# Water UK response to PR24 and Beyond: Discussion paper on risk and return

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## Summary

Water UK is the representative body and policy organisation for water and wastewater service providers across the UK. We welcome the opportunity to respond to Ofwat's discussion paper on risk and return[1]. This response represents the considered and consolidated views of Water UK's members, and should be read alongside our response to the separate discussion paper on financial resilience[2]. We note that many of the issues considered in the discussion document are highly technical and we do not respond to those specific elements here; companies will respond to those technical arguments specifically in their individual responses.

**Taken together we consider that the proposals set out in the discussion document could have a significant negative impact on customers and the environment. They are not consistent with the supportive investment atmosphere that is needed for PR24 in order to meet the long-term interests of customers and the environment.**

Whilst the changes proposed in the document would reduce customer bills, and at a difficult time, as we look ahead to the long-term in line with Ofwat's PR24 principles and objectives[3] there is also a clear need for substantial, sustained new capital investment to meet the long-term interests of customers and the environment.

For example, work by the National Infrastructure Commission suggests that £21bn of new investment would be required to address the supply demand imbalance in water resources[4], there has been significant recent focus on the need to invest to improve river quality, including through reducing water abstraction and reducing the harm from combined sewer overflows[5] and Water UK's own work on achieving Net Zero suggests some £2-4bn of investment will also be required[6].

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[1] https://www.ofwat.gov.uk/consultation/pr24-and-beyond-discussion-paper-on-risk-and-return/
[2] https://www.ofwat.gov.uk/consultation/financial-resilience-in-the-water-sector-a-discussion-paper/
[3] See: https://www.ofwat.gov.uk/wp-content/uploads/2021/05/PR24-and-Beyond-Creating-tomorrow-together.pdf pp.3 in which Ofwat sets out its desire to 'focus on the long term'
[4] See: https://nic.org.uk/app/uploads/NIC-Preparing-for-a-Drier-Future-26-April-2018.pdf pp.4
[5] EAC, 2021, Water quality in rivers, see: https://committees.parliament.uk/publications/8460/documents/85659/default/ The summary of the report notes: *'The sewerage system is overloaded and unable to cope with the increasing pressures of housing development, the impact of heavier rainfall, and a profusion of plastic and other non-biodegradable waste clogging up the system. Successive governments, water companies and regulators have grown complacent and seem resigned to maintaining pre-Victorian practices of dumping sewage in rivers. There has been investment in the network since privatisation, but underlying problems have not been resolved and capital investment has not kept pace with housing and other development pressures on the drainage and treatment network.'*
[6] See: https://www.water.org.uk/routemap2030/wp-content/uploads/2021/03/Water-UK-Net-Zero-2030-Routemap-Summary-updated.pdf pp.7

This will require the sector to attract new capital in a competitive and international market for that investment, with much of that needed precisely in the next five-year period. Without that investment the detriment to consumers and the environment would be very significant[7], for example the NIC report notes that the impact of not investing could be c.£40bn, and we consider that PR24 needs a greater focus on supporting this investment. Indeed, one of the reflections on last price review has been that there was too strong a focus on short-term bill reductions[8].

However, taken together the changes proposed in the document would:

- require the sector to raise additional new equity, over and above the equity the sector will need to attract to meet the key challenges set out above, under the changes proposed to the notional structure; and
- offer significantly lower returns to that equity, with a highly material – and unwarranted – reduction to the cost of equity implied by the changes.

These changes would occur at a time when, as Ofwat recognises, sector risks are already increasing[9], when more than 80% of the sector is failing to earn their base allowed return[10] and when there has been substantial market volatility driven by the Covid-19 pandemic, all of which will generally make the sector less attractive to new capital.

Rather than seek more reform to every parameter involved in setting the cost of capital, reducing the allowed return and amending the notional structure to one that does not reflect the efficient capital structure observed in the sector, we would instead urge Ofwat to pursue a more stable and predictable model of regulation to support investment.

This is clearly now in the long-term interest of customers and the environment, and broader direction of travel signalled in recent PR24 discussion papers with reference to the development of long-term delivery strategies to be tested against a range of scenarios aimed at capturing, in part, some uncertainties facing the sector.

**Ofwat's proposals do not respect the CMA outcome and the checks and balances in the regulatory system**

We are disappointed that Ofwat has chosen to reject almost all of the CMA's 2021 decisions, and to ignore or not attach weight to the evidence which underpinned these decisions, from what was the most recent, longest and most considered water price review redetermination ever undertaken.

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[7] This is for example why regulators including Ofwat at PR04, PR09 and PR14 as well as the CMA have tended to 'aim-up' in setting the allowed cost of capital as, given the essential services companies provide, the detriment to consumers and the environment is greater if the return is set too low than if it is set too high, see for example the CMA redeterminations from the PR19 water appeals at: https://assets.publishing.service.gov.uk/media/60702370e90e076f5589bb8f/Final_Report_---_web_version_-_CMA.pdf pp.1094-6

[8] For example the EAC 2021 report on Water quality in rivers raised this concern and this was raised by the disputing companies in the PR19 CMA redeterminations where the CMA did increase both levels of investment and the allowed return

[9] For example, in its discussion document Ofwat recognises that 'The combined effects of a more uncertain future (for example, driven by less predictable weather and the effects of climate change) and revenue at risk from service performance…may indicate a greater role for equity in order to provide a buffer against supply-side or demand-side shocks'. Pp.43

[10] During AMP 6 over half of the companies (9/17) failed to earn their base allowed return on regulated equity. In 2020/21 this figure grew to 14/17 companies (over 80%) with three companies having negative RoRE. See: https://www.ofwat.gov.uk/regulated-companies/resilience-in-the-round/monitoring-financial-resilience/

Moreover, the proposals set out in the discussion paper omit evidence recognised by the CMA as relevant and valid in its recent PR19 re-determination and renders the proposals in combination an insufficient basis for setting allowed returns.

We recognise that there have been subsequent appeals against regulatory decisions (as opposed to redeterminations) in the energy sector and indeed that there may be more appeals in other sectors in the future ahead of PR24, the decisions of which may not be entirely irrelevant to the approach taken at PR24. However, we consider that the water sector appeals and their final determinations from less than a year ago remain by far the strongest precedent for Ofwat at PR24, in particular:

- they were made on companies operating within the sector who are facing the specific risks water companies face as opposed to energy networks or air-traffic control which have very different characteristics; and
- the appeal mechanism in the energy sector, from which Ofwat draws most heavily, is very different as under that mechanism, as the CMA itself has noted, the CMA is simply required to determine whether the regulator has made an 'error' rather than what they consider to be the right or best approach to estimation - which is what the water redetermination implies.

In this context Ofwat should therefore be setting itself a well-evidenced and high bar for deviating away from the CMA water redeterminations.

Parliament set out a legal framework for water companies and their investors at privatisation that allows companies the opportunity to seek a full 'de novo' redetermination in extreme circumstances. Up until PR19 that framework was rarely triggered, and the regulatory model enjoyed a significant degree of stability and predictability[11].

Where companies do seek an CMA appeal both sides have a responsibility to accept the decisions and the precedent it sets; otherwise, the same issues are returned to the CMA on multiple occasions damaging confidence in the checks and balances in the regulatory system[12].

Reading the discussion document, on the face of it Ofwat appears to have selectively accepted only those CMA decisions that would reduce companies' allowed returns, rejecting any that would increase them and cherry-picked elements from the various CMA redeterminations and appeals. As can be seen in Figure 1 below, which summarises the more detailed table in Annex A:

- Ofwat has rejected most of the CMA's decisions adopting consistent approaches potentially on just two or three parameters;
- the calculation of Beta remains unclear and the approach to embedded debt and removing the customer benefits test are the only instances of consistency and even in these instances, there remains significant uncertainty about what approaches will be taken and Ofwat has signalled departures from the CMA's approach which could further reduce estimated returns. On Beta in

[11] This stability and predictability was, for example, recognised by the independent rating agency Moody's in its assessment of the Water regulation model for England and Wales but this was adjusted in 2018, Moody's, 28 May 2018, *Regulator's proposals undermine the stability and predictability of the regime*

[12] An example of this is Ofwat's approach to the small company premium, which Bristol Water brought to the CMA and its predecessor body three times with the CMA rejecting Ofwat's approach on each occasion. Despite these rejections Ofwat never reflected the CMA or its predecessor's views in its price control methodology.

particular Ofwat is considering approaches to de- and re-levering which are inconsistent with the CMA decision on this question, and which would materially reduce the allowed return and on embedded debt Ofwat proposes to exclude the costs of swaps, which the CMA included; and

- across all other areas, almost all of which led to the CMA increasing the return, Ofwat proposes to reject the CMA's approach in favour of alternatives which were generally considered and explicitly rejected by the CMA and which will reduce the allowed return.

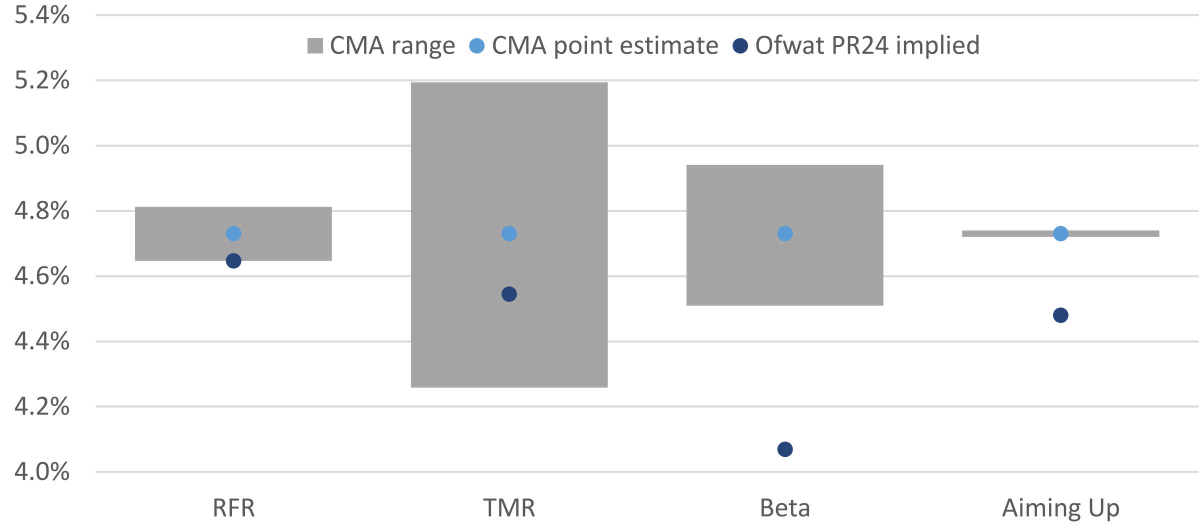
**Figure 1: Comparative assessment of Ofwat's risk and return consultation with the CMA appeal decisions**

| Parameter area | Was it changed by CMA? | Indicative impact of CMA change on allowed return | Is Ofwat's proposed approach for PR24 consistent with CMA? | Indicative impact of Ofwat change on allowed return |
|---|---|---|---|---|
| **Cost of Equity** | | | | |
| Risk Free Rate | Yes | Upward | No | Downward |
| Total Market Return | Yes | Upward | No | Downward |
| Beta (excluding impact of de-levering/re-levering and treatment of covid data) | No | No change | Yes | No change |
| Treatment of Covid data | Yes | No change | Not clear | Not clear |
| Beta- de-levering and re-levering | No | No change | Not clear- Ofwat considering approaches that could reduce returns | Not clear but potentially downward |
| Aiming-up | Yes | Upward | No | Downward |
| **Cost of Debt** | | | | |
| Cost of embedded debt | Yes | Flat | Yes- but methods are unclear | Not clear |
| Embedded debt- scope | Yes | Flat | No | Downward |
| Cost of new debt | Yes | Upward | No | Downward |
| Customer benefits test for company specific adjustment | Yes | Upward | Yes | Upward |
| **Notional gearing** | No | N/A | No | N/A |
| **Cross-checks-** *financeability* | Yes | Upward | No | Downward |
| **Cross-checks-** *Alternative* | Yes | Upward | No | Downward |

Source: Water UK analysis of CMA final decision versus Ofwat risk and return consultation for PR24

This would result in an allowed cost of equity, for example, which is well outside the reasonable ranges from the CMA redetermination. This is shown in Figure 2 which also assumes that Ofwat makes the change to the calculation of the Beta which is currently presented as an option.

**Figure 2: Cost of equity values implied by Ofwat's proposals versus the ranges proposed by the CMA**




Note: Water UK analysis, RFR shows indicative impact of using ILGs only, TMR shows impact of dismissing RPI evidence (assumes CPIH=CPI) and using forward looking evidence to select the point estimate. Beta- only includes the impact of relying on raw equity beta directly. Aiming up- excludes CMA's 25 bps adjustment

**Ofwat is separately raising concerns about the financial resilience of the sector[13]; whilst we do not agree with those concerns we note that the proposals in the risk and return working paper will, all else equal, harm financial resilience.**

Ofwat has published a separate consultation on the financial resilience of the sector. Whilst we do not recognise the concerns voiced by Ofwat in that paper which focus primarily on water company capital structures, we note that the scope of this paper only considers one half of the financial resilience equation (the liability side).

However, the financial resilience of the sector is also inextricably linked to the level of the allowed return and risk exposure implied by the regulatory framework, for example the calibration and overall impact of the ODI framework. The lower the allowed return, the lower the equity buffer companies will have to respond to and manage shocks and stresses. This point was recognised by the CMA[14] who said:

*"Our starting point is that 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."*

Indeed, less than a year ago the CMA adjusted Ofwat's previous approach to risk and return in part precisely because they considered that Ofwat's approach did not sufficiently support the financial resilience of the companies. **Ofwat's proposals for risk and return at PR24 are inconsistent with those decisions and the proposed changes to the setting of the allowed return can only weaken the financial resilience of the sector.**

[13] https://www.ofwat.gov.uk/consultation/financial-resilience-in-the-water-sector-a-discussion-paper/

[14] https://assets.publishing.service.gov.uk/media/60702370e90e076f5589bb8f/Final_Report_---_web_version_-_CMA.pdf , page 1116

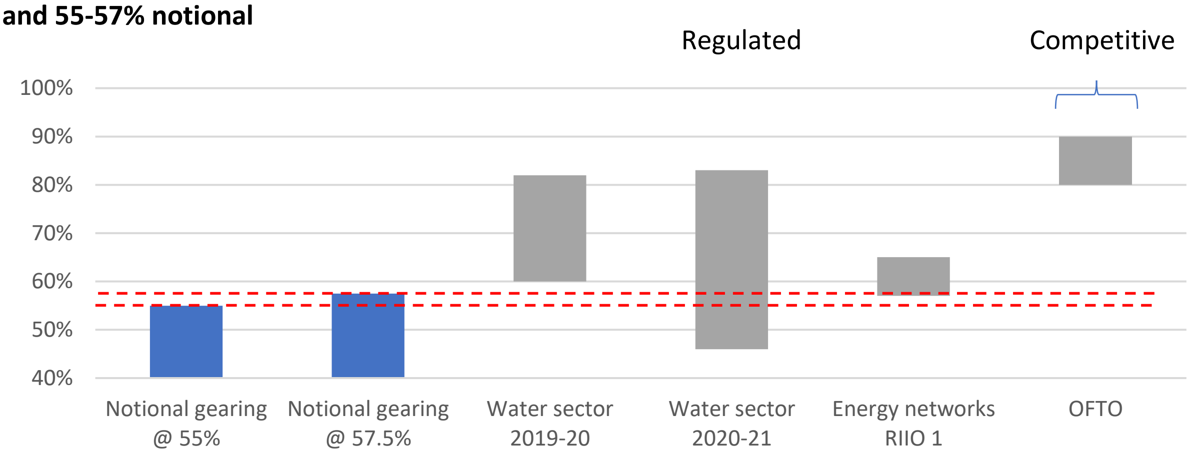
**The economic rationale for adopting a notional structure does not support Ofwat's proposals to adjust notional gearing – the level proposed would not represent an efficient water company**.

Regulators have for many years used a notional company structure when setting price controls, the use of the notional company has two long-standing objectives recognised by Ofwat in the consultation[15]:

- It allows an approximation of an efficient capital structure - so where companies adopt inefficient capital structures the regulator does not have to embed those structures into the determination for customers; and
- It enables regulators to be agnostic to the structures adopted by companies - any risks implied by those structures will sit with shareholders.

This implies that any adjustment to the notional structure must be driven by some evidence that the predominant structure in the sector is inefficient for some reason or perhaps might expose customers to excessive risk. At 60% the current notional structure is below the actual structure for all but one company in the sector and at the bottom end of other comparable regulated and competitive infrastructure sectors. A notional gearing level below 60% is therefore unlikely to be efficient, implying higher costs for customers.

**Figure 3: Comparative analysis of gearing across regulated and competitive infrastructure sectors and 55-57% notional**




Sources: Water sector data sourced from Ofwat: https://www.ofwat.gov.uk/regulated-companies/resilience-in-the-round/monitoring-financial-resilience/, energy networks data sourced from Ofgem Regulatory financial performance data file - Annex to RIIO-1 Annual Reports 2019-20, and OFTO data from: https://www.ofgem.gov.uk/sites/default/files/docs/2014/02/offshore_transmission_-_an_investor_perspective_-_update_report_1.pdf

Ofwat suggests that the notional structure 'is a matter of regulatory judgement' and that the structure has varied over time. Whilst it is true the structure has varied, this has generally followed the changes to the sector structure – as a reflection that if the whole sector's gearing is increasing then this is likely to be a more efficient structure for customers. In making this statement Ofwat appears to imply that it can suggest whatever notional structure it chooses, which is not credible. Ofwat must provide some evidence as to why it considers that this new notional structure is efficient or in customers' interests.

[15] See section 5.1 of Ofwat's risk and reward discussion paper https://www.ofwat.gov.uk/consultation/pr24-and-beyond-discussion-paper-on-risk-and-return/

**Annex A: Comparison of Ofwat risk and reward discussion document with Water CMA decisions**

In Figure A1 below we summarise the Water CMA decisions on each of the cost of capital parameters, including the assumptions around the notional structure as well as the cross-checks that were applied to either individual parameters or the overall cost of capital allowance (column A). The figure then sets out directionally whether the changes made by the CMA generally increased the allowed return, reduced it or left it at the same level (column B). It then describes the Ofwat approach as proposed in the recent risk and return discussion paper (column C), these are coloured reflecting the extent of alignment with the CMA decisions. Finally sets out the impact Ofwat's new proposals would have on the allowed return at PR24.

**Figure A1: Summary of CMA changes in water appeals versus Ofwat's discussion document with indicative impacts**

| Parameter | A. PR19 CMA Approach | B. Impact on allowed return compared to Ofwat PR19 approach | C. PR24 Ofwat Proposed Approach (red shading denotes inconsistency with CMA, green is consistent amber denotes uncertainty at this point) | D. Impact on allowed return compared to CMA approach |
|---|---|---|---|---|
| **Risk Free Rate** | 1. Relied on the evidence from index-linked Gilts ('ILGs') and AAA rated corporate bonds to estimate RFR. It constructed a range for the RFR based on the yield on ILGs at the lower end and AAA rated corporate bonds at the upper end and selected the point estimate at the mid-point of this range. The CMA did not consider any adjustments to the AAA rate were required given its approach to selecting the point estimate.<br>2. Adopted 6-month period for estimation<br>3. Rejected the SONIA swap rate as a cross check on the basis that it is inherently a short-term rate and investors borrowing at SONIA would need to post collateral, making it unsuitable as a benchmark for long-run RFR<br>4. Used an estimate of the long-term RPI-CPIH wedge to translate the RPI-linked Gilt yields into CPIH.<br>5. Did not adjust for forward rates. | ↑ | 1. Ofwat propose to rely on index-linked Gilts ('ILGs') as the sole proxy for RFR, dismissing the evidence from AAA-rated corporate debt bonds.<br>2. Propose an averaging period of 'several' months.<br>3. Propose to use SONIA rates as a cross check.<br>4. The approach and evidence for the RPI-CPIH wedge is unclear at this stage given uncertainty around market pricing of the wedge ahead of RPI reform in 2030.<br>5. Proposes to exclude forward rate adjustments. | ↓ |
| **Total Market Return** | 1. Relied upon evidence from historical ex-post and the historical ex-ante approaches. The CMA concluded that limited weight should be placed on forward-looking evidence given reservations about the robustness of the forward-looking evidence and preference to maintain the assumption of a constant TMR over time. | ↑ | 1. Ofwat has proposed to use a range derived from both the historical approaches (ex-post and ex-ante) as a starting point, while considering forward-looking evidence to select a point estimate in that range.<br>2. Ofwat has proposed to estimate a CPIH-based TMR directly using CPIH back series currently being developed by ONS. | ↓ |

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| | 2. The CMA placed weight on estimates calculated on the basis of both RPI and CPI inflation series (RPI figures adjusted by 30bps post 2010 owing to the formula effect).<br>3. The CMA relied upon arithmetic means, namely both overlapping and non-overlapping estimators of returns over 10 and 20-year holding periods. | | 3. Ofwat has not discussed its approach to averaging. | |
| **Beta (excluding impact of de-levering/re-levering and treatment of covid data)** | 1. The CMA utilised United Utilities and Severn Trent as proxies for beta.<br>2. The CMA adopted an expansive approach estimating beta using a range of different time windows (2, 5, 10-year) and sampling frequencies (daily, weekly, monthly). | → | 1. Ofwat intends to rely primarily on SVT and UUW data at this time.<br>2. Ofwat has proposed to consider evidence from a range of estimation periods and frequencies to inform its best view of beta, although it is not clear to what extent Ofwat intends to follow the same approach as the CMA. | → |
| **Treatment of Covid-affected data** | The CMA set out to place equal weight on beta estimates from before and during the Covid-19 pandemic and applied an approach to testing outliers that further reduced the weight placed on Covid-affected data. | → | Ofwat has not signalled a proposed treatment of the data from the period affected by the pandemic and is seeking views on this. | → |
| **Beta *De and re-levering*** | The CMA applied the Harris-Pringle approach to derive the beta estimates for the notional company, de-levering raw betas from listed comparators using enterprise value gearing and re-levering to the notional gearing. It explicitly considered and rejected a similar approach to that proposed in the Wright and Mason paper that Ofwat references from the NATS redetermination. | → | Ofwat is considering alternative approaches to derive beta estimates for the notional company, including, setting the notional gearing equal to that of the listed comparators used for equity beta estimation. These changes would materially reduce the allowed return. | ↓ |
| **Aiming Up** | When setting the point estimate for the cost of equity, the CMA aimed up from the from the mid-point of the range by 25bp and emphasised the concept of aiming-up on the basis of:<br>• the need to promote and retain investment;<br>• asymmetry in the package (structural asymmetry commensurate with 0.1%-to 0.2% RORE resulting from the calibration of the performance package);<br>• parameter uncertainty in the cost of equity; and<br>• ensuring financeability. | ↑ | Ofwat intends to consider latest evidence on equity returns and wider implications of the PR24 package but has proposed not to 'aim up', as it considers:<br>• that the PR24 package will not be designed in a way that requires an allowed return on equity above the midpoint;<br>• asymmetry and investment incentives could be addressed at source; and<br>• financeability is best addressed by measures which are present value neutral in terms of customer bills – unlike aiming up on the allowed return. | ↓ |
| **Embedded debt** | The CMA put weight on company specific evidence in setting the embedded cost of debt the 'balance sheet approach'. | → | Ofwat proposes to use the balance sheet approach to set the embedded debt costs. The methodology for setting the embedded cost of debt via the balance sheet approach is unclear. | → |

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| | They applied two cross-checks based on the iboxx A/BBB index. The first used a 20 year trailing average which they adjusted for EIB and floating debt and the second used an index and a 15 year collapsing average. | | They propose to apply a cross check from relevant benchmark indices noting the CMA approach. | |
| **Embedded debt- scope** | In its 'balance sheet' approach the CMA included swaps and subordinated debt. | ↑ | Ofwat is proposing to exclude swaps from its analysis of embedded debt as well as subordinated debt. | ↓ |
| **New debt** | CMA did not materially change Ofwat's PR19 approach to indexing new debt. However, they removed the Ofwat proposed 'outperformance wedge'. | ↑ | Ofwat provides similar analysis using new bond issuances since Jan 2020 which it states shows companies have issued debt with an average tenor of 18 years and with yields 55 basis points below the benchmark. It states that this implies that it should either amend the benchmark or apply an outperformance adjustment. | ↓ |
| **Customer benefits test** | CMA removed the 'customer benefits test' that Ofwat applied in the consideration of whether or not to allow adjustments to the allowed return (cost of equity or cost of debt) for specific companies, for example because the cost of raising finance for smaller companies is higher. | ↑ | Ofwat continues to propose to remove the customer benefits test. | ↑ |
| **Notional gearing** | CMA used a 60% notional gearing assumption which it considered was appropriate and noted that this had already reduced from PR14. It made no other changes to PR19 notional company. | | Ofwat is proposing to reduce the notional gearing assumption from the current level to 55%. | |
| **Cross checks *Financeability*** | The CMA concluded that the overall determination, in the round, needs to include a consideration of whether the WACC assumptions chosen are consistent with the credit rating assumed throughout the determination. The CMA therefore applied financeability as a binding cross-check on the calibration of the price control. | ↑ | Ofwat is clear that it does not see the financeability assessment as a test for whether an individual component of the price control package, such as the allowed return (or the components of it), is reasonable. | ↓ |
| **Cross checks *Alternative*** | The CMA rejected the use of MAR as a cross check, noting the difficulty of correctly interpreting MAR data, particularly in determining the suitability of a relatively minor adjustment.<br>The CMA further noted the challenge of interpreting broker forecasts of the cost of equity in relation to utility companies. It highlights that such estimates may be no more accurate than its own and can be tailored to the needs of specific investors. | ↑ | Ofwat intends to make use of MARs analysis, noting that this approach is widely used by equity analysts to infer investor discount rates.<br>Ofwat further notes that it intends to make use of broker forecasts/analyst reports as a cross check. | ↓ |