



Cost of debt consultation  
Water 2020  
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**Strategy & Regulation**

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Dear Sir or Madam

**Water 2020: consultation on the approach to the cost of debt for PR19.**

Thank you for the opportunity to comment on the way that the cost of debt allowance is set for the 2019 price review. We summarise below the key messages in our response, which should be read in conjunction with our detailed comments on each question raised by the consultation, as set out in Appendix 1.

We think that the most important issues raised in this consultation relate to the adoption of a notional approach, how risk is allocated and the potential impact on the cost of equity. We set our views on these issues below, followed by a summary of other comments on the consultation.

Notional approach to setting the cost of capital

We agree that a notional capital structure and notional cost of debt should be adopted for all companies and welcome Ofwat's continued confirmation that companies are responsible for their own financing choices and bear the risks (and benefits) associated with their choices.

We note, however, that customers do take some of the benefit associated with companies' gearing decisions where this is higher than the notional assumption due to Ofwat's approach to funding of tax payments which is based upon companies' actual gearing.

Allocation of risk

In considering options to change how the cost of debt is funded it will be important to ensure that risk is allocated to the party best able to manage it, that risk sharing arrangements are both symmetrical and transparent, and that incentive arrangements are designed to ensure that costs are minimised in the long-term interests of customers.

Ofwat's proposals regarding indexation of new debt with no additional mandatory risk sharing mechanism appear to us to be consistent with these key principles, passing forecasting risk to customers but retaining companies' incentive to minimise debt costs and to develop appropriate risk sharing mechanisms across the price controls as a whole in consultation with customers.

It will be important that the design and operation of the indexation method ensures that the mechanism is fully transparent and operates in a symmetrical manner and that the true-up mechanism addresses customer aspirations with respect to bill stability whilst also ensuring that company credit quality is maintained. The choice of index, its reference period and how the respective weight of embedded and new debt is calculated will be critical aspects in the detailed design. In our view, the indexation true up should be mechanistic with the parameters made clear upfront so companies can track it with confidence. An additional allowance should be made for transaction costs.

The methodology should seek to recognise the value of efficient long-term financing decisions taken by companies in the past and linked to this, to avoid the unintended consequence of incentivising companies to focus on short-term debt, which would increase volatility of costs and reduce credit quality.

Our analysis of the inflation adjustment proposal indicates that it appears to change the exposure of equity holders to inflation. Given that companies have been actively managing their mix of nominal and index-linked debt to optimise their equity holders' inflation exposure, there is a risk that any change may increase the cost of equity, and thus operate against customers' long term interests. More detail is set out in our response to question 5 within Appendix 1. When calculating the real cost of debt, CEPA recommend using the outturn value for breakeven inflation – we concur with this approach<sup>1</sup>.

#### Impact on the cost of equity

It is also important carefully to consider the impact of debt indexation on the cost of equity. We would expect that its impact would be broadly neutral. There are a number of factors which suggest that the impact on the cost of equity will be limited, or indeed which may be upward drivers, including:

- Both forecasting risk and its associated cost will pass to customers through a lower cost of debt (as any headroom associated with 'aiming up' has been reduced) rather than impact on the cost of equity;
- Equity will retain cash risk pending true-up under the mechanism;
- Indexation will make equity returns less counter-cyclical/more pro-cyclical than they have been in the past. This effectively increases systematic risk putting an upward pressure on the cost of equity; and
- Risk may increase depending upon the design of the index, although we would expect that the detailed design would fully address this potential issue.

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<sup>1</sup> "Alternative approaches to setting the cost of debt for PR19 and H7", CEPA, August 2016

However, we are not currently aware of any compelling evidence which suggests that there is a material net change (upward or downward) to the cost of equity as a consequence of introducing debt indexation.

#### Other comments

The mechanisms relating to how the cost of debt is funded and how the risks associated with new debt are shared between companies and customers should be considered in the wider context of the PR19 price controls as a whole, with companies developing plans in consultation with customers. Providing companies with freedom to develop appropriate risk sharing mechanisms, with adjustments made either within period or at the following price review would be most consistent with those aims.

We are not convinced at this stage that a menu based approach to the cost of equity (as considered by the Essential Services Commission in Victoria) is materially better than the risk based approach used by Ofwat in PR14 and it would appear to include a number of issues that would need to be dealt with in advance of being introduced. At this time it is difficult to see how it could be implemented in a way that is demonstrably fair to investors and customers.

We would welcome the opportunity to discuss further the issues we raise in this letter with you if that would be helpful.

Yours faithfully



**Nick Fincham**  
**Director of Strategy & Regulation**

## **Appendix 1: Response to specific questions raised in the consultation on the approach to the cost of debt for PR19**

### **Q1: Do you agree that the cost of debt allowance should be set on the basis of a notional capital structure and notional cost of debt for all companies as opposed to being based on the actual capital structure and debt costs of each company?**

Yes, we support continued use of the notional approach. It would be helpful if the parameters for the notional company are clearly defined in consultation with the industry

In our view the key criteria against which the approach to the cost of debt should be tested is whether companies bear the risk associated with their choice of financing and capital structure.

A notional approach to capital structure and the cost of debt along the lines proposed would meet this criteria in part, but to be fully consistent, an approach to fund tax on a notional basis also would need to be adopted for PR19.

We note that a notional approach for tax was adopted by the Competition Commission (now the Competition and Markets Authority) in its review of Bristol Water's PR09 final determination.

*"We considered that the gearing assumed in the WACC should be consistent with the gearing used to assess financial ratios and to calculate tax."*<sup>2</sup>

*"We considered it necessary for there to be consistency between gearing in the WACC and in the tax modelling in order to generate a projected return equal to the cost of capital."*<sup>3</sup>

### **Q2: We do not propose to introduce a specific benefit sharing arrangement for companies with securitised capital structures. Do you agree with this approach?**

Yes, a notional approach should apply equally to all companies consistent with companies bearing the risk associated with their choice of capital structure.

We also note that customers already benefit from lower actual debt costs associated with the adoption of securitised structures through the current approach to funding of embedded debt.

Furthermore, given that customers have benefited from companies' use of efficient sources of financing and financing structures – in how both debt and tax costs have been funded – it is important that Ofwat continues to take due regard of these benefits when setting price controls.

### **Q3: Do you agree to the introduction of indexation for the allowance for the cost of new debt?**

We recognise that when setting allowances on ex ante basis there can be significant forecasting risk involved in setting the cost of new debt and that this risk may be more efficiently borne by customers. We therefore support indexation of the cost of new debt, assuming that it is underpinned by an appropriate index with adjustments applied in a symmetric and transparent manner.

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<sup>2</sup> Bristol Water plc: A reference under section 12(3)(a) of the Water Industry Act 1991, Competition Commission, August 2010, page 65

<sup>3</sup> Ibid, page 67

However, it is important to consider carefully the impact of debt indexation on the cost of equity – both upward and downward drivers should be taken into account.

Whilst there may be a perceived impact on the cost of capital associated with transfer of forecasting risk from companies to customers, much of that will be effected by reduction to the allowed cost of debt itself (as any headroom associated with ‘aiming up’ has been reduced) – the impact on the cost of equity will arguably be more limited as both the risk and reward has transferred to customers through adoption of indexation. Equity will also retain cash risk pending true-up under the mechanism.

It is also arguable that adoption of an indexation approach to setting the cost of debt might increase risk. Two reasons for this were set out in a report by First Economics with regard to Ofgem’s proposals to adopt an indexed approach in 2012<sup>4</sup>:

- Index design: in Ofgem’s case it was shown that the proposed index over-reacted to changes in market interest rates compared to a fixed cost of capital for the full duration of the price control; and
- Systematic risk: First Economics noted that regulated networks have acted as a sort of hedge against macroeconomic risk.
  - *“The return on offer to equity investors in regulated businesses remains stable or increases as the returns on other investments fall – something that has been seen very apparent since 2008 – and vice versa.”*
  - *“Ofgem has effectively elected to eliminate this quality in its new RIIO framework (by introducing debt indexation).”*
  - *“All other things being equal, this will push up the cost of equity and requires Ofgem to provide for higher equity returns to compensate for the higher systematic risk that shareholders will now face.”*

The introduction by Ofwat of an indexation approach to the cost of new debt could lead to a higher cost of equity for both of these reasons. However, with regard to index design, the risk could be mitigated through its choice of index, its reference period and in how the respective weight of embedded and new debt is calculated – including consideration of any material capex being delivered through direct procurement.

We agree that the index adopted should reflect the long term tenor of new debt which is available to companies, consistent with the long term nature of the underlying business which has historically contributed to the efficient placing of debt by the sector.

However, we think that First Economics’ conclusion regarding systematic risk still holds true today – namely that *“indexation will still make equity returns less counter-cyclical/more pro-cyclical than they have been in the past. It is therefore necessary to provide for a higher cost of equity even if the over-reaction [to changes in market interest rates]...is completely eliminated.”*

In summary, we expect that the impact on the cost of equity from introduction of debt indexation should be broadly neutral. We have not yet seen any compelling evidence which suggests that

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<sup>4</sup> Ofgem’s Cost of Debt Index and the Cost of Equity: Report prepared by First Economics for the Electricity DNOs, 8 June 2012

there is any material net change (upward or downward) to the cost of equity as a consequence of introducing debt indexation.

The existing approach to embedded debt means that the benefits of the low cost finance that companies have raised in AMP6 (and prior) are passed to customers for the remainder of the life of those loans, therefore with regard to embedded debt any outperformance is already shared with customers. Therefore, we agree that an indexation approach for embedded debt is not required.

In setting final allowances for both new debt (using indexation) and embedded debt (using the current approach) an appropriate allowance for transaction costs should be included.

**Q4: Do you agree that indexation of the new debt allowance should have an end of period adjustment?**

We consider that companies should be free to choose whether to make adjustments for changes in the cost of debt index within period or at the end of the period, in order to help address customer aspirations with respect to bill stability and to ensure that credit quality of companies is maintained.

Such assessment would be made alongside consideration of other adjusting factors which may arise as part of the price control, and in consultation with CCGs. It would be helpful if companies were also free to decide whether the correction should be made as a “fast money” adjustment or through the RCV, again enabling impacts on customers and credit metrics over time to be assessed alongside other adjustment mechanisms.

**Q5: Do you agree to an adjustment to the inflation estimate to reflect out-turn inflation and so mitigate inflation forecast error for new debt only?**

An inflation adjustment along the lines proposed in the consultation appears to reduce company risk associated with nominal debt, but increase company risk associated with index-linked debt. In addition it appears to change the exposure of equity holders to inflation.

Given that companies have been actively managing their mix of nominal and index linked debt to optimise their equity holders’ inflation exposure, there is a risk that any change may increase the cost of equity (including that due to any transaction costs associated with rebalancing the notional company’s equity holder’s portfolio), and so act against customers’ interests. Further detail around our understanding of the proposed inflation adjustment, and its implications are shown below.

The CEPA report for Ofwat and the CAA proposes “*an ex-post adjustment for the notional benchmark on the cost of new debt. This would work by comparing the forecast real cost of new debt with the outturn real cost of new debt*”.<sup>5</sup> CEPA note that this means that no explicit forecast of inflation is required, and further note that “*this should remove any forecasting error stemming from inflation*”.<sup>6</sup> When calculating the real cost of debt, CEPA recommend using the outturn value for breakeven inflation.

If CEPA’s proposed approach for indexation of new debt is followed, this appears to remove any forecasting error stemming from inflation on the cost of new debt.

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<sup>5</sup> “Alternative approaches to setting the cost of debt for PR19 and H7”, CEPA, August 2016, page 136

<sup>6</sup> Ibid

The Ofwat consultation appears to indicate that the relevant inflation being considered for this adjustment is the outturn inflation over the price control period:

*“A difference in the inflation assumption and actual inflation over the price review period can cause companies’ actual cost of debt to fall below or above the efficient cost of debt allowance set at the price review. In the 2010-15, the out-turn RPI was 3.5%, well above the forecast level of 2.5%, which resulted in outperformance. In the current 2015-20 period, the out-turn RPI has so far been lower than the 2.8% forecast RPI, used to set the cost of debt.”<sup>7</sup>*

We note that this appears to be different from that used in CEPA’s approach, which considers the breakeven inflation on a consistent time-frame as the tenor of the underlying debt.

Assuming that the CEPA approach to indexation for new debt is used, then any further adjustment for inflation appears to reflect the difference between breakeven inflation (calculated at each year of the AMP covering a consistent time-frame as the underlying debt, reflecting the notional assumption of when new debt is raised, and of what tenor), and spot inflation for each year of the AMP.

Table 1, below, considers a scenario where spot inflation in the year is higher than breakeven inflation. While the real cost of debt is 3% (calculated using breakeven inflation, in line with the CEPA indexation approach), the real cost of debt using the spot inflation is 2%, requiring a true-up where the company subsequently returns 1% to customers.

**Table 1:** Illustrative example of inflation adjustment

Illustrative example of inflation adjustment		
Nominal cost of new debt	<b>A</b>	6%
Breakeven inflation	<b>B</b>	3%
Real cost of new debt <sup>8</sup>	<b>C = A – B</b>	3%
Spot inflation	<b>D</b>	4%
Implied real cost of debt using spot inflation	<b>E = A – D</b>	2%
Inflation adjustment required	<b>F = D – B</b>	(1%)

Source: Illustrative data, Thames Water analysis

If such an approach is applied to all new debt, we understand that it would have the following implications for companies that issue nominal or index-linked debt:

<sup>7</sup> Water 2020: consultation on the approach to the cost of debt for PR19, Ofwat, September 2016, page 12

<sup>8</sup> For simplicity this is shown using a simple additive approach. In practice we would expect the Fisher equation to be used.

## Nominal debt

- The actual nominal cost of debt in the AMP is recovered. However, there may be a mismatch in future AMPs if breakeven inflation is used to derive embedded debt costs, which may result overall in notionally efficient companies over / under-recovering their cost of capital.
- Increases / decreases in spot inflation (compared to breakeven inflation) no longer automatically generate out / under-performance.

## Index-linked debt

- Companies recover the actual cost of index-linked debt before the adjustment is made. Making a further inflation-related adjustment would therefore cause notionally efficient companies to over / under-recover their cost of capital.
- Increases / decreases in spot inflation (compared to breakeven inflation) do now generate out / under-performance.

Making such an inflation adjustment therefore changes the extent to which companies are exposed to inflation movements in the AMP regarding their costs of new debt:

- Companies that issue nominal new debt are less exposed to spot inflation movements.
- Companies that issue index-linked new debt are more exposed to spot inflation movements.

Given that, “*at present just over 50% of sector debt is nominal and just under 50% is index linked debt*”, it is not clear that such a change would materially change the balance of inflation risks on the overall costs of new debt for the sector.

When the inflation adjustment is considered as part of the overall financing structure, it appears to change the exposure of equity holders to inflation movements. Given that companies have been actively managing their mix of nominal and index linked debt to optimise their equity holders’ inflation exposure, there is a risk that any change may increase the cost of equity (including that due to any transaction costs associated with rebalancing the notional company’s equity holder’s portfolio), and so act against customers’ interests.

We also note that there appears to be some complexity with introducing such an adjustment such that it is consistent with the approach to setting embedded debt, which will need to be considered, prior to introducing such an adjustment.

Given the limited benefits, and potential risks noted above, on balance, such an adjustment does not appear to be in customers’ interests.

Our preferred approach to adjusting for the effects of inflation would be to correct using outturn breakeven inflation consistent with the index, along the lines suggested within the CEPA report. Outturn breakeven inflation can be derived with reference to RPI in the first instance, with any necessary conversion to CPI/H to follow on as a subsequent step based on assumed differentials between CPI/H and RPI.

We would welcome the opportunity to discuss this issue and to share our suggested approach in more detail with you.



**Q6: Do you agree that we should leave companies to develop their own company specific risk mechanisms on a voluntary basis for the 2019 price review and we should not mandate a company specific risk sharing mechanism?**

Yes, we agree that risk mitigation mechanisms should not be mandated and that companies should be able to develop appropriate proposals regarding sharing the risks associated with new debt where this is supported by customers.

Key criteria to assess the options in this area include whether the mechanism efficiently allocates risk between companies and customers, and whether companies are appropriately incentivised to minimise long term debt costs.

Against these criteria, a mandatory approach could result in an inefficient allocation of risk and it could weaken incentives for companies to minimise the cost of debt. In contrast, leaving companies free to agree an appropriate set of risk sharing mechanisms across the price control would better enable efficient risk sharing and ensure that companies are fully incentivised to minimise debt costs over the longer term.

**Q7: What are the potential advantages and disadvantages of a menu based approach to the cost of equity, compared with the approach adopted by Ofwat at PR14?**

In considering the menu based approach for setting the cost of equity it is important to set out the criteria to assess whether the mechanism would be a beneficial addition to the regulatory framework.

As we understand it, the model being considered by the Essential Services Commission (ESC) in Victoria, Australia is focussed on an assessment of the business plan pricing submission<sup>9</sup> and is not an assessment of the overall business or a way to imply that one plan is better than another.

If this is also how Ofwat would intend to use the mechanism, if adopted, the criteria for assessment would be very similar to the criteria around the risk based review (RBR) process introduced in PR14, i.e. will the menu based approach:

- Improve the quality of customer engagement?
- Improve the focus on outcomes and an understanding of what customers value?
- Improve companies understanding of the costs and benefits of options?
- Increase legitimacy with customers?
- Improve delivery for customers?

We are not convinced at this stage that the menu based approach is materially better than the risk based approach used by Ofwat in PR14 and it would appear to include a number of issues that would need to be dealt with in advance of being introduced.

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<sup>9</sup> “The PREMO assessment framework is designed and intended to assess your pricing proposals and *only* your pricing proposals.” - Dr Ron Ben-David, Chairperson, ESC, presentation to VicWater Annual Conference (9 September 2016)

The allowed cost of equity ranges are very wide in the ESC example, which results in a number of considerations:

- As the consequences of the different grades become more significant for customer bills, so there is a need for the mechanism to be tested with customers through robust engagement, including willingness to pay, to ensure there is customer legitimacy.
- As the consequences of the different grades become more significant for companies, so the need for clarity of the criteria used to assess the plans needs to be more transparent, in order for the mechanism to be seen to be fair and promote trust and confidence.
- As the criteria becomes more transparent, so there is an increased risk that it becomes a “box ticking” exercise that will act counter to the interests of genuine customer engagement. In addition, there will be an increased scope for appeals and wasted effort in companies focussing their attention on the regulator rather than customers.

We note that in the ESC proposal, the cost of equity for the standard category is described as *“the same rate that would have been earned under the old model”*. Ofwat would similarly need to set out how it intended to scale the cost of equity. The ESC approach seems sensible, but given the magnitude of the penalty if a company assessed their submission as ambitious while the regulator assessed it as standard, there is a risk that companies are incentivised not to be ambitious or innovative, which could be detrimental to customers.

We have briefly reviewed the practical application of the PREMO framework that the ESC has published. It does not appear to us that the questions that companies need to address are any different to those used by Ofwat in PR14 (which is not surprising as the document has been built around RIIO and PR14 experience). From our perspective there did not seem to be any lack of innovation or competition between companies to address these questions and to obtain enhanced status in PR14 and we would expect companies to be even more active in PR19, if a similar process was utilised. So we question whether the menu based approach would materially improve outcomes for customers in PR19.

If Ofwat were to bring this proposal forward during the PR19 methodology consultation process, we think it would be important that it sets out the evidence it has used to determine that the process will be an improvement over the PR14 RBR process. It should also address some of the concerns that have been raised in Victoria, for example, over the labels used for the categories.

In summary, it is difficult at this time to see how this approach is an improvement on the PR14 RBR process or how it could be implemented in a way that is demonstrably fair to investors and customers.