Business Plan 2020-2025
Response to Ofwat's July 2019 Draft Determination
for Slow-track Companies
**Supporting information**

a shared Water Future

# Aligning Risk & Return

South West Water

Bournemouth Water

Contents

# Executive Summary

## Cost of capital

1. Consistent with our approach to our Business Plan we have commissioned a third-party report (Frontier Economics) to provide us with an independent assessment of the cost of capital following Ofwat's latest view.

2. The assessment considers each aspect of the methodology used for the slow-track Draft Determinations issued in July and considers market data points.

3. Specifically, we have considered the approach with reference to:
   - PR14 assumptions and approach taken, including the CMA decisions on Bristol Water
   - Regulatory precedent and recent reporting
   - Current market assessments.

4. We believe the approach taken for the July Draft Determinations is not consistent with regulatory precedent and we also have considered recent market information, both of which would imply a higher point estimate for the weighted average cost of capital.

5. Overall, we believe a point estimate for the cost of capital is 59 bps higher than Ofwat's assumptions within the slow-track Draft Determinations. This is based on independently commissioned work from Frontier Economics.

6. Frontier's estimate addresses questions of methodology which have arisen as part of the Draft Determination and provides market updates in relation to Ofwat's view at Draft Determination on 28 February 2019 (based on updated information to the end of July 2019).

7. Frontier derive a point estimate of 2.67% for the vanilla weighted average cost of capital (WACC) in RPI real terms. This is 59 bps higher than Ofwat's Draft Determination.

| **(Real RPI)** | **Frontier Assessment** | **Ofwat's Assessment** |
|---|---|---|
| **Cost of equity:** | **4.63%** | **3.46%** |
| **Cost of debt:** | | |
| *Nominal cost of embedded debt* | *1.61%* | *1.46%* |
| *Nominal cost of new debt* | *0.63%* | *0.35%* |
| Real overall cost of debt | **1.55%** | **1.34%** |
| **Appointee WACC** | **2.78%** | **2.19%** |
| Retail net margin deduction | 0.11% | 0.11% |
| **Wholesale WACC (vanilla)** | **2.67%** | **2.08%** |

8. The differences in the point estimate are driven entirely by differences in methodology, with all market data being derived in line with Ofwat's cut-off date at Draft Determination of 28 February 2019. These methodological differences are as follows:

   - **Total market return:** Ofwat no longer focuses on DGM (Dividend Growth Model) analysis, but puts equal weight on ex-post, ex-ante and forward-looking approaches. While we agree with this view, we estimate a range of 6.5%-7.2% (in real CPIH terms), in line with that used by the CMA for its decisions on Bristol Water and Northern Ireland Electricity (NIE). Frontier propose a point estimate at the top of this range, having regard to regulatory consistency, reflecting the absence of evidence to support a material change from PR14, and to preserve neutrality from the switch to CPIH
   - **Risk-free rate:** Ofwat has changed its approach and relies on the average of spot yields for 10 and 20-year index-linked gilt yields. Frontier maintain an approach in line with that taken by Ofwat at its early view and use the six-month average of 15-year nominal gilts
   - **Asset beta:** Ofwat relies on a single point estimate based on two-year daily data, estimating a range using different estimation windows and data frequencies. This approach is in line with recent regulatory precedent, such as the approach adopted at PR14, and by the CMA for Bristol Water and NIE. Frontier adopt Ofwat's updated debt beta estimate. It is our view that the traditional approach to the EV/RCV gearing adjustment is the most reasonable approach.
   - **Ratio of embedded to new debt:** a review of the resubmitted business plan table data results in a lower estimate of 16% new debt in comparison with that used by Ofwat at the July Draft Determinations of 20%
   - **Cost of embedded debt:** this methodology does not include the reduction from expected outperformance (the so-called 'halo' effect) on the cost of new issuance up to 2020, as we do not see sufficient evidence of its existence. Frontier also adopt an updated approach to estimating forward uplift adjustment
   - **Cost of new debt:** as for embedded debt, Frontier has removed Ofwat's halo adjustment and apply an updated approach to estimating the iBoxx rate and forward uplift

9. Frontier has identified differences with Ofwat due to market movements and methodological approaches.

10. Frontier also identify factors that would suggest that the true cost of capital could lie towards the upper end of the range. This is supported by the evidence on overall cross-checks of the cost of equity, including DGM.

11. A copy of the full report by Frontier is included within the suite of additional supporting evidence provided alongside this representation.

12. In summary, we believe both for the cost of equity and the cost of debt, that Ofwat should consider both a top down cross-check as well as a bottom up calculation for the WACC given the uncertainty in estimating some of the parameters. For example, whilst Ofwat's approach does not put any weight on the market to asset ratios, the fact that these have fallen is indicative of political risk – which has always been a valid and material risk in the sector.

13. In conclusion, we do not believe that the WACC has declined since the early view nor that a further reduction from the Draft Determination is warranted.

## Return on Regulated Equity - RORE

14. At the fast-track Draft Determination, Ofwat did not require any actions or changes to our return on Regulated Equity (RORE) approach and analysis. The only change in value reflected the actions associated with ODIs and the range of potential under/out performance.

15. Similarly, following the information on ODIs implied from the slow-track Draft Determinations we have updated our RORE risk range to reflect these changes.

[redacted]

16. Overall the RORE range has changed reflecting the movements within the ODIs. Whilst the implied totex allowances have reduced, South West Water is making a number of representations relating to both base and enhanced expenditure and therefore has not changed our expectations on the potential range for under/out performance on totex (including retail).

17. In addition, the overall cost of debt has not changed in Ofwat's updated view of the cost of capital. As a result, we have not changed our assumed RORE outperformance assumed for potential financing under/out performance.

## Financial Resilience

18. Using Ofwat's current view of the cost of capital and the implied updates for the latest view on totex allowances, there would be an impact on South West Water's financeability ratios.

19. As a fast-track company we have not received Ofwat's updated financial model for South West Water. We have however, reviewed the implied impact of the reduction in the cost of capital and further challenge to the cost base.

20. Based on our fast-track Draft Determination models in April 2019, assessing the impacts of the reduction in the cost of capital and further challenge to cost base inevitably has a detrimental impact on the financial ratios and level of headroom for the business to manage financial shocks in the period to 2025.

# Supporting Information

## Cost of Capital

1. Frontier's estimate addresses questions of methodology which have arisen as part of the Draft Determination and provides market updates in relation to Ofwat's view at Draft Determination on 28 February 2019 (based on updated information to the end of July 2019).

2. Frontier derive a point estimate of 2.67% for the vanilla weighted cost of capital (WACC) in RPI real terms. This is 59 bps higher than Ofwat's latest view.

| **(Real RPI)** | **Frontier Assessment** | **Ofwat's Assessment** |
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| *Nominal cost of new debt* | *0.63%* | *0.35%* |
| Real overall cost of debt | **1.55%** | **1.34%** |
| **Appointee WACC** | **2.78%** | **2.19%** |
| Retail net margin deduction | 0.11% | 0.11% |
| **Wholesale WACC (vanilla)** | **2.67%** | **2.08%** |
| **Wholesale WACC (vanilla) RANGE** | **2.20% - 2.83%** | |

3. The differences in the point estimate are driven entirely by differences in methodology, with all market data being derived in line with Ofwat's cut-off date at Draft Determination of 28 February 2019. These methodological differences are as follows:

| Component of the WACC | Comparison to Ofwat's DD |
|---|---|
| Gearing | Adopted Ofwat's estimate |
| Total market return (TMR) | Evidence of higher TMR and appropriate interpretation of data |
| Risk-free rate (RFR) | Rely on nominal rather than index-linked gilts |
| Equity risk premium (ERP) | Evidence of higher TMR and RFR |
| Debt beta | Adopted Ofwat's estimate |
| Asset beta (given assumed debt beta) | Evidence of higher asset beta |
| Ratio of embedded to new debt | APP19 tables from resubmitted business plans, evidence of a lower proportion of new debt |
| Nominal cost of embedded debt | Excluded the reduction from expected outperformance (the 'halo' effect) on the cost of new issuance up to 2020<br>Updated approach to estimating forward uplift |
| Nominal cost of new debt | Excluded the reduction from expected outperformance (the 'halo' effect)<br>Updated approach to estimating iBoxx rate and forward uplift |
| Issuance and liquidity costs | Adopted Ofwat's estimate |
| Retail net margin deduction | Adopted Ofwat's estimate |

4. Frontier has found differences with Ofwat's assessments due to market movements and methodological approaches. The cost of equity difference is primarily due to updates to the total market return (TMR) and the asset beta. While we adopt a different approach to Ofwat on the risk-free rate, the impact on the WACC is relatively small. The cost of debt difference is largely driven by our removal of Ofwat's outperformance (halo) adjustment.

## Cost of Equity - Frontier Conclusions

**FRONTIER KEY CONCLUSION**

Our estimated overall cost of equity is 4.63%, which is higher than Ofwat's at Draft Determination of 3.46% (both real RPI).

Our TMR figure is based on historic average and is higher than Ofwat's estimate.

We disagree with Ofwat's decision to change the method used to estimate the risk-free rate to index-linked gilts, as we do not believe that there is sufficient evidence regarding the size of the inflation risk premium. We instead rely on 15-year maturity nominal gilts.

We disagree with Ofwat's raw equity beta, and we adopt Ofwat's debt beta and gearing estimate. We disagree with Ofwat's sole reliance on two-year daily betas in estimating the raw equity beta. We have reviewed the EV/RCV gearing adjustment and the RAR versus RER adjustments, as proposed in Ofgem's December sector consultation, and conclude that neither is appropriate to be applied to the water sector cost of equity.

Consistent with Ofwat, we use the Fisher equation when moving between different indices. We use inflation forecasts consistent with Ofwat of 2% for CPIH and 3% for RPI.

- **Total market return:** Ofwat no longer focuses on DGM analysis, but puts equal weight on ex-post, ex-ante and forward-looking approaches. While we agree with this view, we estimate a range of 6.5%-7.2% (in real CPIH terms), in line with that used by the CMA for its decisions on Bristol Water and NIE. Frontier propose a point estimate at the top of this range, having regard to regulatory consistency, reflecting the absence of evidence to support a material change from PR14, and to preserve neutrality from the switch to CPIH.

**FRONTIER KEY CONCLUSION**

Ofwat's DGM analysis which underpinned its early view, now results in a much higher figure, driven by movements in the stock market. Ofwat is now proposing not to focus on the DGM analysis, but put equal weight on ex-post, ex-ante and forward-looking approaches. The decision to disregard evidence that was previously relied upon could be regarded as opportunistic and could undermine regulatory credibility.

Ofwat now relies on the ex-post approach (which is the approach we have always advocated, but which Ofwat rejected at its early view). Its estimate under this method appears to be based on a selective assessment of both the inflation series and the averaging method. We do not consider that there is robust analysis to support these choices.

Ofwat has, in effect, failed to deliver on its commitment of NPV neutrality for the switch from RPI to CPIH, as the majority of its decrease on the nominal TMR comes from the switch from RPI to CPIH. Ofwat is moving from a 6.75% RPI to a 6.5% CPIH TMR without substantial evidence to support an underlying decrease in the market data.

We acknowledge the emerging debate on DMS inflation series, and present a balanced view taking this into account, which results in a range of 6.5%-7.2% CPIH real, using Ofwat's own calculations. We propose a point estimate at the top of this range, of 7.2% CPIH.

- **Risk-free rate:** Ofwat has changed its approach and relies on the average of spot yields for 10 and 20-year index-linked gilt yields. Frontier maintain an approach in line with that taken by Ofwat at its early view and use the six-month average of 15-year nominal gilts.

**FRONTIER KEY CONCLUSION**

Ofwat's assessment that the estimation of the risk-free rate should be based solely on index-linked gilts is based on insufficient evidence of the existence of an inflation risk premium and ignores the (albeit relatively low) liquidity premium inherent in current index-linked gilts.

Ofwat's reliance on applying a strict mechanistic approach to the use of the average of 10- and 20-year gilts does not address the risk that this leads to an inappropriate estimate of the risk-free rate.

On this basis, we maintain that the previously adopted approach of relying on nominal gilt yields, based on the six-month average of 15-year gilts, should be used to estimate the risk-free rate. This results in a risk-free rate in real RPI terms of -1.05%, lower than Ofwat's early view but 37 bps higher than Ofwat's value at Draft Determination.

- **Asset beta:** While Ofwat rely on a single point estimate based on two-year daily data, estimating a range using different estimation windows and data frequencies. This approach is in line with recent regulatory precedent, such as the approach adopted at PR14, and by the CMA for Bristol Water and Northern Ireland Electricity. Frontier adopt Ofwat's updated debt beta estimate. It is our view that the traditional approach to the EV/RCV gearing adjustment is the most reasonable approach.

**FRONTIER KEY CONCLUSION**

The issue with the largest impact on asset beta is the adjustment to the gearing level used to de-lever the raw equity beta, informed by Indepen's research and considered by Ofwat at Draft Determination. We do not believe that this is an appropriate adjustment and believe that the traditional approach remains the most appropriate to apply.

We consider that a beta range should be established by assessing two, five and ten-year data, on a daily, weekly and monthly basis.

We adopt Ofwat's updated debt beta at Draft Determination of 0.125.

Our updated asset beta range (including debt beta) at the cut-off date of 28 February 2019 is 0.31-0.41, and our point estimate is 0.39. This is above Ofwat's Draft Determination estimate of 0.36.

## Cost of Debt - Frontier Conclusions

**FRONTIER KEY CONCLUSION**

Our estimated cost of debt is 1.55%, compared to Ofwat's 1.34% (both RPI real). The difference arises from a different methodology. More specifically:

- we do not include a reduction to account for the 'halo' effect;
- we see evidence of a lower proportion of new debt; and
- we do not agree with Ofwat's approach to estimating the iBoxx 'central' estimate based on the spot rate on a given day, nor on its use of the average 10- and 20-year average forward uplift (in line with our arguments related to the implied market rate rise on the risk-free rate).

- **Ratio of embedded to new debt:** a review of resubmitted business plan table data results in a lower estimate of 16% new debt in comparison with that used by Ofwat at Draft Determination of 20%.

FRONTIER KEY CONCLUSION

We use resubmitted business plan table data and find a lower estimate of 16% new debt. We use this in our analysis.

- **Cost of embedded debt:** this methodology does not include the reduction from expected outperformance (the so-called ‘halo’ effect) on the cost of new issuance up to 2020, as we do not see sufficient evidence of its existence. We also adopt an updated approach to estimating forward uplift adjustment.

FRONTIER KEY CONCLUSION

We have removed Ofwat’s halo adjustment as we do not see sufficient evidence of its existence.

We adopt an alternative approach to Ofwat’s in adjusting for the forward uplift.

Our cost of embedded debt is 4.66% nominal

- **Cost of new debt:** As for embedded debt, we have removed Ofwat’s halo adjustment and apply an updated approach to estimating the iBoxx rate and forward uplift.

FRONTIER KEY CONCLUSION

Our methodology does not include the reduction from expected outperformance (the so-called ‘halo’ effect), as we still do not see evidence of this.

The negative outlook, warning on the regulatory regime and analysis on financial metrics by Moody’s poses a risk for an increased cost of debt, further decreasing the likelihood of any future halo effect.

We adopt an alternative approach to Ofwat’s in reaching a point estimate for the iBoxx rate and forward uplift.

We estimate the cost of new debt at 3.65% nominal.

5. Finally, Frontier also identify factors that would suggest that the true cost of capital could lie towards the upper end of the range. This is supported by the evidence on overall cross-checks of the cost of equity, including DGM.

6. A copy of the full report by Frontier is included within the suite of additional supporting evidence provided alongside this representation.

## Return on Regulated Equity - RORE

7. At the fast-track Draft Determination, Ofwat did not require any actions or changes to our Return on Regulated Equity (RORE) approach and analysis. The only change in value reflected the actions associated with ODIs and the range of potential under/out performance.

8. Similarly, following the information on ODIs implied from the slow-track Draft Determinations we have updated our RORE risk range to reflect these changes.

[redacted]

### Totex

9. The outcomes of the slow-track Draft Determinations in July have implied further changes to the Totex allowance for South West Water, with total expenditure of £1,944m compared with £1,982m in our fast-track Draft Determination. The adjustments have reflected:
   - Further challenge and review of enhanced expenditure
   - Revised base econometric modelling and continued frontier efficiency challenges
   - Combined modelling of base and growth expenditure.

10. South West Water is making a number of representations relating to both base and enhanced expenditure and therefore has not changed our expectations on the potential range for under/out performance on Totex (including retail).

### Outcome Delivery Incentives (ODIs)

11. The impact of the changes in ODIs within our fast-track Draft Determination were updated to reflect Ofwat's review of company business plans and performance commitments. South West Water adopted the early certainty principle for ODIs – which related to our bespoke ODIs and specific aspects of the common ODIs.

12. Whilst the potential RORE performance on ODIs resulted in a profile that was weighted to the lower limits (and therefore potential downside / underperformance) South West Water accepted the overall position based of risk ranges in the RORE – except for representations made at our Draft Determination in April 2019 on enhanced rates for Internal sewer flooding – to retain our original business plan submission enhanced rate rather than accept the lower incentive rate Ofwat's intervention would impose.

13. As part of July slow-track Draft Determinations further assessments and analysis has been completed, and whilst the early certainty principle has limited the impact to South West Water, changes which apply to all companies include:
    - DMex – increasing the range from -5.0% → +2.5% to -12.0% → +6.0%
    - Supply interruptions – changes in the performance commitment levels.

14. We have assumed within the implied RORE range above that representations made at our Draft Determination and within this response are taken into account.

### Financing

15. South West Water's assessment of potential financing outperformance was included within the business plan submission and has remained consistent through the initial assessment of plans and our Draft Determination in April 2019.

16. The overall cost of debt has not changed in the updated cost of capital included within the slow-track companies draft determinations published in July. As a result, we have not changed our assumed RORE outperformance following the latest view of the cost of capital and in particular the cost of debt.

17. Whilst Ofwat are considering a different approach to assessing the potential financing outperformance for the Final Determination – one which considers the potential outperformance for embedded debt as well as new debt – this will inevitably change depending on the actual underlying market conditions. For embedded debt 100% of the risk and reward remains with the company – and can be dependent on the financing structures in place, including the level of index-linked debt.

18. Given the low cost of debt assumed (both for new and embedded debt) within Ofwat's latest view of the cost of capital, consideration should be given to the under/out performance assumptions used to calculate the RORE and the likelihood of companies with existing debt structures achieving any outperformance.

## Financial Resilience

19. South West Water considers long-term financial resilience on an ongoing basis and we update these assessments as and when new information arises. A key aspect of this assessment is to consider the financial ratios for the company.

20. Using Ofwat's current view of the cost of capital and the implied updates for the latest view on totex allowances, there would be an impact on South West Water's financeability ratios.

21. As a fast-track company we have not received Ofwat's updated financial model for South West Water. We have however, reviewed the implied impact of the reduction in the cost of capital and further challenge to the cost base. The changes implied within the slow-track draft determinations include:
    - Reduction in the overall cost of capital, driven by the cost of equity
    - A change in assumptions for the cost of debt, with the assumed proportion of new debt for a notional company reducing to 20%
    - £38m further reduction to totex allowances
    - Additional recent disclosures on developer services and grants and contributions
    - Changes in net adjustments relating to past delivery.

22. Based on our fast-track draft determination models in April 2019 and assessing the impacts of reduction in the cost of capital and further challenge to cost base inevitably these have a detrimental impact on the financial ratios and level of headroom for the business to manage financial shocks in the period to 2025.

23. The change to financial ratios estimated on a notional basis is set out below:

[redacted]

24. Further adjustments of +/- 10 bps to the cost of capital would have the following estimated impact on ratios as follows:

[redacted]

## Financial Reconciliations

### Tax

25. During the 2015-20 regulatory period South West Water's unique WaterShare mechanism included sharing any benefit from changes in the headline corporation tax rate with customers. With the reduction in the headline rate to 19% and 18% (from the assumed 20%) it is estimated that the benefit of this voluntary sharing mechanism will be c.£3m.

26. We are pleased that this innovative approach has now been incorporated into the regulatory reconciliations for 2020-25. We agree that it is important that the risk of changes in the tax regime for capital allowances are shared fairly with customers and that the proposed reconciliation for 2020-25 continues to allow companies to appropriately manage their tax affairs but ensures the risk of changes in headline tax rates or capital allowance rates (which are outside of company control) are reflected in future regulatory periods by adjustments to revenue.

### Cost of new debt

27. South West Water's innovative WaterShare mechanism for 2015-20 included a sharing mechanism where any changes in the cost of new debt (with reference to the 10-year iBoxx) would be returned annually with 100% shared with customers. It is estimated that the benefit of this voluntary sharing mechanism will be c.£20m for 2015-20.

28. The proposed reconciliation for 2020-25 broadly reflects this approach and we are supportive that this has been included within the standard regulatory mechanism.

29. In addition to this regulatory mechanism, South West Water has also committed to sharing the historical benefits of embedded debt. We are proposing to share with customers any net benefit arising from the market movements for previous regulatory period new debt assumptions which were based on 25% new and 75% embedded debt. We will retrospectively apply the approach used in the 2015-2020 WaterShare mechanism. As this relates only to market movements this still preserves the ongoing incentive for outperformance by management action.

30. Whilst the 2020-25 Draft determination assumes new debt of 20%, previous regulatory periods have assumed c.25% of new debt is raised in each regulatory period. We will retrospectively compare the cost of new debt allowance for historic periods PR04 (2005-10) and PR09 (2010-15) with the average annual outturn iBoxx indices in those periods. Assuming current market conditions for fixing debt we expect this to result in a value of c.£20m to be shared in 2025.

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