



TMS-DD-040 Thames Water PR24 DD response - Allowed Return on Capital

August 2024

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Key messages:

- In developing the Final Determination, Ofwat must have regard to key statutory objectives, including the consumer and resilience objectives, as well as the financing and growth duties. Ofwat must, in particular, secure that water companies can finance the proper carrying out of their statutory functions (including through securing reasonable returns on their capital).
- A pre-requisite for the delivery of our ambitious plan for customers and the environment is our ability to finance the investment programme. This rests on our ability to attract substantial new equity investment into our business.
- To attract substantial new equity, we will need to show investors that Ofwat's sector-wide allowed return is in line with the industry cost of capital and competitive with comparable assets in the UK and internationally.
- A return on equity which sits <2.5% above gilt yields and <1% above investment-grade corporate bond yields does not provide sufficient reward for the risk that shareholders take on as the owner of a water and wastewater company.
- Ofwat needs to recognise more explicitly that market conditions have changed in the last 2-3 years, leading to higher interest rates and higher returns across global markets.
- When assembling the Final Determination Ofwat needs, in particular, to approach each component part of the calculation in a more balanced way, by considering all available information, rather than look for the lowest admissible estimate.
- Our estimate of the return that is needed to positively attract new equity capital to the water industry is 5.0% to 6.5% (CPIH real).
- We also identify a set of updates that Ofwat should make to its draft determination calculation of the allowed cost of debt.
- Our proposed return is 4.6% in real CPIH terms.

1 Overview

1.1 DD summary

Ofwat's draft determination provided for a return on the RCV of 3.66% per annum (in real, CPIH-stripped terms).

Table 1 details the build-up of Ofwat's return and compares Ofwat's calculations to the figures that we put forward in our October 2023 business plan.

Table 1: Cost of capital calculations

	Ofwat DD	Thames Water plan
Gearing	0.55	0.55
Cost of embedded debt	2.46%	2.50%
Cost of new debt	3.36%	3.87%
Weight for new debt	26%	29%
Issuance and liquidity costs	0.15%	0.1%
Cost of debt	2.84%	3.0% to 3.1%
Risk-free rate	1.43%	2.0%
Expected market return	6.29% to 6.87%	6.96%

Unlevered beta	0.26 to 0.29	0.33
Debt beta	0.1	0.1
Equity beta	0.57 to 0.63	0.72
Cost of equity	4.19% to 4.88% point: 4.80%	5.55% + 0.15% aiming up
Weighted average cost of capital	3.72%	4.25%
Retail margin adjustment	0.06%	-
Allowed return on the RCV	3.66%	4.25%

The final row of the table shows that Ofwat's proposed return is 59 basis points lower than the base return contained within our plan. This is primarily a function of Ofwat choosing to allow for a lower return on equity, including a lower risk-free rate, a lower TMR and a lower beta.

1.2 Context

PR24 is taking place against a very different backdrop from previous price reviews.

The discussion throughout PR14 and PR19 centred on the implications of what were thought at the time to be 'lower-for-longer' interest rates, which was clearly a generational opportunity to secure low-cost capital for investment. After seeing a drop in the returns that were available across the capital markets, Ofwat was able to reduce significantly its allowed return on debt and the allowed cost of equity. Ofwat also argued forcefully against companies' suggestions for changes in estimation methodologies wherever change would lead to an upward revision in any of Ofwat's numbers. It stated publicly that it believed that there was "a wall" of investor money waiting to come into what it viewed as a safe, low-risk industry and, hence, viewed any upward movement of any kind as unnecessary.

Starting from around 2022, wider financial market conditions have completely changed. Long-term interest rates now stand 3-4 percentage points higher than they were at the start of the regulatory period following the steps that central banks around the world have taken to normalise monetary policies. This, in turn, has pushed up returns across all asset classes. The question now is not how best Ofwat can ensure that water company customers do not pay oversized returns, but rather how Ofwat should be adapting the previous PR19 methodologies to a world in which interest rates are seen as being 'higher for longer'.

This is a particularly important question when one looks at the size of the industry's planned capital programme. In a contrast to previous reviews, the scale of RCV growth means that all companies in the sector are going to need to raise both new debt and new equity finance in the next few years, rather than finance investments solely through additional borrowing. The requirement for brand new equity capital, in particular, means that the industry must for the first time in many years positively persuade investors to move their money into water companies rather select than any of the other alternative investment options that are available to them. This, in turn, necessitates that investors see the prospect of a return that is at least commensurate with the returns that can be earned elsewhere on assets with a broadly similar risk profile.

Risk exposure, unsurprisingly, is a much bigger issue for investors now than it was five years ago. Despite a positive start to the 2020-25 period and a mostly smooth journey through the covid pandemic, water company profitability has dropped off markedly during years 2, 3 and 4 of AMP7. The combination of an input price shock, unforeseen demands from stakeholders for additional investment and a realisation that the common performance targets that Ofwat set in PR19 were too challenging has left all companies overspending and paying net performance penalties. Companies have also had to deal with much greater public scrutiny and press attention than in the past, much of which has betrayed fundamental misunderstandings about water industry economics and economic regulation.

The combination of all of the above factors mean that water companies are no longer the textbook low-risk utility investments of a few years ago. Recent investor and rating agency comment has also made it clear that Ofwat is no longer seen as providing a transparent and predictable regulatory framework, thus further complicating the task of balancing risk and reward.

Thames Water, for our part, has been the water company that has encountered the greatest financial challenges. This chapter forms part of our turnaround plan, and, as such, is an important underpinning to our planned equity raise, the restoration of our investment-grade credit ratings and our ability to access new debt.

In the material that follows we identify the steps that we believe Ofwat needs to take to right-size the industry's allowed return. We deliberately focus on the industry cost of capital and stop short of asking for a company-specific rate of return to reflect company-specific risk exposure and company-specific financing costs. We are adopting this approach because we believe that we can attract equity capital at the industry rate of return *so long as* Ofwat simultaneously makes important and necessary corrections to our draft determination. This chapter of our response therefore needs to be read alongside TMS-DD-041 and the proposals set out therein on overall investibility.

1.3 The DD vs other regulatory decisions

A first, high-level check on Ofwat's draft determination can be obtained by looking at where Ofwat's proposed level of return for investors sits in comparison to other recent regulatory determinations.

Table 2 compares Ofwat's proposed return on equity to (i) the return that would emerge from a straight roll-forward of the Competition & Markets Authority's (CMA's) PR19 calculations, and (ii) Ofgem's July 2024 RIIO-3 range for the energy networks' allowed return.

Table 2: Allowed return on equity

	Ofwat PR24 DD	CMA PR19 roll forward ^	Ofgem RIIO-3
Gearing	0.55	0.55	0.55
Risk-free rate	1.43%	1.93%	1.18%
TMR	6.29% to 6.87%	6.81%	6.5% to 7.0%
Unlevered beta	0.26 to 0.29	0.29	0.26 to 0.36
Debt beta	0.1	0.075	0.075

Equity beta	0.57 to 0.64	0.63	0.57 to 0.79
Aiming up	-	0.25%	-
Cost of equity	4.19% to 4.88% point: 4.80%	5.28%	4.2% to 5.8%

[^] We update the CMA's risk-free rate calculation to incorporate the latest gilt market and iBoxx readings. We also convert to a 55% gearing figure.

The final row in the table shows straight away that something is not quite right in Ofwat's proposals. The draft determination return on equity is approximately 50 basis points lower than the CMA's rolled forward calculation and up to 100 basis points lower than Ofgem's proposals for the energy networks' allowed return. A closer look at the inputs into the calculations shows Ofwat taking a harsher stance than the CMA and/or Ofgem on each of the risk-free rate, TMR and beta.

There is no reason this picture should be the way that it is. The clear takeaway is that Ofwat is being less supportive of investment and investibility than the UK appeals body and the regulator of a competing infrastructure sector.

1.4 Other benchmarks

Other cross-checks confirm this initial impression.

Ofwat's 4.8% CPIH real return on equity converts to a nominal, all-in return of approximately 6.8%. Table 3 identifies the returns that investors could have locked in during the month of July 2024 on other investments.

Table 3: Available returns for investors

	July 2024
20-year gilts	4.6%
A rated corporate 10+ year bonds	5.4%
BBB rated 10+ year corporate bonds	6.0%
Severn Trent Water 14-year bond	6.0%
South West Water 17-year bond	6.4%

Investors that put money into water companies as equity capital take on (far) more risk than they do if they opt for any of these alternative homes for their money. It is therefore very clear that the draft determination simply does not contain a sufficient amount of return to persuade a rational investor to choose risky equity investment over the alternative, safer and much less risky ways of earning returns in the range of 5-6% per annum.

The same point can also be made about Ofwat's proposed allowance for the cost of new debt. Ofwat assumes in its draft determination that companies should be able to borrow at roughly the mid-point of the iBoxx A and BBB benchmarks. As of July 2024, this set a benchmark of approximately 5.7%. Severn Trent and South West Water raised debt in July 2024 at costs of 6.0% and 6.4%, respectively. The two companies – and not just any companies, specifically the two companies with an 'outstanding' grade in Ofwat's PR24 business plan assessment –

therefore make it plain that this is not a realistic proposition, and especially not on an industry-wide basis.

1.5 Conclusion

The remainder of this chapter explains in greater detail what is causing Ofwat to under-estimate required returns.

Inevitably, the discussion from this point forward gets more technical. But the over-arching message to Ofwat's board as they make their decisions on the PR24 settlement remains as set out above: Ofwat's final determination has to positively attract equity capital into the sector; this requires Ofwat to provide for a level of return that recognises current market conditions and current interest rate outlook, and takes account of the returns that investors can earn on competing investment opportunities; but Ofwat is not finding this sweet spot and is not going to be able to remedy the deficiencies in its draft decision if it insists on sticking rigidly to its old PR19 methodologies and fails to move in step with the CMA and other regulators like Ofgem. There is a considerable risk that in providing for insufficient returns, Ofwat fails to enable investibility and the financeability of the sector's investment programme, and the delivery of the outcomes for customers and the environment that depend on it.

2 Cost of equity: response

Risk-free rate

Ofwat's estimate of the risk-free rate as of March 2024 this year is 1.43%. This figure is based on the observed yield on 20-year index-linked gilts, plus a ~30 basis point conversion from RPI real to CPIH real.

In our business plan, we, along with most other companies, cautioned Ofwat against placing sole reliance on index-linked gilts. We noted that multiple voices, including the CMA, had identified a 'specialness' to these bonds (such as their superior collateral compared to other assets) which makes them more valuable to investors and, hence, pushes their yield down below the true risk-free rate in the economy.

Ofwat in its draft determination nevertheless rejects these arguments, and the evidence that was submitted, and persists with an approach that focuses exclusively on index-linked gilt yields to the exclusion of all other possible estimates of the risk-free rate.

We continue to believe that this approach is unsafe. However, our bigger concern is that Ofwat's stance is one-sided and shows a disregard for the overall context for the PR24 cost of capital work. When faced with a situation in which there are several plausible ways of estimating the risk-free rate, we would expect Ofwat to give weight to all the available evidence and alight on a point estimate that sits firmly in the middle of the pack. What Ofwat, in fact, does in its draft determination is discount large swathes of the evidence, including the work of the CMA, to select the lowest among all the possible values that it could choose from. This kind of approach cannot be said to be compatible with Ofwat's stated aim of wanting to facilitate, rather than impede, the flow of new capital into the sector to enable the delivery of investment for the benefit of customers and the environment. Nor is it aligned with Ofwat's statutory duties (in particular, the newly introduced growth duty, under which Ofwat needs to be mindful of the need to balance and promote economic growth while delivering on the consumer objective).

We are submitting a new independent report from KPMG alongside this response which provides new and updated material on the alternative ways that there are to estimate the risk-free rate of return. The report identifies that the theoretical literature provides reason to think that index-linked gilt yields will understate the CAPM risk-free rate by up to 29 basis points. KPMG also provides quantitative analysis of sterling instruments that suggests under-estimation of up to 67 basis points.

A rounded approach to the estimation of the PR24 risk-free rate would therefore allow for a range that extends up to 67 basis points above the readings that Ofwat takes from index-linked gilt yields.

Total market return ("TMR")

Ofwat's range for the TMR is 6.29% to 6.87%.

The mid-point of Ofwat's PR24 range is more than 20 basis points lower than the CMA's preferred estimate of 6.81%. Ofwat's range is also noticeably lower than Ofgem's range of 6.5%

to 7.0%. This once again indicates one-sidedness in Ofwat's thinking. The work carried out by Ofwat, the CMA and Ofgem uses/used the same underlying source data. There is no good reason Ofwat should come out with a TMR, and hence, an estimate of the cost of equity, that is materially lower than its fellow regulators.

KPMG's report identifies that a key reason for the discrepancy in the Ofgem and Ofwat ranges is Ofwat's unwillingness to use the arithmetic mean of historical ex post stock market returns as a starting benchmark for future returns. This, in turn, stems from unjustified assumptions on Ofwat's part about the presence of serial correlation in market returns.

KPMG separately updates its estimate of historical ex ante returns to incorporate new data published earlier this year by Dimson, Marsh, and Staunton.¹ Consequently, KPMG's starting range for the TMR is 6.75% to 6.93%. The lower and upper bounds of the range are formed from the mid-point estimates from KPMG's ex ante and ex post analyses, respectively.

KPMG's TMR is squarely in line with both the CMA's methodology from PR19 and the CMA's preferred point estimate of 6.81%.

A key question for Ofwat when it assembles its final determination will be how far Ofwat needs to depart from a historical TMR benchmark. A long-term 'average' will be a good predictor of the current, real-world TMR in 'average' market conditions. However, we are not currently at a neutral point in the interest rate cycle. The current outlook is for interest rates to stay 'higher for longer' – i.e. higher than long-term historical averages – which means that the available returns on all types of financial asset, including other equity investments, are likely going to be above historical benchmarks for the foreseeable future.

Ofwat must not ignore the evidence. A decision to stick rigidly to a long-term average TMR will automatically make returns in the water sector look unattractive relative to the returns that investors can obtain elsewhere. This, in turn, will inhibit the flow of capital to the sector, including by making it much harder for Thames Water to get the new equity capital it needs to deliver our ambitious plan for customers and the environment and to implement our turnaround plan (which ultimately lends itself to furthering Ofwat's consumer and resilience objectives).

It is therefore vital that Ofwat makes allowance somewhere in its final determination for a TMR that is higher than the aforementioned 6.75-6.93% range. KPMG's approach is to make this allowance in an explicit 'aim up' at the end of the cost of equity calculation (see section 2.4 below). In our view, it might, however, be more transparent and send a clearer signal of intent to the markets for Ofwat to make the required adjustment directly within the TMR line of its calculations.

Our expectation in any event is that one way or another, Ofwat will provide for an additional 25 to 50 basis points of equity return somewhere in its calculation specifically to avoid a misalignment between a long-term average TMR and equity investors' actual current expected stock market returns.

¹ Dimson, Marsh and Staunton, Global Investment Returns Yearbook 2024.

Beta

Ofwat's range for the unlevered beta is 0.26 to 0.29.

This range is lower than the PR19 beta of 0.29. Ofwat's stated justification for the supposed fall in beta comes very mechanistically from an observed reduction in the calculated SVT and UU betas between 2020 and 2023.

We acknowledge some noise in the data during this period as a result of covid and the war in Ukraine. However, it is equally clear that the direction of travel reversed during 2024, and that 'spot' betas are now above the upper end of Ofwat's range. Given this picture, we struggle to understand why Ofwat deemed it necessary to make any form of adjustment to its previously estimated beta range.

KPMG's report suggests a number of technical improvements that Ofwat can make to its analysis. The stand-out recommendation is that Ofwat should give weight to Pennon's beta, alongside the SVT and UU betas. Pennon has been a pure-play water company since 2021 and KPMG identifies that since this time the PNN beta has been consistently higher than the SVT and UU betas. Ofwat discards this information in its entirety in its draft determination, whereas KPMG adopts a less one-sided approach of incorporating readings of the PNN beta into the upper end of its range.

This again illustrates how Ofwat could have taken a more balanced approach in its draft determination rather than searching for the lowest possible numbers, which is what it appears to have done to the detriment of other key considerations. In a scenario where this will affect the financial and operational resilience of the sector over the longer-term, it is clearly not in the best interests of customers to focus on keeping returns low.

KPMG's report also contains an important discussion about forward-looking risk. Empirical estimates of beta are, by definition, backward-looking and pick up investors' perceptions of riskiness in previous regulatory periods. The 2025-30 regulatory period contains new, incremental challenges for water companies and their investors, including most notably a bigger capital programme and an accompanying increase in cost risk.

We agree with KPMG that Ofwat's wholly backward-looking beta calculations are not aligned with forward-looking risk. There are multiple possible ways of making allowance for heightened risk, but KPMG's approach of including National Grid in the beta comparator set strikes us as a sensible and pragmatic way forward. National Grid saw the earliest step up in its capital programme among all the regulated utilities, and Ofgem's regulatory framework provides a broadly comparable allocation of risks to Ofwat's PR24 rules. It stands to reason that there is information here that should receive some weight and which would not be discarded in a balanced and objective summation of the available data.

KPMG's proposed beta range is 0.28 to 0.35. This aligns to Ofgem's RIIO-3 beta for companies with fundamentally the same risk characteristics, and hence would serve to ensure that there is no material difference in the returns that investors can obtain by putting their money into water companies rather than regulated energy network businesses.

Aiming up

We agree with Ofwat's proposal to pick a point value from the top end of its estimated range, as well as Ofwat's stated reason for its decision – i.e. a shared desire to ensure that companies face no difficulty raising the external debt and equity financing for their business plans.

However, Ofwat's aiming up is not, as Ofwat would have it, inserting a meaningful safeguard against financing issues. With the risk-free rate, TMR and beta all lower than CMA and/or Ofgem values, all that Ofwat's aiming up achieves is to paper over some, but not all, of the systemic under-estimation in its CAPM calibrations. In order to properly support the investibility of the sector, Ofwat needs to first set the risk-free rate, TMR and beta in the right places.

KPMG recommends that the required amount of aiming up from a central case cost of equity estimate is 0.15% to 0.75%. As noted in the section on the TMR, we consider that around half of this allowance is required to correct for the use of a long-term average TMR value. It follows that it is only by going to the top end of the range that Ofwat can talk about wanting to be seen to support investment and investor confidence.

Summary

Table 4 reproduces KPMG's overall estimate of the cost of equity based on data as of June 2024.

Table 4: Cost of capital calculations

	Ofwat DD	KPMG
Gearing	0.55	0.55
Risk-free rate	1.43%	1.55% to 2.32%
Expected market return	6.29% to 6.87%	6.75% to 6.93%
Unlevered beta	0.26 to 0.29	0.28 to 0.35
Debt beta	0.1	0.1
Equity beta	0.57 to 0.63	0.63 to 0.74
Aiming up	-	0.15% to 0.75%
Cost of equity	4.19% to 4.88%	4.97% to 6.48%

We agree with KPMG's analysis and commend it to Ofwat.

3 Cost of debt: response

Embedded debt

Ofwat's current forecast of the industry mean/median cost of embedded debt going into the 2025/30 regulatory period is 2.46%.

We note Ofwat's caveat that it has not yet had the opportunity to process the information contained in companies' 2024 Annual Performance Reports (APRs), nor has Ofwat made any allowance for the financing of RCV growth in 2023/24 or 2024/25.

We have not been able to process a full update of Ofwat's calculations during the time afforded to us for our response to the draft determination. However, based on our tracking of new bond issues since the start of 2023/24, we currently expect Ofwat's allowance to increase by around 30 basis points ahead of the final determination.

We request that Ofwat separately looks again at its decision not to include swaps in its analysis. Water companies have historically used swap instruments to create a form of inflation-linked debt. We consider that the all-in cost of such debt is as an equally valid part of the industry's cost base as the cost of straight index-linked bonds.

We do not consider that an index-led cross check adds any value to Ofgem's work on embedded debt. There is no 'right' way of picking either a start date for a trailing average iBoxx calculation or the weights that should be given to individual years in the sample. Consequently, an index-led cross-check at best gives a very wide range of plausible values and at worst enables a user to create a justification for a figure they have already decided is the correct number.

We therefore submit that Ofwat's final determination embedded debt costs allowance should be set in line with actual industry mean/median interest costs, inclusive of all of the instruments that large companies are known to have used to raise debt in the period up to 31 March 2025. We use a placeholder value of 2.76% in the calculations below.

New debt

Ofwat's allowance for new debt costs will index in-period in line with an external market benchmark. Ofwat's proposed benchmark is the average of the iBoxx A and BBB £ non-financial 10+ year indices.

The question to ask when evaluating this index design is: how likely is it that the chosen benchmark will accurately track the water industry's cost of debt? In PR19 Ofwat's answer to this question was 'not likely', prompting Ofwat to provide a 15 basis points deduction from iBoxx values. In its PR24 draft determination Ofwat has proposed to remove this deduction. But it is noticeable that the evidence that Ofwat relies upon has a cut-off date of 31 March 2023 and that Ofwat has not yet had the opportunity to consider evidence from the debt issued by water companies since 1 April last year.

When Ofwat comes to review the latest year and a bit of data it will see that water companies have been consistently issuing at above iBoxx rates. We count a total of around 25 new bond issues/taps since the start of 2023/24. Almost all of this new issuance has been priced above iBoxx.

Arguably the most telling case study of the difficulties that companies have been facing came shortly after the publication of Ofwat’s draft determination when Ofwat’s two ‘outstanding’ companies, Severn Trent Water and South West Water, issued bonds at around 40 basis points and 80 basis points above Ofwat’s iBoxx benchmark, respectively.

Considering this evidence, we consider it reasonable that Ofwat should provide for a 60 basis points uplift to IBoxx for the duration of the 2025-30 regulatory period.

Weights for new and embedded debt

Ofwat’s draft determination uses industry-average weights for the cost of embedded debt and new debt of 74% and 26% respectively. Given the growing gap between the cost of embedded debt and the cost of new debt, it is important that Ofwat updates these weights to reflect the size of the capital programme that is factored into its draft determination.

If a company’s modelled mix of embedded and new debt is materially different from the industry average, Ofwat should consider applying a company-specific set of weights. This will ensure that the company is not disadvantaged by taking on a relatively high amount of new investment.

Summary

Table 5 sets out our update to Ofwat’s proposed cost of debt allowance.

Table 5: Cost of capital calculations

	Ofwat DD	Thames Water revised proposal
Cost of embedded debt	2.46%	2.76%
Cost of new debt	3.36%	3.96%
Weight for new debt	26%	26%
Issuance and liquidity costs	0.15%	0.15%
Cost of embedded debt	2.84%	3.22%

4 Gearing: response

Ofwat's overall cost of capital is a 55:45 weighted average of the cost of debt and the cost of equity.

We accept this notional capital structure with two caveats.

First, Ofwat must recognise that a 55:45 debt:equity mix is a wholly hypothetical capital structure that no real-life shareholder-owned company actually exhibits. When Ofwat tests for financeability and sizes modelled equity injections, it should recognise that all companies in the sector will need to issue new equity to bring gearing down from the PR19 notional gearing of 60% to the starting PR24 notional gearing of 55% and should make allowance for associated equity issuance costs.

Second, Ofwat's cost of capital calculation is not neutral to the level of assumed gearing. We calculate that Ofwat's cost of capital at 55% gearing is around 7 basis points lower than the cost of capital would be if estimated at the PR19 gearing figure of 60%. While we are not asking for explicit recompense for this differential, it ought to be a factor that Ofwat is cognisant of as it approaches the rest of its calibrations, including its selection of a point estimate from the overall cost of capital range and its conduct of cross checks on its final determinations, in order to ensure the financeability of AMP8 plans.

5 Retail margin

The retail margin adjustment was first introduced in PR14 at a point in time when there was a potential double count between the retail margin and the return on retail assets included in the wholesale RCV. The retail assets in question have since become fully depreciated and have dropped out of the wholesale RCV. We had expected that Ofwat would respond by likewise dropping the retail margin adjustment. However, the adjustment has remained a part of Ofwat's cost of capital framework, with Ofwat advancing several conflicting justifications for a continued deduction over the years.

In PR24 Ofwat first sets what it considers to be an appropriate retail margin – i.e. 1.2% – based on benchmarking evidence. Ofwat then applies a retail margin adjustment in the wholesale price controls to, in effect, take back retail profits that it says cannot be justified on the basis of a more simplistic retail capital base x WACC calculation. Ofwat's approach here is flawed. First, if Ofwat is content that it is providing the right level of profit for the retail business, it should leave that profit intact. Second, it makes no sense to interfere with the wholesale rate of return for reasons that are wholly to do with the calibration of the retail price control.

We note that had Ofwat given as much weight to wholesale benchmarks (see table 2 above) as it gives to retail benchmarks, it would have seen very clear reason not to downsize the wholesale rate of return via a de facto downsizing of the wholesale beta.

Accordingly, we do not consider that Ofwat has provided the necessary justification for making its retail margin adjustment and for setting the wholesale rate of return below the wholesale cost of capital.

6 Conclusions

Table 6 brings together our estimates of the cost of equity and the cost of debt into an overall calculation of the weighted average cost of capital.

Table 6: Cost of capital calculations

	Ofwat DD	Thames Water response
Gearing	0.55	0.55
Cost of embedded debt	2.46%	2.76%
Cost of new debt	3.36%	3.96%
Weight for new debt	26%	26%
Issuance and liquidity costs	0.15%	0.15%
Cost of debt	2.84%	3.22%
Risk-free rate	1.43%	1.55% to 2.22%
Expected market return	6.29% to 6.87%	6.75% to 6.93%
Unlevered beta	0.26 to 0.29	0.28 to 0.35
Debt beta	0.1	0.1
Equity beta	0.57 to 0.63	0.63 to 0.74
Aiming up	-	0.15% to 0.75%
Cost of equity	4.19% to 4.88% point: 4.80%	4.97% to 6.48%
Weighted average cost of capital	3.72%	4.01% to 4.69%
Retail margin adjustment	0.06%	-
Allowed return on RCV	3.66%	4.01% to 4.69%

We take a point estimate near the upper bound of this range of 4.6% as the current best available estimate of the industry's required return over the period 2025-30. This point estimate is higher than the 4.25% return that we included in our business plan due to (i) changes in market data; (ii) an observable increase in the industry's cost of debt since summer 2023; and (iii) a deterioration in the industry's perceived risk profile.

Our choice of point estimate is based explicitly on our testing of financeability, investibility and financial resilience, which we discuss in detail in TMS-DD-041.



It's everyone's water