January 2021

Reference of the PR19 final determinations: 2019-20 data for base cost models – response to working paper

Ofwat

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1. Introduction

1.1 In September the CMA published its provisional determinations in relation to the Anglian Water, Bristol Water, Northumbrian Water and Yorkshire Water price controls for 2020-2025 following a reference from Ofwat on request of each company.

1.2 To determine the efficient level of base (ie routine) costs for each company, the CMA used a set of econometric models fed by input data for the period 2011-12 to 2018-19.

1.3 Since the publication of the provisional findings, the disputing companies have argued that the econometric models should be updated with new data from the year 2019-20.

1.4 On 13 January 2021 the CMA issued a working paper consulting on whether to include 2019-20 data in the base cost models for these references.

1.5 In the working paper the CMA makes a provisional decision not to use the new year of data, either for the determination of the base cost allowance for water services, or in relation to wastewater services. The CMA considers that the disadvantages of including 2019-20 wholesale water and wastewater cost data in its cost models outweigh the advantages. In reaching this provisional decision, the CMA gives particular weight to the risk of biasing its predicted allowances for companies' base costs, since biased predicted allowances risk consumers overpaying or underpaying for water services. The CMA view is that this is a high risk in comparison to the benefits which 2019-20 cost data might provide.

1.6 The CMA has provisionally decided to use the new year of data only to update the forecast of cost drivers for the period 2020-25.

1.7 The CMA is also consulting on three methodological issues that may arise should it decide to change its provisional decision, and to use the 2019-20 data in its final determinations.

1.8 This document sets out our response to the CMA's working paper.

1.9 We will also provide a response to any new issues or further arguments raised by the disputing companies, or other parties, in response to this working paper.

2. Our response

2.1 The CMA notes that "it is common practice for the CMA to exclude data that it finds to be unreliable or unrepresentative" (para 61). It provides examples of instances where it has considered whether information is sufficiently complete and robust for it to be safely relied upon. The CMA goes on to suggest that the inclusion of 2019-20 data may offer both advantages and disadvantages, which it proceeds to discuss, before arriving at a view "on balance" that the disadvantages of including the data outweigh the advantages (para 64).

2.2 We strongly support the decision not to include the 2019-20 data. The 2019-20 data is unrepresentative and insufficiently robust to be safely relied upon. It therefore falls squarely within the categories of data which the CMA has rightly and regularly excluded from its analysis.

2.3 As we previously pointed out, and as the CMA concluded through its independent analysis, there is considerable evidence that wholesale water expenditure in 2019-20 is significantly affected by pre-spending for AMP7. That is the main reason why the data is unrepresentative and unreliable. This evidence includes:

- A trend analysis which shows that 2019-20 was a high cost year, particularly considering the regulatory cycle where the fifth year has typically been a relatively low or average cost year.[1]
- Direct evidence from companies on the nature of expenditure in 2019-20, both in water and in wastewater.[2]
- The CMA's analysis comparing outturn costs with business forecast costs in 2018-19 and 2019-20. This analysis shows that in 2019-20 outturn costs significantly exceeded companies' forecasts by over £300 million (9%).[3]

2.4 The evidence from companies' commentaries, our analysis, and the CMA's independent analysis, combine to provide strong and consistent evidence that the 2019-20 data is materially and atypically distorted.

[1] Competition and Markets Authority, '2019/20 data for base cost models – Working Paper', January 2021, p. 14, paragraph 34; Ofwat, 'Reference of the PR19 final determinations: Costs and Outcomes – response to provisional findings responses', November 2020, p. 89, paragraph A6.4.
[2] Competition and Markets Authority, '2019/20 data for base cost models – Working Paper', January 2021, pp. 6-7, paragraph 10.
[3] Competition and Markets Authority, '2019/20 data for base cost models – Working Paper', January 2021, pp. 16-18, paragraphs 40-44.

2.5 The implication of the fact that 2019-20 data is significantly affected by pre-spending for AMP7 is that the model results will be biased – both the estimated coefficients and the catch-up efficiency challenge. Using a biased model is undesirable regardless of whether the bias reduces or increases companies' cost allowances because, as noted by the CMA, "biased predicted allowances risk consumers overpaying or underpaying for water services" (para 64). Given the significant scope for distortion, using the new year of data would not be in the interest of the disputing companies' customers.

2.6 We agree with the CMA's view that a company-specific adjustment to the 2019-20 expenditure would not mitigate the risk of biased estimates. A company-specific adjustment to companies' 2019-20 expenditure to reflect the investment brought forward from AMP7 would not be robust, as some companies have been unable to quantify the expenditure specifically relating to 2020-25 targets.[4] We also agree that the use of a dummy variable would not address the issue. We have previously argued that a dummy variable is an imperfect tool to capture the full and accurate effect of the additional investment brought forward in 2019-20.[5]

2.7 In light of the above, we support the provisional view set out by the CMA not to use 2019-20 data to re-estimate the wholesale base cost models.

2.8 We also support the CMA's view not to use the 2019-20 data for wholesale wastewater alone, given several companies indicated the presence of substantial investments in preparation for AMP7 performance commitments in this area, including United Utilities, South West Water, Southern Water, Dŵr Cymru and Yorkshire Water.[6]

2.9 Finally, we agree with the CMA's provisional decision to use the 2019-20 cost driver data to update its cost drivers' forecast for 2020-25.

[4] Competition and Markets Authority, '2019/20 data for base cost models – Working Paper', January 2021, p. 22, paragraph 63.
[5] Ofwat, 'Reference of the PR19 final determinations: Costs and Outcomes – response to provisional findings responses', November 2020, p. 91, paragraph A6.10.
[6] Competition and Markets Authority, '2019/20 data for base cost models – Working Paper', January 2021, pp. 6-7, paragraph 10.

3. Our response to the specific methodological issues that may arise should the CMA decide to use 2019-20 data

3.1 The working paper invites views on three methodological issues that would arise if the CMA changes its provisional decision and decides to use the 2019-20 data in wholesale water and/or in wholesale wastewater.[7] We provide our brief view below.

Frontier shift

3.2 We have nothing further to add to our previous submissions, in particular page 4 of the November costs and outcomes submission, where we said:

> "In relation to modelled base costs, if the CMA models are updated to include 2019-20 data, modelled costs will then be based on data from 2011-2020. While this implies that frontier shift should be applied from 2020-21 onwards, this would be a material softening of the efficiency challenge as it would only reflect frontier shift efficiency improvements from a year later. If the CMA were to incorporate 2019-20 data then it should revisit the overall scale of the efficiency challenge for the remaining years of the price control. Alternatively continuing to apply from 2019-20 would have benefits in terms of simplicity as all companies would have the same adjustment and the same adjustment would apply to all costs. It would also be consistent with the challenge placed on other companies that accepted their final determination."

Merger of Severn Trent and Dee Valley

3.3 The CMA indicates that, if it were to use the 2019-20 data, in wholesale water it would include SVE as a separate entity and drop HDD. The inclusion of SVE as a separate entity is due to sufficient difference between this entity and the historical SVT. The exclusion of HDD is due to its small presence, which would lead it to be an outlier.

3.4 In wholesale wastewater, the CMA proposes to treat SVE and HDD as a single entity and assume this to be a continuation of SVT, given the small size of HDD in

[7] Competition and Markets Authority, '2019/20 data for base cost models – Working Paper', January 2021, pp. 23-24, paragraph 67.

wastewater (which would lead it to be an outlier) and the absence of DVW in wastewater.

3.5 In wholesale water, we agree that SVE should be included and treated as a separate entity given the company's differences from the historical SVT, including in relation to relative efficiency.[8] However, we do not agree that HDD should be excluded. Unlike in wholesale wastewater, where HDD's size is markedly different to the rest of the companies, in wholesale water the sample of companies is much more varied, and includes various small companies. In particular, the size of HDD is similar to that of historical DVW, which is included in the wholesale water sample.

3.6 In wastewater, we agree that it would be appropriate to merge SVE and HDD to a single observation due to HDD being an outlier for its size compared to the rest of the sample. We also agree that on balance it would be appropriate to treat the merged observation as similar to historical SVT for the purpose of panel data modelling.

Efficiency challenge

3.7 The CMA states a provisional view that the efficiency challenge should not be tightened simply because the new data results in higher cost allowances for the disputing companies. It offers the view that the efficiency challenge should be set based on the quality of the models, rather than to seek specific outcomes.

3.8 We do not agree with this provisional view. We consider that it is very important, in light of results from the new data, and in keeping with our duties in the round, including the consumer objective, that the efficiency challenge should be further reviewed and appropriately adjusted to ensure costs allowances remain efficient.

3.9 We do not agree that the efficiency challenge should be set only in relation to the quality of the econometric models. There are other relevant considerations that should be taken into account adequately to discharge our duties in the round, including the consumer objective. These include the credibility of the companies that determine the efficiency benchmark, evidence from companies' forecast of future base costs, the quality and representativeness of the sample data (eg are the sample costs, on average, representative of annual routine costs, subject to some natural cyclicality?).

[8] Ofwat, 'Ofwat response to RFI 019 – 13 November 2020 (updated)', November 2020, p. 2.

3.10 It is very difficult to justify a fine calibration of the efficiency challenge based on the quality of the econometric models alone. This link has not been statistically established and it would be difficult and disputed to establish such clear link. Moreover, even if we agree that an upper-quartile catch-up challenge is reasonable based on the quality of the models, the magnitude of the challenge can vary materially based on some non-trivial decisions, such as the length of sample used to determine the catch-up challenge or whether the challenge is set at the price control level or at the service level.

3.11 The upper quartile is a reasonable starting point, based on the quality of the models and the wider process for determining base costs. However, the precise calibration of the catch-up efficiency challenge needs to be informed by an in the round view, using all relevant evidence.

3.12 At final determinations, we considered that there was sufficient evidence to set the challenge beyond the upper quartile. This was on the basis of evidence from companies' forecast of base costs and the over-representation of high cost years in our sample. We consider that there would be an even stronger rationale for a further stretch of the upper quartile challenge than at the time of our decision for final determinations should the CMA decide to use the 2019-20 data in some capacity because of:

- the evidence from company forecasts of base costs – the discrepancy between modelling results and companies' forecasts of base costs would be larger than at final determinations; and
- the lesser extent to which the sample data is representative of annual routine costs – we considered that with the 2018-19 data the sample had over representation of high cost years (based on regulatory cycle). This would be exacerbated if the 2019-20 year data, which includes significant costs to deliver AMP7 outcomes, were included.

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