THE CMA REDETERMINATION OF PR19

Our assessment of the key issues and implications

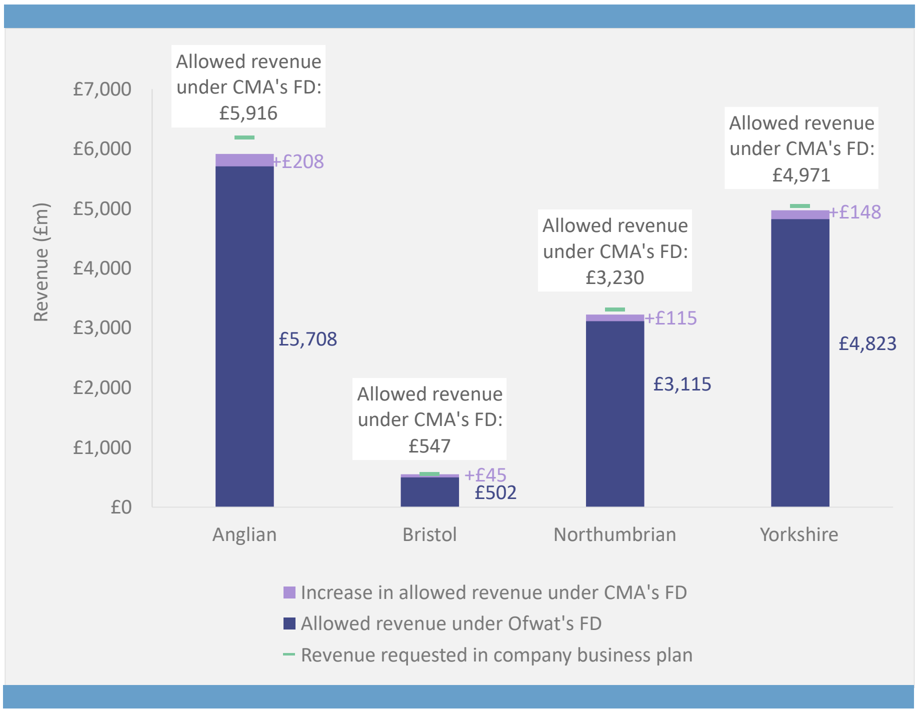
April 2021

On 9th April 2021, the CMA published the details of its final determination (FD) for the four companies that appealed Ofwat's PR19 FD. Primarily driven by concerns over the financeability of the notionally efficient firm, the CMA awarded the companies over £500m in additional revenues. The increased revenues occurred primarily as a result of increases to both the WACC and the totex allowances. Whilst Ofwat (and other regulators) have recently placed significant weight on ensuring low prices for current customers, the CMA's decision is likely to cause a reset in how outcomes for both current and future customers are considered. Furthermore, the CMA's decision to 'aim up' on the cost of equity by 25bps adds to the case against Ofgem's 25bps outperformance wedge adjustment, which the CMA will address as part of the ongoing RIIO-2 appeals. Economic Insight was the lead economics advisor to Yorkshire Water throughout the redetermination process, and provided evidence on some of the key issues.

1. Overview

The change in companies' allowed revenue from the CMA's redetermination is summarised in the chart below.

Figure 1: Allowed revenue under CMA FD versus Ofwat FD



Source: Economic Insight analysis of CMA FD

Note: Revenue requested in company business plans is calculated from the business plan average bills included in the CMA's FD, and the ratio of total revenue to average bills under the CMA's FD.

> "…we conclude that the evidence requires us to modify the package that Ofwat imposed to achieve cost-effective improvements in service while at the same time securing that the Disputing Companies are financeable." – CMA

As shown, each company received an uplift to its allowed revenue. Consequently, average bills for the companies were set 4% higher by the CMA relative to Ofwat, over the regulatory period – a significant increase. Notably, the CMA's position is also closer to the companies' April business plans than to Ofwat's FD.

In coming to its decision, **the CMA reached materially different views to Ofwat in relation to totex allowances and the WACC**, whilst being more aligned with Ofwat in other areas of the price control (e.g. outcome incentives). Where the CMA made material changes to Ofwat's package, **ensuring financeability was a fundamental driver** – a key issue that Economic Insight provided detailed evidence on. Despite the changes that the CMA made to the overall package, it largely followed the structure and methodology used by Ofwat in its FD.

Compared to Ofwat's FD, the CMA:

- allowed an additional £307m in base costs;
- allowed an additional £90m in enhancement costs;
- increased the appointee WACC from 2.96% to 3.20%;
- made only limited changes to Ofwat's package of outcome incentives; and
- removed Ofwat's novel gearing outperformance sharing mechanism.

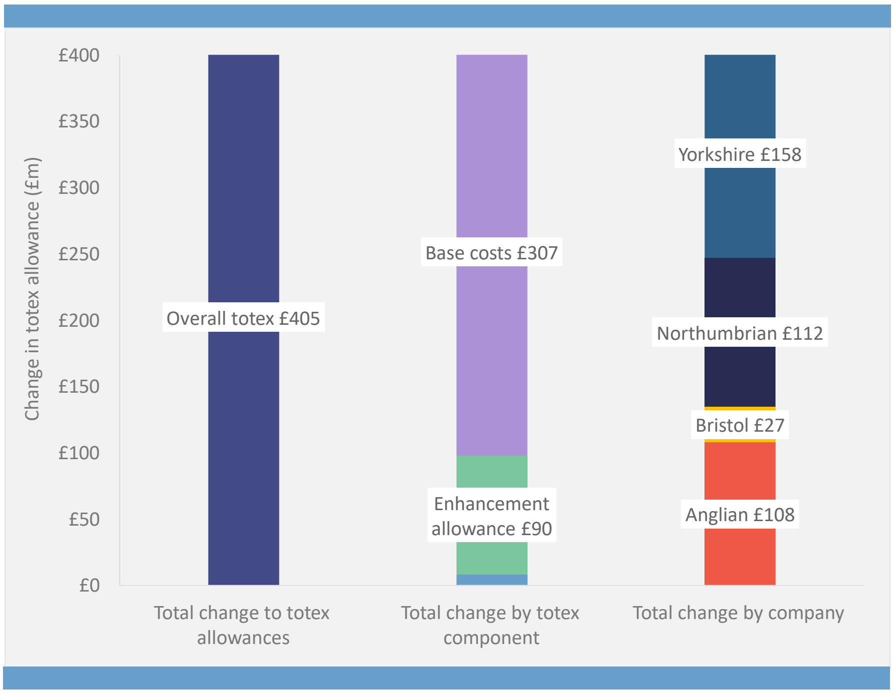
In the following sections we provide further details as to how the CMA arrived at each of these decisions, along with its rationale.

2. The CMA's decision by key 'building block'

2.1 Totex

The CMA increased totex allowances by £405m across the four companies. In the chart below, we show how this increase is split by totex component and by company.

Figure 2: Increase in totex allowance under CMA FDs versus Ofwat FDs (£m)



Source: Economic Insight analysis of CMA FD
Note: other changes to the totex allowances, indicated by the blue block in the middle bar, include operating lease adjustments; strategic regional water resources solutions; and other cash items.

As shown in the above chart:

- **The CMA increased base cost allowances by £307m**. Key details as follows:

  - Modelling approach and data. The CMA employed a similar approach to Ofwat in its econometric modelling of base costs. However, the CMA made minor adjustments to the models and used an additional year of data that had not been available to Ofwat (2019/20) – the latter resulting in a large increase in cost allowances. The CMA decided that the advantages of using the additional year of data (e.g. accounting for the most recent information and increasing the number of observations) outweighed the risks of a potential bias (e.g. as a result of investment having been brought forward to meet PR19 outcome targets). Interestingly, the CMA initially proposed to *exclude* the additional year of data in one of its working papers, and the decision to include it in its FD appears to be a finely balanced one. Although the CMA did not accept that there was a 'simple' cost-service relationship, we consider the fact that outcome targets were so stretching may have contributed to the CMA's decision to use the additional year of data. As noted above, its decision will also have been made in the context of its **financeability concerns**.
  - Efficiency benchmark. The CMA set the catch-up efficiency benchmark at the upper quartile, rather than the 3rd or 4th company used by Ofwat. The CMA considered this decision appropriately balanced the need to set a challenging determination with the limitations of econometric modelling. In particular, the CMA noted that too challenging a benchmark could risk insufficient allowed revenues to ensure the base level of service (i.e. that a 'tougher' benchmark may result in the companies being unfinanceable).
  - Frontier shift. The CMA used a frontier shift of 1%, down from the 1.1% used by Ofwat in its FD, and applied this to both modelled and unmodelled costs. However, the CMA did not apply this to costs associated with business rates or abstraction charges (on the basis that these costs are largely outside of management control). Notably, the analysis presented by the CMA seems to support a somewhat *lower* figure; but the CMA was perhaps influenced by the fact that some companies had themselves proposed values close to Ofwat's assessment.
  - Real price effects. The CMA supported Ofwat's position that it was only appropriate to include an allowance relating to labour costs.
  - Growth. To account for each company's forecast growth in connections, the CMA: (i) applied symmetrical downward and upward adjustments, whereas Ofwat applied a more limited downward adjustment; and (ii) expanded the scope of the reconciliation mechanism.

THE CMA SET THE EFFICIENCY BENCHMARK AT THE UPPER QUARTILE – NOTING THE FINANCEABILITY RISKS OF SETTING ALLOWED REVENUES TOO LOW.

- **The CMA increased enhancement allowances by £90m.** Main points:

  - Deep dives. The CMA's most material additional funding allowances related to 'deep dive' reviews of specific investments proposed by companies. In total, the CMA allowed an additional £75m of costs relating to these. This was primarily because, in a number of instances, the CMA took a different view to Ofwat as to the need for, or efficiency of, specific investments. Here, the CMA gave material weight to independent engineering evidence.

- Leakage. The CMA considered that enhancement allowances would be needed to meet the ambitious leakage targets set by Ofwat. Thus, the CMA allowed an additional £28m for leakage enhancements for Yorkshire (as discussed in relation to outcomes below).
- Phosphorus-removal allowances. In modelling allowances for P-removal, the CMA employed an approach consistent with Ofwat's. However, the CMA used a broader range of model specifications. This change resulted in £4m and £9m of additional allowances for Northumbrian and Yorkshire respectively.
- Frontier shift. The CMA applied frontier shift to all enhancement costs (not just WINEP and metering as Ofwat did). This resulted in a net reduction of £21m in enhancement allowances across the four companies.

2.2 The WACC

The CMA set a substantially higher WACC (3.2%, appointee, CPIH) compared to Ofwat (2.96%). Overleaf, Table 1 provides an overview of the CMA's decision on each of the key parameters and how it compares to Ofwat's position.

Table 1: Summary of CMA decision on the WACC

	Ofwat FD	CMA FD	Basis for CMA decision
Appointee WACC	**2.96%**	**3.20%**	**Based on updated cost of equity and debt as below. Gearing at 60% (no change to Ofwat FD).**
Post-tax cost of equity	**4.19%**	**4.73%**	**Based on updated components. The CMA picked a point estimate 0.25% above the midpoint of its range.**
TMR	6.50%	6.81%	In comparison to Ofwat, the CMA placed more weight on historical ex-post returns, and less weight on forward looking evidence.
Risk free rate	-1.39%	-1.34%	The CMA placed weight on both long-tenor index-linked gilts and AAA-rated non-government bonds (Ofwat considered only the index-linked gilts).
Unlevered beta	0.29	0.29	The CMA used a broadly similar to approach to Ofwat. The CMA updated the analysis using up-to-date data but placed less weight on the lower estimates produced as a result (on the basis that the effects of COVID-19 may be overweighted in these).
Debt beta	0.125	0.075	The CMA placed less weight on the decomposition approach used by Ofwat (on the basis that such methodologies can produce uncredible results), and more weight on regression results which showed the debt beta may not be significantly different to 0.
Pre-tax cost of debt	**2.14%**	**2.18%**	**Based on the updated costs for embedded and new debt, the cost of issuance, and ratio of embedded to new debt.**
Cost of embedded debt	2.42%	2.47%	The CMA undertook an assessment of companies' actual costs (submitted by the parties after PFs), and cross checked this against external benchmarks to ensure it did not overcompensate companies. In comparison, Ofwat used an external benchmark and cross checked this against actual costs.
Cost of new debt	0.53%	0.19%	The CMA removed Ofwat's outperformance wedge but maintained the true-up mechanism. The CMA set the allowance relative to an iBoxx A/BBB 10+ benchmark, measured over the first 6-months of the price control.
Proportion of new debt	20%	17%	The CMA undertook an assessment of actual debt maturing and required for RCV growth over the price control – and undertook cross checks on these. In comparison, Ofwat placed most weight on a 'notional approach' which assumed that a new debt issuance profile can be inferred from data on the years to maturity of companies' existing embedded debt.
Issuance and liquidity	0.10%	0.10%	No change.

Source: Economic Insight analysis of CMA FD

"We therefore continue to assume that financeability should be a valuable cross-check when picking an appropriate point estimate from a calculated cost of capital range" – CMA

In setting the overall level of the WACC, **the CMA viewed financeability as a key consideration**. In particular, and with regard to Ofwat's methodology, the CMA noted the following.

- The overall regulatory settlement needs to include a consideration of whether the WACC assumptions chosen are consistent with the credit rating assumed throughout the determination. On this basis, the CMA also disagreed with Ofwat's submission that the need to maintain credit metrics can never be part of the WACC assessment.

- Ofwat's cash flow advancements (via the PAYG rate and RCV run-off adjustments) resulted in higher bills for current customers, without improving credit quality according to credit rating agencies. Furthermore, even if there was an uplift to credit quality in one period, the adjustments could give rise to a reduction in credit quality in future periods (as it is not obvious there would be 'excess' cashflows in future periods to avoid subsequent financeability concerns). We think this also highlights a fundamental issue with the totex approach; in that the regulator has the ability to continually change the way in which revenues are recovered across control periods, in a way that investors may worry is not necessarily value neutral.

THE CMA 'AIMED UP' IN SETTING THE COST OF EQUITY. IN OUR VIEW, THIS WAS PRIMARILY DRIVEN BY A FUNDAMENTAL CONCERN AROUND FINANCEABILITY.

In our view, the weight given by the CMA to financeability is especially apparent in its decision to **set the cost of equity 0.25% above the mid-point of its estimated range** (i.e. the CMA 'aimed up'). Here, the CMA noted the following considerations in its decision.

- The allowed cost of equity must be set to ensure financeability across the package. Specifically, the CMA made it clear that if allowed revenues (and associated cash flows) are not consistent with an efficient firm being able to meet investment grade status, an increase in the allowed WACC is the appropriate remedy – and not adjustments to the timings of cashflows.

- There is considerable uncertainty in estimating the cost of equity, particularly in the context of the decline since the last price control (PR14).

- Setting the cost of equity too low risks underinvestment and the exit of capital. That is, the CMA was concerned that 'too low' a WACC would place too much weight on the welfare of current customers, relative to future customers. Ofwat argued that investment would be invariant to a higher WACC, but the CMA disagreed. Economic Insight provided empirical evidence that there is a strong relationship between the WACC and investment.

- Asymmetric risk in the rest of the package should be reflected in the WACC point estimate. The CMA found that the package of outcome incentives set by Ofwat (and largely unchanged by the CMA) represented asymmetric risk for the disputing companies. Therefore, the fact that the expected return would be below the allowed return provides further justification to aim up.

2.3 Outcome delivery incentives

The CMA was generally supportive of Ofwat's outcomes framework – and the level of challenge set by it. Thus, the CMA made no major changes to Ofwat's determination with regard to most outcome delivery incentives (ODIs). In coming to this decision, the CMA made the following observations.

- The three performance commitments (PCs) set on the basis of the forecast upper quartile (i.e. water supply interruptions, pollution incidents, and internal sewer flooding) were appropriately challenging. Furthermore, the CMA noted the use of upper quartile benchmarking is common in economic regulation.

- There is no simple cost-service relationship whereby more demanding PCs should always be accompanied by higher costs. Moreover, for the PCs other than leakage, the CMA did not find that the improvements in performance required by the common PCs justified an increase in cost allowances across the companies. However, as noted above, we consider that the potential for cost-service relationships may have contributed to the CMA's decision to include 2019/20 in its cost benchmarking dataset, along with its broader decision to significantly increase allowed revenue.

The CMA considered leakage separately. Here, the CMA found that additional enhancement allowances could be justified on the basis of both maintaining stretching performance and achieving it – in effect, a cost-service relationship existing for leakage. More specifically:

- With regard to maintaining higher leakage performance (i.e. performance above the upper quartile), the CMA considered that base cost allowances may not adequately compensate companies for the costs of achieving this. Both Anglian and Bristol are higher performing companies on leakage, but the CMA decided that only Anglian required an increase to its base cost allowances. The CMA considered the costs for Bristol to maintain its lower level of leakage were funded through existing base cost allowances, once the 2019/20 data had been incorporated into the modelling.

- With regard to improving leakage performance, the CMA disagreed with Ofwat's position that the companies which were not high performers may have profited in the past by underperforming against their leakage targets, or by obtaining excessively generous funding for those targets. Supported by evidence we developed, an additional £28m leakage allowance was provided to Yorkshire for meeting Ofwat's targets.

2.4 Other incentive mechanisms

In considering Ofwat's other incentive mechanisms, the CMA made two significant decisions, as detailed below.

- The CMA rejected Ofwat's proposed gearing outperformance sharing mechanism, on the basis that the mechanism was ineffective as either a benefit sharing mechanism or a tool to improve financial resilience. Furthermore, the CMA found that Ofwat had not adequately demonstrated that companies were benefitting financially from higher gearing. Economic Insight provided evidence that demonstrated these benefits do not exist.

- The CMA set a totex sharing mechanism that was 'less severe' than Ofwat's. This was to avoid the risk of perverse incentives, especially in the context of investments which are needed over multiple periods. The CMA set an asymmetric sharing rate under which the companies bear 55% of the overspend, and 45% of the underspend.

3. Implications of the CMA's decision

The CMA's redetermination is likely to have wide ranging implications for the future of economic regulation – and not just in water.

3.1 CMA suggestions for Ofwat

Although the CMA was encouraged by some stakeholders to make recommendations as to how Ofwat's framework could be improved for future price reviews, its suggestions were largely limited to the collection of more data. Most notably, the CMA suggested:

- Given the limitations of determining enhancement allowances on the basis of benchmarking forecast costs, there may be merit in additional safeguards. The CMA recommended that Ofwat considers introducing a mechanism for PR24 to provide a more effective basis for ex-post reporting on P-removal costs.

- Ofwat should collect data such that it can separate base costs from enhancement costs, so there is no need to make a modelling adjustment for enhancement opex in future price reviews.

The CMA also recognised the limitations of the customer research that had been used to support ODIs, and appeared to welcome Ofwat's recent consultation on how customer preferences might inform future price reviews.

3.2 Implications for UK regulation in general

"…the WACC is the primary factor in the redetermination ensuring that an efficient firm can finance its functions. If the WACC is set at a level which properly reflects the cost of debt and cost of equity for the investors in the sector, both debt and equity investors will earn sufficient returns to cover the costs of financing, and therefore the companies will be financeable…" – CMA

The CMA's decision might conceivably prompt a reset in how prices and other outcomes are considered, for both current and future customers. Economic regulators have recently placed signficant focus on ensuring that 'current' customers pay low prices. For example, through setting the cost of capital at historically low levels and/or by setting more challenging cost benchmarks. Indeed, it may appear to some that a game of *'how low can you go'* has been played. The CMA's decision is likely to buck this trend, and remind regulators that there is a cost to going 'too low'. Although it is hard to pinpoint, there is an efficient level of allowed revenue, and deviating from this (either above or below) will cause customer harm. Of particular relevance for future price controls, without sufficient returns for investment, there is likely to be underinvestment in resilience and efforts to meet the net zero target.

The CMA ultimately took the view that Ofwat's FD package was not consistent with a notionally efficient firm being financeable. Although its 'solution' changed slightly between its provisional findings and its FD, the CMA found that a significant increase in allowed revenue was required.[1] It also decided that the reprofiling of allowed revenue in an attempt to improve financial metrics within the regulatory period was not an appropriate solution to financeability concerns. This may deter regulators

[1] *The CMA's provisional findings included a higher cost of capital and lower cost allowances, relative to the CMA's FD.*

from advancing revenue in the future – and place the focus back on the cost of capital and cost allowances, when addressing financeability constraints.

The CMA's redetermination will also support:

- reflecting cost-service relationships in allowances and targets;
- the use of upper quartile benchmarks, rather than anything more challenging;
- any asymmetries in risk, including from outcome incentives, being taken into account when setting the WACC; and
- regulators applying a degree of judgement when taking account of customer evidence in setting outcome targets.

3.3 Implications for energy appeals

All of the transmission and gas distribution companies are appealing Ofgem's recent RIIO-2 FD. Although the CMA is not bound by its previous decisions and there is a different decision-making panel, the CMA will take account of precedent.

One obvious read across is in relation to the cost of equity. Ofgem set the cost of equity for the energy companies at 4.55% (CPIH real, 60% gearing); whereas the CMA set a higher value of 4.73% (CPIH real, 60% gearing) for the water companies. Many would argue that the energy sector is riskier than water. However, for the energy appeals, the CMA will have to decide whether or not Ofgem was 'wrong'. Whereas for the water redeterminations, the CMA had to reach its own view given the evidence available to it. Nevertheless, the energy companies are appealing on the grounds that Ofgem made errors in its *approach* to setting the cost of equity.

A related matter is Ofgem's outperformance wedge. Ofgem reduced the allowed cost of equity by 25bps on the basis that investors should expect outperformance. As Economic Insight has previously argued, such an adjustment lacks both theoretical and empirical support. Furthermore, in its redetermination, the CMA decided to 'aim up' on the cost of equity by 25bps, and it did not pursue Ofwat's apparent stance that companies had outperformed in the past and therefore more stretching targets were warranted. As such, the CMA's redetermination adds to the case against Ofgem's 25bps outperformance wedge adjustment – and is one of the grounds of appeal for which the CMA may be more likely to find that Ofgem was 'wrong'.

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