# 1 OVERVIEW

(1) This is Northumbrian Water's (**NWL**) final submission with respect to the CMA's redetermination of our PR19 price controls. In this submission we seek to achieve the following:

- revisit our rationale for taking the decision, one year ago, to seek a redetermination and reflect on how the passage of time and positive changes in the CMA's Provisional Findings (**PFs**) have validated that choice (see Section 2); and
- recognise that further movement is required from the PFs to ensure that the price control settlement is a balanced package in the round which discharges the CMA's statutory duties and, without repeating the detail from previous submissions, highlight the key areas where we expect to see change in the CMA's final determination (see Section 3).

# 2 REFLECTIONS ON THE REDETERMINATION

## 2.1 WE TOOK THE DIFFICULT DECISION TO SEEK A REDETERMINATION BECAUSE OF THE CLEAR IMBALANCE OF THE PACKAGE IN THE ROUND

(2) As we explained at the outset of this process,[1] we created a well-balanced business plan for PR19 (**BP19**) that listened to the priorities of our customers. Our stretching, innovative and ambitious proposals offered to deliver sector-leading bill reductions alongside high levels of service, efficient operations and important investment in resilience for the future.

(3) Ofwat's FD19, however, failed to achieve a balanced package in the round in both the short and longer-term, with respect to the interests of our consumers, the efficiency of our costs, the resilience of our operations, the level of returns and the financeability of our business. In doing so, Ofwat failed to discharge its statutory duties under the Water Industry Act 1991 (**WIA**) appropriately. As such, we concluded that it was necessary to make this reference to the CMA.

## 2.2 THE NUMBER OF COMPANIES SEEKING A REDETERMINATION IS UNPRECEDENTED: THIS IS NOT A BATTLE BETWEEN CUSTOMERS AND INVESTORS AS OFWAT SUGGESTS

(4) The ability to seek a redetermination is an important part of the regulatory framework for the setting of price controls. It provides important checks and balances on the exercise of the significant degree of regulatory discretion that is encompassed in the myriad of individual decisions that combine to set revenues and outcomes. The CMA's role in that framework as an independent, objective and evidence-based regulator is vital. The framework effectively provides a 'double-lock' on the independence and objectivity of the CMA panel: the CMA as an institution operates entirely independently from Government, the Disputing Companies and their regulator, and the use of the panel provides further independent governance and oversight. As the CMA is subject to the core WIA statutory duties in carrying out its redetermination, the interests of customers will be protected.

(5) At the same time the CMA has always set an extremely high-bar for evidence and analysis in reaching its decisions. This combination of framework and practice protects customers as well as give confidence to global investors about the effectiveness and robustness of the checks and balances inherent the regime. As a result, the existence of merits-based

*1 NWL SoC, Section 1.2*

redeterminations by the CMA is a critical factor in ensuring continued confidence in the regulatory framework and, therefore, in supporting continued investment into the sector.[2]

(6) We also recognise and value the independent role played by Ofwat in driving improvement across the sector and the expertise it has. Indeed, since privatisation it has been extremely rare that companies have felt the need to seek a redetermination from the CMA and this, alongside the significant improvements in investment, efficiency and service improvement that customers have enjoyed, is testament to the important role Ofwat has played on most occasions in providing challenging but fair settlements.

(7) The current situation is however unprecedented. Never in the three decades since privatisation have so many companies sought a redetermination at the CMA or its predecessor at the same time or across so many areas of Ofwat's decisions. Ofwat characterises the redetermination as a battle between customers and investors.[3] We do not recognise Ofwat's description of this process. We are fundamentally one of the best performers in the sector across a wide variety of benchmarks: we recognise many similar characteristics across the other appellants also. We prepared challenging business plans that were ambitious and strongly supported by customers but which Ofwat has materially amended to the dismay of the customer challenge groups, departing widely and materially from precedent in each of the building block elements often on weak evidential grounds. This becomes apparent in Ofwat's continued assertion that customers are only focussed on prices, when our evidence shows that they have wider concerns and demand high service performance, affordability, investment for now and the future, protection of the environment and stability of operations from their water company, we do them a grave disservice if we do not listen to this wider view. In carrying out its independent and expert cross-check on regulatory decisions which have departed materially from evidence and theory, the CMA is acting in the interests of customers. It is in this context rather than any other that the CMA should view its final decisions rather than Ofwat's characterisation of this as a battle between customers and investors.

(8) In reaching its final determination we therefore urge the CMA to consider the important role it plays in the broader regulatory system and the need for confidence to be retained in that system. And to take the steps it considers necessary to ensure that due process is scrupulously maintained and that it's decisions and underlying rationale are clearly explained and reflect the evidence submitted.

## 2.3 WE WERE PLEASED TO SEE THAT THE CMA'S PROVISIONAL FINDINGS SUPPORTED MANY OF THE ARGUMENTS THAT WE RAISED IN OUR SOC

(9) Our submissions in this redetermination have focused on the interventions that we consider to be necessary from the CMA in order to address the imbalance in the FD19 package[4] and to ensure that the overall price control settlement is consistent with a proper application of the WIA statutory duties.

(10) We were, therefore, pleased to see that important aspects of our position had been recognised and reflected in the CMA's PFs:

2 UKRN, Investor Guide, 2014 pp.33 , *"Regulatory accountability and Judicial Review: … The merits of regulatory decisions, which result in amendments to existing licences, can be appealed to the CAT or CMA. The most frequent such decisions are those that concern the periodic changes in licence conditions relating to price and service (price controls). The CMA and CAT are expert professional bodies with the experience and power to amend or overturn regulatory decisions. They are independent from central government, which is an important safeguard against their decisions being vulnerable to lobbying by special interest groups."*

3 *"At this relatively late stage in the redetermination process, the submissions made to the CMA have increasingly been dominated by the well-resourced company and investor voice, on occasion to the exclusion of other perspectives … Nevertheless, as the focus of exchanges has narrowed to concentrate on highly technical matters, there is a risk that the voice of the consumer is drowned out. There is accordingly a regrettable asymmetry of representation and perspective during this stage of the process."* Ofwat Final Response to WACC Working Papers, 27.1.21, para. 1.5.

4 See, for instance, NWL Reply to Ofwat's Response, May 2020, Section 2.

- the importance of supporting investment in resilience was recognised in the CMA's provisional decision to allow enhancement funding for our Essex Resilience Scheme. In doing so the CMA acknowledged that "*the narrow application of a specific assessment framework may miss wider implications*" and instead took a reasonable and proportionate decision, based on a balancing of the duties, that accepts that the relatively modest cost of addressing a material residual risk to customers is justified;[5]
- incentives such as setting an efficiency challenge and cost sharing rates must be structured so that they genuinely promote improved outcomes for customers, for example in terms of efficiency and service quality and do not discourage essential investment;
- in concluding that "*it is appropriate to set a pack of challenging PC targets*"[6] the CMA acknowledged the asymmetric risk this presents, including that "*an average performing company may expect to face some penalties*"[7] and took this into account both in its assessment of WACC[8] and its financeability cross-checks;[9]
- the allowed return must be set according to sound methodology, based on best regulatory practice and reflecting market evidence; and
- the overall settlement must ensure the financial sustainability of the business so that we have the resources to meet our service commitments to our customers and can continue to attract the external capital we need to properly finance our functions.

## 2.4 THE PASSAGE OF TIME HAS ONLY INCREASED THE STRENGTH AND RELEVANCE OF OUR ARGUMENTS

(11) We consider that the passage of time since the commencement of this process shows that our BP19 plans were well positioned and that our concerns about FD19 were valid and appropriate:

- a key influencing factor in Ofwat's FD19 decisions and its rhetoric throughout this process has been the misplaced assumption,[10] based on partial data about the AMP 6 period, that companies systematically outperformed against FD14.[11] Analysis of the full AMP 6 outturn data set clearly shows that assumption and Ofwat's statements about "*embarrassing outperformance*"[12] to be factually incorrect. Instead, it shows that PR14 control was well calibrated, with overall returns very close to base levels and an equal number of companies underperforming as outperforming against the base return.[13] This up to date information supports our proposition that the level of stretch and asymmetry in the FD19 package is neither justified nor required: the evidence does not support Ofwat's policy to deliver a step-change from PR14. Moreover, early information from the first year of AMP 7 similarly shows that the listed companies in aggregate are performing less well than they did during the same year of the previous AMP, further confirming that the PR19 package is asymmetric. [14] Finally, the 2019/20 costing information, use of which

*5 PFs, paras. 5.248 - 2.252.*

*6 PFs, para. 7.240.*

*7 PFs, para. 10.72.*

*8 PFs, paras. 9.670 – 9.673.*

*9 PFs, para. 10.72.*

*10 Even prior to receipt of the full AMP 6 outturn information we had demonstrated the flaws in Ofwat's assertions about systematic outperformance – see, for example, NWL Reply to Ofwat's Response, 27.5.20, Section 4.3.*

*11 See, for example, Ofwat - Reference of the FD19: Cross-cutting issues, March 2020, SOC243, para. 3.5 p. 7..*

*12 Ofwat Hearing Day One,15.7.20, p. 36 lines 9-10.*

*13 See, for example, NWL Post-Hearing Submission, 17.8.20, Section 3.1*

*14 Ofwat continues to dispute that the level of stretch in the FD19 package by asserting that "well-run efficient companies, notionally financed companies will expect to outperform on ODIs" and pointing to statements from the two listed companies about anticipated outperformance as evidence for that (CMA All Party Cost of Capital Round Table Hearing – Transcript (20.1.21), p. 73, lines 3-15). This evidence is not compelling.*

would increase company allowances,[15] further confirms that the FD19 package is too stretching and that companies are underfunded in their allowances for base costs;[16]

- the initial response by companies to Defra's 'Green Recovery' programme indicates both the desire of the companies to contribute to the country's economic recovery from the effects of the Covid-19 pandemic, but also the very real appetite for increasing the overall level of investment in resilience. The stringent criteria for selection within the scheme and the clear indication that Ofwat would not be willing to revisit price controls and the allowed return to support the funding of the schemes has, however, led to 13 of the 17 companies (to date) pulling out of Ofwat's process for securing additional funding. Specifically:
  - of the companies who did make submissions, we are aware of proposals amounting to £957m across three companies,[17] the majority of which require additional customer funding in AMP7 via an uplift to bills[18] in order to proceed; and
  - across a small subset of three of the remaining companies, however, we are aware of at least a further £1.5bn of potential green investment which was not put forward due to concerns about Ofwat's process and the absence of a reasonable return – a figure which almost certainly under-represents the scale of missed opportunity because it ignores ten other companies in the sector who may have developed proposals but who ultimately do not appear to have submitted evidence into this process.[19]
- at a time when the sector is clearly facing significant investment needs, borrowing costs are at all-time lows, there is headroom in customer bills and support for new investment and our regions are facing perhaps the worst economic recession of our lives it is disappointing that Ofwat continues its focus on short term bill reductions at the expense of longer-term investment;
- the provisional view on WACC confirms that the FD19 allowed return was too low and that the significant movement from the PR14 WACC was driven by methodological changes and not by market developments.[20] Even allowing for the current debate around the shifting views in the CMA's working papers, it remains clear that the CMA supports the need to aim up in setting the point estimate to account for the inherent uncertainties. There are also material concerns with many of the novel changes Ofwat made at FD19 in estimating the underlying parameters;[21]
- the CMA has further endorsed the importance of financeability and maintaining a strong investment grade credit rating based on the methodologies of the independent rating agencies. During the Covid pandemic the financial resilience of the water companies has never been more important, particularly as low inflation and additional costs coupled with more volatile revenues and bad debts have emphasised how important it is to maintain headroom in the cashflows and financial metrics of companies to respond to these shocks.[22] Indeed, during 2020 Ofwat needed to make significant interventions in the competitive non-domestic retail market to avert the real risk of widespread retailer failure and wholesalers have supported that intervention with consequential impacts on their

*15 On the use of 2019/20 APR data in econometric modelling, Oxera, 23 October 2020 PFREP002, Table 4.3.*

*16 NWL Response to 2019/20 Working Paper,*

*17 Based on submissions from Severn Trent https://www.stwater.co.uk/content/dam/stw/regulatory-library/life-beyond-the-pandemic-customer-overview.pdf, United Utilities https://www.unitedutilities.com/green-recovery-proposals and South West https://www.southwestwater.co.uk/greenrecovery . We are also aware that Thames Water may have made a submission.*

*18 Based on page 2 of Severn Trent's submission.*

*19 Note that at the time of writing Ofwat has published nothing about the Green Recovery submissions it has recieved*

*20 We note that despite the strong evidence to the contrary, Ofwat continues to attribute the majority of the WACC reductions from PR14 to "movements in market parameters" (Ofwat Final Response to WACC Working Papers, 27.1.21, para. 2.17).*

*21 See the table setting out the novel aspects of FD19 parameter estimation, compared to past price controls and redeterminations, in NWL Reply to PFs Responses, 11.20, Annex 3.*

*22 We ran Covid specific scenarios on financeability in NWl Reply to Ofwat's Response, 27.5.20, Section 7.5.2.1.*

cashflows (the retail market's resilience has been supported by strong wholesaler credit quality); and

- of course, at this difficult time, the sector has always needed to maintain an affordable package to customers. Even with the additional investment and the increase in the allowed return from the consultation our bills are likely to fall in line with the 21% that we set out in our business plan which was widely supported by 91% of our customers. At the same time our commitments to eradicate water poverty by 2030 and our sector leading support for vulnerable customers, as well as the extra support we have made available during the pandemic, means that customers will continue to receive a very affordable service.

# 3 FURTHER CHANGES ARE NEEDED TO DELIVER THE BEST OVERALL PACKAGE 'IN THE ROUND'

(12) Whilst the PFs do represent an improvement on FD19, there remain important aspects of the PFs that still need to change if we are to achieve our aim of a balanced package that delivers for customers, supports investment in resilience and is financeable. We recognise the volume of material that the CMA has already received on these substantive issues and do not intend to revisit those arguments and evidence in detail. We do, however, want to provide some focused comments on the three areas that we consider have material impacts as the CMA moves to finalise its decisions. These comments reflect the fact that, since publication of the PFs, there has been no further consultation from the CMA with respect to either sewer flooding or the broader issues around cost allowances (except in relation to 2019/20 data and leakage), so our comments there are focused on summarising the key issues and providing updated information. Our response on WACC is broader and reflects on the latest submissions from Ofwat and third parties.

(13) In particular, we would encourage CMA to:

- update the WACC based on market evidence and accepted economic theory and address the clear errors inherent in its latest position as set out in the working papers to ensure that the package remains financeable and provides a reasonable return on investment (see Section 3.3 below);
- acknowledge and address the persisting gap between our allowed and anticipated efficient costs to ensure that we are properly funded to carry out our functions (see Section 3.2); and
- recognise the importance to our customers of taking an enhanced approach to the reduction of sewer flooding risk in our region, during a price control period where the level of bill reductions and wider economic challenges provides an opportune moment to make this kind of resilience investment, and allow enhancement funding for our sewer flooding resilience programme (see Section 3.1).

## 3.1 ALLOWING NWL TO INVEST IN ITS PROACTIVE SEWER FLOODING WORK

(14) Following the PFs and the discussions about sewer flooding at the post-PF's hearing in December, we looked closely again at the rationale for our investment proposals and the concerns voiced by the CMA. We concluded that these remain sensible proposals that reflect our customers' desire to deliver increased resilience through the reduction of the risk of sewer flooding, above and beyond the type and level of protection that can be achieved through our base programme. Indeed, our Customer Challenge Group also urged us to continue to press for these investments. As such, we considered that it was incumbent on us to continue to pursue the case for investment by reviewing and adapting the proposals to demonstrate that the risks identified by the CMA have been adequately mitigated.

(15) Our revised proposals[23] are for an enhancement funding allowance of £64.3m to deliver proactive flood risk reduction to 5,920 properties during AMP7, along with stronger mechanisms to protect customers against under-delivery. During the preparation of our BP19 71% of customers supported investment in this scheme.

(16) We now have visibility of the draft outputs of the first cycle of the Drainage and Wastewater Management Planning **(DWMP**) process that were produced in December 2020.[24] These assessments, never undertaken before, for the first time bring some formality to the long-term planning for climate change and flooding impacts on wastewater systems in a comparable way to Water Resource Management Plans on the water service. While these are only draft outputs, and some refinements are required to increase consistency across companies,[25] they clearly show a material increase in flooding risk between the 2020 baseline and the 2050 assessment[26] as a result of climate change and urban creep.[27]

**Figure 1: DWMP risk analysis – Risk of sewer Flooding in a 1:50 year storm, 2020 baseline (CONFIDENTIAL)**

[✂]

Source: DWMP, figure 5

**Figure 2: DWMP risk analysis – Risk of sewer Flooding in a 1:50 year storm, 2050**

[✂]

Source: WaterUK DWMP, figure 6

(17) [✂].[28]

(18) In particular, this latest national assessment resulting from the DWMP process shows a material increase in risk in our Northumbrian operating area. This is consistent with the increase in risk we have articulated as justifying the need for the scheme.

(19) The DWMP planning framework places drainage planning on the same footing as the process for delivering 25-year Water Resource Management Plans (**WRMPs**) - many comparisons between the two are drawn in the DWMP framework.[29] It is a well-established part of the WRMP and business planning process that when climate change creates an imbalance between water demand and supply, and hence a risk to companies' ability to maintain supplies, that there is a clear route for associated mitigations (for example a new water resource) to be funded as enhancement.[30]

(20) This approach is entirely consistent with our arguments regarding the mitigation of increasing flood risk due to climate change (i.e. that the associated costs are highly unlikely to be met from either base allowances or ODIs). In particular, we note that:

- drivers relating to climate risk are not reflected in Ofwat's approach to modelled base cost allowances;[31]

*23 These were set out in detail in NWL Post-PFs Hearing Submission, 17.12.20, Section 3.*

*24 WaterUKs "Baseline Risk and Vulnerability Assessment (BRAVA) outputs for the first cycle of Drainage & Wastewater Management Plans (DWMPs)" December 2020 (**WaterUK DWMP**) (**NWLFS-001**) (CONFIDENTIAL)*

*25 As such the figures should be viewed as a collection of company / regional assessments, as opposed to a national assessment*

*26 NWLFS-001 WaterUK DWMP, Figures 5 and 6. (CONFIDENTIAL)*

*27 NWLFS-001 WaterUK DWMP, p.2. (CONFIDENTIAL)*

*28 Northumbrian, Yorkshire, United Utilities and Welsh Water all sought additional funding via a combination of special cost claims (base) and enhancement funding. See NWL SoC Table 40.*

*29 DWMP framework documents can be found at: https://www.water.org.uk/policy-topics/managing-sewage-and-drainage/drainage-and-wastewater-management-plans/*

*30 Enhancement requests relating to supply/demand balance would typically be submitted on Ofwat data table WS2, rows 7-10, 46-49, for "enhancements to the supply/demand balance".*

*31 NWL Post PFs Hearing Submission, Section 3.4.*

- the ODI mechanism is a framework for marginal improvements but not major enhancement;[32] and
- mitigating an increasing risk (which by definition can only keep risk and hence associated performance broadly stable) cannot trigger ODI rewards (which only result from improving performance).

(21) These observations regarding the WRMP and DWMP process clearly support our view that there is a clear gap in the regulatory framework regarding the allowance of costs for investment to mitigate increasing flooding risk.[33]

(22) Finally, we note that the impact of climate change on flood risk continues to be felt across the UK,[34] with recent atypical rainfall in January resulting in more flooding in our operating area than would otherwise have been expected.

(23) As such, we reiterate our request to the CMA to allow enhancement funding for this important resilience scheme.

## 3.2 ADDRESSING THE COST GAP FOR NWL

(24) In our SoC we identified a cost gap of c.£85m.[35] In our response to the PFs that gap had closed marginally to c.£83m.[36] Where we recognised the rationale underpinning the CMA's provisional decision to reject certain of our arguments, we accepted those in our response to the PFs.[37] We also set out our view as to what might be driving this remaining cost gap, including several factors which were not accepted in the PFs, but which we believed deserved further consideration.[38]

(25) With respect to the need for an energy RPE We have provided strong evidence that we face real price impacts on our power costs. We have provided: a) information that showed a clear wedge between the historical cost inflation and CPI based on the independent BEIS index;[39] b) information that confirms our power costs are efficient;[40] and c) an independent expert forecast which similarly shows that power costs will increase faster than CPI.[41]

(26) In relation to allowances for growth costs, we have shown that: a) growth drivers are already captured by the cost assessment process and its models;[42] b) the ex-post modelling adjustment duplicates a change in allowances which is already made by the drivers used in the base cost models which are highly correlated with this adjustment factor;[43] and c) in any event, the ex-post adjustment erroneously includes sewer flooding costs which in fact have a negative correlation with growth (i.e. companies with high growth actually face lower sewer flooding costs – see Figure 3).[44]

*32 NWL Post PFs Hearing Submission, Section 3.2.*

*33 NWL Post PFs Hearing Submission, para. 79.*

*34 For example: https://www.bbc.co.uk/news/uk-55743246*

*35 NWL SoC, Section 5.9.1, Table 30.*

*36 NWL Response to PFs, para 10 and Annex 3.*

*37 This includes the CMA's PFs position on an RPE for chemicals, cost sharing rates and enhancement cost efficiencies (see NWL Response to PFs Part B Sections 3.5.4, para. 404, and Section 4.5 respectively).*

*38 NWL Response to PFs, Part B section 3.*

*39 NWL SoC Section 5.5.3.2 and NWL Reply to Ofwat's Response, 27.5.20, Section 4.5.2.1.*

*40 NWL Reply to Ofwat's Response, 27.5.20, Section 4.5.2.2.*

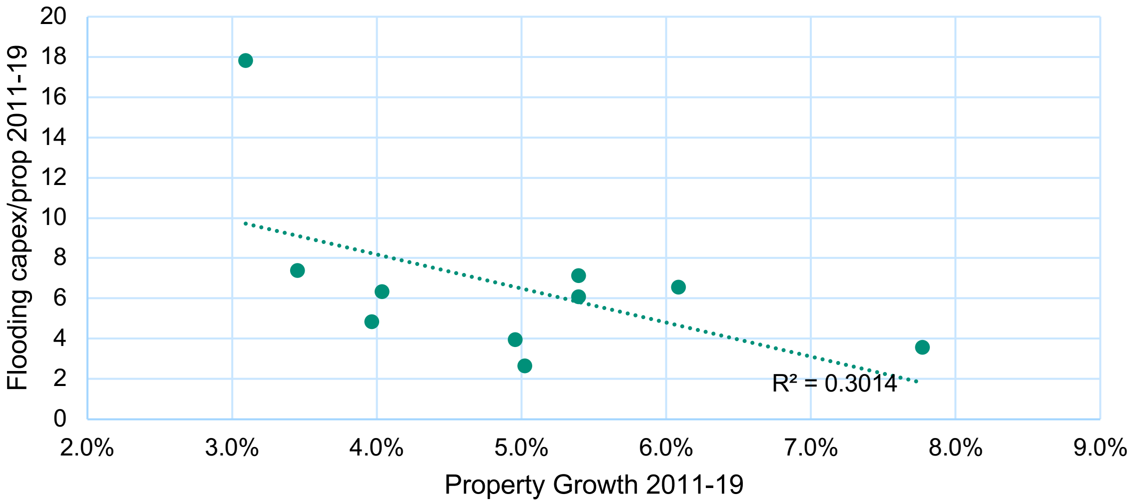
*41 Northumbrian Water Group Forecast of GB electricity costs: 2020-21 to 2024-25 (CI Code 20-4107), Cornwall Insight, 22.10.20 (Cornwall Insight Forecast 22.10.20), PFREP013 and Appendix to Cornwall Insight Forecast 22.10.20, PFREP014. See also NWL Response to PFs Section 3.5.2.*

*42 NWL SoC, Section 5.6.4.2.*

*43 NWL Response to PFs, Section 3.6.1.*

*44 NWL Response to PFs, Section 3.6.2; NWL Reply to PFs Responses, Section 4.6; NWL Post PFs Hearing Submission, Section 2.4.*

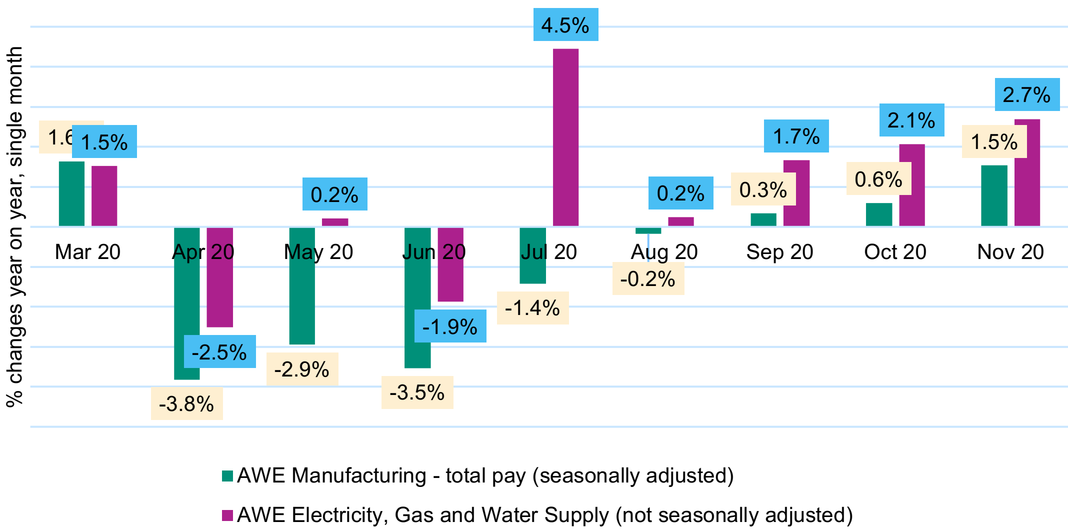
### Figure 3: Sewer flooding capex v. property growth




Source: NWL analysis using data from Models WWW1 & WWW3. The y axis is £/total properties. The scatter graph is plots for individual companies.

(27) The CMA has made an error in applying productivity improvement data to abstraction costs that are essentially taxes on the companies and are well outside of management control.[45] We also provided clear evidence of the impact of Covid on productivity[46] and raised concerns about the Ofwat's proposed index for reconciling wage RPEs.[47] In the latter case new data released since December further underlines the deviation of the manufacturing index proposed from water sector wages as can be seen in Figure 4. Analysis also shows that the proportion of furloughed workers is materially higher in the manufacturing sector, further supporting this distortion.[48] This data conclusively shows that the wage index proposed by Ofwat is not appropriate.

### Figure 4: Avg. weekly earning index manufacturing vs utilities update

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*45 NWL Response to PFs, Section 3.4.2.*

*46 NWL Response to RFI027 and supporting analysis from Turner & Townsend regarding the supply chain costs associated with Covid-19 which might have cost and/or productivity implications for our capital programme: RFI027-002 and RFI027-003.*

*47 NWL Response to PFs, Section 3.5.3; NWL Post PFs Hearing Submission, Section 2.3.*

*48 Data from ONS shows that the proportion of furloughed workers in 'Water supply, sewerage waste management and Remediation activities' is between 10-11% compared to 26-29% in 'Manufacturing', data sourced from ONS: Furloughing of workers across UK businesses. See: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/furloughingofworkersacrossukbusinesses/23march2020to5april2020 and https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/furloughingofworkersacrossukbusinesses*

Source: This is an updated version of Figure 4: NWL Response to PFs.[49] Data sourced from ONS Monthly Wages and Salaries Survey

(28) Beyond these broader points, the full set of quality checked 2019/20 cost data became available in December 2020.[50] This data provides additional confirmation of the position put forward by all four Disputing Companies that the allowances provided by Ofwat in FD19 were insufficient. We have responded to the CMA's consultation on this information separately and do not repeat that detail here but, in short, we believe that the CMA's proposal to exclude this data is indefensible. It is clearly at odds with past precedent (including that of the CMA itself) and the upward 'distortions' (perhaps accounting for about £1-200m from a total expenditure of £4bn) that the CMA has highlighted as a rationale for discounting this information entirely from its analysis are in fact not distortions, immaterial anyway and much smaller than the downward distortions (of c.£8-900m) that are clearly visible from the data.[51]

(29) In the PFs the CMA made a change to Ofwat's policy and methodology for funding leakage enhancement allowances. Whilst we satisfy the revised criteria for funding, which should result in an uplift to our allowed costs of c.£10.8m,[52] the CMA's provisional decision to treat us differently to the other Disputing Companies effectively penalises us for having complied with Ofwat's original methodology.[53] At the same time, however, the CMA has used our information on our efficient costs to reduce the allowances for the other companies by a much greater amount than we are requesting for NWL in total.[54]

(30) These issues relating to our costs are captured in Figure 5 below. If these issues were all addressed in our favour, thereby closing the cost gap and removing the cost asymmetry in the PR19 package, we acknowledge that the collective impact would be to increase costs above those set out in BP19. We reiterate once again that we are not seeking a redetermination that gives us more totex than we set out in BP19: we simply want to ensure that the correct decisions are taken that will support an allowance that reflects our anticipated efficient costs for AMP 7.

(31) We are the benchmark company for wastewater and at the upper quartile for water. On a unit cost basis we are one of the most efficient companies in the sector.[55] We are not starting from a position of inefficiency. Our relative position across the sector, the range of factors that drive the gap between our efficient and allowed costs and the strong evidence supporting the existence of the underfunding clearly demonstrates that the true gap to efficient costs is likely to be much higher than we are seeking. Despite this, we have remained very clear that we are only seeking the level of cost allowance requested in BP19, which was widely supported by 91% of our customers and would not expect the CMA to adjust our allowed costs beyond that.

*49 Chart is updated version of Figure 4, p.24 of NWL Response to PFs, Section 3.5.3.1*

*50 On 1 February Ofwat raised a query with NWL regarding the reported 2019/20 data. As the timing of the query and requested response appears related with the process, we have attached a copy of the correspondence for the CMA: Email Ofwat to NWL 1 February 2021 and response NWL to Ofwat 3 February 2021: (**NWLFS-002**) (CONFIDENTIAL).*

*51 NWL Response to 2019/20 Working Paper.*

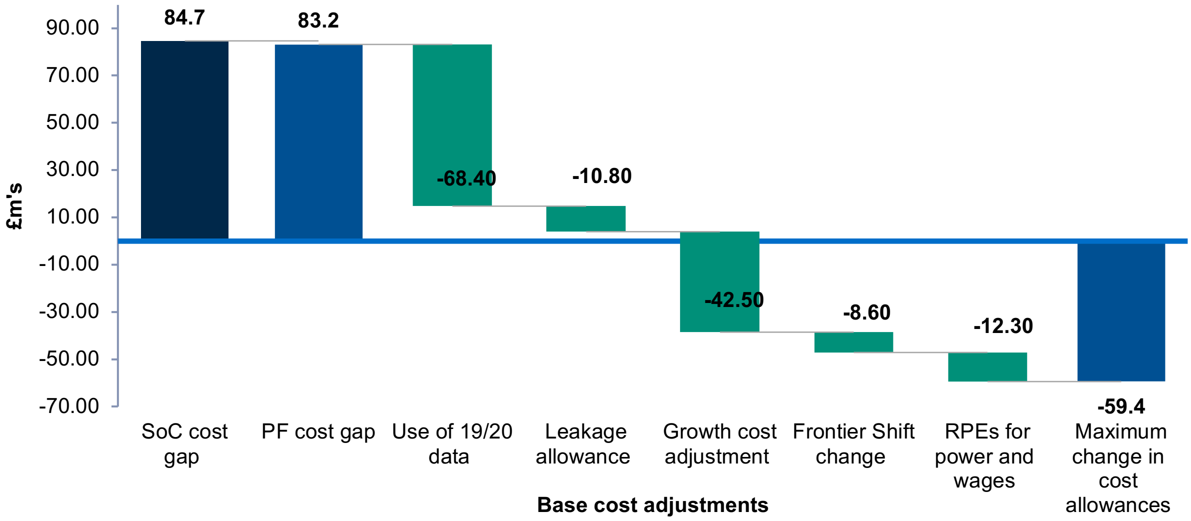
*52 NWL Response to Leakage Working Paper, para. 8.*

*53 NWL Response to Leakage Working Paper, Section 1.3.*

*54 NWL Response to Leakage Working Paper, para. 46.*

*55 NWL SoC, Section 2.6.1.3.*

**Figure 5: Waterfall chart of NWL cost gap and elements of our case (£ms)**




Source: NWL analysis

## 3.3 ENSURING THAT THE PACKAGE REMAINS FINANCEABLE AND PROVIDES A FAIR RETURN ON INVESTMENT

### 3.3.1 We continue to support the CMA's approach to financeability

(32) We continue to support the CMA's position on financeability as articulated even more strongly in its recent working papers on the cost of capital.[56] In particular we strongly support the importance that has been placed on the independent role of the credit rating agencies in this assessment[57] and the recognition of the WACC as a key driver of financeability.[58] This position must be maintained through to the CMAs final decisions. Financeability is a critical issue for customers in a capital-intensive sector like water.

(33) Whilst the CMA has applied financeability as a cross check on the allowed return, the implication of the recent WACC consultations is that the CMA considers that a 30-basis point reduction in the WACC remains consistent with that position. Once the errors in the CMA's consultation are corrected,[59] however, the outcome it proposes is simply not financeable. If this is confirmed in the final determination, we do not see how this can be a rational outcome in light of the CMA's statutory duties and certainly not consistent with the CMAs previous statements.

(34) Finally, the WACC roundtable revealed discussions and thinking that, if implemented, would represent very material departures from the PFs without these issues being aired in the consultation. For example, there was a suggestion in the Roundtable that a notional gearing of 55% may be appropriate[60] although this has not been signalled at any time during the previous discussions and is not addressed in the recent consultation. A similar change is also suggested in Ofwat's response to the WACC consultation and the supporting report from Europe Economics.[61] This change would: not aid financeability for the reasons previous set out;[62] fail to reflect the gearing across the sector (there are no companies at this level of gearing in 2019/20); and represent a material change from the PFs without further consultation.

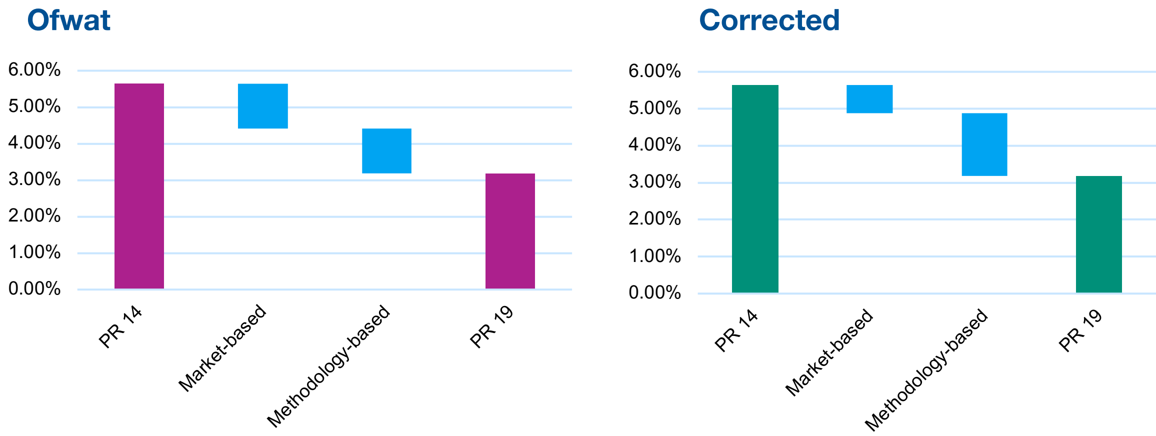
*56 Point estimate for the Cost of Capital Working Paper.*
*57 Point estimate for the Cost of Capital Working Paper, para. 97.*
*58 Point estimate for the Cost of Capital Working Paper, para. 15.*
*59 NWL Initial Response to WACC Working Papers, 18.1.21, Section 4.*
*60 CMA, All Party Cost of Capital Round Table Hearing – Transcript (20.1.21), pp. 126-129.*
*61 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 2.76; and Europe Economics position on Debt Beta, January 2021.*
*62 NWL Reply to PF Responses, Section 3.1.4.*

### 3.3.2 Our response to Ofwat's reply to the CMA's consultation

(35) We have responded to CMA's consultations on selection of a point estimate and the CoD allowances and do not seek to repeat those points here.[63] Instead we focus on the comments made by Ofwat and its advisors in their consultation replies.

(36) Ofwat provides analysis that it considers supports its proposition that that the majority of the changes that have driven the shift in the WACC from PR14 to PR19 simply reflect market movements rather than changes to the underlying methodology.[64] Ofwat's analysis is simply wrong. In particular, it suggests that changes to the Risk Free Rate (**RFR**) were wholly driven by the market rather than Ofwat's unprecedent step to move to a spot rate for RFR based on Index Linked Gilts (**ILGs**). Once this mistake in Ofwat's analysis is corrected, the previous position, as articulated by all of the Disputing Companies, is clear. The drop in the allowed return – in particular the allowed cost of equity - in FD19 is driven in large part by changes in Ofwat's methodological choices, rather than changes in market rates. This is demonstrated in Figure 6 which shows how Ofwat's view of the market vs methodology split for the CoE compares to a corrected market vs methodology split.[65]

**Figure 6 : Waterfall of market vs methodology changes to the Cost of Equity:**




Source: NWL analysis of CoE parameters, this analysis is consistent with the KPMG expert report on the WACC submitted alongside our Statement of Case. Please note that the analysis presented in the CoE video is based on the approach provided in our Statement of Case

(37) In the following sections we respond to Ofwat's latest position with respect to each of the individual parameters. Looking at this in the round, overall we propose a final decision on WACC that: 1) accepts the enhancements to the CMA's PFs in terms of the use of a collapsing average for the Cost of Embedded Debt but retains the appropriate 20 year period; 2) retains the appropriate level of 'aiming-up' on the CoE; and 3) corrects the clear errors in theory and practice in the CMA's recent WACC consultations. This is the only common position that would likely meet all key tests including enabling the CMA to properly meet its duties. We calculate this WACC at 3.4% (CPIH).

#### 3.3.2.1 Risk Free Rate

(38) We support the CMA's use of AAA bonds as a suitable benchmark for setting the RFR. This is both theoretically sound and represents a more evolutionary approach than the unprecedented move to spot rates on ILGs adopted by Ofwat at PR19.[66]

*63 NWL Initial Response to WACC Working Papers, 18.1.21; NWL Final Response to WACC Working Papers, 27.1.21, and the associated supporting documents.*

*64 Ofwat Final Response to WACC Working Papers, 27.1.21, Table 2.1.*

*65 We present the market vs methodology split for CoE only, because the debt market vs methodology split involves a large degree of judgment. For example, it is not clear whether Ofwat's increase in the outperformance wedge from 15 to 25 basis points is driven by market or methodology.*

*66 NWL Response to PFs, paras. 259-261.*

(39) We have previously discussed the Brennan model and the extent to which the appropriate question is the marginal investor in the water sector or the market.[67] We note that Wright and Mason (**W&M**) in their most recent submission have helpfully now clarified that the relevant marginal investor is the marginal investor 'in the market'[68] consistent with our previous statements on this issue. This effectively endorses the CMA's approach in the PFs and confirms that a concern raised in response to the PFs by Ofwat and their advisors[69] was unfounded.

(40) Ofwat and its advisors advance various arguments that there is likely to be a liquidity premium on AAA corporate bonds[70] driven by the infrequent nature of their trading. Similarly, in the WACC roundtable and in various submissions, Oxera has argued that there is a clear convenience premium on ILGs.[71] Both benchmarks are likely to suffer from some form of market distortion but these will work in both directions as the examples illustrate. Either all benchmarks should be adjusted for distortions (e.g. ILGs uplifted for convenience premia) or a range of unadjusted benchmarks should be used, acknowledging that not one benchmark perfectly meets all the RFR criteria. The CMA has done the latter,[72] which is appropriate in light of past precedent and the inherent difficulty in measuring the size of the distortions. We note that the CMA uses an estimate of the liquidity premium when computing the debt beta. However, this is for a different exercise and as the CMA acknowledges, one of the drawbacks of the decomposition approach to estimating debt beta is the difficulty of estimating liquidity and other premia within the spread accurately[73]. For this reason we do not agree with Ofwat that there is inconsistency of approach of the same liquidity adjustment is not made to AAA bonds in the calculation of the RFR.

(41) We do continue to believe that the long-run equilibrium evidence should have some bearing on the CMA's estimates.[74] For R* the benchmark model contained in a paper authored by Malik and Meldrum (2014) indicates that market expectations for long-run UK interest rates are -0.3% real CPI (-1.2% real RPI) as of July 2020. The updated R* therefore supports the upper end of the CMA's range. The yield on US TIPS with 20-years remaining maturity is c.-0.5% (real CPI).[75]

#### 3.3.2.2 Total Market Return (TMR)

(42) At this late stage in the process Ofwat and W&M appear to be suggesting that the CMA should assume a material degree of serial correlation.[76]

(43) In this regard, we note that regulatory precedent and the weight of academic literature, supports the current CMA position of assuming that there is insufficient evidence of material serial correlation to take a firm position on return predictability. Indeed, this was the position adopted in the UKRN report, which W&M co-authored:

*"We are unable to point to a methodology that would capture predictability of the EMR that would be as straightforward to implement as the existing approach, nor-given the still-contested and partial nature of the evidence for predictability-that would be robust to criticism."* [77]

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*67 NWL Reply to PF Responses, Section 1.3.2.*

*68 Wright & Mason, Comments in response to the CMA roundtable on the cost of capital, 26.1.21, Section 1.1, para. 1.1.4.,*

*69 Ofwat Response to PFs: Risk and Return, para. 1.21.*

*70 Ofwat Final Response to WACC Working Papers, 27.1.21, paras. 2.53 – 2.55; Europe Economics position on Debt Beta, January 2021.*

*71 Oxera, The asset risk premium relative to debt risk premium for PR19; REPCOC004 CMA Letter – Julian Franks; CMA, All Party Cost of Capital Round Table Hearing – Transcript (20.1.21), p. 91 line 4 – p.92 line 23.*

*72 PFs, paras. 9.134-9.139.*

*73 See for example PFs, para 9.314 and 9.316*

*74 NWL Response to PFs, Section 7.2.3.*

*75 See: https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=realyield*

*76 Ofwat Final Response to the WACC Working Papers, paras. 2.53 - 2.55.*

*77 Recommendation 5 of the UKRN Report*

(44) In the WACC roundtable, analysis by PwC was referred to, which suggested that there was a large degree of serial correlation and in turn that an uplift as low as 0.3 percentage points from the geometric mean could be justified.[78] However, PwC's latest submission to the CMA demonstrates that the uplift of 0.3 percentage points was downward biased due to the use of overlapping returns in the analysis.[79] The CMA should not therefore place weight on this evidence, when considering the appropriate approach to averaging.

(45) We continue to believe that some weight should be placed by the CMA on the non-overlapping estimates of the TMR. There are existing statistical challenges with other estimates beyond the small sample size issue that the CMA has identified and this is not a strong basis for rejecting these estimates. [80]

#### 3.3.2.3 Beta

(46) In its recent submission Ofwat helpfully recognises the importance of the frequency of pandemics in consideration of inclusion of the data for the 2020 Covid period, albeit in a rather gloomy observation of the future.[81] As we have set out in our previous response and articulated in a short visualisation on the key CoE elements, it would not be credible to use the 2020 data to set the beta estimates using a methodology consistent with the PFs.[82] This would imply that between 2 and 10 years of the 20-year investment horizon are likely to be affected by lockdowns and the levels of government intervention seen in 2020. This is not a credible position where similar levels of Government intervention (as measured by spending levels relative to GDP) have only occurred in 1 in 20 years and the last comparable pandemic occurred 102 years ago. Instead the CMA should exclude the Covid period from its analysis or use the longest-run of data to estimate the beta, which would support a beta estimate towards the top of the CMA's range.

(47) At the WACC roundtable there appeared to be consensus of the problems associated with using rolling beta estimates amongst the academic advisors. We note that neither Ofwat, nor any of its advisors have raised any further objections to beta estimation in their responses to the WACC consultation. The CMA should place no weight on rolling beta estimates.

#### 3.3.2.4 COE distributions

(48) The CMA proposes to alter its position in relation to the point estimate for the CoE using distribution analysis of the underlying parameters.[83] This distribution analysis forms the basis of the CMA's justification for moving to a 25bp level of aiming-up rather than 50bps. The distribution analysis is, therefore, clearly important and represents an enhancement to the aiming-up process. It seems odd for W&M and Ofwat to suggest otherwise.[84] Otherwise the CMA has no basis for its point estimate decision and, given the clear weaknesses that we have articulated with that distribution analysis it is using, it would simply be clear that the point estimate reached was incorrect.

(49) We provided two sets of revised distribution analysis in our initial and final responses to the consultation.[85] The first was clearly described as "*illustrative*".[86] We do not agree with the

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*78 In the WACC roundtable, Professor Gregory suggested that use of overlapping returns may well be the source of the unusual findings in the PwC analysis – see CMA, All Party Cost of Capital Round Table Hearing – Transcript (20.1.21), p. 131, lines 1 - 2.*

*79 PwC – Setting the TMR assumption: adjusting geometric returns, January 2021, paragraph 14*

*80 NWL Response to PFs, Section 7.3.1.*

*81 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 2.41: "Far from being a one-off, research suggests that major pandemics are likely to happen more frequently in future".*

*82 The evolution of Beta through the Covid Crisis, AGRF, January 2021; NWL Final Response to WACC Working Papers, 27.1.21, Section 4; and NWL Video on the Cost of Equity: https://www.youtube.com/watch?v=4y6bugLYVKQ&feature=emb_logo.*

*83 Point estimate for the Cost of Capital Working Paper.*

*84 CMA, All Party Cost of Capital Round Table Hearing – Transcript (20.1.21), p. 77 lines 7-11; Ofwat Final Response to WACC Working Papers, 27.1.21, para. 2.15.*

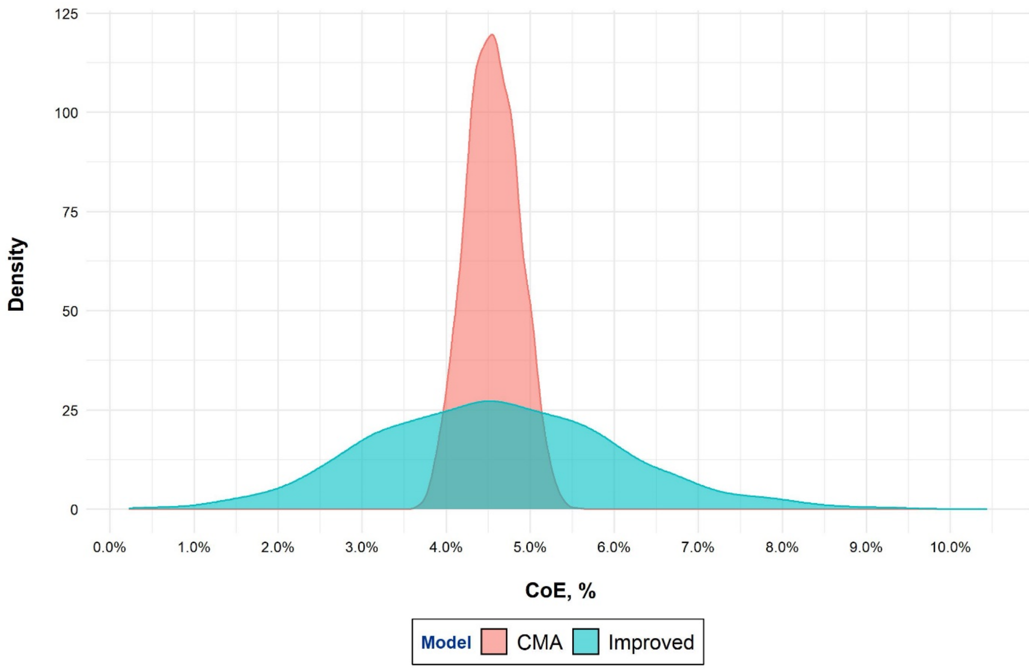
*85 NWL Initial Response to WACC Working Papers, 18.1.21, Section 2.1.2; NWL Final Response to WACC Working Papers, 27.1.21, Section 3, as well as Annex 1: a simulation of the CoE for the Water Industry, AGRF January 2021 and Annex 2: Beta Simulation.*

*86 NWL Initial Response to WACC Working Papers, 18.1.21, para. 23.*

criticisms raised by Ofwat and its advisors about the initial analysis,[87] but nevertheless reiterate that the analysis was only intended to be indicative and was updated by Professor Gregory for the final submission.[88] We respond to some of the key points here:

- Ofwat and its advisors raise concerns that distributions fall outside past regulatory decisions and are therefore unreasonable.[89] The distribution analysis seeks to address the risk of uncertainty in the underlying WACC parameter ranges - this is fundamentally a statistical exercise (reflecting that the uncertainty is a statistical problem). The fact that some of the probability distributions fall outside of previous decisions is purely a function of the statistical properties of the underlying parameters. It is not surprising and nor does it weaken the analysis undertaken which better reflects those statistical characteristics. The CMA has used similar analysis in estimating the level of asymmetry in the package and reaching its decision of including a 15bp uplift in the allowed return; and
- Ofwat and W&M dispute the aiming-up amounts in our probability distribution analysis on the basis that the results are distorted upwards because of the higher mean CoE in the simulations.[90] However, it is the relative uplift that matters for the amount of aiming-up to achieve certain percentiles, rather than the absolute numbers. Figure 7 illustrates this by setting the mean CoE for our probability distribution models to be equivalent to the CMA's. It is evident that the wider distribution remains, such that the degree of aiming-up, to achieve a given percentile, under the two models remain materially different.

**Figure 7: Analysis of CMA and NWL updated distribution analysis**




Source: NWL analysis of CMA versus improved distribution

(50) We also note that the references to NZCC precedent made by Ofwat are partial and selective.[91] The NZCC guidance clearly states that aiming-up is done on case by case

*87 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 2.13; Wright & Mason, Comments in response to the CMA roundtable on the cost of capital, 26.1.21, Section 2.1.*

*88 NWL Final Response to WACC Working Papers, 27.1.21 and Annex 1 and Annex 2.*

*89 Wright & Mason, Comments in response to the CMA roundtable on the cost of capital, 26.1.21, para. 2.1.6.*

*90 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 2.13*

*91 Ofwat Initial Response to WACC Working Papers, 18.1.21, para. 2.60; Ofwat Final Response to WACC Working Papers, 27.1.21, paras. 2.7-2.10.*

basis.[92] In making its case Ofwat refers to various NZCC decisions in relation to fibre investment in telecoms where the NZCC has chosen not to aim-up or 'aim straight'.[93] That sector is clearly not comparable to the water sector, where the consumer detriment of underinvestment is much greater than failing to invest in fibre roll-out where there are some competitive alternatives for customers and where the infrastructure represents much less of an essential service. For example, as well as regulated fibre there are copper connections, other broadband networks, wireless connectivity and competitive threat from 5G and other technologies. This means that an outage for fibre drives a much lower cost to the end consumer. Where the recent NZCC decisions are considered for energy networks (a better comparator to water in this context) the decisions do involve aiming up.

(51) The CMA is right to 'aim-up' and in doing so it is sensible to use the distributional analysis as it has done in reaching its decision in relation to the 25bps in its consultation. However, there are errors in the distributional analysis undertaken and the Gregory analysis is clearly superior. This analysis implies aiming up of 34bps to 67th percentile plus 15bps for asymmetry or 50bps to 75th percentile (the CMA's PF position). An uplift of 50bps is the minimum that should be considered by the CMA.

#### 3.3.2.5 COD

(52) Ofwat's position on the allowance for CoD has changed materially throughout the CMA process and the calculations in its response to the CMA's consultation are deeply flawed.

(53) Ofwat adopts a myriad of different positions and justifications on CoD but there is no overarching principle which could underpin a clear, stable and predictable policy for remunerating the cost of embedded debt.

(54) Ofwat in some places argues that 20Y is the right investment horizon for debt and (in error) that this is achieved by its approach based on asset lives and the years to maturity of the iBoxx…

*"It is therefore more accurate to describe our allowance as remunerating historic debt of up to 20 years tenor at issuance. We consider the 20 years spanned by our final determination approach to be fairly matched with the roughly 20 year average asset life… as implied by RCV run-off rates, and also the weighted average years to-maturity of the iBoxx A/BBB (21 years)."*[94]

(55) … but in others states that asset lives are not relevant:

*"there is no reason to consider that company treasury policies (or the regulatory determination of trailing averages for embedded debt) should by underpinned by underlying asset lives."*[95]

(56) … and in others still that 20Y is too long,[96] or that the length of the trailing average does not matter as when debt was raised is not a material driver of the cost of debt.[97]

(57) Similarly Ofwat at PR19 argued that the iBoxx benchmark reflected the tenor at issue across the sector,[98] but now argues that the average tenor is materially different to the benchmark.[99]

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*92 NZCC Fibre Input Methodologies, Main Final Decisions – reasons paper, 13 October 2020, paras. 6.668 to 6.682 and para. 6.846: https://comcom.govt.nz/__data/assets/pdf_file/0022/226507/Fibre-Input-Methodologies-Main-final-decisions-reasons-paper-13-October-2020.pdf.*

*93 NZCC Fibre Input Methodologies, Main Final Decisions – reasons paper, 13 October 2020:*

*94 Ofwat June Response, Risk and Return, para 3.39*

*95 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.10*

*96 Ofwat Response to PFs, Risk & Return, para. 4.17.*

*97 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.21 where Ofwat suggests that debt captured by the length of the trail may be a distraction from more important issues which are causing company underperformance against the cost of debt working paper's 4.52% index-led benchmark (e.g. high gearing and expensive swaps).*

*98 "We consider the above points on legitimacy are important. However, we also note that the average tenor of debt in the iBoxx non-financials for A and BBB credit ratings is 21 years. This is broadly consistent with the tenor of around 18 years for the sector. Tenor is one of the key determinants of the spread of corporate debt over gilts". Ofwat (July 2017) Delivering Water 2020: consultation on PR19 methodology. Appendix 13: Aligning risk and return. https://www.ofwat.gov.uk/wp-content/uploads/2017/07/Appendix-13-Risk-and-return.pdf*

*99 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.16.*

(58) In the past Ofwat has compared the years to maturity of the iBoxx to tenor at issue for the sector.[100] More recently Ofwat has argued that years to maturity or tenor outstanding data for the sector (although inconsistent with its previous approach) supports a shorter trailing average…

*"The weighted average years-to-maturity of the iBoxx A/BBB 10yrs+ index over 2000-2019 is too long, at 19.4 years, compared with the current 13.2 years for the sector."*[101]

(59) … but now acknowledges that tenor at issue could be twice the years to maturity.[102] This suggests its previous comparison to the iBoxx was not on a like-for-like basis but implied that there should be some correspondence between these two datapoints.

(60) Ofwat oscillates between 'actual' and benchmark-led approaches, arguing initially in the referral process that its approach was benchmark-led with a 'cross-check' against actuals[103] and more recently that the benchmark approach should be adjusted to align with industry average costs.[104]

(61) Ofwat has also at different stages positioned its policy as supporting recovery of 'efficient' costs.[105] More recently this has been downgraded to (more ambiguously) what Ofwat considers 'reasonable' costs ex post.[106]

(62) Ofwat is also inconsistent and selective in its commentary on the CMA's proposed matching adjustment, welcoming matching floating rate debt for the first time:

*"Given that all but one of the companies have a share of floating-rate borrowings and that the March 2020 sector average was around 15%, **it seems reasonable to reflect this widely-held instrument in both index-led and balance sheet-led benchmarks**."*[107]

(63) … but elsewhere considers that actual company risks should not be transferred to the notional company:

*"it is not appropriate for customers to bear the costs or risks associated with a company's capital and financing choices which may depart from the notional structure."*[108]

(64) … that instruments should only be reflected in the notional company with clear ex ante signalling (which has not been provided for floating debt):

*"Companies issuing swaps therefore had no reason to believe that they would be taken into account in future price controls."*[109]

(65) … and that time variation of interest costs could distort the analysis of efficient costs (although time variation could be considered a characteristic of floating rate debt as well as swaps):

*"We do not consider it appropriate to reflect swap costs, as their bespoke nature and time variation of interest costs degrade their usefulness as datapoints to inform the efficient cost of debt."*[110]

(66) Ofwat was clear early in the process that stability is important and there should be limited recalibrations of the cost of debt methodology in future controls:

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*100 See Footnote 98 above.*

*101 Ofwat Response to PFs, Risk and return, para. 4.13.*

*102 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.35.*

*103 See, for example, Ofwat 008 Response Risk and Return, 4 May 2020, para. 3.95*

*104 For example, Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.29*

*105 For example, "our approach supports the importance of long-term finance for this sector. It ensures companies are remunerated for the efficient cost of embedded debt for the duration of the price control and provides some stability to cashflows compared with an approach that relies only short-term market data." SOC424 Ofwat (December 2017), Delivering Water 2020: Our final methodology for the 2019 price review.*

*106 See for example, Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.6.*

*107 Ofwat Final Response to WACC Working Papers, 27.1.21, para 3.7.*

*108 Ofwat 008 Response Risk and Return, 4 May 2020, para. 4.4.*

*109 Ofwat 008 Response Risk and Return, 4 May 2020, para. 3.98.*

*110 Ofwat Post Hearing Submission (August 2020), p. 39.*

> *"This will promote a **more robust and stable framework** for setting embedded debt that will give investors confidence to choose optimal debt financing strategies without the **concern that this will be disrupted by large-scale recalibrations in future**."*[111]

(67) But now considers that the methodology will evolve depending on how markets have moved which could result in departures from the current approach:

> ***"we have evolved, and will continue to evolve, our approach where appropriate**… a 15 year trailing average as the starting point for our assessment at PR24 (and would need a good reason to change). However, **we would need to take into account all the relevant circumstances at the time**, including the financing conditions closer to time of our PR24 determinations."*[112]

(68) Overall, we are less clear on what Ofwat policy on embedded debt is for PR19 than we were at the outset of the process, and it is impossible ex ante to predict how Ofwat might 'evolve' its approach for PR24. This cannot be the right framework to incentivise long term financing, provide clear incentives to companies and stability to customer bills.

#### 3.3.2.5.1 Ofwat policy undermines stability and predictability of regime

(69) Ofwat's new definition of its policy as providing a 'reasonable' allowance at each price reset[113] has no meaning on an ex ante basis. As a result it implies the regulator has full discretion ex post to determine what it considers reasonable. However, companies cannot make financing decisions ex post taking into account how markets have moved. This ex post determination of Ofwat policy introduces a material disconnect between how companies raise finance based on ex ante market expectations and regulatory policy applied ex post. It is impossible ex ante to know whether debt raised (for example in line with the benchmark) will be reflected in regulatory policy in future AMPs.

(70) Ofwat has confirmed that its policy may move from a 15Y trailing average in subsequent price reviews depending on how markets have moved[114] – the absence of ex ante commitment fundamentally erodes the predictability and stability of regulatory policy and drives a wedge between Ofwat policy and competitive infrastructure financing. As we set out in our video submission to the WACC consultation,[115] this transfers risk to customers, volatility in cashflows and bills and creates poor incentives for efficient financing.

#### 3.3.2.5.2 New Ofwat evidence is not robust and cannot be relied upon

(71) Ofwat has included a number of additional data points in its latest submission which we consider to be misleading. We have provided evidence on these in detail in Appendix 1 and Appendix 2 below. In particular we highlight the new 'tenor at issue' analysis carried out by Ofwat[116] which is flawed as: (1) it is based on past water sector issuance post 2000 rather than debt outstanding at the beginning of AMP7; (2) it is based on the median of company averages aggregated by year rather than across all instruments so does not take into account relevant data points; (3) Ofwat ignores all sector debt raised pre 2000; and (4) it includes debt with tenor of less than 10Y (which Ofwat has previously excluded from its analysis on the basis that it could provide perverse incentives and increase refinancing risk). Ofwat stated:

> *"we considered… that including these bonds might incentivise issuance at tenors lower than 10 years, which would introduce greater refinancing risk to the sector. We were not convinced that this would be in customers' best interests, and so excluded these instruments."*[117]

*111 Ofwat June Response, Risk and Return, para. 4.22.*

*112 See for example, Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.6.*

*113 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.6.*

*114 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.6.*

*115 NWL Video on Cost of Debt: https://www.youtube.com/watch?v=6wjlhb2_-k8&feature=emb_logo*

*116 Ofwat Final Response to WACC Working Papers, 27.1.21, Section .3*

*117 Ofwat Cost of Capital technical appendix, Draft Determination, p66: https://www.ofwat.gov.uk/wp-content/uploads/2019/07/PR19-draft-determinations-Cost-of-capital-technical-appendix.pdf*

(72) In practice including these bonds is non comparable to the 10Y+ index (where debt with time remaining to maturity of less than 10Y is not included). We sensitise water company bond data to exclude these instruments.

(73) Ofwat has also put forward no evidence to suggest that any company's cost of debt which is not remunerated by an allowance of c.4.5% is inefficient. Outturn cost of debt is largely driven by factors outside of a company's control. It is not clear how Ofwat can consider debt costs inefficient with no evidence to support that ex ante a company should have pursued a different strategy.

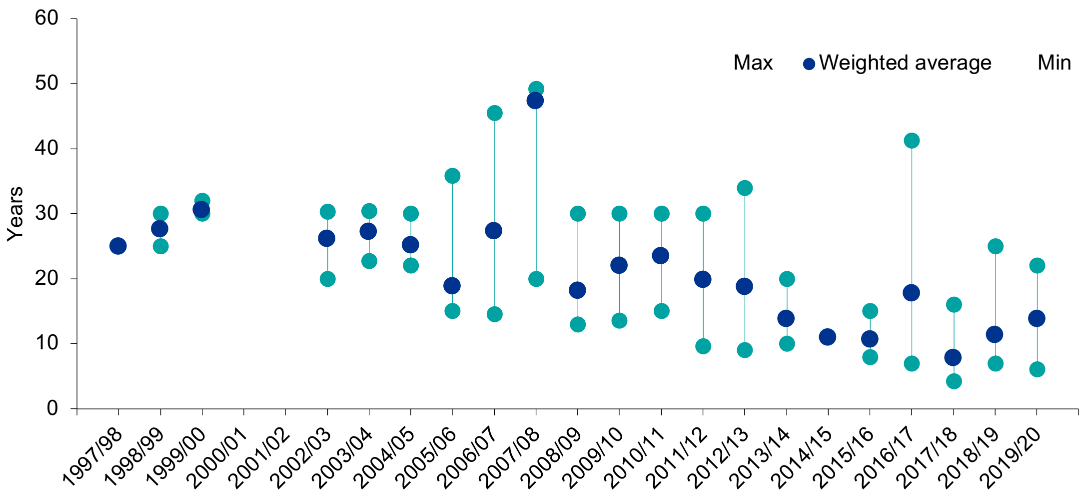
#### 3.3.2.5.3 Matching adjustment increases exposure to regulatory risk and incentivises a race to the bottom

(74) 'Matching' actual company financing is a slippery slope and provides significant scope for asymmetric implementation. It is bad for customers and incentivises the wrong outcomes.[118] A cursory review of Ofwat's response highlights examples of Ofwat identifying drivers of company financing which could increase observed costs (swaps, gearing, index-linked) and suggesting that these could over-state efficient costs, whilst endorsing adjustments for floating debt and EIB debt which reduce costs.

(75) Ofwat's analysis in Figure 3.1 of its final response illustrates that the incentive properties that we have identified are in fact happening currently.[119] We consider that whilst many factors are likely to influence company choices around debt issuance they must take into account regulatory policy as a key driver of treasury policy.

(76) The chart below illustrates the decreasing weighted average tenor of debt across the sector – a trend that has become more pronounced following Ofwat's introduction of the 10-year trailing average in PR14.

**Figure 8: Tenor at issue (fixed public debt): weighted average, min, max**




Source: KPMG analysis

(77) We also note that the submission by Frontier Economics on behalf of SWW recognises that matching transfers risk to customers over time: "*The concern with this argument is that the current cost of floating rate debt is significantly lower than the 15 year collapsing average. Going forward, if the floating rate increased materially then the 15 year collapsing average may no longer be an appropriate measure*".[120]

(78) Regardless the CMA is now considering a very material change to the notional company which is a long-standing concept of regulatory certainty.

*118 NWL Video on Cost of Debt: https://www.youtube.com/watch?v=6wjlhb2_-k8&feature=emb_logo*

*119 Ofwat Final Response to WACC Working Papers, 27.1.21, Figure 3.1.*

*120 Assessment of CMA Working Papers on cost of capital: Ofwat PR19 Referrals, Report for South West Water, Frontier Economics 22.1.21, p.23.*

(79) Ofwat endorses the matching policy applied by CMA but at the same time is clear that it is not intended for the notional company to match all features of actual financing and that the notional company has not been calibrated in this way in the past. We agree that the evolution of the notional company has been gradual over time (e.g. 2.5% adjustments to notional gearing assumed). It would undermine the predictability and stability of the notional company to make material adjustments to assumed notional financing to approximate features of actual company financing as this would by definition be partial without material changes to gearing, index linked debt assumed.[121]

**Table 1: Table of notional company assumptions across successive controls**

| Price review | Notional gearing | Debt mix | Approach to embedded debt |
|---|---|---|---|
| **PR04** | 55.00% | 100% fixed | Actual costs based on debt premium implied by publicly traded water company debt. |
| **PR09** | 57.50% | 70% fixed; 30% index-linked | Actual costs drawing on direct observations from companies' existing debt portfolios and forward projections. Allowance set higher than observed actuals. |
| **PR14** | 62.50% | 67% fixed; 33% index-linked | 10Y trailing average based on iBoxx A/BBB. Cross check against long term 10-15 and 15+ year water company bond issuances from 2000 to 2014. Allowance set higher than observed actuals. |
| **PR19** | 60.00% | 67% fixed; 33% index-linked | Actual costs and iBoxx A/BBB adjusted for outperformance wedge. Actuals based on balance sheet cross check (new methodology). |

Source: Ofwat

(80) We note Frontier's analysis for SWW which highlights that the changes implemented at PR19 could not have been predicted ex ante: "*we do note that the regulatory approach to the assessment of embedded debt costs have varied over time and that companies which have high embedded debt costs due to the timing of debt issuance would not, based on information at the time, have known that the notional assessment would be applied in this way in future price controls*."[122]

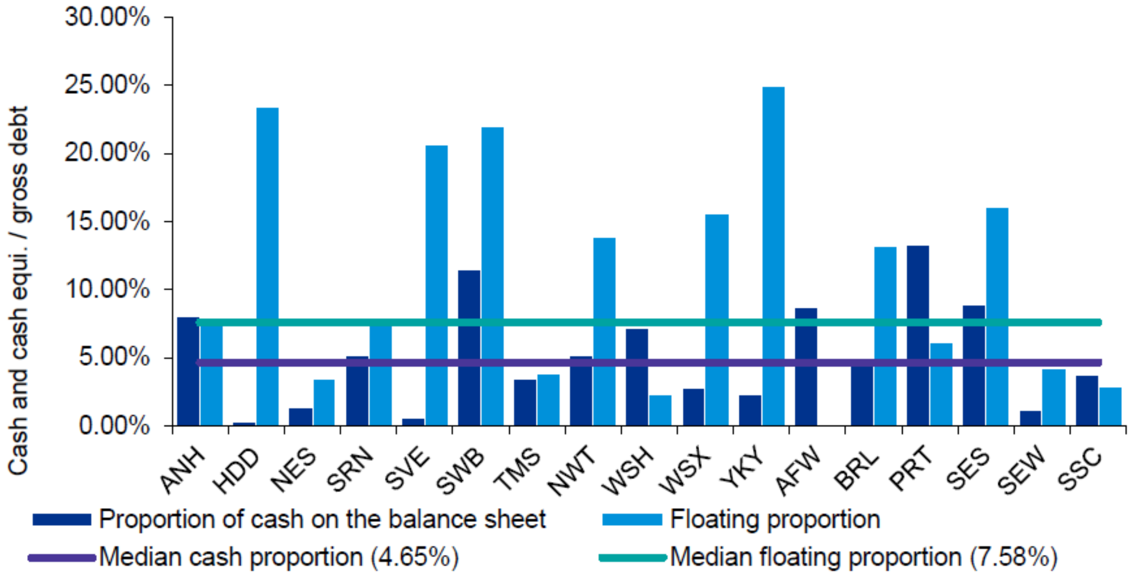
#### 3.3.2.5.4 Cost of carry

(81) Even if the matching principle is retained it cannot be applied in a one-sided way as Ofwat suggests. Figure 9 below shows that the proportion of floating rate debt (7.58% sector median) to the proportion of cash held on the balance sheet (4.65%) over the last 5 years have been largely consistent with one another.

121 *"Existing characteristics of the notional company (i.e. gearing, share of index linked debt) are not mechanistic applications of the sector average actual figures": Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.15, bullet 2.*

122 *Assessment of CMA Working Papers on cost of capital: Ofwat PR19 Referrals, Report for South West Water, Frontier Economics 22.1.21, p.21,*

**Figure 9: Floating rate proportion vs proportion of cash over the last 5 years**



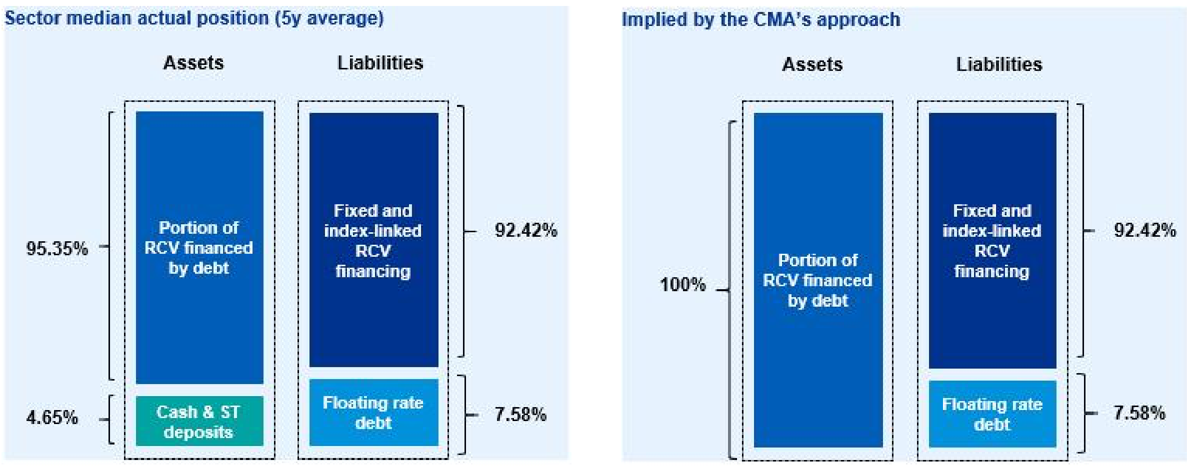

*Source: APR table 1E data.*

(82) This observation (that floating debt is closely linked to financing cash rather than the RCV) has been explicitly recognised by regulatory policy in the past, from both Ofwat and the CMA. Specifically, it has consistently been assumed that for the notional company the impact of cost of carry and floating rate debt offset one another, which allows analysis of notional company costs to focus on long term RCV financing. For example, Ofwat states:

*"We have made an allowance for the cost of holding cash 0.20% within our assessment of the actual cost of debt, consistent with Bristol Water's submission and the assessment of the Competition Commission in 2010.* ***We do not include these holding costs in our notional cost of debt as they are offset by the lower cost of short term floating debt, which is not factored into our notional cost of debt."***[123]

(83) Overall floating rate debt predominantly corresponds to financing cash held on company balance sheets and relates to cost of carry rather than financing the RCV per se:

**Figure 10: Comparison of floating rate debt and cost of carry**




Source: NWL analysis

123 Ofwat Reply to Bristol Water's SoC, 8.4.2015, p. 81, para. 310: https://assets.publishing.service.gov.uk/media/5525099640f0b61392000001/Ofwat_response_to_Bristol_Water_s_SoC.pdf

(84) Figure 10 above clearly illustrates that the majority of floating rate debt for the median company is financing cash not the RCV; as a result an adjustment for floating rate debt cannot be made without a corresponding adjustment for cost of carry. We estimate the impact of cost of carry at 11-14bps based on the 5Y average cash positions, in line with Ofgem's point estimate (10bps) for RIIO-2.

**Table 2: Estimate of costs – cost of carry**

| | Average/median | % cash on balance sheet | Cost of carry |
|---|---|---|---|
| **Sector** | Median | 4.65% | 0.12% |
| **WaSC** | Average | 4.33% | 0.11% |
| **WaSC & large WoC** | Average | 4.42% | 0.12% |
| **Sector** | Average | 5.17% | 0.14% |

Source: NWL analysis

#### 3.3.2.5.5 Corrected implementation of matching principle

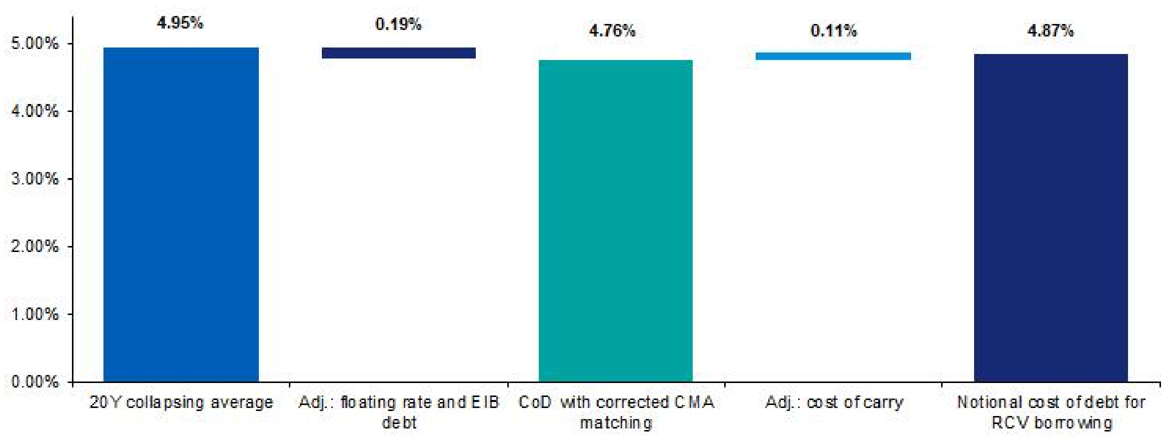
(85) The 20Y collapsing average represents a robust starting point for any analysis of the matching principle (as recognised by CMA) as 20Y reflects the average tenor at issue across the sector (20-25Y) and the benchmark selected (21Y). As we set out in our video response to the WACC consultation, the tenor at issue is the right measure to work out how far back the trailing average period should go as this is a better proxy for:

- the investment horizon over which companies have raised debt; and
- pricing of water company debt which is governed by tenor at issue

(86) This 20Y period is also observable from the run-off rates across the sector and is also the horizon used by the CMA when setting the WACC. Appendix 2 sets out examples from infrastructure financing to support asset liability matching which illustrate that Ofwat's conclusions on asset-liability matching are erroneous.

(87) We set out below a corrected version of the matching adjustment which starts from the 20Y collapsing average and reflects adjustments which correctly estimate the impact of EIB and floating rate debt as well as the cost of carry. This is consistent with the analysis provided in our initial response to the WACC consultation but also reflects the impacts of the cost of carry analysis.

**Figure 11: Overview of corrected matching principle**




Source: NWL analysis

(88) Adjusting the 20Y collapsing average for: (1) floating rate debt (14bp); and (2) EIB debt (5bp) implies a cost of debt of 4.75%, before taking into account costs which could increase the allowance. Including an adjustment which increases costs (such as cost of carry which CMA assumes to be zero for the notional company) would increase the cost of debt by 11bp to 4.87%.

(89) This points to a cost of embedded debt in line with at least a 15Y trailing average (4.72%) with no collapsing average component. This is also below the upper end of the CMA's cross check against actual costs.

(90) Adjusting the 20Y collapsing average for: (1) EIB debt; and (2) the combination of floating rate debt and cost of carry (non-RCV financing): (a) clearly allocates financing risks to companies; (b) avoids incentives to take on more risk; and (c) retains stable cashflows and bills. This will result in lower costs for customers in rising interest rate environment as well as more stable costs over time.

## 3.4 THE BEST OVERALL OUTCOME FOR CUSTOMERS

(91) Overall, making the changes we set out above would result in a well-balanced package for customers:

- the package would be very affordable, with bills falling by 21%, consistent with our business plan which was supported by 91% of our customers. This is the largest reduction across the sector at PR19 and in NWLs history and the bill reduction would be combined with our sector leading affordability commitments;
- the service levels would remain largely consistent with the PR19, which we accepted and which, if met, would represent the most challenging ever delivered since privatisation;
- the proposals would also deliver an additional c.£147m of additional investment in resilience and base activities supporting local economic growth at a difficult time compared to the PFs; and
- it would be more financeable than the current proposal and the PFs, with improved credit metrics under the notional structure.

(92) Importantly, the package would also correct the clear errors of theory, fact and calculation in the CMA's consultation proposals. This would be consistent with the CMA's reputation and role as an expert and independent evidence-based arbiter of these redeterminations and will help to retain global confidence in the UK regulatory framework.

(93) This is demonstrated in Table 3 below. Here we show the overall impact on bills, investment and service levels relative to the business plan and the PR19 package. We also test the implications on financeability across two of the key credit metrics.[124]

*124 As set out in Table 3 this would imply an AICR of 1.55x. This is closer to a level consistent with 'stable Baa1' (i.e. an AICR of 1.6x, which is slightly above the minimum threshold of 1.5x for Baa1 specified by rating agency methodologies). This level of headroom is appropriate in light of the asymmetry in the package, which has been recognised by the CMA. An ODI penalty of 0.15% of RoRE to account for asymmetry reduces the AICR to 1.52x, which is consistent with Baa1 and the level targeted by the CMA. Including cost of carry in the embedded cost of debt, i.e. assuming an embedded CoD of 4.87% would imply an AICR of 1.54x. Including an ODI penalty equivalent to 0.15% of RoRE would reduce this to 1.51x. The conclusions under the scenario still hold.*

**Table 3: Projected metrics under the proposed package, business plan, FD19 and CMA PF and working papers**

| | NWL BP | Ofwat FD19 | CMA PF | CMA Working Papers | Proposed package[125] |
|---|---|---|---|---|---|
| Change in bills | -21% | -26% | -22% | -23% | -21% |
| New investment (change on previous scenario) | £3,167m | -£197m | +£21m | £0 | +£147m |
| Service levels | Stretching | Stretching | Stretching | Stretching | Stretching |
| Moody's AICR | 1.57x | 1.43x | 1.54x | 1.55x | 1.56x |
| S&P FFO / Net Debt | 9.0% | 9.0% | 9.3% | 9.1% | 9.3% |

Note: We have run the analysis on the Ofwat model but have used the CMA financeability model as a cross check.
Source: NWL analysis

## 3.5 REDETERMINATIONS ARE AN IMPORTANT PART OF A HEALTHY REGULATORY SYSTEM AND THE CMA SHOULD SEEK TO MAXIMISE THE VALUE FOR CUSTOMERS

(94) The ability to seek a redetermination is an important part of the regulatory framework for the setting of price controls. It provides important checks and balances on the exercise of the significant degree of regulatory discretion that is encompassed in the myriad of individual decisions that combine to set revenues and outcomes. As an independent, objective and evidence-based regulator that is subject to the same statutory duties in carrying out its redetermination, the CMA can ensure that customer interests are protected in an price control reset whilst exercising this fundamentally important constraint and challenge to Ofwat as well as the regulated companies. As a result, the existence of merits-based redeterminations by the CMA is a critical factor in ensuring continued confidence in the regulatory framework and, therefore, in supporting continued investment into the sector[126].

(95) The fact that an unprecedented four companies did make the choice to seek such a referral of FD19 means that the sector as a whole can benefit from the CMA having undertaken perhaps the most thorough and expert review of regulation of water in England and Wales in recent times. The CMA is therefore well placed to comment on that framework for its future improvement for customers and stakeholders. We set out a range of areas in our response to the PFs where the CMA might consider making comment on the regulatory framework for the future improvement of that framework and to maximise the enduring benefits of its decisions.[127] Amongst this list we would emphasise to the CMA:

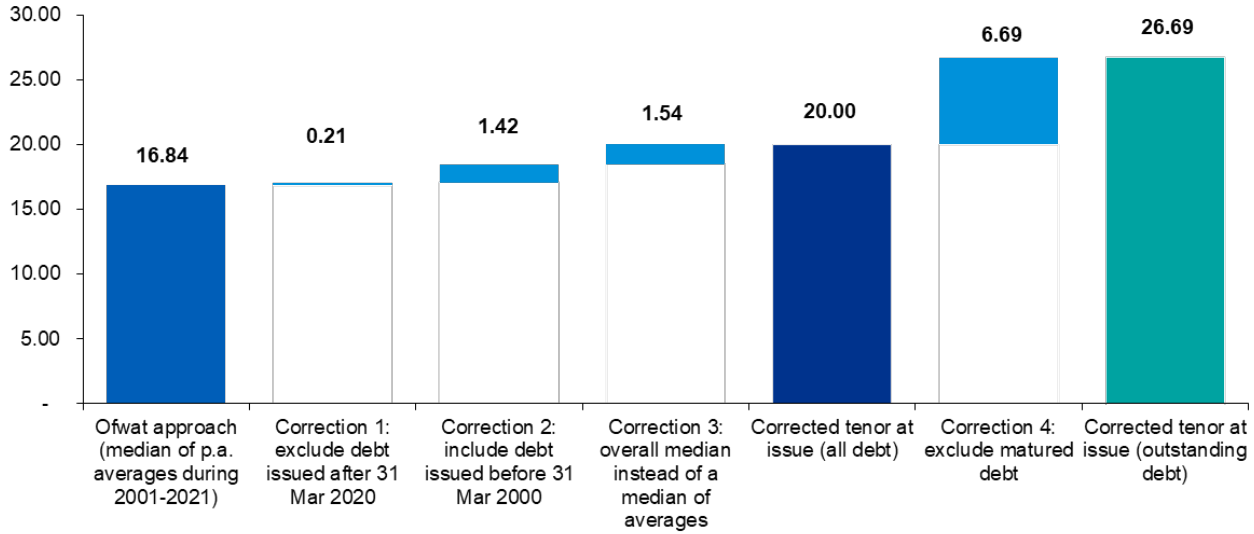
- the importance of continued focus and improvement on customer engagement in future price reviews;
- the essential need to develop a framework that better supports the resilience of the sector; and
- the criticality of ensuring that the sector remains financeable and investable.

*125 Our analysis of the package considers: 1) totex gap funded including sewer flooding costs; 2) cost of embedded debt of 4.76% (excluding cost of carry), proportion of new debt of 17%, cost of new debt of 2.19% consistent with the CMA's working paper and applying the prudent 50bps uplift to the CoE mid-point used in the CMA's PFs; and 3) a retail margin adjustment of 3bps.*

*126 See for example UKRN, Investor Guide, 2014 pp.33 , "Regulatory accountability and Judicial Review: … The merits of regulatory decisions, which result in amendments to existing licences, can be appealed to the CAT or CMA. The most frequent such decisions are those that concern the periodic changes in licence conditions relating to price and service (price controls). The CMA and CAT are expert professional bodies with the experience and power to amend or overturn regulatory decisions. They are independent from central government, which is an important safeguard against their decisions being vulnerable to lobbying by special interest groups."*

*127 NWL Response to the PFs, Section 10*

## APPENDIX 1: RESPONSE ON OFWAT'S COST OF DEBT REPLY- ERRORS OF FACT

| Issue | NWL Response |
|---|---|
| **Sector average tenor at issue** | Ofwat argues that 15Y trailing average is supported by 16.8Y median tenor at issue for 2000-20 debt.[128] This figure is misleading because it:<br>(1) includes debt issued after 31 March 2020 which should not be captured by the embedded debt allowance for AMP7;<br>(2) excludes debt issued before 31 March 2000 which forms parts of the sector's AMP7 embedded debt portfolio and is relevant in the calibration of the trail;<br>(3) represents a median of simple averages rather than purely a median observation – Ofwat first calculates annual simple averages for each year and then derives the median on their basis; and<br>(4) includes both outstanding and matured debt – the latter is not directly relevant for calibration of the allowance for AMP7 debt.<br>Correcting Ofwat's estimate for the first three errors yields a tenor at issue of 20Y for all debt issued up to 31 March 2020. This is consistent with the time to maturity of the iBoxx benchmark as well as the iBoxx Utilities index (which tracks only Utilities bonds over time).<br>Further adjusting the estimate to reflect only outstanding debt as at 31 March 2020 results in an implied tenor at issue of 27Y.<br>Notably, Ofwat includes debt with tenor at issue less than 10Y (which it elsewhere correctly excludes from its analysis of sector financing as well as from the benchmark index selected gives implied refinancing risk). The median tenor at issue after correcting for Ofwat's errors and excluding debt with tenor at issue shorter than 10Y is 30Y.[129]<br>**Figure 12: Correcting Ofwat's estimate of tenor at issue**<br><br>Source: NWL analysis |



128 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.16.
129 Ofwat Cost of Capital technical appendix, Draft Determination 2019, p. 67

| | |
|---|---|
| **Floating rate debt %** | Ofwat in error considers sector exposure to floating debt to be c.15%.[130] This is not correct as we have shown in previous responses.[131] Floating debt in 2018/19 is 5-6% and 7.5% on average over the last 5 years. Excluding floating debt raised to finance cash (i.e. non-RCV assets) results in c.2-3% floating debt on average across the sector |
| **20Y investment horizon introduces a new constraint on notional structure** | This is fundamentally inconsistent and goes against past Ofwat policy as (1) Ofwat has previously excluded short term and floating rate debt from its analysis of industry average costs (most recently at PR14); (2) has selected a 20Y benchmark index for the last two price controls; and (3) has incentivised long dated issuance over time |
| **New to embedded debt ratio** | Ofwat's estimate of new debt is flawed as it assumes 1/15 debt matures each year, which 5Y less than the sector average tenor and the tenor of the benchmark.<br>Ofwat argues that the 3.9% contribution from RCV growth used by the CMA may be an underestimate as it is based on applying the notional gearing assumption to real RCV growth and would understate the new debt requirement.<br>First, Ofwat's rationale for estimating the contribution on nominal basis is flawed because it, in error, implies that the sole driver of the new debt requirement is RCV growth (in nominal terms) and the business is otherwise cash neutral. Water companies have been since privatisation, continuously cashflow-negative, resulting in part from their capital-intensive investments exceeding returns, and exacerbated by the real-nominal mismatch. This means that their cash outflows exceed cash inflows in any given year, and that the debt requirement does not arise solely to finance RCV growth. This means that companies do not need to raise new RCV related debt to maintain the target gearing level.<br>Second, approach to estimating the contribution from nominal RCV growth are flawed:<br>(1) As acknowledged by Ofwat, its estimate uses out of date inflation profile which does not capture the near-term deflationary impacts of the Covid-19 crisis. All else equal, this overstates the new debt requirement;<br>(2) Ofwat only reflects the indexation of the RCV whereas in reality some of this growth would be offset by the indexation of notional index-linked debt. All else equal, this overstates the new debt requirement;<br>(3) Ofwat does not account for the assumed reduction in notional gearing of 2.5% since PR14. All else equal, this overstates the new debt requirement;<br>As a result, Ofwat's analysis is flawed and should be disregarded. |
| **Ofwat past policy** | Ofwat reviews the speech from Philip Fletcher in 2002 and comments that "*there is nothing obvious to indicate support for 20 year over 15 year tenors.*"[132] This is clearly misleading. Philip Fletcher recognises that companies "*seek to match their financing structure to their cash flows*"[133] and at the time the duration of cashflows was 20-25Y based on run off rates. |
| **Asset liability matching** | Ofwat considers that "*as consequence of these protections is that there is no reason to consider that company treasury policies (or the regulatory determination of trailing averages for embedded debt) should by underpinned by underlying asset lives.*"[134] The protections cited by Ofwat (e.g. license extension) are not relevant as asset liability matching is undertaken to hedge against exposure to movements in interest rates, inflation (which Ofwat protections cited do not address). |

*130 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.27.*
*131 NWL Initial Response to WACC Working Papers, 18.1.21, Appendix 1 Section A.1.2.2.*
*132 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.13.*
*133 Restructuring – Glas, 'Talk Schoder Salomon Smith Barney Sterling Bond Community Conference, London 9 February 2001.*
*134 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.10.*

## APPENDIX 2: ASSET-LIABILITY MATCHING AS STANDARD IN INFRASTRUCTURE FINANCING

(1) Ofwat has recently argued (contradicting its position earlier in this process that it had calibrated its trailing average in line with sector asset lives)[135] that it is not necessary to match asset lives when choosing the length of the trail as: (1) there is no direct link between asset lives and financing the RCV; and (2) the protections provided by a revolving 25-year licence, a transparent and predictable regulatory regime with a 30-year track record and the RCV obviate the need for asset-liability matching.[136] Both statements are misleading and directly contradict the outcomes observed in competitive infrastructure financing.

(2) A paper from OECD on infrastructure financing notes that long term certainty is critical to attract long term financing: "the potentially large information asymmetries that may exist in infrastructure, along with the long-term nature of infrastructure investment, may lead parties to deviate ex post from ex ante decisions, a risk which among others may impede private financing. [137]

(3) The paper also acknowledges that where the rate of return may be insufficient to compensate private sector investors for the level and/or character of risk, various risk mitigation techniques and incentives may be employed to manage risks and/or enhance returns and that *"any government intervention to these ends may, however, generate unintended consequences, such as moral hazard <u>and market distortions, which should be addressed ex ante in policy design to the extent possible</u>. Generally, the expected benefits of providing risk mitigants should be balanced against their costs, and their provision should serve to <u>supplement market-based approaches to infrastructure finance</u>."*[138]

(4) We set out below a few examples from competitive infrastructure financing to illustrate this point.

(5) Asset liability matching is standard practice in infrastructure financing – such as the Offshore Transmission Owners (OFTOs) regime and Contracts for Difference (CfDs) in energy.

(6) OFTOs are competitively tendered with successful bidders entitled to a stable, long-term, inflation-linked revenue stream in return for operating, maintaining and decommissioning the transmission assets[139]. OFTO assets are characterised simple performance-based incentives, built-in risk protections and a low risk profile.

(7) During the initial rounds of tenders, the revenue period was set at 20 years to align with the forecast life of the wind farm and therefore to minimise the risk of stranding the OFTO assets. A review of early OFTOs (for illustrative purposes) highlights that investors have raised debt in line with the asset lives:[140]

*135 Ofwat June Response, Risk and Return, para 3.39.*
*136 Ofwat Final Response to WACC Working Papers, 27.1.21, para. 3.10.*
*137 OECD, Infrastructure Financing Instruments and Incentives, 2015, p.8. http://www.oecd.org/finance/private-pensions/Infrastructure-Financing-Instruments-and-Incentives.pdf*
*138 Ibid, p.9.*
*139 https://www.ofgem.gov.uk/sites/default/files/docs/2014/02/offshore_transmission_-_an_investor_perspective_-_update_report_1.pdf*
*140 Offshore Transmission: An Investor, Perspective Prepared for The Electricity and Gas Markets Authority under Con / Spec / 2011-99A, KPMG December 2012*

*Table 3.3: Transitional Regime Round 1 OFTO financing terms*

| Project | Senior Debt (Gearing) | Terms |
|---|---|---|
| **Robin Rigg**[a] | £65.1m (c. 84%) | 19 year tenor (12 month tail)<br>Priced at ~ Libor +220-235bp |
| **Gunfleet Sands 1 & 2**[b] | £50m (c. 85%) | 19 year tenor<br>Priced at ~ Libor +195bp |
| **Walney 1**[a] | £105m (c.85%) | 19 year tenor (12 month tail)<br>Undisclosed pricing<br>Additional minor reserve facility of around £3m |
| **Barrow**[b] | £35m (c, 81%) | 17.5 year tenor[c]<br>Priced at ~ Libor +220bp |

Source: a Inspitatia website; b InfraNews website; c Barrow's licence was for 18.5 years only

Source: KPMG (2014), Offshore Transmission: An Investor Perspective – Update Report

(8) Similar to OFTOs, CfDs have been designed to offer investors relatively stable revenue streams, whereby generators of renewable energy are guaranteed a fixed 'strike price' for the energy produced. If the wholesale market price is below the strike price, the generator receives the difference from the contract counterparty, if prices are above the strike price the generator pays the difference to the counterparty. A notable example of a CfD project is the Swansea Bay Tidal Lagoon – an asset with a very long useful life matched with similarly long tenor debt. The final offer highlights that:

*"Project finance debt for infrastructure assets typically has a tenor commensurate with the length of the support mechanism."*[141]

(9) In the water sector the most recent standalone competitively procured project is the Thames Tideway Tunnel, which provides a notable example of an asset with a very long useful life (120Y life)[142] which has attracted institutional investors seeking to match the duration of their assets and liabilities and issuance of long term (35Y) debt to hedge its bespoke regulatory regime.

(10) The ability to provide long-term stable cash flows to match long-term liabilities is also widely acknowledged as an important driver of the attractiveness of infrastructure as an asset class:

*141 Swansea Bay Tidal Lagoon Project – Contract for Difference – Final Offer, Appendix B – Proposed CFD Variations, para. 2.1. https://www.parliament.uk/globalassets/documents/commons-committees/business-energy-and-industrial-strategy/Correspondence/160630-TLSB-BAFO-CfD-Appendix-B-Final-17-19.pdf*

*142 https://www.tideway.london/media/1577/investor-presentation-26-january-2017.pdf*

*"Institutional investors, such as pension funds, insurance companies or sovereign wealth funds, seek long term, stable returns, consistent with their need to fund long term obligations to policy-holders or pensioners".*[143]

*"Infrastructure businesses can benefit from extremely stable revenue streams, which means that borrowers can be creditworthy for longer periods than other sectors. This allows debt to extend 40+ years into the future, continuing to provide high quality, dependable cashflows for pension fund liability matching purposes"*[144]

*"it is increasingly acknowledged that alternative sources of financing are needed to support infrastructure development. In this context, much attention is being focused on the institutional investor sector, given the long-term nature of the liabilities for many types of institutional investors and their corresponding need for suitable long-term assets."*[145]

143 HM Treasury Infrastructure Finance Review consultation, March 2019, Box 2.B, p. 11. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785546/infrastructure_finance_review_consultation_web_version.pdf

144 Macquarie, Appraisal of private debt opportunities: A holistic approach for UK pension funds, October 2016, p. 9 https://www.macquarie.com/assets/macq/about/news/2016/midis-whitepaper-appraisal-of-private-debt-opportunities.pdf

145 OECD, Infrastructure Financing Instruments and Incentives, 2015, p.7. http://www.oecd.org/finance/private-pensions/Infrastructure-Financing-Instruments-and-Incentives.pdf