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Reference of the PR19 final determinations: Explanation of our final determination for Bristol Water

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1. Bristol Water: Summary of our final determination

1.1 In reaching our final determination for Bristol Water,[1] we considered the company's business plan in line with our statutory duties. We are satisfied that our final determination ensures that the company has adequate funding to properly carry out its regulated business, including meeting its statutory and regulatory obligations, and to deliver the outcomes within its final determination. As explained below, we took into account the evidence submitted by the company and accepted its proposals where they were justified, supported by sufficient evidence and in line with comparative analysis across the industry. However, where the company's proposals were not adequately supported, we challenged assumptions and arrived at our own view.

1.2 Bristol Water asked us to refer its 2019 price control determination to the Competition and Markets Authority (CMA).[2] The company considers that "there remain fundamental issues we could not resolve in the price review process that, in combination, mean we cannot find any alternative other than to seek re-determination by the CMA."

1.3 The company identified four main areas of issue with its final determination:

- the **wholesale totex allowance** is too low;
- the **allowed cost of capital** is too low for a water only company;
- the **balance of risk and reward** is asymmetrically biased towards high risks; and
- there is inadequate headroom in the **financeability** assessments.

1.4 We note that Bristol Water referred its previous two price control determinations to the CMA in 2009 and 2014.

1.5 We summarise below what was included in our final determination in each of these four main areas, and outline the key issues that arose between us and Bristol Water during the 2019 price review process.

[1] Ofwat, 'PR19 Final Determinations: Bristol Water Final Determination'.
[2] B001 - Bristol Water PR19 final determination notice of reference to CMA, 13 February 2020.

The company

1.6 Bristol Water plc is a water-only company based in the South West of England. Bristol Water is owned 80% by iCON investment funds, Infrastructure Partners III LP and iCON Infrastructure Partners III (Bristol) LP (managed by iCON Infrastructure Partners on behalf of pension funds, asset managers and insurance companies from around the world) and 20% by Itochu Corporation of Japan. It supplies water services to 1.2 million customers in the South West of England.

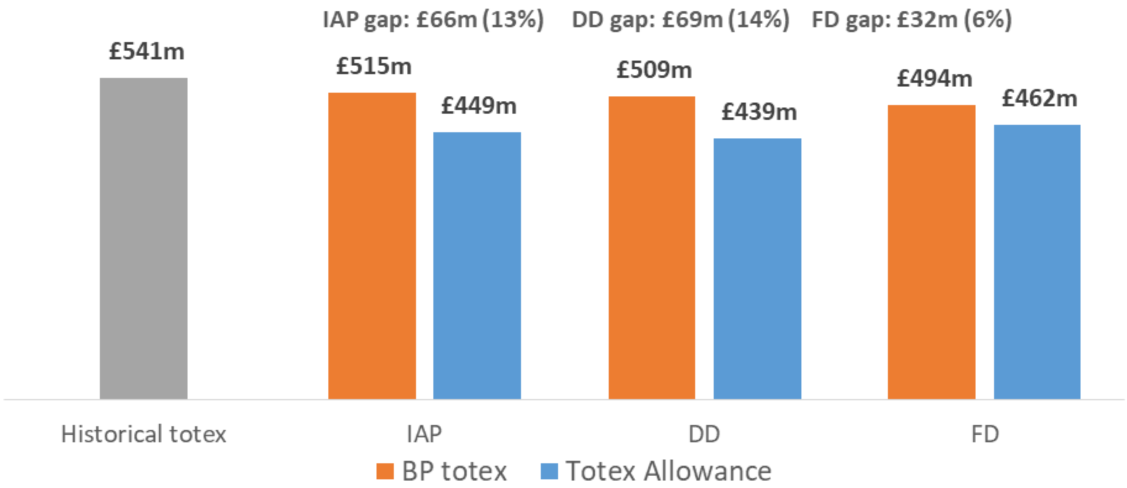
Key issue: total expenditure allowance

1.7 In its letter requesting a reference of our final determination to the CMA,[3] Bristol Water explain its view: “The wholesale totex allowance for Bristol Water is insufficient to deliver the ambitious outcomes and performance levels set in the Final Determination and supported by our customers. The application of the modelling for the circumstances faced by Bristol Water, rather than the fundamental approach, means we cannot agree with the Final Determination allowance as an efficient cost of delivery.”

1.8 Figure 1.1 shows a comparison between the company’s requested totex and our allowance at the initial assessment of plans, draft determination and final determination.

[3] B001 - Bristol Water PR19 final determination notice of reference to CMA, 13 February 2020.

Figure 1.1: Overview of totex allowances for Bristol Water (2017-18 prices)[4]



1.9 At final determination, we allowed Bristol Water £462 million compared to a requested cost of £494 million. This represented an efficiency challenge of £32 million (6%), which had reduced significantly from the draft determination efficiency challenge (14%). This was as a consequence of a £23 million increase in our cost allowance and a reduction of £15 million in the company's requested cost.

1.10 The main area of difference in Bristol Water's final determination is in relation to **wholesale water base costs**, where there is a £28 million gap. Our base allowance is based on our econometric models. In Bristol Water's August 2019 representation on our draft determination, it stated that "Ofwat's suite of base efficiency econometric modelling is overall robust"[5] and it accepted that it had "more to do on efficiency, and the [Ofwat] models to an extent confirm this".[6] At final determination, we closely examined our econometric models, and the alternative specifications of these models and concluded that the remaining cost difference is explained by the **inefficiency of Bristol Water's base costs**.

1.11 At final determination, we allowed £29.9 million of the £34.5 million which the company requested for **enhancement expenditure**. This was an increase of £5 million from our draft determination following the consideration of additional evidence provided by the company as part of its August 2019 representation on

[4] We present our totex allowance as the sum of base and enhancement expenditure, including allowances for residential retail. We exclude operating lease adjustments, third party service costs, pension deficit recovery payments, atypical expenditure and non-section 185 diversion costs. If we included these items, our final determination allowance would be £471 million (£420.2 million for wholesale services, £50.8 million for retail services) compared to a requested cost of £502.1 million (£452.1 million for wholesale services, £50.0 million for retail services). Historical totex refers to actual spending over 2014-2019. See 'Key elements of the methodology appendix' for further details on our definition of totex expenditure.
[5] Bristol Water Response to PR19 Draft Determination, p. 26.
[6] Bristol Water Response to PR19 Draft Determination, p. 28.

our draft determination. The remaining challenge to its enhancement costs relate mainly to **water resilience enhancement**.

1.12 In its August 2019 representation on our draft determination, Bristol Water reduced the requested cost for its **Canal** & **River Trust cost adjustment claim** – which relates to the cost of purchasing raw water from the Trust – from £9.4 million to £8.6 million. At final determination, we made an **allowance of £5.9 million** for this claim, which was £2.7 million lower than the company requested. While we accept that Bristol Water has a unique contractual arrangement to source raw water, other companies also incur costs associated with owning water resource assets, and these are reflected in our models and therefore in our base allowance.

1.13 We made an allowance of £5.9 million for the claim because we acknowledged the potential for some of the Canal & River Trust costs to be in addition to base costs given the more exogenous nature of these charges relative to alternative arrangements.

1.14 We considered that Bristol Water is **efficient in the residential retail** price control, and gave an allowance which is £0.8 million greater than requested in this area.

1.15 We consider that Bristol Water's wholesale totex allowance forms part of an **in-the-round package that is stretching but achievable**, and is set at a level that ensures that customers only pay for efficient costs.

1.16 This is the **third price review in succession** where Bristol Water has requested a redetermination. In the 2014 price review at final determination stage Bristol Water had a 24% cost gap between its business plan and the Ofwat allowance. In its 2015 redetermination the CMA made an allowance to Bristol Water that was 4% higher than our final determination, leaving a gap of 20% relative to the company's view of required costs. We note that in the first four years of the 2015-20 price control the company has underspent by 4% [7] against that cost allowance. However based on the latest data provided by the company in its August 2019 representation, the company is forecasting to slightly overspend for the 2015-20 price control.

1.17 In the 2009 price review at final determination stage Bristol Water had a 20% cost gap. In its 2010 redetermination the CMA made an allowance to Bristol Water that was 3% higher than our final determination, leaving a gap of 17%

[7] Ofwat, 2018-19 Service Delivery Report, p. 7.

relative to the company's required view of costs. In the 2010-15 price control the company underspent against its cost allowance by 1%.

Key issue: Allowed return on capital

1.18 The final determination set an **allowed return of 2.96% (CPIH)** which we consider provided a **reasonable return for an efficient company based on the market evidence** at the time. We are satisfied that our final determination for Bristol Water provided an appropriate balance of risk and return.

1.19 Bristol Water's April 2019 business plan was based on our 'early view' of the sector allowed return (3.40% in CPIH terms) plus a company-specific adjustment to the allowed cost of debt of 38 basis points, resulting in an allowed return of 3.62%. The company did not however seek a company-specific adjustment to its allowed return on equity (which it had done at PR14). We set a lower sector allowed return at draft determinations (3.19% in CPIH terms), reflecting movements in market rates and some refinements to our assessment of the market evidence on the allowed return. Our draft determinations signaled that trends in market data since the February 2019 data cutoff used for the draft determinations could support an even lower allowed return in our final determination.[8]

1.20 In its representations on the draft determination, Bristol Water raised concerns with our approach to estimating the risk-free rate, Total Market Return, equity beta, and the cost of debt – arguing that our decisions led to an understated allowed return. The company continued to propose an uplift of 38 basis points to its overall cost of debt on account of it being a small company, and no uplift to its allowed return on equity.

1.21 We considered the evidence raised by the company on the overall balance of risk and return in our final determination, having regard to revisions made in the final determination (including to allowed costs, outcome delivery incentives and revenues) which changed the overall balance of risk and return in the company's favour.

1.22 We **set an allowed return of 2.96% (CPIH)** in our final determination. This allowed return reflected some methodological changes to our assessment of the market evidence raised by companies in representations and our assessment of market evidence to the end of September 2019. Bristol Water said in its letter requesting a reference of our final determination to the CMA

[8] Ofwat, 'PR19 Draft Determinations: Cost of capital technical appenidx', pp. 6-7.

that this allowed return was too low for an efficiently financed small water-only company such as itself. Specifically, it argued that this allowed return was insufficient to service debt and equity returns, or to compensate its investors for the risks they faced.

1.23 We consider that evidence from the share prices of the listed water companies and credit rating agencies after our final determinations provides further evidence that the allowed return is not too low. We explain the issues further in the 'Cross-cutting issues' document that accompanies this submission to the CMA.

Key issue: Company-specific adjustment

1.24 For PR19, adapting the approach we followed at PR14, our methodology set out that we apply a high bar for company-specific adjustments to the allowed return on debt. We set out this was conditional on companies passing a three-stage assessment.

1.25 Our approach recognises that small companies can remedy financing diseconomies of scale themselves – for instance through mergers, or by pooling financing arrangements. It also recognises that small companies in competitive markets cannot expect to pass higher size-related financing costs on to their customers unless they either provide a service whose higher quality compensates for its increased cost or find offsetting efficiencies elsewhere. We therefore applied a similar standard to requests for company-specific adjustments to the allowed return on capital. In particular, we required that there must be compelling evidence that customers receive benefits that adequately compensate for the higher cost of funding any uplift, and that customers are willing to incur the additional cost.

1.26 In our final determination, we considered that Bristol Water passed two out of three stages of our assessment relating to the level of its requested uplift and customer support. However, the company **did not pass our customer benefits assessment**, as we did not find compelling evidence that customers were likely to be adequately compensated for the cost of funding the uplift. Therefore we **did not allow a company-specific adjustment** for Bristol Water in our final determination. Two other small water companies (Portsmouth Water and South Staffs Water) were able to provide us with compelling evidence that they passed all three stages – we allowed these companies an uplift.

1.27 Bristol Water considers it should be allowed a higher sector allowed return, and that it should receive a company-specific uplift to the sector allowed cost of debt to reflect its circumstances as a small company. We do not consider recent evidence supports the premise that the company faces a disadvantage in raising finance related to its small size. Bristol Water's actual cost of debt is broadly similar to large water and wastewater companies – three of which (Southern Water, Dŵr Cymru, and Yorkshire Water) reported higher borrowing costs as at March 2019.

Key issue: Balance of risk and reward

1.28 In its letter requesting a reference of our final determination to the CMA[9], Bristol Water said: "The balance of risk and reward in the Final Determination is biased asymmetrically towards high risks, in outcome delivery penalties, sharing mechanisms, and restrictions in the financing of the business, to the extent that overall levels of risks are unacceptable to the future of Bristol Water and our ability to serve our customers."

1.29 Following our draft determination we **increased Bristol Water's cost allowance** by £24 million, **reduced stretch on a number of performance commitments** and **adjusted incentive rates** based on company and sector evidence. Our final determination is intended to be stretching but achievable for companies to deliver improved levels of service in 2020-25.

1.30 In its response to our draft determination, Bristol Water argued that our use of 'reasonable ranges' on outcome delivery incentive rates was inconsistent with its evidence of its customers' preferences, gathered as part of the company's customer research programme.

1.31 Our approach uses a comparison against a range based on data from across the sector. We mitigate the risk of methodological differences between companies leading to incentive rates which do not reflect customer preferences. However, the **reasonable range** is not imposed mechanistically, and is just one of the checks we apply to assess outcome delivery incentive rates.

1.32 We consider also that its **performance in the 2015-20 period** is relevant to Bristol Water's claims about the expected skew in returns. Bristol Water set out a **negative skew in expected totex performance** in its 2015-20 business plan, but has in fact **outperformed the cost allowances** set in the CMA's 2015

[9] B001 - Bristol Water PR19 final determination notice of reference to CMA, 13 February 2020.

determination for the first four years of the control period. While companies across the sector forecast a negative skew on expected outcome delivery incentive performance in the 2015-20 period, actual performance across the sector has been in line with performance levels set at PR14.

1.33 Bristol Water's **performance in the 2015-20 period** has led to a number of outcome delivery incentive **underperformance penalties**, reflecting a poor level of service performance in areas that are under Bristol Water's influence or control.[10] We note that the company is forecasting an improvement in some of the key areas of performance as a result of actions it has taken and in its business plan targeted incentives on areas that mattered most to its customers but which had the widest range of underperformance incentives in the industry.

1.34 Bristol Water's determination includes an uncertainty mechanism that allows the level of price controls to be changed in 2020-25 if there is a material increase or decrease in charges payable to the Canal & River Trust for abstraction from the Gloucester and Sharpness Canal. At the time of our determination the charges were subject to an ongoing formal arbitration process. If the charge levels are resolved within the period of the redetermination, we expect that the CMA will wish to take these into account, which would remove the need for the uncertainty mechanism.

1.35 We have taken account of evidence provided by the company as well as wider evidence to calibrate the stretch of the performance commitments for an efficient company. We consider that the resulting combination of our requirements on both **costs and outcomes are stretching but achievable for an efficient company**.

Key issue: Financeability

1.36 With regard to our approach to the assessment of financeability, Section 11 of the PR19 methodology[11] set out an approach that is consistent with established regulatory practice adopted in previous price reviews, and was consulted on as part of the methodology to be applied at PR19.

1.37 In its letter requesting a reference of our final determination to the CMA,[12] Bristol Water explains its view that as a result of the other three key issues it has identified: "there is not adequate headroom in the financeability

[10] Bristol Water – Annual performance report 2018-19, pp. 214-267.
[11] Ofwat, 'Delivering Water 2020: Our final methodology for the 2019 price review', pp. 187-203.
[12] B001 - Bristol Water PR19 final determination notice of reference to CMA, 13 February 2020.

assessments to demonstrate resilience in the financing of the company over the price review period."

1.38 In its representation on our draft determination,[13] Bristol Water indicated that the draft determination was not financeable for it or any other small water company, taking into account the draft determination as a whole, including the level of the allowed return. We consider the allowed return in our final determination is sufficient to reward investors for the risk they face in a sector that benefits from significant risk protections and we considered the financial ratios calculated in the company's final determination to be consistent with a credit rating of Baa1/BBB+ for the notional capital structure. On this basis we assessed Bristol Water's final determination to be financeable.

1.39 We summarise our overall approach to financeability in the final determination in the 'Cross-cutting issues' document that accompanies this submission to the CMA.

Actual company structure

1.40 Bristol Water has gearing close to our notional company assumption. However, Bristol Water will see a significant reduction in revenue over 2020-25 due to past performance reconciliation adjustments which is having a negative impact on its credit rating. We highlighted concerns with the financial resilience of the company in our final determination.

Conclusion

1.41 Our final determination for Bristol Water reflected a number of adjustments to the company's business plan to protect customers and the environment, in line with our statutory duties.

1.42 We are pleased to note that in its CMA reference letter,[14] Bristol Water stated that: "….it was clear that there is much we agree on. The residential retail price control is not disputed. The ambitious outcomes and scope of what we proposed for our customers and stakeholders, our local communities and for the environment in our business plan are very similar to those in the Final Determination. There have also been many areas of convergence during the testing of plans carried out by the Ofwat team, such as on outcome delivery incentives and resilience investment. The risk mitigations we proposed were

[13] Bristol Water Response to PR19 Draft Determination, p. 3.
[14] B001 - Bristol Water PR19 final determination notice of reference to CMA, 13 February 2020.

accepted as clearly in customers' interests and, in the case of the annual outcome delivery incentive bill smoothing cap, standardised as an industry-wide measure at the Final Determination."

1.43 Nonetheless, Bristol Water has not accepted our final determination overall. The size of the difference on costs between Bristol Water and Ofwat is much smaller than in the case of previous price reviews which were referred to the CMA.

1.44 We are satisfied that **our final determination for Bristol Water is fair, financeable and deliverable,** based on the proposals and evidence submitted by the company and our analysis of the markets and sector wide data and submissions. We are confident that **our decisions protect customers' interests and are in accordance with our statutory duties**.

2. Bristol Water: Our final determination

Introduction

2.1 Our final determination for Bristol Water reflects our consideration of the company and other stakeholder views throughout the price review process. We gathered a wide range of views on the 2019 price review (PR19) framework and methodology between 2015 and 2018 through working groups and consultations. As a result our final PR19 methodology set out a framework for companies to address the challenges facing the sector with a particular focus on improved service, affordability, increased resilience and greater innovation both in the 2020-25 period and the longer term.

2.2 Bristol Water submitted its PR19 business plan on 3 September 2018. We reviewed its plan and provided detailed feedback as part of our initial assessment of plans on 31 January 2019. We published our draft determination for Bristol Water on 18 July 2019, based on our thorough review of the revised plan the company submitted on 1 April 2019. The company and a number of other stakeholders provided representations on our draft determination on 30 August 2019.

2.3 Our final determination carefully considered all of the representations we received from companies and stakeholders on our draft determination and took account of the most up-to-date information available where appropriate. We consider that our final determination for Bristol Water[15] was in line with our statutory duties.

2.4 Bristol Water asked us to refer its 2019 price control determination to the CMA.[16] The company considers that "there remain fundamental issues we could not resolve in the price review process that, in combination, mean we cannot find any alternative other than to seek re-determination by the CMA."

2.5 In Bristol Water's letter asking us to refer its 2019 price control determination to the CMA, it identified four main areas of issue with its final determination which we address in more detail in the following sections:

- the wholesale totex allowance is too low;
- the allowed cost of capital is too low for a water only company;

[15] Ofwat, 'PR19 Final Determinations: Bristol Water Final Determination'.
[16] B001 - Bristol Water PR19 final determination notice of reference to CMA, 13 February 2020.

- the balance of risk and reward is asymmetrically biased towards high risks; and
- there is inadequate headroom in the financeability assessments.

What our final determination includes

2.6 We set out key metrics relating to our final determination package for Bristol Water in Table 2.1. We describe key areas of the company's final determination in the remainder of this chapter. Our final determination provides Bristol Water with £22 million more allowed wholesale expenditure, and £25 million more wholesale allowed revenue than our draft determination. Further explanation of our wholesale and retail price controls is provided in Appendix 1 of this document.

Table 2.1: Summary of key metrics

Wholesale	**Company view (April 2019)**	**Draft determination**	**Company view (August 2019)**	**Final determination**
Wholesale totex, 2020-2025 (£million, 2017-18 CPIH deflated prices)	458.6	389.2	444.0	**411.3**
PAYG rate (%)	74.1%	72.7%	73.5%	**74.3%**
Wholesale allowed return (CPIH basis, %)	3.53%	3.08%	3.42%	**2.92%**
RCV run-off rate (%)	4.77%	4.77%	4.77%	**4.77%**
Allowed wholesale revenue, 2020-2025 (£million)	553.6	477.2	539.0	**502.3**
Residential retail	**Company view (April 2019)**	**Draft determination**	**Company view (August 2019)**	**Final determination**
Residential retail cost allowance, 2020-2025 (£million, nominal)	50.0	50.3	50.0	**50.8**
Residential retail net margin (%)	1.00%	1.00%	1.00%	**1.00%**
Allowed retail revenue, 2020-	55.0	55.3	56.1	**56.4**

2025 (£million, nominal)				
Appointee	**Company view (April 2019)**	**Draft determination**	**Company view (August 2019)**	**Final determination**
Average bill per household customer, 2020-2025 (£, 2017-18 CPIH deflated prices)	174	155	170	**160**

Securing cost efficiency

2.7 In its letter requesting a reference of our final determination to the CMA,[17] Bristol Water explains its view: "The wholesale totex allowance for Bristol Water is insufficient to deliver the ambitious outcomes and performance levels set in the Final Determination and supported by our customers. The application of the modelling for the circumstances faced by Bristol Water, rather than the fundamental approach, means we cannot agree with the Final Determination allowance as an efficient cost of delivery."

2.8 This is the third price review in succession where Bristol Water has requested a redetermination. Table 2.2 shows the difference between the company's requested costs compared to Ofwat's final determination and the CMA's redetermination for the previous two price reviews.

Table 2.2: Historic price review allowances and cost gaps for Bristol Water (£ million 2017-18 CPIH deflated prices)

	Company view of costs (£m)	Ofwat final determination view of efficient cost	Cost gap (%)	CMA final determination view of efficient cost	Cost gap (%)
2014 price review	579	441	24	463	20
2009 price review	740	595	20	617	17

2.9 We note that in the first four years of the 2015-20 price control the company has underspent against its cost allowance by 4%.[18] However based on the latest data provided by the company in its August 2019 representation, the company is forecasting to slightly overspend for the 2015-20 price control. In

[17] B001 - Bristol Water PR19 final determination notice of reference to CMA, 13 February 2020.
[18] Ofwat, '2018-19 Service Delivery Report', p. 7.

the 2010-15 price control the company underspent against its cost allowance by 1%.

2.10 Throughout the 2019 price review we made clear that we expected companies to demonstrate an increase in cost efficiency. We set a cost-outcomes package that provided a strong incentive for companies to invest and operate efficiently and at the same time deliver a marked improvement in their level of performance, particularly on outcomes that matter to customers and the environment. Our cost-outcomes package was stretching but achievable.

2.11 Table 2.3 shows the changes in company requested costs and our view of efficient costs.

Table 2.3: Change in cost gap in totex through-out the price control process (£ million 2017-18 CPIH deflated prices)

	Company view of costs (£m)	Ofwat view of efficient cost	Cost gap (%)
Initial Assessment of Plans	515	449	13
Draft Determination stage	509	439	14
Final Determination stage	494	462	6

2.12 Table 2.4 sets out where the differences lie in our and the company's view of costs across base and enhancement areas of wholesale and retail services.

Table 2.4: Cost gap at final determination by area (£ million 2017-18 CPIH deflated prices)

Base expenditure area	Company view (August 2019)	Final determination allowance	Cost gap (£)	Cost gap (%)
Wholesale base expenditure	409.5	381.4	28.1	7%
Wholesale enhancement expenditure	34.5	29.9	4.6	13%
Total wholesale expenditure	**444.0**	**411.3**	**32.7**	**7%**
Residential retail expenditure	50.0	50.8	-0.8	-2%

Note: Residential retail expenditure is presented in nominal terms (£ million)

2.13 Table 2.4 shows that the most significant area of difference is related to base water services at £28 million (7%). The majority of this gap relates to costs modelled within our wholesale econometric models and to a £2.7 million difference on the Canal and River Trust cost claim. The cost gap on enhancement water services is mainly related to a £3.9 million difference on resilience costs.[19] We discuss each of these cost gaps in turn below.

Base wholesale water totex

2.14 Our view of base totex costs for wholesale water is derived from econometric models and additional allowances to cover items less well suited to this approach such as business rates. In Bristol Water's August 2019 representation on our draft determination, it stated that "Ofwat's suite of base efficiency econometric modelling is overall robust"[20] and accepted that it had "more to do on efficiency, and the [Ofwat] models to an extent confirm this".[21] Bristol Water reduced its base cost allowance request by £14.6 million.

2.15 We developed our econometric models after extensive consultations with the industry and full details of our approach are given in our final determination technical appendix.[22] We are aware of the limitations of econometric models in fully determining companies' efficient costs. We mitigate this through our consultations and by triangulating a range of models, and by allowing companies to submit claims for material adjustments to our models. We continued to refine our models through-out the price control process to test the significance of further variables, often based on company representations. Between our draft and final determinations we evaluated a number of alternative modelling approaches including taking leakage as an explanatory variable. Our analysis did not reveal any significant factors that would warrant a material adjustment to Bristol Water's base allowance.

2.16 We assess the expenditure required for population growth across the water services within our base allowance. For the water service, this assessment is linked to the water resources management plan. At final determination, we increased Bristol Water's base allowance by £3.6 million to reflect the relatively high forecast population growth for 2020-25 in the Bristol Water area.

2.17 In its August 2019 representation, Bristol Water provided further evidence in support of its cost forecasts associated with the Traffic Management Act. The

[19] Further details on the difference between the enhancement requested cost and our allowance see Ofwat, 'PR19 final determinations: Bristol Water - Cost efficiency final determination appendix', p. 3.
[20] Bristol Water Response to PR19 Draft Determination, p. 26.
[21] Bristol Water Response to PR19 Draft Determination, p. 28.
[22] Ofwat, 'PR19 final determinations: Securing cost efficiency technical appendix', p. 13.

evidence it provided was sufficient and convincing and we allow the requested £4.1 million costs in full at final determination.

2.18 We consider Bristol Water to be efficient in the residential retail price control and we allowed £50.8 million, £0.8 million greater than requested.

Canal and Rivers Trust cost adjustment claim

2.19 Our cost assessment framework allows companies to submit cost adjustment claims in their business plans. This mechanism allows a company to present evidence of unique operating circumstances which drive differences in costs for a company relative to its peers and thus account for cost gaps in either base or enhancement costs. In its August 2019 representation on our draft determination, Bristol Water resubmitted a claim for a base cost adjustment to cover the cost of purchasing raw water from the Canal & River Trust, reducing the requested cost from £9.4 million to £8.6 million.

2.20 At final determination, we made an allowance of £5.9 million, £2.7 million lower than the £8.6 million which the company had requested. Bristol Water sources 45% of its water from the Canal & River Trust, claiming this arrangement is unique and therefore requires an adjustment to our modelled base allowance. While we accept that Bristol Water has a unique contractual arrangement to source raw water (other companies pay Canal & River Trust charges, but for a smaller proportion of their water), we do not accept that this necessarily requires an adjustment to our cost modelling results. Other companies incur alternative costs associated with owning water resource assets, which means that these costs are reflected in our models and in our base allowance. Bristol Water did not present sufficient and convincing evidence to demonstrate that our base allowance is insufficient, or that its cost is higher than other companies when it is efficiently incurred.

2.21 Nonetheless, we have made an allowance for the claim, calculated by excluding the annual savings identified by the company which are related to costs it does not incur as it does not own the asset. We acknowledge the potential for some of the Canal & River Trust costs to be in addition to base costs given the more exogenous nature of these charges relative to alternative arrangements. Our decision to make the allowance is also because we acknowledge that the company challenged its own costs considerably throughout the price review process, including submitting business plan costs that are lower than the costs incurred historically. In its representations to us Bristol Water submitted limited evidence on the costs associated with its different water sources (e.g. canal sources versus non-canal sources) and allocated 70% of its water resources costs to “central costs”. We have challenged Bristol Water to have a better understanding of its own direct (i.e. asset related) water resources costs and a clear justification of its high overall water resources costs when compared to the rest of the industry for future price reviews. This is particularly important because its costs are high and there is a consequent need to consider alternatives for its customers.[23]

2.22 In addition, in response to a proposal by Bristol Water, we included an uncertainty mechanism, a Notified Item, that allows the level of price controls to be changed in 2020-25 if there is a material increase or decrease in charges payable to the Canal & River Trust for abstraction from the Gloucester and Sharpness Canal.[24] At the time of our final determination the charges were subject to an ongoing formal arbitration process.

2.23 At final determination, we maintained our position to not to allow two further cost adjustment claims that Bristol Water raised in its September 2018 business plan:[25]

- Age and materials of its water distribution network (£12.3 million requested): we rejected this claim in our initial assessment of plans as we considered these costs were modelled within our base cost allowance and the company was not uniquely affected by the age or materials of its network.
- Water treatment complexity (£6 million requested): our econometric models included a measure of treatment complexity which we considered adequately addressed the company’s requirements.

2.24 In relation to both cost adjustment claims, Bristol Water did not provide additional evidence with its April 2019 revised business plan or raise substantive issues in its representation on our draft determination.

[23] Ofwat, ‘PR19 final determinations – Cost adjustment claim feeder model Bristol Water’ and ‘PR19 final determinations – Bristol Water – Cost efficiency additional information appendix’.
[24] Ofwat, ‘PR19 final determinations: Bristol Water final determination’, pp. 62-63.
[25] Ofwat, ‘PR19 initial assessment of business plans – Cost adjustment claim feeder model Bristol Water’ for further details on the assessment of the cost claims.

Enhancement wholesale water totex

Table 2.5: Enhancement expenditure, 2020-25 (£ million, 2017-18 CPIH deflated prices)

Wholesale enhancement expenditure area	Company view August 2019 (£m)	Final determination allowance (£m)	Cost gap (£)
Environmental obligations (WINEP)	4.9	4.5	0.4
Resilience enhancement	12.0	8.1	3.9
Supply-demand balance enhancement and metering	14.2	14.2	0.0
Other enhancement	3.4	3.1	0.3
Total enhancement expenditure	**34.5**	**29.9**	**4.6**

2.25 Enhancement expenditure relates to investment for the purpose of enhancing the capacity or quality of service beyond a base level. This may be driven by a number of factors including new legal obligations. At final determination there was a £4.6 million difference between our allowance and what the company requested. The most significant element of this cost gap, £3.9 million, relates to our view of efficient costs in the company's plan for water resilience enhancement.

2.26 On water resilience enhancement, we increased our final determination allowance to £8.1 million compared to a requested cost of £12 million, in consideration of further evidence the company provided of the need to mitigate the risk associated with the main supplying Glastonbury and Street. However we considered that the company did not provide sufficient and convincing evidence relating to most of its proposed investment for mitigation of mains failure at 'six exceptional sites', and therefore only made a partial allowance of £1 million for the sufficiently evidenced risks. Bristol Water also did not provide sufficient evidence to demonstrate the specific resilience risks that the proposed investment at these six 'exceptional' sites would mitigate, which we did not make an allowance for. Further detail on this can be found in our final determination for the company.[26]

[26] Ofwat, 'PR19 final determination: Bristol Water final determination', p. 38.

Aligning risk and return and financeability

Key issues for Bristol Water

2.27 Bristol Water's September 2018 business plan was based on our 'early view' of the allowed return set out in the PR19 methodology (3.40% in CPIH terms) plus a company-specific adjustment to the allowed cost of debt of 45 basis points. This increased its proposed allowed return to 3.67% in CPIH terms. Bristol Water's April 2019 business plan was based on our 'early view' of the allowed return plus a company-specific adjustment to the allowed cost of debt of 38 basis points; the company proposed an allowed return of 3.62%. Bristol Water submitted Board assurance that both business plans were financeable on both a notional and an actual basis.

2.28 The allowed return was lower in our draft determinations (3.19% in CPIH terms), reflecting movements in market rates and some refinements to our assessment of the market evidence on the allowed return. We assessed Bristol Water's draft determination to be financeable on the basis of the notional capital structure.

2.29 Our draft determinations signaled to companies that movements in the market data suggested it was possible that the allowed return could be lower by 0.37 percentage points in our final determinations. The detail underpinning this analysis was set out in section 1.2 of the Cost of capital technical appendix in our Draft Determinations.[27]

2.30 In its representation on our draft determinations, Bristol Water did not provide Board assurance on the financeability of the draft determination, stating "The revised plan submitted in April was supported by Board assurance that the plan was financeable over the long term. This considered that notional financing should remain in line with Moody's Baa1 expectations. The draft determination is not consistent with this, even at the cost of capital before the 40bps reduction Ofwat proposes".[28] The company argued that "Ofwat's expectation on Board's to provide financial resilience assurance on an unjustifiably low cost of capital is not consistent with Ofwat's duties".[29] The company instead provided Board assurance of its financeability under its own set of revised proposals, including an allowed return of 3.53% in CPIH terms.

[27] Ofwat, 'PR19 draft determinations: Cost of Capital technical appendix', pp. 6-8.
[28] Bristol Water, 'BW01 – Overview document', p. 40.
[29] Bristol Water, 'BW04 – Financial issues', p. 125.

2.31 Based on updated market evidence and some revisions we made to the calculation of the allowed return that took account of company representations, the allowed return for the sector in our final determination was 2.96% in CPIH terms. We did not allow Bristol Water a company-specific adjustment to its allowed cost of debt, as we considered that based on the evidence it provided to us that it did not pass our three-stage approach to assessing such proposals.

2.32 The most material issues relevant to Bristol Water's representations on our draft determination related to the overall balance of risk and return in our draft determinations, our assessment of the allowed return and associated company-specific adjustment claim, and our overall approach to financeability. We summarise the issues raised by Bristol Water and our response below.

2.33 As companies are responsible for their own financial resilience and our determinations focus on the financeability of the notional capital structure, we focus our commentary on the notional capital structure in the sections that follow. We comment on the actual financial structure for the company in the 'Cross-cutting issues' document that accompanies this submission to the CMA.

Allowed return on capital

2.34 In its letter requesting a reference of our final determination to the CMA[30] Bristol Water claims: "Despite the clear precedent set by the CMA in 2010 and 2015, Ofwat's Final Determination allowed cost of capital is too low for an efficiently financed small water only company such as Bristol Water. The overall allowed cost of capital is insufficient to service debt and equity returns and allow investors a reasonable expectation that they will receive a return commensurate with the risks they face. This issue is the combined result of the industry allowed weighted average cost of capital and the Bristol Water requirement for a company specific adjustment to the industry cost of capital."

2.35 Specific areas of disagreement raised by Bristol Water in response to our draft determination approach to estimating the sector allowed return on capital were:

- **Risk free rate** – that our estimate of the inflation risk premium was overstated, and that we should base our estimate on nominal gilt yields adjusted for a more reasonable estimate of 15 basis points. Our analysis suggested that the pricing of nominal gilts embedded an inflation risk premium of around 40 basis points, and that the liquidity risk premium in RPI-linked gilt yields was negligible. Given that a true risk-free rate should not reflect any risk premia, we consider RPI-linked gilt yields to provide a

[30] B001 - Bristol Water PR19 final determination notice of reference to CMA, 13 February 2020.

better basis for our estimate. We also consider that basing our assessment on the nominal gilt yields would over-remunerate investors for inflation risk in a sector where investors benefit from protection for inflationary movements.

- **Total Market Return** – that our assumption of low Total Market Return was inconsistent with our assumption of high productivity growth in the water sector over 2020-25. The company also challenged our assumption of 5-10 year holding periods as too high, and argued that dividend growth assumptions in our dividend discount models were too low. As Total Market Return (TMR) is an economy-wide input and our productivity estimate drew on a selection of comparator sectors, we did not agree that higher productivity in these sectors was inconsistent with lower TMR. Our 5-10 year range for holding periods is consistent with a 5 year control with a fixed TMR assumption, investor surveys and other regulatory decisions. Finally, we continue to consider GDP growth to be a reasonable proxy for dividend growth, with historical dividend growth tending to be lower, and analyst forecasts tending to be higher.
- **Beta** - that our estimate was too low due to focusing on short-term data, and that we should use a 5 year unlevered beta of 0.32 because this formulation showed more stability over time. Our final determination set out that by placing more weight on 5 year betas in final determinations we had adopted a more cautious approach than at draft determinations (which used a point estimate anchored on 2 year betas). This resulted in an estimate of unlevered beta (0.29) higher than our advisors' (Europe Economics) recommendation of 0.26.
- **Embedded debt** – that it was inappropriate to assume outperformance of our benchmark index without controlling for credit rating and tenor. The company also argued that our allowance should not exclude swaps and other instruments. We considered that it was not necessary to control for tenor or credit rating, and retained our 25 basis point outperformance adjustment, because our aim was to calibrate the index-based allowance to be reflective of efficient borrowing costs for the sector, which reflect these factors. We consider excluding swaps in our assessment to be justified, as the swaps companies have in place generally reflect risk management due to company-specific factors (including high gearing). As our allowed return is predicated on a notional company structure, including swap costs would seem to go against the principle that companies – not customers – should bear risks associated with their choice of financing structures.

2.36 In addition to our decision on equity beta, when compared to our draft determination we also increased the company's effective return through reducing the retail margin adjustment,[31] and reduced the level of outperformance we assumed on our benchmark index for the cost of new debt from 25 to 15 basis points. Collectively, we estimate that these three decisions amounted to an allowed return on capital 33 basis points higher than it would have been using our approach from our draft determinations.

2.37 In support of its arguments on the sector allowed return, Bristol Water supplied a report by Economic Insight.[32] This set out a view that the appropriate range for the sector allowed return was well above our draft and final determinations at 3.6% to 4.5% in CPIH terms. We consider that this range is materially out of line with market evidence; for instance our review of equity analyst expectations published over September – December 2019 indicated a range of 2.8% to 3.3%, and 14 out of 17 companies based their business plans on an allowed return of 3.4%. We discuss these issues in further detail in the 'Cross-cutting issues' document that accompanies this submission to the CMA.

2.38 We set out in our final determination that we were satisfied that our determination included a reasonable allowed return that was sufficient to reward investors for the risk they face in a sector that benefits from significant risk protections.

Company-specific adjustment

2.39 Bristol Water is seeking a company-specific adjustment to the sector allowed cost of debt, reflecting its view that we should allow an uplift over the sector allowed return to reflect its efficiently-incurred higher debt costs that are due to it being a small company. Unlike at PR14, Bristol Water has not sought a similar company-specific adjustment to the sector allowed cost of equity during the PR19 price review process.

2.40 We do not consider recent evidence supports the premise that the company faces a disadvantage in raising finance related to its small size. We indicated in our PR19 methodology that we would consider allowing a company-specific adjustment to the allowed cost of debt for small water-only companies as we recognise some of these companies have historically had more limited access to listed bond markets, which have tended to be the lowest-cost source of financing. However, Bristol Water is the largest of the water-only companies which requested such an adjustment at PR19, and unlike some smaller companies, has been able to independently access finance from listed bond

[31] This adjustment is applied to the appointee allowed return to derive the wholesale allowed return, avoiding double-counting the retail net margin return in the latter.
[32] B002 - Economic Insight, 'Review of Ofwat's approach to the WACC at PR19 draft determinations', August 2019.

markets – most recently in 2011. Bristol Water's actual cost of debt is broadly similar to large water and wastewater companies – three of which (Southern Water, Dŵr Cymru, and Yorkshire Water) reported higher borrowing costs as at March 2019. [33] We therefore expect that the CMA may wish to consider the extent to which any company-specific adjustment remains appropriate in the company's particular circumstances.

2.41 We stated in our PR19 methodology that we must set a cost of debt allowance in a manner that is consistent with our duties, including the duty relating to the financing of the proper carrying out of the functions of a water company. However, if the cost of maintaining a particular corporate structure is more than that which underpins the sector cost of capital, it is not clear that customers should be expected to incur the incremental cost.

2.42 Past evidence demonstrates that small companies can remedy financing diseconomies of scale, for instance through mergers or by pooling financing arrangements. Moreover, in a competitive market, for which any price control must operate as a proxy, small companies cannot expect to pass higher size-related financing costs onto their customers unless either they provide a service whose higher quality compensates for its increased cost or they find offsetting efficiencies elsewhere. In this context, customers are entitled to expect that any increased cost allowance due to a particular company's corporate structure is adequately compensated for by efficiency and/or quality of service benefits provided by that company.

2.43 Where we allowed an adjustment, which we did for both Portsmouth Water and South Staffs Water, we did so on the basis that we were satisfied that the evidence demonstrated that the additional allowances were reasonable and served the best interests of customers. In particular, we required compelling evidence that customers would receive benefits which adequately compensated them for the higher cost of funding any uplift, and that they were willing to incur the additional cost for that purpose.

2.44 Our methodology accordingly required those seeking a company-specific adjustment to pass a three-stage assessment:

1. **Levels:** Is there compelling evidence that the level of the requested adjustment is appropriate?
2. **Customer benefits:** Is there compelling evidence that there are benefits that adequately compensate customers for the increased cost?

[33] Bristol's reported nominal weighted average cost of debt was 4.73% compared to 5.56% for Southern Water, 5.04% for Dŵr Cymru, and 4.91% for Yorkshire Water.

3. **Customer support:** Is there compelling evidence of customer support for the proposed adjustment?

2.45 Bristol Water did not pass our three-stage assessment at the initial assessment of business plans or at the draft and final determination stages.

2.46 The company proposed an uplift of 38 basis points in its April 2019 business plan. In its representations to our draft determination the company's proposed uplift was based on a 40 basis points embedded debt uplift and a 30 basis points new debt uplift, using our draft determination share of new debt of 20%. The company also challenged various parts of the analysis underpinning our conclusion that it did not pass our 'Customer benefits' assessment.

2.47 In our final determination, we assessed that Bristol Water passed the 'Levels' and 'Customer support' components of the assessment. However, we concluded that the company did not pass our 'Customer benefits' assessment as we did not find compelling evidence that customers were likely to be adequately compensated for the cost of funding the uplift. We did not therefore allow a company-specific adjustment in our final determination.

2.48 We discuss these issues and our response to the company's representations in further detail in the 'Cross-cutting issues' document that accompanies this submission to the CMA.

Balance of risk and reward

2.49 In its letter requesting a reference of our final determination to the CMA,[34] Bristol Water explains: "The balance of risk and reward in the Final Determination is biased asymmetrically towards high risks, in outcome delivery penalties, sharing mechanisms, and restrictions in the financing of the business, to the extent that overall levels of risks are unacceptable to the future of Bristol Water and our ability to serve our customers."

2.50 However, during the PR19 process we made a number of adjustments in the company's favour. Following our draft determination we increased Bristol Water's cost allowance by £23 million, reduced stretch on a number of its performance commitments, and adjusted incentive rates based on company and sector evidence. We were satisfied that our final determination was stretching but achievable for companies to deliver improved levels of service in 2020-25.

[34] B001 - Bristol Water PR19 final determination notice of reference to CMA, 13 February 2020.

2.51 In its response to our draft determination, Bristol Water argued that our use of 'reasonable ranges' on outcome delivery incentive rates was inconsistent with its evidence of its customers' preferences, gathered as part of the company's customer research programme.

2.52 Our approach uses a comparison against a range around the mean based on data from across the sector. We mitigate the risk of methodological differences between companies leading to incentive rates which depart from underlying customer preferences. However, the reasonable range is not imposed mechanistically and is just one of the checks we applied to assess outcome delivery incentive rates.

2.53 Based on company and sector evidence, at final determination we made adjustments to some outcome delivery incentives which resulted in a more limited RoRE range (-2.15% to +1.00% versus -3.51% to +0.97% at draft determination), a modest forecast negative skew. Experience from PR14 shows that an expected negative skew in our PR14 determinations has not materialised in actual reported returns across the sector. This reflects our view that companies are likely to focus on downside risks and benefit from the asymmetry of information in their favour when preparing their plans and representations.

2.54 Our allowed return on capital reflects the fact that water companies and their investors benefit from significant risk protection. Our final determination for Bristol Water included uncertainty mechanisms which further reduced the risk exposure for the company.[35] We introduced risk sharing mechanisms for business rates and abstraction charges which are subject to different cost sharing rates. We included a bespoke Notified item for uncertainty associated with changes to charges payable to the Canal & River Trust for abstraction from the Gloucester and Sharpness Canal on grounds that these charges were the subject to an ongoing formal arbitration process. If the charge levels are resolved before the CMA has concluded its redetermination of the price control, we expect that the CMA will wish to take these into account, removing the need for the uncertainty mechanism.

2.55 Bristol Water's outturn performance is also relevant to Bristol Water's claims about the expected skew in returns. Bristol Water set out a negative skew in expected totex performance at PR14, but, similar to the average performance of companies in the sector, Bristol Water has in fact outperformed the cost

[35] Ofwat, 'PR19 final determinations: Bristol Water final determination', p. 62, Section 4.4.4.

allowances set in the CMA's 2015 determination for the first four years of the control period.

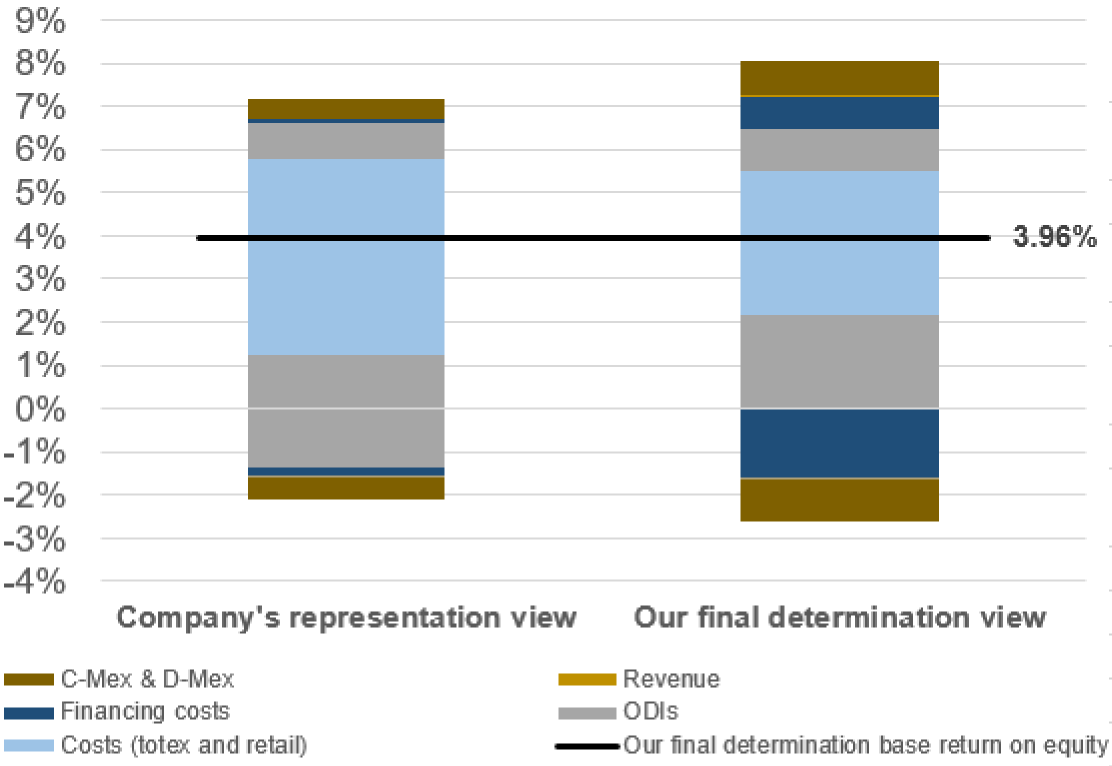
2.56 Bristol Water's performance against its outcome delivery incentives has led to underperformance penalties in 2015-20 reflecting a poor level of service in areas that Bristol Water is able to influence or control.[36] While some of the poor performance was as a result of adverse weather conditions, we believe that it is the responsibility of the water sector as whole to make sure there are real improvements in all areas of emergency planning, preparation, response, communication and payment of compensation. We note that the company is forecasting an improvement in some of the key areas of performance as a result of actions it has taken.

2.57 We took account of evidence provided by the company as well as wider evidence to calibrate the stretch of the performance commitments for an efficient company. We consider that the resulting combination of our requirements on both costs and outcomes are stretching but achievable for an efficient company.

2.58 We assessed that Bristol Water has a significant scope to earn upside from outperformance as well as the risk of lower returns from underperformance with modest negative skew overall to its overall risk range, driven primarily by outcome delivery incentives. Our view is that Bristol Water, if efficient, should be able to achieve the base return on the notional structure. We set out in Figure 2.1 our assessment of the company's represented risk range as measured by the return on regulatory equity and the range we set out in our final determination based on the common approach we took to the calculation.

[36] Bristol Water – Annual performance report 2018-19, pp. 214-267.

Figure 2.1: Company representation and final determination RoRE ranges for Bristol Water



Financeability

2.59 In its letter requesting a reference of our final determination to the CMA,[37] Bristol Water explains that as a result of the other three issues it has identified: “there is not adequate headroom in the financeability assessments to demonstrate resilience in the financing of the company over the price review period.”

2.60 In its representations on our draft determinations, Bristol Water did not provide Board assurance on the financeability under our assumptions, stating “The revised plan submitted in April was supported by Board assurance that the plan was financeable over the long term. This considered that notional financing should remain in line with Moody’s Baa1 expectations. The draft determination is not consistent with this, even at the cost of capital before the 40bps reduction Ofwat proposes”.[38] The company argued that “Ofwat’s expectation on Board’s to provide financial resilience assurance on an unjustifiably low cost of capital is not consistent with Ofwat’s duties”,[39] the company instead provided Board

[37] B001 - Bristol Water PR19 final determination notice of reference to CMA, 13 February 2020.
[38] Bristol Water, ‘BW01 – Overview document’, p. 40.
[39] Bristol Water, ‘BW04 – Financial issues’, p. 125.

assurance of its financeability under its own set of revised proposals, including an allowed return of 3.53% in CPIH terms.

2.61 We summarise below the issues raised by Bristol Water in its representations, and our response:

- **Financial ratios** – Bristol Water stated that Ofwat should target Moody's adjusted interest cover of c1.5x to be consistent with Baa1 notional ratios, equivalent to the alternative ratio in the financial model. The company said that while the financial ratios set out in the draft determination showed a positive position for Bristol Water compared to other companies, this is inconsistent between companies and with the actual approach taken by credit rating agencies. We set out Bristol Water's financial ratios in our final determination in Table 2.6. We considered Bristol Water's determination to be financeable at Baa1 taking account of the financial ratios in the round, including an average adjusted interest cover of c.1.5x before adjustments for past performance.
- **Actual company financial ratios** – Bristol Water stated that critical to the Board's financeability assessment of the company are also the financial ratios on the actual balance sheet and the company's corporate model. For the April 2019 business plan, Bristol Water targeted Baa1 for the notional company and Baa2 for the actual company. The company stated that it took into consideration that Moody's had placed Bristol Water plc on negative watch for a one notch downgrade from Baa1 to Baa2 as a result of PR19. However, we note that Moody's changed the outlook for Bristol Water plc to negative on 1 October 2018,[40] identifying the credit challenges for Bristol Water as including missed operational targets, which were expected to result in penalties carried forward into 2020-25, and the long-dated capital structure which is exposed to decreasing allowed returns from 2020. These are both matters that are under Bristol Water's control. Bristol Water argued that the return indicated in the draft determination was insufficient to cover forecast debt costs, even with no equity return and assuming efficient costs and successful outcome delivery. However, our PR19 methodology set out we assess financeability on the basis of the notional company structure and before reconciliation adjustments for past performance.[41] We consider this protects customers by ensuring they do not pay more to address financeability constraints arising from poor performance and the approach is consistent with the policy we have adopted at previous price reviews.

[40] B003 - Moody's Investor Services: Bristol Water plc credit opinion, update following a change of outlook to negative, 1 October 2018.
[41] Ofwat, 'Delivering Water 2020: Our final methodology for PR19', p. 187.

- **Totex sharing and financeability** – Bristol Water argued that changing the totex sharing approach and the removal of ex-ante allowed revenue alters the balance of risk for the industry compared with the approach set out in our PR19 methodology. We consider this payment is not appropriate as companies tend to outperform their business plan submissions. If companies underspent against our PR19 allowances then an upfront payment could lead to even greater negative adjustments to its revenue at PR24. The upfront payment also means that customers are likely to pay more for the 2020-25 period and above the level of efficient costs.[42] Since we consider it appropriate that our assessment of financeability is on the basis of an efficient company with the notional capital structure. As such, we do not believe that it is appropriate to take totex sharing into account in our financeability assessment.

2.62 We assessed the financial ratios in Bristol Water's final determination to be consistent with the credit rating the company had targeted for the notional structure in its business plan (Baa1/BBB+).

2.63 In Table 2.6 we set out the key financial ratios provided by the company in its business plan, and in our draft and final determinations. The financial ratios underpinning our determination were broadly consistent with those proposed by the company in its business plan that underpinned its Board assurance statement that its plan was financeable on the basis of the notional capital structure (after adjusting for the change in calculating the adjusted interest cover ratio set out in the following table).

[42] Ofwat, 'PR19 final determinations: Securing cost efficiency technical appendix', upfront payment to reduce the size of reconciliation at PR24, p. 138.

Table 2.6: Ofwat calculation of key financial ratios – notional structure before reconciliation adjustments (5 year average)

	Revised business plan (April 2019)	Draft determination	Final determination
Gearing	58.48%	59.1%	58.78%
Interest cover	4.65	5.04	5.37
Adjusted cash interest cover ratio (ACICR)	2.50	2.52	1.47
Funds from operations (FFO)/Net debt	14.26%	13.29%	13.53%
Dividend cover	3.25	2.63	2.84
Retained cash flow (RCF)/Net debt	12.17%	11.05%	11.39%
Return on capital employed (RoCE)	6.95%	6.15%	6.13%

2.64 We set out the basis of the calculation of the ratios in the PR19 methodology.

- **Net debt** represents borrowings less cash and excludes any pension deficit liabilities.
- **FFO** is cash flow from operational activities and excludes movements in working capital.
- **Cash interest** excludes the indexation of index-linked debt.

2.65 In its representation on the draft determination, Bristol Water contends that there is a significant disparity between Ofwat's view of the company's financial ratios for the draft determination (which are presented as the strongest in the industry in the draft determination) and its own view. We accept that different accounting treatment of infrastructure renewal expenditure may impact on the comparability of adjusted interest cover. Therefore in presenting the ratios for our final determinations we excluded the effect of this from the numerator of the adjusted interest cover ratio to improve comparability. If calculated on a consistent basis with the final determination, Bristol Water's draft determination adjusted interest cover would be 1.46x.

Delivering outcomes for customers

2.66 'Bristol Water – Delivering outcomes for customers final decisions'[43] sets out our final decisions in terms of changes to our draft determination for the company's performance commitments and outcome delivery incentives.

2.67 We are pleased to note that in its CMA reference letter,[44] Bristol Water stated that: "….it was clear that there is much we agree on…The ambitious outcomes and scope of what we proposed for our customers and stakeholders, our local communities and for the environment in our business plan are very similar to those in the Final Determination. There have also been many areas of convergence during the testing of plans carried out by the Ofwat team, such as on outcome delivery incentives…."

2.68 In the following sections we explain the key representations made by the company in response to our draft determinations in August 2019. However, as the company has stated in its CMA reference letter, there has been considerable convergence between it and Ofwat on its Outcomes package during the price control process.

Key issues for Bristol Water

Mains Repairs

2.69 As we set out in the 'Key elements of the methodology appendix' that accompanies this submission to the CMA, mains repairs is an important indicator of the health of a water company's assets. In our draft determination we intervened in Bristol Water's performance commitment level to set it at the average of the company's best three years' historic performance. This was because the company's forecast performance levels for the 2020-25 period were lagging behind the rest of the sector.

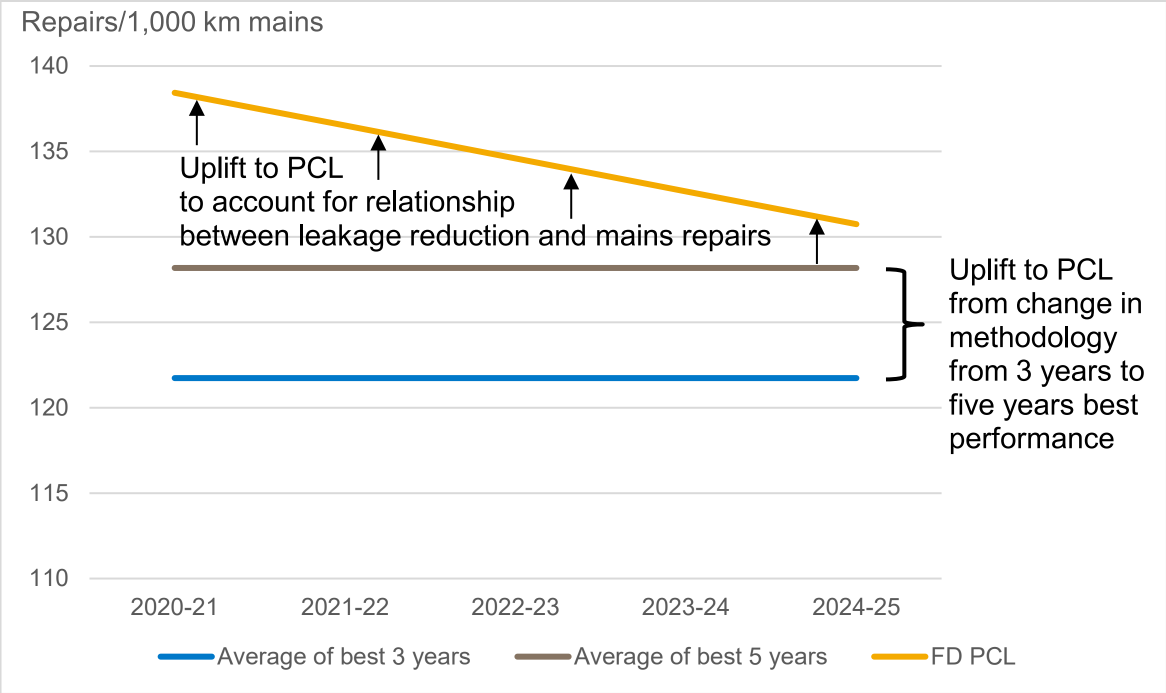
2.70 In its representations on our draft determination the company argued that the performance commitment levels for mains repairs did not take into account the link between leakage and mains repairs and that the performance commitment levels were unachievable, leaving it at significant risk of underperformance payments. As we set out in the 'Key elements of the methodology appendix' we revised our approach to setting mains repairs performance commitment levels

[43] Ofwat, 'PR19 final determinations: Bristol Water – Delivering outcomes for customers final decisions'.
[44] B001 - Bristol Water PR19 final determination notice of reference to CMA, 13 February 2020.

in our final determinations to account of the link between increasing proactive mains repairs and leakage reduction.

2.71 We have also amended our approach to setting the underlying performance commitment level (i.e. prior to the upward adjustment for leakage reduction), basing it on the average of the companies best five years of historic performance. We consider that this provides a more representative level of good performance required to improve the overall health of companies' assets over the long run. This results in a less stretching performance commitment level in each year, see Figure 2.2.

Figure 2.2: Impact of methodology changes on mains repairs performance commitment levels



Outcome delivery incentive rates

2.72 In its representation on our draft determination, the company raised concerns with our approach to setting outcome delivery incentives. It argued that our methodology for setting rates is invalid as:

- past performance / delivery concerns are not relevant to setting rates,
- some customer preferences have been infringed,
- rates should not be compared across companies, and
- each performance commitment is considered separately not in the round.

2.73 We considered that past performance was a relevant consideration when setting outcome delivery incentive rates. There was a risk that companies with poor past performance may propose weak incentives. We considered these companies may require stronger financial incentives than in previous periods, to ensure that they focus on improving performance in specific areas where past performance has been poor. As such, we used a range of tests as articulated in our 'Delivering outcomes for customers policy appendix'.[45]

2.74 As set out in the 'Overview' that accompanies this submission to the CMA, as part of our assessment of each company's plan, we carefully considered the research provided including evidence to support setting outcome delivery incentives. In some cases, we found that the evidence provided had not been used by companies to inform their business plans or to set incentive rates, or that they made selective use of the evidence, or that the research itself was of insufficient quality. As a result of our assessment we made adjustments to outcome delivery incentives accordingly.

2.75 In addition, although customer engagement was a vital element of our approach, we were mindful that the survey evidence provided by companies was only one piece of evidence on customer preferences. As we had set out in our PR19 methodology, we looked at all evidence submitted by each company to determine whether company plans were aligned with customers' interests. In particular, in addition to customer views, we considered the robustness and relevance of customer research presented by companies, their historical performance, cross-company comparisons and whether the company had appropriate incentives to manage risk. We used this information, our assessment of the companies' proposals in their business plans, and stakeholder representations to make our final determination.

2.76 For example, in reviewing Bristol Water's leakage outcome delivery incentive rate we found that it had not appropriately triangulated the results of its customer research to arrive at a representative marginal benefit component. Instead of using its triangulated willingness to pay value, the company chose the lowest value for use in the derivation of its outcome delivery incentive rate. This was of concern given the company's rates were low compared to both the industry average and its PR14 outcome delivery incentive. This implied a materially lower level of protection for customers against leakage underperformance than at PR14 without any evidence that customers' preference for leakage reduction has diminished since PR14. We therefore

[45] Ofwat, 'PR19 final determinations: Delivering outcomes for customers policy appendix', p. 83.

intervened to re-triangulate Bristol Water's outcome delivery incentive rate using the lower bound of our reasonable range around industry average.

2.77 We also considered the package of performance commitments in the round. We set expectations that the package would lie in the range of ±1 to ±3% of RoRE. We reviewed the package level impact of our outcomes intervention and made adjustments accordingly. Further details are provided in section 7.3 of the 'Delivering outcomes for customers policy appendix'.[46]

[46] Ofwat, 'PR19 final determinations: Delivering outcomes for customers policy appendix', p. 172.

Appendix 1 – Calculation of our final determination

The main body of this document sets out the key interventions that we made to Bristol Water's business plan. This appendix provides further detail of the calculation of our final determination for the wholesale and retail price controls. This builds on Tables 4.1 and 4.2 in the Bristol Water final determination. To make our final determination we made a number of interventions to Bristol Water's business plan and/or representation position. These are summarised in the Bristol Water final determination. The following tables provide details of where further explanation of these interventions can be found in the final determination suite of documentation. To assist the CMA we have developed a detailed spreadsheet which compares the company plan and representations to the draft and final determinations by year and price control: see 'Bristol Water - detailed calculation of the final determination revenue allowances'. We also provide a financial model comparison of Bristol Water's April 2019 company plan to our final determination: see 'Bristol Water - Financial model comparison of April revised business plan and final determination'. Further detail on the interventions on outcomes are set out in chapter 3 of the Bristol Water final determination and Bristol Water - delivering outcomes for customers final decisions.

Table A1.1: Calculation of total wholesale expenditure for Pay As You Go (£ million over five years unless otherwise stated, 2017-18 prices)

	Final determination allowance
Wholesale base expenditure	381.4
Wholesale enhancement expenditure	29.9
Operating lease adjustment	0.0
Gross allowed totex for calculation of cost sharing rates	**411.3**
Strategic regional water resources solutions and other cash items	2.0
Third party costs	6.8
Non-section 185 diversions	0.1
Ex-ante cost sharing adjustment	0.0
Gross totex	**420.2**
Grants and contributions after adjustment for income offset	14.9
Net totex for PAYG calculation	**405.4**

Note: We provide a breakdown of wholesale base expenditure and enhancement expenditure in Tables 2.4 and 2.5. For further details on operating lease adjustments, strategic regional water resource solutions, third party costs and non-section 185 diversions see pp. 32-33 and Table 3.2 in Bristol Water final determination.

Table A1.2: Calculation of the wholesale revenue control (£ million over five years unless otherwise stated, 2017-18 prices)

	Company View (April 2019)	Draft determination	Company View (August 2019)	Final determination	Further explanation
Net totex for PAYG calculation	448.8	389.7	435.3	405.4	Cost adjustments are explained in chapter 3 of the Bristol Water final determination, Bristol Water cost efficiency appendix and cost feeder models. The relationship between gross totex and net totex for PAYG is set out in Table 3.2 of the Bristol Water final determination.
PAYG (%)	74.1%	72.7%	73.5%	74.3%	PAYG % is based on the opex and capex split of the expenditure allowance adjusted for capitalised infrastructure renewal expenditure. Further details are provided in section 4.2.1 of the Bristol Water final determination, Bristol Water allowed revenue appendix and Bristol Water aligning risk and return final decisions, Pay as you go (PAYG) model – Bristol Water, Bristol Water aligning risk and return final decisions and the Bristol Water - calculation of Pay As You Go rates spreadsheet
Totex PAYG	332.5	283.1	320.1	301.1	
Pension deficit repair costs	-	-	-	-	
Total pay as you go	**332.5**	**283.1**	**320.1**	**301.1**	
Average opening RCV in each year	539.3	535.0	539.6	533.7	RCV run off rates have not been adjusted. Further details are provided in section 4.2.4 of the Bristol Water final determination, Bristol Water allowed revenue appendix and Bristol Water aligning risk and return final decisions.
RCV run off rate (%)	4.77%	4.77%	4.77%	4.77%	
RCV run-off	**128.7**	**127.5**	**128.7**	**127.2**	

	Company View (April 2019)	Draft determination	Company View (August 2019)	Final determination	Further explanation
Average RPI RCV in each year	238.1	238.4	239.4	238.3	The allowed return on capital is based on prevailing market evidence. Further details are provided in section 4.2.3 of the Bristol Water final determination, Bristol Water allowed revenue appendix, Bristol Water aligning risk and return final decisions and Allowed return on capital technical appendix.
RPI return (%)	2.52%	2.08%	2.41%	1.92%	
Total RPI Return on RCV	30.0	24.8	28.9	22.9	
Average CPI RCV in each year	288.4	283.8	287.4	282.7	
CPI return (%)	3.53%	3.08%	3.42%	2.92%	
Total CPI Return on RCV	50.8	43.7	49.1	41.3	
Total Return on RCV	**80.8**	**68.5**	**78.0**	**64.1**	
Revenue adjustments for PR14 reconciliations	(7.6)	(8.4)	(7.2)	(7.0)	Adjustments made to the reconciliation of PR14 incentives are described in section 4.3 of the Bristol Water final determination, Bristol Water accounting for past delivery appendix and Bristol Water accounting for past delivery final decisions. Note adjustments are explained relative to 15 July submission rather than representation.
Fast track reward	-	-	-	-	Not applicable.

	Company View (April 2019)	Draft determination	Company View (August 2019)	Final determination	Further explanation
Tax	-	10.0	12.8	10.5	The tax allowance reflects the corporation tax that the company expects to pay in 2020-25. Tax adjustments are explained in section 4.4.1 of the Bristol Water final determination and Bristol Water aligning risk and return final decisions.
Grants and contributions (price control)	16.8	6.5	16.8	14.8	An allowance for the revenue that water companies will receive from developers for the work that they undertake to service new developments. Adjustments to grants and contributions forecasts are set out in section 4.4.2 of the Bristol Water final determination. In our final determinations we amended our approach to grants and contributions. This included the removal of non-section 185 diversions to outside the price control. More details of our approach are set out in Our approach to regulating developer services.
Deduct other income (non-price control)	(10.2)	(10.2)	(10.2)	(10.2)	This reflects income water companies receive from outside the price control. Adjustments to non-price control other income are described in section 4.4.3 of the Bristol Water final determination and is described in Our approach to regulating developer services
Innovation fund/competition	-	-	-	1.9	This represents the additional revenue that the company will collect from its customers for the purpose of a collectively funded innovation competition for the period 2020-25

	Company View (April 2019)	Draft determination	Company View (August 2019)	Final determination	Further explanation
					This described in section 4.1.1 of the Bristol Water final determination and Driving Transformational Innovation in the Water Sector.
Revenue re-profiling	-	0.2	-	(0.1)	This reflects the change in revenue in 2017-18 prices as a result of adjustments made to annual revenues to smooth the final bill profile consistent with customer preferences, on a net present value neutral basis. This is described in section 4.1.1 of the Bristol Water final determination.
Final allowed revenues	**553.6**	**477.2**	**539.0**	**502.3**	The calculation of final allowed revenues is set out in Table 4.1 of the Bristol Water final determination, Bristol Water allowed revenue appendix, Financial model – Bristol Water, Bristol Water allowed revenue appendix and the Bristol Water - detailed calculation of the final determination revenue allowances spreadsheet

Table A1.3: Calculation of the retail revenue control (£ million over five years unless otherwise stated, nominal prices)

	Company View (April 2019)	Draft determination	Company View (August 2019)	Final determination	Further explanation
Total wholesale revenue	593.1	518.5	574.9	539.5	Wholesale revenues adjusted from 2017-18 prices to nominal prices
Proportion of wholesale revenue allocation to residential, %	74.66%	74.66%	74.66%	74.66%	We did not intervene in the proportion of wholesale revenue allocated to residential retail and any difference reflects movements in revenues across different wholesale controls
Wholesale revenue allocated to residential	442.8	387.1	429.2	402.8	Wholesale revenues multiplied by proportion allocated to retail
Residential retail costs	50.1	50.3	50.3	50.8	Cost adjustments are explained in chapter 3 of the Bristol Water final determination and residential retail cost feeder models.
Total retail costs	492.9	438.0	480.5	454.5	Wholesale revenue allocated to retail plus retail costs
Residential retail net margin (%)	1.00%	1.00%	1.00%	1.00%	Retail allowed margins are set out in Bristol Water allowed revenue appendix
Residential retail net margin	5.0	4.4	4.9	4.6	This is calculated as (1-retail margin)* (total retail costs mins retail adjustments

	Company View (April 2019)	Draft determination	Company View (August 2019)	Final determination	Further explanation
Residential retail adjustments	-	0.5	1.0	1.0	Retail adjustments from the reconciliation of PR14 incentives, PR14 service incentive mechanism and residential retail revenue reconciliations. These adjustments set out in table 4.11 of the Bristol Water final determination, Bristol Water accounting for past delivery appendix and Bristol Water accounting for past delivery final decisions. Adjustments have been converted from 2017-18 prices to nominal prices.
Residential retail revenue (£ million)	55.0	55.3	56.1	56.4	The sum of residential retail costs plus retail net margin plus residential retail adjustments

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales.

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