Measurement - discounting estimated cash flows Issues Paper

Objective

1 The objective of this paper is to seek EFRAG TEG views on selecting a discount rate to use when applying the measurement principles of the model for regulatory assets and regulatory liabilities.

The IASB measurement principles on discounting

2 In June 2019, the IASB discussed here how to select a discount rate when applying the measurement principles for the accounting model for regulatory assets and regulatory liabilities. The IASB tentatively decided that when discounting estimated cash flows the model should:

(a) apply an **indicator-based approach** to assessing whether the regulatory interest rate or return rate is adequate to compensate the entity for the time value of money and the risks inherent in the cash flows between the origination and reversal of a regulatory asset. The model should also include guidance on indicators to consider in making that assessment;

(b) if the regulatory interest rate or return rate is inadequate to compensate the entity for the time value of money and uncertainty inherent in the cash flows, an entity should determine a **minimum adequate rate** to use as the discount rate;

(c) the model specifies that the **minimum adequate rate** is one that the entity would expect to receive for a stream of cash flows with the same timing and uncertainty as those of the regulatory asset, or regulatory liability; and

(d) in cases when the regulatory interest rate or return rate provides excess compensation or excess charge for the time value of money and uncertainty in the cash flows, an entity should:

(i) recognise the excess as regulatory income or regulatory expense immediately if it arises from an identifiable transaction or other event, such as a bonus or a penalty; but

(ii) use the regulatory interest rate or return rate as the discount rate, if that excess does not arise from an identifiable transaction or other event.

3 The IASB tentatively **decided not** to include:

(a) a separate step that requires an entity to assess whether the effects of the time value of money and risks inherent in the cash flows are significant; and

(b) a practical expedient that would avoid the need for discounting if the effects of time and risks were not significant.

Measurement principles for selecting a discount rate

Assessing the adequacy of the discount rate for regulatory assets

4 The main objective of the regulatory agreement is to provide price stability and affordability to customers, while at the same time protecting the financial viability of the regulated entity and encouraging its ongoing investment in the rate-regulated activities.

5 Protecting the financial viability of the regulated entity is achieved by the provision of a rate of interest or return on amounts which have not yet been included in the rates charged to customers. Therefore, the model considers that the rate of interest or return provided by the regulatory agreement is 'adequate' to compensate the entity for time and risks inherent in cash flows between the origination and reversal/ fulfilment of a regulatory asset and regulatory liability.

6 The determination of an 'exact' rate that precisely compensates the entity for the time value of money and risks will only introduce unnecessary complexity into the model and impose costs that would outweigh the associated benefits.

7 The regulatory agreement often allocates the amounts which have not yet been included in the rates charged to customers into different specified time bands and provides a rate of interest or return specific to each time band. If the entity has a valid expectation that the rates provide adequate compensation for the time and risks associated to each time band, it would recognise this interest or return in the statement of financial performance over time.

8 This assessment would need to be performed only once for each time band and not for every recognised regulatory asset within it. The adequacy of the rate applicable to each time band is only re-assessed when the method for determining the rate in the regulatory agreement is subsequently changed.

9 The accounting model for regulatory assets and regulatory liabilities presumes that the rate of interest or return provided in the regulatory agreement for an entire time band provides adequate compensation to the entity. For example, the regulatory agreement may provide a return on long-term items that approximates the entity's actual weighted-average cost of capital (WACC) which includes a 'profit' element in the form of a return for equity holders; while short-term items may attract a rate based either on corporate borrowing rates or the entity's incremental borrowing rate.

10 It is possible, however, that a specific regulatory asset in a time band would attract a rate of interest or return which is different from other items in the same time band. If such an indication exists, then the entity would need to perform a more detailed analysis.

Indicator-based assessment

11 The entity would need to consider particular indicators when assessing whether the rate of interest or return provides adequate compensation for the time and risks specific to the cash flows for all items within a particular time band or an individual regulatory asset which does not clearly fit within an existing time band.

12 When assessing the adequacy of the rate of interest or return provided in the regulatory agreement, the following indicators can be considered (this is not an exhaustive list):

(a) the rate of interest or return provided for a regulatory asset is lower than for other regulatory assets in the same time band;

(b) the rate of interest or return has been modified for a regulatory asset partway through its recovery because of a change in circumstance (eg the abandonment of an item of plant or equipment resulting in it receiving a return of 0% on a go-forwards basis);

(c) the regulatory agreement did not contemplate the item giving rise to the regulatory asset and there is a lack of clarity as to how the return has been calculated; or

(d) significant changes in market interest rates have not been reflected in the rates provided by the regulatory agreement.

13 If such indicators are present, the model requires an entity to establish a **'minimum adequate rate'**. A minimum rate is the one that would compensate the entity for the time and risks specific to the cash flows of the regulatory asset, which would be the rate that the entity would expect to receive to compensate it for cash flows with the same timing and uncertainty as those of the regulatory asset.

14 When determining the minimum adequate rate, the entity is not expected to determine the rate it 'otherwise would have received' for such an item under the regulatory agreement or understand the regulator's intentions in setting the rate for the item.

15 After establishing the minimum adequate rate, the entity needs to compare it with the rate provided by the regulatory agreement for the regulatory asset. If the rate provided in the regulatory agreement is less than the minimum adequate rate, then the regulatory agreement has imposed a **partial disallowance** on the entity, i.e. the entity will not recover the entire nominal value of the regulatory asset. Consequently, the entity would measure the regulatory asset at its present value using the minimum adequate rate to discount the estimated future cash flows. The entity would recognise interest income at the minimum adequate rate. This measurement principle is illustrated in Example 1 of Appendix 1.

Determining the interest rate or return provided by the regulatory agreement

16 Generally, the regulatory agreement explicitly states the rate of interest or return applicable to a particular time band of regulatory items. However, there may be instances where the rate provided may be unclear. For example, when there is a 'gap year' before the interest or return begins to accrue or when the cash flows for the recovery of the regulatory asset are irregular or not based on a clearly stated rate of return.

17 In such cases, the entity would need to determine the implicit rate of interest or return provided by the regulatory agreement. When determining the implicit rate of interest or return, the entity will need to discount the future cash flows back to the amount of the initial difference between the total allowed compensation for goods or services supplied and the amount already included in the rate. It would then use this implicit rate of interest or return to measure and account for the regulatory asset over the period from origination to reversal. The determination of implicit rate of interest or return is illustrated in Example 2 of Appendix 1.

18 The entity may conclude that there are no indicators that the process detailed in the regulatory agreement would result in an inadequate return for the time and risks specific to regulatory assets recognised in the particular time band. In this case, it would apply the implicit rate of return to measure and account for the regulatory assets and regulatory liabilities.

Identifiable event or transaction

19 In certain situations, it is possible that the regulatory agreement provides a rate of interest or return which contains an explicit additional return relating to an identifiable transaction or event. For example, it is possible that an entity is rewarded with a bonus return by increasing the rate of interest or return provided for a particular time band of assets or individual regulatory asset for a given period.

20 In such situations, if an entity determines that the rate of interest or return provided by the regulatory agreement contains an explicit additional return, as a reward for achieving a performance target, which relates to an identifiable transaction or event, it would make an estimate of the amount related to that transaction or event and recognise it as separate regulatory asset.

Measurement of regulatory liabilities

21 The accounting model for defined rate regulation requires that the same measurement requirements are applied for regulatory liabilities as for regulatory assets.

22 Similarly, the regulatory agreement applies the same interest rate or return to all regulatory liabilities and all regulatory assets within the same time band, rather than identifying an interest rate or return for each individual item within a time band.

23 It is possible that the regulatory interest rate or return applied to a regulatory liability is higher than the interest rate or return that the entity might have to pay to obtain funding in the form of financial liability for the same amount and duration. However, the entity will eventually be compensated for the overall net regulatory asset position at a lower rate of return which would still be an adequate rate. Consequently, the entity would recognise the interest or return charged on the regulatory liability **over time**, using the regulatory rate.

24 When the excess interest or return changed on a regulatory liability or on a net regulatory liability is an indication of imposition of a penalty on the entity by the rate regulator, this would represent an identifiable transaction or event. In such situations, the entity should immediately recognise the penalty charge as an expense, rather than recognising the whole of the regulatory interest or return over time.

EFRAG RRAWG feedback on discount rate

25 EFRAG RRAWG members discussed the discount rate to use when applying the measurements principles of the model for regulatory assets and regulatory liabilities and expressed the following views:

(a) the regulatory rate of interest or return established in the regulatory agreement might not be adequate to compensate the entity for the time value of money and the risks inherent in the cash flows. EFRAG RRAWG members explained that often the regulatory rate of interest or return did not provide a fair return to compensate the entity for the goods or services provided to customers. The compensation for both short- and long-term timing differences were initially negotiated with the regulator also in terms of discounting;

(b) the implicit rate of interest or return usually referred to return on capital invested and the terminology created confusion when it was to be used for discounting regulatory assets and regulatory liabilities;

(c) it was common that bonuses and penalties were included in the rate charged to customers, however, such incentives could also be imposed on entities outside the regulatory rate and accounted for in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*;

(d) the accounting model for defined rate regulation applied the regulatory rate of interest or return asymmetrically:

(i) when the regulatory interest rate is lower than the minimum adequate rate, then the entity should use minimum adequate rate to discount estimated future cash flows – consequently, the entity should recognise a Day 1 loss, however;

(ii) when the regulatory interest rate provides an excess compensation, which does not relate to an identifiable transaction or event, then the entity should use the regulatory interest rate to discount estimated future cash flows and there is no recognition of a Day 1 gain.

(e) a suggestion was made that it would be more practical for entities to apply a ‘reasonable’ discount rate at each balance sheet date instead of keeping track

of different discount rates established at initial recognition of regulatory assets and regulatory liabilities. Another proposed alternative was to use WACC at each balance sheet date.

(f) a few EFRAG RRAWG members commented that the concept of discounting when measuring regulatory items was not very relevant as the amounts to be recognised as regulatory assets and regulatory liabilities were initially agreed with the regulator and the time frame was short (1-2 years). Members added that, even for long-term items, discounting was irrelevant and entities would rather use nominal amounts for measurement purposes;

Questions for EFRAG TEG members

26 Do EFRAG TEG members agree that the rate of interest or return provided by the regulatory agreement can be presumed to be generally adequate to compensate the entity for time and risks inherent in cash flows? If you disagree, please explain.

27 Do EFRAG TEG members agree with the proposed approach that an entity should determine a minimum adequate rate and use it as a discount rate if there are indicators that the regulatory rate does not provide adequate compensation?

28 When assessing the adequacy of the rate of interest or return provided in the regulatory agreement, what other indicators would you suggest for an entity to consider in addition to the ones mentioned in paragraph 12?

Appendix 1: IASB examples illustrating the measurement principles of the model for regulatory assets and regulatory liabilities

Example 1 – Partial disallowance

1 A rate regulated entity incurs expenses of CU100 in year X0 which will be recovered through the rates charged to customers evenly over 4 years from X1 – X4 (CU25 per year). The regulatory agreement provides no interest or return to the entity on the outstanding amount.

2 The entity recognises a regulatory asset. However, it determines that the return of zero to compensate it for the time and risks specific to this regulatory asset is inadequate. Therefore, the entity determines a minimum adequate rate to be 3.0%. As a result, the entity has experienced a partial disallowance as the minimum adequate rate is higher than the interest rate provided by the regulator.

3 The entity recognises the regulatory asset at its present value measured using the minimum adequate rate in X0 as detailed in the table below.

Determination of present value	X0	X1	X2	X3	X4
Cash flows	100	(25)	(25)	(25)	(25)
NPV @ 3%	92.93				
Partial disallowance	(7.07)				
Accounting outcome					
Regulatory asset	X0	X1	X2	X3	X4	Total
Opening balance	-	**92.93**	**70.72**	**47.84**	**24.27**	**(0)**
Origination	92.93	-	-	-	-	92.93
Interest at 3%	-	2.79	2.12	1.44	0.73	7.07
Recovery through the rates	-	(25)	(25)	(25)	(25)	(100)
Closing balance	**92.93**	**70.72**	**47.84**	**24.27**	**(0)**	**(0)**
Profit or Loss account	X0	X1	X2	X3	X4	Total
Revenue	-	25	25	25	25	100
Regulatory income/(expense)	92.93	(22.21)	(22.88)	(23.56)	(24.27)	-
Expenses	(100)					
Profit or loss	**(7.07)**	**2.79**	**2.12**	**1.44**	**0.73**	**-**

Example 2 – Calculation of implicit rate of interest or return

4 The regulatory agreement provides for the recovery of a regulatory asset evenly over the three years period X2-X4.

5 The regulatory asset originates in year X0 in the amount of CU100. The agreement also provides a return of 0% in year X1 and 10% in years X2-X4 as reflected in the table below:

Year	X0	X1	X2	X3	X4	Total
Opening balance	**-**	**100**	**100**	**66.67**	**33.33**	**(0)**
Origination	100	-	-	-	-	100
Interest	-	-	10	6.67	3.33	20
Recovery of balance	-	-	(33.33)	(33.33)	(33.33)	(100)
Recovery of interest	-	-	(10)	(6.67)	(3.33)	(20)
Closing balance	**100**	**100**	**66.67**	**33.33**	**(0)**	**-**

6 As the cash flows are provided in an irregular manner, it is not immediately apparent what implicit rate of return is being provided to the entity. However, it can be easily calculated using an internal rate of return formula as detailed below:

	X0	X1	X2	X3	X4
IRR= 6.43%	100	-	(43.33)	(40)	(36.67)

7 Furthermore, applying the model the entity would recognise the implicit rate of return as follows:

	X0	X1	X2	X3	X4	Total
Opening balance	-	100	106.43	69.95	34.45	0
Origination	100	-	-	-	-	100
Interest at implicit rate	-	6.43	6.85	4.5	2.22	20
Recovery of balance	-	-	(43.33)	(40)	(36.67)	(120)
Closing balance	100	106.43	69.95	34.45	0	0

8 The statement of financial performance will reflect the following movements:

	X0	X1	X2	X3	X4	Total
Revenue	-	-	43.33	40	36.67	120
Regulatory income/(expense)	100	6.43	(36.49)	(35.50)	(34.45)	0
Expenses	(100)	-	-	-	-	(100)
Profit or loss	-	6.43	6.85	4.5	2.22	20