PR19 Redetermination

Bristol Water:

Further response to the CMA cost of capital working papers

27 January 2021

bristolwater.co.uk

Contents

1. Executive summary 2
2. Cost of embedded debt 5
3. Cost of new debt 10
4. New to embedded debt ratio and cross check on overall cost of debt 12
5. Cost of equity 15
6. Financeability 20

1. Executive summary

1 This submission forms the further response of Bristol Water to the CMA cost of capital working papers. We consider our initial response of the 18th January 2021, together with our earlier submissions, provided a full analysis of the evidence that the CMA must consider in determining an appropriate cost of capital for Bristol Water, in line with the CMA's statutory duties. This further response makes focused observations following the cost of capital round table on 20th January 2021 and in particular the specific session with Bristol Water and Ofwat.

2 Overall, we have two main concerns with the CMA working paper contents, firstly the inadequate justification for the substantial shift from the Provisional Findings (PF) implied by the consultation, and second the absence of any consultation on the impact of the proposed changes to the industry cost of capital on the Bristol Water Company Specific Adjustment (CSA) to cost of capital.

3 On the first concern, we remain of the view that there is much for the CMA to consider in the remaining short published timescale in order to consider our submission, and that of other companies. The main cost of capital round table did not have time to fully explore the significant changes of methodology and reduction in size to the cost of capital from the CMA's Provisional Findings (PFs). Particularly on the cost of equity parameters, it was clear that the shift in logic from the PFs was not supported by academic theory. It appeared that the CMA had not considered all of the evidence on equity beta in particular.

4 Our second overall concern is that the proposed change to the industry-level cost of capital will have a direct impact on Company Specific Adjustment (CSA) to cost of capital for Bristol Water, a significant element of our Statement of Case. As we write this response, we have not yet seen any written papers or other material published by the CMA on the Bristol Water CSA. Following raising our concerns with the CMA on omission of CSA in the cost of capital working papers, we were given the opportunity to have a brief roundtable with CMA and Ofwat on 20th January. From the discussion at the Bristol Water specific round table hearing it appears the principles of the CSA are not disputable and changes to the industry cost of capital will require the quantum of the CSA to be revisited. Ofwat did not raise any new points at the round table to contradict this approach.

5 In this paper we focus on the second issue, that of the impact of the CMA working paper proposal on the Bristol Water cost of capital. We cover the impact in a number of areas, namely, the universally accepted higher cost of capital for a small company, cost of embedded debt, cost of new debt, overall cost of debt, cost of equity, and the impact of all these on financeability. We also list Ofwat's statements against each of these areas and answer their objections clearly.

6 **Small Company Cost of Capital:** It is universally accepted that small Water only Companies (WoCs) have a higher cost of financing than Water and Sewer Companies (WaSCs) based on market evidence, corporate finance theory and in practice. Ofwat agreed with this statement in the course of PR19, and allowed an additional cost of capital for two other WoCs. This higher cost of finance that a notional WoC faces is intuitive and reflects market conditions. It is not driven by a single factor that an individual company can resolve. The arguments used by Ofwat during PR19 and this redetermination in order to deny Bristol

Water a CSA are unfounded, prejudicial to Bristol Water and contrary to the CMA determination in 2015, seriously undermining regulatory consistency.

7 **Cost of Embedded Debt:** The range of factors that result in a higher cost of embedded debt include a limited range of available market instruments, lower appetite from lenders given insufficient ancillary business, infrequent issuance, additional cost of carry, higher transaction costs. All have been clearly demonstrated to apply up to a turnover level of c£500m, around four times higher than that of Bristol Water. This is not a marginal boundary case and there should be no doubt that these factors impact Bristol Water, and will continue to do so. **The CMA working paper shows a significant gap in the actual cost of financing between WoCs and WaSCs based on current data. Based on eight different cross checks, the embedded cost of debt for a notional WoC and Bristol Water clearly sits in the range of 4.9% - 5.3%.**

8 **Cost of New Debt and ratio of new debt:** a notional WoC will continue to have a higher cost of raising new debt than the benchmark used for WaSCs. The factors that apply to embedded debt noted above also continue to apply to new debt. A notional WoC will also have a lower new to embedded debt ratio for 2020-25 than a WaSC, which is a difference in financing need rather than a matter of averaging.

9 **Cost of Equity:** There are clear differences in risk exposure between small WoCs and WaSCs that justify a higher cost of equity for the former. Asymmetric ODI and other risks are higher on the water service, which on its own is sufficient to justify a CSA uplift ,in addition to the operational gearing evidence that the CMA has found to be sufficient evidence previously. There is no robust evidence that undermines the CMA 2015 precedent that small WoCs required a higher cost of equity. On the contrary, new evidence substantiates this conclusion.

10 **Financeability:** Any changes made on the cost of capital ultimately have to be tested properly for financeability based on appropriate assumptions about the notional company, which for Bristol Water is as a small WoC.

11 In response to the above statements, Ofwat have made the following points, which they repeated in the Bristol Water cost of capital roundtable. We have addressed their statements as follows:

- *In taking a notional approach, cross checks should be used to test what allowance in reasonable*. Our initial response showed cross checks that support 4.9%-5.0% as such a range for Bristol Water embedded debt. *Ofwat accepted the logic that on the basis of the working paper, consistent with the iBoxx benchmark, the CSA for a WoC could be the 35bps Ofwat applied in the FD (c4.9% in total), based on considering adjustments and cross checks*[1].

- *Ofwat agreed that in theory a notional WoC has a higher cost of raising new debt*[2]. Ofwat's view that we have a greater range of financing opportunities than in the past is not evidenced. We provided an independent report with our Statement of Case

[1] Bristol Water cost of capital transcript, page 4 line 23
[2] Bristol Water cost of capital transcript, page 14 line 8

(BW431) which highlighted some of the challenges, and we illustrate further in this response.

- *Ofwat expressed the view that Bristol Water is no longer a small WoC*, which contradicts Ofwat's position at PR19. *Ofwat stated that Bristol had (just) turned into a large WoC/WaSC for cost of debt purposes*[3]. This contradicts the cost of debt analysis Ofwat has presented to the CMA, including in the 18th January submission. We summarise the evidence in this response.

- *Ofwat's view is that the CMA should take into account that it does not plan to allow a CSA at PR24*. Ofwat believe incorrectly that losses incurred by investors that force a merger is in customers' interests and is a legitimate economic regulation policy on incentives. Our current investors relied on the CMAs 2015 redetermination decision and have retained equity in Bristol Water since. Ofwat seems to consider the evidence on the CSA to be irrelevant to its decision making on this topic of particular impact to Bristol Water and its investors. The CMA ought to ensure that Ofwat affords due weight to the clear precedent laid down by the CMA's redetermination decisions. Failure to do so would undermine the stability and predictability of the regulatory regime, discourage investment, and thereby undermine Ofwat (and the CMA's) consumer objective as well as the finance duty.

12 Finally, there are fundamental points that must underpin the CMAs Final Determination and any doubt on the strength of this evidence will require further consultation and an opportunity for us to respond:

- it is clear that the evidence supports an embedded cost of debt for Bristol Water within the range for a notional WoC of 4.9% to 5.3%, supported by an actual cost cross check of c.4.9%;

- it is clear that small WoCs have a higher cost of new debt than the iBoxx benchmark, with a minimum of a c.0.15% CSA premium;

- based both on underlying evidence and the need to comply with the Finance Duty, the CMA should adopt a new to embedded debt ratio of 5%:95%; and

- the CMA should allow a CSA on the cost of equity that reflects the higher asymmetric risk on the water service, and the additional risk this provides to small companies. A 13% beta uplift is the minimum that any of the evidence supports, with a cost of equity of c7.7% required in any case to reflect ODI asymmetry from the perspective of financeability.

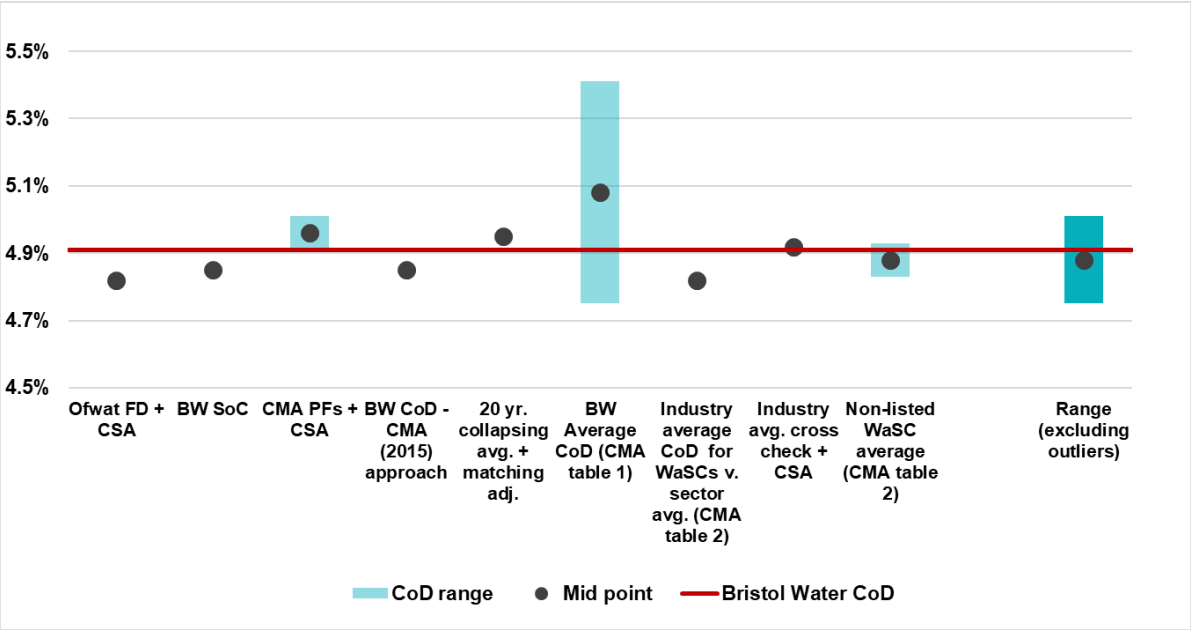
[3] Bristol Water cost of capital transcript, page 5 line 12

2. Cost of embedded debt

13 We set out in our initial response to the CMA's cost of capital working papers (Table 1) a series of cross-checks on the appropriate cost of debt for Bristol Water. Based on the other initial submissions and the discussion at the round tables, it is clear that our analysis was fully supported by the evidence and subsequent discussion. **An embedded cost of debt of c4.9% is supported by a wide range of evidence.**

14 We summarise the cross-checks in diagrammatic form below:

Figure 1: Cross-checks on embedded cost of debt (nominal)



Note: See Table 1 of initial response for further breakdown. Ofwat FD + CSA = 4.47% + CSA of 0.1% (CMA) and 0.2% (BW). BW SoC = Ofwat FD (4.47%) + CSA of 0.35% (applied for Portsmouth and South Staffs). CMA PFs + CSA = 4.81% + CSA of 0.1% (CMA) and 0.2% (BW). Non-listed WaSC average = 4.73% + CSA of 0.1% (CMA) and 0.2% (BW).

15 The cross checks indicate a range for the embedded debt, for WoCs, of **4.75% - 5.01%** with a mid-point of **4.88%.** This excludes an outlier of 5.41% on the top end of the range, which is the 'WoC average approach' reported by the CMA for Bristol Water.

16 The mid-point of 4.88% is consistent with our CoD position of c.4.9% as the appropriate cost of embedded debt that should be assumed for a small notional company.

17 These cross-checks demonstrate that it would be flawed for the CMA to apply matching adjustments for Bristol Water in addition to the clear evidence of what the embedded cost of debt is for WoCs. Small WoCs cannot achieve the financing assumptions assumed in "matching adjustments".

(a) It is not reasonable to use a shorter trailing average for historical debt data than 20 years for a small WoC. Small companies such as Bristol Water have higher transaction costs and cost of carry, which are minimised by not going to market to issue debt frequently in shorter tenors. Accordingly, small WoC companies have a higher cost of finance, which is

supported by the evidence that looks at bond costs (for the same timing and tenor), and is evidenced through the cross-checks summarised above..

(b) Financing at shorter frequencies is also less appropriate for smaller companies as they have higher operational gearing, which results in lower financing headroom, and less flexibility on financing options (without even higher transaction costs and cost of carry). Assuming shorter tenors therefore results in a higher future refinancing risk which would affect financeability.

(c) Ofwat and the CMA's analysis relies on EIB debt, which is not available to water only companies in practice.

(d) Assuming floating rate debt within embedded debt increases the gap between WoC and WaSC cost of debt, and this must be offset by a positive adjustment to a notional WoC cost of embedded debt allowance to reflect the higher transaction costs and cost of carry. At the January cost of capital round table Ofwat referred to greater financing options such as callable bonds[4] – these are not viable options for WoCs due to the lack of scale to make these attractive to lenders. We have provided confidential evidence to the CMA (BW431) on the options for refinancing that demonstrates the challenges faced in obtaining floating rate debt that is cheaper than existing embedded debt.

18 The context for points a) and b) are that the CMA should set a regulatory policy for all the disputing companies that promotes long term asset financing consistent with the asset lives for the industry. Adopting a shorter term financing approach will reduce the incentives for long-term financing in the industry. For a small water only company, the issue goes further – it is not possible to achieve shorter term financing at a lower cost. In the short term a lower financing cost will not be achieved (the cost of debt will be set too low if regulators use such assumptions) and in the medium and long term the costs and risk or customers will rise exponentially when interest rates increase.

19 We address point c) in our initial response to the CMA's cost of capital working papers[5]. There is no basis for any EIB adjustment for WoCs (of any size). ✂[6], ✂.

20 Point (d) can be illustrated for a notional WoC based on the analysis in Table 1 of the CMA cost of debt working paper:

[4] Cost of capital main hearing transcript, page 36 line 10
[5] Bristol Water initial response to cost of capital working papers, para. 63
[6] ✂

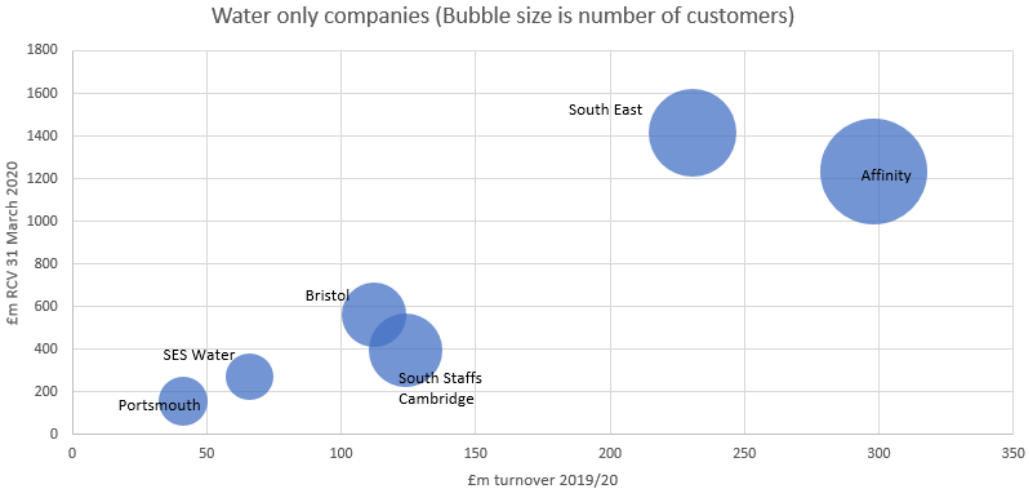
	Fixed rate	Floating rate	Indexed rate
WaSC average	4.03%	1.37%	5.28%
WoC average	4.28%	2.22%	6.08%
Difference	0.25%	0.85%	0.80%

21 If the CMA were to decide to explicitly consider floating rate debt within embedded debt given that it does not feature within the iBoxx benchmark, the CMA would need to consider the full range of debt instruments. For Bristol Water this would include the historical irredeemable preference shares (included in Ofwat's definition of regulatory gearing) and debentures.

22 These instruments have not historically been included in CMA analysis, but if the CMA were to move away from regulatory precedent then these costs would also need to be considered. These amount to £15m (c4%) of our net debt, at a cost of c7.7%, which is equivalent to a 0.1% upwards "matching adjustment" in addition to our view of a notional WoC benchmark of 4.9%.

Bristol Water remains a small WoC

23 Ofwat's contention that Bristol Water is no longer a small WoC is unsupported by the evidence. The only issues should be whether we are small for financing purposes. We show below the factual data on RCV, turnover and customer numbers for 2019/20. On two of these three metrics Bristol is smaller than South Staffs Cambridge, and on any of the metrics there is a significant gap between the four small WoCs and the two larger WoCs, who in water customer numbers compare more closely to some of the small WaSCs.



24 We stated at our hearing that banks normally consider companies with turnover above £500m as large companies for the purposes of their corporate cashflow lending activities, and therefore companies with this level of turnover or above have greater negotiating power. The CMA should also consider the evidence we have submitted on the illiquidity and size premia apparent from data on public bonds[7]. Whilst Affinity and South East may be able to borrower in larger tranches than Bristol Water, even they do not have sufficient size to be attractive to competitive bank loan financing. This explains their relatively low use of floating rate debt shown in Table 1 of the CMA working paper. We do not see any evidence for the low cost of debt for any WoC that aligns with Ofwat's reasoning[8].

25 It is also clear that Ofwat did not take this position during PR19. Ofwat accepted Bristol Water was small for the purposes of calculating the industry cost of debt (leaving Bristol Water out of the "WaSCs and large WoCs" embedded debt benchmark, thus considering qualification for a CSA, which would have been allowed were it not for Ofwat continuing to apply the discredited customer benefits test). The CMA recognised this in the PFs, reflecting a notional small WoC:

"As a starting point, the discussion around the need for a CSA and the relevance of a customer benefits test appears to be similar to that in previous determinations. As with other aspects of the determination, there is a benefit from regulatory consistency, and investors in smaller companies would expect that Ofwat would consider applying a CSA for as long as there is a higher cost of financing those companies.

Ofwat has assessed that the smaller companies, including Bristol, will continue to have higher financing costs during AMP7."[9]

26 The reason why Ofwat did not take this position is clear from the Bristol Water cost of capital round table transcript – Ofwat accepted that Bristol Water was small when the Artesian debt was issued[10]. This is retrospective regulation as the cost reflects an efficient small company issuance at the time. The tenor of 30 years was typical and appropriate. This illustrates why retrospective assumptions of a different approach to the benchmark (such as floating rate debt) are not reasonable for investors. Assuming otherwise will result in short termism and put long term investment in the sector at risk.

27 As was discussed at the main hearing, if companies matched a benchmark at the time, having been encouraged to do so by Ofwat based on the risk to customers from rising

[7] e.g. Bristol Water Response to CMA Provisional Findings, para.129
[8] e.g. Bristol Water cost of capital hearing, page 12 line 23
[9] CMA Provisional Findings (2020), paras. 9.445 and 9.446
[10] Bristol Water cost of capital transcript, page 6 line 9

interest rates / the need for investment and then financial market crisis, they should not be penalised now for having done so. This includes small companies.

28 Ofwat at the main round table hearing agreed that a reasonable return had to be set for the price control period, looking at both market based benchmarks and company data-led benchmarks[11]. This means taking a 20 year trailing average as the benchmark and taking a CSA of 10 basis points (in Ofwat's view) and 20 basis points (in our view), cross checked against WoC average actual costs of debt. This takes us to a range of 4.9% to 5.3%, as we explain above. A different trailing average requires a higher CSA for the allowance to be reasonable. Ofwat's only argument against this logic is that Bristol Water is not a small WoC.

29 The inconsistency in Ofwat's in logic and argumentation appears when considering Ofwat's application of the customer benefits test at Final Determination. As the extract shows below[12], at the Final Determination Ofwat specifically excluded the potential for small WoC mergers (including Bristol Water). Ofwat's consideration of merger likelihood is one of the biases in its approach to the customer benefits assessment, as in our view (and the CMA's view) this does not relate to financing costs. The key point however is that in the Final Determination Ofwat state that because a merger between Bristol Water and South Staffs would not result in a sufficiently large company – the small company premium would in Ofwat's analysis still apply. Therefore Bristol Water must be a small WoC.

Table A1.5 - Summary of representations on our benefits assessment and our response

Issue	Raised by	Our response
Benefits (base totex) - Ofwat's modelling should not assume that small companies will not merge with each other – historically this type of merger is not uncommon. Correcting this assumption would increase benefits.	Bristol Water/ KPMG	**No change:** Our analysis focuses on the benefits of averting a merger through providing an uplift. We set out in our initial assessment of plans publication on company-specific adjustments how an uplift conditional on remaining a small company could affect the probability of being acquired by a larger entity. The same logic does not apply if the acquirer is small enough that the merged entity might still attract a small company premium. Even if the two largest small WoCs (Bristol Water and South Staffs Water) merged, it would result in a merged entity RCV of c.£1bn – around 1/3 the size of the smallest WaSC (Wessex). We therefore continue to consider our assumption reasonable.

[11] Cost of capital main hearing transcript, page 11 line 4
[12] Ofwat (2019): PR19 Final Determinations: Allowed return on capital appendix, p.103

30 We believe that Ofwat's reasoning that Bristol Water is no longer a small WoC to be extraordinary and must carry no weight with the CMA. Alongside other aspects of small company financing arguments which have been heard by the CMA at previous reviews, this is an area where the CMA must make a clear statement that Ofwat should not take the same approach at PR24.

3. Cost of new debt

31 **Whether the CMA considers the notional WoC or evidence of Bristol Water's actual cost of debt, it is clear that there is a higher cost of financing than the iBoxx benchmark.**

32 At our hearing Ofwat stated that there are more opportunities for Bristol Water to raise debt than 15 years ago. There is no evidence to support this assertion and our experience of our 2018 refinancing is that our smaller size restricts access to the funding market. ✂

33 ✂

34 ✂

35 ✂

36 We believe the factors that in the past have supported a CSA on the cost of new debt (including the 25bps allowed by Ofwat at PR19 to similar WoCs to Bristol Water) will

continue to apply in the future. The table below lists these factors, and explains the position which will likely apply in future.

Past	Future
Infrequent issue – higher transaction costs	Remains the case – For Bristol Water examples provided of bank refinancing restricted because scale of financing opportunities not attractive to some lenders.
Smaller tranche sizes – less competitive rate v IBOXX when controlling for tenor and rating	Evidence provided for recent financing (controlling for tenor and rating) will continue in future.
Easier to access low cost from EIB on wastewater (environmental) assets	EIB now less available/higher cost. Still not available to WoCs like Bristol Water
Past financing - pull together in larger with insurance wrapper (monoline) to offset higher financing cost (higher rating)	Cost of refinancing at the time will depend on market (30 year tenor matches asset lives).
5%:95% new to embedded debt ratio at PR19 – typical for WoCs, smallest level of AMP7 enhancement in sector	Low new debt / falling RCV. Less new climate change/resilience investment needs than larger companies/WASCs. This suggests will not average out over time. WaSC new debt ratio of 10 – 12% apparent if calculated correctly.
Ofwat CSA 25bps (15bps outperformance wedge plus 10bps other)	At least 15bps vs iBoxx/WASCs. At lower current level of iBoxx and without forward rate adjustment, WoC evidence in working paper suggests higher new debt CSA as a cross check (0.85% on historical floating debt financing).
Companies benefit from reduction in IBOXX	Adjustment mechanism for change in IBOXX

Ofgem recognise more adjustments to benchmarks for WASCs

37 At the main round table, a comparison was made between the allowances made by Ofgem to Ofwat in terms of issuance and liquidity costs. The CMA will note that on its own this analysis would suggest that our proposed CSA of 15bps is a reasonable assumption on liquidity and the cost of carry for a small company, as it could easily also apply to larger companies.

	Ofgem FD	Ofwat FD
Transaction costs	6bps	6bps
Liquidity/RCF	4bps	4bps
Cost of carry	10bps	0bps
CPIH issuance mitigation	5bps	0bps
Total	**25bps**	**10bps**

38 Ofgem in its RIIO-2 Final Determination provide an additional allowance (in addition to the above) of 6bps to reflect a smaller company/less frequent issuer new debt allowance. This is in addition to the 10bps cost of carry shown above allowed by Ofgem.

39 Ofgem recognised that smaller sized EIB borrowing and private placements were less available than in the past[13]. Ofgem used £150m annual issuance as a cut off, although recognised this required assuming a £250m face value bond issuance cut off at iBoxx as some issuance could be made over multiple years. Ofgem thus recognise that the factors that resulted in Artesian debt issuance scale remain pertinent to issuances today and over the next 5 years.

40 Ofwat argued at the Bristol Water cost of capital round table that the cost of carry argument was weak, because liquidity could be drawn down incrementally. This is clearly inconsistent with Ofgem's view of a small company issuance level at £150m p.a., given that Bristol Water's annual issuance level may average as little as £5m, with tranches of £25m - £50m (✂

[14]).

41 This Ofgem cost of debt adjustment was applied to much larger companies than Bristol Water (e.g. Wales & West Utilities with a RAV of c£2.5bn. For Bristol Water (with c£0.5bn of RCV) the issuance costs would be significantly higher: our estimate of c15bps is conservative, given Ofwat's FD allowance of 25bps for other small companies, and that it does not explicitly allow for the 10bps additional cost of carry allowed by Ofgem.

4. New to embedded debt ratio and cross check on overall cost of debt

42 We set out in our initial response to the CMA's cost of capital working papers the case for a WoC specific new to embedded ratio, which was not considered in the working paper. There was insufficient time to discuss the new to embedded debt ratio at the main roundtable hearing or Bristol Water specific session. **The CMA must consider the new to**

[13] Ofgem (2020): RIIO-2 Final Determinations – Finance Annex, para. 2.62
[14] ✂

embedded debt ratio evidence in order for the overall cost of debt to be reasonable for a small WoC.

43 We illustrate below our projected refinancing for AMP7. ✂

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
% existing floating rate debt	25%	✂	✂	✂	✂	✂
% new or refinanced floating rate debt	0%	✂	✂	✂	✂	✂

44 This demonstrates why using a Bristol Water specific cross check on the cost of debt justifies a CSA on new debt and also the adoption of a reasonable new to embedded debt ratio. Bristol Water current debt costs are lower than the 5.3% current WoC average, in part due to a higher proportion of floating rate debt than other WoCs (27% v 13% based on table 1 of the CMA working paper on the cost of debt).

45 Ofgem recognised in the RIIO-2 Final Determination that a notional company that had different RAV growth could be expected to raise debt at materially different times to other notional companies.[15] The lower RCV growth for Bristol Water results from lower enhancement (requirements of EA and DWI, plus resilience, being low). These are benefits to customers, which are exogenous factors to financing choices. Companies should not face financing risk due to low RCV growth, as this provides incentive properties to invest more when interest rates are low which is inconsistent with water company infrastructure planning. Scale and timing of enhancement investment is a matter for Government policy, not Ofwat or the CMA.

46 We illustrate below the overall cost of debt using a new to embedded debt ratio of 10%, which is the highest notional assumption that could be assumed from Ofwat's assessment of WoC financing and refinancing requirements, supported by the correction to the CMA new to embedded debt ratio calculation suggested by Yorkshire Water. We also show an alternative based on the CMA PFs embedded debt ratio, but with the Ofgem allowance for issuance and liquidity costs.

[15] Ofgem (2020): RIIO-2 Final Determinations – Finance Annex, p.183

	Bristol Water view (incl. actual cross check)	Conservative WoC Notional	WoC notional allowance only for embedded debt, remainder as per PFs	Derived from CMA working paper (assuming CSA on embedded debt of 10bps only)[16]
Embedded cost of debt	4.91%	5.3%	5.3%	4.61%
New cost of debt (CMA working paper plus CSA of 0.15%)	2.34%	2.34%	2.19%	2.19%
Embedded debt ratio	95%	90%	80%	80%
Issuance and liquidity	0.10%	0.10%	0.25%	0.10%
Overall cost of debt	**4.88%**	**5.10%**	**4.93%**	**4.23%**

47 Whichever perspective is taken, the Bristol Water suggested overall cost of debt of 4.9% is reasonable, and necessary for the purposes of financeability testing of the sufficiency of the overall cost of capital / determination. The approach derived from the CMA working paper is far below any of these perspectives, and represents an unwarranted shortfall of c0.7% on the overall cost of debt on a notional or actual basis.

48 We believe that the minimum assumption that the CMA should make on the new to embedded debt ratio is 10%:90%, although a consistent approach to WoC notional or Bristol Water actual ratio of 5%:95% should be preferred as a consistent assumption.

49 Following on from the discussion at the main round table hearing on the cost of capital, the CMA should conclude that:

(a) The ratio between new and embedded debt in the working paper is flawed and inconsistent with dynamics of collapsing average applied by the CMA for the notional company (which points to only one of the three approaches considered by CMA);

[16] Bristol Water initial response to CMA cost of capital working paper, para. 119

(b) The CMA is in error as it is more appropriate to model a 20Y trailing average than the 15Y assumed by CMA, and correcting for this reduces assumed new debt from 18.5% to 14.5% ;

(c) The CMA partially bases its estimate on a methodology which assumes tenor at issue is 12.5Y (lower than the 15Y assumed across its trailing average and collapsing average methodology), so this methodology (which implies 20% new debt) should be excluded; and

(d) The CMA's analysis of the industry average new debt % contains a material error as it assumes that all water company debt will mature in c.14 years, but this is an average and in practice all water company debt will mature in c.28 years. Adjusting CMA's calculations by 50% gives new debt % of 11%.

50 Therefore considering all the evidence, the CMA should therefore set the embedded: new debt ratio based on the needs of a typical small company requirement in the current regulatory period, else it risks creating a significant financeability problem by exposing Bristol Water to risk we cannot control, and thereby failing to satisfy the Finance Duty.

51 Overall, a new to embedded debt ratio of 5:95 is appropriate for a small company such as Bristol Water.

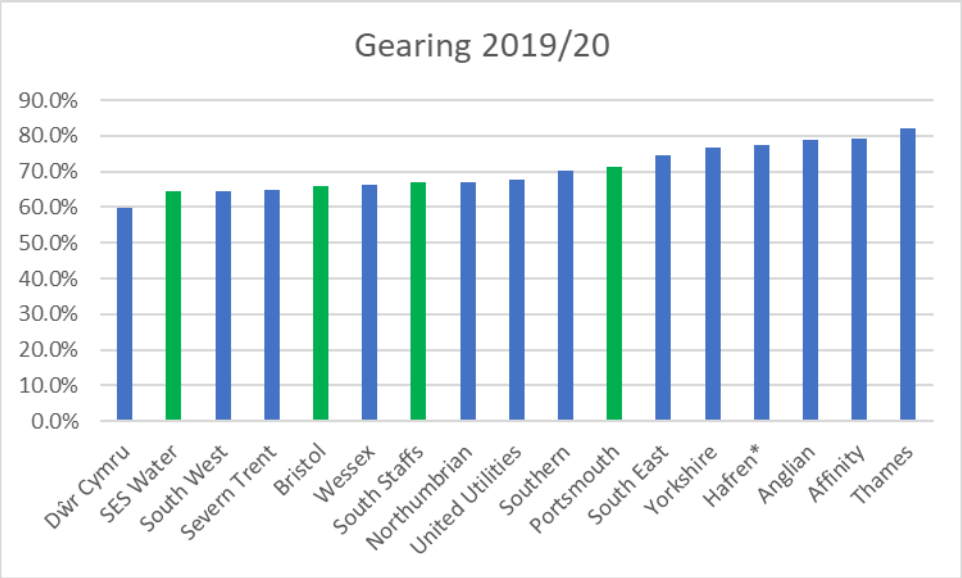
5. Cost of equity

52 **Discussions at the recent round tables support the evidence we have submitted throughout this redetermination that small WoCs must have a higher cost of equity than the listed WaSC comparators. The evidence is stronger today than when the CMA found this to be the case in 2015.**

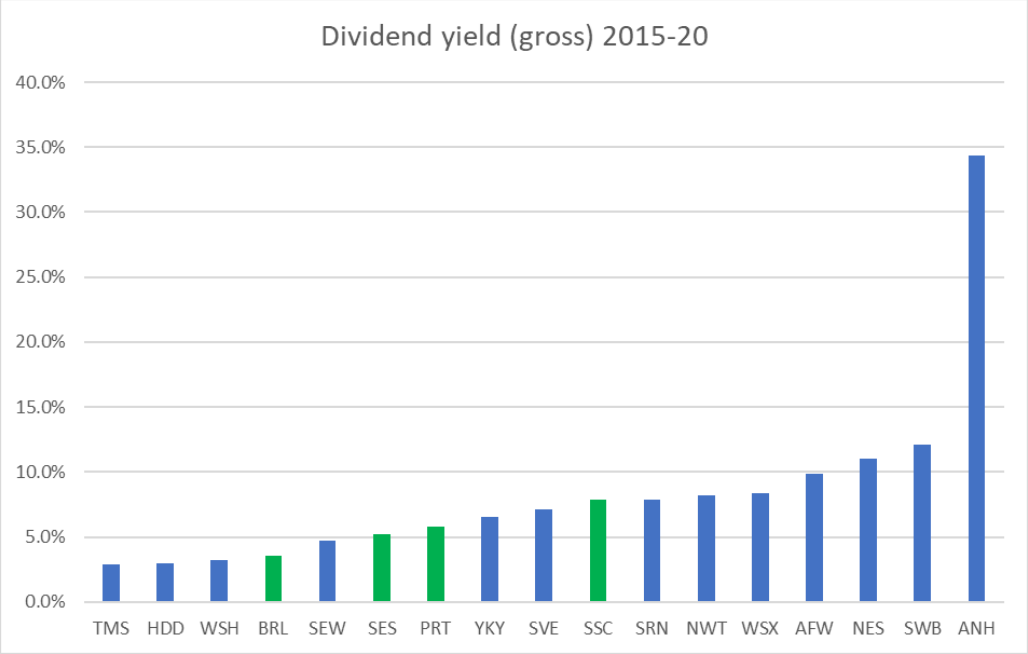
53 At the Bristol Water cost of capital round table, Ofwat suggested that if there was a higher risk in the water service you would expect to see this reflected in lower gearing. In fact for the water only companies there is evidence of lower / reduced gearing, and it explains why for instance Bristol Water investors have retained equity in the business.[17]

54 We show below the current level of gearing across the sector[18], highlighting that small water only companies generally have gearing similar to those of the listed companies.

[17] Bristol Water cost of capital transcript, page 19 line 14.
[18] Bristol Water graph derived from Ofwat 2019-20 financial monitoring report data file

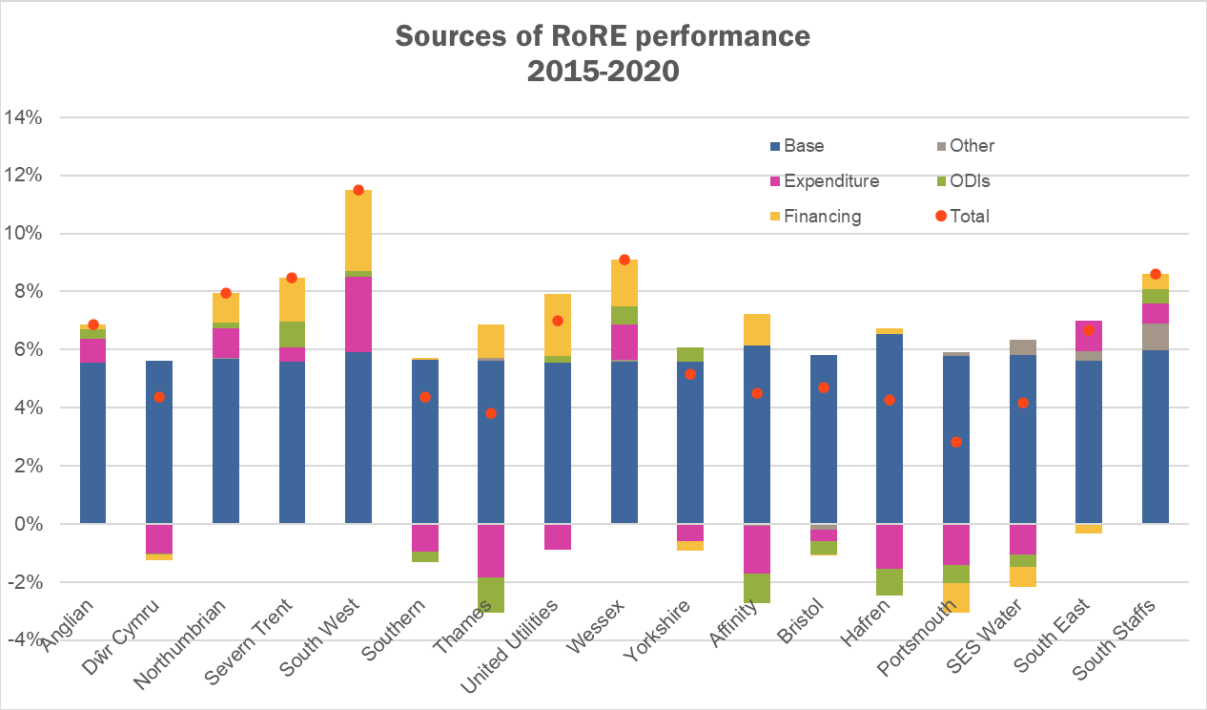


55 Ofwat's view on gearing that if WoCs had higher equity risk they should have lower gearing therefore does not work. Gearing at listed companies is relatively low (similar to the WoCs such as Bristol Water), and yet they have higher RoRE and dividend yields because of their financing outperformance. The graph below shows that gearing is lower at most small WoCs in part because they have had relatively low dividend yields[19]. Lower gearing does not reduce relative risk compared to the larger comparator company for equity purposes, with less cash buffer headroom for ODI risks and cost shocks. The listed fast track companies had protection from Ofwat in terms of ODI design. The ODI analysis we presented showed less risk for listed companies than Bristol Water.



[19] Bristol Water graph derived from Ofwat 2019-20 financial monitoring report data file

56 Ofwat's RoRE analysis for 2015-20 from the 2019/20 Financial Montioring report highlights the importance of financing performance to listed company equity returns, with ODI penalties dominating for small WoCs despite their good relative performance. This also shows that asymmetry and skew is not just a matter of AMP7 ODIs at the lower levels of service, but cost allowances (given the implications of 2019/20 water service cost data) and AMP7 asymmetric cost sharing rates as well.



57 Ofwat has argued that if there is higher risk for WoCs which results in a financeability issue, then a lower level of gearing should be assumed. There is regulatory precedence (Ofgem at RIIO-2 and Ofwat at PR09) of allowing equity issuance costs where such assumptions are to be made. These costs would be very high for the small level of equity this would imply for a small WoC[20].

58 Our RORE skew analysis that we presented in our Statement of Case was therefore correct to compare Bristol Water risk to the listed companies, based on ODI and other asymmetric risks in Ofwat's Final Determination. In its response to the responses to the Provisional Findings[21], Ofwat's analysis demonstrated the higher ODI skew for Bristol Water compared to the other three disputing companies, the source of which is the water service incentives. It would be informative if Ofwat had completed this assessment for listed companies, and we expect it would have produced a similar indication to the analysis we carried out in support of a CSA uplift for small WoCs.

59 The ODI asymmetry on the water service is a non-diversifiable risk for a WoC. It stems from the regulatory framework and the higher historical performance for small WoCs compared to other companies. Whilst it can be considered diversifiable from a WaSC perspective, the correct

[20] Ofgem RIIO-2 Final Determinations Finance Annex page 138 - cost of equity issuance allowance of 5% of funds raised, assuming a size of £250m to £750m.
[21] Ofwat response to Provisional Findings responses: Risk & Return, Appendix A4

perspective is whether this is the case for an investor in the notional WoC, when compared to the listed WaSCs that are the reference point for beta.

60 Ofwat have suggested that rather than aiming up, the CMA could consider a) redesign of ODIs[22] or b) greater allowances for capital maintenance expenditure[23]. We agree with Ofwat that the CMA should make greater allowances for capital maintenance expenditure to reflect the relationship with service levels, which can best be achieved through including 2019/20 cost data, given that data is readily available and reliable. This is essential for financeability, but does not offset the case for aiming up.

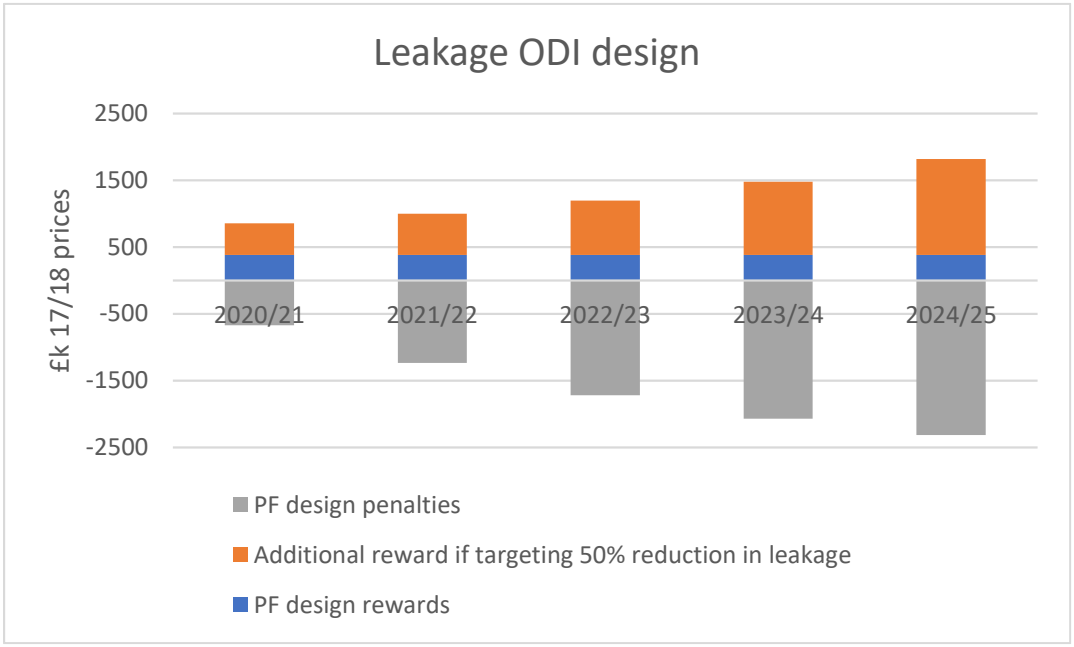
61 However whilst ODI redesign could be a feature, in practice this would be difficult to achieve without changing targets where they are reducing beyond AMP6 levels (in particular per capita consumption, leakage and supply interruptions). This would not be in line with customer preferences or Government policy for the water sector.

62 A second approach to achieving less asymmetry is to redesign underperformance incentives. This would require maintaining or reducing ODI penalty collars, whilst also introducing deadbands for normal variation as the CMA did in the PFs for mains bursts. The CMA could change the definition of supply interruptions, for instance to exclude the asymmetric risk of interruptions cause by third parties, to include a deadband or lower collar. There are many alternative design options available for Bristol Water, and examples are available throughout the PR19 business plan process as Ofwat changed their incentive design policy. The CMA could also scale down the common penalty incentive rates, something that Ofwat did subjectively and in part during PR19 where standardised interventions meant that the sum of ODI penalties (or the share of particular ODI on the total penalty) looked large. We identified errors and found it difficult to rationalise the approach. Therefore this experience suggests that amending ODIs would require further consultation and the options that would need to be considered are beyond the narrow areas of dispute on ODI design apparent from the Final Determination that the CMA has considered to date.

63 Ofwat has also suggested a more theoretical approach to reducing asymmetry, specifically for Bristol Water by increasing ODI rewards for leakage by removing the outperformance cap level[24]. Targeting zero leakage is clearly impossible, and based on the theoretical reward (£28.5m over AMP7, assuming this could have started in 2020/21) is not sufficient to offset the total maximum ODI asymmetry of c£60m over AMP7 (total rewards less totex penalties[25]).

64 Even assuming the 50% reduction on the 2017/18 base which is the 2050 long term target for the water industry as a whole (with presumably higher reductions for those with higher leakage), is insufficient to deal with leakage ODI asymmetry, even theoretically. The CMA should note the increasing penalties as performance target levels get tougher over AMP7. This is a feature of AMP6 water service performance in terms of the cost and ODI service relationship, which is why there is a particular water service risk that should be considered in the CSA on equity (i.e. because of the potential incremental impact on financeability).

[22] Ofwat initial response to cost of capital working paper, para. 2.85
[23] Ofwat initial response to cost of capital working paper, para. 2.49
[2424] Ofwat response to Provisional Findings responses, para A4.10. Used as an example at the cost of capital round table of Ofwat's view set out in Ofwat initial response to the cost of capital working paper, para. 2.85
[25] Bristol Water Response to CMA Provisional Findings, Table AN2.1



65 As the leakage outperformance rate for Bristol Water is £0.164m/Ml/d, this is far below the enhancement unit rate of £0.55m/Ml/d which is the allowed cost to reach a net zero ODI position. Even taking into account a totex sharing rate of 45% for underperformance, this is clearly not an economically efficient or logical incentive design, before considering the higher marginal cost of the leakage reduction required to earn any reward beyond the unit rate associated with the AMP7 target for leakage reduction. Assuming more leakage outperformance to offset asymmetric underperformance in ODIs must be more than offset by greater cost asymmetry if ODIs have been designed in an economically efficient way.

66 The only logical conclusion is that there is clear evidence of asymmetry, which is higher on the water service. ODI asymmetry cannot be assumed away by investment incentives in the regulatory framework, or resolved with greater theoretical outperformance.

Moody's recent report illustrates WoC ODI risk

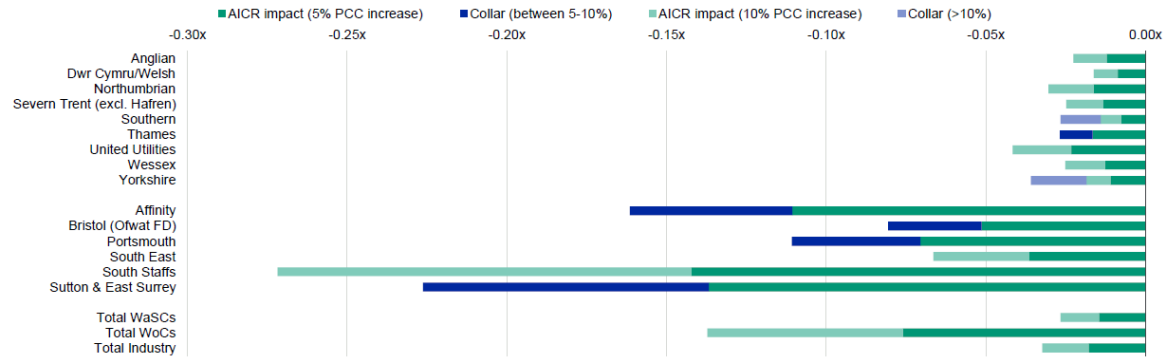
67 The following graph from Moody's recent water sector report[26] clearly demonstrates the particularly impact on ODI skew on WoCs compared to WaSCs. This supports our view that in addition to the case for general aiming up for asymmetry in the industry cost of equity, there is an additional well evidenced case support the principle that smaller WoCs require a higher cost of equity. This should be reflected in the CMA's final decision for Bristol Water.

[26] Moody's (January 2021): Regulated Water Utilities

Exhibit 11

Penalties for increasing household water usage over 2020-21 could result in disproportionate reduction in water-only companies' AICR

Data based on Ofwat's FD



Most WaSCs do not have ultimate performance collars. Companies shown with collars are Southern Water (16.7% PCC increase), funded through its subsidiary Southern Water Services (Finance) Limited (Baa3 stable) Thames Water Utilities Ltd (8.8%; Baa2 stable), Wessex Water (12.7% at standard penalty rate, but unlimited at enhanced penalty rate), Yorkshire (16% at standard and 17.6% at enhanced penalty rate), Affinity Water Limited (8.1%; Baa1 negative), Bristol and Portsmouth (both at 8.6%), and Sutton & East Surrey Water plc (8.9%; Baa2 negative). Based on the CMA's provisional findings, Bristol Water's PCC penalty rate has reduced, which if confirmed at the final decision would mean that the maximum AICR reduction, including the collar, would be 0.04x rather than 0.08x.

Sources: Ofwat and Moody's Investors Service

6. Financeability

68 In our initial response to the CMA's working papers on the cost of capital (Table 2) we set out the importance of using a reasonable cost of debt in carrying out the financeability analysis on a notional basis. The difference between the working paper implied cost of debt and our view for a notional WoC was worth 0.25x of AICR (a reduction from 1.57x to 1.32x). 0.5% RoRE asymmetry reduced this to below the level necessary for Baa2, let alone Baa1, at 1.24x.

69 This assumes that cost asymmetry does not also apply given the sensitivity of this issue to the use of 2019/20 cost data, an issue that we raised in our separate response on this topic.

70 Based on our updated analysis following the working paper, we believe the appropriate cost of equity for Bristol Water will be 7.7% - 7.8%, depending on the final parameters and aiming up, once a CSA uplift on the cost of equity is applied.

71 The total cost of debt of 4.88% reflects a 4.9% embedded cost of debt, 0.15% CSA on new debt and a 5%:95% new to embedded debt ratio. Together, these assumptions are sufficient to restore financeability to 1.5x, as we show below. The outcome we propose is therefore necessary and reasonable for a notional small WoC to be considered financeable and therefore for the CMA's Final Determination to adequately discharge the Finance Duty.

	CMA Working Paper	CMA Working paper - cost of debt updated (cost and revenues) 4.88%	CMA Working paper – cost of debt updated 4.88% and cost of equity of 7.8%	+ 0.15% RoRE penalty due to asymmetry	0.5% RoRE penalty due to asymmetry
AICR	1.57x	1.47	1.65	1.61	1.53
S&P FFO / Net Debt	13.7%	13.7%	14.4%	14.3%	13.9%