



PR24 and beyond:
discussion paper on risk and
returns response

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About this response

In its ‘PR24 and beyond: discussion paper on risk and returns’ dated December 2021, Ofwat asked for responses to a number of questions summarised in Appendix 1 of the paper.

This document sets out a full response to all questions. Given the complex nature of the topic we have provided an executive summary, which we hope helps to provide context and explain the basis on which we have provided answers to each of the specific questions.

For clarity, our response sets out each of Ofwat’s questions, followed by our answer.

We would be happy to discuss this response, or any other aspect of our financial resilience with the Ofwat team at any point.



Executive summary

We welcome the opportunity to comment on PR24 and beyond: discussion paper on risk and returns.

Ofwat have set out a focus for PR24 of taking a long-term approach recognising the challenges ahead for the industry and explicitly state, “*Water companies are expected to face substantial investment needs over PR24 and beyond*”¹. This includes potentially over £20bn of incremental investment needs to address the supply demand imbalance in water resources², improve river quality and combined sewer overflow outcomes³ and achieve Net Zero⁴. An analysis of risk and return is very important in any price review and it is crucial that PR24 prioritises establishing a strong basis for attracting debt and equity funding on an ongoing and efficient basis. We consider it to be particularly important that all aspects of the price review provide a coherent equity story that increases investor confidence around making long-term investments to improve services for customers, communities and the environment. It would be helpful if this could be achieved earlier during the PR24 process to allow greater time to be spent on agreeing the substantial investment needs and the most optimal, customer-centric ways in which they can be delivered.

We note that in its financial resilience discussion paper Ofwat suggest financial resilience can be improved through increased equity in the sector and lower gearing levels. While we do not consider that the case has been made for regulatory intervention to require lower gearing, we note that many aspects of the risk and return discussion paper – insofar as it seeks to further reduce base return expectations and upside opportunities – appear to us to be in tension with the objective of increasing equity to support de-gearing and higher levels of investment.

It would also be helpful if Ofwat were able to signal the point at which its ‘back in balance’ reset of economic regulation is complete. This would help to address current investor concerns that each successive price review will seek to squeeze investors further. This concern is based on their experience of at the last two price reviews and, it appears, the emerging methodology for PR24. It also reflects much of Ofwat’s messaging. We hold an associated concern that the proposed changes to the notional capital structure would allow financeability tests to be more easily satisfied despite the application of lower returns. This concern could be exacerbated if underlying financeability issues caused by an insufficient rate of return are made less apparent by the use of PAYG and RCV run-off levers, an issue which the CMA recently highlighted. Investors understand that Ofwat plays an important role in continuously challenging companies who hold privileged monopoly positions, but ‘back in balance’ as a reset should have an endpoint and being clear about this through a change of tone would support Ofwat’s investment agenda.

The CMA’s approach in the recent PR19 Water redeterminations provided useful clarity and robust statements in this regard. Its use of the ‘aiming up’ principle, like other regulators including Ofwat over the last two decades, recognised the net benefits of securing long-term investment through maintaining sufficient incentive for incumbent equity to invest. Moving so significantly from

¹ Ofwat, ‘PR24 and beyond: Discussion paper on risk and return’, December 2021, p 43

² See: <https://nic.org.uk/app/uploads/NIC-Preparing-for-a-Drier-Future-26-April-2018.pdf> p 4

³ EAC, 2021, Water quality in rivers, see:

<https://committees.parliament.uk/publications/8460/documents/85659/default/>

⁴ See: <https://www.water.org.uk/routemap2030/wp-content/uploads/2021/03/Water-UK-Net-Zero-2030-Routemap-Summary-updated.pdf> pp.7



the CMA's approach, and potentially from Ofwat's own decisions in PR19, in such a short period of time will inevitably undermine the stability and transparency of the regulatory framework. This is not conducive to facilitating access to debt and equity capital efficiently and is not, we consider, in the long-term interests of customers, communities and the environment. One can point to Moody's response to Ofwat's 'back in balance' announcement at PR19 as an example of how much weight investors place on regulatory stability and predictability⁵.

We recognise that Ofwat can take an alternative approach to achieve the same objectives, noting that Ofwat appear to acknowledge the reasons the CMA 'aimed up' on the cost of equity and propose to achieve the same objective by making changes "at source". It would be helpful if Ofwat could set out more clearly what such changes are from PR19 that will provide incentives for investors to invest. This is but one example of the wider need for Ofwat to provide a clearer articulation of the risks equity should bear, and why those are adequately remunerated within the regulatory regime, as part of the overall 'equity story'. To this end, we support Ofwat in exploring how notional RoRE could be used to help investors understand the relative change in risk between price reviews, even if only directionally. We do think it could be used to provide thought leadership in the discussions around how risk to equity is evolving and should be priced so that returns can be calibrated accordingly. We stress the significance of addressing investor perceptions to give investors confidence in making long term investment decisions.

There are a number of technical changes outlined in the discussion paper that we can support, for example, the full and immediate transition from RPI to CPIH and simplification of reconciliation mechanisms. We are also interested in understanding how Ofwat will develop its approach in setting the cost of embedded debt based on the industry balance sheet. There is of course scope for unintended consequences in these changes and we would encourage an open dialogue with companies to ensure the changes are implemented as intended and in a way which gives companies sufficient time to adjust their capital structures and/or treasury management practices accordingly as well as maintains strong incentives for debt financing to be raised efficiently and prudently. Achieving this will contribute to Ofwat's policy objectives of affordability and financial resilience.

It is important to note that the transition to CPIH is likely to put upwards pressure on customer bills at a time when there is considerable need for higher investment. We would advocate exploring the use of PAYG and RCV run-off levers as a way to help manage short-term affordability considerations. We believe these levers are most appropriate for maintaining inter-generational equity; to simply reduce the allowed WACC risks failing to meet the investment need which would result in worse outcomes for current and future generations.

We would be very happy to discuss these comments with you further and append below our responses to the specific consultation questions.

⁵ Moody's Investor Service, 'Regulator's proposals undermine the stability and predictability of the regime', 22 May 2018



Response to questions

Question 2.1

Do you agree with our principles for reviewing old and new reconciliation mechanisms and do you have suggestions for further reconciliation mechanisms which could be retired for PR24?

We agree with the proposed principles based on materiality, efficiency of risk allocation and cost-benefit. We would also suggest that there is an additional cross-check in the decision-making process: that is, to assess the likely residual impact on the risk exposure to equity as a result of any contemplated additional, removal or modification of a reconciliation mechanism. This is to ensure that due consideration is given to potential unintended consequences such as a material transfer of risk to (or from) equity which should be compensated for in the most appropriate way (or it may reduce the cost-benefit ratio to the extent that it would be preferable not to change the approach).

Based on our experience so far in AMP7, we have the following suggestions on the following PR19 reconciliation mechanisms:

- Cost of new debt indexation: we would suggest simplifying the mechanism by excluding the cost of embedded debt from the calculations. Comparing the fixed amount of allowed embedded debt (80%) with the changing amount of actual embedded debt (100% reducing to 60%) creates unexpected reconciling adjustments, especially for companies with growing RCV. For example, even if outturn cost of new debt was equal to the PR19 forecast cost, an adjustment would still arise, which could be unintended. Refocusing the mechanism on weighted average cost of actual new debt only could be one way to simplify the reconciliation.
- In-period ODI determinations: we consider the latest approach to the tax effect to be oversimplified and results in an overstated tax adjustment, leading to bills being either too high or too low. This is because not all companies (with Thames Water as an example) will be in a marginal tax-paying position, on a notional basis, in the relevant years for which revenues need to be adjusted based on their respective Final Determinations. We would expect an ex-post tax true-up for AMP7 to be conducted at PR24 in any case and suggest Ofwat refines the tax effect methodology for AMP8 to reflect the effective marginal tax rate on a notional tax basis as set out in the PR24 Final Determinations.
- C-MeX and D-MeX: As we pointed out in our response to the 2021 in-period draft determination, there seems to be a technical error in the indexation approach used in the C-MeX and D-MeX models. In these models, the performance payments are calculated using the 2020-21 residential retail revenue allowance from the PR19 Final Determination (FD) in nominal prices, but the results are treated as being in 2017-18 prices without any price base conversion. The consequence of this approach is that the calculation of the reward and penalty is inconsistent with the FD. For example, the FD set out the range of the reward and penalty for C-Mex as a percentage of allowed retail revenue, setting the maximum penalty at 12% of annual allowed revenue. The approach used to calculate the C-Mex and D-Mex payments results in rewards and penalties that exceed the stated percentages for the company that is highest ranked and for the company that is lowest ranked. We therefore recommend that Ofwat revisit the indexation treatment of future iterations of the C-Mex and D-Mex models.



We note that it is still early in the AMP and not all reconciliations have been ‘road-tested’ fully, or at all. We encourage Ofwat to keep open this dialogue with companies over the coming years to help Ofwat refine this area of the regulation leading up to the PR24 Final Determination.

On a related but separate note, we would encourage Ofwat to re-issue guidance about how interim determinations should work when there is greater clarity over the likely balance between risk and return for PR24 so that the sector can make a holistic assessment at the time of the Final Determination.

Question 2.2

Do you have any comments on our proposed approach to producing risk ranges, including but not limited to:

- a. Notional risk ranges for the efficient notional company prepared by Ofwat; and*
- b. Company-specific risk ranges produced by companies.*

We are, in principle, supportive of Ofwat’s proposals. We also encourage Ofwat to keep finding ways to simplify the use of RoRE ranges in practice, such as measuring RoRE on an aggregate appointee basis and rationalising RoRE from the financial modelling. We also have the following comments:

- Regarding purpose, we believe RoRE’s usefulness can be enhanced if it is also used to compare relative levels of variability around the central return expectation between AMPs. This is an important measure to help investors and rating agencies understand, even if only directionally, the level of risk to which a company is exposed. This will enable more efficient price signals to be established for the cost of finance which, in turn, should allow companies to make more informed decisions on actual capital structures and financial resilience. For example, we agree that putting more revenue at risk over the course of PR14 and PR19 “in areas of importance to customers...facilitates greater alignment of company and customer priorities”⁶. All else being equal, this would imply higher risk to equity (and debt), with a generally greater negative skew, which is specific to the sector and for which investors would expect to be compensated. This is unlikely to be sufficiently or reliably captured in the observed beta as (i) it is a forward-looking risk and would, in theory, only be observable from the publication of substantive details for investors to beginning pricing in the incremental risk and (ii) without a clear basis for articulating and calculating the risk, investors are likely to under- or over-price such risk. Using RoRE in this context can provide a more informed basis for measurement, articulation and discussion with sector stakeholders, which could help to avoid potential mispricing of risk and unnecessarily higher financing costs. This is particularly pertinent in the context of other proposals contained in the various live consultations (such as on financial resilience) which result in lower levels of regulatory stability and predictability, which is a bedrock for low-cost financing in the sector.
- We would encourage Ofwat to further explore using the long-term scenario planning workstream to inform the scenarios for RoRE ranges. This would promote consistency

⁶ Ofwat, ‘PR24 and beyond: Discussion paper on risk and return’, December 2021, p 13

between asset and financial risk planning tools and improve RoRE's reliability (being linked to real-world scenarios) for assessing financeability downside resilience.

Question 3.1

How should we reflect the period affected by Covid-19 in our approach to estimating beta?

Given the relatively unprecedented and unpredictable nature of Covid-19, it is clearly difficult to determine with certainty whether the impact on beta is a one-off or could have structural, more long-lasting implications. We are supportive of Ofwat's proposal to consider evidence from a range of estimation periods and frequencies to inform its best view of beta.

We also suggest that Ofwat considers:

- The impact on beta in conjunction with the impact on total market returns over the same observation period to take a holistic and balanced view – for example, listed water shares may have been more defensive than the total market, but the total market volatility may have increased during the same period.
- Views from investors to complement any academic analysis, particularly if the latter may be constrained by data limitations.

Question 3.2

Noting the impact of gearing on betas discussed in the report by Professors Mason and Wright, how should we adapt our approach to specifying beta for a company at the notional gearing?

Clearly this is a complex topic, theoretically and empirically, with a range of approaches which can be supported by plausible, but not flawless, academic views. Given this challenge, and in the context of the wider investment needs to help deliver the PR24 objectives, we consider there is strong merit in maintaining regulatory stability and transparency.⁷ Ofwat's PR19 Final Determination and the CMA's Final Determination in respect of the water company appeals provided useful clarity for the sector after rigorous debate and evidence gathering. We consider these should provide a robust, and the most relevant, precedent for the beta methodology (i.e. using the Harris Pringle approach) in the absence of a patent error with the existing approach.

As with the criteria for assessing changes to reconciliation mechanisms, we consider materiality and cost-benefit are pertinent for assessing potential changes to the beta methodology (and cost of equity methodology more generally). In this context, we consider the CMA's articulation of cost-benefit for the customer to be relevant, which is to the effect that there is, in the current context, a net customer benefit from securing greater long-term investment through maintaining sufficient incentive for incumbent equity to invest, and the cost of equity plays a key role.⁸

⁷ We also note: "This is potentially important at a time when there has been a material decline in returns and there remains significant uncertainty over the measurement of the cost of equity." CMA water appeals final report, March 2021, para 9.1285

⁸ For example, at paras 9.1264-9.1285 in CMA water appeals final report, March 2021

Question 3.3

How should we convert RPI-linked yields into their CPIH-linked equivalents when deriving a RFR point estimate?

We acknowledge the announced UKSA's reforms to RPI could add greater forecasting complexity and inaccuracy. We note that the anticipated change should be effective for only the last two months of AMP8. We query whether, in the interests of simplicity, credibility and consistency with PR19 and CMA methodology, it might be appropriate to use the OBR's estimate at the relevant future point/s in time to cover the period up to 31 January 2030. This would allow the OBR measure to capture relevant developments in the meantime. For the remaining two months, the assumption could be a wedge of zero on the basis of a full convergence.

Question 4.1

Do you agree with our proposed role for benchmark bond indices in cross-checking a cost of debt allowance based on a balance sheet approach?

In our response to the Ofwat's May 2021 consultation, we expressed a preference for continuing with the PR19 methodology of using benchmark bond indices as the primary measure, which was largely affirmed by the CMA Final Determination. If Ofwat, however, is minded to use a balance sheet approach as the primary measure (and we also see the merits of such an approach), we are supportive of using benchmark bond indices as a cross-check. We continue to hold the view that:

- Placing significant reliance on balance sheet data and actual costs of debt risks reducing the incentive for companies to issue debt as efficiently as possible; instead, companies are incentivised to take more short-term actions to outperform (or avoid underperformance) by issuing shorter tenor debt, which has the unintended consequence of increasing refinancing risk and reducing financial resilience.
- It would increase fairness of the approach if it placed appropriate weight on very long-dated debt issued prior to or around the time of the Global Financial Crisis. This is to avoid unfairly penalising bona fide actions taken at the time to prudently manage interest rate and refinancing risk by issuing longer tenor debt, which a notional company could reasonably have also done.
- Ofwat should remain cautious of the technical nature in which debt (and derivatives) are accounted for and therefore should seek to ascertain, as far as practicable, the underlying cost of debt from company data. This visibility could be improved, and a consensual approach could be achieved, through industry working groups.

Question 4.2

Given the persistent issuance discount of water company bonds against the iBoxx A/BBB index, how should this be reflected in our new debt allowance-setting?

We understand Ofwat's suggestion that there may be a case for amending the benchmark or applying an outperformance adjustment, if there is conclusive evidence of a persistent issuance discount based on data which is like-for-like (e.g. normalised for tenor and rating). We encourage



as much transparency as possible in the analysis. It is important to note that any such discount is a product of market factors, which are clearly fluid, and will be subject to volatility, particularly over a 5-year AMP. As the current cost of new debt indexation mechanism only measures the benchmark index itself, we would ask Ofwat to consider how volatility in this differential could be accounted for.

We also note, as a related matter to the intended full transition to CPIH, that CPIH-linked instruments (debt or derivatives) are likely needed to be issued to manage basis risk effectively in the absence of a liquid and efficient market for CPIH-linked debt becoming established. We ask Ofwat to consider the most appropriate way to compensate companies for such costs including a likely liquidity premium.

Question 4.3

Do you agree with our proposal to restrict company specific adjustments to reflect only factors due to small size, and to remove the benefits test?

We would reiterate the comments we made in our response to Ofwat's May 2021 consultation. Since then, our situation has not materially changed: due to our large size and saturation in the Sterling market, we continue to be reliant on diversifying our sources of funding via different currency markets, which can potentially be at a cost premium to Sterling iBoxx indices due to a combination of investor appetite and additional credit charges involved in using derivatives to hedge currency and interest rate risks. Taking a sector balance sheet approach would likely only account for this to a de minimis degree. We would therefore welcome further engagement on this issue. We also recognise that diversifying access into different debt markets can be a positive factor for long-term financial resilience for the notional company as well as for companies' actual capital structures.

Question 5.1

Do you agree with the framework we have set out for determining an appropriate notional structure at PR24 and beyond?

We see the decision around notional structure as a matter of regulatory policy and agree with the four principles set out under the proposed framework. That said, such a decision should be informed by two key policy objectives: (i) to seek a proxy for an efficient capital structure and (ii) to insulate customers from inappropriate levels of capital structure-driven risk. It is not clear to us that either objective would point to a lowering of notional gearing by five percentage points.

Regarding investment needs, we note that Ofwat states: "*Water companies are expected to face substantial investment needs over PR24 and beyond. Therefore, we may expect the notional company to reduce gearing in anticipation of this investment in order to increase the capacity to borrow efficiently*"⁹. We query whether this should be the expectation, as the RCV growth itself is the driver for increased capacity to borrow, even with constant gearing. De-gearing at the same time as investing to grow the RCV would require a higher marginal equity contribution and, all else being equal, would result in the incremental RCV being funded with a

⁹ Ofwat, 'Discussion paper on risk and return', December 2021, p 43

more expensive mix of capital (on a notional and actual basis). We therefore query whether this was Ofwat's intent as we see low-cost debt financing as a pillar to financing RCV growth efficiently. This is of course subject to financeability and financial resilience considerations, but we do not currently see evidence that 60% gearing would not be financeable or financially resilient. For example, at 31 March 2021 there were seven companies with a lowest credit rating held of BBB+ or higher.¹⁰ The range of regulatory gearing for these companies was from 60.2% to 82.7%, with an average of 70.2%.

Regarding the benchmarking principle, we would advise caution with respect to changing the established definitions of gearing (for example, to be based on enterprise value instead of RCV), which is a fundamental concept within water economic regulation. The academic literature indicates there is no perfect or easy solution. As with potential changes to cost of equity methodology, we suggest Ofwat applies a high bar to change and robustly assesses the benefit of any definitional or conceptual change against the potential costs (of financing) driven by lower levels of regulatory stability and transparency.

Question 5.2

Do you agree the proportion of index-linked debt should be increased and what are your views on the composition of index-linked debt for PR24?

We understand that sector levels of index-linked debt as a proportion of total debt, on a post-swap basis, have been higher than the 33% assumption for the notional company used in the PR19 Final Determination since 2015/16. Like notional gearing, we see the notional level of index-linked debt being a matter of regulatory policy for the notional company that may or may not be reflective of actual levels in the sector, but ultimately is a decision that should be driven by efficiency and risk protection for customers.

We would encourage Ofwat to ensure that any changes to this assumption for PR24 are fully accounted for in the downstream financial modelling and consequences (e.g. for gearing in a low-inflation scenario, particularly with CPIH-linked RCV indexation) are understood.

Of the two approaches to the composition of index-linked debt, at this stage, on balance we consider the former to be preferable. In reality:

- A material proportion of companies' existing index-linked debt (including swaps) will likely be longer dated than the AMP8 period.
- The market for CPI- or CPIH-linked debt and swaps is still relatively immature compared to the RPI-linked market, meaning companies may still choose to issue RPI-linked instruments between now and the PR24 Final Determination.

Therefore, it would be reasonable to assume the notional capital structure to have similar characteristics and constraints around the speed of transitioning to a fully CPI- or CPIH-based index-linked portfolio. Whilst taking a hybrid approach risks introducing more complexity, the benefit is a more realistic and credible notional capital structure which captures to an extent the RPI/CPIH basis risk that actual capital structures are likely to be subject to in AMP8.

¹⁰ Ignoring TTT, which would be the eighth



As a point of detail, we believe Table 5.1 should be expressed in gross debt terms (i.e. gross index-linked debt as a proportion of gross total debt), although we recognise this may not result in a material difference.

Question 6

Do you agree with our proposed framework to evaluate the transition to CPIH indexation, and our proposal to transition fully at the start of PR24?

We agree with the five principles set out under the proposed framework. We are, in principle, supportive of Ofwat's proposal to adopt full indexation of the RCV to CPIH from the start of the PR24 period. We remain, however, cautious over the potential impact of an immediate transition on customer bills at a time when there is considerable need for higher investment. We would advocate exploring the use of PAYG and RCV run-off levers as a way to help manage short-term affordability considerations. We see this as important if companies are to deliver on long-term investment needs (which should be appropriately incentivised through the allowed WACC) whilst maintaining inter-generational equity (managed through the above levers).

We also reiterate the observations we made in our response to Ofwat's May 2021 consultation, which can be summarised as:

- Subject to further updates on RPI reform, an instantaneous transition would create a basis risk for companies with RPI-linked debt or derivatives until the CPIH-linked debt and derivatives market significantly matures.
- A possible regulatory mechanism to mitigate this risk could be to include an ex-post wedge true-up, potentially as a midnight RCV adjustment at PR29, based on the notional capital structure.
- Alternatively, Ofwat could provide a specific allowance for the incremental cost of issuing CPIH-linked debt or derivatives to allow a notional company to manage the basis risk. We appreciate that Ofwat appear to be giving this thought under the 'implementation costs' principle.

We encourage Ofwat to continue consulting with the industry and other CPIH market stakeholders to further its understanding of the risk and potential costs of managing, as well as benefits. Early clarity would be considered helpful to give companies time to adapt before the implementation of any changes to basis risk between RPI and CPIH.

We would also encourage Ofwat to consult further with the industry on the current methodology (and financial modelling) for indexing the RPI-linked portion of RCV to ensure that there is no permanent loss of RCV in any transition to full CPIH indexation. We understand a number of companies raised this issue in relation to the 2020/21 annual performance reporting and welcome further engagement on this.



Question 7.1

Do you agree that financeability is likely to be less constrained at PR24 than at PR19?

We understand how the three factors set out by Ofwat could improve financeability at PR24 compared to PR19 for cashflow-based metrics, all else being equal. For gearing-based metrics, the net impact may be more neutral due to a slower level of indexation.

More significantly, the proposals relating to cost of equity and cost of debt – most of which would result in a lower WACC on a like-for-like basis compared to the CMA methodology and even PR19 methodology – would erode any financeability benefits and potentially make financeability more constrained. In the context of potentially higher levels of revenue and cost uncertainty driven by the macroeconomic environment and/or regulatory changes, there may be a greater need to focus on the resilience of financeability metrics in downside scenarios in addition to average or 'base case' levels of financeability.

We agree with Ofwat's proposal to consider the underlying cause of the financeability constraint in determining the most appropriate solution. We encourage Ofwat to be cautious with the use of financeability levers which advance revenues at the expense of real RCV as this can mask underlying issues with the allowed WACC and impact longer term actual financial resilience, independent of the degree of real RCV growth. We consider the CMA's statements to be a relevant precedent.¹¹

Question 7.2

Do you agree that real RCV growth should be funded through a combination of debt and equity such that gearing of the notional company remains consistent with the notional gearing set at the start of the control period?

We agree with this principle. We consider our response to Q5.1 with respect to investment needs to also be relevant for this question.

¹¹ Refer to the 'Financeability – CMA approach' section of the CMA water appeals final report, March 2021

