Preliminary Response to CMA's Cost of Capital Working Paper

13 January 2021

1. Introduction

1.1.1 Ahead of the cost of capital round-table taking place on 20 January 2021 (the **Roundtable**), Yorkshire Water Services (**YWS**) would like to alert the CMA specifically to a material misconstruction that YWS has identified in the CMA's Cost of Debt Working Paper.

1.1.2 For the avoidance of doubt, YWS will also be submitting an initial response to the CMA's cost of capital consultation on Monday 18 January as well as a final response on Wednesday 27 January, both of which will consider additional issues. This submission is not intended to serve as a replacement for either. Rather, given the materiality of this error, and in order to ensure the CMA has sufficient time to consider it ahead of the Roundtable, this is a separate, standalone submission focused on the error and its knock-on effects.

1.1.3 The misconstruction concerns the CMA's references to "weighted average years to maturity" and "average maturity", and the use that the CMA subsequently makes of these statistics when:

(a)   calibrating its notional cost of debt trailing average in Section 5 of the Cost of Debt Working Paper[1]; and

(b)   calculating the weights for embedded debt and new debt in Section 11 of the Cost of Debt Working Paper.[2]

1.1.4 The first issue relating to the calibration of the notional cost of debt trailing average is set out in **Section 3** of this paper. YWS considers the CMA's analysis is not founded on an 'apples-to-apples' comparison because it seeks to equate average maturity periods with the tenor of debt in justifying its 15-year trailing average, despite the differences between the two concepts. These issues result in a cost of debt allowance that is unnaturally depressed.

1.1.5 The second issue is addressed in further detail in **Section 4** below, in which YWS submits this misconstruction means that the CMA should reconsider its calculations for setting the appropriate weights for embedded debt and new debt.

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[1] CMA, 'Water Redeterminations 2020: Cost of Debt – Working Paper' (January 2021) (**Cost of Debt Working Paper**), section 5.

[2] CMA, Cost of Debt Working Paper, section 11.

2. Weighted average years to maturity

2.1.1 Companies report on the composition of their debt portfolios in their Annual Performance Reports (**APRs**). One of the summary statistics that is highlighted in these reports is the "weighted average years to maturity" across a company's debt at the relevant reporting date.

2.1.2 The CMA correctly identifies[3] that, at the industry level, the weighted average years to maturity of the debt held on companies' balance sheets as at 31 March 2020 was approximately 13 years.[4] In YWS's case, the figure was 14.7 years. Figure 1 sets out the source data for YWS's calculation.

Figure 1: Maturity date / amount of borrowing (YWS)[5]
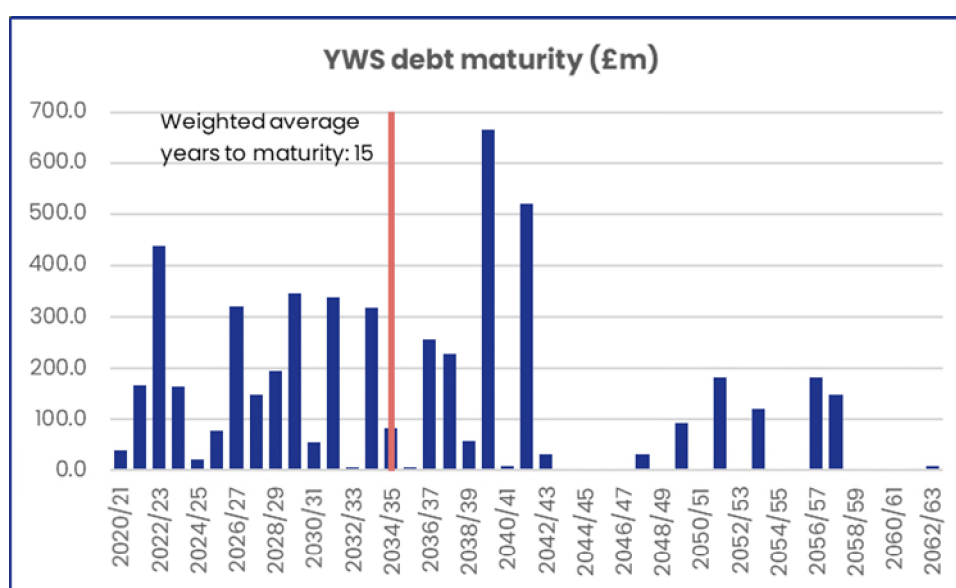
2.1.3 There are three key points to note about this data:

(a) first, the calculation of weighted average years to maturity reflects the average <u>remaining</u> tenor across each debt instrument – i.e. the number of years from a chosen start date of 31 March 2020 until each instrument matures;

(b) second, the average number of years to maturity will, by definition, be shorter than the average tenor at issue (because borrowings will

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[3] CMA, Cost of Debt Working Paper, paragraph 78; table 1; paragraph 254.

[4] YWS agrees with the observation in paragraph 254 of the Cost of Debt Working Paper: "*this figure may be slightly understated by the inclusion of 'too much' floating rate debt for the reasons discussed in paragraph 113*". For reference, the sector-average weighted average years to maturity was 13.8 years at 31 March 2019 and 15.1 years at 31 March 2018 (Ofwat, 'Financial monitoring report 2018-19 charts and underlying data' (2020), section 13).

[5] YWS March 2020 debt maturities excluding RCF.

necessarily have been entered into a period of several months or several years before the reporting date); and

(c)   third, the weighted average reported is simply an average – i.e. some debt will mature before the average year and some debt will mature after the average year, as seen in Figure 1.

2.1.4   YWS is concerned that the CMA may not have fully reflected these points in its analysis, leading it to make what YWS considers are the following two errors in the analysis in the Cost of Debt Working Paper.

3.   Notional Cost of Debt Index

3.1.1   The CMA is proposing to set its allowance for embedded debt in line with a collapsing 15-year trailing average iBoxx index.[6] This design means, in effect, that: the cost of embedded debt allowance for 2020/21 is the average A/BBB long-term corporate bond yield over the 15-year period 2005/06 to 2019/20; the allowance for 2021/22 is the average A/BBB long-term corporate bond yield over the 14-year period 2006/07 to 2019/20; the allowance for 2022/23 is the average A/BBB long-term corporate bond yield over the 13-year period 2007/08 to 2019/20; and so on.

3.1.2   Figure 2 shows the implied profile of debt maturity for the notional company as at 31 March 2020. The chart shows an even 1/15th of debt maturing each year, as each and every year one year of historical data drops out of the calculation, until the index collapses to zero in 2035.

Figure 2: Maturity date / amount of borrowing (notional company)

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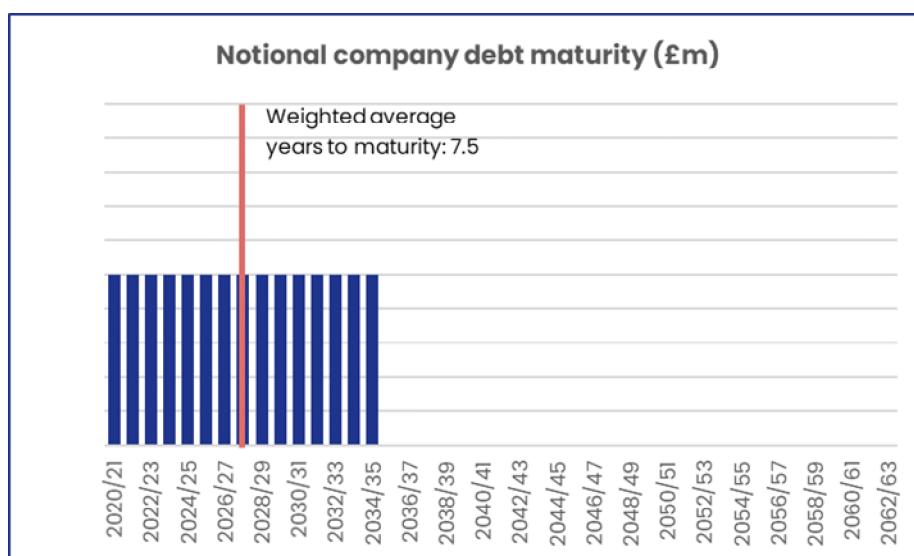
[6] CMA, Cost of Debt Working Paper, paragraph 81.

3.1.3 Importantly, <u>the weighted average number of years to maturity</u> as at 31 March 2020 for the notional company under this notional construction is <u>7.5 years</u>.

3.1.4 This notional construction of 7.5 years does not constitute a suitable match to the actual industry weighted average years to maturity of more than 13 years, resulting in it being a poor representation of a typical water and sewerage company. It is not clear that the CMA has intended to establish a notional index with such a short weighted average number of years to maturity, as it has noted:

> "…the use of shorter lookbacks could provide an inappropriate signal to companies that the regulator is encouraging them to shorten the tenor of their debt in order to reduce costs, potentially trading lower short-term costs for increased financing risk."[7]

3.1.5 YWS notes, however, the statement that the CMA makes at paragraph 78 of its Cost of Debt Working Paper:

> "*We acknowledged the Disputing Companies' argument that a 15-year rather than a 20-year approach excludes 20% of the sector's (bond) debt. However, a 15-year average appears to be a better proxy for the range of instruments used by water companies (for example, long vs short tenors, differing weights of fixed and floating debt) and thus would provide a more accurate assessment of efficiently incurred costs than an unadjusted 20-year average.* **The current measure of average maturity using APR data is approximately 13 years, while Ofwat estimated the current range of maturities to be 13-17 years (see paragraph 33). This suggests that the 15-year average adequately meets the CMA's objectives for a benchmark approach without the need for judgment or manipulation of data** …"

3.1.6 YWS considers that the equivalence that the CMA draws in this explanation is not based on an apples-to-apples comparison. Specifically, the 2020 APR "average maturity" ("13 years") and Ofwat figures ("13-17 years") referenced in this paragraph are <u>weighted average years to maturity</u> as at 31 March 2020 and at the dates of preceding APRs, whereas the CMA's notional "15-year average" corresponds, in effect, to the notional <u>tenor at issue</u>.[8]

3.1.7 YWS would like to discuss this matter in greater detail at the Roundtable.

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[7] CMA, Cost of Debt Working Paper, paragraph 18.

[8] CMA, Cost of Debt Working Paper, paragraph 78.

3.1.8 YWS's preliminary assessment is that the CMA should revert to a longer trailing average if it wishes its notional index to provide any sort of realistic characterisation of the debt portfolio that a notional company would hold to finance its functions, and take into the current price control period. This would also help to address the logical disconnect in cutting off all pre-2005 data (and then progressively cutting off all pre-2010 data as the index collapses during AMP7), with the knowledge that the actual companies will be continuing to service significant amount of pre-2005 (and pre-2010) debt over the five years of AMP7.

4. Weights for embedded debt and new debt

4.1.1 The CMA goes on to reference "average years to maturity" in paragraphs 254 to 258 of its Cost of Debt Working Paper when examining the appropriate weights for embedded debt and new debt.

4.1.2 YWS submits that the CMA should reconsider these calculations for the following reasons:

(a) first, the arithmetic in paragraphs 255 and 256 is directly impacted by the issues identified above.[9] The unrealistically early start date and unrealistically rapid rate of collapse in the notional index cause the CMA to understate the weight that should be given to embedded debt and overstate the weight for new debt;

(b) second, the figure quoted in paragraph 256[10] for the parameter "M" in any case requires correction – i.e., it is not a weighted average years to maturity as at 31 March 2020; and

(c) third, in line with Figure 1, and consistent with the submission that YWS made on 27 October 2020,[11] the calculations given in paragraphs 256 and 257 should also recognise that there is a distribution of debt maturities around the average.[12] It is unrealistic to assume that 36-40% of existing debt will have matured by 2025 when the average maturity date is in 2034.

YWS proposed that the CMA should instead assume, for the sake of simplicity, that around half of the existing debt will have matured

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[9] CMA, Cost of Debt Working Paper, paragraphs 255 and 256.

[10] CMA, Cost of Debt Working Paper, paragraph 256.

[11] YWS, Response to the CMA's provisional findings of 29 September 2020 (27 October 2020) (**PFs Response**), Table 1, page 31.

[12] CMA, Cost of Debt Working Paper, paragraphs 256 and 257.

when T=M and around half the existing debt will still be in place. Algebraically, this means that the proportion of new debt at the end of the period can be calculated as = 0.5 x T / M.[13] (Based on 2020 APR data, an M of ~13 would mean that 19% of existing debt will have matured by 2025. This is consistent with the App20 data provided by Ofwat that shows c.21% of March 2020 debt will have matured by 2025.)

4.1.3 YWS's preliminary assessment is that the CMA should revert to its original lower bound of 13%[14] or lower if it wishes to ensure consistency with the weighted average maturity data reported by the industry (i.e., (19% + 3.9% RCV growth)*50% = 11.5%).

5. Conclusion

5.1.1 YWS acknowledges that the CMA proposes to set the cost of embedded debt solely based upon an average of the iBoxx A and BBB indices. Furthermore, YWS understands the intent is for this to incorporate a suitable lookback period that reflects the maturity of debt in the water sector and also that, as a regulator, the CMA cannot be seen to be providing an inappropriate signal to companies to issue shorter tenor debt.

5.1.2 In light of the points set out above, YWS requests that, before making its final determination, the CMA revisits:

(a) its proposed allowance for embedded debt costs (for the reasons set out in Section 3 above), with YWS's suggested solution being that the CMA should revert to a longer trailing average; and

(b) the weights for embedded debt and new debt for the reasons set out in Section 4 above), with YWS's suggested solution being that the CMA should instead assume that around half of existing debt will have matured when T=M and around half the existing debt will still be in place (and the proportion of new debt at date T can be calculated as 0.5 x T / M).

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[13] For the avoidance of doubt, the CMA's remarks in paragraph 258 of its Cost of Debt Working Paper appear to have misconstrued the point that YWS intended to make in its PFs Response. YWS considers that the formula for N, the proportion of new debt <u>at the end of the control period</u>, should be N = 0.5 x T / M. It is then necessary to divide N by 2 in order to obtain the mid-period average.

[14] CMA, PR19 Provisional Findings (29 September 2020), Table 9-20, page 603.

5.1.3   As the CMA no doubt agrees, YWS considers that it is imperative that a notional approach to setting the cost of debt allowance has a sound economic rationale, and thus permits all efficiently financed companies to recover their efficiently-incurred interest costs. As presented in the CMA's Cost of Debt Working Paper, a collapsing 15-year trailing average does not have such a robust and factual rationale for the reasons explained above, and it is concerning that the estimate of the appropriate cost of debt allowance is unnaturally depressed as a result.