

We consider this overall approach is consistent with McKenzie and Partington's recommendation to 'triangulate' different sources of evidence.<sup>15</sup> Further, we consider that having regard to a range of evidence, tempered by an understanding of the strengths and weaknesses of each source of evidence, is good regulatory practice and results in a reasonable estimate. Based on these reasons, we consider an estimate of the utilisation rate of 0.7 promotes the rate of return objective.

<sup>&</sup>lt;sup>14</sup> Australian Bureau of Statistics, *Feature article: Foreign ownership of equity*, Available at: http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/5302.0Feature%20Article10Sep%202007?opendocumen t&tabname=Summary&prodno=5302.0&issue=Sep%202007&num=&view

<sup>&</sup>lt;sup>15</sup> M. McKenzie and G. Partington on behalf of the Securities Industry Research Centre of Asia Pacific (SIRCA) Pty Ltd, *Report to the AER—Evidence and submissions on gamma*, March 2010, p. 4.

#### 2.3 Future process and consultation

A key element of our consultation over the coming months will be a public forum and other targeted bilateral meetings. This will allow stakeholders the opportunity to provide more detailed input on specific aspects of the draft guideline. Together with written submissions on this draft guideline we will use this dialogue to complete our final guideline by December 2013. Table 3 sets out our proposed consultation timeframes for developing the final guideline.

Table 3	Rate of return	guideline-key	y milestones
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Date	Milestone
Early October 2013	Release equity beta material for consultation
Third week of September 2013	Public forum on draft guideline
11 October 2013	Submissions close on draft guideline
Late October 2013	Submissions close on equity beta
Mid December 2013	Publish final guideline

Source: AER analysis.

#### 2.3.1 Consultation on equity beta

On equity beta, which is relevant to the return on equity, we have commissioned a report which updates the empirical estimates of equity beta from those we commissioned in the context of the 2009 WACC review. We expect to release this report in early October, with an accompanying note outlining our further considerations on beta and a proposed equity beta value. We will seek submissions on that material which will be taken into account in developing the final guideline.

#### 2.3.2 Draft guideline submissions

We invite interested parties to make submissions or comments on our draft rate of return guideline. If you would like to have your say prior to us publishing the final guidelines, you have until close of business 11 October 2013 to get your submission or comments to us. You can find further details on how to provide your submission on our web page <a href="https://www.aer.gov.au/node/18859">www.aer.gov.au/node/18859</a> or you can email us at <a href="https://rateofreturn@aer.gov.au">rateofreturn@aer.gov.au</a>.