PR19 Redetermination

Bristol Water: Reply

(Non-Confidential)

May 2020

bristolwater.co.uk

Executive Summary

1. Introduction

1 This document sets out Bristol Water's reply to Ofwat's response (the **Response**) to our Statement of Case. As a high level summary, our Statement of Case set out a number of errors that Ofwat had made in the PR19 Final Determination (**FD**):

- the **cost of capital** errors, in particular setting a cost of capital too low to support efficient financing for a **notional company** with characteristics relevant to Bristol Water. This was contrary to the regulatory precedent from the two previous references to the CMA in 2015 and the CC in 2010;

- a series of **cost allowance errors**, which reflected the application of Ofwat's modelling and assessment approach and resulted in a c. £30 million cost gap for us on a plan that was 10% below historical totex. This failed to take the "in the round" approach that Ofwat claims to practice, and results in a cost allowance set below a reasonable estimate of what can be efficiently achieved;

- the **balance of risk errors**, where elements of the incentive framework compromise our ability to secure a reasonable return on capital and undermine our financeability; and

- The combined effect of the above errors is that we cannot efficiently finance the delivery of our business plan. We set out in our Statement of Case the inadequacy of Ofwat's assessment of **financeability**. Ofwat failed to carry out an adequate assessment to ensure that the FD was financeable for a **notional** financial structure **relevant** for Bristol Water. It is this failure that, on its own and in combination with the other errors, means that Ofwat has failed to meet its statutory "finance" / "financing" duty for Bristol Water (the **Finance Duty**).

2 The tone and content of Ofwat's Response were both surprising and concerning. We found the language used unnecessarily aggressive, the tone dismissive of key issues without due consideration, and the approach overly focused on irrelevant process matters. The content did not address many of the issues raised in our SoC and included many misleading statements. It is felt that Ofwat have chosen to evade an adequate response to a number of important issues, and have instead made the company the target of their response.

3 We choose not to engage with Ofwat's approach and not to reply in a similar language in this document, and instead focus on the key issues we would like CMA to consider, looking beyond Ofwat's tone, language and approach. We have however provided CMA with a summary of the key misleading statements and evasive responses at the end of this Executive Summary.

2. Structure of our Reply

4 Our case raises a narrow range of issues. In this Reply, we comment only on the main points raised in Ofwat's Response and where Ofwat has presented new evidence that is relevant to the key points in our Statement of Case. We do not attempt to address all of the points which Ofwat sets out in its Response, if they are not directly relevant to our Statement of Case; however, if we do not directly refute an Ofwat statement, that does not mean that we agree or accept it.

5 For ease of reference, wherever possible, we cross reference our Reply against our original Statement of Case. We also note where we included evidence in our Statement of Case but Ofwat has not addressed this in its Response. Redactions for confidential information are clearly marked by [✂]. We structure our Reply against the four groups of errors we included in our Statement of Case:

- Section A: Cost of capital
- Section B: Cost assessment
- Section C: Balance of risk
- Section D: Financeability

6 To support the above, we also provide Annexes with additional analysis, and two additional reports:

- Annex 1: Ofwat's Finance Duty
- Annex 2: Cross referencing index of Bristol Water and Ofwat submissions
- Annex 3: Information on leakage innovation and efficiency
- Annex 4: Information on plausibility of downside risk scenarios
- Annex 5: Artesian debt
- Expert report from Economic Insight on Response to Ofwat's criticisms of the case for an uplift to asset beta
- Expert report from Economic Insight on NERL Provisional Findings: Implications for the water sector cost of capital

3. Summary of key issues

3.1 Cost of capital

7 Ofwat's Response attempts to reframe the Company Specific Adjustment to the cost of capital (**CSA**) issue for Bristol Water as not one of size. Ofwat has not suggested this previously over the last 30 years of its regulation.

8 On the **cost of debt** this is portrayed as an issue of 'old embedded debt'. Ultimately, Ofwat continues to exclude small water only company debt in its estimate for the industry cost of debt, and then disallow a notional small water company additional debt allowance for Bristol Water based on a spurious "customer benefits" test (which was unequivocally rejected by the CMA in 2015).

9 Ofwat's Response does not provide any reason why the CSA should move away from past regulatory precedent. Ofwat attempts to suggest that the CMA should change its previous decisions on the CSA in general as it *"will serve to perpetuate the incentive on the company to*

dispute its regulatory determinations at each price review". This argument is flawed as it assumes that the CMA (and the CC previously) were wrong in allowing a CSA, and that Ofwat's approach is correct now (and for always going forward). The incentive for us to seek a re-determination only exists if Ofwat were to continue to not allow a CSA despite there being overwhelming evidence that one should apply.

10 Having presented evidence throughout PR19 and engaged constructively with Ofwat, we tried to avoid this reference by considering what cost of debt and equity was justified based on the evidence available, and whether this was in the form of a CSA. We carried out more analysis on both topics than Ofwat. We welcome the CMA providing clarity, as with previous decisions, and also encourage any observations on how we can avoid a fourth reference on topics where the circumstances persist.

11 Ofwat's new estimate of the 'size' premium is inconsistent with precedent and its CSA allowance for other small companies. Ofwat describes the cost of debt issue as one where companies took out debt with too long tenor, even though the length of tenor at the time of Artesian was comparable to the average for the sector. Ofwat's new analysis is flawed but helps to explain that its perspective on tenor is driven by the limitations of its data analysis, rather than a reasonable assessment of an appropriate cost of debt for Bristol Water, which is Ofwat's duty.

12 On the **CSA cost of equity uplift**, Ofwat focuses on process points and the analysis undertaken for us by Economic Insight. Despite Ofwat's statements to the contrary, this evidence was provided with our response to Ofwat's draft determination (**DD**), it formed part of our post-DD presentation[1] and Ofwat commented on it in the FD.[2] Our Statement of Case reflected the position as at Ofwat's FD, by comparing our return on RCV and volatility compared to the listed companies used to set beta. This is important analysis, as it confirms that the level of equity uplift that the CMA and CC previously allowed still reflects a reasonable minimum estimate. We could not have carried out this element of analysis until the FD because of the large range of uncertainty on equity returns, significant errors in ODI incentive levels in the DD which Ofwat could not defend for the FD, and significant changes in totex modelling.

13 On the **industry cost of capital components** we retain our Statement of Case position. The only significant new evidence Ofwat presents is an update on equity beta analysis from Europe Economics. This is helpful analysis, but we differ on the interpretation of the conclusions. Europe Economics appear to take the lowest and highest observed equity beta values and then average this range. Whether September 2019 and February 2020 data is used, taking a mean and median from the individual values suggests a very narrow equity beta range of 0.30 – 0.32.[3] Our Statement of Case (pre-CSA uplift) set out that 0.31 was a reasonable central estimate, which this new analysis appears to confirm.

14 Ofwat claims our suggestion of a 95:5 embedded to new debt ratio is based on company specific financing decisions. However, the ratio actually reflects the low level of our enhancement expenditure for 2020-25. We show in our Statement of Case that this is also a relevant notional assumption for water only companies.

1 BW438, Bristol Water presentation slides to Ofwat, 11 October 2019.
2 Ofwat (2019), FD, Bristol Water final determination, page 11. See also Bristol Water presentation to Ofwat, dated 11 October 2019, which is provided with this Reply.
3 We show the mean and median of the individual values in BW439, Averaging of Europe Economics equity betas.

3.2 Cost allowances

15 Ofwat has failed to engage with the evidence regarding our assessment of efficient costs. Given our costs were c. 10% below historical levels and were set based on efficient top down and bottom up costs, it is important that Ofwat considers the cost allowance "in the round". We presented extensive evidence on c. £45m of individual Ofwat errors, but our proposed remedy only seeks allowance for the £30m gap from the FD to our efficient plan.

16 Ofwat criticises the extensive cost assessment evidence that informed our plan, pointing out that it shows Bristol Water as "inefficient". Ofwat's reference to Bristol Water as inefficient is misleading as it refers to our historical costs prior to 2016/17 and not our recent costs, nor the proposed costs in our business plan. In Ofwat's original reference documents and briefings for the CMA, Ofwat recognised the extensive efforts we went to challenge our own costs throughout the price review process. Our case remains that the proposed remedy in our Statement of Case reflected a reasonable estimate of efficient costs.

17 Ofwat's Response presents its cost assessment decisions as a series of component judgements that ought to be considered individually and in isolation. We disagree. Our case is that it is particularly important not to take such a limited approach when service levels are improving at such a rate and costs are reducing to such a large extent. Ofwat places too high a premium on avoiding potential outperformance, by requiring certainty on evidence that suggests cost allowances are, in the round, too low.

18 In a number of places Ofwat's Response alleges that we do not understand our costs, or that our analysis is not credible. We refute this suggestion. Ofwat did not raise such concerns during the PR19 process, other than in the context of the disputed C&RT cost adjustment claim, where we believe the CMA 2015 precedent allowing this claim in full should still apply. Ofwat also claims that we raise a new issue on leakage in our Statement of Case that we had not raised earlier – this is untrue as it was a specific section of our DD response.[4]

19 Ofwat provides limited insight and few solutions in its Response. For instance, in our modelling on the **service level error**, Ofwat has noted weaknesses in our modelling, and therefore rejects the claim in its entirety. Our Statement of Case explicitly recognised that there was a degree of uncertainty in the approach, and sought to address this uncertainty through the use of sensitivities. Ofwat provides no comment on the sensitivity analysis.

20 A recent query response from Ofwat clarified one key element of information and confirmed that Ofwat had made an error in their assessment of the base efficiency factor. Ofwat stated we were wrong to describe the 12% base efficiency factor used in growth and enhancement expenditure as "historical". However, Ofwat confirmed that this base efficiency gap is based on our April business plan view of costs (informed by the IAP at the time), and not the DD position. This explains why it differs from the c. 6% totex gap we have at the FD (which we dispute in any case). This confirms our position on two of the errors we raise in our Statement of Case.

4 BW438, Bristol Water presentation slides to Ofwat, 11 October 2019.

3.3 Balance of risk

21 Ofwat's Response provides little new information on this subject.

22 Ofwat suggests it is outside of the CMA's remit to consider the **gearing sharing error**, as it will be a reconciliation determined for the mechanism at PR24. We do not agree. We would observe that Ofwat suggested this in its DD; that if we did not agree to their definition of gearing and the mechanism, it would instead consider its application at PR24.[5] We responded to the DD on this basis.

23 On the **ODI error**, Ofwat selectively quotes from our customer research evidence to justify its view that our research was biased. Our customer research included a number of different triangulations, did not rely on any one specific customer response and it is misleading to dismiss extensive customer research evidence based on a single quote taken out of context. The Bristol Water Challenge Panel scrutinised this research and have expressed their view independently to the CMA, including references to the report that the CMA provided at the time.

24 Ofwat also criticises our assessment of P10 estimates of downside risk as being overly pessimistic. Ofwat confirmed in its presentation to the CMA on RoRE that it simply assumes P10 levels of performance move in parallel to their service level interventions. This simplifying assumption is implausible, and runs counter to the extensive analysis we provided throughout PR19.

25 On **asymmetric cost sharing rates** we retain the views we expressed in our Statement of Case. Ofwat has recently used the wholesale totex cost sharing rate in its allocation of bad debt risk in the business retail market following its Covid-19 related intervention, which required all wholesalers to provide liquidity. This is a systematic shock for wholesalers directly linked to the intervention of a regulator, but the asymmetric cost sharing rates result in a different impact depending on Ofwat's view at PR19, which is irrelevant to the risk faced. This example illustrates both the unfair impact of Ofwat's use of cost sharing rates and the risks from the lack of debt service headroom because of Ofwat's approach to financeability in the FD.

3.4 Financeability

26 Ofwat focuses in its Response on the notional testing of financeability based on the price review building blocks of revenue. The notional test Ofwat applies is, by design, almost impossible to fail and requires a set of stringent and unreasonable conditions to hold throughout the period. Our Statement of Case set out three critical tests for any financeability assessment, which Ofwat fails to address in the FD and its Response:

- the notional company should be able to achieve the **credit rating** assumed in the cost of debt allowance;
- the notional company should have **sufficient financial headroom** to withstand plausible downside risk; and

[5] Ofwat (2019), DD, Aligning risk and return technical appendix, page 92.

- the notional company should be able to reasonably expect to earn the required return on a mean expected basis.

27 In order to fulfil the Finance Duty, the **relevant notional** structure for Bristol Water should account for a size premium consistent with the CMA approach at the last re-determination. Ofwat's approach is inconsistent with the CMA's approach, where the CMA carried out the notional financeability test using our allowed Cost of Debt, which in turn was based on a notional cost of debt allowance that took into consideration a Small Company Premium (i.e. a CSA) of 40bps.

28 Ofwat is inconsistent in its view on financeability and financial resilience, and its downside analysis remains inadequate. What Ofwat describes in the FD as the financeability test has to check that the company has adequate financial headroom and liquidity to manage risks and to withstand plausible downside scenarios.

29 In our Statement of Case we demonstrated that this is not the case under the relevant notional structure. We showed that Ofwat's stated 'headroom' under its own notional capital structure is not sufficient based on the downside scenarios it set out in the FD. In its Response, Ofwat now denies that this was a notional financeability assessment,[6] despite the clear reference to this in the FD.[7] Taking Ofwat's current statement at face-value would suggest that Ofwat made no financeability assessment "in the round". This is compelling evidence that Ofwat failed to meet the Finance Duty.

30 Ofwat's Response provides no solution to the financeability error as it defends all the other individual assumptions made in the FD. On the one hand Ofwat implies that a lack of financeability forces companies to improve further. Ofwat then suggests that even if the CMA find that the FD is not financeable, the CMA can resolve this through changing notional financing assumptions. This includes assuming lower gearing or a higher level of index-linked debt. This would result in a further gap to the relevant notional company for Bristol Water. It is surprising Ofwat should consider such assumptions as appropriate now having not considered them appropriate at any previous point during PR19 or previously in the long history of water regulation, at a time that the stability and quality of the regulatory regime is already under scrutiny.[8]

31 Ofwat presents a very weak interpretation of the Finance Duty, and it is important the CMA reflect whether it agrees with this because of the implications for investment in UK infrastructure, if a regulator is able to change notional assumptions to unreasonable positions so far away from the precedent or the actual company position.

32 Ofwat makes much in its response out of the Moodys' rating report,[9] which downgraded Bristol Water to Baa2 (negative watch). Ofwat comments on Moody's views on the risk of further downgrades if either performance penalties are incurred or if additional revenues do not result from the CMA determination. Ofwat's comments are inconsistent with what is actually stated in Moody's rating review for Bristol Water.

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6 Ofwat (2020) 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, page 121.
7 Ofwat (2019) FD, Final determination for Bristol Water, section 5.3.
8 R031, Moody's, Water Sector Outlook Remains Negative, page 15.
9 BW416 Moody's credit opinion on Bristol Water (March 2020).

3.5 Covid-19

33 Ofwat suggests in its Response that it would prefer to take account of the impacts of Covid-19 across the sector as part of the PR19 reconciliation process. This is consistent with the approach that we suggested in our original presentation to the CMA and therefore we support this. We note however that in certain areas, Ofwat has contradicted its stated preference by asserting that Covid-19 strengthens its case as set out in the FD (for example that Covid-19 might make the case for Real Price Effects weaker). We believe it is premature to evaluate the impact of Covid-19.

34 We believe that the CMA should keep this under review, and information may be revealed from Covid-19 that affects CMA decisions on issues raised in our Statement of Case.

3.6 Summary of concerns with Ofwat's Response

35 We are concerned by a number of statements in Ofwat's Response and presentation to the CMA on 20 May which suggest a failure to engage with the specific evidence in our case. Some of the points are specific to our case, but others reflect a broader concern with the way Ofwat has structured its response on supposedly cross-cutting issues, where the position of Bristol Water is different to the other disputing companies, and very few examples specific to us are used. These concerns are summarised in the table overleaf.

Ofwat argues that the CMA should disregard companies' arguments on the grounds that they are "*simply disagreements as to the merits of decisions*" which Ofwat took in exercising its **regulatory discretion**. Ofwat then goes further and states that the points which companies raise are not "*hard edged*" questions about whether Ofwat has complied with its statutory duties. **We focus on the Finance Duty in our Statement of Case using precise and specific evidence and analysis.**

Ofwat refers in several places to the fact that thirteen water companies have chosen not to refer the FDs to the CMA and implies that this validates the decisions it has taken at PR19. **Our Statement of Case is very specific to Bristol Water and Ofwat's presentations to the CMA also demonstrate this.** We did not want to have a third reference in succession but were left with no choice after Ofwat ignored the precedent from the previous redeterminations that could have avoided this.

Ofwat claims in its Response that our request for a CSA to the cost of equity is a new claim that was not raised during the PR19 process, and that including it in our Statement of Case was an attempt to **"*evade proper scrutiny*"** of the price review process. We reject this allegation and refer the CMA to our Draft Determination Response in August 2019, where we noted that work conducted by Economic Insight supported a CSA to the industry cost of equity. Indeed, Ofwat even commented on this evidence and our position at length in the FD. Ofwat makes a similarly misleading allegation in relation to leakage expenditure.

In its Response on cross-cutting issues, Ofwat frequently refers in generic terms to companies **outperforming their base returns and returning high dividends to shareholders**. It is important to note that this characterisation does not apply to Bristol Water.

We also have concerns where Ofwat raises new matters or takes positions that differ substantially from those stated in the past. In particular:

- Ofwat now claims that Bristol Water is not a "*small*" company, despite leaving Bristol Water debt costs out of the calculation of industry embedded debt on the grounds that it is a small company. Ofwat also presents new analysis that the cost of debt premium for small companies should only be 5bps rather than the 33bps they allowed for two companies at the FD.
- On our historical debt, Ofwat advocates the view that water company investors should carry all the risk for past investment decisions. Ofwat suggests that shareholders expect a one-way bet, that we ask for a pass through of actual debt costs and that our costs are below some other companies. This misrepresents our position and calculation of the CSA.
- We raise in our Statement of Case the fact that Ofwat's notional financeability test in the FD only showed £20m five-year totex headroom above a 1.0x AICR ratio, below the £25m notional totex downside let alone any allowance for other downside risks, such as not allowing a CSA adjustment or for ODIs. Based on Ofwat's Response, we are not clear whether Ofwat still believes this was a financeability test and/or what its role was.

Contents

Section A: Cost of capital

4. Summary

36 Our Statement of Case identified a number of errors in Ofwat's approach to setting the allowed cost of capital for Bristol Water:

(a) Ofwat disallowed Bristol Water a CSA on the basis that it did not satisfy Ofwat's customer benefits test. This was notwithstanding the CMA having rejected the relevance of this test in CMA15.[10]

(b) Ofwat set the CSA too low due to errors in assessing the embedded cost of debt, the ratio of new to embedded debt and the cost of equity premium.

(c) There were further errors in setting the industry cost of capital, including in relation to the total market return (**TMR**), risk-free rate (RfR), asset beta, debt beta, the cost of new debt and the ratio of embedded debt to new debt.

37 In its Response, Ofwat has repositioned the issue of the Company Specific Adjustment as a claim to pass through our embedded debt cost and a new challenge arguing that there is no compelling evidence that the level of the CSA requested by us is appropriate, in contradiction to its previous finding in the FD that the 'levels assessment' test was satisfied. We address these arguments, including Ofwat's new claims, in section 5 below.

38 In relation to the cost of equity CSA, Ofwat argues that our requirement for the CSA is new and an abuse of process. As set out in section 6, this is not correct. We had raised the cost of equity CSA in our response to the Draft Determination and expressly stated that we may seek this adjustment if there was a price control redetermination.

39 In section 7, we address the points made by Ofwat in relation to other cost of capital issues, including on the ratio of embedded debt to new debt, asset beta and TMR.

5. Company Specific Adjustment – Cost of Debt

5.1 Key issues raised in Ofwat's Response

40 In its Response, Ofwat has, for the first time, challenged our status as a small company and challenged the existence of higher debt financing costs for small companies.

41 The core of Ofwat's argument in the Response can be summarised as follows:

- Bristol Water is not a 'small company' in absolute terms;[11]
- Our higher cost of financing is solely a result of our own choices, i.e. due to the timing and tenor of our existing debt;[12] and

[10] CMA(2015), Bristol Water plc: A reference under section 12(3)(a) of the WIA91 – Report (**CMA15**).

[11] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, Table 6.1.

- Specifically for Bristol Water, the company has locked in long-dated and expensive (relative to current market conditions) debt in the early 2000s. Ofwat claims this debt was issued in part to pay dividends / set up intercompany loans, which, whilst even if efficiently incurred at the time, is currently at higher rates than the market rates that have subsequently became available.

42 Ofwat has thus reframed the issue of the CSA as an issue of the cost of 'embedded debt' that should not, in Ofwat's view, be remunerated. The issue is largely repositioned by Ofwat as a problem with our past choice of a long tenor, where Ofwat's argument is that the company should not pass on to customers the cost of long duration debt, even if it was efficiently incurred. Implicitly, Ofwat suggests that investors should have predicted falling interest rates, chosen a shorter tenor, and faced refinancing risk.

43 More widely, once Ofwat has reframed the issue of the CSA as an 'embedded debt' issue, Ofwat then argues that under the notional cost of debt (**CoD**) allowance, companies should bear the risk of a gap between past and current rates in order to have the incentive to time debt efficiently. Ofwat further argues that its approach is justified simply because it creates winners and losers as it is not an 'actual cost of debt pass through' regime. Finally, Ofwat states that under this regime, cost recovery is (generally) ensured over the life of the loan but companies might be sometimes above and other times below the allowance across several price controls.

44 To support this argument, Ofwat uses Figure 6.1 in Document 003 of its Reponse to demonstrate that in its view there was over-recovery on Artesian debt in the 2000s. Therefore, Ofwat argues that we have 'headroom' for under-recovery in subsequent periods, as the regime only need allow reasonable prospect of cost recovery over the life of the loans (having made the assumption for the comparison that the tenor of the loans should be shorter).

45 Ofwat also claims that investors in the UK water sector have always had clarity that debt is not a pass-through item and that they therefore have to be prepared to face exposure and under-recovery in some regulatory periods.

46 Finally, Ofwat states that if the CMA were to allow the actual cost of debt for companies that have costs above the allowance in a particular period, this would undermine the concept of notional allowance as companies will always appeal if their costs are above, and opportunistically take advantage of allowance if their costs are below the allowance.[13]

47 Specifically in the case of Bristol Water, in relation to embedded debt, Ofwat claims that there are three water and sewerage companies (**WaSCs**) with a higher cost of debt than us.[14]

48 In relation to new debt, Ofwat cites evidence from our publicly listed bond (2011) citing this trades below the iBoxx at the moment.

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[12] Ofwat (2020), 003, Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.12.
[13] Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 2.47.
[14] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.36.

5.2 Reply to Ofwat's Response

49 This section sets out our reply to specific points that Ofwat raised in relation to the Company Specific Adjustment on debt as discussed above.

(1) Ofwat's Response is inconsistent with its PR19 FD and its own precedent established over the last four price controls

50 Ofwat's position on the existence of, and need for, a CSA on debt for Bristol Water has significantly changed since its PR19 FD.

51 Specifically, in the PR19 FD, Ofwat's stated reason for disallowing a CSA adjustment on debt for Bristol Water was that we did not satisfy Ofwat's 'customer benefits' test:[15]

> "*We do not allow the company's proposed company-specific adjustment to the allowed return on capital* ***because the potential benefits do not adequately compensate customers for the increased cost****.*" (emphasis added)

52 From the above, it is evident that Ofwat did not dispute **the existence** of such higher financing cost for us as a small company, but, instead, it viewed that such an adjustment should not be allowed in revenues because there are no offsetting benefit to 'adequately compensate consumers' if the cost were to be allowed.

53 In fact, as shown in the table below reprinted from Ofwat's Allowed Return on Capital technical appendix of the FD, Ofwat explicitly recognised that we passed the 'level assessment' test of the suite of CSA tests it prescribed, where this assessment answers the question whether there is "*compelling evidence that the level of the requested adjustment is appropriate*".[16] Therefore, passing the 'level assessment' meant that Ofwat thought there was compelling evidence that we do face higher financing costs as a small company.

Table A1 Ofwat FD conclusions on company-specific adjustments

Table A1.1: Our final determinations assessment of claims for a company-specific adjustment:

Assessment:	Bristol Water	Portsmouth Water	SES Water	South Staffs Water
Level of uplift:	Pass	Pass	Pass	Pass
Customer benefits:	Fail	Pass	Fail	Pass
Customer support:	Pass	Pass	Fail	Pass
Overall decision:	**Fail**	**Pass**	**Fail**	**Pass**

[15] Ofwat (2019), FD, page 11.

[16] Ofwat (2019), FD, Allowed return on capital technical appendix, Annex 1: Company-specific adjustments to the cost of capital, page 94.

54 Ofwat also said that it found that 'the notional small company' faced a 35bps higher embedded debt cost relative to the allowance, and 25bps higher new debt cost.[17] As shown in the table above, we were considered within this sample of small companies to which this 'notional small company' uplift applies, having passed the levels assessment test. Ofwat's FD therefore clearly recognised the existence of higher financing costs for Bristol Water and the group of small companies applying for the CSA, but thought that, in the case of Bristol Water, there are no offsetting 'customer benefits' to merit allowing the recovery of this cost, as also shown in the table above.

55 Therefore, Ofwat's position in the Response, where it argues that we are not a small company, and that it does not face higher financing costs on debt due to size, directly contradicts its assessment of our financing costs in the FD, where it recognised that this cost exists.

56 Ofwat's Response is also inconsistent with the position that it adopted historically on this issue, as it has allowed a higher cost of capital for small companies at the PR94, PR99, PR04 and PR09 price determinations.

57 For example, at the PR09 price review, Ofwat allowed Bristol Water (and other small companies) a Small Company Premium, stating:[18]

> "*There is evidence that small companies face different challenges to larger water companies in accessing debt. Therefore,* ***there is a need for a small company cost of debt premium****.*" (emphasis added)

58 Similarly, at PR14, Ofwat again reaffirmed the existence of such costs, stating that small companies including Bristol Water did face higher debt financing costs as a result of difficulty of accessing bond markets:[19]

> "*While the* ***six smaller WoCs (Bristol Water****, Dee Valley Water, Portsmouth Water, Sembcorp Bournemouth Water, Sutton & East Surrey Water, and South Staffordshire Water) did not face higher equity costs, they* ***did face higher debt costs****…*
>
> "*… smaller WoCs face a higher notional cost of debt due to the small size and difficulty accessing bond markets, which is equivalent to 25 basis points on the efficient notional cost of debt …*" (emphasis added)

59 Finally, Ofwat **excludes** our Artesian debt and publicly listed debt from its calculation of a notional cost of debt allowance, precisely for the reason that small companies face higher financing costs. This stands in direct contradiction to the view that we should have been able to perform in line with the allowed cost of debt without the CSA, given that the allowed cost of debt for an efficient company in the sector excludes small company debt.

60 In summary, Ofwat's current position that we are not a small company, and that we do not face higher financing costs due to size, is new and in direct contradiction with its previous position as well as well-established regulatory precedent on this issue.

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17 Ofwat (2019), FD, Allowed return on capital technical appendix, Annex 1: Company-specific adjustments to the cost of capital, page 95.

18 Ofwat (2009), Future water and sewerage charges 2010-15: Final determinations, page 132.

19 Ofwat (2014), Final price control determinations notice: policy chapter A7 – risk and reward, page 47.

61 This is particularly surprising given that our portfolio of debt is largely unchanged since the last price review, and, specifically, the higher cost Artesian debt has been in place since the early 2000s.

62 Separately, all of Ofwat's consultants calculate the CSA by including Bristol Water Artesian debt in the 'small water only companies' (**WoC**) samples.[20] Ofwat does not explain its departure from their approach, including the implication that Ofwat allowed an excessive cost of debt at the FD for Portsmouth Water and South Staffs Cambridge Water who received the 33bps CSA.

(2) Ofwat's Response position is inconsistent with regulatory precedent including the last two CMA re-determinations

63 The CMA recognised that small companies face higher financing costs and that this was an issue for Bristol Water in both previous references in 2010 and 2015.

64 In its 2015 re-determination, the CMA stated that the small companies do face a higher cost of capital and critically that this principle was also recognised by Ofwat:[21]

> "*The aim of the SCP is to ensure that we set a level for the cost of capital which a small company could reasonably achieve. The need for an SCP is predicated on the assumption that smaller companies, will, on average, face a higher cost of debt than larger companies.*
>
> "*This principle was supported by Ofwat's own analysis in PR14. If the cost of debt for both small and large companies were used to decide the cost of debt for all companies then, in the absence of an SCP, smaller companies would tend to face an assumed cost of debt that is lower than their actual financing costs on average, over time. In contrast, larger companies would tend to face an assumed cost of debt that is higher than their actual financing costs on average, over time.*"

65 In both of our previous references to the CC and CMA (CC10 and CMA15), the CC and CMA allowed a 40bps Small Company Premium (**SCP**, equivalent to the CSA) in the calculation of the allowed notional cost of debt for Bristol Water, having considered our portfolio of debt financing including the Artesian debt issued in the early 2000s.

66 In CMA15, the CMA overruled Ofwat's disallowance of an SCP for Bristol Water. Ofwat's stated reason at the time in its PR14 final determination (the same as its position in the PR19 FD) was that we did not pass the 'customer benefits' test.

67 The customer benefits test was considered and unequivocally rejected by the CMA, on the ground that it did not constitute a valid reason not to allow efficient financing costs for small companies such as Bristol Water. In rejecting the validity of the test, the CMA stated that: (1) there was no causal link between the benefits estimated under this test and the efficient cost

[20] See PwC (2014), Company Specific Adjustment to the WACC. Also see the latest assessment submitted by Europe Economics on behalf of Ofwat (spreadsheet 'Figure 4.1 Table 4.1 (CONFIDENTIAL - COMMERCIALLY SENSITIVE) (003)'.

[21] CMA15, paragraphs 10.64 - 10.65.

of debt, (2) the test was not necessary to meet the duty to consumers; and (3) it risked undermining regulatory consistency while creating stranded asset risk.[22]

68 The CMA explicitly stated that it considered that financeability was the critical condition for setting an appropriate level of the cost of capital, and that efficiently incurred costs on financing should be recognised. The CMA also noted that Ofwat accepts that small companies have higher financing costs, which was the relevant consideration for setting the cost of capital (rather than the 'customer benefit' test):[23]

> "*…in our view the primary consideration in setting the cost of capital was whether efficient companies could finance their functions. Ofwat accepted that small companies have, on average, a higher cost of capital. While this remains the case, our starting point would be that this should be taken in to account in the assumption on the cost of finance.*"

69 Although the CMA unequivocally rejected the customer benefits test as a valid reason for disallowing a CSA, Ofwat nevertheless continued to apply such a test over the PR19 process and rejected the CSA for Bristol Water on that basis.

70 Ofwat's position in its Response is therefore inconsistent with established CMA precedent. It is also evident from the above that Ofwat's current position – that Bristol Water is not a small company, and that our high debt financing cost are an 'embedded debt' issue as a result of locking in long-term debt in the early 2000s – is an attempt to reframe and reposition this issue, in contrast to how both Ofwat and the CMA have viewed this issue in the past, despite the fact that our debt portfolio is largely unchanged from the last price review.

71 This approach critically undermines investor confidence, as noted by the CMA before, because regulatory departures from established precedent undermine confidence that on average investors have a reasonable prospect of recovery of their efficiently incurred costs (in this case, the cost of debt financing).

(3) We require a premium over Ofwat's allowance due to size regardless of what Ofwat's allowance implies in terms of optimal timing of debt, given that the allowance does not account for size

72 Ofwat's argument appears to be that (1) its notional cost of debt allowance is sufficient if it allows a hypothetical notional (presumably representative of the industry) company to recover its cost over the life of the loan (but not in every regulatory period as in some periods companies' costs might be above the allowance), and that (2) this is to incentivise efficient timing of debt issuance.[24]

73 In practice, companies structure their issuance according to the following factors:

(a) timing of debt issuance;

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22 CMA15, paragraph 10.72.

23 CMA15, paragraph 10.75.

24 See Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraphs 6.40 – 6.42. Also see Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return, paragraph 2.47, andOfwat (2020), Reference of the PR19 final determinations: Cross-cutting issues, paragraph 5.58.

(b) choice of tenor;

(c) choice of type of instruments (e.g. fixed, floating, ILD debt); and

(d) achieving a better credit rating than the allowance.

74 Size is not a factor that Ofwat specifically accounts for when setting the cost of debt allowance. In fact, precisely for this reason, and in recognition of the fact that small companies have higher financing costs, Ofwat deliberately **excludes** small companies' debt (specifically our Artesian and publicly listed debt) when calculating the **notional** cost of debt allowance. Ofwat separately assesses a 'Company Specific Adjustment' for small companies to add to the notional CoD allowance.

75 If Ofwat aims to set the notional cost of debt allowance (which reflects the average cost of debt in the industry) and if size does not systematically affect costs, then it is not clear why Ofwat **excludes** small company debt when assessing the notional CoD allowance. This would result in a higher allowance for WaSCs, to the detriment of their customers. This was Ofwat's stated reason in the December 2017 PR19 methodology, based on the analysis by Europe Economics at that time.

76 As shown in previously in CMA15 analysis, PwC for Ofwat (2014),[25] and, most recently, in the KPMG SCP Report,[26] size **does** affect financing costs. In fact, once all other factors that affect pricing of debt have been appropriately and robustly controlled for (i.e. credit rating, tenor, type, and timing of issuance), small companies such as Bristol Water clearly face significantly higher cost of debt financing than larger companies.

77 As explained in detail in the KPMG SCP Report,[27] there are a number of reasons for this finding including: (1) small companies are unable to tap public bond markets and often rely on more expensive sources of financing such as bank loans; (2) small companies might face illiquidity premia; and (3) issuance costs, some of which are fixed / invariant to size of issuance, form a greater proportion of the quantum of debt issued (whereas Ofwat provides one fixed allowance for all companies). In addition, small companies face a higher 'cost of carry', because their debt issuance is 'lumpy', and debt is often raised before the funds raised are fully deployed; this is because it is uneconomical for small companies to raise debt in small tranches and on a regular basis.

78 Overall, it is clear that, regardless of what the Ofwat allowance implies in terms of optimal debt issuance (tenor, timing, type, credit rating), as a small company, Bristol Water could not consistently achieve that because the allowance does not account for size. Ofwat excludes small company debt from the WaSC cost of debt allowance (including our Artesian and 2011 issuance), so the industry cost of debt is set with reference to large companies' debt financing and so without any adjustments. The allowance does not reflect the additional cost of financing faced by small companies by design.

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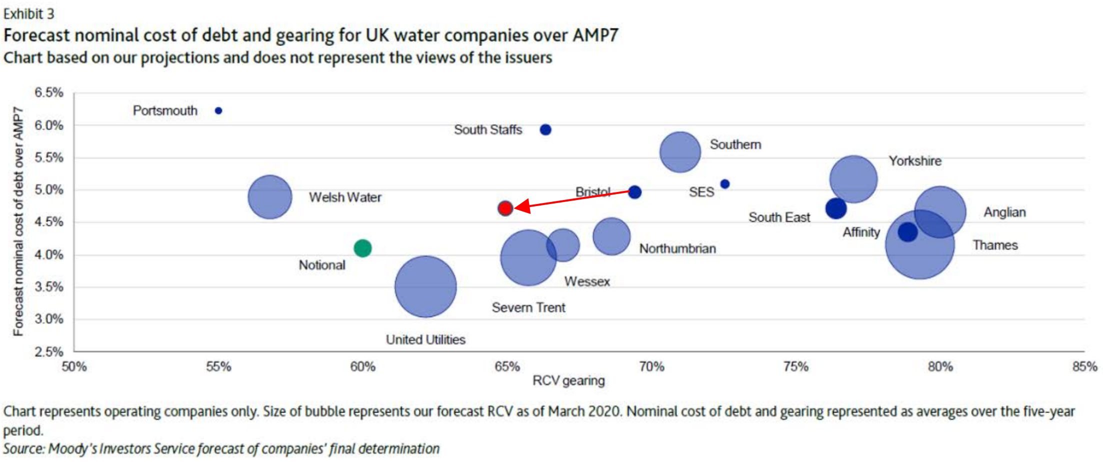
25 PwC (2014), Company Specific Adjustment to the WACC. Accessed: https://www.ofwat.gov.uk/wp-content/uploads/2015/10/det_pr20141212riskrewarduplift.pdf

26 KPMG SCP Report, section 4.

27 KPMG SCP Report, section 3.2.

79 Finally, our required CSA is calculated for the 'relevant notional' company, and is not intended to allow full recovery of our actual costs, contrary to how Ofwat has portrayed this issue in its Response. We aim to reflect the 'average' additional cost of debt faced by small water companies in the sector through the 'relevant notional' company approach, consistent with how the CMA has considered this issue in the past.[28] It is useful to illustrate this on the graph from the recent Moody's sector report, which also illustrates that our gearing is similar to the comparator listed WaSCs, once the impact of the absence of the CSA uplift is adjusted:

Figure A1 Moody's forecast nominal cost of debt for UK water companies



(4) The financing cost risk is not appropriately apportioned through the notional CoD allowance in the FD

80 Our inability to achieve the industry cost of debt without the CSA is principally related to its size rather than the tenor and timing of its debt. Despite this, Ofwat's response raises the issue that, given that tenor and timing of issuance are management choices according to Ofwat, therefore companies should bear the risk of those choices:[29]

> "*… choices over tenor of issuance rather than size disadvantage are the relevant issue [for Bristol Water]. As tenor is a management choice, and the risks of the company's long-dated issuance were clear, we consider that shareholders, not customers, should bear the consequences of this choice.*"

81 Irrespective of the size issue, Ofwat's rationale as stated above would still penalise us for conduct that was reasonable and necessary in the circumstances, to which we respond below.

82 Water companies regularly issue long-term debt to part finance their assets, which have very long economic lives, and longer than for most of the rest of the corporate sector. As a company operating in the water sector, we face some choice as to what type of debt we could issue, e.g. in terms of tenor and coupon (fixed vs floating).

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[28] In CMA15, the CMA assessed the appropriately notional CoD allowance for Bristol and separately assessed the actual CoD at the time as a cross check. The notional Cost of Debt allowance contained an SCP of 40bps based on the average / estimated level of additional financing costs small companies in the water sector face relative to large companies.

[29] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.42.

83 However, unlike in other sectors, we have limited choice as to when to issue debt and in what quantum. This is because we require regular access to debt markets to finance our operations and investments, and our small size makes it uneconomical to do so. In other words, as a small company, it is inefficient for us to try to tap debt capital markets on a frequent basis, and/or attempt frequent refinancing (through locking in short-duration debt) because doing so would incur significant transaction costs which makes such frequent issuances not economically efficient.

84 Our financing needs are dictated by our capex and operational requirements, e.g. the Artesian issuance was raised at the time to enable us to finance substantial forward capex requirements at the time, part of the PR99 review. Our enhancement capex requirements are now much lower, which is a function of effective management of resilience, operational performance and leakage.

85 Ofwat also cites the special dividend of £10m that was issued at the time Artesian debt was raised. This dividend was small in size and substantially lower than the cumulative dividend retained in the business that has reduced the company's gearing since 2014.

86 The regulatory regime implies that, even when water companies issue debt at the most efficient cost available to them in the market at a given point in time, they are still exposed to significant risks of a mismatch between their (efficient) costs and regulatory allowances in the future, because the allowance changes in every price reset due to:

(a) changing market conditions, and

(b) discretion in regulatory policy when setting the allowed cost of debt.

87 Therefore, Ofwat's position is that the combined risk of the impact of the two factors mentioned above should be allocated, in its entirety, to companies, despite the fact that companies have no control of the above two factors.

88 This combined risk is significantly determined by the scale of market movements over time (first factor) and how the regulatory policy (the second factor) takes these movements into account. Ofwat argues that its approach to setting the allowed embedded cost of debt appropriately and sufficiently mitigates the combined risk mentioned above, because it employs a trailing average approach, which partly reflects the market cost of debt in the past.

89 Both Ofwat and the appealing water companies seem to agree that companies should bear the cost of any inefficient cost of debt issuance. Although Ofwat states that it does not comment on the efficiency of specific instruments,[30] its position can be inferred from the difference between Ofwat's benchmark and the actual cost of debt at the time of issuance. However, we do not agree on how to treat the gap between the cost of efficient debt issuance in the past and the current Ofwat allowance.

90 In our case, as for other small companies, there is also a dispute about how the allowance should be set. WoCs argue that by excluding WoCs' bonds and disallowing small company

[30] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.38.

premium, this is a clear error in terms of how the notional debt for the sector is set. This second issue was discussed above, and the first issue is discussed further below.

91 Ofwat also argues that reflecting the actual costs of debt (efficiently incurred which Ofwat does not dispute) in some way in the allowed cost of debt "*would greatly dilute incentives to issue debt efficiently*".[31] However, this is not the approach that regulators generally take to incentives, that factors outside of companies' control in the long run increase costs to customers. In the case of financing costs, companies have limited ability to control timing of issuance (as they generally issue debt when they need cash to fund investment), and have no ability to forecast future market conditions beyond what is reflected in current market conditions about expected future market prices.

92 That companies should not be fully exposed to risk on the cost of debt, in the presence of factors outside their control, was recognised in CC 2010 when setting our cost of debt allowance. The CC specifically noted that this is undesirable as it would have financeability implications: [32]

> "*Ofwat sets a single rate for all companies of a particular size. This has the advantage of giving companies a strong incentive to reduce the cost of their debt. However, one of the main factor affecting the cost of fixed-rate debt is the time it was taken out, and interest rates fluctuate over time. As debt issuance may be affected by company-specific factors (for instance, the timing of capex) and the cost of fixed-rate debt is affected by unpredictable changes in interest rates, there may be a danger of this approach penalizing companies that need to borrow at times of high interest rates. It might prove unsustainable if such companies are unable to finance their functions, or in order to avoid this, it might require headroom over and above the actual average to the detriment of consumers.*
>
> "*In its approach to the cost of debt, therefore, Ofwat seems to take no account of specific company circumstances (other than company size). We note that this is in contrast to other areas of price controls (opex and capex), where Ofwat has developed approaches that combine incentives for cost reduction with taking into account differences in company circumstances (of which timing of debt issue may be regarded as an example).*"

93 Ofwat argues that setting the cost of embedded debt using a 15-year trailing average at PR19 appropriately mitigates companies' exposure to changes in market prices,[33] i.e. that the regulatory policy appropriately and sufficiently mitigates companies' exposure. This assertion is flawed for several reasons:

- Ofwat's approach allocates significant risk to companies especially in case of large market movements and significant changes in regulatory policy over time (which Ofwat emphasises in terms of its discretion that companies should assume is always present) – the implied risk exposure undermines companies' financeability and is inconsistent with its cost of capital.

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31 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 3.94.
32 CC10, Appendix N, paragraph 47.
33 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 3.94.

- Ofwat's position seems to be internally inconsistent – on the one hand Ofwat argues that companies should bear the risk of market movements, on the other hand it tries to argue that its mechanism is sufficient to mitigate this risk.

- Ofwat's solution based on 15-year trailing average is too short – it is shorter than the average tenor of debt as part of the cost of debt index it uses (20+ years), it effectively implies that no debt should be issued with the tenor of more than 15 years. It is shorter than the tenor of debt that the water sector issued at the time of our Artesian issuance, or subsequently.

- Even if this average were to be extended, companies that did not issue in equal tranches as the simple iBoxx average implies, would face a shortfall in allowances to cover their efficiently incurred costs.

- Ofwat's approach also creates wrong incentives for companies to issue shorter term variable interest rate cost of debt as this strategy would (currently) outperform the index, which is inconsistent with typical infrastructure financing, and creates refinancing risk that Ofwat does not take into account.

- Ofwat argues that its policy has resulted in winners and losers, which it argues is sufficient to justify its approach. Ofwat mistakes the fact that market movements and changes in regulatory policy (neither of which companies control) will necessarily result in some companies outperforming and others underperforming its allowance, for evidence that (i) its policy creates the right incentives and that (ii) some companies that have benefited from Ofwat's approach are better at financing (which Ofwat's argument implies). In fact, Ofwat's policy is more likely to create winners and losers 'by chance', or at least due to factors beyond company's control, since the timing of debt issuance (which in turn depends on their funding requirements), and market movements, might be favourable to some companies but not to others.

94 Ofwat then argues that our costs are not higher than the costs of some of the WaSCs, as well as being lower than for other WoCs. Ofwat appears to be suggesting that Bristol Water is simultaneously a 'winner' due to its apparently lower debt costs outperforming other, larger companies, as well as being 'a loser' due to its own fault of issuing more expensive debt than Ofwat's embedded debt allowance. This logic from Ofwat is clearly flawed.

95 The considerations we set out above imply that efficiently incurred, actual embedded cost of debt has to be taken into account when setting the embedded cost of debt allowance in order to share the risk of market movements between customers and companies.

96 This is also consistent with CC and CMA precedent in previous references, where the approach to setting the cost of capital allowance was informed by both the relevant notional cost of debt for Bristol Water, as well as its actual cost of debt.

(5) Ofwat's assessment that we may recover the cost of debt over the life of the loans is flawed

97 Ofwat states in its Response that we have benefited from historical outperformance in relation to the cost of debt and that "*it is not clear that the company is set to under-recover debt*

interest costs on average over the debt's 30 year term".[34] This statement is misleading and based on flawed analysis.

(i) Ofwat's evidence of historic outperformance is flawed

98 Ofwat appears to argue that companies should have reasonable prospect of cost recovery over the life of their loans, but that a company's allowance could be set either above or below its actual cost of debt for any particular regulatory period.

99 Ofwat relies on its Figure 6.1 in its Response to assert that Bristol Water (and other small companies) that issued debt through the Artesian facility, have over-recovered on their cost of debt over a number of previous price controls. Ofwat concludes that it is not clear that we will under-recover our debt interest costs over its entire 30 year term. The implication of this is that, in Ofwat's view, it is acceptable for there to be under-recovery over the next price control period, and potentially more price control periods in the future.

100 Ofwat has presented misleading information in this context because Figure 6.1 does not show a like-for-like comparison of costs and allowances – specifically:

(a) **Additional non-cash indirect costs are included in the allowance but not in the 'effective yield' on Artesian debt:** Ofwat's allowances, as presented in Figure 6.1, reflect the all-in real cost of debt that has been allowed in a particular price control. The all-in real cost of debt allowance includes provisions for the following items that are part of the total cost of debt for companies but are not included in the effective yield on Artesian debt:

(i) **Transaction costs:** Ofwat's allowance (and allowances under CMA's previous determinations) include c. 10bps of transaction costs to cover companies for the higher transaction cost associated with raising debt financing, such as legal fees, rating agency fees, arranger fees (costs depend on type of debt financing incurred). These costs are (to our knowledge) not included in the effective real yield on Artesian calculated by PwC and used in Figure 6.1.

(ii) **Liquidity cost allowances to meet covenants:** In the past, the CMA has made explicit provisions for certain types of costs that we incur, e.g. in particular around covenants that require us to hold minimum cash balances. The CMA has in the past allowed 20bps for such costs on both existing and new debt (i.e. included on top of the industry cost of debt allowance).[35]

(iii) **Non-cash costs included in CSA:** The allowance in the PR99 and PR04 in the 'upper bound' presented in the chart includes the CSA on debt for small companies. The CSA at the time was based on the acceptance that small companies require this premium because (1) small companies face higher transaction costs in percentage terms relative to large companies, because transaction costs are to an extent fixed, and for small companies these constitute a large proportion relative to the size of issuance (therefore a standard 10bps transaction cost allowance may be not be appropriate for a small company) and

[34] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.40.
[35] CC10, Appendix N and Annex 3.

(2) small companies face a cost of carry, i.e. a situation where debt has to be raised before it is needed, meaning CoD has to be financed in full before capex is incurred and enters the RAB to earn a return. Both of these costs are not costs that would be reflected in the 'effective yield' on Artesian debt.

(b) **The cost of financing for small companies is not reflected in full in Figure 6.1 of the Response.** Ofwat's allowance would reflect the allowance for the portfolio of embedded debt that companies have on their balance sheets at the start of the price control as well as the allowance for new debt expected to be raised over the period. However, in Figure 6.1, Ofwat compares this allowance with the fixed effective yield on particular individual Artesian debt instruments. This comparison cannot be used to conclude whether Bristol Water, or any of the other companies, outperformed the allowance, because the allowance is meant to compensate companies for the overall cost of debt on their entire portfolio of debt in a particular regulatory period.

101 Ofwat has not taken account of the overall weighted average cost of the portfolio of debt instruments, but instead has only compared the allowance to individual debt instruments. This is misleading as individual instruments do not reflect the average cost of debt for companies. On that basis it cannot be concluded that the allowance is overall 'broadly aligned with costs'.

102 To illustrate why Ofwat's comparison is misleading, we note that in 2009 the CC stated that our actual, weighted average real cost of debt was 3.53% as of 2009,[36] higher than any of the effective yields on Artesian debt presented by Ofwat in Figure 6.1. To calculate the all-in cost of debt, the CC then also made a provision for 10bps of transaction costs and 20bps of liquidity for covering covenants. The overall all-in actual cost of the portfolio of debt for Bristol Water calculated by the CC stood at c. 3.8%. The CC then extensively assessed market conditions over the upcoming period, to conclude that the expected cost of new debt over the period was 4% in real terms. The CC then set the allowance at 3.9% real, which was the best estimate at the time of our all-in overall cost of debt over the period.

103 These numbers show that the 'headroom' above our actual outturn embedded cost of debt at the time included in the allowance by the CC was only 10bps. Ofwat's Figure 6.1 projects a much greater 'outperformance' wedge because it cites only our Artesian effective yields (at 3.1-3.4% real) and excludes any other costs such as transaction costs and liquidity arrangements.

104 Finally, as evidenced from this example, the 10bps of headroom above our real embedded debt in the CC's cost of debt allowance in 2010 was intended to reflect the expected increases in the new cost of debt over the period. Even where our outturn cost of debt might have subsequently deviated from this figure, this would have been because market conditions have turned out to be different from the expected conditions at the time when the allowance was set. We do not have control over this risk and therefore should not be penalised for outturn costs over the period deviating from allowances.[37]

36 CC10, Appendix N and Annex 3, paragraph 48, page N11.

37 Another example to illustrate the point is that in 1999, at the point where our PR99 allowance was set, our cost of debt was 4.56% in real terms, excluding transaction, liquidity costs or cost of carry (see our Annual Account for the FY1999). By comparison, the PR99 allowance as per Ofwat's Figure 6.1 was 4.88%. The gap of c. 30bps is explained with the inclusion of all additional costs such as transaction, liquidity and cost of carry which we face on top of our actual coupon cost of debt.

105 In summary, a careful assessment shows that Ofwat's Figure 6.1 is misleading as what it inaccurately ascribes to 'outperformance' is in fact the gap between the allowance and our costs due to (1) non-coupon costs (transaction costs, liquidity costs, cost of carry) being included in the allowance but not in the 'effective yields' on our Artesian debt; and (2) erroneously comparing the allowance which is meant to reflect our all-in cost of the entire portfolio of debt with the cost of individual instruments within our debt portfolio.

(ii) Ofwat's arguments on tenor are misleading as they are based on the benefit of hindsight

106 Ofwat states that it does not take a view on whether debt was raised efficiently, but nevertheless implies that that our high cost of finance locked in through the Artesian debt is essentially inefficient and that investors should bear the risk of the market moving not in their favour. In fact, Ofwat specifically makes the argument that instead of getting long-term exposure, we could have issued debt with a shorter tenor, which would imply refinancing when rates turned out to be lower.[38] Ofwat asserts, with the benefit of hindsight, that had we done that, we would have had an overall all-in cost of debt which is lower than Ofwat's current allowance.

107 This argument almost suggests that in 2002 we could have forecast the financial crisis, 'lower for longer' interest rates and Covid-19. It assumes that we could have obtained the same financing cost, covenant arrangements, and demonstrated financial resilience at the time. If Ofwat and financial markets had such foresight, the regulatory framework and cost of capital would have been different then, removing the need retrospectively to consider the outcome with the benefit of hindsight.

108 Specifically, Ofwat's argument is misleading for the following reasons:

(a) **Ofwat uses the benefit of hindsight to argue that we would have been better off if we had used shorter tenor.**

In efficient markets, the price of long-term debt reflects the expected price of a chain of shorter-term issuances covering the same period, i.e. as of the time of issuance, market prices would have been such that we would have been indifferent to issuing one long-tenor bond or two subsequent shorter-tenor issuance, which would also involve taking refinancing risk. For example, a 30-year tenor locked in as of 2005 (maturing in 2035) would have had an annualised return that would be equivalent to the expected annualised return that investors would have to incur if they were to raise one debt instrument in 2005 with 15-year tenor, with subsequent refinancing in 2020 for additional 15 years.[39]

It is misleading for Ofwat to claim that our 'locking in' of long-term debt was effectively inefficient because investors in efficient markets could not have predicted how the price of future short-term debt would move, beyond what would have already been priced as an expectation in long-tenor debt.

38 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.41.

39 Because in efficient markets, (1+30YTreturn)^30 = (1+15YT)^15 * (1 + 15Y forwardT+15)^15

(b) **Our tenor on Artesian debt did not compare unfavourably to the sector benchmarks at the time of issuance**, where most Artesian debt issuances were of very long tenor.[40]

(c) **Bristol Water has long-term assets and therefore it is appropriate for it to secure long-term financing to match the life of the assets**. Investors at the time (and still today) would have been expecting that they should have reasonable prospect of cost recovery so long as these costs were deemed to be efficient at the time.

(d) We are a small company, and as such cannot **frequently access debt capital markets** and refinance due to fixed transaction costs which makes such frequent issuance uneconomical (our average debt ticket of c. £50m is considerably smaller than the average issuance of larger companies). The [✂][41] demonstrates this remains the case.

109 Overall, Ofwat has not demonstrated that a wrong choice of the tenor of our Artesian issuance is the root of the issue. Ofwat's argument relies on benefit of hindsight to claim inefficiency. Neither we nor our investors could have predicted how markets would move in the future, therefore this argument is misplaced. In fact, as we have outlined, there were good reasons at the time (which still apply today) for why the optimal policy for a small company like Bristol Water is to pursue a strategy of infrequent issuance, in particular to avoid the transaction costs associated with gaining market access.

(6) Ofwat's new estimate of the size premium is inconsistent with precedent and its CSA allowance for other small companies

110 In the FD, Ofwat allowed a CSA of 33bps for both Portsmouth Water and SSW, and concluded that this was an appropriate level for Bristol Water.[42] Ofwat departs markedly from this position in its Response and now asserts that the CSA is as low as 5bps.

111 We have reviewed the analysis presented by Europe Economics for Ofwat and show that there are material gaps and methodological flaws in this analysis, which indicate that Ofwat has not in fact provided any reliable evidence to move away from the precedent on appropriate value of the CSA, and the amount that Ofwat allowed Portsmouth Water and SSC in their final determinations.

112 The attempts to quantify the CSA rely on comparisons of spreads of WoC vs WaSC debt relative to appropriately selected benchmark indices. Chapter 4 in the KPMG SCP Report provides background to the approaches and explains that the three key criteria to control for are: (1) timing of issuance, (2) tenor of issuance; and (3) credit rating. Ofwat endorsed this methodology in its response to our IBP submission.[43]

113 The Ofwat/Europe Economics analysis did not follow the methodology that Ofwat itself endorsed during the PR19 process. Specifically, the analysis is flawed for the following reasons:

40 KPMG SCP Report, Table 1 (page 14).

41 [✂]

42 Ofwat (2019), FD, Allowed return on capital technical appendix, Annex 1: Company-specific adjustments to the allowed return on capital, pages 95 and 102.

43 Ofwat (January 2019), Technical appendix 4: Company-specific adjustments to the cost of capital, page 16.

(a) **The Europe Economics analysis is based on spreads to gilts and does not control for credit rating**. The analysis erroneously attributes to 'size' what could be a difference due to credit rating in the samples of WoC vs WaSC debt. This issue was extensively discussed in the KPMG SCP Report.[44] In fact, Ofwat explicitly endorsed credit rating as a factor that needs to be controlled for in its response to our original business plan submission.[45] In CMA15, the CMA also implicitly controlled for credit rating when calculating spreads of the sector relative to the iBoxx index (as explained in the KPMG SCP Report). Europe Economics' analysis is therefore a less accurate measure of the CSA as it misses a critical factor that drives debt pricing, and hence differences in WoC vs WaSC debt costs.

(b) **The analysis includes callable bonds in the WaSC sample and none in the WoC sample**. Callable bonds are bonds that can be redeemed early, which gives flexibility to issuers to retire debt early / refinance if interest rates fall. This exposes investors to risk and is the reason why callable bonds are generally more expensive (i.e. carry higher interest costs). The inclusion of callable bonds is likely to overstate spreads for WaSC debt. Since there are no callable bonds in the WoC sample, this is likely to under-estimate the difference. In contrast, the KPMG analysis controls for callable bonds.

(c) **The analysis calculates spreads relative to a maximum of 25Y gilt rate** even where bonds are much longer tenor – this is imperfect, although we recognise that this is a limitation of the data sample as gilt rates might not be available at longer maturities. This is another reason why the spreads to gilt analysis is generally flawed, and a better approach would be to use spreads to iBoxx of relevant credit rating and tenor, as was used by the CMA in 2015, and by KPMG.[46]

(d) **The analysis appears to selectively exclude Artesian III**, which has the largest premium to iBoxx in the WoC sample – the PwC analysis for Ofwat placed this issuance at premium to iBoxx of 66bps (after adding back 15bps as PwC analysis states spreads relative to iBoxx less 15bps). This appears to be a selective use of data as Europe Economics have not offered a rationale as to why any Artesian tranches should be excluded from the analysis.

(e) Although the analysis is presented as an 'update', **the analysis includes no new evidence on WoC issuance**.

114 Overall, these are material flaws in Europe Economics' analysis which are likely to affect its results. This new evidence by Ofwat fails to isolate the impact from size on the cost of debt at present, and is based on analysis which erroneously attributes to 'size' a combined set of differences in the sample of WoC vs WaSC debt such as differences in credit rating and structuring of bonds. Therefore, this analysis should not be relied upon.

115 We consider that previous analysis by the CMA and KPMG, which both rely on superior methods for isolating the impact from size on the cost of debt, should be used as evidence of the size premium.

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44 KPMG SCP Report, section 4.

45 Ofwat (January 2019), Technical appendix 4: Company-specific adjustments to the cost of capital, page 16.

46 KPMG SCP Report, page 26.

(7) Ofwat's claim that we face comparable debt costs to large WaSCs is factually inaccurate

(i) The traded Bristol Water bond issued in 2011 was issued at a significant premium to iBoxx

116 Ofwat claims that Bristol Water's traded debt issued in 2011 is cheap relative to the iBoxx index. However, as shown even by Europe Economics' analysis, this is misleading as the bond was issued at a significant premium to the iBoxx A/BBB index at the time of issuance. The bond was rated Baa1 at the time, and issued with 30Y tenor, higher than the iBoxx average of 21Y. Therefore, the bond had higher yield at issuance than the iBoxx index, but some of that difference could be explained with tenor and credit rating.

117 A better comparison (included in the KPMG SCP Report) is to compare the spread at issuance of this bond relative to the BBB iBoxx index. KPMG find that there is a considerable spread of more than 75bps at issue even under this measure. Therefore, it cannot be said that the bond was 'cheap' at issue.

118 The 2011 bond was also known to Ofwat at the FD, and was considered by the CC in 2010 and again by the CMA in 2015. In these instances this instrument did not prevent the CC or the CMA from allowing us a CSA. Given that Ofwat now asserts that the 2011 bond issuance is pivotal in the assessment of whether we should be allowed a CSA, it is incumbent on the regulator to explain why this now should be viewed differently. Ofwat has not done so.

(ii) Our cost of debt is not broadly similar to large WaSCs

119 We also reject the contention that our actual cost of debt is "*broadly similar*" to large WaSCs.

120 In the FD Ofwat noted that our reported cost of debt was higher than those of Welsh Water, Southern Water and Yorkshire Water.[47] Ofwat took account of this as part of its levels assessment, but still found that there was compelling evidence that the level of our requested adjustment was appropriate. As set out in the Statement of Case, it is inevitable that some companies happen to have a higher cost of debt than Bristol Water.[48]

121 Ofwat argues that we have a broadly comparable actual cost of debt relative to other large WaSCs, where the comparison is done using our annual stated cost in 2018/19, at 4.73% in nominal terms. As we have subsequently explained, this annual figure was significantly affected by low inflation in that year, affecting our Index-linked debt portfolio. Ofwat continues to cite this figure as our actual cost of debt, even though our Statement of Case explains that our expected cost of debt over the period using long-term inflation assumption on ILD as a more appropriate measure of the expected inflation-adjusted cost is 5.09%. Notwithstanding this correction, in its Response, Ofwat continues to cite 4.73% as our actual cost of debt, despite that this figure is not an accurate reflection of our expected cost of debt over the PR19 period.

47 Ofwat (2019), FD, Allowed return on capital technical appendix, Annex 1: Company-specific adjustments to the allowed return on capital, page 98.

48 Statement of Case, paragraph 222.

122 Ofwat argues that if any corrections on expected inflation are made in calculating our nominal CoD, it would have been applicable for all companies. They therefore suggest that the 'non-corrected' nominal interest costs in a given year (in this case, the cited annual interest costs in 2018/19 that include a specific down-ward biased outturn inflation) are therefore comparable across companies. This statement is misleading, as correcting for inflation will have different effect on the overall cost of debt for each company, depending on the companies' exposure to outturn inflation (i.e. depending on the proportion of ILD or derivatives positions in their overall debt portfolio). At the extreme, adjusting for inflation might have no effect for other companies, if they have no or limited ILD / inflation exposure.

123 Relative to the figure that correctly reflects our cost over the upcoming period, the only WaSC with debt more expensive relative to Bristol Water is Southern Water based on Ofwat's nominal CoD figures for Southern Water, Yorkshire and Dŵr Cymru.[49] Southern Water is a highly geared company, with a significant number of complex financing instruments, different timing of debt issuance, and also Artesian debt on its balance sheet. As a result of this known issue, Southern Water argued in a public consultation response to Ofwat, that embedded debt outside a 'corridor' should be treated separately, and, if deemed efficient, should be shared 50% with consumers.[50]

124 It is therefore misleading to claim that we have a comparable CoD to other WaSCs and lower CoD than three large WaSCs, where in fact our expected CoD over the period appears only lower than that of one WaSC, which has specific factors affecting its cost of debt as stated above.

125 Ofwat's consultants, Europe Economics, also argue that Bristol Water is not small in absolute terms compared to SMEs. The absolute size of Bristol Water is not a relevant issue and the absolute size cannot be a reason not to allow a CSA. The relevant question is whether we face a higher cost of debt than the industry allowance as a result of our size, and not whether we are small or large in general. In other words, the relevant issue is whether we have scale to allow frequent access to debt capital markets at no additional cost, comparable with that of large WaSCs. The empirical evidence suggests that this is not the case as found by the CMA in previous rulings, PwC for Ofwat (2014),[51] and KPMG (2020).[52]

(8) The customer benefits assessment should not have been applied

126 We explained in our Statement of Case why the customer benefits assessment should not be applied. However, if it were to be applied, then errors in its application should be corrected.

127 In its Response, Ofwat has made a series of high level points regarding the specific criticisms we raised with Ofwat's application of the test.[53] We set out our reply to Ofwat's points below.[54]

49 See Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, footnote 233.

50 Southern Water Response (October 2016) to Consultation on the approach to the cost of debt for PR19. https://www.ofwat.gov.uk/wp-content/uploads/2016/09/res_stk2016DebtConsSouthern.pdf

51 PwC (2014), Company Specific Adjustment to the WACC. https://www.ofwat.gov.uk/wp-content/uploads/2015/10/det_pr20141212riskrewarduplift.pdf

52 KPMG SCP Report, section 4.

53 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, table 6.3.

Table A2 Bristol Water reply to Ofwat's submissions on the customer benefits test

Bristol Water issue	Ofwat response	Bristol Water reply to Ofwat
Ofwat omitted relevant customer benefits from its benefits assessment (customer willingness to pay, C-MeX, innovation) Statement of case, p. 48, paragraphs 175-184.	Stated willingness to pay is unreliable as a guide to economic benefits when valuing something as complex as avoiding a merger, moreover we tested a bill impact of £1.80 per household per year. We estimate the revised bill impact as £6.00. C-MeX is a PR19 measure, and official (rather than 'shadow') data was not available to consider it. For C-MeX's predecessor, SIM, Bristol Water ranked 11th out of 18 companies in 2018/19, making it doubtful that it provides significant customer service benchmarking benefits. While noting some new examples of innovation cited by BRL we are still of the view that these are unlikely to make up the gap to positive NPV.	While willingness to pay information is not perfect, that is not justification to omit it entirely. Shadow data for 2019/20 shows better C-MeX performance. Ofwat has not provided any analysis to support its view that these factors are unlikely to close the NPV gap
Ofwat did not consider the effect a merger would have on model precision Statement of case, p. 51, paragraphs 185-190.	The impacts of losing a comparator on modelling precision may result in higher or lower bills, therefore we did not include the company's estimate of the impact of losing a company on precision in our cost-benefit analysis.	A reduction in precision should reduce Ofwat's confidence in setting challenging efficiency targets. Ofwat has previously modelled precision as a detriment to companies merging (see Pennon-Bournemouth precedent).
Ofwat's approach does not align with its final determination benchmarking methodology Statement of case, p. 52, paragraphs 191-	Using the upper quartile is well established in our methodology from past price controls, and we do not consider the slight change at final determination (fourth company rather than upper quartile) to set our benchmark invalidates the use of this assumption for our forward-looking	It should be noted that this is not a 'slight' change, and would completely remove the cost determinant that Ofwat has modelled.

[54] The first two columns are from Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, Table 6.3 on page 109

193.	modelling.	
Ofwat understates the benefits of service comparisons due to an unbalanced use of incentive rates Statement of case, p. 52, paragraphs 194-196.	We are not convinced that averaging penalty and reward rates instead of using reward rates would change the outcome of our assessment.	Ofwat provides no justification why averaging rates is less appropriate than just choosing a single rate.
Ofwat's estimate of future comparative non-totex benefits is arbitrary and understates the benefit Statement of case, p. 53, paragraphs 197-201.	We consider that the company's alternative proposal that we model future benefits based on benchmarking benefits in the final year of the PR19 control instead of benefits across the entire control is contrived and unrealistic.	Ofwat has provided no justification for this assertion. For Ofwat's position to hold true, it requires an impossible assumption that the same ODI glidepaths in absolute terms will also apply in future periods.
Ofwat has wrongly assessed our efficiency Statement of case, p. 53, paragraphs 202-203.	We consider that our totex models accurately measure Bristol Water's historic totex and efficiency rank, providing valid inputs to our modelling.	While Ofwat may consider that its assessment of our costs is accurate, we detail in section C of our Statement of Case why this is not the case.

128 Given that at the FD the application of Ofwat's customer benefits test was the only reason for the regulator to disallow our Company Specific Adjustment, that position could only be justified by a more comprehensive response from Ofwat on the points we made in our Statement of Case[55] and that KPMG made in the KPMG SCP Report.[56] In particular, Ofwat has provided no meaningful assessment of the benefits from our approach to innovation.

129 In between its reference to the CMA and the response to the Statement of Case, Ofwat has stopped suggesting that a merger or pooling of finance could be a justification for this approach. Ofwat's presentations to the CMA on Bristol Water-specific issues, particularly on the cost of capital, in advance of our Statement of Case are very different to that presented on 20 May, despite us setting out our issues in our reference letter, and these issues also featuring in our DD response.

55 Statement of Case, paragraphs 172 to 203.
56 KPMG SCP Report, paragraphs 6.3.2.8 to 6.3.2.17.

130 The conclusion from the above is that the customer benefits test should be disregarded in its entirety.

6. Company Specific Adjustment – Cost of Equity

6.1 Key issues raised in Ofwat's Response

131 Ofwat opposes the need for a CSA to the cost of equity to account for an operational gearing adjustment. Ofwat presents two sets of arguments:

(a) Process arguments – Ofwat argues that we did not raise the issue in the PR19 process, and have not ran customer engagement on the acceptability of this uplift. Ofwat claims that our claim is an '**abuse of process**' and that this might be because we are seeking to avoid full regulatory scrutiny.[57]

(b) Substantive arguments – Ofwat states that there is weak evidence that small companies are exposed to more risks, and disputes Economic Insight's analysis of the impact of operational gearing. Specific arguments Ofwat has made on the appropriateness of this adjustment include:

(i) The definition of the issue of operational gearing as arising from "*a higher proportion of fixed to variable costs*" is unclear "*in the context of substantively fixed revenues over the five-year control period*";[58]

(ii) Economic Insight have not used appropriate metrics to assess operating gearing;[59]

(iii) Costs are cyclical so profit impact is countercyclical and we are therefore likely to benefit from operational gearing; and a variant of this argument, not all of the risk we are exposed to is systematic, therefore the argument on operational gearing is irrelevant / the risk should not be priced in equity returns;[60]

(iv) As there are systematic risks associated with the re-setting of financing costs, the overall volatility of revenues would be lower for companies with high operating leverage that therefore have lower return margins;

(v) If higher operational gearing were an issue, the data should show small companies having lower leverage and lower MARs;[61] and

(vi) Totex RoRE volatility for Bristol is not markedly different from that of other listed companies over the last four years.[62]

132 Overall Ofwat's position is that operating leverage is not an issue for small companies, but in case the CMA finds it to be a relevant factor affecting the cost of capital, the appropriate way

57 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraphs 1.7 and 6.11.
58 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.26.
59 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.25.
60 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.28.
61 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.29.
62 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.30.

to addressing this is through lower gearing. We do not accept this and respond to both sets of Ofwat's arguments below in relation to the CSA on equity.

6.2 Reply to Ofwat's Response

133 This section sets out our reply to specific points that that Ofwat raised in relation to the CSA on equity as discussed above.

(1) Our request for a cost of equity CSA is not new

(i) Ofwat's claim that we have not raised the need for a CSA on equity is factually incorrect

134 Ofwat claims that we did not raise the issue of operational gearing adjustment on equity during the entire PR19 process, alleging that we might have been attempting to avoid regulatory scrutiny.[63] We were surprised that Ofwat makes this claim. Ofwat also makes this claim in relation to leakage costs, which we address in the cost assessment section. Both claims suggest that Ofwat has not properly engaged with the contents of our Draft Determination and the Statement of Case.

135 The reality is that we tried to avoid this reference, and, while we clearly stated that the uplift was justified, we were even prepared for Ofwat to depart from the CC and CMA precedent and not allow a cost of equity CSA, providing that the determination was appropriate overall. We made this clear to Ofwat:

- In BW01 BRL overview document of our response to the DD, we noted that: "*Cost of capital – The impact of Ofwat's draft determination approach is that a small company cost of equity premium could be justified.*" (page 59).

- In BW04 Financial Issues of our response to the DD, we provide the following detail and refer to the Economic Insight report supporting a cost of equity CSA: "*On this latter point, we remain happy to absorb this due to the uncertainty, but this does depend on the remainder of our response points in the draft determination on outcome incentive balance, efficiency and the CSA cost of debt elements being accepted. Not having balance in these regards relates, as we demonstrate, to operational gearing, and therefore additional headroom in the cost of equity of 13%-16% would be required to maintain small WoC notional efficient financing, in line with Ofwat's duties.*" We expressly referred to this statement in our Statement of Case.[64]

- Slides 7, 16 and 18 of our DD presentation to Ofwat refer to the CSA cost of capital and Economic Insight evidence. Our position was discussed at that meeting.

136 Ofwat's allegation that Bristol Water did not raise this argument during the PR19 process is therefore factually inaccurate. As set out above, we did raise the issue and presented the same Economic Insight analysis in support of the adjustment.

63 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.11.
64 Statement of Case, paragraph 247.

137 Indeed, Ofwat's FD contains a section on this issue titled 'levels assessment : cost of equity', where Ofwat states:[65]

> "*No company has formally applied for a cost of equity uplift, though Bristol Water argue that evidence supports such an uplift, and signals that it could in future seek such an uplift, dependent on the outcome of its final determination.*
>
> "*In support of its representation, Bristol provides a report commissioned from Economic Insight which advocates for an uplift to the asset beta estimated for listed WaSCs in the range 5%-26%...*"

138 The section then presents Ofwat's arguments as to why a cost of equity uplift is unwarranted.

139 The above shows that Ofwat was fully aware of our position on this issue during the PR19 process, as well as of analysis by our consultants in relation to the appropriate size of the premium. Therefore, Ofwat's claim that we were attempting to avoid regulatory scrutiny by bringing this issue only at the point where we are seeking a redetermination of the PR19 price settlement by the CMA is misrepresentation of the facts, particularly given Ofwat's focus on this point in its presentation to the CMA on 20 May 2020, where it did not explain any of the above context.

140 Ofwat also only focuses on the operational gearing evidence from Economic Insight and not the volatility of returns compared to the listed WaSCs, which is analysis that could only be undertaken based on the FD, because Ofwat did not provide a consistent draft determination for the fast tracked listed WaSCs in July 2019 alongside the "slow track" draft determinations.

(ii) Ofwat's allegation that we have not consulted with customers on their willingness to fund a CSA on the cost of equity is also factually incorrect

141 Ofwat states that Bristol Water "*did not consult with its customers on their willingness to fund an uplift to the cost of equity*".[66]

142 This statement is not correct. Three pieces of customer research were undertaken in support of the inclusion of a company specific adjustment in our original plan. These were explained in section C6 of our business plan.[67]

143 We undertook qualitative research on costs and benefits of being served by a smaller, local company in January 2018. Customers provided a range of views and opinions, but generally thought that if the additional costs of small companies are outside of management control then they thought it should be allowed within the overall bill, but not if the costs were within management control.

144 We undertook qualitative research with the customer forum in July 2018. This found that most customers would prefer Bristol Water to remain their supplier as long as the additional cost is kept below £3, and for this to be reflected in visible service benefits. They would prefer to pay

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[65] Ofwat (2019), FD, Allowed return on capital technical appendix, Annex 1: Company-specific adjustments to the cost of capital, pages 96 - 97.

[66] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.13.

[67] Bristol Water (2019), C6: Financing, Affordability and Risk and Return, pages 97 – 102. See also Bristol Water (2019), C6 Financing, Affordability and Risk and Return REVISED, pages 133 – 139.

a little more to be served by a smaller company due to the benefits received, as they consider the customer service to be better and would prefer to be supplied by a local company. They didn't see the potential £3 reduction in their bill as enough of an incentive or cost effective to be served by a larger company.

145 We undertook quantitative research carried out by ICS Consulting in July 2018. This research found overwhelming support for the small company cost of financing for Bristol Water, particularly if there were offsetting benefits and a reinvestment mechanism should borrowing costs be lower than expected or fundamental service delivery in support of the benefits not transpire.

146 This research found that 78% customers were supportive of paying a higher cost of finance, with 40% supporting paying a cost of £4.50 if there were below the cost and service benefits compared to other companies, and a further 38% supporting paying £3 even if there were no offsetting benefits.

147 Only 12% of customers were opposed to paying the additional cost of finance.

Figure A2 ICS customer research on cost of finance

148 For our revised April 2019 business plan, we carried out further research on the CSA. The additional research is explained in section C6 of our revised plan.[68] This was in response to Ofwat's criticism in its Initial Assessment of Plans, that:[69]

> *"The company provided inadequate evidence that the uplift is supported by customer preferences. A majority of surveyed customers only supported an uplift conditional on the bill impact being lower than the company's £4.50 benefits estimate, or if the*

68 Bristol Water (2019), C6: Financing, Affordability and Risk and Return REVISED, pages 149 – 154.
69 IAP test question RR1.

company included a sharing mechanism in its plan which returned potentially 100% of the value conditional on its performance. As we have concerns over the £4.50 figure, and the company's final business plan contains a sharing mechanism risking only 50% of the uplift, we conclude that its research should not be taken to represent compelling customer support for its proposal."

149 Ofwat suggested some specific wording for this research, in line with research undertaken by Portsmouth Water. Portsmouth's approach had been supported by Ofwat in its IAP, stating:[70]

> "*The company provided high quality and convincing evidence that the uplift is supported by customer preferences, based on sufficienty [sic] large sample surveyed (500 customers), weighted to the profile of customer base, and high proportion (86%) supporting the estimated £0.80/yr increase to the average bill from providing the uplift.*"

150 The question asked was as follows:

Figure A3 Extract from Bristol Water customer research informing April 2019 business plan

The water companies in England are a mix of larger companies and smaller companies. Your water company is one of the smaller companies.

Your water company believes that being smaller means they can provide you with a better level of service by responding to issues more quickly and tailoring their services to the local community. They are also more likely to employ people from their local areas and buy goods and services from other local businesses.

Your water bill is lower than the average water bill in the industry, although some of the costs included in the bill are slightly higher due to the small size of Bristol Water. This includes for example the cost of borrowing from banks and other lenders.

The impact of these higher costs on the current average bill is estimated to be about £1.80 per household per year (c.1% of the water bill) and is included in the projected bill estimates presented to you in earlier questions.

Q12 Please indicate how happy you are to continue paying this amount for your local water service?

151 This research used a value £1.80 per customer per year, rounded up from our calculated cost of debt adjustment at 38bps of £1.73 per customer per year.

152 This value was calculated as follows:

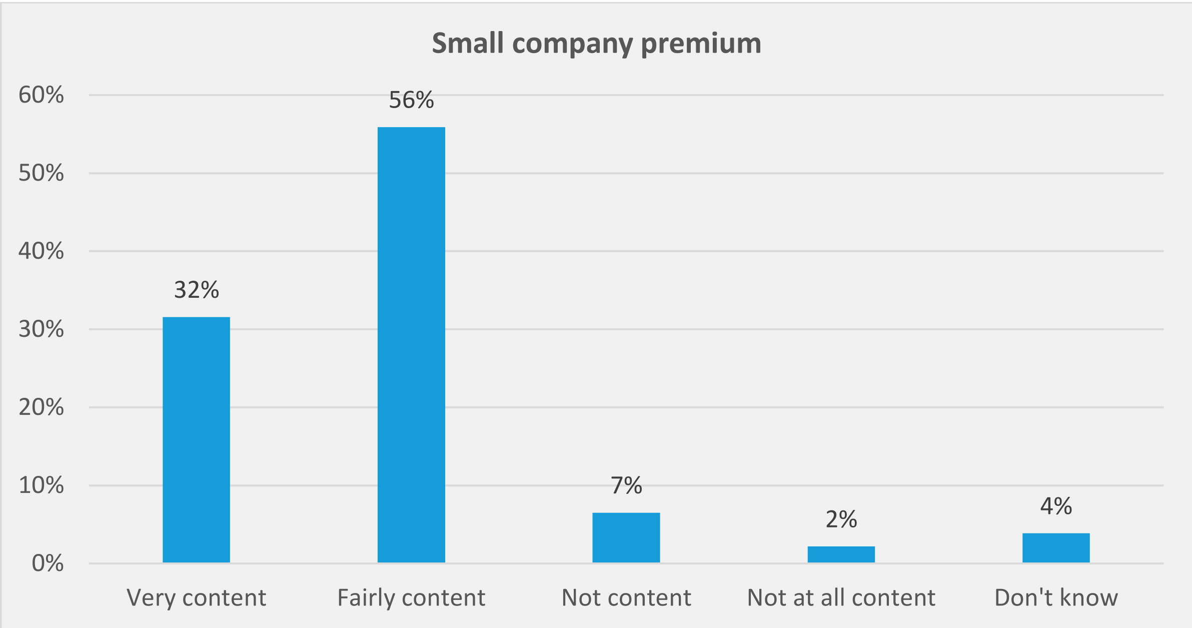
70 Ofwat, Portsmouth Water: Test question assessment, question RRI. https://www.ofwat.gov.uk/wp-content/uploads/2019/01/Portsmouth-Water-Test-question-assessment.pdf.

Table A3 Calculation of average cost to customer of CSA

Item	Value
Cost of debt uplift	0.38%
Av RCV £m	525.236
Gearing	60%
Cost of debt value £m	1.20
75% weighting to households	75%
Embedded debt value £m	0.90
Number of customers	519,309
Cost per customer £	1.73

153 This research found 88% support for the CSA at that value. 415 customers responded.

Figure A4 Bristol Water customer support for CSA



154 Based on this research, we concluded that customers would be happy to support a CSA of up to £3 with no direct or specific offsetting benefits. The total value of our proposed uplift to the WACC equated to £2.91 per customer:

Table A4 Calculation of Bristol Water proposed WACC uplift

cost of embedded debt uplift	0.38%
embedded debt ratio	95%
cost of new debt uplift	0.25%
new debt ratio	5%
value embedded debt £m	1.14
value new debt £m	0.04
cost of uplift to embedded debt per hh customer £	1.64
cost of uplift to new debt per hh customer £	0.06
equity uplift on 13bps on beta	0.40%
value of equity uplift £m	0.84
£ per hh customer	1.21
Combined debt + equity £ per customer	2.91

155 We therefore concluded that customers supported the combined value of the cost of debt and cost of equity adjustments we propose in our Statement of Case.

156 In our original business plan[71] we also presented evidence of the "loss aversion" value of how much bill reduction customers would need to receive to be supplied by an alternative supplier to Bristol Water. In return we offered our social contract and a local focus. This emphasised that a financial value was not the only criteria. Excluding those who would not be happy with the change, and valuing all other observations at the minimum of the range (i.e. less than £5 we counted as zero), calculated a value to customers of c. £20, driven by service contentment as well as local service. Only 12% of customers were price sensitive in terms of the cost of finance.

[71] Bristol Water, C6: Financeability, risk and return and affordability, page 105.

Figure A5 Customer views on an alternative water supplier

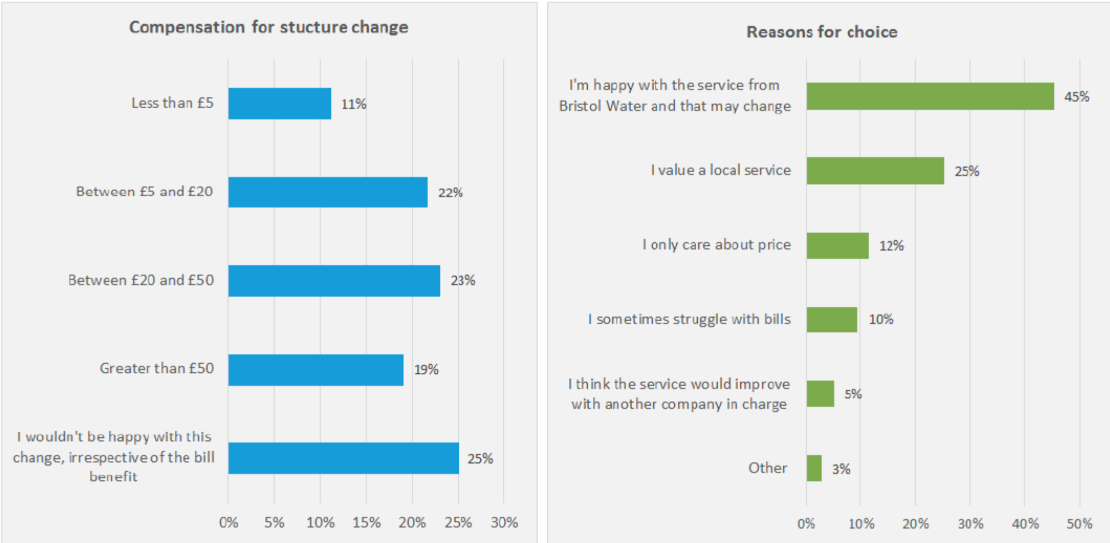


Figure 5-33 - Customer views on an alternative water supplier

(2) Our position on operational gearing is consistent with CMA regulatory precedent

157 Ofwat raises a number of points criticising our position on gearing. We disagree with those statements for the following reasons.

(i) The definition of the issue of operational gearing as arising from 'a higher proportion of fixed to variable costs' is unclear 'in the context of substantively fixed revenues over the five year control period'

158 Ofwat questions how we have defined the issue of 'operational gearing' for small WoCs and claims that this is inconsistent with the definition of operational gearing used by the CMA in the NATS provisional findings – as "*relative exposure of profits to changes in cost*".[72]

159 However, Ofwat's criticism is levelled at only one definition (the traditional definition) of operational gearing noted in our Statement of Case, as arising when a company has "*a higher proportion of fixed to variable costs*". It therefore misses the point.

160 In fact, our definition in the Statement of Case of operational gearing for small companies in the regulated water sector is consistent with the CMA definition cited above, because small water companies face 'thinner margins' as a result of having a small RCV, in contrast to larger WoCs.

161 As we explain in our Statement of Case,[73] due to thin margins, we face greater exposure to changes in cost and ODI performance, as any given shock will have a disproportionately

[72] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.28, first bullet.

[73] Statement of Case, paragraph 244.

greater impact on our profit base (in relative terms) because profits are lower in absolute terms due to the small RCV relative to those of larger WaSCs.

162 As an example, if two companies have a 10x difference in profits (so that say company X has a profit of £10m but company Y has a profit of £100m), the same shock of say £5m will have a much greater impact on company X as it constitutes in this case 50% of its profits; by contrast, the shock is only 5% of company Y's profits. In this sense, lower profit margins create greater profit volatility as a response to given external shocks, all else equal. This definition of the issue of operational gearing is consistent with the CMA's definition which assesses impact of cost risk on profits.

(ii) Economic Insight have not used appropriate metrics to assess operating gearing

163 Ofwat argues that Economic Insight have not used an appropriate set of metrics when assessing operational leverage. In fact, the metrics used by Economic Insight are consistent with those used by the CMA in its 2015 and 2009 redeterminations (table reprinted below).[74]

Figure A6 CMA metrics for assessing operating gearing

Table 9: Operational gearing comparisons for Bristol Water and comparators (AMP6)

%

	Bristol Water	*Water company comparators**	*WoCs*	*WaSCs*
Totex to average RCV	100	62	94	63
Revenue to average RCV	103	79	108	78
Wholesale totex to wholesale average RCV	100	71	94	71
Wholesale revenue to wholesale average RCV	103	88	108	86
Operating cashflow as % of revenue	45	51	38	51

Source: CMA analysis of data from Ofwat Final Determination, company-specific appendices, Tables A2.9/2.10/2.11, A3.9/3.10, A5.1/5.2/6.2/7.3.
* Water company comparators are the three publically listed companies used in the asset market-based asset beta analysis.
Notes: Totex and Revenue (top two rows of table) figures used in these ratios include both wholesale water and wastewater figures, but excludes any retail controls. Operating cashflow (bottom row of table) represents the proportion of wholesale and wastewater revenue (excluding adjustments) which is made up of return on capital and RCV run-off.

164 We append a report by Economic Insight assessing the points Ofwat raises.[75] Economic Insight observe a lack of evidence on the specific technical assertions that Ofwat makes, which renders the analysis unconvincing against an assessment approach grounded in regulatory precedent.

(iii) Costs are cyclical so profit impact is countercyclical and we are therefore likely to benefit from operational gearing; and a variant of the argument - not all of the risk we are exposed to is systematic, therefore the argument on operational gearing is irrelevant / the risk should not be priced in equity returns

165 Ofwat (and its consultants Europe Economics) offer a separate set of arguments against the theoretical underpinnings of this adjustment, focusing on the view that the risks that

74 CMA15, Appendices 5.1 to 11.1 and glossary, table 9, page 25.
75 See section 2 of BW436, Economic Insight (May 2020), Response to Ofwat's criticism of the case for an uplift to asset beta.

operational leverage exacerbates are either (1) not systematic / they are within management control or (2) are countercyclical, to the extent that they arise due to costs being cyclical.

166 These are not new arguments, and were considered by the CMA at the last price re-determination. In CMA15, the CMA nevertheless allowed an uplift on cost of equity for Bristol Water, explicitly stating that operational gearing adjustment is needed even where the risks that generate this excess volatility in cashflows are not fully systematic:[76]

> "*In coming to a view on the level of any uplift, we do however recognise that not all of the operational gearing will necessarily reflect systematic risk, and also that not all beta risk will result from operational factors… Although there is uncertainty over the scale of any uplift, and we agree that calculating a single value is difficult, we were not persuaded that zero is a suitable point estimate for the uplift.*"

167 Subsequently, the CMA allowed 13% uplift on our allowed asset beta to reflect the excess profit volatility we face due to operational leverage. The updated evidence based on Economic Insight data suggests that the size of the adjustment remains appropriate.

168 The issue is further discussed in section 3 and 5 of Economic Insight's Report.[77]

(iv) As there are systematic risks associated with the re-setting of financing costs, the overall volatility of revenues would be lower for companies with high operating leverage that therefore have lower return margins;

169 Although Ofwat generally rejects the notion that operational gearing leads to thinner margins and therefore greater cost risk exposure, it also argues that to the extent profit margins are thinner for smaller water only companies, this reduces their systematic risk as a result of regulatory WACC re-determinations. Ofwat appears to have overlooked the inconsistency.

170 This argument suggests that the revenue allowances for small WoCs are more stable across regulatory resets and therefore they face lower (systematic) risk. We note that this view of operating leverage is inconsistent with the definition of operational leverage endorsed by Ofwat, which relates to the 'relative exposure of profits to changes in cost' (as per the CMA NATS provisional findings Ofwat refers to, see point (i) above).

171 Our position, consistent with the definition of operational gearing applied by the CMA in previous redeterminations, is that operating leverage is a factor affecting small companies because they are disproportionately affected by cost risk due to the thin margins within any given period, relative to the risk faced by larger companies. This is evident from greater profit volatility. It is not clear why Ofwat believes that revenue stability across periods relates to the issue of operating leverage as defined in this context, and therefore how Ofwat's argument disproves the existence of exacerbated risk due to operating leverage within any given period.

172 Moreover, Ofwat has not presented any evidence that, across periods, WoCs face more stable revenues relative to large WaSCs as all components of the revenue allowance vary across periods, for both company categories.

[76] CMA15, Appendix 10, paragraphs 126 - 127.
[77] BW436, Economic Insight (May 2020), Response to Ofwat's criticism of the case for an uplift to asset beta.

173 The issue is further discussed in section 4 of Economic Insight's Report.[78]

(v) If higher operational gearing were an issue, the data should show small companies having lower leverage and lower MARs

174 Ofwat also argues that higher operational leverage, to the extent it creates excess risk, would be reflected in lower MARs for small companies, or in lower gearing. Ofwat offers some arguments as to why this is not the case:

(a) On MARs: Ofwat states that recent examples of premia to RCV include 53% for Affinity Water in 2017 and 50% for Dee Valley Water in 2016.[79] The average premium for Severn Trent and United Utilities over 2016-17 was 22%.

(b) On gearing: Ofwat states that the average of March 2019 company reported gearing levels is 67.9% for water and sewerage companies and 70.1% for water only companies.[80]

175 In relation to the evidence raised on MARs, Ofwat's evidence is misleading since the MAR for any given company is driven by a number of factors other than operating leverage, including but not limited to: 1) potential for outperformance on totex, financing and ODIs; 2) non-regulated activities (if any); and 3) assumptions on the overall market WACC relative to allowance in current and subsequent periods. It is therefore impossible to tell whether a particular difference in MARs across a small sample of cases was in fact affected by operating leverage, without a larger sample and not having controlled for other factors that affect MARs. The sample presented is too small to be able to make any conclusive statements on impact from operating gearing on pricing.

176 In relation to the evidence on gearing, it is important to note that gearing is affected by a number of factors including the risk arising from operating leverage. In both samples of WoC vs WaSCs, there is significant variation in gearing across the companies. Therefore, any observed differences in the average gearing in the two samples is measured with significant margin of error. Ofwat's evidence does not provide a sound basis to conclude that operational gearing has no impact, or that the observed difference between the samples is statistically significant and evidence of (lack of) impact from operational gearing.

177 We also note that the CMA in 2015 dismissed similar arguments raised by Ofwat, stating the following:[81]

> "*We accepted that Ofwat had provided examples from market data that would be consistent with a zero adjustment, including on Dee Valley's observed WoC betas and on market-asset and gearing ratios. However, we were unconvinced of how much weight should be placed on parts of this evidence base. For example,* ***Ofwat provided analysis that average WoC gearing has risen since PR09. This conclusion was driven by the creation of Affinity Water within a highly-geared structure. We did not consider that***

78 Ibid.
79 Ibid., footnote 216.
80 Ibid., footnote 215.
81 CMA15, paragraph 10.158.

***the re-gearing of a large WoC could be directly translated into an assessment of the relative betas of WoCs and WaSCs**.*" (emphasis added)

178 The issues are further discussed in section 7 of Economic Insight's Report.[82]

(vi) Totex RoRE volatility for Bristol is not markedly different from that of other listed companies over the last four years

179 Finally, Ofwat claims that RoRE volatility for Bristol Water has not been markedly different from that of listed companies over the last four years.

180 In fact, in our Statement of Case, we present evidence that, on a forward-looking basis, and because of our small RCV, the impact from financing and downside risk is greater for us by comparison to the listed comparators, on the basis of which Ofwat sets the notional beta allowance. Specifically, the RoRE skew we face as a small company over PR19 is significantly greater relative to that of the listed comparators.[83] Ofwat has not responded to this evidence its Response.

181 The issue is further discussed in section 7.3 of Economic Insight's Report, where they demonstrate that we do face higher volatility of returns on a historical basis relative to the listed comparators.[84]

182 Ofwat claims[85] that market evidence from the listed comparator companies, Severn Trent and United Utilities, indicates that the settlement was reasonable as listed companies have seen their MARs increase as their share prices have increased since the FD was published. However, this comparison cannot be extended to the sector, as both of these companies were fast tracked companies, had a higher rate of return allowance and less challenging outcomes delivery incentives. Therefore, this evidence cannot be used to conclude on reasonableness of the settlement for the sector as a whole.

7. Other cost of capital issues

7.1 Key issues raised in Ofwat's Response

(1) Embedded to new debt ratio

183 Ofwat claims that despite evidence that small companies have a comparatively higher share of embedded to new debt as a result of 'lumpy' debt issuance profiles, this does not merit an adjustment because any such imbalances will correct themselves over subsequent price controls. Specifically, Ofwat states:[86]

"*We recognise that a 'lumpy' investment (or debt issuance) profile can cause a company's share of new debt to deviate from our sector assumption, which may drive under- or outperformance. Over time, we would expect these deviations to balance out,*

82 Ibid.
83 Statement of Case paragraph 253 table B7.
84 BW436, Economic Insight (May 2020), Response to Ofwat's Criticism of the case for an uplift to asset beta.
85 See Ofwat Presentation to the CMA (20 May 2020).
86 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.51.

with underperforming positions becoming outperforming positions and vice versa. This is because, for example, an atypically high share of embedded debt attributable to issuance concentrated over a few years will become an atypically high share of new debt when this debt is refinanced. Over the long term, we therefore consider that making more company specific assumptions on share of new debt is not required to ensure equal treatment of companies."

184 As with the overall argument on embedded debt, Ofwat again claims that it is acceptable to expose companies to gains and losses to preserve efficiency incentives:[87]

> "*A redetermination that assumes a new debt share based on actual company circumstances would distort company incentives as financing decisions would have a material impact on the allowed return. It would also skew benefits towards companies (who would be encouraged to refer their determinations to the CMA only when their actual ratio disadvantaged them relative to the notional assumption). This would clearly not benefit customers in the long term.*"

(2) Asset beta

185 Ofwat rejects our view that more reliance should be placed on 5-year monthly betas. In short, it states that it is more appropriate to assess evidence based on both 2-year and 5-year betas, which is a matter of judgement (specifically, Ofwat argues that 5-year data risks including data in the sample that is "*obsolete and no longer relevant*"[88]). Ofwat also disagrees that there is a downward bias in daily data for large liquid stocks, so daily estimates are better.

186 Finally, Ofwat presents evidence that updated data to February 2020 continues to support its 0.29 unlevered beta decision.

(3) TMR

187 In its Response, Ofwat claims that Bristol Water along with all other appellants assumed a TMR of figure of 7.29% in real CPIH terms in the Cost of Equity submission.[89]

7.2 Reply to Ofwat's Response

188 This section sets out our reply to specific points that that Ofwat raised in relation to the cost of capital issues summarised above.

(1) Embedded to new debt ratio

189 In general, we agree that the regulator should incentivise efficient behaviour, which necessitates that allowances are not fully tied to costs. However, we do not agree with Ofwat's weightings on the embedded and new debt for the following reasons.

190 First, as set out in our Statement of Case, our cost of debt allowance for a relevant notional company is based on the relevant ratio of embedded to new debt for a small WoC. The

[87] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.51.
[88] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.58.
[89] Reply, Document 008, paragraph 3.12.

evidence presented showed that on average, small WoC companies tended to have significantly lower refinancing needs over PR19 relative to larger WaSC companies, of close to 0% (for Bristol) to close to 10% (for South Staffs).[90] Therefore, for a typical, or notional small WoC, 5% would be an appropriate, representative weight of new debt over PR19.

191 Ofwat's allegation that this claim is an attempt to pass through our actual cost of debt is incorrect. Our position is made by reference to the relevant notional company rather than with reference to our actual cost of debt and associated weight.

192 Second, we consider that the incentive to outperform can only be meaningful where the associated risk to which companies are exposed can be managed or controlled by company behaviour.

193 In the case of lumpy investments, as a small company, this risk is not risk that we can avoid or manage, because it is uneconomical for us to tap debt capital markets on a frequent basis to 'smooth out' investment and manage this exposure (given the value of debt we raise by comparison to other larger companies).

194 Therefore, the allowance essentially exposes us to risk which we cannot significantly control or manage.

195 Separately, while Ofwat argues that, on balance, periods of higher embedded to new debt ratios relative to the allowance will balance off with periods of lower ratios relative to the allowance, Ofwat ignores how this interacts with market rates to produce cost of debt exposure. For example, at present, our current high ratio of embedded to new debt occurs at a time where new debt costs are lower relative to historical costs - therefore (even if the new and embedded debt costs were perfectly calculated to reflect our actual costs of new and embedded debt over the period), the allowance will nevertheless undercompensate our actual costs given that the weights on new and embedded debt do not reflect the true proportion of embedded and new debt we face over the period.

196 There is no mechanism or constraint on the allowance to ensure that in future periods where the opposite is true (i.e. in periods where we will have lower embedded to new debt ratio relative to the allowance), the cost of new debt will continue to be lower than that of embedded debt, so that that the allowance will allow us to over-recover in those periods relative to our actual costs, thus offsetting the losses in the current period. In other words, Ofwat ignores that the embedded to new debt ratio effectively amplifies the cost exposure we face, and there is no mechanism to ensure that market rates will move in a way that ensures that on balance we will be able to recover our costs in full. This is because our refinancing needs are not in any way correlated to market movements (as illustrated with the example above).

197 Given that there is nothing to ensure that this risk is symmetric, and given that this risk is outside our control, we consider that the ratio of embedded to new debt should be set in line with our actual financing needs for PR19.

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90 See Statement of Case, paragraphs 228 – 236.

(2) Asset beta

198 In the ongoing NATS redetermination, the CMA considered both 2-year and 5-year betas based on daily and weekly data in its provisional findings report.[91]

199 Ofwat's consultants, Europe Economics, present updated evidence on betas from listed comparators using the CMA methodology in the NATS provisional findings report (reprinted below). Although this evidence shows a clear increase in the ranges (see comparison of spot values at end September in the range of 0.18 – 0.32, as compared to the end February range of 0.27 – 0.34), Ofwat's consultants nevertheless conclude that the data supports Ofwat's point estimate of 0.29.

200 Our interpretation of the data presented by Europe Economics is that it shows clear evidence that betas for the sector are higher than stated by Ofwat. Specifically, the mid-point of the updated spot range presented by Europe Economics as of February 2020, where the range is based on 2 and 5 year weekly and daily data, suggests a point estimate of around 0.31, consistent with our Statement of Case. Moreover, even if the entire set of evidence provided by Europe Economics, and presented below, were to be considered (including the 1-year, 2-year and 5-year average estimates), the median asset beta in both samples (September 2019 and February 2020) sits at 0.32, and the mean at 0.31 and 0.3 respectively.[92] We therefore consider that Ofwat's own evidence better supports our estimate of the asset beta at 0.31.

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91 CMA (2020), NATS (En Route) plc / CAA Regulatory Appeal, Provisional findings report, paragraph 12.82.

92 We show the mean and median of the individual values in BW439, Averaging of Europe Economics equity betas.

Table A5: Europe Economics beta update – September 2019

Table 2.1: Unlevered beta evidence under the CMA's approach (end of September 2019)

		Spot end Sept 2019	1-yr average	2-yrs average	5-yrs average
Severn Trent	2-yr daily	0.26	0.28	0.30	0.34
	2-yr weekly	0.18	0.24	0.32	0.35
	5-yr daily	0.32	0.34	0.34	0.32
	5-yr weekly	0.31	0.33	0.35	0.33
United Utilities	2-yr daily	0.25	0.26	0.28	0.33
	2-yr weekly	0.19	0.23	0.28	0.32
	5-yr daily	0.31	0.33	0.33	0.30
	5-yr weekly	0.29	0.31	0.33	0.30
SVT/UU	2-yr daily	0.25	0.27	0.28	0.33
	2-yr weekly	0.18	0.24	0.30	0.34
	5-yr daily	0.32	0.33	0.33	0.31
	5-yr weekly	0.30	0.32	0.34	0.31

Source: Thomson Reuters, Europe Economics' calculations.

Table A6: Europe Economics beta update – February 2020

Table 2.2: Unlevered beta evidence under the CMA's approach (end of February 2020)

		Spot end Feb 2020	1-yr average	2-yrs average	5-yrs average
Severn Trent	2-yr daily	0.28	0.27	0.29	0.33
	2-yr weekly	0.27	0.21	0.28	0.34
	5-yr daily	0.33	0.33	0.34	0.32
	5-yr weekly	0.34	0.32	0.34	0.33
United Utilities	2-yr daily	0.28	0.27	0.28	0.33
	2-yr weekly	0.27	0.21	0.25	0.31
	5-yr daily	0.32	0.32	0.33	0.31
	5-yr weekly	0.33	0.31	0.32	0.30
SVT/UU	2-yr daily	0.28	0.27	0.28	0.33
	2-yr weekly	0.27	0.21	0.26	0.32
	5-yr daily	0.32	0.32	0.33	0.31
	5-yr weekly	0.33	0.31	0.33	0.32

Source: Thomson Reuters, Europe Economics' calculations.

(3) TMR

201 Ofwat's statement that our TMR assumption is 7.29% in real CPIH terms based on evidence from KPMG is factually incorrect and demonstrates that Ofwat have not fully engaged with the evidence we provided in our Statement of Case.

202 We assume a TMR of 9% in nominal terms, equivalent to 6.86% CPIH in real terms (using long-term inflation assumption of 2.0% and the fisher equation).[93] Our Statement of Case stated that our assumption is consistent with the lower end of the range proposed by Economic Insight and lower than that proposed by KPMG.[94]

93 Statement of Case paragraph 279.

94 Statement of Case paragraph 279.

Section B: Cost allowance

8. Overall assessment of costs

(1) Ofwat has failed to engage with the evidence regarding our assessment of efficient costs

203 In both the FD, and in its Response, Ofwat has not substantially engaged with the extensive body of evidence that we have used in ensuring that the costs in our plan are efficient. We consider that cost assessments should be considered 'in the round', using a wide range of evidence when considering the application of efficiency benchmarks and other cost assumptions.

204 In our business plan we considered a wide range of top-down modelling approaches developed by Oxera and NERA. These models show us to be close to, or in a number of cases more efficient than, the upper quartile level of efficiency in the sector. We also considered our needs and efficiency bottom-up. In developing our bottom-up assessment, we received support from ChandlerKBS, and our approach was reviewed by Atkins. Our bottom-up approach led us to adopting a cost position towards the lower end of the range implied from the top-down modelling (i.e. it was more stretching). Further details of how we developed our plan are included in Annex 7 of our Statement of Case.

205 This approach led to a plan that had 10% less totex than historical levels, while delivering a step change in service performance across a number of key measures. The balance of evidence in the round gives us confidence that our plan is efficient.

206 In our Statement of Case, we summarised the evidence we had used in developing our plan, and provided an update on further analysis we had asked NERA to undertake to include the two additional years of data that are now available (which further supported our position).

207 Instead of engaging with the evidence we provided, in its Response, Ofwat has focused on responding to each of the issues that we had identified with Ofwat's approach to cost assessment. Specific replies are set out in the subsequent section, however, at a high level, Ofwat has rejected the merits of all our analyses.

208 For some of the cost items, we recognise there is a degree of uncertainty in estimating the exact impact of the error. In our Statement of Case, we sought to address this uncertainty by considering sensitivities and ranges. Where Ofwat has found any uncertainty, its approach has been to assume a cost adjustment of zero. This is not a balanced approach.

209 While Ofwat is concerned with setting a cost allowance that could be too high, there seems to be little or no consideration for the equivalent risk of setting cost allowances too low. This constitutes a biased and one-sided approach. Having an insufficient (efficient) cost allowance risks delivery of outputs to customers, further exacerbates the financeability challenge, and the ability for investors to earn the required cost of capital on a mean expected basis. This is of particular concern where there is inevitable uncertainty because service levels are assumed to rapidly improve, and this is out of base cost rather than enhancement expenditure.

210 We request in reaching its determination, that the CMA considers the extensive body of evidence that we used to inform our plan, and comes to a balanced view of what the efficient level of costs should be in the round.

(2) Ofwat has mischaracterised our historical cost performance

211 In the common issues paper, Ofwat suggests that water companies have materially outperformed totex allowances in the past.[95] Ofwat assumes that because some companies have outperformed in the past (for a number of different reasons), it is appropriate to set companies a far more challenging cost allowance for the period 2020-25 than otherwise would have been the case. We refute the suggestion that this is appropriate for Bristol Water for the reasons set out below.

212 First, our plan for 2020-25 is already very challenging and also significantly more challenging than previous price reviews. For example, we included a 1.0% p.a. challenge for frontier shift, whereas Ofwat's cost models for the sector at PR14 did not include an explicit assumption for frontier shift, and at PR09 Ofwat set a challenge of 0.25% p.a. for opex and 0.4% for capex (i.e. significantly less than what we have included in our plan). We included a catch-up efficiency assumption of c. 10% on capex and c. 6% on opex, based on top down modelling and detailed bottom up transformation plans. Ofwat acknowledged the efforts we went to challenge ourselves on costs in its reference to the CMA.[96]

213 In total, our plan has 10% less totex than historical levels, while delivering a step change in service performance across a number of key measures at the same time. Therefore, it is not appropriate in this context to use historical outperformance to inform expected future cost performance.

214 Second, we are not in the same position as the other companies seeking a re-determination. Over the last control period, we spent broadly in line with the CMA's re-determination.[97] Over the 2005-10 and 2010-15 control periods, we spent slightly more than the FD allowance.

215 Ofwat states that in 2015 the CMA set a cost allowance that was lower than Bristol Water's 2014 business plan.[98] While this is true, it should be noted that:

- The majority of the difference between our 2014 business plan and the CMA's cost positions in CMA15 related to different views on enhancement project scope.[99] This is not relevant for this re-determination as we are not proposing a material enhancement programme. Where Ofwat has assessed the efficiency of our enhancement costs, we have been found to be more efficient than Ofwat's benchmarks (Ofwat makes no reference to this in its Response). This is important because the cost challenges and service targets we imposed on ourselves were based on totex, not base and enhancement separately. We provide an annex on leakage to illustrate the impact of this point (see Annex 3).

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95 Ofwat (2020), 006: Cost efficiency – response to common issues, paragraphs 2.5 – 2.8.

96 Ofwat (2020), Reference of the PR19 final determinations: Explanation of our final determination for Bristol Water, paragraph 2.21.

97 See Annex 4 of our Statement of Case.

98 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 1.23.

99 In particular, a proposed new reservoir at a cost of £43m in AMP6.

- Bristol Water has changed significantly from the organisation it was five years ago, with new ownership, a new Board structure, a new management team, and a clear social purpose and social contract with our customers and stakeholders.[100] This provides us with confidence that the expenditure we propose for AMP7 is both necessary and targeted at our customers' priorities.

- Our plan for 2020-25 has been developed using a wide range of evidence to ensure that the costs are efficient.

216 It is therefore not appropriate to assume that we can outperform any cost allowance that Ofwat sets us. Instead, the evidence supporting efficient cost forecasts needs to be considered in detail.

(3) Ofwat has responded incorrectly to our top-down modelling

217 Ofwat did not substantially engage with the extensive body of evidence that we used to ensure that the costs in our plan are efficient, and only made a brief passing reference to our analysis in its Response, where it stated:[101]

> "*…we note that Bristol Water is shown to be inefficient in most of Nera and Oxera's cost models, in line with the findings from our own models. The higher allowances these models indicate could be a result of the use of higher cost driver forecasts (while we use independent forecasts), or a less tight catch up challenge. We consider that the company should work further on its understanding of its efficient costs, using benchmarking and comparative information.*"

218 Only some of the NERA and Oxera models found Bristol Water to be inefficient. This crucially relates to our cost base before 2016/17. In developing our business plan, we used 2017/18 as the base year. The NERA and Oxera models for the more recent years found our costs to be close to, or in a number of cases more efficient than, the upper quartile level of efficiency in the sector.

219 From our base year position, we then applied efficiency challenges that were informed by our top-down modelling and bottom-up planning. Ofwat is comparing its assessment of our AMP7 costs (that are based on our 2017/18 position with 'catch-up' and 'frontier-shift' efficiency assumptions already applied), to NERA's and Oxera's assessment of our efficiency before 2016/17. This is a wrong comparison.

220 We recognise that there was scope for efficiency improvements in the past, which we have since achieved. In recent years we have become far more efficient.[102] We also recognise that, relative to our 2017/18 cost base, there is some scope for further efficiency improvement – this is why we applied an efficiency challenge to the costs that we included in our plan.

221 Ofwat hypothesises that the higher allowances that these models indicate, could be a result of the use of higher cost driver forecasts. This is incorrect. The efficiency assessments were based on our 2016/17 and 2017/18 cost base – these were informed by historical data and therefore

100 See further Statement of Case, Annex 6.
101 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.4.
102 See further Statement of Case, Annex 7.

are not reliant on forecasts of cost drivers in AMP7. This was explained in our business plan, and further demonstrates that Ofwat has not engaged with the evidence that we have provided.

222 We are able to provide the CMA (and Ofwat) a teach-in session on the modelling approaches used to inform our plan. We consider that this substantial body of evidence should be considered in determining an efficient cost allowance for Bristol Water.

9. Ofwat's response to specific cost errors

223 This section sets out our reply to specific points that Ofwat raised in relation to the cost errors we highlighted in our Statement of Case.

224 As described in our Statement of Case, we identified a number of specific errors and weaknesses in Ofwat's approach which all contribute towards Ofwat underestimating the amount of costs we would need to serve our customers efficiently. We included these as specific examples of where Ofwat had made errors, and on their merits they amount to a c. £45m cost adjustment.

225 This is greater than the c. £30m gap between our plan and Ofwat's FD. This is further evidence of the ambition of our plan and is consistent with the extensive cost benchmarking that underpinned our plan and the service level improvements we propose.

226 We are not seeking a re-determination that includes a cost allowance that is £45m higher than Ofwat's FD. Our position remains that the plan we submitted was built on robust and transparent evidence that demonstrates that our cost base is at the lower (most efficient) end of a credible range for upper quartile efficiency.

227 Our reply to Ofwat's Response is focussed on the areas where Ofwat has made new points relative to the FD.

228 We have categorised Ofwat's response to the 10 errors that we identified within Ofwat's cost assessment framework into three groups:

- **Where Ofwat provided substantial new points** – for three of the cost errors (service level error, leakage error, and Canals and Rivers Trust error), Ofwat has made substantial new points relative to what was set out in the FD. We have therefore provided full replies in these areas.

- **Where Ofwat set out only a few new points** – for five of the cost errors (benchmark error, frontier shift error, input price error, growth and developer service error, enhancement efficiency error, and licence fee error), Ofwat has largely re-stated its FD position but has made one or two new points, which we provide a reply to below.

- **Where Ofwat provided no new points** – for one of the cost errors (enhancement opex error), Ofwat has provided no new points. Therefore, we have not included this error in this Reply.

229 For the three cost errors where Ofwat provided a substantial response, we briefly summarise our overall position on the errors. In all cases, we refer the CMA to our Statement of Case for our position in full.

230 A summary of the key issues is shown below.

Table B1 Summary of Ofwat's response to the cost errors identified in our Statement of Case

Ofwat error	Summary of Ofwat's Response and Bristol Water's Reply
Service level error	• Ofwat has not engaged with the sensitivity analysis we provided. • Ofwat states that our own modelling shows us to be inefficient. This is only true for before 2016/17. We developed our business plan using 2017/18 as the base year.
Leakage error	• Ofwat states that the sector's performance has stagnated. It neglects to mention that we have significantly reduced leakage in recent years. • Ofwat criticises the lack of bottom-up evidence to support our claim in our Statement of Case. We had already provided bottom-up evidence as part of our business plan submissions. • Ofwat states that this is a new claim, when this information was in our DD response. • Ofwat also appears to be applying an element of frontier shift efficiency challenge through its approach to leakage funding, which risks double counting with its frontier shift assumption.
Canal and Rivers Trust error	• Ofwat states that our high costs are due to our approach to cost allocation. This is incorrect. We have shown the specific costs that are driven by the CRT. • Ofwat states that the G&S canal is a single water resource for us. This is not the case, and it is not pertinent to the claim. • Ofwat has not responded to the specific points we made regarding treatment complexity.
Benchmark error	• Ofwat states that the PR14 determination was more stringent. However, the PR19 cost challenge is being applied to costs that already reflect the PR14 challenge. • Ofwat has not engaged with our points regarding the imprecise treatment of enhancement opex. • Ofwat also appears to be applying an element of frontier shift efficiency challenge via its choice of benchmark, which risks double counting with its frontier shift assumption.
Frontier shift error	• Ofwat has provided no evidence to support its view that unmodelled costs have significant scope for efficiency improvements.
Input price error	• Ofwat has selectively used Covid-19 as an argument to justify not making a real price effects allowance for energy costs, while ignoring the costs of Covid-19 in general. • Ofwat does not engage with the latest BEIS forecasts.
Growth and developer services error	• Subsequent clarifications have shown that we were correct in our view that Ofwat had used a historical out of date efficiency assessment.
Enhancement opex error	• Ofwat has not responded to our point on gross versus net enhancement opex. • Ofwat stated in its 20 May presentation that improved service levels in the industry are funded from a roll forward from their historical modelling that includes the opex impact of past enhancement for service improvements. This only being true if service improvements are proportionate to growth in property numbers. Additionally, if this is the case, then Ofwat also have confirmed the error in applying the enhancement opex adjustment from base, as it removes such enhancement opex.
Enhancement efficiency error	• Ofwat stated that its challenge would be more than 10% without the cap. Subsequent clarifications have shown we were correct in our view that Ofwat had used a historical out of date efficiency assessment.
Licence fee error	• Ofwat implies that we calculated our claim assuming Ofwat charge up to the cap. This is incorrect.

231 We also provide further details on business rates increases in Annex 4.[103]

(1) Service level error

232 In our Statement of Case we explained how Ofwat's approach to base cost modelling did not take account of different levels of service across companies, and how Ofwat had explicitly given other companies a cost allowance (as enhancement expenditure) to deliver service improvements to bring their performance towards the levels at which we are currently operating.

233 We included an estimation of what the potential impact on our cost allowance would be if this error within Ofwat's cost assessment framework was corrected. The approach we used was to adjust other companies' base cost allowances to reflect the costs they would have had to incur historically in order to achieve the equivalent level of service to us. This was to enable our base costs to be compared to other companies' base costs on more of a like-for-like basis.

234 In its response to our Statement of Case, Ofwat stated: [104]

> "*The approach taken by Bristol Water to demonstrate that its historical base costs are not inefficient is neither robust nor credible. The subjective reallocation of forecast costs to historical expenditure is contrary to any principle of robust modelling, and the results of such modelling cannot be taken as a credible indicator of companies' performance in the historical period, including Bristol Water's performance.*"

235 We recognised explicitly in our Statement of Case that our approach involved an element of judgement. As such, we ran a number of sensitivities to assess how sensitive the estimated impact was to different assumptions. These sensitivities all resulted in material estimates for the impact of the service level error.

236 Ofwat also criticised our approach stating: [105]

> "*Our base cost econometric models do not include a service quality cost driver for a number of reasons. In particular, performance is under companies' control, and so including a variable for this would risk leading to perverse incentives and over-funding companies with worse performance (if, for example, higher costs are associated with lower performance levels). Service quality variables also have an ambiguous relationship with costs.*
>
> "*We further note that, as part of our March 2018 econometric modelling consultation, companies submitted over 220 models in water and wastewater. None of the models submitted by the companies included a service quality variable. We think that this is quite revealing, in particular given that at that early stage of the process, in contrast to the current stage, companies were much more likely to propose their objective view of models, rather than be motivated to search a model that would close their final determination cost gap.*"

103 Statement of Case, Annex 4, paragraph 38.
104 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.25.
105 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraphs 3.28 and 3.29.

237 We recognise that modelling the relationship between costs and service levels top-down across the industry is complicated, and that so far, no company has developed a robust model that controls for all key measures of service. However, this does not mean that there is no relationship between service improvements and additional costs required to deliver these improvements.

238 Our approach to address the service level error did not involve adding additional variables into the cost models. Instead, we adjusted other companies' cost inputs into the models.

239 Ofwat has allowed other companies enhancement expenditure at PR19 to improve service levels towards the levels at which we are already operating. When comparing costs across companies, there needs to be a consistent approach to cost allocation. This issue has arisen due to Ofwat treating base and enhancement costs separately as opposed to a totex approach. Different types of costs can be treated separately, but any comparisons need to be made on a like-for-like basis.

240 Our approach to address the issue is reasonable and pragmatic. Rather than trying to consider alternative approaches to address the issue, Ofwat has failed to engage with the evidence we presented, choosing instead to reject the cost claim in its entirety due to the fact our approach addresses a degree of uncertainty (and without considering the sensitivities we have provided).

241 Ofwat persists with a view that there is no service-cost relationship and that the costs of additional service is included in base modelling. Ofwat criticised the illustration that we provided in Annex 4 of our Statement of Case of removing the high and low outliers,[106] when this is a standard test to illustrate the weakness of a relationship if the conclusions change with removal of outliers. We have carried out further analysis using European Benchmarking data and marginal costs from PR19 outcome incentive rates. However we have not submitted it as, similar to Ofwat, we do not consider that this is central to the issue the CMA has to determine. Nevertheless, we would be happy to present this analysis to the CMA and Ofwat at a teach in.

242 The regulator should not dismiss the relevant issues due to the fact there is some uncertainty in the approach used to estimate the impact of the service level error. We stand behind our approach as a balanced and pragmatic way of addressing the issues. We would be happy to work with the CMA to consider any approach to remedy the issue if required.

(2) Leakage error

243 In our Statement of Case, we set out that while Ofwat had made cost allowances for performance that goes beyond the industry's upper quartile, Ofwat made no specific cost allowance for leakage expenditure below that level, with those activities being funded from base expenditure. Given that we have the lowest level of leakage in the sector (along with Anglian Water), this means that our above average level of service is not being sufficiently remunerated within Ofwat's cost assessment framework.

244 In order to estimate the impact of this, we considered two sources of evidence:

[106] Statement of Case, Annex 4, section 3.

- a report by PwC commissioned by Ofwat that considered alternative funding approaches for leakage reduction; and
- alternative models that Ofwat had considered as part of the FD.

245 These included models that had variables relating to leakage performance, and suggested that our cost allowance should be materially higher than the Ofwat models that do not include any leakage variable.

246 In its response to our Statement of Case, Ofwat stated that:[107]

> "*We believe that the scale of technological change over the last 20 years have been underexploited by the sector and enable companies to significantly step up leakage reduction at PR19.*
>
> "*For this reason, we challenged companies in our PR19 methodology in 2017 to achieve a stretching leakage common performance commitment of 15% leakage reduction (one percentage point more than the largest leakage reduction commitment at PR14). Our aim was to encourage companies to innovate, exploit existing and new technology and to revise business processes to reduce leakage, rather than just doing more of the same techniques used in the past. We wanted to see a step up in performance, we therefore set out that we expected the 15% challenge to meet from within base funding.*"

247 First, Ofwat has not provided evidence that companies have materially underexploited technological change relating to leakage reduction. Moreover, regardless of whether the sector as a whole has 'stagnated' or not, we do not consider that we have. In AMP5 we reduced leakage by 15%. In AMP6 we have reduced leakage by 18%.

248 We now have the lowest level of leakage in the sector (along with Anglian Water). This has (in part) been achieved through us adopting new technology and innovative working practices. In Annex 3, we provide an annex which provides further details on how we have achieved such low levels of leakage, and how this influenced the bottom-up costing of our plan.

249 Second, Ofwat's stated position should also be considered in the context of the frontier shift efficiency challenge set by Ofwat beyond the top end of the range implied through most of the evidence and regulatory precedent (see sub-section (5) below). By underfunding companies on leakage to reflect Ofwat's speculative view of the potential for productivity shift, Ofwat is effectively applying frontier shift challenges in two different places within its cost assessment. Instead, it is more appropriate to provide sufficient leakage funding within the assessment of base costs, and then to have a dedicated discussion on overall frontier shift.

250 In its Response to our Statement of Case, Ofwat stated that this was a new claim, and that Bristol Water did not submit any cost adjustment claim throughout the price review process.[108] This is incorrect. As detailed in Annex 3, we raised the issue in our response to the Draft Determination.[109] In any case, Ofwat did not reveal its alternative leakage models and the PwC

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[107] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraphs 3.38 and 3.39.
[108] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.41.
[109] Bristol Water (2019), Response to PR19 Draft Determination, BW02: Cost and Efficiency, page 64.

report until the FD, so it should not be surprising that we use this new information in our Statement of Case.

251 In its Response to our Statement of Case, Ofwat stated that:[110]

> "*To support its claim, Bristol Water argues that Ofwat's alternative leakage models provide the company with a higher allowance. We consider that this presents an incomplete and misleading picture. Our alternative models include other specifications. By focusing on the leakage models only, Bristol Water fails to acknowledge that there were some alternative model specifications which would reduce or not materially increase its base allowance.*"

252 It is correct that when assessing the impact of including leakage variables in cost models, we compared the cost models that included variables for leakage to the FD allowance (rather than comparing models that did not have variables for leakage to the FD allowance). It is not relevant to compare models without leakage variables to the FD allowance for the purpose of estimating the impact of including leakage variables.

253 The expert report from NERA that we provided alongside our Statement of Case considered all the alternative models, and this informed our overall view of costs in the round.[111] The leakage modelling is more robust and has more extensive analysis in the PwC report than in the alternative Ofwat models.

254 In its response to our Statement of Case, Ofwat stated that: [112]

> "*In addition, Bristol Water does not validate the requested additional £13 million allowance with its own assessment of forecast of leakage costs or its historic expenditure. We would expect the company to be able to demonstrate a clear understanding of its historic costs and leakage management activities and how these relate to the efficient future costs of maintaining its leakage levels. However, the company does not provide any evidence of its leakage expenditure requirements on base costs, and calculates the £13 million allowance using outputs from Ofwat's alternative base model specifications and the PwC report leakage models.*"

255 We did not include bottom-up evidence of our leakage expenditure in our Statement of Case because we were responding to Ofwat's top-down cost assessment. There is extensive evidence included throughout our PR19 submissions, including a leakage improvement investment plan.[113] In Annex 3, we provide further details on how we have achieved such low levels of leakage, and how this influenced the bottom-up costing of our plan.

256 We would be happy to provide the CMA with further details on our leakage activities, and will focus on this subject during the virtual site visit.

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110 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.42.
111 NERA (2020), Ofwat's Approach to Wholesale Cost Assessment in the PR19 Final Determination.
112 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.43.
113 Bristol Water (2018), BW033 September 2018 Business Plan – Investment Cases – Leakage Investment Case.

(3) Canal and Rivers Trust error

257 In our Statement of Case we explained that we have a company-specific driver of costs – Canal and River Trust (**CRT**) payments – due to our area of operation.[114]

258 All water companies make payments to the Environment Agency (**EA**) for the water they take from the environment. The payments that we make to the CRT are a charge over and above our payments to the EA because the Gloucester & Sharpness Canal (**G&S Canal**) is well outside our area of appointment and the relevant arrangements were established in 1962 with the Severn River Authority who, at that time, had responsibility for abstraction from the River Severn (now with the EA) as well as ownership and operation of the G&S Canal (now owned and operated by the CRT). The payments made to the CRT increase our costs relative to other water companies, which can procure more of their raw water from within their areas of appointment and, absent our unique and atypical arrangements, do not have to make additional payments over and above those made to the EA.

259 There is clear precedent for this allowance. The CMA allowed the costs associated with the CRT payments in full in CMA15.

260 In its response to our Statement of Case, Ofwat stated that we had not demonstrated that the third-party payments to the CRT are the cause for our high water resources costs.[115]

261 We have not sought a cost claim for all our water resource costs; only the component that relates to the additional costs associated with the CRT payments that other companies are not exposed to. Any assertions that Ofwat make to the efficiency of our in-house costs are therefore irrelevant. We demonstrated that when the payments to the CRT are removed, our proportion of water resource costs are reduced to fifth highest in the industry.[116] Ofwat themselves have also recognised that the "*CRT payments represent the most efficient source of this supply for [Bristol Water], and alternatives are more expensive.*"[117]

262 Ofwat goes on to state that:[118]

> "*In our draft determination we asked Bristol Water to provide more evidence to demonstrate that the water resources costs it incurs are higher than those incurred by other companies and that these costs are incurred efficiently. Although the company provided a breakdown of its 2017-18 water resources costs, this was at a high-level, with the company allocating over 70% of its overhead costs to 'central costs', with the remainder apportioned between canal and in-house (non-canal) sources and assets. Companies normally allocate overhead costs to specific assets operation or maintenance. This incomplete picture from Bristol Water made a comparison of total costs between types of source difficult. It also raised concerns over the company's understanding of and its ability to manage its assets operational and maintenance costs*"

114 Statement of Case, paragraph 497.
115 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case' paragraph 3.125.
116 Statement of Case, paragraph 514.
117 Ofwat (July 2019), PR19 draft determinations: Bristol Water – Cost efficiency draft determination appendix, page 6.
118 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.129.

263 The points Ofwat makes are not relevant. Central costs include elements such as catchment management and water quality sampling, which is volume related. We have to manage the G&S Canal catchment, which has a large geographical area. This includes controlling for metaldehyde. Using a volume driver for the overhead allocation is an appropriate given the population scaling in the efficiency models (population being based at treatment works and more complex to use as an allocation due to our multiple works and resilience of supply from multiple sources throughout our region). It includes water resource planning costs and resource monitoring, which applies throughout the region.

264 Ofwat discusses options around the allocation of central costs, and suggests that if total water resource costs were considered and only 1/25th of the central costs were allocated to the G&S Canal as a source, then it would not appear like a high-cost option.[119]

265 Ofwat's analysis is flawed. As explained in our Statement of Case,[120] the G&S Canal does not represent a single source, it represents five sources. We report the number of sources in our Annual Performance Report (table 4P Line 16). Our reported figure for this line for 2018/19 is 25 sources, which has remained constant for a number of years. In terms of pumped storage reservoirs, there are three sources at Littleton and two at Purton, all of which are related to the abstraction from the G&S Canal. This is not a valid overhead driver, it was added in by Ofwat, but it is not relevant.

266 A potentially more appropriate approach to allocating overheads would be by volume of water provided, as this is a better indicator of the level of activity incurred with our central costs in relation to the source. For example, our central costs include catchment management expenditure, which relate to the size of the catchment associated with the resource in question. The proportion of our water that comes from the G&S canal is 45% of our total distribution input.

267 We have not included central costs or overheads in the estimation of our cost claim – we have only considered the direct costs associated with the G&S payments.

268 Ofwat states that our comparison of G&S costs to other companies provides an incomplete and misleading picture, as other companies may incur other costs that we incur only at a lower level.[121]

269 To the extent that other companies do incur other costs, they are clearly not as material as those incurred by Bristol Water, as evidenced by us having the highest resource costs in the sector when normalised by the number of properties served. We addressed potentially avoided costs in our extensive earlier submissions to Ofwat – neither ourselves nor Ofwat can identify anything specific and factual to demonstrate this. This is supported by the expert report from Aqua Consultants.[122]

119 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.130.
120 Statement of Case, paragraph 498.
121 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.130.
122 BW023, Aqua Consultants (2018), External Support for Benchmarking of Treatment Works.

270 Ofwat notes the point we raised in our Statement of Case regarding the higher treatment costs associated with the G&S canal. However, Ofwat did not respond to the specific points made in our Statement of Case regarding treatment complexity.[123]

271 We have provided ample evidence to demonstrate that the costs are:

- incurred due to our operational area;
- efficient; and
- not sufficiently remunerated within Ofwat's cost models.

272 Finally, the CMA considered this cost claim in depth in the 2015 re-determination, and determined to allow the cost claim in full.

(4) Benchmark error

273 Ofwat attempts to dismiss the 'benchmarking error' by making a generalised statement about the level of efficiencies that can be achieved absent competitive pressure. For example, Ofwat stated that: [124]

> "*We also have to consider that our benchmarking is done amongst long standing monopolies. Even the relatively efficient companies within this sector are unlikely to be as efficient as companies facing competitive pressure. Our comparative assessment is unlikely to identify maximum achievable efficiency.*"

274 This does not address the points raised in our Statement of Case.[125] Instead, similar to Ofwat's position on leakage funding, Ofwat applies an efficiency challenge to reflect a sector-wide expectation of productivity improvements in addition to the assumption of a frontier shift, which is beyond the top end of the range implied through the evidence and regulatory precedent.

275 The 'catch-up' efficiency and frontier shift should be considered separately, as combining the two risks double counting aspects of the challenge (as Ofwat have done).

(5) Frontier shift error

276 Ofwat do not raise new points regarding its view on frontier shift. Ofwat uses one example in its Response we wish to respond to. Ofwat stated that: [126]

> "*We consider that there is some scope for companies to reduce these costs, in particular Traffic Management Act costs for example through the use of innovative or non-invasive ways to make repairs.*"

277 Ofwat has provided no evidence to support its claim that further efficiencies are available to Bristol Water through increasing the non-invasive ways we make repairs.

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[123] Statement of Case, paragraphs 522 to 530.
[124] Ofwat (2020), 006: Cost efficiency – response to common issues, paragraph 6.36.
[125] Statement of Case, paragraphs 396 to 428.
[126] Ofwat (2020), 006: Reference of the PR19 final determinations: Cost efficiency – response to common issues i, paragraph 7.63.

278 Traffic Management Act (**TMA**) costs are new costs for Bristol Water. While they have been progressively introduced across the country since 2008, innovations like the Bristol Code of Conduct, our overall good performance, and our general positive highway working relationship have meant that the topic of and the need for permits was left off the agenda until now. This changed after 2018 when the Secretary of State for Transport contacted all South West Highway Authorities (including the seven we deal with) advising them all to consider changing from being a noticing authority to a permit authority.

279 With regard to the application of its efficiency challenge to unmodelled costs, Ofwat states: [127]

> "*Bristol Water states that our decision to apply frontier shift to unmodelled base costs is unjustified. We reject this assertion. The frontier shift estimates identified for comparator sectors are based on productivity growth across all costs, including both base and enhancement costs. Given that the frontier shift estimate was based on all costs in comparator industries (including costs that might be regarded as 'fixed'), we therefore applied frontier shift to all wholesale base expenditure. Water unmodelled base expenditure includes business rates, Traffic Management Act costs and abstraction rates. We consider that there is some scope for companies to reduce these costs, in particular Traffic Management Act costs for example through the use of innovative or noninvasive ways to make repairs. If the frontier shift estimate was not being applied to these costs, then either comparable costs should have been removed from other sectors before productivity estimates are made; or the frontier shift on other costs should be increased as it is only being applied to a smaller proportion of costs in the water sector.*"

280 Ofwat is incorrect in this assertion, as for business rates and abstraction rates these are substantially outside of direct management control, in a similar way to Ofwat licence fees for instance business rates correlate to turnover as they are set on a "cumulo" basis. We set out in Annex 4 (paragraph 38) of our Statement of Case the likely increase in our business rates based on a draft VOA valuation, which the CMA will wish to consider once the final valuation is confirmed.

281 For TMA costs, the innovative or non-invasive ways suggested make no difference to the permit schemes in our region, which cover any type of highway or footway opening. Ofwat at the Draft Determination had refused to make any allowance for these new schemes, and therefore there are significant efficiencies required of c. 49% compared to the costs we face had the newly implemented schemes applied in previous years, once the potential for cancellation charges on permit schemes which we did not include in the cost estimates are included.[128] Ofwat's conjecture in the section above has no evidence presented to support it.

282 The costs included in our plan correspond to volumes of activity that already reflect efficient working practices.

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[127] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.85.

[128] The detail of this evidence is set out in Section 8 of BW02, Cost and efficiency of our response to the draft determination.

(6) Input price error

283 Ofwat introduces a partial and one-sided consideration of Covid-19 into its assessment of costs, stating that: [129]

> "*We also note that uncertainty over energy prices has increased with Covid-19, with recent falls in oil prices putting significant downward pressure on energy prices. While the expected impacts for the 2020-25 period are still unclear, this may result in falling real energy costs over the period and further reduce the case for a positive real price adjustment for energy.*"

284 Elsewhere in its response Ofwat stated that: [130]

> "*We consider that it is appropriate to have reasonable certainty around the impacts of Covid-19, before making associated adjustments as part of the redetermination process.*"

285 A consistent approach to Covid-19 should be applied in the re-determinations. It is inconsistent for the costs of Covid-19 to be excluded from consideration, but for Ofwat to seek to use evidence from West Texas Intermediate crude oil futures expiring in May as justification for its position on energy prices over the period 2020-25.[131]

286 The impact of Covid-19 can be addressed outside of the re-determination process. For consistency, this should reflect both the costs and any potential benefits, rather than applying a cherry-picking approach within the re-determination. In any case, if energy prices were to drop as a result of Covid-19, customers' interests would be protected by the equivalent of the labour indexation mechanism Ofwat included in the FD. In any case, the main issue to be considered is Ofwat's distinction between including a labour price indexation mechanism but not the equivalent for energy.

(7) Growth and developer services error

287 Ofwat's response to our Statement of Case fails to address our core points, i.e. the disconnect between the rates in growth and developer services revenue adjustment mechanism (**DSRA**) and the application of a 12% historical efficiency factor. A shortfall of £4.1 million exists in the growth allowance and we are exposed to undue risk through the approach adopted by Ofwat at FD.

288 Ofwat's response focuses on four points:

- the need to apply an integrated approach and the implied unit costs that this generates;
- the choice and implication of forecasts;
- the growth adjustment made at FD; and

129 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.100.
130 Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 1.12.
131 We note that Ofwat has not engaged with the latest BEIS forecasts.

- the application of an efficiency challenge to the DSRA unit rate.

289 There is a need to forecast the efficient level of costs that are required for growth. The key issue is the realism of the allowance generated and the unit rates that this implies. The fact that an adjustment had to be introduced at FD reinforces our position that the modelling approach has not resulted in appropriate allowances.

290 The additional £3.6m generated through the FD adjustment is estimated by taking:

- the difference between the forecast ONS annual growth rate for each company minus the historical average sector growth rate (0.7%) – this generates a value of approximately 4,500 households for Bristol; and

- multiplying this number of households by the industry upper quartile "efficient" historic unit cost of £783.

291 This value, when added to the implied allowance, generates an implied unit cost of about £1,014 for us. This is a coincidence. It is not an adjustment designed by Ofwat to generate our forecast unit cost. Regulation should not depend on happenstance to arrive at the right answer.

292 In the Statement of Case, we confused the FD adjustment and the DSRA. The FD adjustment was an allowance built into the determination while the DSRA is an ex post adjustment mechanism. In April Ofwat published its PR19 reconciliation model consultation which revealed that Ofwat had changed approach between DD and FD in terms of the property numbers used in the DSRA. We return to the DSRA and the risk that it creates for us later in this response.

293 In its response, Ofwat provides a number of reasons for why it considers the ONS forecasts to be better than the Water Resource Management Plan (WRMP) forecasts. While all forecasts naturally include the potential for error, it should be noted that the difference between our WRMP and out-turn values is quite close. This is shown in Ofwat's own Figure 4.1 in its Response.[132] Although this is potentially a moot point given the uncertainty created by Covid-19, the best possible forecast available should be used, which is our forecast. The forecast has also been used to develop our WRMP, a key planning document for the industry, as described in our Statement of Case.

294 Whether or not the forecast is accurate ought not to matter. If the DSRA, which acts as a true-up for the actual number of new connections, is set correctly then:

- a low or high forecast is corrected as the actual number of new connections arise; and

- there is no revenue impact since the unit cost in the correction matches the allowance incorporated into the determination.

295 Neither of these hold true for the reasons set out below:

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132 Ofwat (2020), 006: Reference of the PR19 Final Determinations: Cost Efficiency – response to common issues.

- The forecast matters since it affects cash-flow during the price control as the correction is at the end of the five year period. There is a carrying cost that should be met.

- The DSRA unit cost is higher than the implied allowance unit cost (even correcting for the FD adjustment) and this means our revenues could be affected by the forecast. An important aspect of this second factor is the fact that the DSRA unit cost had an inappropriate efficiency challenge applied to it by Ofwat. Consequently, it is set below our true efficient cost. As explained in our Statement of Case, an internal efficiency challenge had already been applied.

296 Ofwat stated in its Response that: [133]

> *"...the 12% efficiency challenge is not a historical challenge, but is calculated on the company's forward-looking gap on base costs, calculated as the percentage difference between our view of efficient costs and the company's view of efficient costs for the period 2020-25."*

297 From an email exchange with Ofwat,[134] it is clear that Ofwat's calculation did not take into account our response to the DD. Ofwat is not utilising the most up-to-date information available at the time of the FD.

298 Updating the efficiency factor calculations to reflect our DD response and removing Ofwat's view of the reallocations to base results in a considerably lower efficiency challenge of 7.7%. This arises because of the lower base costs in our DD response. This is below the level of efficiency of c. 9% that we included in our plan on these costs in any case (noting Ofwat were treating developer services as enhancement costs in line with their methodology and we were efficient on the modelling of this until the draft determination, where Ofwat's modelling and application to developer services was erroneous).

299 If the correction factor is taken to an extreme and no new connections happened, but a positive allowance had been made, then the situation facing us would be one where the correction factor is greater than the allowance. That cannot be right. It is in customers' interests to adjust the base cost estimate given Ofwat's error in calculating the adjustment using a historical number, and that this adjustment is below the catch-up efficiency for developer services costs used in our own plan.

300 The growth allowance made by Ofwat is £4.1m less than it should be (gross of grants and contributions) owing to the erroneous application of historical efficiency to developer services – both of which are delivered by us and through competitive provision.

(8) Enhancement efficiency error

301 Ofwat incorrectly identified our implied base expenditure inefficiency to be 12% in its models. This is evidenced through Ofwat stating that:[135]

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133 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.117.

134 Email from Paul Valentine, 14 May 2020, 'RE: Ofwat response to Bristol Water's Statement of Case - request for clarification'.

135 Ofwat (2020) 'Reference of the PR19 final determinations: Response to Bristol Water's statement of case', paragraph 3.155.

"*While we cap the challenge at 10%, we do not apply any discretion is [sic] selecting the value of the efficiency challenge between zero and 10%. The efficiency challenge is a result of the company's inefficiency on base costs, calculated as the percentage gap between our view of efficient modelled base costs and the company's view of modelled base costs, which in the case of Bristol Water is 12%. In fact, the cap we adopted means that the efficiency challenge we applied is a conservative estimate, as it is lower than the company's base efficiency challenge.*"

302 Following clarification from Ofwat,[136] it is clear the efficiency challenge was not updated by Ofwat to reflect our DD response. The 12% challenge referred to by Ofwat reflects our view of modelled base costs at the initial assessment of plans assessment. If our view of modelled base costs had been updated to our DD response, the efficiency factor would be below Ofwat's 10% cap.

303 While this error would reduce the cost challenge using Ofwat's methodology, more fundamentally, the position we set out in our Statement of Case remains correct: it is wrong to apply further efficiency challenges to our enhancement costs given that:

- we had already applied challenging efficiency targets to our enhancement expenditure; and
- in cases where Ofwat conducted a detailed efficiency analysis using benchmarking models, our enhancement costs were assessed to be efficient relative to our peers.

304 Therefore, our cost allowance should be increased by the full value of the claim set out in our Statement of Case.[137]

(9) Licence fee error

305 Ofwat has not understood the basis of our cost claim, stating that: [138]

"*We do not consider it is appropriate of Bristol Water to request an adjustment at this stage. We will run a consultation on the proposed licence change later in the year. In addition, the proposal does not relate to an automatic increase in the licence fee, but rather to an increase in the cap. We have been clear with companies that the cap increase is a limit and is not a target Ofwat aims for in agreeing its budget with Government.*"

306 We did not calculate our cost estimate by assuming the cap was the target. We set out in our Statement of Case a series of different approaches that could be used to estimate the cost increase, and came to a view of a reasonable estimate for the cost increase in the round.[139] Ofwat has yet to provide a cost forecast for the control period. Ofwat had the opportunity to include a reasonable allowance in the FD.

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136 Email from Paul Valentine, 14 May 2020, 'RE: Ofwat response to Bristol Water's Statement of Case - request for clarification'.
137 Statement of Case, paragraph 557.
138 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.160.
139 Statement of Case, paragraph 583.

307 This claim helps to illustrate the general approach Ofwat take – only considering certain cost increases (but still applying an efficiency challenge even where costs are not likely to be controllable), whilst increasing both catch up and frontier shift assumptions beyond the likely potential by assuming an innovation or technology gap.

Section C: Balance of risk

10. Overall assessment of the balance of risk

10.1 Ofwat's overall approach

308 In our Statement of Case, we set out how Ofwat's FD imposed certain financial incentive and sharing mechanisms which were not justified by supporting analysis and which expose us to material downside risk that compromises our ability to secure a reasonable return on capital. We described these as the '**balance of risk errors**':

- Ofwat wrongly set the penalty rate too high for both the mains bursts and per capita consumption ODIs because it failed to adequately consider the strength of customer views (the '**ODI error**').
- Ofwat was unjustified in setting asymmetric totex cost sharing rates, whereby the company bears 60% of the burden of any overspend, and retains only 40% of the benefit of any underspend (the '**asymmetric cost sharing rates error**').
- Ofwat was unjustified in including the gearing outperformance sharing mechanism, which adversely impacts our financial resilience (the '**gearing outperformance sharing error**').

309 Ofwat's Response made the following submissions on the balance of risk errors:

- The **ODI error**: Ofwat claims that it took sufficient account of evidence on customer preferences in setting ODI rates, and was moreover justified in the way it calculated the impact on the ODI RoRE range.[140]
- The **asymmetric cost sharing rates error**: Ofwat claims that its approach is justified by the information asymmetry between it and companies, and Bristol Water has outperformed totex allowances in the past.[141]
- The **gearing outperformance sharing error**: Ofwat claims that the mechanism is consistent with financial theory.[142]

310 The significant asymmetric risk introduced by the balance of risk errors, together with the **cost of capital errors** and the **cost allowance errors** in the FD, means that we cannot expect to earn a reasonable rate of return if we deliver on an efficient level of costs in the 2020–2025 period. This is one reason why Ofwat failed to meet its Finance Duty. We comment further below on how Ofwat's Response dealt with each of the balance of risk errors.

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140 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraphs 4.18 – 4.41, and 4.46 – 4.51.

141 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraphs 6.65 – 6.70.

142 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraphs 5.13 – 5.25.

10.2 Overall level of stretch

311 In its Response to our Statement of Case, Ofwat expanded on its view of the overall level of stretch in the FDs, and its conclusion that there needed to be a "step change" in performance in the industry. Ofwat argued that the overall level of stretch was justified in view of the level of stretch applied at PR14.

312 Our business plan is very ambitious. We proposed a level of costs that were 10% below historical levels, while delivering a step-change in many of the key performance measures. For example, by 2025 we propose to deliver:

- 21% reduction in leakage;
- 6% reduction in per capita consumption;
- 58% reduction in supply interruptions; and
- 50% reduction in water quality contacts.

313 These targets are highly challenging as we are already a strong performer, in particular on leakage, where we have the highest performance levels in the sector, have had one of the biggest reductions in leakage across the sector in AMP6, and have the biggest forecast reduction in AMP7. Ofwat's FD goes beyond what can be reasonably expected to achieve while introducing significant downside risks we cannot mitigate or absorb.

314 Ofwat seeks to compare the level of 'stretch' at PR14 to PR19 by comparing the average level of service improvement.[143] This analysis is not compelling. As service levels improve, incremental improvements become more challenging and more costly to achieve as companies exhaust the opportunities for improvements – there are diminishing returns to new programmes. Furthermore, it is the package in the round that needs to be considered – i.e. the stretch on service, the stretch on costs, the reduction in the allowed return, and the significant asymmetric downside risk from the various regulatory mechanisms.

315 We note that Ofwat's analysis does not use the more comparable leakage measure,[144] when it uses the more comparable data for other metrics. In doing so, Ofwat understates the extent of stretch for Bristol Water. When the PR19 definition for leakage is used no relationship between efficiency and performance remains, as we showed in Annex 4 of our Statement of Case.[145]

143 Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 4.20.

144 Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 7.25 and table 7.2.

145 Statement of Case, Annex 4, section 3.

11. Ofwat's response to specific balance of risk errors

(1) The ODI error

316 In our Statement of Case, we set out how Ofwat had wrongly set the penalty rate too high for the outcome delivery incentives (**ODIs**) for both the burst mains (mains repairs) and per capita consumption (**PCC**) performance commitments (**PCs**). We also explain how this error results in greater negative asymmetry in the overall Return on Regulatory Equity (**RoRE**) range compared to our business plan, but that Ofwat failed to adequately take this into account.

Mains repairs

317 In its Response to our Statement of Case, Ofwat made the following arguments in relation to the mains repairs ODI:

- First, Bristol Water's proposed penalty rate was outside **Ofwat's assessment of the "reasonable range"**;[146]
- Second, Bristol Water's **recent mains repairs performance is poor**;[147] and
- Third, Bristol Water's **customer research evidence was insufficiently high-quality, and should not be relied on**.[148]

318 In relation to the first point, we made clear in our Statement of Case that our proposed rate was appropriate irrespective of the fact that it fell outside Ofwat's assessment of the "reasonable range" (+/- 0.5 standard deviations around the industry average), because it was higher than the level that would have been obtained from our customer willingness to pay (**WTP**) data.[149]

319 Given that Ofwat's motivation for using a *"reasonable range"* approach was to avoid *"ODI rates which depart significantly from underlying customer preferences"*,[150] our set rate is therefore not invalidated by the fact that it falls outside the industry average range. The penalty rate we set was also more stringent than the rate that would have resulted had we used Ofwat's standard formula.

320 In relation to the second point, Ofwat's criticism of our mains repairs performance was not raised in the FD. Over the period 2015-20, relative to other companies, our mains repairs performance has been around the average for the industry. While it has not been as strong as our performance on other measures, we have not been a poor performer compared to others in the sector.

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146 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 4.21.
147 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 4.23.
148 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 4.25.
149 Statement of Case, paragraph 609.
150 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 4.21.

321 Reducing the level of burst mains is a longer-term activity impacted by maintenance and replacement activity, making shorter-term improvements through our transformation harder to achieve. We provided Ofwat evidence for this in our response to the DD.[151]

322 With regards to our performance against targets; we did not have a specific mains repairs PC in 2015-20, but it was included as a sub-component of an overall metric for asset health ('asset reliability – infrastructure').

323 For the burst mains sub-component, we stayed within the target range for four out of the five years of the control period. The one year we went outside the range was due to the extreme freeze-thaw event of 2018, which saw a temperature swing of 16 degrees Celsius in less than 48 hours. This caused major operational issues for the entire sector. Following the freeze-thaw event, Ofwat undertook a review of the sector's performance, noting that Bristol Water overall had performed well.[152]

324 While there is scope for improvement with our mains repairs performance (and we have accepted a PC to improve over the period 2020-25), our performance has not been 'poor', and this cannot serve as rationale for rejecting the ODI rate set out in our business plan.

325 In relation to the third point, our incentive package was discussed at length with our customers. Our approach to customer engagement is detailed in our business plan and is summarised in our Statement of Case.[153]

326 In its Response, Ofwat has selectively identified a single question from one element of our broad range of customer research (*"Do you agree with Ofwat's view that mains burst should incur a significantly large penalty? Is it as important as supply interruptions, water quality and leakage?"*), and alleged that this amounted to a leading question which was heavily relied upon in shaping our business plan.[154]

327 We firstly reject Ofwat's contention that the question it identified was leading. Secondly, this question should not be viewed in isolation given the range of research we conducted. We would be happy to take the CMA (and Ofwat) through our approach to customer research in detail if this would be helpful.[155]

328 The customer engagement criticism by Ofwat relates to the statement made in our Statement of Case:[156]

> "*We had provided clear evidence for our mains bursts ODI that customer views did not support Ofwat's increased penalty rate. Ofwat had been concerned that customers were not informed why the underperformance incentive would significantly outweigh the outperformance incentive. This was not the case. Moreover, several groups recognised that we are already working hard to prevent mains bursts and considered that Ofwat's penalty rate was unlikely to provide an incentive for further investment.*"

151 Bristol Water (2019), Response to the Draft Determination, BW02-6: Deliverability.
152 Ofwat (2018), Review of water companies, response to the 'Beast from the East'', page 1.
153 Statement of Case, Annex 6.
154 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 4.25.
155 Full details of our approach to customer engagement is set out in our Business Plan, Section C1.
156 Statement of Case, paragraph 614.

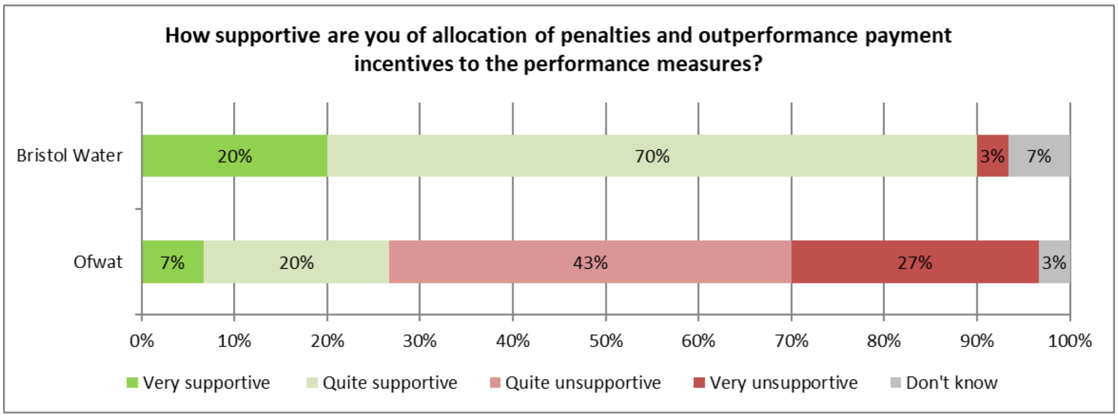
329 The research called into question by Ofwat relates to the Bristol Water Customer Forum, held on the 13th of August 2019 to inform our response to the PR19 Draft Determination.[157] The Customer Forum is a group of customers from within the Bristol Water supply area who we engaged with regularly during the development of our plan on specific options and choices. They were recruited through a market research agency to be representative of our overall customer base, and received payment for their attendance at the research sessions. Therefore, by August 2019, these customers had significantly greater than average knowledge and engagement with our business plan, in particular on PCs, which had been presented in earlier iterations.

330 This engagement constituted deliberative research with an informed group of customers, and confirmed the views of the earlier focus group research. It was not the main research on incentives or on mains bursts, but was conducted to understand and cross-check the view we had previously obtained.[158] This research was focused on testing conclusions from research already obtained, which is good practice. We note that this is precisely the type of research recommended in a recent publication from the Consumer Council for Water.[159]

331 The format of the engagement event was to present the overall DD, followed by more detailed discussions in four groups of key issues. This format allowed for any issues of comprehension to be addressed, and participants to provide their views at length if necessary.

332 Participants were provided with handouts, which gave a reminder of the commitments within our plan. The research found that 90% of participants were very or quite supportive of the Bristol Water package overall, compared to just 27% being supportive of the Ofwat package.

Figure C1 Results of Bristol Water Customer Forum ODI questionnaire, 13 August 2019



333 When discussing mains bursts specifically, most felt that Ofwat's view on the underperformance penalty was disproportionately high and were concerned about the impact this would have on wider issues such as future investment, traffic and leakage. **Overall, 80% of**

157 The research event in August 2019 presented the proposed ODIs from the Draft Determination, compared to those proposed by Bristol Water in our April 2019 plan. 30 customers attended. This was the sixth meeting of the customer forum.

158 ICS Consulting (2019): Customer Research: Outcome Delivery Incentives 2019 and ICS Consulting (2019): Draft Determinations customer research: ODI August 2019

159 https://www.ccwater.org.uk/research/engaging-water-customers-for-better-consumer-and-business-outcomes/

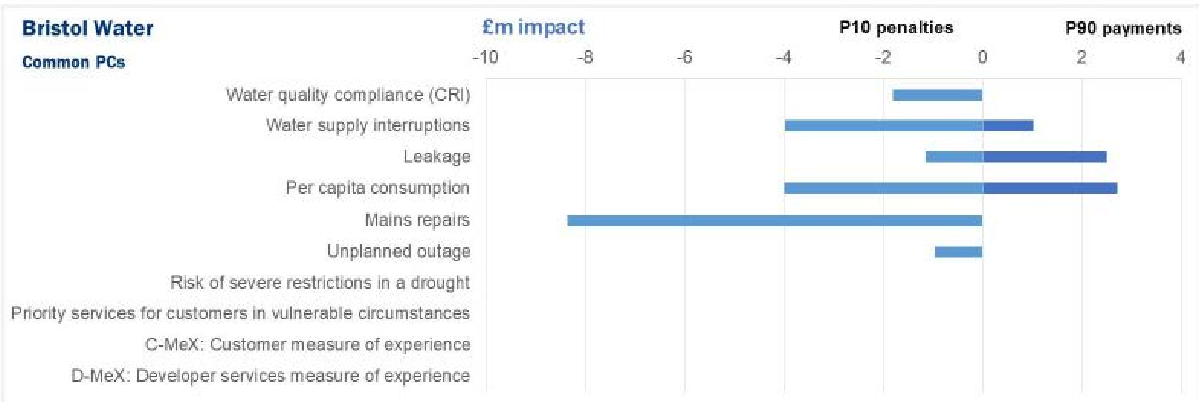
customers preferred the incentive value proposed by Bristol Water to that proposed by Ofwat.

334 In its Response to our Statement of Case, Ofwat suggests that the specific question asked on mains bursts was leading. In fact, the question posed was neutral, and in its phrasing invited customers to either agree with Ofwat's DD position or to provide an alternative opinion.

335 There are useful insights that can be gained from allowing customers to discuss and explore their views more fully than would be the case in solely using quantitative research projects. Therefore, the views of the customers expressed in this event provide a relevant contribution to a review of the appropriate level of incentive payments. The final conclusion that informed our plan was not solely based on this final confirmatory discussion with customers (which was to validate research results). A representative of the Bristol Water Challenge Panel attended this event and their response to the DD reflects this view.

336 The ODI rate that Ofwat set creates a disproportionate exposure relative to other measures. Ofwat's own analysis shows our package of potential ODI penalties and rewards (based on p10/p90 scenarios) to be dominated by the mains repairs incentive.

Figure C2 Ofwat's projection of P10 underperformance payments and P90 outperformance payments for common performance commitments over 2020-25 (£ million)[160]



337 The above analysis is based on Ofwat's view of p10 and p90 levels of performance. As such, it does not show the total maximum exposure, which could be up to £2.5m per year from the mains repair measure alone. The ODI rate we included in our business plan still provides a very strong incentive for us to avoid poor performance. As explained in our Statement of Case,[161] we set the rate significantly above the unit cost of carrying out mains repairs, while maintaining an appropriate balance of incentives within the overall package.

338 Mains bursts often have no impact on customers' supplies, whilst a single burst main could be responsible for a supply interruption to a significant number of customers. Our customers recognised that it is more appropriate for incentives to be focused on the measures which impact their water supply most directly. Further, more mains repairs in a single period may

160 Ofwat (2019), FD, Bristol Water final determination, page 28.
161 Statement of Case, paragraph 607.

just mean that more leaks are being found and fixed, which is efficient behaviour if extreme weather is expected.

339 The Bristol Water Challenge Panel has responded independently to the CMA regarding our plan and Ofwat's FD. Their letter supports the validity of our approach to calibrating ODIs:[162]

> "*The research found that customer priorities did not align with the targets set by Ofwat in the Draft Determination. Customer preferences were supportive of the company's original ODIs and service priorities while some of the incentives, particularly those regarding asset health, were at odds with and harsher than customer preferences.*"

340 Ofwat has erred by disregarding our customer research, and setting an incentive that does not align to our customers' priorities. In so doing, Ofwat's intervention has exacerbated the negative asymmetry of the ODI RoRE range, to a level that we cannot absorb given the overall level of headroom under the FD.

Per capita consumption (PCC)

341 In its Response to our Statement of Case, Ofwat made the following arguments in relation to the PCC ODI:

- first, given that Ofwat had intervened to make meter penetration a scheme-based PC (such that it no longer contained a willingness to pay component), and set its ODI rates on a cost recovery basis, Ofwat claim that it was **right to apply 100% of Bristol Water's customer willingness to pay valuation to the PCC ODI**;[163]

- second, because PCC is a consumer-focused outcome measure *"which customers care about"*, Ofwat claims that it is **important to ensure that it is sufficiently incentivised**;[164] and

- third, Ofwat preferred to **place more weight on our willingness to pay research than on our customer incentive prioritisation research**.[165]

342 In relation to the first point, even though Ofwat moved the metering ODI in the FD to be cost-based rather than based on customer willingness to pay, Ofwat's incentive rates on the PCC ODI are still out of line with the relative importance indicated by our customer views research. This is not sufficient to resolve the double-counting challenge we made, and the outcome results in incentives which are out of line with customers' views. For example, PCC represents 11.3% of the total p10 level of underperformance incentives and 8.7% of the maximum underperformance penalty. This is the third highest underperformance risk after supply interruptions and mains bursts. This compares to the results from the customer research that indicated PCC ODI should rank 18th out of 22 financial incentives.

343 In increasing the PCC incentive rates by redistributing our full customer willingness to pay valuation to this ODI, Ofwat made no corresponding reduction to the incentive rates for meter

162 BWCP (2020), Letter from Peaches Golding OBE to Sharon Mayor, page 4.
163 Ofwat (2020) , 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 4.31.
164 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 4.32.
165 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 4.33.

penetration. In fact Ofwat significantly increased the incentive rates for meter penetration in the FD from £0.026m per 1% meter penetration to -£0.400m per 1% meter penetration (for underperformance) and £0.607m per 1% meter penetration (for outperformance). Ofwat's changes resulted in an unjustified increase in penalties across the two measures.

344 In relation to the second and third points, our customer willingness to pay data reflects our customers' views on overall reductions in per capita consumption. As these are strongly driven by meter penetration, there is an overlap between the two measures. If the penalties for the two measures are set significantly above the level of penalty that our customers consider to be appropriate, then the determination does not align to our customers' preferences, contrary to Ofwat's purported approach. By way of context, our customers ranked the priority of the PCC ODI as 18th out of 22 financial incentives.

Overall implications for RoRE

345 In the FD, Ofwat estimated that for Bristol Water the p10 to p90 ODI RoRE range was -2.15% to +1.00%. In our Statement of Case, we explained that Ofwat's estimation of the RoRE range is incorrect, and that our analysis of the FD indicates a much greater negative skew with p10/p90 RoRE range of -2.9% to +0.8%. This is significantly more asymmetric than our business plan submission of -2.3% to +1.1% which already specified significant asymmetric downside exposure, which poses a significant risk and challenge for us.

346 In its Response to our Statement of Case, Ofwat restated its approach to estimating p10s and p90s, and made the following arguments:

- first, Ofwat's adjustments to companies' P10 and P90 performance estimates at FD **represented a "*considered approach*"** that took account of "*comparative assessments, historical and forecast performance and wider evidence*";[166] and

- second, Ofwat's approach is justified by its view that companies' estimates of downside skew on the ODI package are subject to **pessimism bias**.[167]

347 In relation to the first point, Ofwat implicitly assumes that the relative distribution of p10s and p90s from the performance target are not affected by how stretching the performance target is. This is an overly simplistic approach, and is not robust compared with the bottom-up evidence which we provided to justify our estimate of the RoRE range. Had Ofwat properly assessed the impact of the ODI RoRE range, the degree of negative asymmetry would have been evident.

348 In relation to the second point, this is the first time Ofwat have raised the issue, and in all previous stages of PR19 accepted the need to moderate the incentive interventions for Bristol Water. For instance, in the BW03 Delivering Outcomes for Customers part of our response to the DD,[168] we set out the many errors in Ofwat's analysis, which were subsequently corrected at the FD.

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166 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 4.48.
167 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 4.50.
168 Bristol Water (2019), Draft determination response, BW03: Delivering outcomes for customers.

349 For example, on page 102 we presented the evidence that there was no evidence of the need to target mains bursts down due to *"poor performance"* when also targeting leakage and supply interruptions. Ofwat accepted this as evidence of good understanding of asset and performance relationships sufficient to moderate the draft determination target proposals. Page 105 showed the relationship we demonstrated between mains bursts and temperature variation.

350 Having demonstrated the clear relationship between adverse mains burst circumstances and weather, together with the customer research supporting our approach to incentives, we also presented in BW03 our explanation of the P10 and P90 ranges.

351 As Ofwat demonstrated in their 'teach in' on RoRE to the CMA, Ofwat makes a set of very limited assumptions, not based on engineering or economic logic. For instance, when Ofwat changed outcome commitment P50 levels, it moved P10 and P90 ranges up or down accordingly (scaling). However, changing a target should not change the P10 or P90 levels.

352 The Monte Carlo analysis that we undertook was deliberately comprehensive, and included long-tail risks of low probability but significant impact (not just p10s and p90s). Including these long-tail risks accounts for the impact resulting from penalties due to extreme events (such as rare weather events, for example the freeze-thaw events in 2018 associated with the "Beast from the East"). Tracking both helps to understand the risk that the P10 and P90 range is not normally distributed around the P50 level, which is an assumption scaling in the way Ofwat undertakes and assumes for notional RoRE ranges requires.

353 Recent Covid-19 developments may also have an impact on the achievement of PCs, and this is further evidence of the need for companies to take account of such low-probability, high-impact events. Ofwat placed too much emphasis on the fact that companies' outturn performance in the 2015-20 period was generally towards the upper end of the ODI risk range estimated in PR14. This provides no meaningful evidence that companies are systematically "pessimistic", or that our detailed modelling was incorrect.

354 We do not agree with Ofwat's presentation in the 'teach in' to the CMA that there should be a focus on actual RoRE returns, as this moves away from the notional basis of setting the cost of equity (the data is derived from a dividends funds flow analysis rather than the standard Annual Performance Reporting RoRE basis that has also been used at PR19).

355 The material extent of the asymmetry set for us is unjustified and inappropriate. Given the outcome of the FD, we are not in a position to be able to absorb cost shocks and still expect to earn a reasonable return on our efficient level of costs.

356 We have also tested our proposed incentive range with our customers and received support for the overall incentive balance. The CMA should therefore address the ODI errors and thereby the significant negative asymmetry to which they contribute.

(2) The cost sharing error

357 In the FD, Ofwat set significantly asymmetric cost sharing rates for Bristol Water. This means that we must bear c. 60% of any cost over-runs but only retain c. 40% of any underspend. It was wrong for Ofwat to expose us to this additional downside risk in circumstances where, as a

result of the cost of capital errors and the cost allowance errors, we have limited financial resilience in terms of our ability to withstand cost shocks.

358 In its Response, Ofwat made the following submissions:

- first, Ofwat's approach to determining cost sharing rates should be considered in the context of the objective of **incentivising companies to submit efficient business plans**;
- second, Ofwat's approach should be considered in the context of **incentivising ongoing cost efficiency in-period**;
- third, Ofwat recognised that cost sharing rates **mitigate companies' exposure to the risk of overspend** and are an important regulatory tool enabling Ofwat to meet its duties;[169] and
- fourth, Ofwat sought to **portray its approach at PR19 as a "marginal" change** from its approach at PR14.

359 We assess each of these submissions in turn below.

(i) Incentivising companies to submit efficient business plans

360 The overall regulatory framework, views and preferences of our customers and stakeholders all acted as significant drivers on us to produce a challenging business plan. This was reflected in our plan, which had 10% less totex than historical levels. The cost sharing mechanism is not a relevant consideration to companies in setting the level of challenge to costs, given the uncertainties around its application that exist until the outcome of the FD is known. In any case, the models and their application by Ofwat changed so significantly during PR19, up to the FD, that there appears to be no logic in the incentive.

361 Ofwat's approach to incentivising performance is clearly not appropriate as shown by the CMA's earlier re-determination for Bristol Water. In CMA15, the CMA stated:[170]

> "*We recognised that the appropriate role, if any, for the menu scheme in our determination for Bristol Water would not necessarily be the same as that for Ofwat's price control review process covering 18 water companies. We were concerned about the additional complexity that Ofwat's menu scheme would bring, relative to its benefits, for the purposes of our determination. We also considered that the use of the menu scheme raised complications and uncertainty in terms of the approach to financeability assessment.*"

362 In CMA15, the CMA set a cost sharing rate of 50:50. This was in a context where the relative difference between the costs in Bristol Water's 2014 business plan and Ofwat's PR14 Final Determination was much greater than it is at PR19, in particular due to judgements on the scope of enhancement expenditure. The CMA did not raise concerns in this respect about symmetric cost sharing rates providing potentially insufficient incentives for companies to

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169 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraphs 2.59 and 2.60.

170 CMA15, paragraph 3.53.

submit efficient business plans. As the quotation above demonstrates, the CMA was concerned about how the cost sharing mechanism might introduce uncertainty into the financeability assessment.

363 It is important to consider that the cost sharing rate is applied in a range of different circumstances over the course of the price control period, which are not within the control of company management. For example, the sector is currently facing the risk of non-household retailers defaulting due to a downturn in payments from business customers resulting from the Covid-19 situation. Where a retailer defaults, wholesalers (like Bristol Water) are subject to bad debt risk (in this case caused by an Ofwat intervention that requires wholesalers to provide liquidity to retailers and prevents them using payment collateral for revenue due to wholesalers that Ofwat allowed retailers to defer to March 2021). Ofwat is proposing that such bad debt should be subject to the company-specific cost sharing rates set at PR19. This means that companies with a higher totex sharing rate have a higher cost risk arising out of Ofwat's retail market intervention. Ofwat did not have to follow this approach in their business retail market intervention and did not take into account the consultation response from water companies, including Bristol Water, on the unfairness (and regulatory complexity) this causes.[171]

364 Such shocks expose wholesalers to systematic risks directly linked to the intervention of a regulator; the asymmetric cost sharing rates result in a different impact depending on Ofwat's view on company plans during the PR19 process, which is irrelevant to the risk now faced (other than the lack of headroom for such downside risks). Even if Ofwat's contention that the asymmetric cost sharing rates incentivise submission of efficient plans were correct, it failed adequately to take account of the wider consequences, in a context where the FD does not enable adequate financial resilience.

(ii) Incentivising ongoing cost efficiency in-period

365 Ofwat's argument that the asymmetric nature of its PR19 cost sharing rates provides additional in-period efficiency incentives is overstated. In order to incentivise ongoing cost efficiency, the most important factor in a cost sharing mechanism is the absolute sharing rate; not the extent of the asymmetry between the out- and underperformance rates.

366 In an extreme example, a cost sharing rate of zero (i.e. the company bears all the impact) for any out- or underperformance would provide a strong incentive for a company to not overspend, and to seek to reduce costs further. It is not clear why having a large difference between the out- and underperformance rates would have any positive effect on incentivising ongoing cost efficiency.

(iii) Mitigating exposure of overspend

367 Ofwat recognised the importance of cost sharing rates in mitigating costs exposure to companies. However, Ofwat has not justified its adoption of highly asymmetric cost sharing rates, particularly in the context of adopting more aggressive cost assessment assumptions and expecting companies to make a step change in service performance.

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171 Ofwat (2020), Covid-19 and the business retail market: Proposals to address liquidity challenges and increases in bad debt – a consultation, page 16.

368 The holistic effect of the FD is one of disproportionate downside, which exacerbates our financeability problem, and undermines the reasonable expectation for our investors to be able to earn the required cost of capital on a mean expected basis. The cost sharing rates should reflect the risk exposure which companies face in the round. As per our Statement of Case, we consider that 50:50 cost sharing rates (in line with regulatory precedent) are appropriate.

(iv) "Marginal" change from PR14

369 Ofwat submits that the incentive rates in the FD represent only a *"marginal change"* to the position at PR14. While this may be the case in respect of the absolute levels of the rates, Ofwat's approach at PR19 translates into a material impact on totex compared with the PR14 menu sharing when modelling outturn totex. As illustrated in our Statement of Case, Ofwat's PR19 approach to cost sharing increases the range between the p10 and p90 scenarios by c. £9 million compared to PR14 (c.£54 million compared to c. £45 million).[172]

(3) The gearing outperformance sharing error

370 In its Response, Ofwat justifies its imposition of the gearing outperformance sharing mechanism on the following basis:

- first, in the absence of the mechanism, the regulatory framework could distort company incentives in choosing financial structures;[173]
- second, in its view, the mechanism is not inconsistent with accepted financial theory (i.e. companies have misunderstood the Modigliani Miller theorem);[174] and
- third, if the mechanism is retained by the CMA, the CMA does not need to consider whether Bristol Water's preference shares should be treated as equity for the purpose of the mechanism as a reconciliation will be made at PR24.[175]

371 In relation to the first point, Ofwat's submission appears to respond to other companies' positions, rather than our own. Ofwat positions the gearing outperformance sharing mechanism as a response to companies and their investors benefitting from structures where gearing levels are well in excess of the notional level, with little evidence of benefits to customers.[176] This is not the case for Bristol Water and therefore cannot be an appropriate influencing factor in our case.

372 In 2018/19, our gearing was 64.6% including preference shares, or 62.2% excluding preference shares relative to Ofwat's notional gearing for the period of 62.5%. In our business plan, we sought to keep gearing well below 70% (the threshold above which Ofwat considers water companies' gearing to be high) for every year of the 2020-25 control period.

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172 Statement of Case, paragraph 647.
173 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 5.4.
174 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 5.13.
175 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraphs 5.26 – 5.27.
176 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 5.4.

373 Given the FD revenue allowance was substantively lower than that required to finance our plan, we are far more likely to require an increase in gearing. Having the gearing outperformance sharing mechanism in place reduces our financial resilience as it limits the extent to which we can increase gearing as required to weather cost shocks, and increases the gap between achievable and required returns.

374 In relation to the second point, Ofwat argues that companies have misunderstood the Modigliani Miller theorem, and that the proposition that the cost of capital is invariant to capital structure does not hold true for the water sector. Ofwat bases its argument on the fact that the theorem's assumptions do not apply, including the assumption that there are no taxes. However, Ofwat concedes that the regulatory framework in the water sector ensures companies cannot benefit from leveraging up above the notional level since the ex-ante revenue allowance for each company already includes an allowance for tax, calculated based on the projected actual level of gearing (where this is higher than the notional level).

375 Given that in the water sector companies cannot benefit from leverage above the notional level (due to Ofwat taking this into account in the revenue allowance), companies are not being driven by the regulatory framework to increase gearing for the reasons set out by Ofwat. As stated above, we do not have a high gearing, and are not forecasting to significantly increase gearing (although we may need the option to increase gearing to respond to cost shocks).

376 Ofwat has not proven that higher gearing levels result in a transfer of risk to customers. Since privatisation no appointed water company (including the highly geared companies) has defaulted. Even in the unlikely event of a hypothetical default, investors would be significantly affected, and the regulatory ring fence, and special administration, exist precisely to protect customers from any negative impact of default. While Ofwat states that these mechanisms are 'not perfect' it provides no specific analysis of what the weaknesses of these mechanisms may be.

377 Nor does Ofwat provide justification as to why these apparent weaknesses it assumes to exist are of sufficient concern that they warrant an unprecedented regulatory intervention in companies' financing that would restrict companies' choices regarding their capital structures. Indeed, given the penalties that would be incurred in the event of gearing increasing (which could be the result of a company experiencing cost shocks due to events outside of its control), the gearing outperformance sharing mechanism would have the effect of reducing financial resilience for water companies. It might also have a perverse effect of companies gearing up more in order to make up for the resulting shortfall in equity returns.

378 In relation to the third point, Ofwat states:[177]

> "*Bristol Water considers that if the gearing outperformance sharing mechanism is applied in 2020-25 that its own definition of gearing should apply rather than the standard definition of regulatory gearing reported in the annual performance report. The company considers its preference shares should be treated as equity rather than debt.*

[177] Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraphs 5.26 and 5.27.

"*We do not consider this to be a matter for the CMA to determine as the reconciliation will be made at PR24. Should it consider it necessary to address this issue, the CMA should note:*

- *Bristol Water's view is inconsistent with the definition of gearing in the Regulatory Accounting Guidelines (RAGs) published by Ofwat.*
- *Bristol Water argued in its 2015 CMA appeal (with a supporting KPMG report) that its preference shares were more like debt than equity.*
- *The reason we exclude Bristol's preference shares from our assessment of the cost of debt that might apply for a notional structure is that their irredeemable nature makes them non-pure debt which is unlikely to be included in an efficient notional company's debt financing mix.*"

379 Ofwat's logic that, because there will be a reconciliation at PR24, the definition of the mechanism is therefore not a matter for the CMA, is flawed. Over the course of the 2020-25 control period, we need to manage the price control in the round, which requires an understanding of the key regulatory mechanisms which apply to us. That is not possible if a key definition (against which our performance will be assessed) will not be defined until PR24. More generally, there will also be cost, performance commitment, and revenue reconciliation mechanisms at PR24, and this clearly does not change the fact that it is appropriate for the CMA to concern itself with those aspects of the re-determination now. Ofwat made a similar statement on considering the topic at PR24 in the DD and we responded on that basis, although the FD was then definitive that Ofwat would apply the gearing outperformance sharing mechanism in any event.[178]

380 We consider that it is irrelevant that our proposed treatment of preference shares for the purposes of the gearing outperformance sharing mechanism is inconsistent with Ofwat's Regulatory Accounting Guidelines. Gearing without preference shares is a standard requirement for our regulatory reporting and is included in the regulatory accounts. The preference shares are not included in the allowed cost of debt, so there is no logic for this mechanism in sharing a further benefit with customers.

381 Ofwat argues that our submission during the 2015 re-determination was in favour of treating preference shares as debt. This argument is irrelevant: our submissions in relation to the cost of debt during the PR14 re-determination were in a completely different context to the calculation of the gearing outperformance sharing mechanism and there is no merit in any read-across. Further, it should be noted that the CMA's precedent decision on cost of debt at CMA15 gave most weight to the cost of debt excluding preference shares.[179] We have adopted the CMA precedent on this point and as a result, the cost of debt that we have reported throughout the PR19 process has excluded preference shares.

382 We do not understand Ofwat's view that preference shares are unlikely to be included in an efficient notional company's debt financing mix. If Ofwat is arguing that preference shares should not be treated as debt for the purposes of the gearing outperformance sharing

[178] Ofwat (2019), DD, Aligning risk and return technical appendix, page 92.
[179] CMA15, paragraph 10.94.

mechanism, then we agree. If Ofwat is arguing that preference shares are per se inefficient, we disagree – Ofwat has presented no evidence to support such a claim.

383 As set out in our Statement of Case, the gearing outperformance sharing mechanism reduces financial resilience as it limits the extent to which we can increase gearing as necessary to weather cost shocks. This mechanism should be removed in its entirety. However, if the CMA chooses to keep the mechanism, we propose that our preference shares are not treated as debt, as there is no evidence that they reduce our financial resilience. In fact, they include a number of features that improve financial flexibility.

Section D: Financeability

12. Summary

384 Our Statement of Case showed that Ofwat failed to carry out an adequate financeability assessment and, as a result, failed to recognise that the FD for Bristol Water is not financeable. We demonstrated this using three clear financeability tests as set out below:

- The **credit rating test:** Ofwat's was wrong in its conclusion that the credit rating (Baa1) it set for determining the cost of capital was achievable for Bristol Water under the FD. When the relevant tests are correctly applied, it is evident that the core ratios used by Moody's (Adjusted Interest Coverage Ratio, **AICR**) and Standard and Poor's (FFO/net debt) to support this rating are not achieved.

- The **headroom debt service test:** Ofwat's FD did *not* provide sufficient headroom to ensure that we are resilient to plausible downside risks while maintaining an investment grade credit rating (as required by our licence). This is because of the inadequate cost of capital, shortfalls in cost allowances and excessive exposure to material asymmetric downside risks under the FD.

- The **equity returns test:** Ofwat's FD did not ensure that a relevant notional company can reasonably expect to be able to earn the required equity return on a mean expected basis.

385 The mitigation strategies, in particular the adjustment to PAYG rates, which Ofwat relied upon (as was the case for other companies) are not applicable and/or not available to Bristol Water.

386 While Ofwat believes that the points we raise in our Statement of Case are disagreements on the merits of their individual judgements[180] (and therefore should not be seen as inconsistent with the Finance Duty) and that all financing risks should be assigned to shareholders,[181] Ofwat also accepts that securing a reasonable return requires achievable cost and performance incentives.[182] We indicate below the relative scale of the various issues we raised in our statement of case, to illustrate how they flow into the overall impact on the financeability assessment and the Finance Duty. Whilst inevitably this diagram can only be illustrative, we provide this to help the CMA navigate through the issues we raise in our Statement of Case. It shows the relative scale of issues in terms of financial impact,[183] as well as the flow of different issues through to our financeability issues.

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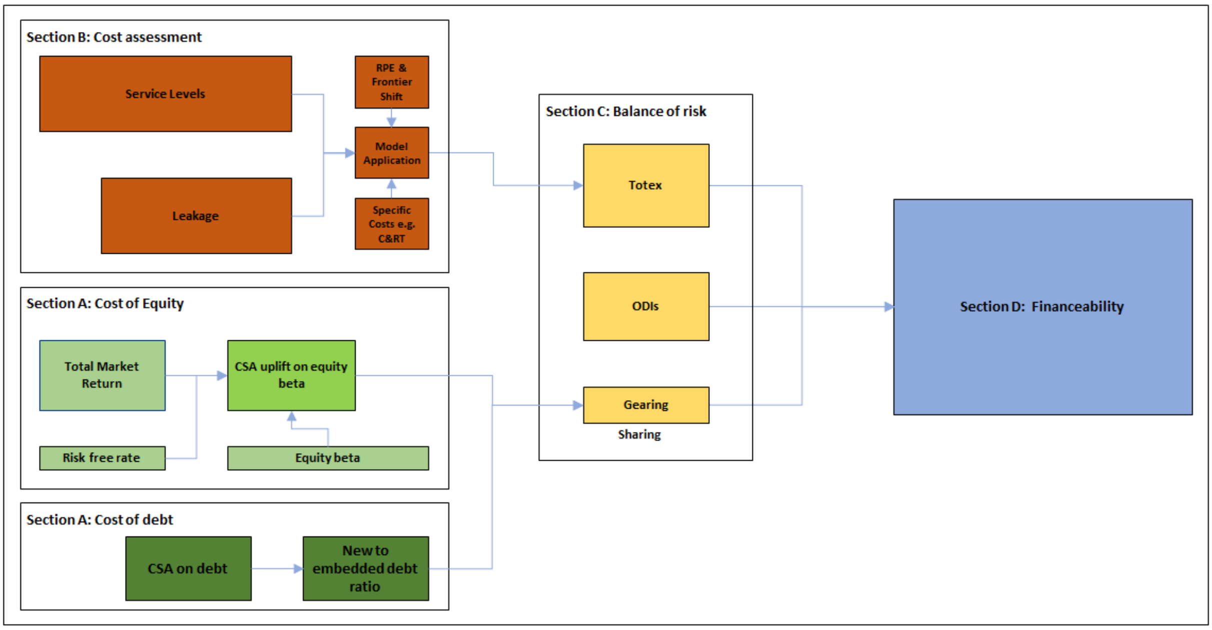
180 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 1.21
181 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 1.30
182 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 1.67
183 £m revenue impact over five years, with gearing sharing estimate as a £1m block. The values in balance of risk are in addition to the financeability block, which only shows the total building block of revenue gap from cost allowance and cost of capital errors.

Figure D1 Bristol Water Statement of Case



387 This illustration reflects that financeability should not just be seen as a sum of individual regulatory judgements, or that the solution to notional financeability issues can be to change the notional structure assumed. Instead, the actual downside risks faced and areas of judgement in the FD need to be considered through the lens of financeability tests to provide confidence to stakeholders that the FD meets the finance duty. This is the key point we explore in this section D.

388 In its Response to our Statement of Case, Ofwat made several arguments which question our financeability assessments and our conclusion that we are not financeable based on the FD. We do not agree with Ofwat's positions and we find that, in some instances, Ofwat did not adequately engage with our arguments, and in others made statements not supported by evidence or analysis. We address these points in more detail in below, but in summary:

- **Remuneration of the efficient cost of debt (Section 13):** Ofwat does not include the CSA to the cost of capital in revenues (i.e. through the allowed WACC) or in interest costs (i.e. through an allowed cost of debt including the CSA). Ofwat's Response rejected our proposed cost of debt uplift based on their view that the level of the uplift we sought is not appropriate.[184] However, as a small company we face higher debt costs which have not been provided for in allowed revenues. These unfunded debt costs need to be considered as relevant costs in the financeability assessment. The fact that Ofwat has failed to adequately provide for these costs, and continues to maintain this position, is inconsistent with the CMA's conclusions at CMA15.[185]

184 This is different to Ofwat's reasoning at the FD stage, where it argued that BW's claim for a cost of debt uplift failed the "*benefits assessment*" (i.e. "*is there compelling evidence that there are benefits that adequately compensate customers for the increased costs?*"). See Section 5 of this Reply.

185 CMA15, paragraphs 10.64 – 10.65.

Ofwat's approach to financeability assumes that all risks associated with financing should be borne by companies. The CMA stated that, within each regulatory period, companies are expected to accept the risks associated with the actual cost of finance relative to regulatory assumptions. However, in establishing the costs of an efficient company, it considered that it is important to have regard to the actual financing costs incurred by water companies as this reflects the reasonable expectation that investors will, on average be able to recover their efficiently-incurred costs.[186] We consider that our past financing decisions are well justified and our financings have been efficiently incurred.

- **Rating agency guidance (Section 14):** Ofwat does not accept that achieving a specific level of AICR, or a specific credit rating, is a relevant and transparent empirical test of financeability and whether the regulator has fulfilled its Finance Duty.[187] We consider that rating agencies undertake market-based tests directly relevant to assessing financeability, and that these tests can be used objectively to assess whether an appropriately defined notional company would be able to achieve a credit rating consistent with the assumed in the cost of debt allowance. Ofwat do not appear to present an alternative solution, other than ignoring financeability by changing notional assumptions. We also note that in CMA15, the CMA stated that it is good regulatory practice to consider the views of rating agencies when assessing financeability.[188]

- **Performance in line with the regulatory determination (Section 15):** Ofwat argues that the FD would provide us with a reasonable return if we can deliver within the cost allowances and deliver on the performance commitments set under the FD. In its financeability assessment, Ofwat excludes the additional costs we would incur in the base case resulting from the disallowance on our efficient business plan costs and from the downside risks associated with the inherent asymmetry in the regulatory framework. We provide evidence of these additional costs in our Statement of Case, and why we consider that these unfunded costs should be taken into account in the financeability assessment. We note that in CMA15 the CMA made its own assessment (with sensitivity testing) of our wholesale totex requirements and financing costs to determine a reasonable level of costs that we would be expected to incur.[189]

- **Performance under normal business risk downside scenarios (Section 16):** Ofwat has cautioned the CMA against placing any weight on our arguments regarding downside analysis and headroom, and has not dismissed the fact that downside scenario analysis is critical to any financeability assessment. We consider the importance of downside scenarios analysis given the asymmetry of the regulatory determination, which exposes us to significant downside risk (which is also significantly greater than any potential upside) in the context of many risk drivers, including factors outside of our control, such as severe weather events. Leading up to PR19, Ofwat placed a lot of emphasis on requiring companies to ensure financial resilience. However, Ofwat has not conducted a detailed or comprehensive notional financeability assessment, let alone tested resilience to downside scenarios. Ofwat's primary basis for concluding that the notional company is financeable under the FD rests on its assertion that the building blocks are sufficient,

186 CMA15, paragraphs 10.3 – 10.5.
187 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.45.
188 CMA15, paragraph 11.24.
189 CMA15, paragraph 11.75.

i.e. that the WACC, totex and PCs have been set correctly, which we do not agree with. The problem with this approach is that pre-empts the conclusion of the financeability analysis. There are many cost shocks that efficient companies may be subjected to due to factors outside of their control. Testing downside scenarios has been accepted by the CMA and other regulators (including Ofwat) in the past.

- **Remedies (Section 17):** Ofwat argues that even if the CMA were to agree with us that we face a financeability problem, there are alternative remedies that could be used to address financeability:

  (1) reducing the notional gearing;

  (2) a faster transition to CPIH;

  (3) increasing the proportion of index linked debt (ILD);

  (4) restricting dividend payments, and injecting equity.

  We disagree with Ofwat. There are clear reasons why any of these remedies would be inappropriate for addressing our financeability constraint – on the basis that they are either ineffective or not achievable, or would require additional costs that have not been allowed for; some of them are also inconsistent with Ofwat's previous statements and views, and inconsistent with the CMA precedent.

- **Ability of the notional company to achieve a Baa1 rating (Section 18):** In its Response, Ofwat argues that companies with capital structures similar to the notional level can maintain a Baa1 rating, pointing out that some companies with actual capital structures similar to the notional level are capable of maintaining a credit rating that is at least two notches above the minimum investment grade. The comparison that Ofwat has made is inappropriate because it does not take into account the differences between the notional company and the comparators, which are listed companies, 'fast-tracked' at PR19, and which have a lower cost of embedded debt relative to the allowance.

389 In summary, Ofwat's tests and conclusions on financeability are based on a set of unrealistic and unachievable assumptions. Under these idealised and unrealistic conditions, Ofwat tries to show that the hypothetical notional company (which is unattainable for us in practice) could be just about financeable. This is not a relevant or appropriate approach. The unreasonable assumptions made by Ofwat include:

- there is no requirement for a company specific adjustment on the cost of debt and the cost of debt allowance is sufficient to remunerate efficient financing costs;

- the company will be able to perform in line with the regulatory settlement, or better, with regards to costs and PCs set out in the FD;

- there is sufficient headroom to accommodate downside risks during the price control, and these risks have no bearing on financeability;

- achieving a specific level of AICR, or a specific credit rating, is not a relevant test for assessing financeability, or for whether Ofwat has satisfied its Finance Duty; and

- despite all of the assumptions set out above that either ignore downside exposure or skew the results to the positive, some measures appear still to be required to ensure financeability, and these measures are readily available to the company.

390 We discuss each of the points above in further detail below.

13. Remuneration of the efficient cost of debt

391 Under Ofwat's notional assessment, it is assumed that the higher debt cost we face as a small water-only company would not be included in the allowed revenues (through the allowed WACC) or costs (through debt costs incurred). In assuming that the CSA does not apply, Ofwat also effectively assumes that our higher debt costs do not exist, and does not consider the impact of our higher debt costs on interest coverage ratios.

392 We have provided evidence to show that we do incur higher financing costs because of our size, and that our debt was efficiently raised (see Section A for further details on the CSA). These higher financing costs, which have not been provided for in allowed revenues under the FD, should be taken into account when assessing our financeability position.

393 Including an uplift for the additional cost of debt we face in the financeability assessment would be consistent with the methodology followed by the CMA in CMA15.[190] The CMA determined that it was appropriate to calculate credit ratios based on the notional cost of debt, which took into account a 40bps uplift from the CSA.[191] The CMA's test assumed a cost of debt allowance within a range, where the lower bound was the CMA's estimate of our actual cost of debt and the upper bound was the allowed cost of debt plus the CSA.[192]

394 The financeability assessment should take account of the higher financing costs that we will incur as a small company (see Section A **Cost of capital**).

14. Rating agency guidance

14.1 Having regard to rating agency methodologies

395 In assessing financeability, both Bristol Water and KPMG, who we commissioned to independently assess our financeability, have used Moody's rating methodology for Regulated Water Utilities and the minimum guidance provided by Moody's on ratio thresholds required to achieve a particular credit rating (among other assessments of financeability in the round).

396 Ofwat does not accept that achieving a specific level of AICR, or a specific credit rating implied by the rating methodology, represents a relevant, transparent and robust test of both financeability, and whether it has satisfied its Finance Duty.[193] Ofwat's position is that strict adherence to credit rating agency methodologies would result in the cost to customers being influenced by credit rating agencies, and, as a result, the CMA should consider disregarding

190 Statement of Case, paragraphs 28 – 30.
191 CMA15, paragraph 11.33.
192 CMA15, paragraph 10.108.
193 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.45.

credit rating agency guidance on thresholds for AICR and gearing.[194] Ofwat's own financeability assessment focuses on AICR and, to a lesser extent, gearing (given the notional approach). We are therefore unclear as to exactly what is Ofwat's position, and if not a particular AICR threshold, what its financeability methodology is.

397 Ofwat's view disregards the fact that credit rating agencies undertake market-based tests relevant to assessing financeability, and that companies and investors rely heavily on rating agency assessments when issuing debt in financial markets, particularly in the utilities sector. Therefore, it is essential that Ofwat has regard to the view of credit rating agencies when assessing financeability; credit rating methodologies also provide a clear and transparent methodology, with binding constraints, which cannot be simply re-interpreted under regulatory discretion. To this end, the CMA has also recognised the relevance of rating agency methodologies when assessing financeability in CMA15, as "*good regulatory practice*":[195]

> "*In assessing financeability, it is good regulatory practice to consider the views of the credit rating agencies, and by implication, the financial ratios they partially base their views on.*"

398 Financeability testing aims to ensure that an efficient notional company is able to raise finance at a cost that is commensurate with that assumed in the cost of debt allowance, i.e. consistent with a credit rating of Baa1. Ofwat should therefore have regard to the methodologies that rating agencies use. In particular, Ofwat's financeability tests should have verified whether the notional company could achieve a credit rating of Baa1 that the regulator has assumed.

399 In our Statement of Case, we noted credit rating assessment methodologies from different rating agencies. We focused on Moody's published ratings methodology. Moody's place a significant emphasis on the AICR, and, as stated in our Statement of Case and the KPMG Financeability Report, Moody's minimum guidance on AICR to achieve Baa1 would constrain the overall rating implied by the Moody's ratings scorecard (which takes into account both qualitative and quantitative factors).

400 The analysis of Moody's assessment referred to in our Statement of Case adopted Moody's guidance on the minimum threshold on the AICR to achieve a Baa1 rating, which is 1.5x. Whilst Ofwat's financeability assessment referred to the indicative guidance published by Moody's, Ofwat argues: *"it is by no means clear that an AICR of 1.5x should be interpreted as a minimum requirement for a credit rating of Baa1."*[196]

401 Ofwat understates the importance of AICR in achieving credit ratings in practice and hence for its financeability assessment; it also tries to undermine the relevance of thresholds for financial ratios, which we do not agree with. Ofwat has not recognised the emphasis Moody's places on the AICR, relative to the attention it gives to other ratios, such as FFO / Net debt, which are relatively less constrained under the FD. For example, in the latest Moody's credit opinion for Bristol Water, Moody's states:[197]

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194 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.64.
195 CMA15, paragraph 11.24.
196 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.63.
197 Moody's (2020), 'Credit Opinion – BW plc', March, pages 1 and 5.

> "*The strengths are offset by (1) likely* ***significantly weaker interest coverage*** *over the 2020–25 regulatory period (AMP7) as result of declining allowed returns set against long-term debt funding; and 2) increasing cost efficiency and operational challenges for the next regulatory period...*" (emphasis added)
>
> "*Moody's base case scenario, reflecting the current final determination, results in BW exhibiting* ***an AICR around 1.1x, below the 1.5x guidance for the previous Baa1 rating as well as the 1.3x guidance for the current Baa2****. This ratio could improve towards the 1.3x threshold, if the company received a more favourable determination from the CMA and/or were able to materially outperform its cost allowances. Moody's notes that in previous CMA referrals,* ***the company was able to secure a small-company premium within its allowed return, which -- if achieved again -- could reduce the pressure on the AICR****.*" (emphasis added)

402 In other aspects of its PR19 methodology, Ofwat appears to consider AICR an important metric for financeability. For example, when setting the FD, it appeared to "goal-seek" the PAYG and RCV run-off rate adjustments for the majority of the water companies in order to achieve an AICR of 1.5x (the minimum guidance for Baa1 specified by Moody's).[198] It has also assessed financial headroom relative to an AICR of 1.0x.

14.2 Consideration of qualitative factors in the ratings assessment

403 In its Response, Ofwat argues that credit rating agencies consider a range of factors, including a wider consideration of company performance and a range of financial ratios in carrying out their assessments. Ofwat also claims that where the focus of a credit rating agency is on one key financial ratio, generally it is only where the financial ratio is consistently below guidance that it constitutes grounds for downgrade of the rating.[199]

404 Credit rating agencies do consider qualitative factors. However, in the case of Moody's, Ofwat appears to have misinterpreted the guidance provided on interest coverage ratios. Moody's makes its assessments through its ratings scorecard approach under which it considers qualitative factors, such as the stability of the regulatory regime together with financial ratios. However, the minimum guidance on AICR (1.5x for Baa1, and 1.3x for Baa2) and the maximum guidance on gearing (72% for Baa1) are calibrated to take into account such factors. These financial ratios therefore can be assessed on their own (i.e. independent of the ratings scorecard). This is evident in the fact that Moody's has recently updated its guidance on these ratios to reflect a reduction in the stability and predictability of the regulatory regime:[200]

> "*To reflect the somewhat increased business risk, given* ***our changed view around the stability and predictability of the regulatory regime*** *and expectation of more volatile cash flow,* ***we have revised our ratio guidance*** *for the sector, such that a UK regulated water company would have to exhibit slightly lower gearing and stronger interest coverage to maintain the same credit quality.*" (emphasis added)

[198] This can be seen in Table 5.2 of Ofwat's Final Determinations for each of Anglian Water, Northumbrian Water and Yorkshire Water.

[199] Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.78.

[200] Moody's (2018), 'Regulator's proposals undermine the stability and predictability of the regime', May, page 5.

405 Overall, when carrying out robust financeability assessment, Ofwat should pay due regard to rating agencies' methodologies and the ratios relied upon in the financeability assessment, as the CMA did in CMA15. Doing so would provide for a robust market-based test to assess whether Ofwat has fulfilled its Finance Duty.

15. Performance in line with the regulatory determination

406 In its financeability assessment in the FD, Ofwat assumed that we will perform within the regulatory settlement.[201] In its Response, Ofwat stated that it has satisfied its Finance Duty by ensuring that companies' allowed revenues, relative to efficient costs, were sufficient for an efficient company to finance its investment on reasonable terms,[202] i.e. that an efficient company will be able to meet its obligations and PCs within in its cost allowances.

407 However, neither Ofwat's cost allowances nor its calibration of performance commitments have been set appropriately. As set out in our Statement of Case, Ofwat's FD has errors on costs, ODIs, and other regulatory mechanisms which introduce material asymmetry and subject Bristol Water to significant downside risk. Taken together, this implies that, on average, we will incur significant additional costs in the base case, and that we are exposed to material downside risk. We provide evidence on the plausibility of downside scenarios in Annex 4.

408 The CMA will form its own view on efficient costs. Whatever that view, we expect that the CMA will recognise the importance of considering the company's plan in making its financeability assessment. The CMA also considered downside sensitivity analysis against our stated targets in CMA15.[203]

409 The financeability assessment should consider the likely impact of the additional costs from totex and ODIs on financeability in the base case. At a minimum, the financeability test should have regard to totex spend levels consistent with our business plan.

16. Performance under normal business risk downside scenarios

410 In its Financeability Report, KPMG outlined that a key test for financeability was whether the projected cash flows under the FD were sufficient to withstand plausible downside risks, whilst at the same time maintaining an investment grade rating consistent with licence requirements. It also provided examples of when downside risk scenario analysis has been accepted by regulators in the past, including the CMA.[204] The KPMG Financeability Report assessed the impact of several downside scenarios, including Ofwat's prescribed scenarios for all companies and our company specific scenarios, on leverage and coverage metrics.[205] We presented these arguments and the results from this analysis in our Statement of Case.[206]

201 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.90.
202 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.45.
203 CMA15, paragraph 11.52.
204 KPMG (2020), Financeability of BW and PR19 Final Determination (**KPMG Financeability Report**), paragraph 5.3.5.
205 KPMG Financeability Report, sections 7 and 8.
206 Statement of Case, paragraphs 85 – 93, and 110 – 115.

411 In the Response, Ofwat states various reasons why the CMA should be cautious in placing any weight on our arguments on headroom and downside scenarios. We disagree with its reasoning, as explained below.

16.1 The application of financial resilience tests

412 In its financeability assessment for the FD, Ofwat assessed the headroom available to allow us (under the notional structure) to continue to meet our annual interest costs. It estimated 5-year headroom of £20m above an AICR of 1.0x, which it considered to provide adequate debt service headroom for its FD totex and ODI downsides (note these are different to the prescribed Ofwat downsides described above).[207] As set out in Annex 4, we consider that the downside risk assumptions that Ofwat relies on when assessing debt service headroom are not plausible and are inconsistent with parts of the FD. Ofwat appears to now deny this was a financeability assessment, as they do not respond to our challenge that this level of debt service headroom is wholly inadequate compared to Ofwat's own notional estimates of P10 downside risks (e.g. £25m for totex). **These scenarios were clearly not just for the purposes Ofwat now claim.**

413 The downside scenario assessment presented in our Statement of Case represents a more robust and comprehensive approach to assessing headroom in ratios and resilience to downside risk (under both the actual and notional structure). The scenarios were based on Ofwat's prescribed financial resilience tests set out in PR19, as well as our own company specific scenarios. However, in its Response, Ofwat now argues that these tests were not intended for an assessment of the notional structure, but rather to allow Ofwat to compare each company's approach to financial resilience under the actual structure, and to allow it to understand how companies would respond downside scenarios.[208] It should be noted that for our business plan Ofwat required us to run these scenarios on both notional and actual structures, and for the notional structure, an additional set of scenarios for a cost of debt that excluded the CSA.

414 Ofwat has recognised the importance of financial resilience, and although it expects companies to apply tests to their actual structures, it has not provided any rationale to justify why these tests are not relevant for the notional structure as well. Even if these tests were designed only for the actual structure (and if this is the case, then this is the first time Ofwat has explained this) it is not clear why Ofwat would require the actual capital structures to pass tests that are not applicable for its own designed notional financial structures. The downside risks in these scenarios reflect the risks borne by the company, regardless of whether it is operating under the actual or notional structure. In the FD Ofwat states explicitly:[209]

> "*We expected companies' business plans to demonstrate that their actual financial structure allows them to* ***maintain financial resilience*** *in 2020-25 and in the long term,* ***taking account of their overall assessment of risks related to their capital structure, as well as any potential cost shocks****.*" (emphasis added)

207 Ofwat (2019), FD, Bristol Water final determination', p.74.
208 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.82.
209 Ofwat (2019), FD, Aligning risk and return technical appendix, page 9.

415 In our view, the tests that Ofwat prescribes are also relevant for its own financeability assessment under the notional structure because the price control determination will have a material impact on our ability to deal with the downside scenarios which they contemplate.

416 Ofwat's approach is also inconsistent with its previous statements that companies should model downside scenarios:[210]

> "*Companies should model their own scenarios based on severe, reasonable and plausible scenarios for key variables to support their assessment, building on the long term viability statements that are included in Annual Performance Reports.* ***Companies should also model a minimum suite of scenarios that are prescribed by Ofwat.***" (emphasis added)

417 We submit that the CMA should consider a reasonable range of downside scenarios in its financeability testing, having particular regard to those scenarios prescribed by Ofwat, and those which we set out in our Statement of Case.

16.2 Treatment of past performance reconciliation adjustments

418 In the Response, Ofwat argues that our headroom calculations are materially impacted by reconciliation adjustments for past performance, because companies benefit from cost sharing at each price control for expenditure in the preceding period.[211]

419 While this may be true for the actual structure, our financeability test for the notional structure did not take these reconciliation adjustments into account. They therefore have no impact on the calculation of our results under the notional structure.

420 In its latest credit opinion, Moody's do not identify past reconciliation adjustments as the only main factor contributing to a material reduction in our financial headroom. Moody's set out credit challenges, one of which is the impact from reconciliation adjustments (but noting our improved performance in 2019/20), but the others include: (1) a material cut in allowed returns from 2020; (2) more stringent cost efficiency and performance challenges for the next regulatory period; and (3) a long-dated capital structure which exacerbates exposure to declining allowed returns.[212] These factors are consistent with the factors we have taken into account in our financeability analysis.

421 The main concerns, which we share with Moody's, are the risks of under-performance given the low allowed returns, the significantly lower cost allowance relative to our plan, and the risk of ODI penalties, for example in a bad weather event.

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210 Ofwat (2018), 'Putting the sector back in balance: position statement on PR19 business plans', July. https://www.ofwat.gov.uk/wp-content/uploads/2018/04/Putting-the-sector-in-balance-position-statement-on-PR19-business-plans-FINAL2.pdf, page 61.

211 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraphs 4.86 – 4.92.

212 Moody's (2020), 'Bristol Water plc – Update following downgrade to Baa2, negative outlook', 16 March, page 2.

16.3 Interpretation of ratio thresholds in downside scenario testing

422 Downside scenarios will result in deterioration of key credit metrics. This should be analysed using objective criteria for the purposes of assessing headroom. As demonstrated in our Statement of Case, we have very limited headroom in our coverage metrics to absorb plausible downside shocks.

423 Ofwat states that while credit rating agencies have not provided any guidance on the minimum required financial ratios to maintain an investment grade rating, we have argued (based on analysis by KPMG) for an AICR threshold of 1.1x as the appropriate level necessary to maintain an investment grade rating by Moody's.[213]

424 KPMG's Financeability Report explicitly recognised that Moody's does not have a threshold on AICR for a Baa3 credit rating, and provided a reasoned justification for why it considered 1.1x to be a reasonable and appropriate threshold compared to Ofwat's assumption of 1.0x when assessing headroom in the AICR.[214]

425 Ofwat's position is that the AICR threshold of 1.1x may not represent the appropriate guidance for a minimum investment grade credit rating. However, under the downside scenarios presented in our Statement of Case, the AICR is considerably below Ofwat's lower 1.0x threshold. These outcomes would not meet the criteria for an investment grade rating, regardless of whether the threshold for investment grade is 1.0x (as argued by Ofwat) or 1.1x (as derived by KPMG). Details of the AICR values, under specific downside scenarios, are provided in our Statement of Case.[215]

426 Further, Ofwat argues that we have placed too much weight on the AICR metric but, as explained above, this is the key financial ratio to assess our ability to meet debt financing costs and is also the key ratio considered by Moody's. We provided evidence in our Statement of Case,[216] and discussed in Section 14 above, as to why the AICR is a key constraining metric on the overall rating. In addition, Ofwat itself conducted headroom analysis relative to the AICR and did not consider other ratios such as FFO/Net debt (although Ofwat may be now suggesting in its response that this wasn't a financeability assessment).[217]

427 Ofwat also states that rating agencies are unlikely to downgrade the rating if a particular ratio is weak for a short period of time and, in particular, if the company can demonstrate a clear recovery plan.[218] Our interest coverage ratios were very weak under almost all of downside scenarios tested (and regardless of whether or not the totex gap was included in the base case),[219] which is not something that rating agencies are likely to overlook.

213 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.86.
214 KPMG Financeability Report, paragraph 5.2.23.
215 Statement of Case, paragraphs 85 – 92, and 111 - 114.
216 Statement of Case, paragraph 40.
217 Ofwat (2019), FD, Bristol Water final determination, page 74.
218 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.80.
219 Statement of Case, paragraphs 83 – 90.

16.4 The expectation to outperform the regulatory determination

428 In its Response, Ofwat's position is that in a downside scenario we will have scope to manage costs and can be expected to focus on minimising ODI underperformance adjustments.[220] Ofwat argues that, in a totex regime, companies have significant scope to mitigate this downside risk by determining the most efficient mix of expenditure and taking steps to control costs and focus management to mitigate downside performance issues.[221]

429 In the Response, Ofwat asserts that the FD was designed to be very challenging for all companies. Ofwat appears to have assumed that companies can meet this challenge and retain substantial scope to manage downside risks when they occur. In the case of Bristol Water: (1) Ofwat has considerably increased the stretch on PCs relative to PR14; (2) there is a material asymmetry with regards to ODI penalty and reward rates and the calibration of caps of collars; and (3) Ofwat applied a large disallowance on our business plan costs. Even if there is scope to earn rewards in principle, the package has materially more downside risk given the asymmetry and more challenging cost and performance targets. Moreover, debt holders are more concerned about the downside risk companies are exposed to, and the ability of the company to service debt costs in such scenarios.

430 Ofwat's Response does not take into account the fact that downside shocks could also be driven by factors outside of our control, and that we need sufficient headroom to manage these shocks. For example, under a bad weather event, we would incur additional totex costs to repair burst pipes, and additional ODI penalties from failing to meet targets on PCs such as leakage, supply interruptions and PCCs. This is not a controversial proposition, and has been recognised by Moody's:[222]

> *"In addition, the calibration of targets and incentive rates means that severe weather events could carry disproportionate downside risk. Government restrictions to counteract the spread of the coronavirus and focus on essential services may also mean that certain targets cannot be met."*

431 As we set out in the downside scenario analysis in our Statement of Case, the FD does not provide us with sufficient headroom to manage plausible downside risks, including under Ofwat's prescribed downside scenarios.[223]

16.5 Reconciliation adjustments at the next price control

432 Ofwat considers that the reconciliation adjustment limits the impact of a proportion of a totex downside because companies benefit from totex cost sharing through reconciliation adjustments at PR24. While reconciliation adjustments allow for some sharing from totex under-performance at the end of the price control, they do not address financeability concerns. This is because we would still have to fund these additional costs – and incur the additional financing costs of doing so – during the AMP, which would in turn impact our leverage and interest coverage ratios. Moreover, rating agencies base their calculations of projected cashflows on an accruals basis and do not reflect the regulatory true-up mechanisms

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220 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.80.
221 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.90.
222 Moody's (2020), 'Outlook remains negative as price review leads to unprecedented number of appeals', 30 April page 11.
223 Statement of Case, paragraphs 83 – 90.

in their rating assessments. Relatedly, the highly asymmetric cost sharing factors would exacerbate the effects of any true-up (see Section C on Balance of risk).

433 Ofwat also argues that, in order to mitigate the scope for extreme cash flow associated with ODIs, companies have the option to ask to defer incentive adjustments that exceed +/-1% of notional equity to a subsequent year in the regulatory period, or for reconciliation at PR24. We do not consider that this will solve the underlying issues as improving liquidity is not the same thing as improving creditworthiness – so long as a company is financeable, the market should be able to provide similar liquidity solutions. Deferring penalties further in time would not improve our overall financial position or on a sustainable basis.

16.6 Overall view of downsides

434 Overall, Ofwat does not appear to recognise the relevance or importance of downside testing in assessing financeability. However, as set out in our Statement of Case[224] and in the KPMG Financeability Report,[225] the financeability test needs to assess whether a company has adequate financial headroom to manage risks and withstand plausible downside scenarios. We also provided evidence that downside testing has been accepted and recognised by regulators as well as the CMA.

435 In our Statement of Case, we demonstrated that there is insufficient headroom for downside scenarios under the relevant notional structure for the plausible downside scenarios that we have modelled, which include the prescribed Ofwat scenarios. In fact, we showed that Ofwat's stated 'headroom' under its own specification of the notional capital structure and tests is not sufficient to meet Ofwat's own requirements for financial resilience tests.[226]

436 Ofwat has criticised our approach to downside testing, but has not proposed or conducted any additional downside scenario analysis to support its assertion that the FD represents a financeable outcome. The evidence clearly suggests that Ofwat has not carried out any financeability assessment. There is nothing in the Ofwat Response to support its conclusions on financeability, any indication that it considered the consequences of its notional debt service headroom test in the FD, or anything that justifies its failing to undertake comprehensive downside scenario testing. We maintain our view that a range of financeability tests should be carried out, robustly and objectively, with an explanation of the consequences, as part of Ofwat's financeability assessment, having regard to the plausible scenarios we set out in our Statement of Case. Even based only a more limited exploration of notional downside risks, such as from the RoRE analysis, the only conclusion that can credibly be drawn is that the FD is not financeable and that the cause is an insufficient revenue allowance for the risks faced.

17. Remedies

437 We note that Ofwat does not agree with our position that alternative remedies such as equity injections, a faster transition to CPIH and changes to the notional structure are not appropriate remedies to address the financeability constraints resulting from the FD.

224 Statement of Case, paragraph 34.
225 Statement of Case, paragraph 68; KPMG Financeability REport, section 5.3.
226 Statement of Case, paragraph 68.

438 Ofwat sets out alternative mechanisms in its Response that it claims the CMA could consider as solutions to address financeability concerns. However, none of these measures are adequate for the reasons set out below.

17.1 Increasing the proportion of index-linked debt

439 Ofwat argues that we did not highlight the benefit to AICR arising from the materially higher proportion of index-linked debt in our debt portfolio relative to the notional assumption of 33% (which it considers to be conservative). Ofwat states that the CMA could reasonably assume a higher proportion of index-linked debt than that assumed in the FD, noting that the sector average is 55%.[227]

440 Ofwat's proposed remedy is inconsistent with what Ofwat had signalled in its approach to the assumed level of index-linked debt for PR19. Ofwat recognised that, while there would be a 50% transition to CPIH indexation, almost all of the ILD in the sector is linked to RPI (which is still the case). Given that the rationale underpinning this decision has not changed, it is not clear why Ofwat now considers a material increase in the proportion of ILD under the notional structure to be appropriate.[228]

> "*As at March 2017, nearly half of the sector's debt was index-linked to RPI. However, we* ***continue to consider 33% as a prudent assumption for the testing of financeability****, both due to the variation in its percentage share by companies in the sector,* ***and because the regulatory framework is transitioning away from the use of RPI.***" (emphasis added)

441 Further, the sector average proportion of ILD, of c. 55%, has remained broadly stable since 2014, as illustrated in Table D1 below. Ofwat's proposition to increase the proportion of ILD to the current sector average of 55% is therefore not warranted.

Table D1 Sector average proportion of index linked debt, 2014 – 2019

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Notional assumption	33%	33%	33%	33%	33%	33%
Sector average	54.2%	55.9%	56.6%	56.1%	55.8%	55%

Source: Ofwat, monitoring financial resilience reports. 2017 - 2019

442 Adjusting the proportion of ILD would likely undermine the internal inconsistency of the notional structure for an overestimated financeability benefit. This is because 50% of revenues are effectively linked to CPIH whereas the interest costs on ILD are 100% linked to RPI. In Ofwat's own modelling, the real RPI rate is reflected in the AICR, which is lower than that which would be calculated using an equivalent CPIH rate. All else equal, this would benefit the AICR. However, where a proportion of ILD is assumed to be linked to CPIH under the notional structure, the benefit to AICR from a higher assumed proportion of ILD would be lower.

227 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's, paragraph 6.78.

228 Ofwat (2017), Delivering Water 2020: Our final methodology for the 2019 price review, Appendix 12: Aligning risk and return, page 84.

443 All index-linked debt is currently assumed to be RPI-linked under the notional capital structure. This is inconsistent with the assumption that 50% of the RCV is linked to CPIH. Assuming that 50% of index-linked debt is linked to CPIH to ensure internal consistency would put negative pressure on metrics, suggesting that this remedy would not be effective.

17.2 Reduction in the notional level of gearing from 60% to 56%

444 Ofwat has suggested that if the CMA finds a financeability constraint and chooses not to resolve it by means of accelerating cashflows, then the CMA could consider reducing the notional level of gearing used in its financeability assessment from 60% to 56%, i.e. to a level that is more consistent with the gearing levels of a few listed companies in the sector on which Ofwat's beta observations are based.

445 In the NATS appeal, the CMA took the provisional view that there are issues with the de-gearing / re-gearing formula, which may cause the effect of the WACC increasing with gearing, which is inconsistent with finance theory and the Modigliani Miller capital structure irrelevance theorem. In its Response, Ofwat attempts to take advantage of the CMA's Provisional Findings from the NATS appeal, and suggests that the notional gearing should be reduced to a level consistent with the gearing levels of the beta comparators (i.e. 56%). As set out in in Section A **Cost of capital**, we do not agree with this position as the CMA's results are driven by a combination of assumptions, which we do not believe are consistent with the theory given the position we face.

446 We set out below other reasons why we do not consider that an assumption of a hypothetical reduction in the notional gearing is an adequate approach to addressing financeability.

447 Ofwat suggests a 56% gearing because this is the observed level of gearing for the two listed companies it uses as comparators in estimation of equity beta for the entire sector. The gearing for these two particular companies, however, is calculated using the Enterprise Value (**EV**) as opposed to the RCV. Calculating gearing based on EV is not a meaningful or useful comparator for the purposes of setting the gearing for the relevant notional company for Bristol Water due to a number of factors specific to these companies, such as their outperformance on the cost of debt, their "fast-track" status, and the existence of non-regulated and non-wholesale businesses. RCV-based gearing for both of these companies is in fact above the 60% notional assumption used by Ofwat in its FD (64% for Severn Trent and 65% for United Utilities).

448 The notional gearing should be set at a credible market-based level, which is appropriate for the sector overall. Typically, notional gearing has reflected the gearing level observed on average in the relevant industry. At PR19, Ofwat has adopted this approach in setting notional gearing at 60% and has justified its choice at the FD. This notional gearing assumption set by Ofwat is already at a level below the majority of companies in the sector.

449 There are in fact good reasons why gearing in the water sector is higher than the average gearing observed across the economy. Water companies invest in very long-term infrastructure assets, are subject to what is assumed to be a stable regulatory regime, and experience relatively low volatility in returns (in particular, compared with sectors with lower gearing). In fact, even higher gearing is observed for infrastructure projects. High gearing is also observed for infrastructure companies, which is explained by the agency theory, i.e. given that debt is used to limit the potential impact of 'agency' problems that could arise from

availability of substantial free cashflows that such businesses generate. In this context, debt serves the purpose of a disciplining device on management to repay capital to investors without discretion.

450 The downward adjustment to gearing suggested by Ofwat is therefore not appropriate. Ofwat provided no coherent or robust justification for why it now considers 56% to be an appropriate level of notional gearing, why it would be better than 60% it set at the FD, or why it should not change e.g. to 64%; Ofwat presented no rationale for making this an ad hoc reduction now. Moreover, the level of gearing across the industry suggests that if any adjustment might be justified, it would be to increase the notional gearing, rather than to reduce it.

451 Even if a downward adjustment in gearing were justified, it is not appropriate simply to assume that this is attainable to the notional company that can change its gearing without regard to its circumstances. A material reduction in gearing such as that now suggested by Ofwat would not be achievable even by an efficient notional company in such a short period of time. Companies would need to make the necessary arrangements and would require considerable time to implement this reduction. It is also necessary to consider the significant additional costs associated with such a refinancing exercise. Break costs on repayment of bonds are significant. The high costs of refinancing our Artesian debt was explained in our Statement of Case, which was supported by an independent report from EY. We considered these options carefully throughout the PR19 process and note that even large WASCs have not undertaken such large-scale refinancing exercises. A re-financing exercise of this magnitude also imposes the additional condition of requiring equity investors to provide the additional equity required while the FD does not provide a basis for equity investors to reasonably expect to be able to earn their required returns.

452 The fact that gearing reductions need to be feasible is supported by regulatory precedent. For example, the CMA's expressed this view in CC10:[229]

> "*If the financeability assessment suggests that gearing needs to be altered significantly, then we would take this as an indicator that our inputs (in particular the WACC) may be incorrect.*
>
> "***We consider that a significant change in gearing is one that is either not feasible, or cannot reasonably be achieved by the company.***
>
> "*In assessing whether the change in gearing is significant, we recognize that a company will have a wide range of financing options available to it, not all of which will be known to us.*" (emphasis added)

453 Ofwat has not signalled the proposed reduction in notional gearing to relieve financeability up to now. It is prompted by the assumption for the cost of capital provisionally considered by the CMA in the ongoing NATS case. A reduction in gearing was also contemplated in the Firmus Energy licence modification appeal (Ofwat referenced this in their May 20 presentation to the CMA). However, in both cases the circumstances are very different to that faced by Bristol Water: NATS' actual gearing is much lower than the notional gearing assumption; Firmus Energy was in a position to be able to refinance its entire debt stock without penalty

229 Competition Commission (2010), 'Bristol Water plc – A reference under section 12(3)(a) of the Water Industry Act 1991 – Report' (**CC10**) Appendix O, paragraph 38.

over the course of the regulatory price control period. These factors make these cases unsuitable precedents for Bristol Water and Ofwat has not addressed this.

454 In summary, it is not reasonable to assume that a change in notional gearing can somehow resolve the financeability problems that are in fact created by the terms of PR19 FD. We find it concerning for the stability of the regulatory regime for Ofwat to make a change in one of its assumptions at the time of the FD to solve a problem that its regulatory determination has created in the first place.

17.3 Faster transition to CPIH

455 We set out in our Statement of Case why a faster transition to CPIH would not represent an adequate solution to addressing financeability concerns.[230] Ofwat's Response did not fully engage with our arguments and evidence on this point.

456 Ofwat states that the CMA should note that other companies requested a faster transition to CPIH at PR19 (including Severn Trent Water and United Utilities Water) and Ofgem has adopted a full transition to CPIH in its RIIO-2 methodology, which purportedly lends support to the idea of a faster transition in water.[231] However, when consulting on the PR19 methodology, Ofwat recognised that the switch to CPIH represented a significant change in approach, and it would be prudent to allow companies a transition period over which it is implemented:[232]

> *"Our decision to adopt a transition reflected concerns raised at the time by companies and their investors about the need for a managed transition and also reflected considerations about the potential impact on customer bills of an immediate switch."*

457 The CMA should also note that, even though Severn Trent and United Utilities have adopted a full transition to CPIH, Moody's treats the additional cash flows from this faster transition as 'excess fast money' and strips it out of the AICR calculation in order to maintain comparability with the sector (just like it does for adjustments to the natural PAYG rate) and consider companies' financial position on a sustainable basis.[233]

> "*UUW has argued, and Ofwat accepted, that its customers would prefer an immediate full transition to CPIH, which would mean higher revenues but lower RCV growth over the AMP7 period.*
>
> "***Rather than increasing the allowed return, Ofwat chose to achieve an equivalent result by increasing the RCV run-off rate by approximately 1% during AMP7.***
>
> "*Ofwat adopted a similar approach for Sever Trent Water (Baa2 stable). While a higher run-off rate will increase the company's cash flow from operations compared to other companies, improving liquidity, we do not view the change as fundamentally improving*

230 Statement of Case, paragraphs 129 – 131.

231 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraphs 4.130 – 4.132.

232 Ofwat (2019), FD, Aligning risk and return technical appendix, page 84.

233 Moody's (2020), 'Credit Opinion – United Utilities Water Limited. Update following PR19 FD'. 4 March.

credit quality because RCV growth, and therefore future returns and cash flow, will be reduced.

To maintain comparability with other water companies during AMP7, we will continue to deduct the full amount of the RCV run-off when calculating our AICR". (emphasis added)

458 A full transition to CPIH would exacerbate the mismatch between the revenues linked to CPIH and costs linked to RPI, given that all our index-linked debt is linked to RPI. The implementation of any hedging strategies would likely result in unfunded debt costs, which are likely to be material given the scale of financing required. It is also not clear whether the CPI bond market is large enough to support a restructuring of this scale.

17.4 Dividend restrictions and equity injections

459 Ofwat considers that dividend restrictions may be an appropriate solution to improve financial metrics for the notional structure, and equity injections can be used to reduce gearing where there is a financeability problem under the actual company structure.[234]

460 In our Statement of Case, we set out that reducing the notional dividend yield is not appropriate since it fails to take into account equity financeability.[235] Ofwat does not explicitly address this point, but argues that an efficient company can expect to earn the allowed return if it performs in line with its PCs and totex allowances. Ofwat notes that customers should not be expected to pay for underperformance, and companies have significant opportunity to outperform the allowed return through incentive mechanisms.[236]

461 There are two issues with Ofwat's assertions:

- first, equity investors cannot rely on outperformance, which may or may not materialise (and is in fact less likely than not), to expect to be able to earn a reasonable return; and

- second, Ofwat has considered its targets and totex allowances to be set correctly. If there is a financeability constraint, then it is likely that either the allowed return, totex allowances or performance targets have not been set correctly. Either way, reducing the dividend yield would not be an adequate solution as it would reduce the return that would reasonably be expected by equity investors.

462 Dividends are a key component of equity financeability, particularly for utility investments as is clear from the listed utilities in the energy and water sectors. If dividend payments are constrained, and hence investors cannot receive back the capital they invested, equity investors may not be willing to commit long term capital to the business. Ofwat argues that it has not seen evidence of unwillingness to invest in the water sector before or after the FD given that the listed water companies have traded at a premium to RCV.[237] But it does not state what evidence it would expect to see in this regard, or whether it has seen evidence of willingness to invest.

234 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.116.
235 Statement of Case, paragraph 134.
236 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.119.
237 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.121.

463 There are several factors that drive Market-to-Asset Ratios (MARs), which need to be taken into account such as financing outperformance (the listed companies have lower actual debt costs), non-regulated and non-wholesale activities (which form part of the EV but not the RCV), investor sentiment, and events such as the risk of nationalisation. The listed companies have had fast-tracked business plans, financing outperformance (lower embedded debt), and the threat of nationalisation has reduced significantly all of which could contribute to a MAR greater than 1. Overall, company-specific MARs do not provide an appropriate indication of investor's willingness to invest in the sector as a whole.

18. Ability of the notional company to achieve a Baa1 rating

464 Our Statement of Case and the KPMG Financeability Report set out why the notional company would not be able to achieve an investment grade rating that is consistent with that assumed in the cost of debt allowance, i.e. Baa1.

465 In its Response, Ofwat argues that companies with capital structures similar to the notional level can maintain a Baa1 rating. It presented evidence to illustrate that companies with actual capital structures similar to the notional level are capable of maintaining a credit rating that is at least two notches above the minimum investment grade with at least one credit rating agency.[238]

466 Ofwat's reference to actual ratings for companies is inconsistent with its overall approach to financeability, which is based on the notional company. The companies that Ofwat refers to are not comparable to the notional company due to outperformance on financing costs (as a result of short-dated issuances), fast-track status and lower gearing than assumed under the notional structure. Severn Trent, for example, has a gearing of 63.7%, but an actual debt cost that is lower than Ofwat's allowance. Wessex Water, United Utilities and Affinity Water also have an actual cost of debt that is in some cases well below the allowance.[239] These companies all have non-regulated revenue streams that supplement their regulated revenues, which further limits their comparability to the notional company. A read-across to the actual rating assigned for these companies therefore does not provide credible evidence that the notional company would be able to achieve a rating of Baa1.

467 In a recent publication, Moody's calculated that a notional company with cost of debt in line with Ofwat's allowance, a gearing of 60% (at the notional level), and assuming 33% index lined would achieve an AICR of 1.24x.[240] While the 60% notional gearing is below Moody's maximum guidance of 72%, the AICR is below Moody's minimum guidance for both Baa1 (1.5x) and Baa2 (1.3x). Taken together, this suggests the credit rating for the notional company would be more in line with Baa2 than Baa1. This evidence shows that Ofwat cannot conclude that the notional company will be able to achieve a rating of Baa1 simply by looking at evidence on the actual rating achieved by selected companies.

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238 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraphs 4.28 – 4.29.

239 Ofwat (2019), FD, Allowed return on capital technical appendix, figure 6.6, page 91.

240 Moody's (2020), 'Outlook remains negative as price review leads to unprecedented number of appeals', 30 April, pages 4 and 5.

Annex 1: Ofwat's Finance Duty

1. Ofwat's Response

1 In its Response to the disputing companies' Statements of Case, Ofwat makes a number of points regarding its statutory duties under the Water Industry Act 1991 (as amended) the references we made to those duties in our Statement of Case which we believe are mischaracterisations and merit response.

2 On statutory duties generally, Ofwat states that:

(a) The requirement to exercise regulatory judgement, and to do what Ofwat considers best calculated to meet its objectives (i.e. the regulator's discretion), is *"an explicit feature of [its] statutory duties"*.[241]

(b) Suggestions by the disputing companies that it has not met its statutory duties are, in reality *"disagreements as to the merits of [its] decisions, dressed up as legal points"*.[242]

(c) Ofwat's decisions *"were taken in the light of all of the circumstances (including [Ofwat's] experience of the sector and the evidence submitted to [it]), and as part of the balance that [it] struck between various policy considerations; in short, they were the result of an exercise of discretion."*[243]

(d) Ofwat's role is *"not to ascertain whether a set of bright-line tests has been met. Rather, this is an exercise of regulatory judgement, in which the regulator strikes a balance between the objectives set out in the Act read in the light of the SPS, the evidence and its own experience and expertise."*[244]

(e) Ofwat has given *"careful and conscientious consideration"* to its statutory duties and is *"confident"* that it has fulfilled all of them.[245]

3 With particular regard to its Finance Duty,[246] Ofwat states:

(a) The disputing companies *"decline to emphasise"* the important opening words of this duty, which make clear that it requires the exercise of Ofwat's regulatory judgment.[247]

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[241] Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 2.26.

[242] Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 1.6.

[243] Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.4; Document 003, paragraph 2.5.

[244] Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.12.

[245] Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.5.

[246] Section 2(2A)(c) Water Industry Act 1991 (as amended) (WIA91).

[247] Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.76.

(b) It interprets its Finance Duty as *"a duty to secure that an efficient company with the notional capital structure can finance its functions, in particular by securing reasonable returns on its capital."*[248]

(c) The disputing companies *"cannot credibly cast doubt"* on the fact that it has satisfied the Finance Duty *"[h]aving regard to the volume of the economic and financial analysis forming part of the PR19 determinations..."*.[249]

(d) The disputing companies "*all draw a straight line between the financing duty on the one hand and a company-specific financeability analysis (based on interest cover ratios) on the other*".[250] However, the Finance Duty does not require Ofwat "*to target a specific credit rating or use specific rating agency methodologies*" in its determinations.[251]

(e) It does not accept that its final determination for any of the companies was in breach of the Finance Duty. Ofwat states, *"We provided adequate funding for an efficient company with the notional capital structure. That was a proper discharge of our duty. … To put it plainly: companies cannot, by pointing to our financing duty, divest themselves of the responsibility that they themselves bear for ensuring their own financeability."*[252]

4 Ofwat therefore seeks to position itself – in relation to the various decisions made within the context of its FDs – as operating within the bounds of its regulatory discretion and, as such, that its decisions are beyond the scope of legitimate challenge before the CMA (subject only to considerations of irrationality, etc.).

5 These points are also reflected in Ofwat's Response to our Statement of Case,[253] in which it summarises the *"ways in which Bristol Water wrongly tries to present some of its arguments as breaches of duty"*.[254]

6 We address the points made by Ofwat below and explain why they are either wrong or mischaracterisations.

2. Bristol Water's Analysis of the Finance Duty

7 For the CMA's ease of reference, we restate section 2(2A)(c) of the Water Industry Act 1991 (as amended, the Act):

> *"The Secretary of State or, as the case may be, [Ofwat] shall exercise and perform the powers and duties mentioned in subsection (1) above in the manner which he or it considers is best calculated –*

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248 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraphs 4.2 and 4.21.

249 Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.77.

250 Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.78.

251 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraph 4.55.

252 Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.78.

253 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case.

254 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 1.21.

…

(c) to secure that companies holding appointments under Chapter 1 of Part 2 of this Act as relevant undertakers are able (in particular, by securing reasonable returns on their capital) to finance the proper carrying out of those functions; …".

8 In our Statement of Case we used the term 'finance duty' to mean this, the precise wording of the duty in the Act.

9 We do not dispute that satisfaction of the Finance Duty requires the exercise of Ofwat's regulatory judgment or discretion.[255]

10 However, we consider that Ofwat's Response takes the point on discretion too far. Based on Ofwat's interpretation, its discretion appears to be so extensive that it is difficult to envisage a circumstance in which one of its price determinations could ever be challenged on the grounds of breach of the Finance Duty. This is plainly wrong.

11 In fact, there are always limits on a regulator's discretion. In Ofwat's case, its discretion is clearly limited on the face of the legislation and, importantly, does not alter the effective obligation – namely *"to secure that companies … are able (in particular, by securing reasonable returns on their capital) to finance the proper carrying out of [their] functions"*.

12 So whilst Ofwat has discretion as to <u>how</u> to achieve the Finance Duty, it does not have discretion <u>whether</u> to achieve it. Put another way, Parliament did not give Ofwat discretion as to whether to secure that companies can finance their functions (and it would be surprising if it had). Rather, it gave Ofwat discretion as to how to achieve that defined statutory objective. This is consistent with the origins of the Finance Duty,[256] its drafting and interpretation in other regulated sectors, and the long term interests of consumers to ensure that capital is available to finance the functions of water companies.

13 Therefore, contrary to the legal positioning adopted by Ofwat, it is not the case that the points made by Bristol Water (and others) *"are simply disagreements as to the merits of decisions that [Ofwat] made in its final determinations using the exercise of [its] regulatory judgement".*[257] We dispute that Ofwat's FD secures that Bristol Water – as a relevant undertaker – is able (in particular, by securing reasonable returns on their capital) to finance the proper carrying out of its functions.

[255] Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.76.

[256] See, for example, the discussion in Hansard dated 28 March1983 at https://api.parliament.uk/historic-hansard/commons/1983/mar/28/general-duties-of-secretary-of-state-and#column_33, which relates to the Telecommunications Bill (subsequently the Telecommunications Act 1984). As the CMA will know, this is considered the first 'regulatory' statute as it introduced RPI-X and created the licensing regime. Mr Baker at line 40 (second entry) states: *"I turn to subsection (1)(b), which concerns the need for those persons providing the services mentioned in subsection (1)(a) to be able to finance those services. … The effect of subsection (1)(b) is to ensure that neither the Secretary of State nor the Director General exercises his functions in such a way that the operators are unable to finance, both in the immediate future and thereafter on a continuing basis, the services that their licences oblige them to provide."*

[257] Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 2.26.

14 Ofwat's Response is erroneously based on a view that our case is founded on individual regulatory judgements[258] – which it seeks to dismiss one by one – when in fact we have been clear that financeability in the round is the foundation of our challenge.

15 Indeed, we say that Ofwat has failed to satisfy its Finance Duty because Bristol Water's business plan is **not financeable** under the FD. It has thus failed to achieve the defined statutory objective.

16 As Ofwat itself states: *"The words of the financing duty mean what they say in plain English – no more and no less"*.[259]

17 With regard to the other points Ofwat raises in its Response:

(a) Ofwat has altered its interpretation of the Finance Duty. Whilst it has previously stated that it interprets the Finance Duty as *"a duty to ensure that an efficient company can finance its functions, in particular by securing reasonable returns on its capital"*[260] (and this interpretation is highlighted in <u>Annex 2 (Statutory Framework)</u> to our Statement of Case), Ofwat now states that it interprets its Finance Duty as *"a duty to secure that an efficient company <u>with the notional capital structure</u> can finance its functions, in particular by securing reasonable returns on its capital."*[261] (emphasis added).

(b) Whilst it is common for regulators to start their financeability assessment by reference to a notionally efficient company in the first instance, this is not in and of itself – contrary to Ofwat's view – sufficient to amount to *"a proper discharge"* of its Finance Duty. That requires more.

(c) Specifically, Ofwat must ensure that each company – each relevant undertaker – with efficiently incurred costs is financeable. It must therefore consider the financeability of each company individually, taking into account company-specific information and characteristics.

(d) This view is consistent with that expressed in CMA15, in which the CMA stated:[262]

> *"Ofwat's approach will result in some companies, in particular very small companies, being in a position where there notional cost of efficient finance, is higher than Ofwat's assumption. If the notional company is based on a total industry average, the resulting cost of debt could be perceived as too low for these very small companies, which could be perceived as being potentially inconsistent with its finance duty."*

(e) The need for a regulator's financeability assessment to be company-specific was also clearly recognised in Firmus Energy (Distribution) Limited v Northern Ireland Authority for Utility Regulation: Final Determination (2017),[263] in which the CMA stated:

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258 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 2.7.

259 Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.82.

260 See, for example, PR19 Final Methodology, Section 11.

261 Ofwat (2020), 008: Reference of the PR19 final determinations: Risk and return – response to common issues, paragraphs 4.2 and 4.21.

262 CMA15, paragraph 11.75.

"Financeability is a term used by regulators to decide if a firm has the ability to pay off its providers of debt and equity finance. In price controls, … it is generally assumes that financeability is achieved when the rate of return (or WACC) has been set at a high enough rate, such that the revenues and therefore cash flows made by the firm are sufficient to pay investors and lenders."

(f) And Ofwat itself acknowledges that *"each determination … is highly fact- and context-specific"*.[264]

(g) Ofwat therefore cannot assume financeability based simply on the notionally efficient company. It has a duty to act in the manner in which it considers is best calculated *"to secure"* financeability and must make appropriate cross-checks.

(h) With regard to investment grade credit ratings – which are required under licence[265] – we consider testing to ensure that companies' proposed settlements meet appropriate ratios forms a necessary part of Ofwat's financeability assessment.[266] Failure on one or more of the tests is a strong indicator that there is a financeability concern which needs to be addressed.

(i) Ofwat must also allow sufficient headroom so that companies can respond to plausible downside financial shocks. Indeed, Ofwat recognised this in the PR19 process – in response to company concerns at the Draft Determination that Ofwat have not carried out an adequate financeability assessment Ofwat stated the following in the Final Determination for Bristol Water (an equivalent section was included for other companies):[267]

"In assessing the financeability of the notional company, we consider the headroom available in the final determination to allow the company to continue to meet its annual interest costs. We estimate 5 year headroom of £20 million above an adjusted cash interest cover of 1.0 times, providing headroom to our totex downside of £17 million and outcome delivery incentives downside of £10 million calculated as 1% return on regulatory equity."

(j) With regard to the latter, we note that Ofwat's Response states:[268]

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263 See https://assets.publishing.service.gov.uk/media/5953bfd8e5274a0a69000079/firmus-final-determination.pdf (paragraphs 7.98 and 7.99). We note that Ofwat relies on this case as evidence that it need only establish that the notional company is financeable (Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.84 onwards). We do not support this reading of the case.

264 Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.20.

265 See Statement of Case, Annex 2 (Statutory Framework).

266 Ofwat's Response highlights use of the term 'financeability duty' – *"language that is never used in the Act"* – as evidence of a conflation of the statutory duty with financial metrics (Ofwat (2020), 001: Reference of the PR19 final determinations: Introduction and overall stretch on costs and outcomes – response to cross-cutting issues, paragraph 3.80). However, we note that Ofwat itself uses this terminology. See, for example, Ofwat Information Notice on 2014 price review, https://www.ofwat.gov.uk/wp-content/uploads/2015/11/prs_in1411pr14financeability.pdf, in which Ofwat states: *"Under section 2(c) of the Water Industry Act 1991 (WIA91), Ofwat has a statutory ('legal') duty to ensure that an efficient company can finance its functions. We call this 'financeability."*); and Ofwat (2020), 009: Reference of the PR19 final determinations: Glossary, in which Ofawt defines 'Financeability' as *"the ability of appointed water companies to finance their functions through debt, equity or retained earnings*" (page 6).

267 Ofwat (2019), FD, Bristol Water final determination, section 5.2, page 73.

268 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.80.

"The downside scenarios prescribed for the assessment of a company's approach to financial resilience were not intended for assessment of the notional structure in the final determination. These were set out to allow us to compare each company's approach to its assessment of financial resilience under the actual financial structure, to allow us to understand how a company and its investors might respond in a downside scenario. However the modelling scenarios the company has assessed on a notional basis illustrate the company has strong funds from operations/net debt and gearing under all scenarios; while adjusted interest cover is weak."

(k) Effectively, this means that Ofwat did not carry out any notional financeability assessment in the FD, other than relying on the ratios on the notional balance sheet. We note however that the quote in paragraph (i) above is from the "Financeability" section of Ofwat's FD (section 5.2), which deals with notional structure, and not from the subsequent section on "Financial resilience" (section 5.3), which refers to the actual structure. We address this point further in Section D of our Reply above.

(l) It is clear that Ofwat cannot satisfy its Finance Duty based on the volume of its economic and financial analysis. The focus must be on the substance of its actions.

(m) Nor can it, by pointing to companies, divest itself of its statutory duty *"to secure that companies … are able (in particular, by securing reasonable returns on their capital) to finance the proper carrying out of [their] functions"*, by claiming that it is up to the companies to ensure that they are financeable in relation to the duty. See also paragraph 44 of our Statement of Case where we explain the relevance of the headroom test as a cross check against the other failings in Ofwat's financeability assessment (linked to the other individual errors we believe exist in the FD). We note that Ofwat has not addressed these points in its Response.

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Annex 2: Index of Bristol Water and Ofwat Submissions

#	Ofwat Response Submission	Ofwat Response Reference	Where addressed by Bristol Water	
			Statement of Case	**Reply**
1.	**001 - Introduction, overall stretch on costs and outcomes – response to cross-cutting issues in companies' statements of case**			
1.1.	*"Thirteen companies have accepted [Ofwat's] challenge; four have not."*	1. Introduction Paragraph 1.2		Executive Summary, Section 3.6
1.2.	The **allowed return on capital does not increase the level of stretch**	4. Overall level of stretch Paragraph 4.6	Section A, Paragraph 96	Section D: Financeability, Section 12: Summary
1.3.	The **overall level of stretch across costs and outcomes** is similar across PR14 and PR19	4. Overall level of stretch Paragraph 4.21	Annex 4, Section 3	Section C: Balance of risk, Paragraphs 311 – 315
1.4.	There has been **historic outperformance** above the base return allowance across the sector	6. Has there been historical outperformance that needs to be reset? Paragraphs 6.1 – 6.36	Annex 4, Paragraph 27	Executive Summary Section 3.6; Section B: Cost allowance, Paragraphs 211- 216
1.5.	Ofwat has sufficiently accounted for **the link between service quality and cost efficiency**	7. Our approach and final determinations reflect the linkages between costs and outcomes	Annex 4, Paragraphs 62 – 70	Section C: Balance of risk, Paragraph 314
2.	**003 - Response to Bristol Water's statement of case**			
2.1.	Bristol Water raises new issues, and *"this is not an appropriate or even proper use of the CMA redetermination process."*. These issues were:	1. Executive summary Paragraphs 1.6 – 1.7		Executive Summary, Section 3.6
2.1.1.	- Cost of equity uplift	1. Executive summary		Executive Summary,

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#	Ofwat Response Submission	Ofwat Response Reference	Where addressed by Bristol Water	
			Statement of Case	Reply
		Paragraph 1.6		Section 3.6; Section A: Cost of capital, Paragraphs 131(a), 134 – 140
2.1.2.	- Increased funding of leakage in base costs	1. Executive summary Paragraph 1.6		Section B: Cost allowance, Paragraph 250 Annex 3: Information on leakage innovation and efficiency
2.2.	*"For the period 2000-01 to 2018-19, Bristol Water has averaged a 9.4% dividend as a percentage of the equity component of the RCV for that period. For the period 2015-19 Bristol has paid out £24.9 million in dividends. The company proposes a base dividend yield of 3.4%, with a 0.9% per annum real growth based on the company's actual structure."*	1. Executive summary Paragraph 1.17	Annex 4, paragraph 54	Executive Summary, Section 3.6
2.3.	The points raised by Bristol Water are *"…not hard-edged questions of law, but rather disagreements as to the merits…"*	1. Executive summary Paragraph 1.21		Executive Summary, Section 3.6 Section D: Financeability, Paragraph 386
2.4.	*"We find some (although not all) of the company's customer research to be poor quality and vulnerable to bias"*	1. Executive summary Paragraph 1.57	Annex 6: Our Story, Sections 4 and 6	Executive Summary, Paragraph 23 Section C: Balance of risk, Paragraphs 326 – 340
2.5.	*"This is the third price review in succession where Bristol Water has requested a redetermination."*	3. Securing cost efficiency Paragraph 3.8	Executive Summary, paragraph 5	Executive Summary, Section 3.6

#	Ofwat Response Submission	Ofwat Response Reference	Where addressed by Bristol Water	
			Statement of Case	Reply
2.6.	Base cost models should not include **service level** drivers	3. Securing cost efficiency Paragraphs 3.22 – 3.32	Paragraphs 341 – 369	Section B: Cost allowance, Paragraphs 232 – 242
2.7.	There should be no adjustment to base costs to reflect Bristol Water's **leakage costs**	3. Securing cost efficiency Paragraphs 3.33 – 3.46	Paragraphs 370 – 395	Section B: Cost allowance, Paragraphs 243 – 256
2.8.	The move beyond the Upper Quartile catch-up efficiency **benchmark** at FD was appropriate	3. Securing cost efficiency Paragraphs 3.47 – 3.75	Paragraphs 396 –428	Section B: Cost allowance, Paragraphs 273 – 275
2.9.	Setting the **frontier shift** measure at 1.1% per year is appropriate	3. Securing cost efficiency Paragraphs 3.76 – 3.87	Paragraphs 429 – 454	Section B: Cost allowance, Paragraphs 276 – 282
2.10.	No **Real Price Effect** for energy should be applied	3. Securing cost efficiency Paragraphs 3.88 – 3.102	Paragraphs 455 – 471	Section B: Cost allowance, Paragraphs 283 – 286
2.11.	The FD does not result in a costs shortfall with respect to **growth and developer services**	3. Securing cost efficiency Paragraphs 3.103 – 3.120	Paragraphs 472 – 496	Section B: Cost allowance, Paragraphs 287 – 290
2.12.	Ofwat is justified in disallowing £2.6 million of Bristol Water's **Canal & River Trust cost adjustment claim**	3. Securing cost efficiency Paragraphs 3.121 – 3.146	Paragraphs 497 – 537	Section B: Cost allowance, Paragraphs 257 – 272
2.13.	There is no need to cap the implicit **enhancement opex allowance** to the level of enhancement opex in the company's business plan	3. Securing cost efficiency Paragraphs 3.147 – 3.151	Paragraphs 538 – 554	Section B: Cost allowance, Table B1
2.14.	Application of a shallow-dive "company specific efficiency factor" when assessing the **efficiency of certain enhancement costs** was justified	3. Securing cost efficiency Paragraphs 3.153 – 3.155	Paragraphs 555 – 557	Section B: Cost allowance, Paragraphs 301 – 304
2.15.	No costs adjustment should be allowed to reflect the increase in the **licence fee** cap	3. Securing cost efficiency Paragraphs 3.156 – 3.160	Paragraphs 578 – 588	Section B: Cost allowance, Paragraphs 305 – 307

NON-CONFIDENTIAL

#	Ofwat Response Submission	Ofwat Response Reference	Where addressed by Bristol Water	
			Statement of Case	Reply
2.16.	Ofwat was justified in increasing the **ODI penalty rates** for the **mains bursts and per capita consumption PCs** from the levels proposed by Bristol Water	4. Delivering outcomes for customers Paragraphs 4.11 – 4.51	Paragraphs 601 – 626	Section C: Balance of risk, Paragraphs 316 – 344
2.17.	Ofwat did not incorrectly estimate the **ODI RoRE range** in the FD	4. Delivering outcomes for customers Paragraphs 4.42 – 4.51	Paragraphs 617 – 621	Section C: Balance of risk, Paragraphs 345 – 356
2.18.	The **overall level of stretch** across costs and outcomes in the FD is justified	5. Overall stretch across costs and outcomes Paragraphs 5.17 – 5.33	Annex 4, Paragraphs 62 – 70	Section C: Balance of risk, Paragraphs 311 – 315
2.19.	Bristol Water did not previously request a **company-specific adjustment to the cost of equity**, and this *"could be viewed as an attempt to evade proper scrutiny of its proposals during the price review process."*	6. Aligning risk and return Paragraphs 6.10 – 6.11		Executive Summary, Section 3.6; Section A: Cost of capital, Paragraphs 134 – 140
2.20.	A **company-specific adjustment to the cost of equity** for Bristol Water is not justified	6. Aligning risk and return Paragraphs 6.24 – 6.34	Paragraphs 239 – 256	Section A: Cost of capital, Paragraphs 131 – 182
2.21.	A **company-specific adjustment to the cost of debt** for Bristol Water is not justified	6. Aligning risk and return Paragraphs 6.35 – 6.53	Paragraphs 206 – 238	Section A: Cost of capital, Paragraphs 40 – 130
2.22.	Industry cost of capital – Ofwat's **total market return** value is not understated	6. Aligning risk and return Paragraph 6.56	Paragraphs 261 – 280	Section A: Cost of capital, Paragraphs 187; 201 –202
2.23.	Industry cost of capital – Ofwat's **risk free rate** value is not understated	6. Aligning risk and return Paragraph 6.57	Paragraphs 281 – 294	
2.24.	Industry cost of capital – Ofwat's **asset beta** value is not understated	6. Aligning risk and return Paragraph 6.58	Paragraphs 295 – 307	Section A: Cost of capital, Paragraphs 185 – 186; 198 –

#	Ofwat Response Submission	Ofwat Response Reference	Where addressed by Bristol Water	
			Statement of Case	Reply
				200
2.25.	Industry cost of capital – Ofwat's **debt beta** value is not overstated	6. Aligning risk and return Paragraph 6.60	Paragraphs 308 – 318	
2.26.	Industry cost of capital – Ofwat's **cost of new debt** value is not understated	6. Aligning risk and return Paragraph 6.61	Paragraphs 319 – 328	Section A: Cost of capital, Paragraphs 116 – 125
2.27.	Industry cost of capital – the **ratio of new to embedded debt** should not reflect Bristol Water's circumstances as a small company	6. Aligning risk and return Paragraph 6.62	Paragraphs 325 – 328	Section A: Cost of capital, Paragraphs 183 – 184; 189 – 197
2.28.	The inclusion in the FD of **asymmetric cost sharing rates** was justified	6. Aligning risk and return Paragraphs 6.65 – 6.70	Paragraphs 627 – 668	Section C: Balance of risk, Paragraphs 357 – 369
2.29.	The inclusion in the FD of the **gearing outperformance sharing mechanism** was justified	6. Aligning risk and return Paragraphs 6.71 – 6.72	Paragraphs 669 – 709	Section C: Balance of risk, Paragraphs 370 – 383
2.30.	The **notional capital structure** should not be adjusted to take account of Bristol Water's status as a small water-only company	6. Aligning risk and return Paragraphs 6.75 – 6.78	Paragraphs 25 – 33	Section D: Financeability, Paragraphs 391 – 394
2.31.	Ofwat's FD ensures Bristol Water has **sufficient financial headroom**	6. Aligning risk and return Paragraphs 6.79 – 6.80	Paragraphs 45 – 51	Section D: Financeability, Paragraphs 406 – 436
2.32.	Ofwat's FD was subject to a proper **credit ratings check**	6. Aligning risk and return Paragraph 6.82	Paragraphs 36 – 44	Section D: Financeability, Paragraphs 395 – 405; 464 – 467
2.33.	A number of **mitigating measures** are available in the event of a financeability constraint	6. Aligning risk and return Paragraph 6.81	Paragraphs 121 – 136	Section D: Financeability, Paragraphs 437 – 463

#	Ofwat Response Submission	Ofwat Response Reference	Where addressed by Bristol Water	
			Statement of Case	Reply
3.	**006 - Cost efficiency - response to common issues in companies' statements of case**			
3.1.	Ofwat was justified in not reflecting **service quality** in its base cost models	3. Our base economic models Paragraphs 3.31 – 3.46	Paragraphs 341 – 369	Section B: Cost allowance, Paragraphs 232 – 242
3.2.	Integrating **growth costs into base economic models** was the best approach	4. Assessment of growth-related expenditure Paragraphs 4.21 – 4.32	Paragraphs 484 – 488	Section B: Cost allowance, Paragraph 289
3.3.	Implementing the **growth unit rate adjustment** to base models to fund step changes in population growth was the correct approach	4. Assessment of growth-related expenditure Paragraphs 4.63 – 4.71	Paragraphs 489 – 494`	Section B: Cost allowance, Paragraphs 287 – 291
3.4.	**ONS forecasts were the appropriate source for growth rate projections**, not local authority data as used in WRMPs	4. Assessment of growth-related expenditure Paragraphs 4.47 – 4.51	Paragraphs 474 – 483	Section B: Cost allowance, Paragraph 293
3.5.	Industry-leading performance on leakage should be funded **through the base costs allowance**	5. Our approach to leakage Paragraphs 5.48 – 5.57	Paragraphs 370 – 394	Section B: Cost allowance, Paragraphs 243 – 256
3.6.	Ofwat was justified in moving the **catch-up efficiency challenge to the fourth-placed company** (from the Upper Quartile) for wholesale water	6. Our catch-up challenge for base costs Paragraph 6.24 – 6.55	Paragraphs 396 – 428	Section B: Cost allowance, Paragraphs 273 – 275
3.7.	**Frontier shift** – Ofwat's estimate is **justified by the wide evidence base** on which it was based	7. Frontier shift Paragraphs 7.13 – 7.15	Paragraphs 436 – 443	
3.8.	**Frontier shift** – companies' various criticisms of Ofwat's methodology are not justified	7. Frontier shift Paragraphs 7.16 – 7.61	Paragraphs 444 - 449	
3.9.	**Frontier shift** – Ofwat was justified in applying frontier shift to	7. Frontier shift	Paragraphs 450 – 451	Section B: Cost allowance,

#	Ofwat Response Submission	Ofwat Response Reference	Where addressed by Bristol Water	
			Statement of Case	Reply
	unmodelled base costs	Paragraphs 7.62 – 7.63		Paragraphs 276 – 282
3.10.	**Frontier shift** – Ofwat's frontier shift value of 1.1% is in line with recent decisions by other regulators	7. Frontier shift Paragraphs 7.57 – 7.58	Paragraph 453, Table C8	
3.11.	**Frontier shift** – the impact of Covid-19 should not affect Ofwat's frontier shift value of 1.1%	7. Frontier shift Paragraphs 7.75 – 7.79		Executive Summary, Section 3.5
3.12.	Ofwat's decision not to allow a **Real Price Effect (RPE) for energy costs** was justified	8. Real price effects Paragraphs 6.35 – 8.41	Paragraph 455 – 471	Section B: Cost allowance, Paragraphs 283 – 286
3.13.	Generally, the **impact of Covid-19 makes the case for RPEs weaker**	8. Real price effects Paragraphs 8.43 – 8.46		Section B: Cost allowance, Paragraphs 283 – 286
4.	**007 - Outcomes - response to common issues in companies' statements of case**			
4.1.	Ofwat took sufficient account of **customer preferences** when setting ODIs.	5. Our outcomes package does take account of customer survey evidence although this is not the only factor we consider Paragraphs 5.3 – 5.13	Paragraphs 614 – 616	Section C: Balance of risk, Paragraphs 316 – 344
4.2.	The **asymmetric ODI package** is justified, and companies are appropriately incentivised to meet their PCs.	11. We do not think it is necessary to impose symmetric performance incentives to align with customer interests	Paragraphs 621 – 625	Section C: Balance of risk, Paragraphs 345 – 356
5.	**008 - Risk and return - response to common issues in companies' statements of case**			
5.1.	The **notional structure** used in the FD should not reflect	2. Balance of risk and return	Paragraphs 25 – 33	Section A: Cost of capital,

#	Ofwat Response Submission	Ofwat Response Reference	Where addressed by Bristol Water	
			Statement of Case	Reply
	companies' past "financing choices"	Paragraph 2.43 – 2.48		Paragraphs 80 – 96
5.2.	**Asymmetric totex cost sharing rates** are justified by companies' historic outperformance against cost allowances and the need to incentivise efficient business plans	2. Balance of risk and return Paragraphs 2.52 – 2.72	Paragraphs 627 – 668	Section C: Balance of risk, Paragraphs 360 – 364
5.3.	**Downside skew on ODIs** is justified by companies' historic performance record in meeting stretching PCs	2. Balance of risk and return Paragraphs 2.73 – 2.86	Paragraphs 617 – 625	Section D: Financeability, Paragraphs 428 – 431
5.4.	Companies' arguments for increasing the **Total Market Return** point estimate from 6.50% are not justified	3. Allowed return Paragraphs 3.11 – 3.39	Paragraphs 261 – 280	Section A: Cost of capital, Paragraphs 187; 201 – 202
5.5.	Companies' arguments for increasing the **Risk Free Rate** point estimate from 0.58% are not justified	3. Allowed return Paragraphs 3.40 – 3.52	Paragraphs 281 – 294	
5.6.	Companies' arguments for increasing the **asset beta** are not justified	3. Allowed return Paragraphs 3.53 – 3.70; 3.77 – 3.83	Paragraphs 295 – 307	Section A: Cost of capital, Paragraphs 185 – 186; 198 – 200
5.7.	Companies' arguments for reducing the **debt beta** from 0.125 are not justified	3. Allowed return Paragraphs 3.71 – 3.76	Paragraphs 308 – 318	
5.8.	Companies' arguments for increasing the allowed **cost of debt** are not justified	3. Allowed return Paragraphs 3.84 – 3.117	Paragraphs 319 – 328	Section A: Cost of capital, Paragraphs 40 – 130
5.9.	Efficient companies can **maintain a credit rating** with two notches' headroom to **minimum investment grade** on the basis of the FD, and this is supported by recent publications from credit ratings agencies	4. Financeability Paragraphs 4.25 – 4.38	Paragraphs 36 – 44	Section D: Financeability, Paragraphs 464 – 467
5.10.	The Finance Duty does not require Ofwat to target a **specific credit rating**	4. Financeability Paragraphs 4.52 – 4.64	Paragraphs 36 – 44	Section D: Financeability, Paragraphs 395 – 402

#	Ofwat Response Submission	Ofwat Response Reference	Where addressed by Bristol Water	
			Statement of Case	Reply
5.11.	Ofwat conducted appropriate checks to ensure companies would have **adequate financial headroom** to protect against cost shocks	4. Financeability Paragraphs 4.74 – 4.92	Paragraphs 45 – 51	Section D: Financeability, Paragraphs 410 – 436
5.12.	Advancing revenue through **use of PAYG and RCV run-off** is an appropriate means of addressing financeability constraints	4. Financeability Paragraphs 4.97 – 4.113	Paragraphs 123 – 128	Section D: Financeability, Paragraph 385
5.13.	**Faster transition to CPIH** may be an appropriate alternative means of addressing financeability constraints	4. Financeability Paragraphs 4.114 – 4.115; 4.129 – 4.133	Paragraphs 129 – 131	Section D: Financeability, Paragraphs 455 – 458
5.14.	**Dividend restriction and equity injections** may be an appropriate means of addressing financeability constraints	4. Financeability Paragraphs 4.116 – 4.121	Paragraph 136	Section D: Financeability, Paragraphs 459 – 463
5.15.	The CMA could address financeability constraints by **adjusting elements of the notional capital structure**	4. Financeability Paragraphs 4.125 – 4.128	Paragraphs 132 – 134	Section D: Financeability, Paragraphs 444 – 454
5.16.	**Gearing outperformance sharing mechanism:** the Modigliani Miller principle indicates that **the cost of capital is *not* invariant to capital structure**	5. Putting the sector in balance and the gearing outperformance sharing mechanism Paragraphs 5.12 – 5.23	Paragraphs 683 – 695	Section C: Balance of risk, Paragraphs 374 – 377
5.17.	**Gearing outperformance sharing mechanism:** the CMA does not need to determine whether **Bristol Water's preference shares** should be treated as equity rather than debt, because there will be a reconciliation at PR24	5. Putting the sector in balance and the gearing outperformance sharing mechanism Paragraphs 5.26 – 5.27	Paragraphs 702 - 708	Section C: Balance of risk, Paragraphs 378 – 383
6.	**Ofwat initial presentation to the CMA in response to water companies' statements of case, 20 May 2020**			
6.1.	Ofwat's approach allowed increased funding while delivering	Slide 9		The graph shows -14.5% for

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#	Ofwat Response Submission	Ofwat Response Reference	Where addressed by Bristol Water	
			Statement of Case	Reply
	bill reductions			Bristol Water, which is not increased funding.
6.2.	Bristol Water's request for a **company specific adjustment to the cost of equity** is a **new claim that was not raised during the PR19 process**	Slide 17		Executive Summary, Section 3.6; Section A: Cost of capital, Paragraphs 134 – 140
6.3.	Bristol Water's request for a **specific cost allowance to fund efficient base leakage performance** is a **new claim that was not raised during the PR19 process**	Slide 17		Section B: Cost allowance, Paragraph 250 Annex 3: Information on leakage innovation and efficiency
6.4.	Bristol Water has a **cost of debt** lower than some water and wastewater companies and, unlike small water only companies, it is able to access bond markets on reasonable terms.	Slide 17	Paragraph 222, Table B4	Section A: Cost of capital, Paragraphs 116 – 125
6.5.	Bristol Water's **financial resilience challenge** arising from the FD is **due to PR14 underperformance payments**	Slide 17	Section 3.5	Annex 4: Plausibility of downside risk scenarios, Paragraphs 14 – 20
6.6.	We have **applied the results of customer research where appropriate**, and moderated it where necessary, to provide a settlement that matches customer preferences	Slide 18	Paragraphs 614 – 616	Section C: Balance of risk, Paragraphs 316 – 344
6.7.	There is a risk –based on previous experience - that **overly generous funding of enhancement schemes isn't used to improve services** for customers and the environment but ends up in shareholders pockets and undermines the legitimacy of the sector	Slide 19		This statement does not appear to be relevant to Bristol Water. Section B: Cost allowance,

#	Ofwat Response Submission	Ofwat Response Reference	Where addressed by Bristol Water	
			Statement of Case	Reply
				Paragraphs 301 - 304
6.8.	**Financeability**: *"Moody's does not expect any increase in allowances made by the CMA would be enough improve Bristol's credit rating"*	Slide 24		Annex 4: Plausibility of downside risk scenarios, Paragraphs 14 – 20
6.9.	**Financeability**: *"Comment from the credit rating agencies is clear that risks to the credit ratings of the disputing companies result from matters that are under company control"*	Slide 26	Paragraph 105-109	Annex 4: Plausibility of downside risk scenarios, Paragraphs 14 – 20
6.10.	**Company specific adjustment to the cost of equity**: *"If operational gearing is an issue,* [for Bristol Water] *it is more appropriate to reduce notional gearing."*	Slide 31	Paragraphs 132 – 133	Section D: Financeability, Paragraphs 444 – 454

Annex 3: Information on leakage innovation and efficiency

1. Introduction

1 In its Response to our Statement of Case Ofwat stated:[269]

> *"In addition, Bristol Water does not validate the requested additional £13 million allowance with its own assessment of forecast of leakage costs or its historic expenditure. We would expect the company to be able to demonstrate a clear understanding of its historic costs and leakage management activities and how these relate to the efficient future costs of maintaining its leakage levels. However, the company does not provide any evidence of its leakage expenditure requirements on base costs, and calculates the £13 million allowance using outputs from Ofwat's alternative base model specifications and the PwC report leakage models."*

2 We address Ofwat's challenge in this section, with reference to the information provided in our business plan and Statement of Case. We do not present new information as we have provided ample information during PR19 on our approach to leakage costs.

3 Ofwat alludes elsewhere in its submissions to the CMA to our lack of understanding of our costs. This is a challenge which we do not think stands up to scrutiny given the very detailed explanations on our responses to Ofwat throughout the process of what cost assumptions we were changing as evidenced emerge, and the very specific elements, both from our cost base and Ofwat's modelling of why we could or could not accept the challenge.

4 Ofwat's challenge is not valid. Our position has consistently been that Ofwat's base cost allowance is not a reasonable central estimate for the efficient costs required for Bristol Water to deliver the service levels required. It is not in dispute that: a) our levels of leakage are at the frontier of the industry alongside Anglian Water; and b) that Ofwat allowed additional cost allowance to Anglian Water at the FD compared to the amounts allowed to Bristol Water, because of the application of Ofwat's modelling and the focus on a set of alternative models, only one of which (the leakage models) adjusted for this important driver of differential historical base costs, as found by the PwC reports for Ofwat.

5 This annex summarises the interaction we have had to date with Ofwat throughout the price review process on our leakage plans, and provides further detail on our leakage performance.

2. Business plan

6 Leakage can generally be reduced through a mixture of (this is not an exhaustive list):

(a) Monitoring the network, and identifying and repairing leaks quickly.

(b) Reactive leakage – visible leaks that are noticed by staff or the public, or for bursts when they cause network supply issues. Leakage inspectors are trained technical staff who

[269] Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.43.

use a mixture of technology, expertise and traditional techniques to identify where leaks are.

(c) Monitoring of the condition of mains, targeting mains replacement to reduce leakage. This will also reduce supply interruptions and potentially mains bursts.

(d) Increasing customer metering.

(e) Repairing meters, stop taps and ensuring customers repair supply pipes.

(f) Active leakage control – including pressure management to reduce the volume through pipes to prevent bursts, reduce the volume leaking and adaptive network systems that allow for better control.

7 The Bristol Water Plan includes elements of all these activities. Some activities, such as the level of metering, reactive mains repairs, are assumed in the baseline for the Water Resource Management Plans that contribute to the water supply demand balance. The Water Resource Management Plan also includes demand management options such as water efficiency measures, advanced metering, and also reduced leakage options such as greater active leakage control. For Bristol Water, the Water Resource Management Plan included a 15% reduction on the baseline position that had been included in the business plan, a value of 6.5Ml/d from a 2019/20 forecast baseline of 43Ml/d.

8 Section C5B of our business plan set out the technical approach to calculating leakage investment costs.[270] This set out a total five-year cost of maintaining the existing level of leakage at £26.35m, of which £5.91m reflected the 6.5Ml/d reduction from 43Ml/d to 36.5Ml/d, which we considered enhancement expenditure. Of the remaining base expenditure, £18.37m reflected the cost of reactive leak identification and repairs, and £2.32m reflected the network technology (pressure reducing valves, loggers and meters), including the extensive smart network technology that helps to minimise the reactive costs.

9 The base cost excludes overheads and management, as well as the benefit from base maintenance and operating costs to leakage that arises from supply interruptions, proactive mains repairs and other investment cases. This element of general base cost amounted to an additional £8.36m, with allocations of £0.7m from trunk mains distribution, £3.3m from distribution mains, £0.3m of meter and pressure valve maintenance, £3.8m of network ancillaries (e.g. joints) and £0.2m of network monitoring.

10 If only the minimum level of leakage activities was undertaken, our leakage modelling demonstrated that leakage would increase by 10Ml/d over the five years to c. 53Ml/d.

11 The above shows base reactive costs equivalent to £0.6m/Ml/d (calculated using the increase in leakage of 10Ml/d that would occur from only reactive fixing of leaks causing supply interruptions and mains bursts), and the enhancement cost at £0.9m/Ml/d by 2025. This demonstrates an additional cost at increasing levels of leakage. The above figures are based on historical costs before applying the catch-up and frontier shift assumptions assumed in our

270 Bristol Water (2018) 'Cost and Efficiency – C5B Technical Annex 10 – Leakage Investment Case (BW033).

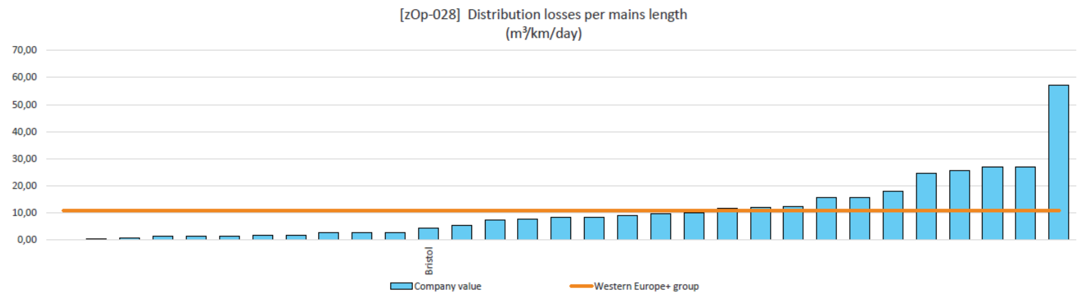
plan (c. 9% capex and 6% opex, before frontier shift) that was reflected in our plan (the efficiency numbers here are those from our DD response).

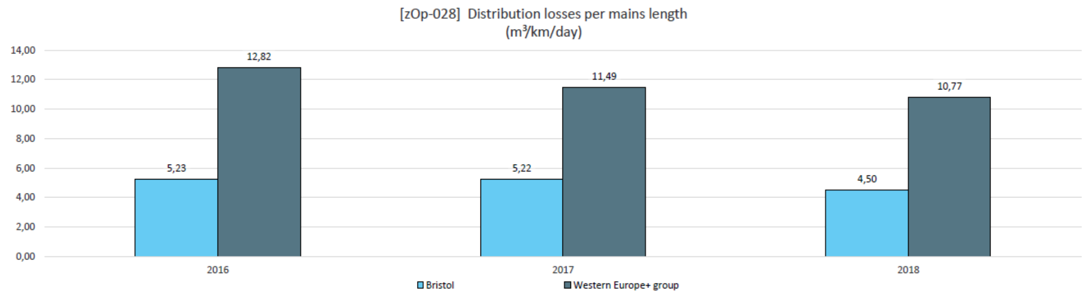
12 Ofwat in the business plan guidance asked companies to calculate the minimum level of leakage that is considered technically feasible, known as the Unavoidable Annual Real Losses (UARL).[271] Using this standard methodology this suggested the minimum leakage level for Bristol Water as 29Ml/d.

13 A “faster” level of leakage reduction was also identified in the business plan options. For an additional enhancement investment of £1.6m, a further 0.5Ml/d of reduced leakage would be delivered by 2025, at a unit rate of £3.2m/Ml/d. As we expected this cost to come down with the roll out of our smart network technology, and given the level of leakage being targeted was at the frontier of the UK water industry (see Statement of Case paragraph 373), the target of 43Ml/d was both efficient and also reflected the point at which costs approximated to customers willingness to pay for leakage reduction.

14 European Benchmarking Cooperation (EBC) data provides further context of Bristol Water leakage performance compared to international comparators. Generally leakage levels are lower than the international comparisons, excluding the Netherlands (ten of the eleven companies with lower levels than Bristol Water in this graph) where municipal planning has allowed low levels of leakage through up front design of networks.

Figure AN3.1 European Benchmarking Cooperation data on leakage





271 The UK specific UARL is calculated for a given system taking into account what is technically achievable. It is derived using the following equation: UARL (m3/year) (6.57 x Lm + 0.292 x NC + 9.13 x Lsp) x Pc. Where Lm = underground mains length (km), Nc = Number of Service Connections, Lsp = total length (km) of underground supply pipes and Pc = current average operating pressure (metres).

15 Section C5 – Cost and Efficiency of the business plan provides further reference information on costs.[272] Table 1-8 shows the ongoing base operating costs in addition to the costs described (£3.5m) that arises from the 12% leakage reduction from 49Ml/d to 43Ml/d over 2015-20 (this is obviously different from Ofwat's response perspective for the whole water industry that leakage reduction was stagnating prior to its PR19 approach). This is equivalent to £0.6m/Ml/d, a similar rate to the cost saved from not maintaining past cost. This demonstrates that steady leakage reduction at a technically feasible rate is the most efficient approach.

16 In BW015 table 3-23 we showed the net opex impact of the AMP7 investment plan, including the average Active leakage control and customer leak stop repairs that arise as part of the £5.9m additional cost to deliver the 6.5Ml/d of leakage reduction.[273] Taking the £1.9m active leakage control ongoing operating cost, this is the same rate (over the whole AMP as the £0.6m/Ml/d) as the increased cost from the AMP6 programme noted in the previous paragraph.

3. Draft Determination response

17 In the cost and efficiency section of our DD response we set out two challenges that related to leakage costs in the DD.[274]

18 In Section 4.1.6.1 we pointed out that Ofwat's approach to calculating leakage enhancement expenditure, to recognise the cost of the 6.5Ml/d improvement, as Bristol Water was beyond the upper quartile level, had been calculated incorrectly in the DD. Ofwat accepted this in the FD and used the £0.9m/Ml/d unit rate to calculate the leakage enhancement allowance of in the Final Determination.

19 We also raised the issue that we had taken a totex approach to calculating our business plan outcomes, considering both the ongoing cost of maintaining and improving leakage alongside the AMP7 specific cost of the 6.5Ml/d reduction. This provides the context for much of our cost allowance issue with Ofwat, as we believe across a number of the errors we set out in our statement of case that Ofwat should have taken more account of our plan evidence (rather than just explaining the standard assessment approach), given the stretching cost and service targets we proposed.

20 We pointed out that Ofwat's enhancement allowance only allowed for the efficiency based on our actual cost, and not the industry benchmark of £2.1m/Ml/d for leakage enhancement costs. We demonstrated that this difference in benchmark rate (£4.5m in a range of £1.8m - £7.2m) should be adjusted from the base efficiency to reflect an accurate estimate of Bristol Water base efficiency, given other companies had yet to incur these on-going costs of leakage reduction as we demonstrate above. As we demonstrate, our on-going cost rate is efficient compared to the industry benchmark of £2.1m/Ml/d, which reflects a reasonable estimate of ongoing additional base costs per Ml/d based on our own experience.

272 Bristol Water (2018), PR19 business plan C5: Cost and efficiency (BW015).
273 Bristol Water (2018), PR19 business plan C5: Cost and efficiency (BW015), page 42.
274 Bristol Water (2019), BW02 Cost and efficiency, (BW119).

21 Ofwat did not comment on this proposed adjustment in the FD, which we believe is why Ofwat erroneously state we raise leakage base cost allowances as a new matter in our Statement of Case.[275]

4. Statement of Case

22 In Section 11 of our Statement of Case (from paragraph 385), we set out the additional information which accompanied Ofwat's FD, which when compared to the information set out above, informs our view that Ofwat's base model makes insufficient cost allowance for our leakage expenditure. This shows that Ofwat's alternative models based on the PwC report suggest an allowance between £7m and £19m. The bottom end of this range coincides with the top end of the more limited enhancement cost modelling shown above. This demonstrates the efficiency of our leakage cost proposals.

23 Our proposed remedy in our Statement of Case was *not* to simply combine the sum of the individual adjustments in our Statement of Case, including the range of £7m - £19m for leakage based on Ofwat's FD modelling. We focused on the evidence that the £30m totex gap to the FD was beyond what we could reasonably deliver and the FD totex allowance was set below efficient costs. We do not comment on Anglian Water's case for higher adjustments than we propose for a similar issue, because leakage is a function of a number of local factors, and as we show, is not independent of other investment areas. However, we note that our proposed adjustments are lower than Anglian's based on unit rate comparisons.[276]

24 Another element of Ofwat's case is that it adjusts for enhancement opex that it considers double-counted if allowed in addition to historical enhancement expenditure implicit in base modelling. Ofwat appears to assume that the increase in leakage costs are included in base service across the industry. This assumption appears inconsistent with Ofwat also making an implicit opex enhancement adjustment. We consider this separate issue in section 17 of our Statement of Case.

25 It is insufficient to assume that past enhancement investment will result in an ongoing maintenance allowance in base cost. Equally, a rapid step change in leakage reduction is not likely to be sustainable at an efficient level of cost, and will see increases in leakage in subsequent years (in addition to the natural rate of rise as the network length and number of connections grow). This is because of the disruption to the network to achieve the reduction in leakage which then cannot be sustained, and explains the high incremental cost for leakage reductions above our plan proposal set out in paragraph 13 above.

5. Performance update

26 We provided in a confidential section in Annex 4 of our Statement of Case, data on our recent operational performance. The leakage targets referenced above (43Ml/d in 2019/20) are based on a frozen PR14 methodology used for PR14 ODI calculation purposes (which did not adjust for technical data changes necessary to measure actual leakage accurately). We also

275 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 3.41.

276 Paragraph 1070 of the Anglian Water statement of case has £77m of enhancement for 30Ml/d, a unit rate of £2.6m/Ml/d. Anglian also suggest a base cost adjustment of £148m for their base leakage figure of c. 180Ml/d, a unit rate of £0.8/Ml/d compared to the £0.3m/Ml/d at the central £13m adjustment suggested in our Statement of Case.

report against a target that monitors actual leakage levels, based on the most up to date assumptions (40Ml/d in 2019/20). This level of leakage is similar to the standardised industry leakage data we used for comparisons in our Statement of Case and forms the basis of PR19 targets.

27 In the FD, Ofwat set a 21.2% leakage reduction target for Bristol Water, which is the highest percentage reduction in the industry. This reflects the 6.5Ml/d reduction that Ofwat allowed for in enhancement based on our efficient unit costs of £0.9m/Ml/d (£4.8m total enhancement capex and enhancement opex allowance), from our 38.3Ml/d forecast of the industry standard leakage data target. This included some forecast of outperforming our 40Ml/d original target for 2019/20.

28 [✄]

[✄]

[✄]	[✄]	[✄]	[✄]	[✄]	[✄]	[✄]
[✄]	[✄]	[✄]	[✄]	[✄]	[✄]	[✄]
[✄]	[✄]	[✄]	[✄]	[✄]	[✄]	[✄]
[✄]			[✄]	[✄]	[✄]	[✄]

29 [✄]

30 [✄] This additional investment and operating costs have been above the level anticipated in our PR19 business plan, and is part of the reason why we no longer expect to outperform the CMA 2015 totex target, as we forecast on Table AN4.1 in our Statement of Case.

31 Given this rapid change in performance and the recent switch to a measure of leakage more consistent between companies, the CMA could consider focusing on efficiency models based

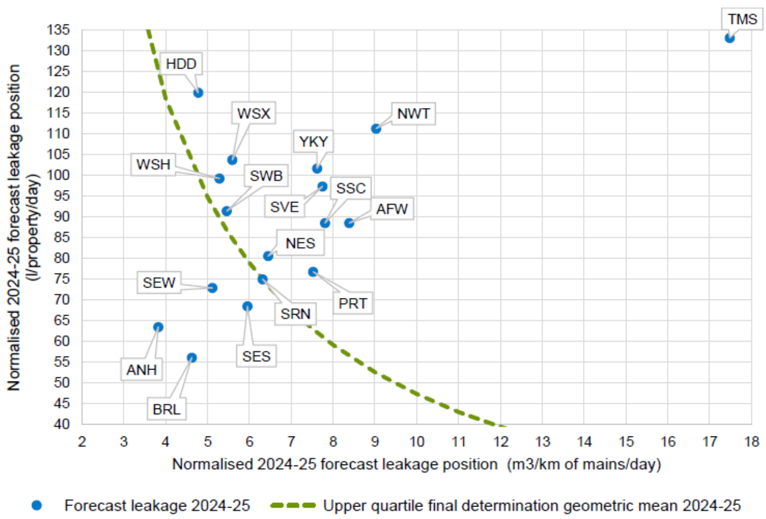
on more recent industry cost performance (the higher costs in 2018/19 with 2019/20 to be known in July 2020). However, because of weather and the fact that companies are likely to change spending plans to be ready for AMP7, this may not be a more robust piece of analysis than the approach we suggested for leakage and service levels to ensure cost allowances reflected an efficient cost forecast in our Statement of Case.

32 The significant leakage outperformance in 2018/19 and 2019/20 in part reflects fairly benign winter weather. However, 2019/20 also saw the appointment of new contractors, including insourcing of planning and scheduling, alongside introduction of traffic permit arrangements, which inevitably saw some short-term increase in leakage during the year as the new arrangements were optimised. This element of our transformation forms part of the changes we needed to deliver the efficient cost and ambitious service levels in our plan.

33 Ofwat's response included the following helpful graph which summarises the forecast 2024-25 difference between Bristol Water and Anglian Water frontier targeted leakage performance and the rest of the industry. As Bristol Water have a larger leakage reduction than other companies in the FD, this gap is not narrowing, which emphasises that there is a need to consider whether the base efficiency adjustment for Bristol Water was sufficient. In the FD, Ofwat tested the sufficiency of its base efficiency model allowances through running a suite of alternative models. Where companies had higher cost allowances on all of these models, and the difference to the standard Ofwat models was greater than 2% of company totex, Ofwat increased the base cost allowance. The c. £50m increased base cost allowance Ofwat included in the FD for Anglian Water as a result of this alternative model testing was heavily influenced by the £98m higher allowance from the average of the two leakage models. Scaling for 2019/20 leakage forecasts for Anglian and Bristol Water, the £50m increased base cost allowance is equivalent to c. £12m for Bristol Water, similar to our £13m central estimate we propose in our Statement of Case from our review of the leakage alternative models.

Figure AN3.2 Ofwat presentation of forecast leakage performance

Figure 5.2: Company view (August 2019) forecast 2024-25 leakage position, relative to the enhancement allowance threshold



Source: Ofwat analysis [103]

34 Our response to the DD includes case studies on how we have delivered efficient and industry leading leakage.[277] We will illustrate this topic further to the CMA as part of the "Virtual Site Visit" in June. The key references in this document are:

(a) Section 6.1.4 highlighted the "Calm-DMA" approach which has smart network controls to make network management and control more automated. A calm DMA means that leaks and supply interruptions are easier to identify as the noise from normal network behaviour is lower.

(b) Section 6.1.5 illustrated how measuring pressure transients with a smart network helps to avoid major bursts, which therefore allows smaller leaks to be fixed.

(c) Section 6.1.6 summarised the relevant elements of our transformation programme, which were delivered for the new contracting arrangements from 1 October 2019.

35 Not only has the revised network maintenance contract allowed us to propose lower cost allowances in our DD response (reflected in the additional opex efficiency and frontier shift that we proposed), but improved productivity in in-house leakage activity has been seen. In April 2018 the leakage inspectors on average identified an average of 1.5 leaks per week, which increased to 7 per week by November 2018.

36 The effectiveness of the innovative technology in network monitoring and control was recently demonstrated with the need to protect the new Nightingale Bristol hospital as part of the Covid-19 response. The site had no on-site storage, so the smart network control equipment, alongside innovative on-line turbidity and water quality monitors, were repurposed so we could remotely monitor any sufficiency or quality risk to the hospital.

277 Bristol Water (2019), Draft Determination response, BW02-6: Deliverability (BW132).

Annex 4: Information on plausibility of downside risk scenarios

1. Summary

1 In its Response to our Statement of Case Ofwat disagreed with our view that the financeability assessment that it carried out for the FD was inadequate. We do not dispute that it is Ofwat's methodology to carry out a financeability assessment *"on the basis of the notional capital structure and before taking account of reconciliation adjustments for past performance"*.[278]

2 While Ofwat's arguments in the Response focus on its contention that a modelled AICR of 1.0x is appropriate for conducting its financeability testing (which we dispute – see Section D of our Reply), it did not address our other arguments that the downside scenarios against which it carried out the financeability testing were insufficient.

3 Finally, Ofwat's Response referred to recent Moody's publications following the FD to support its argument that the FD financeability testing was adequate. Ofwat's use of these credit assessments is misleading, as we explain below.

2. Ofwat's Response

4 In the FD Ofwat carried out a notional financeability assessment based on testing the headroom implied based on a minimum investment grade level for the Moody's AICR ratio of 1.0x.

> *"In assessing the financeability of the notional company, we consider the headroom available in the final determination to allow the company to continue to meet its annual interest costs. We estimate 5 year headroom of £20 million above an adjusted cash interest cover of 1.0 times, providing headroom to our totex downside of £17 million and outcome delivery incentives downside of £10 million calculated as 1% return on regulatory equity."*[279]

5 In paragraph 68 of our Statement of Case, we set out why we believe this assessment to be inadequate, in particular because £20m of totex headroom was below the £25m Ofwat assumed in the standardised notional p10 downside risk for Bristol Water in the FD. This should consider debt service headroom for 2020-25 cost, financing, outcome and performance risk.

6 We assume that Ofwat applied the totex sharing rate (60% underperformance) to a cost risk of £17m (i.e. net £10m), plus £10m of outcome delivery incentives. We assume that the £10m (1% return on regulatory equity) for ODI downside risk may have been selected because of the annual bill smoothing cap that Ofwat <u>may</u> apply to company performance as part of the annual ODI reconciliation.

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278 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, paragraph 6.4.
279 Ofwat (2019), FD, Bristol Water final determination, page 73.

7 Ofwat did not address our concern on this element of the FD financeability assessment in its Response to our Statement of Case. Ofwat only focuses on the separate argument that a 1.0 times AICR ration for this assessment is too low. Ofwat does not address whether the downside scenarios it used for this assessment were plausible, and therefore if its notional financeability assessment was adequate. Instead Ofwat states:[280]

> "*The headroom calculations for Bristol Water are materially impacted by reconciliation adjustments for past performance. These adjustments amounted to revenue adjustments of £7 million in Bristol Water's final determinations; the transparency we gave about the calculation of reconciliation adjustments post PR14 means the consequence of these adjustments were well known to the company in advance and the company acknowledged headroom in its financial ratios was challenged as a result of reconciliation adjustments for past performance. We assess financeability on the basis of the notional capital structure and before reconciliation adjustments for past performance. This approach is consistent with all of our duties, with maintaining incentives on companies to bear the consequences of their actions and the approach we and other regulators have adopted in the past.*"

8 In focusing on this issue, Ofwat appears to have misunderstood our arguments: we do not dispute that it is Ofwat's methodology to carry out a financeability assessment prior to reconciliation adjustments for past performance, and note that we presented financeability testing in our Statement of Case in terms of the notional gap before considering 2015-20 performance adjustment.[281]

9 This Ofwat view refers to paragraph 48 of our Statement of Case, which are Ofwat standardised scenarios and Bristol Water specific scenarios used to test downside risk. Note that this analysis clearly shows the impact of past performance, for instance in Graph A1 which is presented in terms of the notional gap before considering 2015-20 performance adjustment.

3. Plausibility of Ofwat scenarios for downside risk

10 As shown above, we can only conclude that Ofwat's Response to our Statement of Case is mistaken as to the information and arguments we present, and is therefore misleading. The scenarios listed in paragraph 48 of our Statement of Case are clearly more stringent than Ofwat's notional headroom test. Ignoring our own scenarios, Ofwat sets out a range of downside assumptions in separate analysis, which help to illustrate that Ofwat's debt service headroom test for financeability is very weak compared to the alternatives.

11 We summarise the range of relevant notional downside risk assumptions in the table below (green represents the weakest test and red the strongest for purposes of illustration):

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280 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, page 120.

281 Statement of Case, paragraph 48.

Table AN4.1 Comparison of downside risk assumptions

Five year total values used in financial resilience testing	Ofwat prescribed plausible downside risk assumptions	Ofwat P10 FD Return on Regulated Equity downside impact	Ofwat FD notional headroom test assumption	Note
Totex	£47m (10% of totex)	£25m (1.8% RoRE post totex wholesale sharing rate)	£17m*	*Only £10m included in notional headroom test as 60% totex sharing rate applied.
ODIs	£15m (1.5% RoRE)	£21m* (2.1% RoRE)	£10m (1% RoRE)	*£30m (2.9%) RoRE once Bristol Water P10 levels assumed, as Ofwat makes an implausible assumption that scales P10 performance levels when more stringent P50 levels are set
Financing cost	2% additional on new debt, plus 1% higher RPI on index linked (c-0.2% RoRE)	c. £6m (-1.65% RoRE) due to disallowance of CSA debt	Nil	Note that Ofwat included the value of disallowing the CSA within the downside return. This is because Ofwat recognised in the FD that shareholder returns were lowered for Bristol Water as a small company because of the customer

				benefits test, compared to Portsmouth and South Staffs Cambridge who were allowed the CSA debt uplift.
C-MEX & D-MEX	Included in ODI assumption	£9m (-0.98% RoRE)	Nil	

12 Note that in addition to the above table, the £30m totex cost gap we have to the FD should also be considered as part of a downside risk scenario. The difference between our actual embedded debt cost of 0.68% and the 0.35% Ofwat adjusted in the RoRE P10, plus the difference between 20% new debt to 5% new debt within the cost of debt allowance, are also additional downside financing risks. The KPMG expert financing report provided in our Statement of Case illustrates the impact for the FD on downside financial ratios in addition to the plausible scenarios based on FD allowances.

13 In each case we note that Ofwat's notional financeability test uses far less stringent assumptions, or no assumption, of downside risks compared to either the plausible scenarios used to compare to test actual financial resilience, or the downside risks Ofwat use in setting out the balance of risk and return (i.e. the range of returns that shareholders can expect returns to fall within 80% of the time for a notionally efficient company).

4. Ofwat has misinterpreted credit ratings agency views

14 Ofwat notes in the Response its view that Moody's downgraded Bristol Water to Baa2 negative watch because of the c. £7m of outcome delivery adjustments from 2015-20.[282]

15 [✂] None of these factors are relevant to our Statement of Case. However, Moody's awareness of them (which Ofwat should also be fully aware of) was clearly reflected in their rating opinion.

16 The summary of the Moody's rating update makes a number of factual statements that should not be interpreted in the way Ofwat has interpreted them. Rather than focusing mainly on the impact of reconciliation adjustments for performance in the 2015-20 period, Moody's points to several factors which are linked to the PR19 FD. This is demonstrated where Moody's states:[283]

282 Ofwat (2020),003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case, page 120.

283 Moody's (2020), 'Credit Opinion – Bristol Water plc', March 2020 (provided as Document BW416), page 1.

"These strengths are offset by (1) likely significantly weaker interest coverage over the 2020-25 regulatory period (AMP7) as a result of declining allowed returns set against longterm debt funding; and (2) increasing cost efficiency and operational challenges for the next regulatory period as indicated in the regulator's December 2019 final determination. Given the significant cost challenges and financial pressures presented by the final determination, Bristol Water decided to ask the regulator to refer it to the Competition and Markets Authority (CMA) for review. The CMA's re-determination, expected by late 2020, may result in higher or lower allowed revenues."

17 Moody's also note the following factors relating to the FD that could lead to a downgrade from Baa2, i.e. lower returns or cost allowance or further operational penalties (i.e. beyond the £7m reconciliation adjustment identified by Ofwat, for performance over 2019-2025). These points are all relevant to the question of: a) whether the FD judgements on cost allowances, financing and incentives are reasonable; and b) whether the notional financeability assessment is adequate.

"The rating could be downgraded if the CMA's redetermination provides for a lower allowed return, lower cost allowances or greater operational penalties that are not adequately mitigated by management action."[284]

"However, we note that the company has achieved an improvement in its leakage performance in the current and last year of AMP6, which will flow through with a two-year lag into AMP7 and slightly improve the position compared with the final determination."[285]

"Aside from the current period's performance negatively affecting AMP7 revenues, we see additional downside risk associated with the AMP7 performance targets and incentive rates. Ofwat's adjustments, which somewhat softened targets and incentive rates on common performance commitments at the final determination stage, mean that the company may not incur any major penalties, nor rewards, over AMP7. There is, however, risk to the downside in severe weather events."[286]

"We consider the base cost gap more difficult for the company to manage and see increased risk of overspending. Ofwat's final determination includes a 40:60 cost sharing rate for Bristol Water, which means that the company will have to bear 60% of any cost underperformance, and can only retain 40% of cost outperformance; with the remainder passed on to customers."[287]

18 We do not accept Ofwat's interpretation of Moody's rating action. In addition, it is worth observing that in terms of a financeability assessment, Ofwat are wrong to apply a totex sharing rate for considering downside headroom risk against minimum investment grade, because a recovery of the customer share is up to five years away.

19 Moody's concerns on ODIs from 2015-20 are specifically that ODI penalties from both 2015-20 and 2020-25 will affect cash flows over 2020-25, with the move from end of period to in-

[284] Moody's (2020), 'Credit Opinion – Bristol Water plc', March 2020 (provided as Document BW416), page 2.
[285] Moody's (2020), 'Credit Opinion – Bristol Water plc', March 2020 (provided as Document BW416), page 6.
[286] Moody's (2020), 'Credit Opinion – Bristol Water plc', March 2020 (provided as Document BW416), page 6.
[287] Moody's (2020), 'Credit Opinion – Bristol Water plc', March 2020 (provided as Document BW416), page 7.

period application to revenues. This is one of the reasons we believe (together with customer bill smoothing) Ofwat accepted our proposal to cap annual ODI application over 2020-25 at 1% of RoRE.

20 In conclusion, we illustrate above that the downside risk assumptions Ofwat rely on for financeability headroom purposes are not plausible and are inconsistent with other parts of the FD. We also illustrate that this is relevant to the Baa2 negative watch rating action by Moody's, which relates to their view of FD as providing insufficient revenues to account for downside risks. Moody's assessment validates the plausibility of the assumptions we make, and contrary to Ofwat's perspective, their rating opinion does not relate to poor performance, but rather the insufficient FD revenue allowance to, individually and in combination, service existing debt costs, manage the risk of weather-related ODI performance shocks and meet the challenge of the cost allowance targets in the FD.

Annex 5: Artesian Debt

1. Overview

1 In Section 5 of the Reply we address Ofwat's comments concerning our need for a company specific adjustment (**CSA**) to uplift our cost of debt, in particular to cover the costs of repaying our Artesian debt. During our Initial Presentation to the CMA on 15 April 2020, we noted that Panel Members asked a number of questions regarding our Artesian debt. With this in mind, we thought it might be helpful if we provided the CMA with some background and context to that debt, together with cross-references to documents containing further detail if required.

2 For the avoidance of doubt, the cross-references we provide are to documents already with the CMA, and are designed simply to assist the CMA in navigating the significant volume of information now before it. Specifically, the documents to which we cross-refer are:

(a) Bristol Water's Statement of Case dated 2 April 2020;

(b) KPMG Report entitled 'Small Company Premium for Bristol Water' dated 30 March 2020 (**SCP Report**)[288] (pages 12-21);

(c) CMA Transcript of Bristol Water's Initial Presentation dated 15 April 2020 (**Initial Presentation**) (pages 9, 13-15; 19-22, 29-35);

(d) Section C6 'Financeability, Risk & Return, and Affordability' of Bristol Water's Business Plan (Revised April 2019) (**Section C6, Revised Business Plan**)[289] (pages 84-92);

(e) Ofwat's Response to Bristol Water's Statement of Case, dated 4 May 2020 (as subsequently revised on 18 May 2020) (**Ofwat's Response**);[290]

(f) CMA Report entitled 'Bristol Water plc: A reference under section 12(3)(a) of the Water Industry Act 1991' dated 6 October 2015 (**CMA15**); and

(g) Competition Commission Report entitled 'Bristol Water plc: A reference under section 12(3)(a) of the Water Industry Act 1991' dated 4 August 2010 (**CC10**).

3 We have structured the remainder of this document as a Q&A – providing answers to some of the key questions the CMA may have regarding our Artesian debt – with a view to ensuring a useful and easily accessible format.

2. What is Artesian debt?

4 Artesian Finance plc was conceived by Royal Bank of Scotland (**RBS**) in November 2001, ostensibly in anticipation of demand for more flexible and index-linked funding from water companies, and in particular from smaller water companies that might otherwise find it more difficult to access debt capital markets on favourable terms (see further below). Artesian

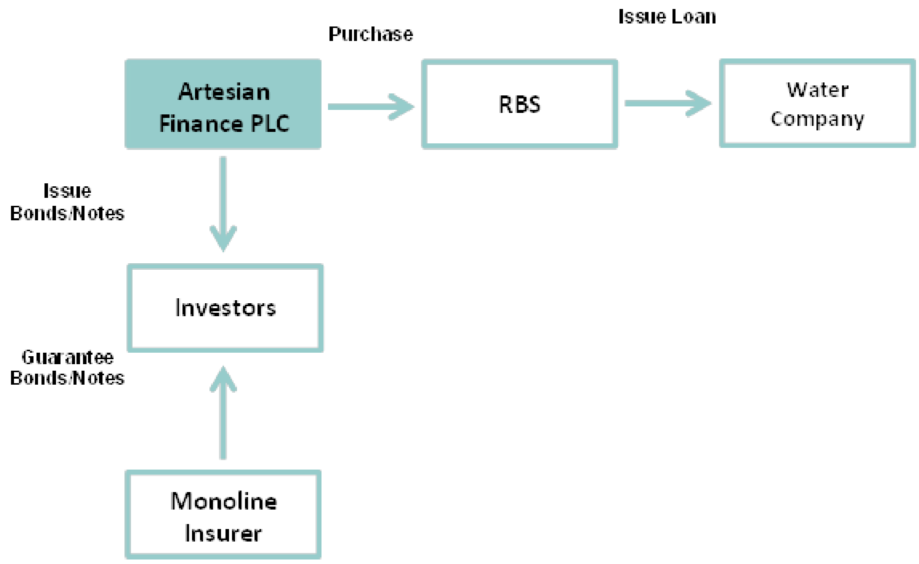
288 KPMG SCP Report.
289 Bristol Water (2019), Business Plan REVISED, Financing, Affordability, Risk and Return.
290 Ofwat (2020), 003: Reference of the PR19 final determinations: Response to Bristol Water's statement of case.

Finance II plc was subsequently established in May 2003, followed by Artesian Finance III plc in 2005. The latter is not relevant to Bristol Water.

5 RBS created these special purpose vehicles (**SPVs**) to issue bonds or notes, guaranteed by monoline insurers, on behalf of WoCs and/or WaSCs that wished to access the capital markets at a more competitive and efficient cost than they could have accessed if they were to issue directly. The monies raised were then issued to WoCs and/or WaSCs via RBS through fixed rate or index-linked loans.

6 A high level diagram is set out below:

Figure AN5.1 Artesian debt finance structure



7 Useful summaries of Artesian debt can also be found in CC10 (Appendix N, page N9, footnote 17) and CMA15 (page 308, footnote 646; page 312, footnote 659).

3. Why was Artesian debt used?

8 The premise for Artesian debt was that a number of water companies (typically WoCs) were too small to access capital market products on a scale justifying the transaction costs (i.e. the cost of fiduciary agents, lawyers, registration, rating agencies, arrangement fees etc.). It is typically not economically viable to issue bonds significantly below c.£100m size.

9 The Artesian SPVs pooled together the demand of participating WoCs and WaSCs to achieve the necessary scale to overcome this challenge, and were therefore able to provide fixed-rate and index-linked loans to those companies under more flexible covenant packages than those structured for standalone financing, as well as using a monoline insurer wrap to improve the credit rating.

10 Further detail can be found in Section C6, Revised Business Plan, pages 90-91.

4. Which water companies used Artesian debt?

11 During the period June 2002 to December 2005, six WoCs and one WaSC borrowed through the Artesian financing facilities. The WoCs were Portsmouth Water, Dee Valley Water, Mid Kent Water/South East Water, Bristol Water, Bournemouth Water and South Staffs Water, and the WaSC was Southern Water.

12 Three WoCs had made use of Artesian financing prior to Bristol Water making its first issuance.

5. What did Bristol Water issue?

13 A table summarising the Artesian issuances by Bristol Water and its peers can be found in Section 3.3.3.3 of the SCP Report (at page 14).

14 This shows that Bristol Water has three packages of Artesian debt totalling £148.5m, comprising:

(a) £45m of loans issued in May 2003, of which £15m was index-linked and £30m was fixed rate;

(b) £53.5m of loans issued in February 2004, of which £26m was index-linked and £27.5m was fixed rate; and

(c) £50m of loans issued in June 2005, providing proceeds of £57m, that were index-linked.

15 Bristol Water was unusual in issuing fixed rate as well as index linked debt. It also issued multiple small tranches rather than a single tranche. Further information is included in the SCP Report (at pages 15 and 18), including KPMG's analysis concluding that these smaller tranches did not adversely affect pricing and are likely to have reduced the costs of carry for Bristol Water (i.e. the costs of raising capital that is not immediately employed).

16 The reasons why Bristol Water took the Artesian financing approach are set out in Section C6, Revised Business Plan, pages 90-91. They include the fact that the long tenors of Artesian debt were better matched to the long-term nature of our assets, and allowed us to take advantage of the shape of the yield curve at the time of issuance in a way that alternatives (i.e. shorter term commercial bank debt) could not. The index-linked products available through Artesian were also well suited to the index-linked nature of our revenue stream.

17 Bristol Water used £20m of the loans to refinance existing debt and £68.5m to put in place holding company loans, leaving its net assets and cash position relatively unchanged. The remaining £35m was used for the capital program being undertaken at the time.

18 As set out in our Initial Presentation (page 15, lines 15-17), Bristol Water's Artesian debt accounts for approximately 50% of our embedded debt.

6. How does this compare with other issuers?

19 Bristol Water issued a total of £148.5m of Artesian debt over 2003-2005, compared to that issued by other Artesian borrowers of between £169m (Mid Kent Water/South East Water) and £335m (Southern Water).

20 Further information is available in the SCP Report (pages 14-15), including KPMG's analysis showing that:

(a) Bristol Water's total issuance under Artesian was within the range of other issuers and in line with market practice; and

(b) Bristol Water's ratio of Artesian debt to RCV is comparable to the ratios of other WoCs that issued Artesian debt.

21 We also note in Section C6, Revised Business Plan, page 91 that, over the same 2003-2005 period, non-Artesian issuances by WaSCs and bigger WoCs ranged in tranche size from £100m (Yorkshire Water) to £402m (Anglian Water).

7. Is Artesian debt still issued?

22 No – the last issuance under the Artesian financing facilities took place in 2005. Following the downturn in the monoline insurance market, WoCs have not made any new issuances using an Artesian facility.

23 As set out in Section C6, Revised Business Plan, page 88, Bristol Water issued a bond to raise £40m of long-term indexed debt (2.7% real) in 2011. This bond was markedly different to the Artesian debt. The 2011 bond was raised at a significant premium to the iBoxx A /BBB index at the time of issuance. As set out in paragraph 117 of this Reply, KPMG found there to be a considerable spread of 75 basis points at issuance once the bond credit rating (Baa1) and tenor (30Y tenor, higher than the iBoxx average of 21Y) are taken into account. The bond is not traded, therefore it is not clear how reliable a Bloomberg spread is as a measure of the required spread for new issuance.

8. When does Bristol Water's Artesian debt mature?

24 As set out in Section 3.3.3.3 of the SCP Report (at page 14), Bristol Water issued five tranches of Artesian debt between 2003 and 2005, with the tenors ranging from 27.4 years to 30.4 years. The 2003 issuances extend to 2032, and the 2004 and 2005 issuances extend to 2033 (see Section 3.3.1.12 of the SCP Report (at page 13)). As stated in our Initial Presentation (page 13, lines 13-15), these tenor were very common at the time.

25 Further information is available in the SCP Report (pages 15-16 and 18), including KPMG's analysis of the tenor of individual tranches of bonds issued by UK WaSCs and WoCs between 2002 and 2006. This shows that the maturity profile of those issues in the wider market was between 10 years and 50 years, with an average tenor of 32 years for the entire UK water sector.

26 The tenor of each of Bristol Water's tranches was therefore in line with the average tenor of comparable loans issued at the time. As set out in Section C6, Revised Business Plan, page 88, it was also justified by the nature of the assets and market conditions at the time, including the shape of the yield curve.

9. Why is Bristol Water's Artesian debt more expensive?

27 As set out in our Statement of Case (paragraphs 14, 44, 124 and 143), Bristol Water's Artesian debt was efficiently incurred at the time. Further information is available in the SCP Report (pages 14, 17-18) – including KPMG's analysis showing that the pricing of Bristol Water's Artesian debt was competitive – and Section C6, Revised Business Plan, page 88.

28 However, as the CMA has previously stated (CMA15, paragraph 10.87(a)): "This debt, whilst relatively low-cost at the time, is now relatively expensive …".

29 Bristol Water faces a relatively higher cost of financing associated with our Artesian debt due to unexpected market movements (i.e. the severe drop in LIBOR rates in the late 2000s). As our Artesian debt is fixed rate/index-linked and long tenor, the terms require us to pay a 'make whole' premium if we repay prior to the end of the term. This is designed to compensate Artesian for the loss of future interest rate cash flows (and Artesian will also need to use that money to close out its fixed/index-linked to floating swaps with RBS and repay its bondholders/noteholders). Given where interest rates are now – which was obviously not predicted at the time of issuance – that premium is very significant and uneconomic. We are therefore unable to prepay our Artesian debt to refinance and take advantage of lower LIBOR rates in the current environment. We address this issue further below.

30 Despite this, as set out in Section C6, Revised Business Plan, page 84, Bristol Water's cost of debt is amongst the lowest of the WoCs.

10. Can Bristol Water's Artesian debt be refinanced?

31 Bristol Water has looked at this issue extensively. As set out in our Statement of Case (paragraphs 44, 124 and 135), we have considered what approaches we might take to replace or restructure our Artesian debt to reduce interest costs, but concluded that it is not efficient under any scenario to repay early and replace it, as it would be exceptionally costly to refinance. Put simply, the costs associated with refinancing in the near-term have been estimated to outweigh the savings from future interest payments. As a result, there would be no benefit from such a transaction and it could create additional financeability challenges.

32 We provide further information on the exercise we have undertaken in Confidential Annex 8 to our Statement of Case. As set out in that Annex, [✂

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33 We also provided details in our Initial Presentation (pages 32-34) in response to questions asked by Panel Members. This included highlighting (at page 21) that, when relevant mergers have taken place, Artesian debt has not been refinanced. This indicates that refinancing is not efficient for other (smaller or larger) companies either.

34 Bristol Water has, however, sought to reduce our interest costs and offset the impact of the Artesian debt where possible. As set out in our Initial Presentation (page 33), we carried out a refinancing in 2018, which means that our other debts are at very low levels of interest (noting, as set out above, that Bristol Water's cost of debt is amongst the lowest of the WoCs).