

PR19 Redetermination Bristol Water: Reply to Ofwat's Response to CMA Provisional Findings

November 2020

Contents

1.	Executive summary	2
2.	Financeability, regulatory process and precedent	3
3.	Risk and return	3
4.	Costs and outcomes	5
	1: Comment on Ofwat's October Submission and reference to Bristol Wat	
Annex	2: The concept of Aiming Up	30
1.	Introduction	30
2.	Criterion 1 – Promote new investments in AMP7	30
3.	Criterion 2 – Promote new investments in the water sector more generally .	32
4.	Criterion 3 – Asymmetry of returns	35
5.	Criterion 4 – Other sense-checks of overall WACC	38



1. Executive summary

- This document sets out our reply to new points raised in Ofwat's Response to the CMA's Provisional Findings (the **PFs**). We do not have any comments on other disputing company or third party submissions, although we note that our observations are also relevant to those made by Ofgem and others on the cost of capital.
- Overall, Ofwat's Response to the PFs provides very little new evidence on most of the matters of detail. The exception is the cost of capital where, despite protestations of lack of time, Ofwat has produced detailed assessments with four separate consultant reports. We have included a supporting report by KPMG which addresses Ofwat's new cost of capital assessments. In addition, we have provided a more detailed cross referencing table of Ofwat's Response to the PFs, together with Bristol Water's submissions, in Annex 1.
- 3 More specifically, we observe the following in each of the four areas of our dispute:
 - Financeability: Ofwat continues to misapply its statutory duties in its Response and, in particular, makes limited and inconsequential references to the finance duty. The CMA was right to correct this error in the PFs and to provide for a more balanced package, which helps to mitigate some (but by no means all) of the adverse consequences for Bristol's financeability arising from the Final Determination (FD).
 - Cost of Capital: Ofwat and its consultants raise a number of challenges to the PFs, but there is little new evidence. KPMG's supporting report forensically unpicks the inconsistencies in Ofwat's position. Ultimately Ofwat focuses on aiming up from an investment incentives perspective, rather than the uncertainty in measurement and expected returns given incentive asymmetry that we prefer, consistent with the PFs. We consider this in Annex 2. Irrespective of the industry position, Ofwat does not deal with the CMA's logic for the small company factors for Bristol Water on both debt and equity that justify a higher cost of capital than Ofwat's FD.
 - Cost Allowances and Outputs: Ofwat repeats arguments used in previous submissions, but provides no material new evidence to support them. We have provided more specific comments to key areas in Ofwat's Response where some new evidence exists. Ofwat provides no sufficient reason why 2019/20 data should not be used, given this is recent data and therefore most accurately reflects industry costs.
 - **Risk and Return:** Ofwat's main line of argument is that the PFs represent a material shift of the package "to the favour of investors, at detriment to customers". We maintain that Ofwat's FD contained errors which led to an imbalance of risk and return in the round, and Ofwat has failed in its Response to the PFs to provide evidence to support its arguments. We provide more specific responses to some of Ofwat's new arguments in this reply.

KPMG (November 2020): A Reply to Ofwat's PFs Response.

Ofwat (2020), 'Reference of the PR19 final determinations: Risk and return – response to CMA provisional findings', paragraph 1.1.



Finally, Ofwat's main ask of the CMA appears to be to delay the conclusion of this process. We dispute Ofwat's claims that there is a customer detriment unless the timetable is extended so that Ofwat's FD survives into 2021/22 charges.

2. Financeability, regulatory process and precedent

- In its earlier submissions Ofwat made much of its consideration of issues "in the round" and its entitlement to "regulatory judgement" in doing so. Our case to the CMA was always based on a series of defined errors Ofwat had made in these judgements, and importantly in the financeability error in providing for inadequate financial ratios and cash buffer / debt service headroom for asymmetric downside risks. Ofwat does not address these aspects of the PFs in its Response, when criticising the cost of capital. Instead Ofwat only criticises potential solutions to a lack of financeability, which the lower cost of capital that Ofwat argue for would inevitably result in. This particularly applies to Bristol Water, given the evidence that for small water-only companies there is additional Company Specific Adjustment (CSA) evidence in support of the cost of capital required to meet the finance duty.
- On both "sufficiency of cost allowances" and "aiming up" for asymmetric risks and expected returns, we provided robust evidence that contradicts Ofwat's assertions (in Annex 1 and Annex 2 respectively of our Response to the PFs).
- Ofwat repeatedly criticises the CMA Panel for failing to follow precedent from previous CMA cases. This is particularly the case with the NATS/NERL decision on cost of capital the proposed departure from which Ofwat wrongly characterises as "radical". The CMA Panel should clearly have regard to previous panel decisions where these are relevant and comparable and reach similar conclusions where the evidence supports this outcome. This ensures regulatory consistency and predictability which in turn supports investability. The NATS/NERL decision can hardly be described as a relevant and comparable precedent given the unusual circumstances in which that interim decision was taken. The CMA was quite right to place more weight on the detailed evidence and analysis submitted during the PR19 process, including that gathered during the cost of capital roundtable hearing.
- Ofwat's comments about the importance of regulatory precedent directly contradict its approach to Bristol's CSA and Canal and River Trust claims where it has repeatedly ignored findings from previous CMA panels. Indeed, we remain concerned that Ofwat will ignore the CMA's PR19 findings on these issues for PR24 given the comments made in Ofwat's Response. Given this history, we suggest it would be appropriate for the CMA to recommend a high bar for Ofwat to alter the position on these issues in PR24.

3. Risk and return

9 Ofwat states that for risk and return the PFs represent a material shift of the package "to the favour of investors, at detriment to customers".³ We think Ofwat failed to understand and balance its duties in the FD and continue to fails to do so in its Response to the PFs.

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³ Ofwat (2020), 'Reference of the PR19 final determinations: Risk and return – response to CMA provisional findings', paragraph 1.1.



- On aiming up, Ofwat observes that "the CMA has not explained its reasons or set out an impact assessment". We believe the CMA's financeability testing as a cross-check on the component evidence through the PFs is an impact assessment considering the finance duty, and this is also consistent with the other duties.
- Ofwat downplays the importance of the finance duty: "We do not consider a financeability assessment, on its own, is an adequate check as it risks a regulator setting a determination specifically to meet the demands of investors, without adequate consideration of the interest of customers." Again, this shows that Ofwat fails to understand that discharging the financing duty is an integral part of protecting consumers to secure investability. Given the lack of cash buffer inherent in the FD, and the reasons for this (such as the CSA customer benefit test) were nothing to do with financing costs or Bristol Water's customers' interests, Ofwat reveals its own errors in its Response.
- Overall on risk and return, Ofwat's contentions in many places do not apply to Bristol Water, as in fact:
 - The embedded cost of debt in the CMA PFs is below our actual cost of debt, as a cross check;
 - Bristol Water's gearing is not high in comparison to other water companies or notional assumptions;
 - There is a clear dividend policy which has seen shareholders retain dividends within the regulated business;
 - The water service shows over 2015-20 both totex and ODI underperformance across the industry, and with tougher cost and service targets there is clear evidence of asymmetric risk in expected returns sufficient to justify a higher level cost of capital than in the PFs (through CSA equity uplift rather than more aiming up, in our view).
- 13 Our comments on Ofwat's overall risk and return criticisms of the PFs are:
 - Ofwat states that the CMA did not carry out cross-checks on the overall risk and return package. The CMA did this for Bristol Water to our actual cost of debt. The CMA did carry out a cross-check for Bristol Water, to our actual cost of debt. The stated cost of debt is not overstated for water-only companies, even based on Ofwat's own analysis, The CMA also considered whether a cost of equity uplift was required on the grounds of financeability, given the rest of the cost of capital. This is clear evidence of a cross-check on the overall risk and return package. KPMG conclude that Ofwat confuses a balance sheet cross-check on the cost of debt with annual reporting data, and in doing so risk moving away from a benchmark-led notional cost of debt estimate.
 - Ofwat believes 'aiming up' addresses a problem that does not exist in the water sector and will provide investors with unnecessary windfall gains. We believe 'aiming up' reflects asymmetric downside risk and is necessary to protect financeability / to avoid the risk that

Ofwat (2020), 'Reference of the PR19 final determinations: Risk and return – response to CMA provisional findings', paragraph 1.5.

⁵ Ofwat (2020), 'Reference of the PR19 final determinations: Risk and return – response to CMA provisional findings', paragraph 2.4.



investors on average earn less than the mid-point of the cost of equity, which would then mean investment is not available for the long term. The KPMG report assesses this evidence.

- Ofwat suggests the CMA has applied a mechanistic process that places significant weight on the end-of-range parameters without adequate consideration as to whether the weight that is applied is appropriate. We do not agree that the approach was mechanistic, but consider it to be evidence-based (even where we do not agree with the judgement taken by the CMA, we do not dispute it was based on considering the evidence).
- Ofwat suggests that the CMA has been inconsistent in its approach to excluding outlying
 parameters when constructing plausible ranges for unlevered beta and debt beta and its
 parameter choices skew the Total Market Return range upwards. In our Response to the
 PFs, we identified that the CMA should have considered evidence with a larger range for
 these parameters, and in practice there was no 'aiming up' once these ranges are
 included.

4. Costs and outcomes

- 14 **Leakage costs**: Please see our Response to RFI020 for our response to the points Ofwat raised regarding our leakage costs. Ofwat's response to RFI020 merely repeated points we have already responded to.
- Canal and River Trust cost adjustment: Ofwat argues that there is an implicit allowance for Bristol Water in the base models. We had already adjusted for this the total value of the claim is less than the total cost that we incur. Ofwat has asserted that there are significant savings from using the canal source. We do not recognise these savings, indeed we have provided extensive evidence of the canal increasing costs due to the high level of required treatment complexity. The CMA looked at the claim in detail in the 2015 redetermination and allowed the claim in full. Ofwat also allowed the claim at PR09. There is strong regulatory precedent for allowing the Canal and River Trust claim. Ofwat makes a specific point about Bristol Water not having to abstract, store and transport the water this is not the case as bankside storage exists at Purton and in raw water reservoirs for Littleton (all of these are existing points, i.e. Bristol Water does incur abstraction, storage and transportation costs).
- **2019/20 cost data**: Ofwat has not provided convincing arguments against using the 2019/20 cost data in updated modelling. The latest data should be used.
- 17 **Choice of benchmark**: Ofwat suggests that the precedent from the Northern Ireland Utility Regulator's electricity review supports a challenge beyond upper quartile. In the example presented, the Utility Regulator explicitly recognised that the cost challenge was approximately equal to the upper quartile, and that the efficiency gap was zero for the fourth placed company. We note that more recently the Utility Regulator in Northern Ireland has published its draft determinations for Northern Ireland Water. This included an upper quartile efficiency challenge,

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⁶ Utility Regulator (2017) 'RP6 Final price control determination - main document', paragraph 5.172.



further adding to the body of evidence that supports such an approach and providing a reference point from another water sector regulatory determination.

- Cost sharing: Ofwat states that the CMA's approach to cost sharing rates undermines incentives for all companies to submit efficient business plans in future reviews. As per Bristol Water's Response to the PFs, there are a large number of other incentives that encourage companies to submit efficient plans. Further, the CMA set a 50:50 sharing rate in the 2015 redetermination there is no suggestion that this undermined the incentive for companies to submit efficient plans for PR19. Ofwat cites a number of examples of other mechanisms (e.g. RIIO) but neglects to point out that they are symmetric. Symmetric cost sharing at PR14 did not discourage water company plan ambitions then, given the main focus provided by "enhanced/fast track" status.
- Ofwat makes a number of observations on the minor changes to Outcome Delivery Incentives in the PFs, in particular for Per Capita Consumption. We respond within Annex 1.



Annex 1: Comment on Ofwat's October Submission and reference to Bristol Water response

#	Ofwat Response to PFs	Ofwat PF Response Reference	Where addressed by Bristol Water				
	(27 October)		Statement of Case (2 April) (other submission where noted)	Response to PFs (27 October)	Comment and reference to this reply		
1.	Overview – response to C	MA provisional fin	dings				
1.1.	Ofwat points out a 20% increase on the WACC comparing Response to PFs (27 October) to their final determinations	Page 1			A more appropriate reference to allow for the impact on companies and customers to be considered would be to PR14 returns, which for Bristol Water is from 4.69% (3.67% RPI real) to 3.55%, a 24% reduction.		
1.2.	Ofwat sets out that 'aiming up' relates to greater demand uncertainty in sectors to accelerate discretionary investment	Page 1		Section 6	We understand the CMA's approach on 'aiming up' (consistent with the logic in NERL/NATS) related both to uncertainty in the range of parameter values and to asymmetric downside risk (which we presented on accordingly). We also presented evidence of the specific water service impact, and noted the link to the impact of cost and performance shocks on small WOCs. Therefore we do not agree with Ofwat's position on an evidential basis. We also note that the CMA has not 'aimed up' in general, that overall a central estimate from the component ranges is a reasonable characterisation, and that the issues for Bristol Water as a small company are distinct (and for the water service the cost and service risks are evidenced by recent data). We provide a detailed discussion in Annex 2 of this Reply.		



#	Ofwat Response to PFs	Ofwat PF Response Reference	Where address	Where addressed by Bristol Water				
	(27 October)		Statement of Case (2 April) (other submission where noted)	Response to PFs (27 October)	Comment and reference to this reply			
1.3.	High gearing – Ofwat sees a gap in the regulatory framework	Page 2	Section 24	Section 22	We do not consider there to be a gap, and Ofwat has not presented any alternative approaches (e.g. changes to the design or approach to application) despite the opportunity to do so.			
1.4.	Incentive for efficient business plans	Page 2 and Page 6, Cost and Outcomes Appendix A7	Section 23	Section 21	We do not agree with Ofwat. We note that according to Ofwat's approach, if 2019/20 cost data is used, then a sharing rate of 50:50 would apply to Bristol Water, as our proposed plan costs would be in line with the allowance. As the CMA set a 50:50 sharing rate in the Bristol Water 2015 reference, and this did not constrain Ofwat at PR19 in any way, this suggests Ofwat exaggerates the risk and there is no detriment. The CMA is setting incentives for individual company referrals, as for Bristol Water in 2015 when 50:50 was used. Therefore Ofwat's concern in A7.10 is not relevant to the determination, and we would in any case expect Ofwat to consider a range of approaches for fast track and cost sharing as regulation emerges before PR24 (as Ofwat did after PR14). Clearly, Ofgem was not constrained by the CMA's decision in 2015. None of Ofwat's other concerns in A7 (e.g. large investments) apply to Bristol Water. Ofwat observes that at PR19 no company had better cost sharing rates than 50:50 and that they can reassess cost sharing mid-points for PR24. This			



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					the PFs. For instance, Ofwat changed the incentive rates design and approach during the PR19 process (A7.25).
1.5.	Ofwat comments on gearing up and higher dividends	Page 2	Annex 4, paragraph 54		These are matters of Ofwat's ongoing regulation, not consequences of price review processes. Ofwat already has the regulatory tools to challenge companies on dividend policies. Ofwat did not object when the CMA did not prioritise this as an area in the June 2020 "approach to the redeterminations" paper. Our dividend policy and gearing policy remains as set out in our business plan. The financeability assessment shows the main driver for gearing is underfunding totex and cost of capital allowances, not dividends.
2.	Fundamental errors of ap	proach – response	to CMA provis	ional findings	
2.1.	Ofwat claims both substantive and procedural errors	1.1			We disagree. There must be a very high bar to making such claims, and how can they be made at this stage of the process for what is a consultation?
2.2.	Ofwat raises concerns that the CMA is failing to follow "principles of fair consultation"	1.2			We note that Ofwat is unable to point to clear evidence of failings in the process to date and fails to acknowledge the CMA's discretion under the applicable procedural rules.
2.3.	Ofwat argues extensively that the	1.14			Ofwat fails to acknowledge the unusual circumstances that applied to the NATS/NERL interim decision. There are good reasons why the CMA chose not



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	Panel's findings on behalf of the CMA cannot diverge from NERL				to rely on this as a relevant and comparable decision. In any event, we consider that the points Ofwat raises were debated through the cost of capital round table, referring to public domain academic papers and to submissions that had been made both in this reference, and also building on papers discussed for the NATS/NERL provisional findings. ⁷ For aiming up – caution in setting the cost of equity where there is a range of market evidence is a regulatory orthodoxy, including for the water sector in the past. The CMA references both SONI and NATS as evidence in support of this. The issue has been fully exposed and debated, in our view.
2.4.	The divergence on 'aiming up' from NERL PFs	1.17		Annex 2	There is no distinction between the PR19 PFs and the NATS/NERL PFs. In NERL the CMA chose to adjust the asymmetric downside incentives. In water the CMA has (for us increased) the ODI asymmetric downside incentive, but did not consider the totex downside asymmetry. Therefore, we believe the CMA Panel has presented objective justification, linked (as we did in our Statement of Case) to expected returns and asymmetry/risk in the regulatory framework, which is sector specific. In

CMA PFs, paragraphs 9.103, 9.231, 9.262 and 9.297 are examples where NATS/NERL evidence has been considered alongside submissions to this reference, with a clear logic as part of the PFs consultation, including responding to Ofwat and others' contentions at earlier stages of this reference process. We note the CMA set a clear approach in initial submissions as to how parties could share their views on the NATS/NERL PFs to inform this reference.



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					NATS/NERL the CMA considered risk against the comparators. The context of NATS being Government as the investor, in terms of risk, and then the Covid impact which is clear from the CMA final findings, is all objectively different from this reference.		
2.5.	Ofwat contends that the panel had not considered alternatives to 'aiming up' for financeability	1.53(c)	Section 4	Section 26	The PFs deal with this from paragraph 10.51 and in 10.70.		
2.6.	Ofwat states that the "duty of sufficient enquiry" has not been met as the panel did not cross-check to the actual cost of embedded debt	1.76			The Panel did do this for Bristol Water (PFs, paragraph 9.491), and the allowed cost of embedded debt after CSA is below our actual cost. Therefore as a minimum, Ofwat's contention does not apply to the Bristol Water reference.		
2.7.	Ofwat raises the issue that a delay to applying the redetermination to 2022-23 will not impact financial resilience,	2.13		Section D: Financeability	This is contradicted by the financeability assessments throughout this review. We also note Moody's comment we referred to in our Response to the PFs on the weakness of ratios despite the CMA PFs. Having found detriment in financeability based on Ofwat's FD, without the PFs being applied in 2021-22, the detriment goes beyond what was envisaged in the six month standard		



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	because the listed companies are operating with strong investment grade credit ratings				timeframe for the reference process. The consideration of non-referring companies is not consistent with the finance duty that applies to the reference for the individual companies.
2.8.	Bill impacts of three vs four year smoothing	A1 Appendix.		Bristol Water Response to RFI017	We note Ofwat excludes the impact of the Blind Year Adjustment. Ofwat also states that this reflects a customer preference for a smooth bill profile. The bills presented are not smooth bill changes in the way customer research tends to support, as they show annual above CPIH increases (i.e. the four year change would be preferred as table A1.2 shows). Ofwat has not presented financeability impacts which is a key consideration. The CMA should therefore discount this consideration.
3.	Costs and outcomes – res	ponse to CMA pro	visional finding	S	
3.1.	Ofwat uses the Canal and River Trust cost as an example of overstated allowances Ofwat states that the CMA PFs are based on incorrect information	2.41, Table 2.1 (page 25) and Appendix A6	Section 16 Reply to Ofwat's Response, from paragraph 257		This is not new evidence and has already been considered. Ofwat mentions an implicit allowance, which is something we calculated in our DD response/Statement of Case on this claim, once Ofwat had reversed its decision to allow this cost claim at the IAP stage (a significant procedural disadvantage to Bristol Water due to Ofwat's error during the PR19 process).



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			Statement of Case (2 April) (other submission where noted)	Response to PFs (27 October)	Comment and reference to this reply		
					As the PFs were based on our actual costs (adjusted for an implicit allowance), Ofwat is incorrect to state it is based on incorrect information, and provides no evidence to support this claim. See Note 1		
3.2.	Use of 2019-20 data in base cost models	2.47		Annex 1	On non s.185 diversion costs, Ofwat did not collect this data with annual returns, but recently asked all companies to provide this data. It is likely not to make a material difference, based on prior years. We explained in our Response to the PFs why base cost data for 2019/20 should be used, because even if costs are brought forward from 2020-25, this is the efficient forward looking cost in the base to meet AMP7 performance commitments. In our view Ofwat has had sufficient time to undertake quality assurance, which to a significant extent Ofwat would need to do before it issues its service and cost reports, which can be expected from around this time of year (and presumably for the blind year adjustments). We also note that Ofwat had previously dismissed 2018/19 as a high cost year (Ofwat 006-Cost Efficiency response to common issues paragraphs 6.18 & 6.35). It seems that Ofwat are making the same claim about 2019/20. We also		



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					in Annexes 1 and 2 of our Response to the PFs provides clear evidence of a water service service-cost relationship in this data.
3.3.	Frontier shift	Table 2.1 (page 17)			We provide comments on the Europe Economics report in note 2 .
3.4.	Ofwat disagrees with the deadbands on mains repairs, unplanned outage, and suggests the CRI deadband should reduce to the DD level as the metaldehyde ban will be re-introduced from April 2022	3.7 and Table 3.1 (page 67)	Reply to Ofwat's Response, section 11		We disagree with Ofwat and Ofwat presents no new evidence to contradict the CMA's PFs. The alternative to the mains bursts deadband in our case is to reduce the incentive rate, which Ofwat do not comment on. On CRI, there is no need to change the FD deadband, as the risk of metaldehyde in raw water may still remain throughout 2020-25 because of the delay to the ban (it also reflected the risk of stocks being used after the ban), and it is possible that further implementation challenges will be identified as previously.
3.5.	Ofwat sets out reasons why it considers the CMA was wrong to adjust the PCC ODI rates	Table 3.1 (page 60-63)	Reply to Ofwat's Response, section 11, from paragraph 341		Ofwat does not raise any new evidence. We summarise our thoughts on the points we raised below. Ofwat refers to the ODI research carried out for us by ICS Consulting, which merely shows both metering and PCC are low priorities for customers. PCC was ranked 18 th of 22 financial incentives, with metering ranked 21 st (BW334 Table



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	Ofwat specifically suggests that with higher leakage ODI rates, we would be incentivised to reduce leakage by estimating a higher value of unmeasured PCC		Statement of Case, paragraph 610		3.1). This therefore does not reduce the customer support for the lower ODI rates for PCC the CMA has used. Ofwat states that the meter penetration rate was not factored into PCC reductions. The meter penetration rate was factored into the PCC rates within the Bristol Water Plan, and therefore what PCC reduction is achievable. To suggest otherwise appears to us to serve no purpose. For instance, Ofwat uses the example of Southern Water, who because of the water resource challenges are approaching all households being metered, including use of smart meters. In any case, we did not only rely on a 75%:25% split between metering and PCC of Willingness to Pay (WTP), but also on the acceptability testing that was carried out (Statement of Case, paragraph 610, footnote 352). Ofwat's suggestion that based on lower PCC incentives, we would estimate a higher value of unmeasured PCC because we would then benefit from improved leakage performance is unwarranted. Both the unmeasured PCC and leakage data is subject to extensive technical assurance review to industry standards. Ofwat is also clear that technical data changes to such methodologies would result in the targets for leakage and PCC being restated, which is why the FD is described in percentage reductions to the 2019/20 three year average. This three year average was restated for both leakage and PCC to represent consistent data reporting, as Ofwat must be fully



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					aware. If Ofwat has such concerns, it has regulatory tools available to it. However, we would point out that the data quality of Bristol Water shadow leakage and PCC measurement, using Ofwat's "table 35" compliance criteria, shows full compliance for Bristol Water for the common definitions for AMP7. Ofwat may have usefully pointed out that Bristol Water has consistently achieved the top compliance for the quality of this report on the AMP7 metric in the industry. We would be happy to provide the CMA with the technical assurance report that we provided to Ofwat annually that demonstrates this compliance. Therefore, we consider Ofwat has not presented any new or meaningful evidence, and note this as an example of where Ofwat raises new issues without appropriate evidence in support of them.		
3.6.	Unplanned outage – use of deadbands. Ofwat's reasons for disagreeing with the PFs include DWI risk management guidelines	Table 3.1 (page 63)		Annex 1	In our experience it is not generally the case that works outage directly links to drinking water risk, and if it does, it is to a significant extent incentivised through CRI. As a new measure, we consider the CMA's deadband approach is appropriate, and is consistent with other aspects of the FD. For our track record of performance on unplanned outages, we do not consider this has a material impact on risk reduction and this measure does not feature in our replication of the CMA's asymmetry risk analysis. As a new measure though,		



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					we support the CMA PFs and do not consider Ofwat's arguments against this to be logical.	
3.7.	Mains repairs deadband /ODI rate	Table 3.1 (page 65-66)			Ofwat refers to our good performance in 2019-20. We explained this performance as benign weather conditions, and our customers would not expect us to be rewarded for that, which is why mains repairs are a penalty only ODI. This level of variation helps to explain why the CMA is right to apply a deadband to mains repair performance, and that the 10/1000km level is very modest compared to weather variations, which does not fully resolve weather risk. From our customer research, it is clear that Ofwat saw no mains repairs ODI rewards and not penalising companies for normal weather variation as consistent and logical incentive design components.	
3.8.	Ofwat provides updated information on outperformance across AMP6	Annex A5		Annex 2	Ofwat presents the same analysis as in our Response to the PFs (although subsequently has referred to it as us producing new analysis). We think Ofwat should have considered the water service separate from wastewater. As we demonstrate and explain, the risks and evidence are very different. On reviewing Ofwat's supporting analysis spreadsheet for A5, we identified a basic error that was the sole cause of different results to our analysis. Rather than referencing the average equity over 2015-20, Ofwat references the 2019/20 number. As this analysis concerns total totex and outperformance over 2015-20, this is clearly an error. Ofwat uses a correct calculation	



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					elsewhere for each year in the 2015-20 ODI RoRE Calculation graphs/spreadsheet.		
					We also noticed that Ofwat's excel file "Outcome response to PF data and charts" contained a significant number of indexing errors in the calculations and therefore the analysis cannot be relied on.		
4.	Risk and Return – respons	se to CMA provisio	onal findings				
4.1.	Ofwat describes evidence that Bristol Water is no longer a small company.	1.26			We are not aware that Ofwat has provided any such evidence, other than by changing its own definition. Bristol Water has not grown its operating area and has falling RCV in real terms compared to other companies due to an industry-low enhancement programme (driven by existing high quality and resilience).		
4.2.	Ofwat sets out evidence of past financing and operational performance against the notional structure	3.47, Figure 3.3		Section C: Balance of risk Annex 2	This supports our view on the small company additional financing cost that Ofwat excludes from Figure 2.1. We present water service data (which shows a different picture from wastewater, and explain the relevant factors).		
4.3.	Ofwat sets out as evidence of 'aiming up' the increase in returns	3.74		Section D: Financeability	PR04 financeability at least in part was a consequence of the cost of capital (in retrospect if considered by subsequent events) being set too low at PR99,		



#	Ofwat Response to PFs	Ofwat PF	Where addre	ssed by Bristol W	/ater
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	at PR04 for financeability				something that PwC recognises. ⁸ It is not surprising that the impact of financeability allowances at PRO4 varied by company, because Ofwat at the time chose (from a notional perspective) to be consistent across companies, rather than adjusting on a company-specific basis (although they did for small companies to reflect Artesian etc). Ofwat recognised that small companies like Bristol Water did not benefit to the same extent because the CSA at the time had protected the financial ratios of small companies. At the time, the financeability was also justified by smoothing out the bill changes that had arisen from cost and other risks that were not reflected at PR99 (e.g. cost of metering and bad debt were issues that had arisen). Ofwat should have pointed out that because of the CSA at the time, the financeability did not apply to Bristol Water: "Following these adjustments to your financial structure and our challenges to your projected costs and efficiencies, it has not been necessary to increase your price limits in order to achieve a satisfactory financial profile." And:

PwC (October 2020), 'Review of the relationship between financing allowances and water company performance', Table 4.A.

⁹ Ofwat (2004) 'PR04 Final Determination: Bristol Water Supplementary Report', 1.4.1.



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	(27 October)		Statement of Case (2 April) (other submission where noted)	Response to PFs (27 October)	Comment and reference to this reply
					"We have looked at the circumstances of individual companies very carefully and an explanation of our financeability assessment for your company is set out below.
					Our generic views on financeability are set out in the national publication. The package of financial indicators we have used to assess the price limits does not represent a 'floor'. There remains some scope for companies to absorb unanticipated downside risk and still remain within the investment grade credit rating range.
					The initial K profile that provided sufficient revenue to achieve returns consistent with our view of the cost of capital results in a financial profile that is in our view consistent with credit quality that is comfortably within investment grade category. We have not therefore adjusted your K profile following our financeability assessment." 10
					Rather than demonstrating Ofwat's contention that aiming up leads to windfall gains, by any reading of this evidence it demonstrates: a) The importance of considering small company financing and then financeability, and b) The regulatory orthodoxy for considering from the perspective of financeability the

Ofwat (2004) PR04 Final Determination: Bristol Water Supplementary Report, F 2.16.



#	Ofwat Response to PFs	Ofwat PF	Where addre	ssed by Bristol W	/ater
	(27 October)	Response Reference	Statement of Case (2 April) (other submission where noted)	Response to PFs (27 October)	Comment and reference to this reply
					downside risks and incentive frameworks, and then the impact on a basket of financial ratios to look at the cost of capital in the round.
					Ofwat presents a subjective view that the CMA PFs will lead to windfall gains for investors, based on the above history. Even if Ofwat's contention applied to the listed companies in those past circumstances, it did not apply to Bristol Water, so continues to be irrelevant to our redetermination. Our estimate of water service risk for totex and outcomes provides additional evidence that the cost of equity is necessary, rather than reflecting a windfall gain.
4.4.	Ofwat argues that rather than financeability, an NPV neutral approach should be taken to gearing, index linked	han financeability, an NPV neutral approach hould be taken to gearing, index linked lebt and speed of CPIH Reply to Ofwat's Response Section 17	Reply to Ofwat's		This is not a new argument from Ofwat, and has been dealt with in previous submissions. For Bristol Water in particular, these mitigations have been considered and rejected (including by Ofwat in its own determination). On gearing, the listed company gearing in 2019/20 was very similar to the Bristol Water level. 11 Ofwat recognises this in paragraph 4.11.
	debt and speed of CPIH transition			Ofwat does appear to have accepted our argument that if it was appropriate to set a lower level of notional gearing, then you would need to include equity issuance costs. For a small company these would be significant and would require acceptance of the CSA uplift on the cost of equity – this would be an objective reason to reconsider this evidence if the CMA were to prefer this	

Bristol Water (2020), 'Post-hearing submission', page 11.



#	Ofwat Response to PFs	Ofwat PF	Where addres	sed by Bristol W	ater
	(27 October)	Response Reference	Statement of Case (2 April) (other submission where noted)	Response to PFs (27 October)	Comment and reference to this reply
					approach. However, the CMA should not need to assume this given the gearing levels of the comparators.
4.5.	Ofwat sets out intercompany loan analysis on whether loans taken out in 2000-05 still exist, in arguing against using a 20 year trailing average	Table 4.3 and Ofwat "Non-operational debt analysis 2000-2020" explanatory note and supporting files	Bristol Water post hearing submission, Section 6.		The analysis has selective criteria concerning whether gearing is persistently below 65% over 2015-20. We note that Bristol Water's gearing was at or below this level in 2010-2013 and 2016-2019, so Bristol Water should be excluded, as it should be noted that these debt movements (and by implication equity retention) are sufficiently satisfied to discount the role of the intercompany debt in higher gearing. Ofwat is using a definition of gearing that includes preference shares (which we dispute for this purpose), and gearing only increased in 2020 due to expenditure as noted elsewhere. Given the lack of dividends paid out in 2015-20, Ofwat should therefore have excluded Bristol Water intercompany debt. Also, the explanatory note incorrectly describes the repayment status. It states "repaid in full" when it should have stated "repaid in part", as noted on page 63 of the Bristol Water Annual Report for 2019-20, which shows the amount outstanding as £65.5m. Why Ofwat should exclude listed companies who have gearing similar to Bristol Water is also questionable. We have not checked Ofwat's approach for other companies for similar errors.
4.6.	Ofwat sets out that the CMA has made errors in	4.42		Section 11	We disagree with Ofwat's analysis, which appears to rely on an assumption of RCV growth that is also used as an assumption of dividend retention. More



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	the calculation of the low end of the share of new debt range				relevant is the low new debt share for notional small water companies as we set out, given the different RCV growth and refinancing typical for small water-only companies.
4.7.	Ofwat cites the CMA not allowing the cost of equity CSA as a reason to reconsider the cost of debt CSA, despite the regulatory consistency, and further suggest that as they intend to continue to argue against the CMA's findings in future, this would reduce rather than increase regulatory certainty			Sections 11 to 14	We have expressed our concerns that Ofwat would take this line with the CMA accepting the principle that small companies have higher financing cost (debt and equity), but then not applying this to the cost of equity or the cost of new debt. Ofwat's approach to maintaining regulatory certainty is clearly not the CMA's intention from the PFs, but was more a reflection of calculation difficulties and the industry cost of equity (which Ofwat disagrees with). The CMA should therefore recognise consistently that smaller companies have higher financing cost, and unambiguously make this clear to Ofwat. Ofwat states that the CMA PFs "privileges the interests of investors over customers and does not [give] appropriate weight to all our duties". It is important that the CMA re-emphasises Ofwat is wrong in this regards, and that reflecting that small companies have a higher cost of finance is in principle fully consistent with the duties.

Ofgem (2020) 'Reference of the PR19 final determinations: Risk and return – response to CMA provisional findings', paragraph 6.4.



#	Ofwat Response to PFs	Ofwat PF Response Reference	Where address	ssed by Bristol W	/ater
	(27 October)		Statement of Case (2 April) (other submission where noted)	Response to PFs (27 October)	Comment and reference to this reply
4.8.	Ofwat sets out its assessment of Expected ODI performance, and	Appendix A2		Annex 2	We do not believe such judgements in analysis can be considered to be an error, a term which in our Statement of Case we reserved for application of analysis (with reference to the duties).
	concludes that the CMA's 0.1% to 0.2% RORE is in error				We have provided with the CMA with our analysis which replicates the CMA's approach, plus provided our consistent Monte Carlo risk analysis. We adjust for maximum risk but then use P10 – P90 to judge asymmetry, as outside of P10 and P90 the assumption of normality for this analysis is less likely to apply.
	Ofwat describes the CMA explanation as incomplete and the				Any calculation errors Ofwat identifies in the analysis are easily resolved, but we in any case provide equivalent analysis and believe the CMA findings understate the expected ODI loss.
	reasoning unclear, with incorrect assumptions, erroneous calculations based on flawed data				In A2.13 in particular we think Ofwat over-interprets the analysis. It is clear to us that penalty-only ODIs apply to asset health and similar measures that are more affected by third party and weather events. In this case the CMA is correct to use this analysis to reach a conclusion on expected loss.
	etc.				The evidence Ofwat provided on P10 / P90 levels for 2015-20 outturn has little value. The increase in service levels and penalties are very different, and there is better information available of P10 levels on this basis. If service levels were not being reset and if no improvements being imposed beyond current levels and if Ofwat had not targeted stronger cost and outcome incentives, including



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					frontier shift, at PR19, then Figure A2.1 may have some value, but none of those conditions hold.
					In A2.22, Ofwat argues that companies will incur additional costs to reduce underperformance on ODIs and this is reflected in base costs. Separately though, Ofwat has argued there is no cost in hitting service levels outcomes (the cost service relationship), where apart from leakage the CMA has accepted Ofwat's position. It should be impossible for Ofwat to continue to hold both of these positions simultaneously.
					In A2.24 Ofwat describe how companies can plan for outperformance (but this is then eroded by events). As these are historic examples, and with a declining target (e.g. for supply interruptions), companies will be less able to do this. This therefore supports the CMA's analysis and therefore aiming up. We provided the CMA with the example that c. 50% of our supply interruptions in the first half of 2020/21 were caused by third party action. On their own these are larger than the annual target (which is c. 50% lower than 2019/20 target). This makes "planning for outperformance" less credible. The leakage outperformance we had in 2019/20 is similarly absorbed by the lower AMP7 target, as an additional typical example for the industry.



#	Ofwat Response to PFs (27 October)	Ofwat PF Response Reference	Where addressed by Bristol Water				
			Statement of Case (2 April) (other submission where noted)	Response to PFs (27 October)	Comment and reference to this reply		
					Ofwat explains the limitations of their analysis in footnote 224 on page 120 – the performance commitments and ODI design are not the same for PR14 as PR19, and supply interruptions is used as an example of that.		



Note 1 – Canal & Rivers Trust Cost Adjustment Claim

Ofwat in our view just represents existing evidence that the CMA has already considered:

- It is irrelevant that the final determination base allowance for Bristol Water's water resources price control is higher than requested in our plan, as this was more than offset by the reduction in allowance for water network plus, and just represents one component of Ofwat's approach to cost assessment and how the models are applied. The base efficiency modelling is done across water resources and water treatment costs, triangulated with water wholesale total modelling. Therefore, a comparison of allowance in water resources is not determinant of whether the water resources and water treatment modelling (network plus) or water wholesale modelling should have C&RT as a cost outside that base modelling.
- Ofwat makes references to a "procurement model", but as Ofwat must know, water resources are heavily regulated and this is a historical existing water resource arrangement that is outside of management control as no alternative is readily available.
- Ofwat refers to the £0.4m implicit allowance as being too small, but does not present any evidence we could understand in support of this claim. The £8.6m requested is less than our £9.4m actual cost (£9.0m after deducting third party sales), because we included an implicit allowance to take into account that there may be other equivalent bulk supply arrangements we are not aware of (e.g. Bristol Water Statement of Case, paragraph 516). We adjust for Elan Valley as one example and then take 20 times this value to account for others. The scale of C&RT bulk supply to Wessex Water supply is very small (Bristol Water Statement of Case, Figure C15) and Ofwat does not mention this. We cannot follow Ofwat's evidence and see no reason why they did not present this at an earlier stage of the process. We suspect this is therefore not new evidence, but a rehash of the previous arguments the CMA has already considered.
- Ofwat raises storage savings, however we have bankside storage at Purton and in the raw water transfer to Littleton because of the risks from poor quality from the canal. The additional treatment costs have been evidenced to the CMA.
- We also note Ofwat's lack of regulatory consistency, that it already plans to ignore the CMA's findings at PR24. Given that Ofwat and the CC allowed this claim at PR09 (when opex modelling was water resource and water treatment), the CMA allowed it at PR14, and the PFs allow it at PR19, this is a significant concern to us that Ofwat continue to claim the importance of regulatory consistency, but only when it is decisions that support its view.

Note 2 – Observations on Europe Economics' "Additional evidence on some points relating to frontier shift"

Frontier shift – Ofwat commissioned Europe Economics (EE) to produce a report considering some of the issues relating to the estimation of frontier shift.



The report does not represent a full study into frontier shift estimation, and does not provide extensive evidence counter to the evidence that the CMA has already considered in reaching its PFs.

We provide comments below on the key areas covered where relevant.

Economy-wide Slowdown in Productivity

- EE states that it is not clear that the recent economy-wide productivity slowdown will continue, and references four academic papers, which it suggests present a more optimistic picture about future productivity growth. These papers have been available throughout the price review process (with two being published as far back as 2013). Therefore, we see no clear reason why they would represent new evidence.
- EE considers a number of factors that may be driving the economy-wide productivity slowdown that it considers do not apply to the water sector. However, EE has not considered any factors that may mean that productivity growth in the water sector may slow relative to the wider economy (for example, increasing regulation and quality obligations). Therefore, this is an unbalanced and partial approach.
- We note that in its PFs the CMA stated that the 'water sector will be affected by **some of the factors** which have led more recent UK-wide productivity growth to be lower than before the financial crisis' (emphasis added)¹³ i.e. the CMA has already recognised that there may be some differences between water companies and the wider economy in the PFs.
- In addition, water company data from 2019/20 shows water companies' costs have increased. EE has not considered this up to date information from the sector.

Application of Value-added TFP Estimates

• This section of the EE report is in response to a First Economics paper. Therefore, we will leave it to First Economics to respond to these points if it so wishes. Our Statement of Case was not based on the First Economics report, neither was the CMA's PFs.

Further Evidence on Size of Uplift for Embodied Technical Change

• EE references two pieces of academic literature, which EE considers may suggest its previously suggested uplift of 60% should be taken as a lower bound.

¹³ CMA (2020) 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price Determinations – Provisional findings', paragraph 4.377.



- The two references are not compelling proof that EE's assertion is correct. Both are somewhat out of date. The first is a study from 2004 assessing US manufacturing plant data between 1972 and 1997, the latter is from 2000 assessing US data from 1947 to 1999.
- In the PFs, the CMA set a frontier shift assumption towards the top end of the range derived from regulatory precedent. We do not consider that these two outdated academic references from another sector and country represent sufficiently compelling evidence to require the CMA to break from regulatory precedent and to change its PFs.

Additional Productivity Gains from Totex and Outcomes Framework

- EE suggests that both COVID-19 and the end of the Brexit transition period could result in additional totex and outcomes gains for water companies. We agree with the CMA's position not to consider the effects of COVID-19 within its re-determination. Therefore, we do not consider EE's speculation on COVID-19 to be relevant. In addition, we fail to see how the pandemic could credibly be expected to improve companies' overall totex and outcomes performance. The view that Brexit could lead to water company cost efficiencies is highly speculative, indeed there may be additional costs.
- We do not consider that EE has provided any new and compelling evidence in addition to its previous report. Therefore, we see no clear reason why the CMA needs to change from its PFs.

¹⁴ See Bristol Water (2020) 'PR19 Redetermination Bristol Water: Statement of Case', table C8 for a summary of regulatory precedent.



Annex 2: The concept of Aiming Up

1. Introduction

- In its response on Risk and Return issues in the CMA's Provisional Findings (the **R&R document**), Ofwat sets out its view that it "strongly disagree[s] that in the context of water, aiming up on the allowed return can be justified in terms of delivering benefits to customers". 15
- In Chapter 3 of the R&R document, Ofwat discusses, reinterprets and then dismisses each of the four criteria listed by the CMA as reasons for its provisional decision to aim up on the Cost of Equity. In support of its position, Ofwat presents four reports that seek to defend the position that aiming up on the cost of equity is unwarranted in the regulated water sector. Ofwat's conclusion is that "Neither individually, nor collectively do they ['the theories the CMA advance'] justify 'aiming up'". 16
- This section considers and responds to Ofwat's reasons to dismiss the need to aim up on the Cost of Equity. In summary, most of Ofwat's new material starts from the false premise that aiming up is needed to encourage or promote new investment. This shows a fundamental disagreement on the key reason for aiming up in the presence of uncertainty around the true WACC, which is to prevent sub-optimal investment that could arise if the cost of capital is set too low and companies cannot attract financing. We also explain why the principle of a 'fair bet' should apply in water, and why the CMA's aiming up to address the downside risk in the PR19 settlement is an appropriate and necessary element of the discharge of the financing duty.

2. Criterion 1 – Promote new investments in AMP7

2.1 Ofwat position

- Ofwat's first argument is that aiming up is not needed to encourage companies to undertake efficient new investment in AMP7, because the regulatory framework as it stands appropriately incentivises companies to deliver the agreed plan. Ofwat argues this is because under the existing regulatory framework, companies' incentive to invest is strictly weaker than the incentive to reduce cost from sharing of benefits and costs from out- and underperformance.¹⁷
- In support, Ofwat presents an illustration from PwC which shows that a 10% underspend would increase return by 264 basis points, far more than an overspend would reduce the return (in this case by 126 basis points). Ofwat therefore argues this is evidence that companies are incentivised to invest efficiently, and the incentive to underspend this is "far greater than any 'aiming up' wedge".¹⁸
- Ofwat concludes that aiming up is unnecessary since the regulatory mechanism already ensures that investments will be not only delivered, but delivered efficiently, given the cost-sharing mechanisms in place. As is evident from the above, Ofwat's starting premise that underpins the

Ofgem (2020) 'Reference of the PR19 final determinations: Risk and return – response to CMA provisional findings', paragraph 3.5.

¹⁶ Ibid., paragraph 3.7.

¹⁷ Ibid., paragraph 3.9.

¹⁸ Ibid., paragraph 3.21.



argument is that aiming up is intended to incentivise or promote investment on assets over AMP7.

2.2 Our response

- Ofwat's discussion of Criterion 1 for aiming up (as well as criterion 2, further discussed below) misunderstands the reason for aiming up: aiming up is not needed to incentivise or promote new or more investment, as most of Ofwat's new material on aiming-up assumes, but to mitigate the risk of getting the cost of equity wrong and therefore restricting investment through inability of firms to attract debt and equity capital. For this reason, in our Response to the PFs we referred to 'aiming-up' to reflect uncertainty in the underlying parameters and the existence of asymmetric risk considerations.
- The basic concept for aiming up, as explained in the 2018 UKRN report, should have been uncontentious. The WACC is not known with certainty, and if it is underestimated, either no investment, or less investment than is optimal, will occur. In fact, for any investment proposition, private actors will undertake the investment only if the expected rate of return on the investment is greater than the minimum required return (i.e. the true cost of capital). This is a standard corporate finance principle, which holds for any investment, regardless of whether the investment is delivered under a regulatory framework or in competitive markets. As UKRN show, the consumer welfare loss from under investment is greater than the consumer welfare loss from marginally higher prices (which occur if the cost of capital is over-estimated):

"with relatively low elasticities, the reduction in consumer surplus from setting the RAR, and hence the regulated price, too high is relatively small. In contrast, the welfare loss from setting the RAR (and hence the price) too low is relatively large. This leads to considerable aiming up, as the optimal choice by the regulator." ¹⁹

9 We note that the UKRN authors, now advising Ofwat, have argued that in the presence of uncertainty around the true WACC, the degree of aiming up required in relation to new investments (applicable for consideration of investments in AMP7) is high, although the authors argue that no aiming up is required for sunk investment.

"For new investment (i.e., investment that has not yet taken place), we make the tradeoff as stark as possible, assuming that setting the RAR in such a way that the RER is below the true WACC entails an entire loss of surplus. We show that, under a range of parameterisations, the optimal extent of aiming up for new investment is large."²⁰

"In contrast, once an investment is sunk, there is (obviously) no risk that investment will not occur if the RAR is set too low. At the same time, regulators are required to ensure financeability of regulated firms. Balancing these two considerations, it is clear that the optimal RER for old (sunk) investment is therefore the expected WACC i.e., the mid-point of the estimated range."²¹

Wright, Stephen, Burns, P., Mason, R., and Pickford, D. (2018) 'Estimating the cost of capital for implementation of price controls by UK regulators', page 72. Available at: https://www.ukrn.org.uk/wp-content/uploads/2018/06/2018-CoE-Study.pdf

²⁰ Ibid., page 72.

²¹ Ibid., page 72.



- In this redetermination process, we commissioned KPMG to consider the appropriate cost of equity for PR19. In its report on the cost of equity, KPMG consider that whilst the above might be true in a single round of regulation, in a multi-round setting, investment would only occur if that investment earned at least the (unknown true) cost of capital in future rounds.²²
- In summary, Ofwat's argument is misconstrued as it starts from, and aims to disprove, the false premise that the intention of aiming up is to promote or incentivise more investment than agreed in Business Plans. The argument for aiming up in the presence of uncertainty around the true WACC for regulated investments, is that greater consumer welfare loss arises from the threat of underinvestment (if the WACC is set too low) than the welfare loss from paying a marginally higher price due to higher WACC. This is supported by Ofwat's own consultants, in line with the previous UKRN report as noted above.

Criterion 2 – Promote new investments in the water sector more generally

3.1 Ofwat position

- Ofwat's second argument, discussed under criterion 2, is that aiming up to promote investment in the water sector more broadly, beyond AMP7, has no basis.
- 13 Ofwat splits this argument into two planks:
 - There is no basis to 'aim up' for the purposes of promoting the provision of finance / willingness of investors to commit capital to the sector more broadly
- 14 Under this first plank, Ofwat repeats arguments that historical transaction premia and MARs for listed companies and transaction premia in the last several AMPs sitting above 1 is evidence that investors are willing to invest capital in the sector under Ofwat's allowances, and that there is no evidence of concern around perceived risk that efficient investment will not be remunerated. Ofwat contends that the most compelling argument for transaction premia is that the regulated sector will either outperform the return, or the cost commitment and incentive package.
 - 2. There is no basis to 'aim up' for the purpose of ensuring continued investment beyond AMP7
- Under this second plank, Ofwat argues that arguments around 'aiming up' in the water sector, for the purpose of encouraging or promoting investment, is unwarranted, as the literature on aiming up (as related to the telecoms sector) relies on assumptions that do not hold in water. Ofwat submits two consultant reports to support this:
- Brian Williamson²³ argues for Ofwat that 'aiming up' as used in telecoms is necessary to offset the risk from demand being insufficient to allow full cost recovery (the 'fair bet' principle). Williamson then argues that this argument cannot hold in water, since investment is effectively planned and agreed in advance, and in the absence of demand risk, there is 'vanishingly small

See KPMG (2020), 'Cost of Equity for PR19', Section 5, page 54, footnote 155.

Williamson, Brian (2020), 'Aiming up on the WACC and prices – the welfare and incentive impacts for the water industry'.



risk' that it could not be recovered due to a lack of demand (since demand is inelastic and the water sector is subject to revenue caps).

- 17 The core of Williamson's argument is that aiming up might be relevant solely in cases where the company has control over the investment and its timing, which is not the case in water where the level of investment is either determined, or planned by the price review process, or driven by environmental or quality drivers part of the statutory planning process (e.g. for enhancement spend).
- In its report for Ofwat, PwC²⁴ attempts a 'real world experiment' whereby it 'observes' the ex post WACC and defines a 'wedge' between the ex ante allowance and the 'realised' WACC over the period. In this 'natural experiment', PwC then assesses whether in historical periods where the allowed return has been set at a higher level than the ex post realized return, there is an associated change in performance. Specifically, PwC investigates whether in periods of higher allowed than required returns (i.e. positive 'wedge' between the ex ante and ex post allowance), there is an associated higher investment, incentivized by the higher return and vice versa. PwC finds no such link between its estimates of the 'wedge' between the ex ante and ex post return and investment.

3.2 Our response

In response to the position "There is no basis to 'aim up' for the purposes of promoting the provision of finance / willingness of investors to commit capital to the sector more broadly"

- In relation to the first plank of Ofwat's argument, we maintain, as has been recognised by the CMA, that MARs and transaction premia cannot be considered as conclusive evidence on the appropriateness of the allowed WACC, as they are a function of a myriad of factors (e.g. income from incentives, cost outperformance, exit multiple assumptions or various assumptions about regulatory framework, cost and returns beyond the current regulatory period, value of inflation protection, control premia etc.) that affect valuations, only one of which is the allowed WACC in the current price control period.²⁵
- Ofwat's own consultants, Mason and Wright, acknowledge the need to adjust for expected outperformance on e.g. performance targets, before this evidence can even directionally be used to make inferences about the appropriateness of the allowed WACC: "...we cannot say how much of the observed premia relate to the allowed WACC being lower [NB we presume the authors mean higher] than firms' true cost of capital, as opposed to expected outperformance against performance targets."²⁶

PwC (October 2020), 'Review of the relationship between financing allowances and water company performance'.

See Bristol Water (2020), 'Response to CMA Provisional Findings', October, page 36.

See Wright & Mason (2020), Comments prepared for Ofwat on the CMA's Provisional Findings Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations: Cost of capital considerations, page 30.



In response to the position "There is no basis to 'aim up' for the purpose of ensuring continued investment beyond AMP7"

Williamson paper

- The Williamson paper suggests that there is little or no downside risk of getting the WACC wrong in the water sector specifically because the investment planning process, and the environmental or quality drivers that form part of the statutory planning process (e.g. for enhancement spend), can effectively force companies to invest, even if the WACC is set too low. The argument appears to be that since all investment is planned, no under or over investment can possibly take place²⁷. This premise is clearly flawed and misunderstands the argument for aiming up, since at a minimum, companies need to raise finance to invest, and can only do so if the allowed rate of return at least equals the true (but unobservable) required return. For Bristol Water, the "statutory" planning investment in AMP7 amounts to c. 2% of totex. The argument for aiming up is that companies will not be able to attract debt and equity capital, needed to make (planned or unplanned) investments, in the event that the allowed return is set below the true required return.
- The Williamson paper also argues that the 'fair bet' principle that underpins the argument for aiming up in the telecoms sector, needed to maintain investment incentives in the presence of downside risk from low demand, does not apply to water. While the water sector does not face the same demand risk which skews the expected return distribution downwards, our argument as recognised by the CMA, is that the regulatory framework as designed, exposes us to downside risk that does not have a commensurate upside. Thus, while the source of the skew is different, the same principle applies, i.e. that aiming up is needed to ensure that equity investors can earn the required return on their investment on a mean expected basis. We discuss this further in the next section.

PwC paper

- The PwC paper asserts that the 'realized' WACC and therefore the 'wedge' between the ex ante allowed, and ex post realized return, can be observed through market data. We challenge this proposition:
 - While one part of the WACC, i.e. the cost of debt, can be observed ex post, the second key element of the WACC, i.e. the cost of equity, is a forward-looking looking estimate of the expected return at a particular point in time which cannot be observed in practice, neither ex ante nor ex post, but rather has to be estimated based on the information set available at a point in time when the pricing is made. Adjusting the cost of equity for observable elements of it, such as the Risk-free rate, introduces false accuracy in the ex post estimate of the equity return, as elements such as the expected Total Market Return and beta, featuring in the pricing of the marginal investor in a water utility, are inherently unobservable.
 - Even on observable parameters, such as the cost of debt, PwC make strong simplifying assumptions, for example, by taking a 10-year trailing average, that need not reflect actual

34

²⁷ If this is the case, it undermines the positive efficiency and incentive benefits that Ofwat ascribes to the adoption of totex / outcomes in the water sector.



debt issuance (and embedded to new debt ratios) of a typical water company, especially a small company like Bristol Water.

- Finally, the realised equity return is not just a function of market parameters, but also of
 company performance. The realised equity return cannot be looked at it isolation for a
 theoretical company, when assessing financing and investment decisions of actual
 companies. The realised equity return could have been eroded from underperformance
 on various incentives and costs, which PwC's assessment does not appear to take into
 account.
- For all these reasons, our view is that the estimate of 'ex post' wedge between the allowed and 'observable' WACC as proposed by PwC is highly uncertain and company-specific, and therefore PwC's simplifying estimates should not be treated as a reliable estimate of the true realised financing cost by water companies over the period considered by PwC.
- Even if the assumptions in PwC's backwards-looking analysis held, they are unlikely to hold in the future. The assessment of AMP6 water totex and ODI performance we included in our Response to the PFs (at Annex 1) provides clear evidence of asymmetric downside risk, even before we arrive at the tougher AMP7 regime.
- Even if we could observe the true WACC, PwC's analysis suffers from the same error in premise as the Williamson paper, in that it misunderstands the argument on aiming up as intending to promote further investment, this being the hypothesis PwC tests. As detailed above, the argument for aiming up is that in the face of uncertainty, understating the true WACC could result in sub-optimal investment, to the extent that it deters equity (and debt) capital flowing into businesses. PwC's analysis therefore starts from a wrong premise, and does not in fact assess or test the hypothesis that if the allowance is not in line with the expected market return, investors would be unwilling to provide capital to the business. The paper therefore cannot provide any evidence against the need for 'aiming up', notwithstanding the flaws in the actual analysis (as discussed in paragraph 23 above).

4. Criterion 3 – Asymmetry of returns

4.1 Ofwat position

- One of the key criteria cited by the CMA for its approach to aiming up in the PFs is the asymmetry in relation to ODI returns. Ofwat has disagreed with this argument as a criterion for aiming up for the following reasons:
- 27 First, Ofwat argues that the CMA has not considered the full range of regulatory mechanisms and scope for outperformance, which once considered implies that it is unlikely for there to be any asymmetry, or if anything, there might be an upward skew in the framework, because the CMA has not assessed in full the range of mechanisms that provide scope for outperformance.²⁸
- 28 Second, Ofwat further argues that the CMA's view that ODI performance is asymmetrically skewed downwards for an efficient firm is incorrect and a misunderstanding of the nature of risk

Ofwat (2020), 'Risk and Return response to CMA provisional findings', paragraph 3.41.



around performance in the sector as Ofwat does not expect negative ODI payments for an efficient firm. As a result, the 'aiming up' adopted by the CMA would overcompensate the efficient firm. In order to justify this argument, Ofwat presents data of historical company performance from past determinations to evidence that companies have significant opportunities to outperform their determinations.

29 Finally, Ofwat also argues that there is informational asymmetry between the regulator and companies which would lead to outperformance, because regulators are "at an informational disadvantage in setting price control determinations" relative to companies.²⁹

4.2 Our response

- 30 One of the basic principles of corporate finance is the idea that investments will be undertaken only if investors believe that they will make the minimum required return, defined as the minimum return that reflects the cashflow risk of the investment, or the opportunity cost of capital (i.e. the return that investors could make on investments of comparable risk).
- 31 This can only be achieved when the price control represents a 'fair bet' for the regulated utility and its investors. A fair bet is one where the firm making an investment should, in expectation, be able to earn a return equal to the investment's cost of capital. That is, a fair bet proposition is one where the firm is allowed to have the opportunity to earn some upside (i.e. be allowed returns higher than the cost of capital) in order to balance the probability that it could earn returns significantly below the cost of capital, due to downside risk that does not have a commensurate upside.
- Where the prospect of downside risk outweighs any reasonable expectation of upside returns, the fair bet principle is violated and the business in question cannot be considered financeable. This is therefore a key reason to aim up as recognised by the CMA.
- We respond to the specific points raised by Ofwat in turn below:
- First, the CMA has been clear that both Ofwat's as well as its own approach to setting the ODI package does imply that for a notional company (outside expected outperformance on financing) there is downside risk in ODIs that does not have a commensurate upside. For example, the CMA noted: "...we have taken a similar approach to Ofwat and have provisionally proposed a package of penalty-only and asymmetric ODIs which expose companies and their investors to asymmetric risk." Therefore, that there is downside asymmetric skew in the settlement should not be contentious. Ofwat's argument that the CMA should have considered factors like 'scope for outperformance on financing' is irrelevant on a notional basis since the settlement should be such that a notional financed company should in expectation be able to earn the required return on capital.
- 35 Second, Ofwat's statement that no ODI asymmetry exists in the settlement is inconsistent with its own analysis. It is evident from Ofwat's own analysis of P10/P90 performance that a negative asymmetry exists when assessing the ODI impact on RoRE. For instance, analysing Ofwat's

Ofwat (2020), 'Risk and Return response to CMA provisional findings', paragraph 3.51.

³⁰ CMA (2020) 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price Determinations – Provisional findings', paragraph 9.671.



changes to ODI returns between DD and FD, although Ofwat decreased the scope for P10 penalties by 90bp on RoRE (on average) whilst increasing the scope for P90 rewards by 30bp (on average), a negative asymmetry was still found to exist with a sector average P10 penalty of c. 180bp and a sector average P90 reward of c. 100bp on RoRE. For Bristol Water, the asymmetry is more exacerbated with a P10 penalty of c. 210bp and a reward P90 reward of c. 100bp on RoRE.³¹

- More specifically, we have previously presented detailed analysis on the extent of the asymmetry and the ODI impact on RoRE, in Ofwat's FD and the CMA's PFs.³² The FDs indicated an ODI under/out performance range of (2.90%) to +0.77% as percentage of RoRE which translates into an annual £m impact of (£6.0)m to £1.6m. This asymmetry was made worse at PFs whereby the under/out performance range was (3.10%) to +0.63% as percentage of RoRE which translates into a monetary impact of (£6.5)m to £1.3m.
- 37 Given the asymmetry in the regulatory package, it is evident that the existing proposals violate the 'fair bet' principle, absent aiming up. The CMA rightly recognises that an imbalanced package of incentives would mean that the expected return for the average investor will be below the cost of capital. As a result, the CMA has been explicit that it considers this to be grounds for aiming up, consistent with its previous findings (e.g. in the SONI appeal) and other regulatory precedent.
- There is a crucial difference between the view taken by Ofwat and the CMA on the relevant reference point. Whilst Ofwat considers that an 'efficient' company would not incur negative payments, the CMA considers the reference point to be an 'average' performing company. As such, while the CMA agrees that a company that meets all its targets would not face any penalties, it expects that an average company is likely to perform with a range of out and under performance against specific targets. Where such a company faces penalty-only incentives (i.e. asymmetric risk package) it would lead to the expected return being below the allowed return. In such an event, it is justified to make an adjustment to the WACC, as recognized by the CMA.
- Ofwat also ignores the relationship between asymmetric returns and the ability of equity to earn the required return on a mean expected basis, as it relates to financeability of the package. In contrast, the CMA draws this link. As detailed in previous submissions, consistent with the CMA, our view is that the ability to earn the required equity return on a mean expected basis in the presence of downside risk is a key condition for financeability.³³
- The CMA has acknowledged that an accurate assessment of the compensation required to offset the impact of the asymmetry of the ODI package on returns is not straightforward. However, its analysis indicates that an average performing company could face a potential loss of 10bp to 20bp impact on RoRE. We have previously set out how the CMA's analysis for an average company understates the level of asymmetry in the package for Bristol Water as a small company and consider the impact to be c. 50bp on RoRE.

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Additionally, Ofwat's analysis implicitly assumes that companies have been funded the required amount to achieve the performance commitment levels. However, Ofwat has not allowed companies' cost cases (the cost gap for Bristol Water is c. f30m)

See Bristol Water (2020), 'Response to CMA Provisional Findings', Annex 2.

lbid, page 55.



- 41 Specifically, in the case of Bristol Water, our impact from downside risk is exacerbated due to our small RCV and greater operating leverage, as evidenced in the greater skew compared to other companies in the sector. As set out in our Statement of Case,³⁴ our higher operational gearing than that of other, larger companies implies a lower capital employed relative to operating costs, which would result in a given cost or ODI shock having a disproportionately larger impact than the same shock would have on a large WaSC.
- Finally, Ofwat's arguments relating to past company outperformance are flawed and are not valid for Bristol.
- First, it is incorrect to assume that historical performance can be a benchmark to predict future performance. The conditions at each price control, the nature of regulatory framework, capital market conditions, CAPEX programme, macroeconomic drivers etc., are different. Notably, the performance commitment targets for PR19 require a step change in performance. To simply assume that past outperformance will be repeated in future price controls is flawed.
- Second, if Ofwat intends to consciously set an asymmetric package to entirely prevent the opportunity to outperform, then this goes against the fundamental principles of incentive-based regulation. Bristol Water underperformed on average over AMP6, as did the average company and the majority of companies on the water service. If one were to follow Ofwat's logic, an asymmetric risk package in AMP7 would exacerbate the underperformance.
- In summary, it is clear that aiming up is needed in the presence of downside risk implied by the highly asymmetric regulatory framework of the PR19 final determination, which is further exacerbated for Bristol Water due to greater operational leverage which concentrates equity risk.

Criterion 4 – Other sense-checks of overall WACC

5.1 Ofwat position

- Ofwat makes several arguments as to why financeability should not be a relevant consideration when setting the cost of capital.
- 47 First, Ofwat states that if the CMA's 'aiming up' is designed to achieve target thresholds of certain financial ratios, it considers this would be inconsistent with the application of all the duties that apply to Ofwat in determining price controls. It argues that it would be incorrect to set an allowed return that has, as an a *priori* objective, a requirement to meet set levels of financial ratios; and that such an approach is an untargeted response that risks a regulator setting a determination specifically to meet the demand of investors without adequately considering consumers.³⁵

Bristol Water (2020), 'PR19 Redetermination Bristol Water: Statement of Case', paragraph 24.

Ofwat, 'Risk and Return response to CMA provisional findings', paragraphs 3.65 – 3.66.



- 48 Second, Ofwat argues that the financeability assessment can only be a check to test whether cashflows are adequate for a notional company to access finance on reasonable terms and should not be confused with a test of whether the allowed return is reasonable.³⁶
- 49 Ofwat then states that in circumstances where cashflow pressure is found to exist for the notional company, a high bar should be applied, and all alternative options should be considered before adopting an 'aiming up' policy, including resetting the notional gearing level, the proportion of ILD and the speed of transition to CPIH.³⁷

5.2 Our response

- We agree with the CMA's overall approach to assessing financeability, which is based on a clear, market-based approach and recognises the importance of ensuring that core parameters are calibrated such they support a financeable outcome. In contrast, Ofwat continues to disregard the robust financeability assessment in line with market practice as a relevant and binding cross-check on the price control, explicitly dismissing the notion that the financeability test should serve as a cross-check on whether the allowed return is reasonable and achievable in practice.
- The regulatory finance duty, that sits with both Ofwat and the CMA, places an obligation on the regulator to exercise and perform its functions in a manner that it considers will best "secure that [water companies] are able (in particular though securing reasonable returns on their capital) to finance the proper carrying out of [their] functions." Therefore, the financeability duty is an important cross-check on the overall internal consistency of the settlement as proposed (e.g. whether the cost of debt allowance is achievable) intended to ensure that companies are able to earn the minimum required return on investment that will be sufficient for companies to be able to attract financing and deliver investments.
- The CMA's PFs and the considerations on whether to aim up, are a necessary element in the CMA's discharge of the financeabillity duty as specified above.
- 53 Specifically, the CMA considered the need to 'aim up' to reflect the level of uncertainty or error in estimating the cost of equity. In doing so, it considered a number of factors, including ensuring long-term investability in the sector as well as the asymmetry in expected returns. ³⁹ Critically, the CMA recognised that the WACC is a key driver of financeability, and then used a financeability assessment as a cross-check on the WACC given the concern that, if the WACC is set too low, notionally geared companies would not be able to retain strong investment grade ratings, or earn the required equity return on a mean expected basis. ⁴⁰
- The fact that the CMA has considered financeability of the sector in its decision to aim up does not suggest that the CMA has targeted a WACC which achieves certain ratios, which Ofwat asserts gives undue weight to the interests of investors. It means that the CMA has properly discharged its financeability duty by carrying out an appropriate assessment of whether at the current cost of capital, companies would be able to achieve a strong investment grade rating, i.e. Baa1, as typically assumed to be targeted for a notional company. The CMA has also

Ofwat, 'Risk and Return response to CMA provisional findings', paragraph 3.67.

Ofwat, 'Risk and Return response to CMA provisional findings', paragraphs 3.9, 3.70 – 3.71.

Section 2(2A) of the Water Industry Act 1991 (WIA91).

³⁹ CMA, 'Provisional Findings', paragraphs 9.665, 10.49.

CMA, 'Provisional Findings', paragraphs 9.665, 9.673.



appropriately considered the financeability duty in relation to equity, in that it has recognised that in the presence of downside risk, the expected mean equity return might end up being below the required equity return (needed to ensure equity financeability), absent aiming up (even if equity returns are not modelled in full).

- We consider that rating agencies undertake relevant market-based tests for assessing financeability, and providers of debt capital rely heavily on the opinions of rating agencies when deciding whether to issue debt and on what terms (e.g. credit rating). These rating agency methodologies provide a clear and transparent methodology, for example the minimum target ratio thresholds that are consistent with a given credit rating such as Moody's 1.5x minimum threshold on AICR. It is therefore important to take into account these methodologies when assessing financeability and consequently whether the allowed returns are reasonable and achievable in practice, under the price settlement as proposed. We do not consider that Ofwat's assertions on target ratios being given improper due weight by the CMA, are in any way warranted.
- Ofwat itself, in its final determinations, adjusted regulatory levers such as PAYG rates for twelve of the seventeen companies⁴² precisely to achieve an AICR of 1.5x. This amounts to recognition that the requirement for a Baa1 credit rating is, amongst others, driven by the AICR minimum target of 1.5x (among considerations of other qualitative factors). Ofwat now implicitly argues against the CMA's need to meet certain ratio thresholds, which is inconsistent with its previous approach where it precisely targeted regulatory levers to meet those same thresholds.
- Ofwat does not appear to consider the importance of financeability, i.e. the ability of water utilities to attract debt and equity capital on reasonable terms, as critical for consumers. Ofwat argues that by 'aiming up', the CMA has not adequately considered consumers.
- In its expert report,⁴³ KPMG states that financeability ensures a company's ability to raise the capital it requires to finance operations and make new investments. The availability of financing (at a reasonable and efficient cost) is critical for companies to deliver services and improvements for customers as well as for continued and sustainable capital investments. As stated above, and acknowledged by UKRN in 2018, the loss to consumer welfare from companies not making adequate investments in the network is higher than the additional cost from aiming up on the cost of capital which is required to ensure a package that is financeable.
- In our previous submissions, we have presented several arguments which set out why we did not consider Ofwat's alternative remedies to be appropriate or effective at addressing financeability constraints. We maintain the position set out in our Statement of Case that financeability should be secured by setting an appropriate cost of capital that is based on relevant market evidence (and that is achievable in practice), appropriate cost allowances and balanced and targeted incentives. 45

KPMG (2020), 'Financeability of Bristol Water under the PR19 Final Determination', page 16.

Bristol Water (2020), 'PR19 Redetermination Bristol Water: Statement of Case', paragraphs 388 and 397.

Ofwat (2020), 'Aligning risk and return technical appendix', page 96, Table 6.4.

Bristol Water (2020), 'PR19 Redetermination Bristol Water: Statement of Case', paragraphs 122 – 136, and Bristol Water (2020), Reply to Ofwat's Response, section 17, page 92.

Bristol Water (2020), 'PR19 Redetermination Bristol Water: Statement of Case', paragraph 144.