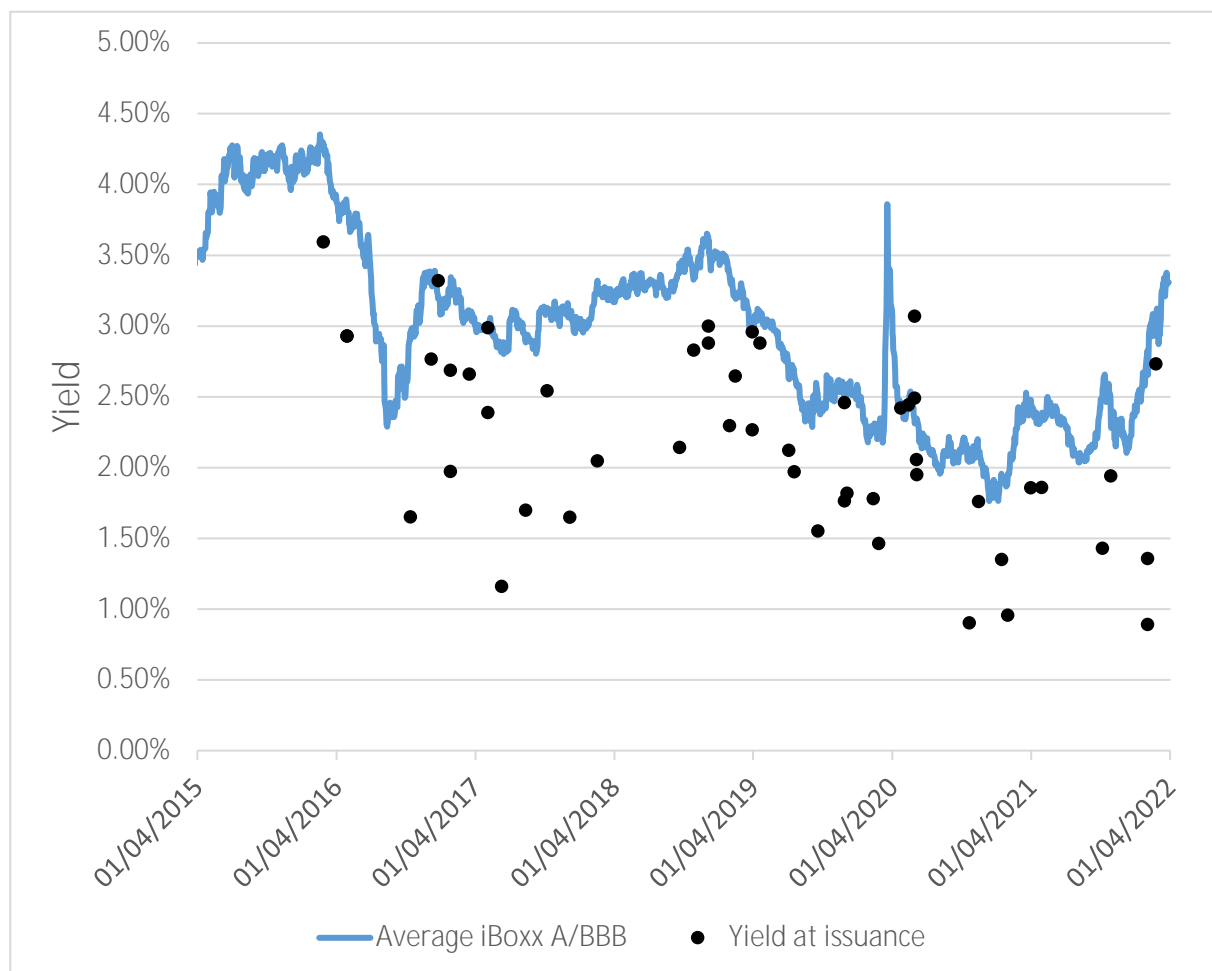


Figure 1.2: Fixed rate bonds since 2015



Source: Refinitiv Data

Our provisional analysis of 50 fixed-rate bonds issued between April 2015 and April 2022 shows that performance vs the iBoxx A/BBB ranges between a P10 of 0% and a P90 of 1.3% outperformance. While we are still considering our approach to gearing and new debt, for illustrative purposes, we have used our PR19 assumptions of an average of 20% new debt and 60% gearing and adjusting for the headline tax rate this translates to a range of 0% to +0.30% of RoRE attributed to the cost of new debt.

This brings the total financing RoRE range to between -0.75% and 1.05%.

Embedded debt benchmarking

Embedded debt refers to debt that will remain on company balance sheets over the price control period. As discussed in Appendix 11: Allowed return on capital, we intend to set a single sector allowance for the cost of embedded debt. Unlike other performance-based areas where there is uncertainty around revenue at risk, the RoRE impact of embedded debt benchmarking is largely known at the start of the period, barring the impact of inflation.

variance). We therefore do not propose to reflect companies' performance against the embedded debt benchmark in the calculation of risk ranges.

Guidance for companies on financing risk

For inflation impacts we propose that companies should use their actual composition of debt (including the impact of swaps), but the notional gearing to estimate a P10/P90 range based on the assumption of a +/-1% variation in inflation. We propose that this applies to both embedded debt and new debt issued within the period. For the cost of new debt, companies should calculate RoRE impacts based on their forecast new debt requirements, and their assessment of the applicable P10/P90 level of discount to the benchmark index for new debt. Companies should clearly reference their calculations and how they have arrived at their final view.

We do not propose for companies to include the benchmarking impact of embedded debt benchmarking in their view RoRE risk ranges. However we still feel that this benchmarking impact an important impact on companies across the price control period. We therefore propose that companies should provide further commentary on their risk analysis to estimate the impact of expected embedded debt performance on their base RoRE (that is, higher or lower depending on whether the benchmarking performance suggests embedded debt out- or underperformance, respectively). Companies should set out the expected impact, how they have calculated it and what impact this performance has on the business plan.

Measures of experience (C-MeX, D-MeX and BR-MeX)

C-MeX and D-MeX are mechanisms that introduce financial adjustments that aim to incentivise companies to deliver high levels of service to customers and hence align the interests of customers with companies and their investors. We propose to add an additional measure of experience for business customers at PR24 (BR-MeX).

As we set out in [appendix 6: performance commitments](#) and [appendix 8: Outcome delivery incentives](#), we are considering increasing the size of incentive for C-MeX.

For illustrative purposes we have carried forward the ranges from PR19 which included the full range of outcomes against C-MeX and D-MeX. We consider this is an appropriate approach given the relative nature of the measures of experience, which mean maximum and minimum returns should be available to all efficient companies.

Our current proposal (as set out in appendix 8: Outcome delivery incentives) is that the incentive range for BR-MeX would be based on +0.5% to -1.0% of wholesale revenue collected from business customers. This equates to potential RoRE impacts of around +0.05% to -0.10%, on a weighted average basis. This is an addition to the return at risk for customer service metrics at PR19 and is reflected within our calculation of the range.

The new BR-MeX will only apply to English water companies because of the extent of competition in these areas. For the Welsh companies, our current proposal is to have business retail performance commitments.

By applying the maximum impacts at PR19 of C-MeX and D-MeX and adding the BR-MeX ranges we estimate a RoRE range of between **-0.60% and 0.45%** (using a weighted average of companies' RCVs over 2020-25).

Guidance for companies on measures of experience

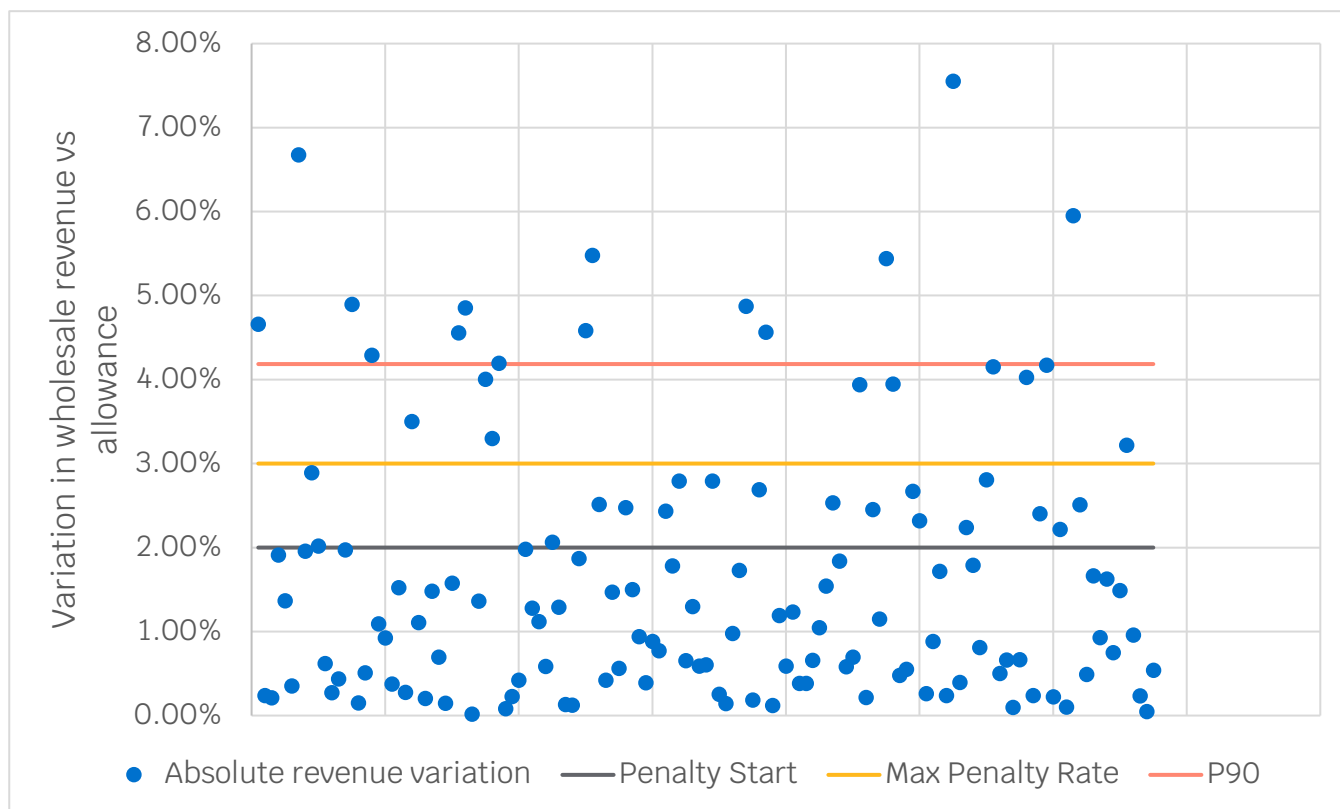
Based on the current framework, we propose that companies should follow our approach adopted at PR19 when calculating potential impacts. Currently this assumes that the full range of incentives is applicable to their business plan.

We propose that where companies have strong views that assuming the full range of financial incentives is not the correct approach for their business plan, the alternative should be well-evidenced and supported.

Revenue

We view the risk to revenue as a very small component of the RoRE range. Our reconciliation mechanisms protect companies against the majority of revenue risk. We view revenue risk as stemming from our revenue incentive mechanisms.

Figure 1.3: Wholesale revenue variations between 2015-20



Source: Analysis from Ofwat PR14 WRFIM model

Our draft methodology proposals around the revenue forecasting incentive are penalty-only once a certain threshold is reached. To signal the strength of the incentive, we include a small downside incentive in our view of RoRE risk of **0.05%**. To calculate this, we took the Wholesale Revenue Forecasting Incentive Mechanism (WRFIM) variations for each year between 2015-20 including a split between water and wastewater controls. While there is no upside reflected in our ranges, only 30% of datapoints resulted in a penalty being applied.

Revenue and other impacts guidance

Companies should consider our approach when assessing revenue risk and any impacts should account for corrections and true-ups applied by our proposed revenue related uncertainty mechanisms. Our list of proposed mechanisms is set out in [Appendix 13: Data and modelling](#).

While we consider that the majority of return at risk is captured in the above sections, we recognise that there may be additional areas of risk that companies wish to consider. Companies may add these areas to their risk ranges; however they should be supported by sufficient and convincing evidence.

1.4 Notified Items and proposals for uncertainty mechanisms

Company licences allow price limits to be reopened in certain limited circumstances as a result of material events that are beyond prudent management control (interim determinations). Notified items allow for specified items to qualify for a standard interim determination, where in aggregate the materiality threshold is met. It is possible for a notified item to form part of an efficient and effective package of risk and return, for example where the costs for an item are uncertain at the time of the final determination and so have not been allowed for in the determination.

However, given the risk-sharing mechanisms already embedded within our PR24 regulatory framework (see [Appendix 13: Data and modelling](#)), we propose to continue to apply a high evidential bar where companies request notified items. We will only accept a request to include a notified item, or bespoke uncertainty mechanism, where compelling evidence is provided as to why the risk in question should be more efficiently allocated to customers than to the company and its investors. This would need to be supported by a company's risk analysis to demonstrate that the risk is material and that a notified item or a bespoke uncertainty mechanism is an appropriate mechanism for dealing with the risk or uncertainty associated with the item.

2. Full indexation of the RCV to CPIH

We set out our intention to fully transition to CPIH indexation from April 2025, in Chapter 7 of our consultation document.

Since the CPIH real return would be higher than its RPI equivalent (because RPI typically exceeds CPIH) we expect full CPIH indexation to have the following short-term impacts:

- An initial increase in revenues (and hence bills) which will unwind over time as a CPIH-indexed RCV will grow more slowly than an RPI-indexed RCV.
- An initial improvement in cash-flow metrics such as interest cover.

Stakeholder responses to our discussion paper and our view

Question Q6 our December discussion paper asked: **"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?"**

Stakeholders were generally supportive of our proposal. Six respondents expressed unconditional support for full transition to CPIH indexation at PR24 and did not raise any concerns.¹² A further six respondents¹³ expressed support for full transition at PR24 but raised the following issues:

- Consideration should be given to: short-term customer affordability, basis risk, and financeability in the long run.
- We should further explore ways to manage impacts on customer bills (ie PAYG and RCV run off levers) and approaches to remunerate basis risk costs (ie an ex-post wedge true-up, potentially as a midnight RCV adjustment at PR29, or the provision of an explicit allowance for the incremental cost of issuing CPIH-linked debt).

Three respondents¹⁴ expressed qualified support for full transition to CPIH indexation at PR24, conditional on the costs associated with basis risk being appropriately remunerated. These responses raised the following issues:

- It is unclear whether basis risk can be hedged in practice as there might be no sufficient appetite to hedge the required volume of basis risk.
- The allowance to cover basis risk provided by Ofgem is not sufficient in the water sector as the proportion of RPI debt is materially lower in the energy sector.

¹² Bristol Water, Hafren Dyfrdwy, SES Water, Severn Trent Water, Dŵr Cymru, Wessex Water

¹³ Portsmouth Water, South Staffs, United Utilities, Yorkshire Water, South West Water, Thames Water

¹⁴ Affinity Water, Southern Water, Northumbrian Water

Three respondents¹⁵ expressed a preference for a more phased transition to CPIH indexation, and noted that:

- Exposure to basis risk would be excessive and hedging may be impractical due to insufficient market appetite.
- Even if hedging was practical, it would be too costly and pose affordability challenges.
- Long-term financeability may be jeopardised.

Our proposal

We agree that short term customer bill impacts should be given due attention. To this end, we have now conducted a more comprehensive assessment of the potential impact of a full transition to CPIH on nominal bills.¹⁶ The results, which we provide in Annex B, confirm the initial findings we set out in our December paper that the annual average bill increase from full CPIH indexation is relatively small, and will unwind in the longer-term. Before setting out our final methodology, we will take stock of any implications for the impact on customer bills and consider whether any mitigations would be appropriate.

While noting the view from some responses that fully-indexing the RCV to CPIH will increase basis risk,¹⁷ we consider this is offset to the extent that CPIH is a less volatile measure of inflation than RPI and because most companies have a significant share of fixed-rate debt (which is not affected by the basis risk issue). Oxera found in 2016 that their modelling of enterprise value suggested the net impact of both effects would be to reduce volatility in enterprise value for all companies except those with very high shares of RPI-linked debt.¹⁸ This suggests that for the notional company there are net benefits in risk reduction from our proposals. It is not clear therefore that our proposals necessitate additional measures to compensate companies for increased basis risk.

A number of water companies have issued CPI-linked debt and more evidence will emerge on the relative cost of issuing this type of debt versus other forms of debt. We will continue to review our position on whether there is a case for an adjustment to the allowed cost of debt to cover differential costs of issuing new CPI-linked debt. Should we decide to provide such an allowance, this will be determined on the basis of a notional capital structure.

We note that Ofgem, in its RIIO-2 Final Determinations,¹⁹ provided an additional allowance of 5 basis points on the overall allowed cost of debt, covering the cost of new CPI/CPIH debt as well as an allowance for managing basis risk between RPI and CPI debt. We note that Ofgem's

¹⁵ Anglian Water, South West Water, iCON

¹⁶ The indicative assessment we conducted in December was focused only on three companies designed to provide reasonable coverage of the different types of companies in the sector: one highly covenanted WaSC (Thames Water), one standard corporate WaSC (Wessex Water), and one WoC (Sutton and East Surrey Water).

¹⁷ That is, movements in RPI driving liabilities that are not mirrored by movements in CPIH driving RCV growth.

¹⁸ Oxera, '[Indexation of future price controls in the water sector](#)', March 2016, section 7.1.3, p67

¹⁹ Ofgem, '[RIIO-2 Final Determinations – Finance Annex \(REVISED\)](#)', February 2021, pp. 13-14, paragraphs 2.24 – 2.26.

approach has been to adopt full transition immediately, whereas in the water sector we have adopted a slower transition, first signalled in 2016, and providing companies significant time to adapt. We assess following Ofgem's approach to remunerating the notional company for higher CPIH-linked new debt costs, that the adjustment corresponding to the notional water company would be approximately 2 basis points on the overall cost of debt.²⁰ While Ofgem's 5bps allowance also compensated customers for basis risk, for reasons set out in this section we are not convinced that the net impact of our proposed changes increase risk overall.

²⁰ This is based on Ofgem's estimated premium of 30bps on CPIH-linked new debt, multiplied by the PR19 share of new debt (20%) and the PR19 notional share of index-linked debt (33%). $(0.30\% \times 20\% \times 33\%) = 0.02\%$

3. Notional Capital Structure

We set out our approach to determining the notional capital structure in Chapter 7 of our consultation document.

In our December discussion document we proposed a framework to determine the appropriate notional capital structure which:

- incentivises efficient financing choices given the **balance of risk faced by water companies**,²¹
- reflects the **scale and nature of investment needs**;
- takes account of a range of **appropriate benchmarks and evidence**; and
- allows the regulator to set a **price control that is in the best interests of current and future customers**.

Stakeholder responses to our discussion paper and our views

Question 5.1 of our December discussion paper asked: **"Do you agree with the framework we have set out for determining an appropriate notional structure for PR24 and beyond?"**

There was limited support for our proposed framework for determining the notional structure, and companies were universally opposed to a reduction in notional gearing from 60%. SES Water agreed with our framework. However, the company raised concerns that proposed changes to the level of notional gearing would result in raising additional equity when returns are lower and the sector has big investment needs.

All companies expressed a clear preference for maintaining the current notional gearing level. Respondents raised a number of concerns. Several respondents stated that there is no evidence to support a change in current gearing levels and that the 60% notional gearing applied at PR19 does not provide an efficient capital structure for PR24. Companies also set out that the CMA did not find evidence that another level of gearing would better suit companies.

A number of companies commented that a reduction in notional gearing would be inconsistent with market evidence from water companies. The companies set out that the average gearing of the water sector at 70% is above the notional level and a decrease at PR24 will move notional gearing further away from the market. Several respondents stated that

²¹ We consider that the notional company should maintain an appropriate level of equity that provides sufficient headroom to reflect the risks faced by the company, and to provide a capital structure that allows efficient access to the debt market through an investment grade credit rating.

enterprise values are not a valid measure of gearing, that RCV represents the invested capital on which companies earn a return, and that rating agencies use RCV gearing unadjusted.

Some companies stated that the proposal undermines the stability and predictability of the regulatory regime. They suggested that we should be aiming for a notional capital structure that is stable and efficient over time. Severn Trent Water considered a 5% reduction to be unprecedented.

Affinity Water, Anglian Water and Northumbrian Water set out that the approach moves risk from debt to equity investors and it is not appropriate to move risk from one investor to another without repricing that risk.

Several respondents suggested that a decrease in notional gearing is inconsistent with rating agency targets. Gearing of 55% would be commensurate with a rating of A3 whilst other financial metrics, such as adjusted interest cover and funds from operations to net debt, are more aligned to a lower credit rating.

Some companies commented that if the water sector faces more uncertainty this indicates a higher cost of equity to compensate for the increased risks.

Anglian Water and Northumbrian Water suggested that an alternative framework is more appropriate. They suggested consideration should be given to the following issues in setting out a framework: identification of market failure, consistency with market evidence based on water companies only, internal consistency of notional structure, consistency with logical sequencing of financeability tests.

Northumbrian Water and Severn Trent Water stated that notional gearing may be construed as artificially constructed to aid financeability and may not be seen as a meaningful cross check by investors.

Our views

We propose to set the notional capital structure including the level of notional gearing and index-linked debt in the final methodology, in line with the framework set out in Chapter 7 of our consultation document. We will set the notional capital structure in advance of, and independent to, making our assessment of financeability as set out in Chapter 8 of our consultation document.

The determination of notional gearing is a regulatory judgement. Therefore, we consider it is important to set a consistent framework to determine the appropriate notional capital structure for PR24 and beyond. Consistent application of the framework over a number of price reviews will add to the stability and predictability of the regulatory regime. In setting an efficient notional capital structure, we will take account of the balance of risk across the

whole price control including the scale and nature of the investment needs of the sector and the level of return at risk through incentive mechanisms. We will also take account of evidence from gearing levels across European equity markets.

Our methodologies for previous price reviews have set out that we do not consider that notional gearing should mirror actual gearing across the sector.²² The level of gearing that companies adopt reflects the interests of the individual company and its investors. It may also be influenced by other structural features such as whole business securitisations or other covenanted debt structures. The notional gearing level should be set at a level that allows a company to manage the risks associated with delivering its obligations and commitments over the long term, while recognising the important role of equity to manage risks and contribute to the effective operation of an incentive-based regime. Changes to the level of notional gearing can be used to signal to companies changes in the level of risk which companies may need to consider in their actual capital structures.

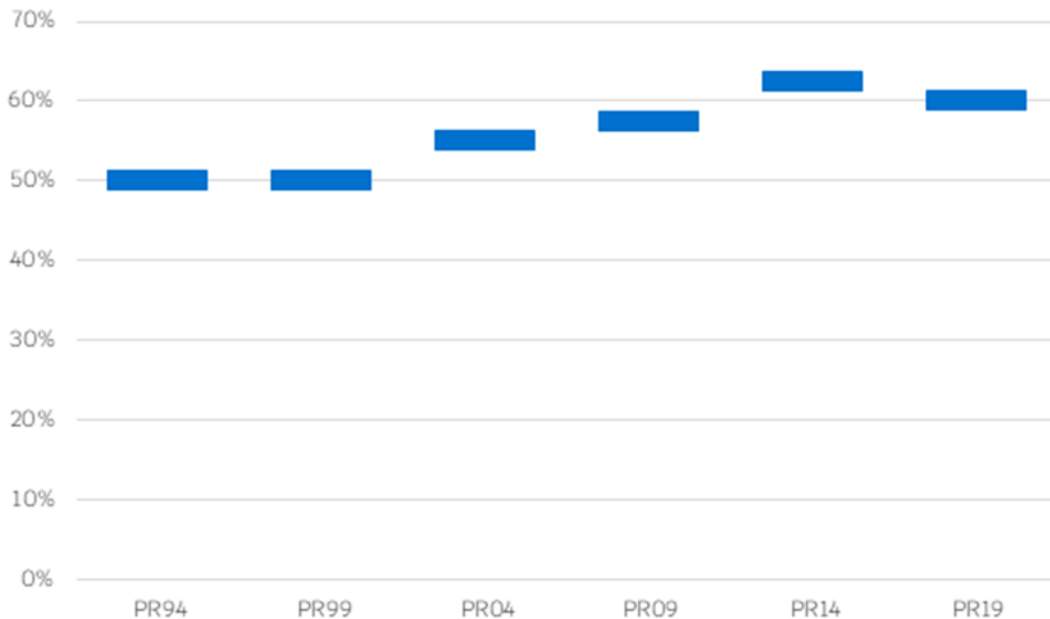
Figure 4.1 shows that, Since PR99, the level of notional gearing has changed at each price review. Changes between price control periods have typically been in the range of 2.5% to 5%, and we have seen similar increases and decreases in notional gearing from the energy sector.²³ Furthermore, we have seen instances of companies adjusting actual gearing by significantly larger amounts in a single year.²⁴ Therefore, we would not consider a change of up to 5%, for example, from 60% to 55% to be unprecedented. We have been signalling our proposal to potentially lower the notional gearing level since 2021 for a price control that starts in 2025, which provides time for companies to respond to the change in notional gearing. Furthermore, as illustrated in Chapter 7 of our consultation document, the current period of elevated inflation provides scope for most companies (including the notional company) to reduce gearing ahead of PR24 and we are carefully considering the impacts on the notional company in terms of new/embedded debt.

²² In the [PR09 methodology](#), we set out that gearing of the water sector had increased substantially from 47% in 2000–01 to 62% in 2006–07 and the industry average gearing was likely to be above the 55%–65% range assumed in 2004 by the time we set price limits in 2009. In [final determinations](#) we considered the 55%–65% range remained a sustainable level of gearing and set opening gearing of 57.5%.

²³ In its recent [RIIO – 2 final determination for Transmission and Gas Distribution network companies and the Electricity System Operation](#), Ofgem reduced notional gearing from 60% to 55% for NGET, from 65% to 60% for Gas Distribution network companies and from 62.5% to 60% for Gas Transmission companies.

²⁴ Anglian Water, '[Preliminary announcement of full-year results for the 12 months ended 31 March 2022](#)', June 2022, Anglian Water set out that it had completed its financial restructure with a shareholder injection of more than £1 billion, reducing gearing from 82% at 31 March 2021 to 65%.

Figure 3.1: Notional gearing from 1995 to 2025.



Source: Ofwat analysis of price review documentation (PR94-PR19)

Regarding the claim that the notional gearing level is inconsistent with the target credit rating for the notional company, we consider that a credit rating is an in-the-round assessment of the credit worthiness of a company taking account of a range of qualitative and quantitative factors. Therefore, we do not consider that each financial ratio needs to fall within the guidance range for the BBB+/Baa1 target credit rating for the notional company. Indeed, a strong level for the gearing ratio, may allow some leeway on other financial metrics such as adjusted interest cover or funds from operations to net debt.²⁵

We do not agree that more uncertainty necessarily indicates a higher cost of equity. To the extent such uncertainty is systemic, we would expect this to be observed in our beta analysis. Any increase in risk that is idiosyncratic is diversifiable by investors. Company management can have material influence over returns at risk through incentive mechanisms, and such company-specific risks are largely diversifiable. However, it remains the case that companies (including the notional company) should have a capital structure in place that provides a sufficient buffer to manage the effects of underperformance or risks materialising.

Index-linked debt

²⁵ Moody's Investors Service, 'Bristol Water plc: Update following CMA approval of acquisition by Penon', May 2022. In its recent credit opinion for Bristol Water plc, Moody's commented that "Gearing is forecast to remain below 70% of net debt to RCV, thus leaving headroom against the maximum 85% for the Baa2 rating, which would also help to offset credit pressure of an AICR slightly below guidance."

Question 5.2 of our December discussion paper asked: **"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?"**

A number of respondents agreed with increasing the proportion of index-linked debt. Some respondents suggested that for modelling notional company purposes, the proportion of index-linked debt could be increased to reflect the industry average.

Other respondents disagreed with changes from PR19. Respondents raised a number of issues (including both those that agreed as well as those that disagreed). Several respondents stated that the approach for index-linked debt is inconsistent with the approach for notional gearing. The respondents suggested that the approach for gearing disconnects notional gearing from the average gearing for the sector, whereas we are proposing to move the proportion of index-linked debt in line with the sector average. Some companies stated that high levels of index-linked debt are associated with high gearing. They suggested that the companies which have higher levels of index-linked debt tend to have higher gearing and securitised structures.

Several responses noted that the sector average of 50% index-linked debt proportion relies on interest rate swaps which is inconsistent with the treatment of derivatives in our proposed assessment of the allowed return on embedded debt.

Bristol Water stated that assuming a higher proportion of index-linked debt, particularly for water-only companies would mask notional financeability issues linked to the cost of debt. The company recommended that we should test the sensitivity of this as part of the PR24 package of assumptions, rather than assuming it at this stage.

Severn Trent Water stated that if we persist with a higher level of index-linked debt, we should consider how it transitions from 33% to 50% and provide for the additional costs of borrowing as was provided by Ofgem. Thames Water set out that if we persist in increasing the level of index-linked debt, we should take a hybrid approach to the mix of RPI and CPIH.

Our views

We intend to set out our decision on the proportion of index linked debt alongside our early view of the allowed return on capital in the final methodology. As for the level of gearing in the notional capital structure, this will be in advance of, and independent to the assessment of financeability.

We do not consider that high levels of index-linked debt are necessarily associated with high levels of gearing. For example, five companies that reported gearing above 75% at 31 March 2021, also reported a proportion of index-linked debt (RPI-linked and CPI/CPIH-linked)

between 33% and 81%.²⁶ Similarly, companies with more than 50% index linked debt, reported gearing between 46% and 83%.

We do not consider that our approach to using data from companies' balance sheets to inform the level of index-linked debt undermines our approach to setting notional gearing. Our proposed approach to setting the level of index linked debt for the notional company is consistent with our proposed approach for setting the allowed cost of embedded debt by reference to company balance sheets. We intend to apply consistent approaches between the cost of embedded debt and the level of index linked debt for the notional company. For example, we propose to exclude interest rate swaps from the determination of the allowed cost of embedded debt and the proportion of index linked debt, and to consider an appropriate mix of RPI and CPI/CPIH linked debt.

²⁶ Ofwat, '[Monitoring financial resilience report 2020-21, charts and underlying data](#)', December 2021, S13. Reg.gearing and S25. Borrowings

4. Financeability

We set out our proposals for assessing financeability for PR24 in Chapter 8 of our consultation document. In our December discussion document, we set out a number of factors that may improve financeability at PR24. These included full transition to CPIH as the inflationary index, reduction in the embedded cost of debt and choices we may make regarding the notional capital structure.

We also set out that should a financeability constraint arise on the basis of the notional capital structure, we proposed to consider the underlying cause of the constraint in determining the most appropriate solution. Our preferred approach, particularly where we identify a financeability constraint for a specific company arising primarily as a result of a large investment programme impacting on the level of notional gearing, or where there is limited headroom when sensitivity testing of the financial metrics, is to consider equity solutions.

Stakeholder responses to our discussion paper and our views

Financeability at PR24

Question 7.1 of our December discussion paper asked: **"Do you agree that financeability is likely to be less constrained at PR24 than at PR19?"**

Respondents raised a number of issues. Several respondents suggested that the proposals in the discussion paper are negative for equity investors. The respondents suggested the proposals imply a challenging and unfavourable environment for financial resilience and equity investment at a time when there is uncertainty around the timing and scale of investment needed. Respondents suggested, there appears to be downward pressure on the cost of equity.

A number of respondents stated that a robust financeability test is an essential cross check on the cost of equity. Several respondents set out that changes to the notional capital structure could mean that the financeability test is not meaningful and undermines the financial resilience of the sector. Respondents suggested these changes do not improve the financeability of the sector, and we should determine the notional structure before applying financeability checks.

Affinity Water, Anglian Water and Northumbrian Water noted that Moody's downgraded its assessment of the predictability and stability in the UK water industry at PR19. Therefore, the companies considered there is a risk that proposed changes implied by the risk and return discussion paper could lead to a further downgrade of the regulatory framework with negative implications for financial resilience.

Portsmouth Water and South Staffs Water set out that the benefit from the higher interest historical debt rates maturing will not benefit all companies at PR24.

Southern Water, United Utilities and Yorkshire Water stated that proposed changes to the notional structure imply a higher target credit rating. If notional gearing is set at 55%, then to maintain consistency of approach, the AICR thresholds in the financeability cross-checks should also be moved up to 2.0x. This would align both ratios within the same rating level of A2 (by Moody's). United Utilities also suggested that targeting key metrics in the central point of any guidance range would be a more appropriate test for an efficient company, rather than placing the notional company on a ratings 'cliff-edge'.

Southern Water, Thames Water and one investor noted that Fitch adjusts revenue advancement in its PMICR and Moody's makes similar adjustments in its AICR. These respondents also noted that the CMA at PR19 acknowledged that revenue advancement does not improve credit quality. However, in contrast, Severn Trent Water and United Utilities stated that there may be occasions when using revenue advancement is appropriate and in customer interests.

Dwr Cymru stated that boards should not be asked to provide assurance on the notional structure. The company set out that its board finds providing real assurance on a hypothetical entity nebulous. Dwr Cymru also set out that, when excluding reconciliation adjustments from the financeability assessment, a distinction should be made between technical reconciliations such as the RPI-CPIH wedge or the cost of new debt, and performance adjustments.

Our views

Setting allowed returns on capital and assessing financeability with reference to a notional capital structure is a long standing regulatory approach. We recognise that individual companies' actual capital structures may be different from the notional company, for example in the level of gearing or the proportion of new and embedded debt. However, that is a result of company financial choices and is therefore the responsibility of each company to manage.

We have set out the framework for determining the level of notional gearing and our proposed approach for the proportion of index linked debt in the financial model in Chapter 7 of our consultation document. We set out that we propose to determine the notional capital structure in advance of, and independent to, our assessment of financeability. We will set out the decisions for the notional capital structure in the final methodology.

A lower level of notional gearing does not imply a higher credit rating for the notional company or that the target for other financial metrics should necessarily be higher. Indeed, we set out in Chapter 8 of our consultation document that we expect companies to target a

credit rating at least two notches above the minimum investment grade (ie to target BBB+/Baa1). A credit rating is an in-the-round assessment of the credit worthiness of a company taking account of a range of qualitative and quantitative factors. Therefore, we do not consider that each financial ratio needs to fall within the guidance range for the BBB+/Baa1 target credit rating for the notional company. Indeed, a strong level for the gearing ratio, may allow some leeway on other financial metrics such as adjusted interest cover or funds from operations to net debt.

Maintaining consistency with our past price determinations, our proposed approach is to assess financeability before the application of all reconciliation adjustments. We do not consider it is necessary to make a distinction between reconciliations resulting from out or underperformance and other reconciliations. Reconciliations for items such as the RPI-CPIH wedge and the cost of new debt are to make adjustments to revenue received in the current price control period. Where the reconciliation results in additional revenue (or an upwards adjustment to RCV) this is to recompense a company for a shortfall in revenue during the previous period. Similarly, where the reconciliation results in a reduction in revenue (or a downwards adjustment to RCV) this is to return excess revenue received in the previous period. In this case, companies will be aware that they have received additional revenue in the current period and should be retaining this to offset the shortfall at PR24.

Targeting a credit rating of two notches above the minimum investment grade credit rating for the notional company provides sufficient headroom against the credit rating condition in the licences of most regulated water companies. We do not consider it necessary for companies to target a specific position for each financial ratio within the guidance range set out by the credit rating agencies. As noted above, a credit rating is an in-the-round assessment and not reliant on a single specific financial metric.

We propose to use a basket of financial metrics in our assessment of notional financeability. We recognise that certain credit rating agencies do not take account of revenue advancement in their interest cover ratios. Therefore, we propose to consider an alternative measure of adjusted interest cover alongside other financial ratios. We provide further detail of the financial metrics and our proposed approach to assessing financeability in Chapter 8 of our consultation document. However, we consider that advancing revenue can be beneficial in certain circumstances to improve cash flow over the period in a net present value neutral manner.

Funding real RCV growth

Question 7.2 of our December discussion paper asked: "**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?**"

The Consumer Council for Water and four water companies, agreed that real RCV growth should be funded through a combination of debt and equity.

Respondents that commented on growth being funded by debt and equity (including those that agreed or disagreed with this approach), raised a number of issues. Affinity Water, South East Water, Southern Water and Severn Trent Water noted that dividend yield is a key metric for equity financeability, particularly as utility investments are often driven by availability of dividends. The companies set out that dividends should be based on market benchmarks and the expectation that equity will be injected to reduce gearing is not sustainable over time where the effective payout ratio is below market benchmarks.

A number of respondents stated that dividends support predictable and stable cashflows to equity investors. These respondents suggested corporate finance principles do not support the need for dividends to vary with capital growth, and companies may prefer to vary gearing depending on capital investment requirements. Requirements for new equity would be clearer under a constant dividend yield.

Anglian Water and South Staffs Water set out that financeability conclusions should not be sensitive to whether dividend yields are held constant. Bristol Water and Thames Water set out that it is likely to be cheaper to fund investments through new debt in the short term. Therefore, de-gearing at the same time as investing to grow the RCV may result in the incremental RCV being funded with a more expensive mix of capital.

Bristol Water, along with United Utilities also suggested that a specific financing cost for new equity above the assumed level of dividend retention should be provided.

Our views

We will set an assumption for dividends in the financial model based on the allowed return on equity. We discuss this in Chapter 8 of our consultation document.

We remain of the opinion that real RCV growth should be funded by a mixture of debt and equity. Where there is significant investment that enhances or expands the asset base, equity has an important role to play. We welcome companies raising equity where necessary to fund such investment, as we saw with Severn Trent to fund its green recovery programme in 2021. We have also seen a number of companies forego the payment of dividends to investors over recent years to support investment.

However, we see the payment of dividends as important in an incentive-based regime and we recognise that dividends have a role to play in equity financeability, with stable and predictable dividends being important to some investors in the utility sector. Therefore, we consider it may not be sustainable to withhold dividends entirely to support real RCV growth over the long term. As such, where gearing varies markedly above the notional level in the

financial model, we are minded to maintain a minimum level of dividend yield and apply injections of new equity to reduce gearing back towards the notional level. For the avoidance of doubt, we consider it is entirely reasonable for investors to forego dividends over a period of time where a company is required to improve the financial resilience of its actual capital structure. However, this should not be a substitute for an injection of equity into the regulated company where this is necessary.

As set out in Chapter 8 of our consultation document, we may provide an allowance for the cost of equity issuance to solve a financeability constraint in relation to real RCV growth. We note that we allowed 5 per cent at PR09 as did Ofgem in its recent RIIO-2 determinations. We will set out our decision in the final methodology.

5. Cost recovery

We set out in Chapter 8 of our consultation document that totex allowances are recovered in the year through pay as you go (PAYG) or are added to the RCV and recovered over a longer period through the RCV run-off.

PAYG and RCV run-off rates balance the recovery of costs between different generations of customers.

5.1 PAYG

PAYG rates determine the amount of totex allowances recovered in period through allowed revenue and, along with RCV run-off, represents a significant portion of customer bills.

We expect each company to set out its proposed underlying PAYG rates for each wholesale control in its business plan tables. Companies may propose adjustments to the base PAYG rates in the business plan tables where it considers it is appropriate to do so.

We consider the most appropriate starting point for calculating PAYG rates is operating costs as a proportion of totex. This was the approach that the majority of companies took at PR19. Where companies propose to diverge from using the proportion of opex as a starting point, or propose adjustments to the base rates for PAYG, we expect companies to provide sufficient and convincing evidence that this is in the best interests of customers, both now and in the future.

Where a company proposes to defer PAYG revenue to future periods, we expect the company to consider the impact on the financeability of the company on the basis of the notional capital structure. The company should confirm that it can also manage the effects of such deferral under its actual capital structure.

We would expect the proportion of opex and capex for base totex to be broadly consistent over time, whereas enhancement totex is primarily capital in nature. Using cost information in business plan tables, we may disaggregate PAYG rates between base and enhancement costs. Where we see significant changes in PAYG rates associated with base totex, we would expect to see sufficient and convincing evidence to support the variation in business plans.

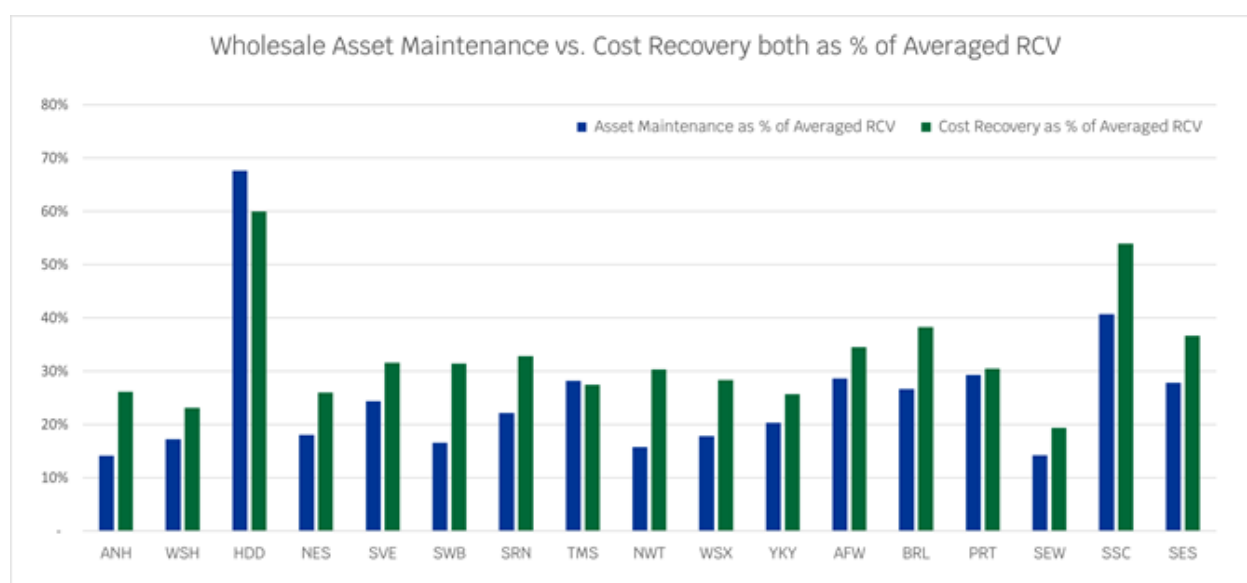
5.2 RCV run-off rates

RCV run-off rates determine the amount of past investment held in the RCV that is recovered from current customers each year.

In Chapter 8 of our consultation document, we set out that analysis of RCV run-off in PR19 final determinations and proposed capital expenditure (which is required to maintain the long-term capability of the assets – as reflected in base totex submissions in business plans), showed that, in almost all cases, the planned spend was less than the total cost recovery in the PR19 price control period.

Companies set out their requested costs for renewals expensed in year and maintaining the long-term capability of the assets for infrastructure and non-infrastructure assets in business plan tables. Companies recovered renewals reported as operating costs through PAYG and some companies also recovered capitalised infrastructure renewals expenditure through PAYG. For other companies this was added to the RCV along with costs associated with maintaining the non-infrastructure asset base, and will be recovered over time through RCV run-off. Figure 5.1 shows the allowed costs associated with asset renewals and maintaining the capability of infrastructure and non-infrastructure assets²⁷ and RCV run-off plus infrastructure renewal costs (opex and capex) recovered through PAYG.

Figure 5.1: Cost allowances for renewals and maintaining the asset base versus cost recovery at PR19 as a percentage of average RCV



Source: Company business plan, data tables. PR19 final determinations

²⁷ This is taken as the costs submitted in business plan tables WS1 and WWS1 adjusted for the base cost efficiency challenge applied in the final determinations

6. Financial resilience

We set out our proposals for assessing financial resilience for PR24 in Chapter 9 of our consultation document. Our proposals for PR24 follow on from our further discussion paper published in December 2021,²⁸ in which we set out the importance of financial resilience and our concerns with respect to the financial structures of some companies. We are carrying forward work on the options to strengthen the customer protections from financial structures and our proposals will be put forward under a separate consultation to be published over the summer. We propose to assess the information provided on financial resilience as part of the quality assessment of minimum expectations for the business plan incentive.

Stakeholders responses to our discussion paper and our views

The December discussion paper on Financial resilience in the water sector asked two questions in relation to PR24. The first of these was Question 14, which said: **"We welcome views on the expectation that PR24 business plans should include a board assured assessment of financial resilience"**

All respondents that commented on this question were in general agreement that PR24 business plans should include a board assured assessment of financial resilience, with a number of companies seeing this as an extension of the requirements at PR19. Six respondents expressed that there should be no change in approach at PR24 compared to PR19, or that any change in scope from PR19 should be agreed separately. Other respondents raised a number of issues.

Northumbrian Water and Portsmouth Water set out that stress testing should cover both actual and notional company structures.

South East Water and one investor stated that financial resilience should be addressed through adequate revenue allowances and robust financeability testing.

South Staffs Water expressed concerns regarding the cost of external assurance, stating that we should not be too prescriptive and allow the Board to decide what level of assurance it thinks is appropriate.

Bristol Water stated that if assurance highlights areas of concerns, the statement should be caveated rather than express a 'clean bill of health'.

Two investors set out that assurance should not extend beyond PR24 as financial parameters for future regulatory reviews are unknown.

²⁸ Ofwat, ['Financial resilience in the water sector: a discussion paper'](#), December 2021

United Utilities and one investor stated that Board assurance should not be extended to cover our determinations.

Our views

While we expect companies to provide Board assurance on the financeability of the notional capital structure as well as actual company financial resilience, we will assess the financeability of our PR24 determinations on the basis of the notional capital structure. Actual financing arrangements and the financial resilience of the actual capital structure remains the responsibility of the company and its investors.

Our proposals set out that the Board of each company should provide evidence of the steps it has taken to provide its board assured statement that the actual company is financially resilient over the period of the price review and beyond under its business plan. We do not intend to be prescriptive regarding the level of assurance we expect companies to obtain over the board assurance statement. We consider that it is for each company to determine the level of assurance required. However, we expect companies to specify the level of assurance obtained and why the Board considers this to be appropriate. We will assess the evidence set out in business plans.

We expect Boards to be able to provide unqualified assurance of each company's financial resilience over the PR24 period and beyond. If the company assurance process identifies areas of concern, we expect the business plan to set out the plans the company and its investors propose to put in place to mitigate any issues to ensure the financial resilience of the company is maintained.

We do not agree that the assessment of financial resilience cannot extend beyond PR24. Setting assumptions for financial allowances beyond the current regulatory period should be part of companies' long-term planning and is consistent with providing long term viability statements in annual performance reports. We expect companies to set out their long-term assumptions underpinning their business plans.

It is possible that a company's view of the reasonable revenue and cost allowances differs from those that we might consider reasonable for an efficient company. We are proposing that companies include a scenario within their stress testing that takes account of plausible adjustments that might be made in arriving at final determinations. Companies should set out the possible impacts on their financial resilience, the consequences thereof and the likely mitigation measures in the event that our view of efficient final determination allowances differ from those requested in business plans.

It remains critical that financial resilience is at the heart of Board assurance processes throughout the planning cycle. As such, in relation to final determinations we would continue to expect Boards to secure that their company has arrangements in place to maintain or

achieve financial resilience. The relevant horizon for considering this resilience is not only the 2025-30 period, but also beyond.

7. Incentivising resilient capital structures

In Chapter 9 of our consultation document, we set out that we consider proposals to strengthen the regulatory ring-fence and to enhance monitoring and reporting could serve to better protect the interests of customers with respect to companies' financial structures. This may remove the need for specific incentives at PR24 to encourage companies to adopt more resilient financial structures. However, we also set out that we may apply an incentive-based mechanism within the price review if we are not satisfied with progress achieved through other means.

Stakeholder responses to our discussion paper and our views

Question 15 in the December discussion paper on financial resilience in the water sector, said **"We welcome views on how the incentives framework around capital structure should evolve at PR24 taking account of the other views set out in this paper and the scope to which companies should provide voluntary sharing arrangements at PR24?"**

South West Water stated that the Gearing outperformance sharing mechanism (GOSM) should remain in place for PR24 to encourage companies to improve financial resilience. All other respondents disagreed with applying the GOSM or a similar mechanism at PR24, arguing that it does not achieve its objective, there is no benefit to share with customers, and it was disapproved by the CMA in its PR19 redeterminations.

Severn Trent Water and United Utilities suggested there should be positive incentive-based mechanisms for companies that maintain gearing at or close to the notional level of gearing.

South East Water stated that it did not support voluntary sharing mechanisms, whilst other respondents stated that the existing regulatory framework already provides strong incentives to maintain a resilient capital structure.

Our views

The risk and return framework is designed to align the interests of companies and investors to those of customers and to allocate risk to the party best able to manage it. The current framework incentivises companies to deliver stretching levels of efficiency and levels of service that improve over time.

Consistent with this principle, our approach has been to allow companies discretion over their financing and capital structure arrangements within the boundaries of the regulatory and licence framework. Nevertheless, we consider there is scope to make improvements.

We are carrying forward work on the options to strengthen the customer protections with respect to companies' financial structures and we will set out our proposals under a separate consultation to be published over the summer. We consider the proposals to strengthen the regulatory ring-fence and to enhance monitoring and reporting could serve to increase levels of financial headroom and better protect the interests of customers. This may remove the need for specific incentives at PR24 to encourage companies to adopt more resilient financial structures. However, we may apply an incentive-based mechanism within the price review if we are not satisfied with progress in strengthening the regulatory protections, or in circumstances where companies with risky structures are not delivering tangible improvements in financial resilience. We will return to this in the final methodology taking account of responses to our separate consultation.

Customers have a right to expect their water company to be financially resilient as a minimum expectation. Therefore, we consider it would not be appropriate to adopt positive incentive-based mechanisms associated with financial resilience. This was also the view of CC Water and two other respondents to the Financial Resilience discussion paper. And is consistent with our expectation that companies should be able to demonstrate they are able to maintain financial resilience in 2025 to 2030 and beyond in their business plans.

We note that one water company stated that it did not support voluntary sharing mechanisms. However, such mechanisms have also been proposed by companies on a voluntary basis. As set out in Chapter 9 we welcome companies coming forward to promise to share such outperformance on a voluntary basis.

There are a number of areas of the price setting process where companies and their investors could benefit that are not subject to sharing mechanisms. The following are examples rather than an exhaustive list:

- We set an allowance for the cost of debt for the sector. Companies' out or underperformance of the allowance for new debt may inform future allowances for embedded debt. However, companies that continually outperform our new or embedded debt allowances will keep all of the benefit.
- We set out in section 7.6 of our consultation document how companies may benefit from the current period of elevated inflation. This is because, unlike the RCV, the amount repayable for nominal fixed rate debt (and to some extent, floating-rate debt) does not grow in line with inflation. The benefits of high inflation will be felt most keenly by companies with a higher share of fixed and floating-rate debt in their financing structure, as well as the notional company, with its high share of fixed-rate debt,
- In the short term, companies cash flows are affected by recent changes to the headline rate of corporation tax and to capital allowances. This will be adjusted for at PR24 in accordance with the tax reconciliation mechanism. However, changes to the profile of

capital expenditure within the price control period is not covered by the reconciliation and companies retain the benefit of additional capital allowances where capital expenditure has been accelerated.

- In setting our determinations, we aim to calibrate the risk and reward package to align the interests of companies with their customers, such that the sector is attractive to investors, but companies can only earn high returns from great performance. This necessarily involves the use of forecast data which may turn out to be different from the actual experience over the price control period.

8. Dividend policies

As set out in Chapter 9 of our consultation document, we propose to assess companies' dividend policies as part of the quality assessment of minimum expectations for the business plan incentive. In this section we set out our expectations for dividend policies for the period 2025–30.

The PR19 final determinations,²⁹ and our revised Board Leadership principles '[Board leadership, transparency and governance – principles](#)' published in January 2019, set out a guiding provision that companies should publish an explanation of dividend policies and dividends paid, and how these take account of delivery for customers and other obligations (including to employees) in Annual Performance Reports from years ending 31 March 2020 onwards.

Our expectations for dividend policies included that companies should set out:

- details underpinning their approach to dividends and factors that influence dividends transparently in their published dividend policy;
- how their approach takes account of delivery for customers;
- the dividend policy in their Annual Performance Report. This should be clear and is consistent with all other narrative in relation to dividend policy or dividends declared or paid within the remainder of their Annual Performance Report, within their statutory accounts and within any other publication; and
- any changes to their dividend policy in their Annual Performance Reports.

Our expectations in relation to the explanation of dividends declared or paid include that companies should:

- set out how total dividends declared or paid have been determined and how they are consistent with the company's dividend policy;
- clearly explain and provide justification for any deviations from the policy.

The factors that companies should take into account in the design and application of their dividend policies should include:

- performance in meeting their obligations including their statutory and licence obligations;
- the commitments they have made to customers;
- out/underperformance against regulatory metrics and benefit sharing;
- employee interests;
- pension obligations;

²⁹ Ofwat, '[PR19 final determinations: Aligning risk and return technical appendix](#)', pp. 117–120, section 9.1.4.

- actual capital structure, including whether, for a company with high gearing, it has considered maintaining the same dividend yield as under our notional structure;
- the need to finance future investment (RCV growth) or fund costs not covered by the price review; and
- financial resilience.

At PR19 we set out that a base dividend yield of up to 4% is reasonable for companies that have little real RCV growth and that perform in line with their determinations for 2020–25. Where a company must finance material growth of the asset base or where long-term financial resilience is at risk, it may need to reduce this base dividend or investors may need to invest more equity. We intend to review the reasonable base dividend yield to account for the PR24 equity return and set this out alongside our early view of the allowed return for the final methodology.

We consider that companies' dividend policies should be applicable to the total dividend declared or paid, including any dividend paid by the appointee for any reason, including dividends paid to a holding company to allow it to pay interest on an intragroup loan from the appointee. In turn, we consider that when companies set out how dividends declared or paid have been determined and how they relate to their dividend policy, this should be with reference to total dividends declared or paid. In all cases, we expect companies to clearly justify and be transparent about these payments, explaining all factors that have been taken into account. References to dividends declared or paid should include all forms of distributions.

Finally, we note that benefits that accrue to equity from the consequences of high inflation (for example where nominal fixed rate debt is in place) are not linked to operational performance. As such these benefits should be retained or reinvested and not distributed as outperformance if companies are to meet our expectations.

9. Performance related executive pay

As set out in Chapter 9 of our consultation document, we propose to assess the companies' performance related executive pay policies as part of the quality assessment of minimum expectations for the business plan incentive. In this section we set out our expectations for performance related executive pay policies for the period 2025-30.

- **Alignment to delivery for customers** – policies should demonstrate that the criteria for awarding both the short and long-term elements of performance related executive pay demonstrate a substantial link to stretching delivery for customers. Delivery for customers includes delivering on environmental commitments and obligations. Metrics relating to the health and wellbeing of company employees may also be relevant.

Examples of specific measures relating to delivery for customers include C-MeX or measures such as interruptions to supply. Appropriate metrics may also include the totex and outcome delivery incentive components of RoRE where companies have identified RoRE performance as part of their incentive scheme. However any financial measures which are for the benefit of investors cannot be considered as relating to delivery for customers.

- **Stretching targets** – policies should demonstrate that stretching targets are used for criteria which are related to delivery for customers. Companies will need to consider what is stretching in the context of the metrics being used. An example of a target which could be considered stretching is one linked to sector upper quartile performance.
- **Poor performance** – policies should explain how poor performance will be taken into account when considering the overall level of performance related executive pay awarded in any year.
- **Malus and clawback** – policies should set out any malus and clawback provisions and how and when these would be used.

Where a policy applies at a group level, we expect the policy to take account of the position of the regulated company within the group. We expect that where directors have shared responsibilities within the group, the policy should clearly explain how it applies to the regulated company. We also expect that the customers of the regulated company only contribute to any performance related executive pay awards that relate to the performance of that company.

We expect companies' remuneration committees to ensure that targets remain appropriate and stretching in the 2025-30 period, to ensure that only truly stretching performance is

rewarded, there is on-going rigorous challenge as to how the policies are applied and that they use their discretion to override formulaic outcomes, where appropriate.

Companies should commit to transparent reporting of policies and any changes to them and, where there are changes, the reasons for these. There should also be transparent reporting of the application of the policy in each year to include clarity on the individual metrics being used, the targets set for those metrics, the performance against each of those targets and the resulting award, if any, for each metric. Companies should also be clear where their remuneration committees have used their discretion to adjust the formulaic outcomes of short- and long-term schemes in the year. They should also explain whether any malus and/or clawback provisions have been applied.

If our final methodology says that companies should set out their policies for performance related executive pay in their business plans then we will, if necessary, update the expectations set out above to reflect any new information we receive.

10. Annex A – Historic Performance of costs vs allowances

10.1 Totex costs vs allowances

Table 10.1: Historic performance of costs vs allowances.

Company	2000-05	2005-10	2010-15	2015-20	Average
Anglian Water	3.5%	1.7%	8.3%	8.6%	5.5%
Dŵr Cymru	2.5%	-4.1%	-10.6%	-8.1%	-5.1%
Northumbrian Water	2.9%	-8.9%	4.4%	5.5%	1.0%
Severn Trent Water	7.6%	-2.5%	-0.2%	-0.2%	1.2%
South West Water	4.6%	-5.6%	0.7%	14.5%	3.6%
Southern Water	1.6%	4.3%	-9.7%	-1.2%	-1.2%
Thames Water	0.0%	-0.1%	-0.8%	-10.0%	-2.7%
United Utilities	5.2%	-0.2%	1.8%	-8.8%	-0.5%
Wessex Water	13.2%	12.5%	15.2%	8.4%	12.3%
Yorkshire Water	11.9%	0.8%	6.4%	-2.6%	4.1%
Affinity	-	-	-5.5%	-2.8%	-4.1%
Bournemouth Water	9.6%	4.3%	-1.0%		4.3%
Bristol Water	3.7%	-0.6%	-5.2%	-2.0%	-1.0%
Cambridge Water	-5.4%	-2.7%	-	-	-4.0%
Dee Valley / Hafren Dyfrdwy	-2.0%	0.5%	0.0%	-6.1%	-1.9%
Mid Kent	3.1%	-	-	-	3.1%
Portsmouth Water	11.8%	-4.8%	-4.0%	-5.4%	-0.6%
SES Water	5.4%	-1.9%	3.8%	-0.3%	1.7%
South East	7.6%	7.0%	-		7.3%
South East (Merged)	-	-	2.3%	3.7%	3.0%
South Staffs Water	6.8%	1.3%	3.1%	-0.7%	2.6%
Veolia Water Central	2.3%	-0.1%	-	-	1.1%
Veolia Water East	-0.5%	-0.9%	-	-	-0.7%
Veolia Water South East	6.8%	-0.4%	-	-	3.2%
Control period average*	4.7%	0.0%	0.5%	-0.4%	1.2%
P10	-0.5%	-4.8%	-6.8%	-8.4%	
P90	11.5%	4.3%	7.0%	8.5%	

*Control period average calculated based on a simple average.
Sources: Financial performance and expenditure reports 2004-05 and 2009-10, PR99 final determination operating expenditure, PR04 final determination total operating expenditure, Capital Incentive Scheme (CIS) reconciliation models, 2011 June Return, 2012 Accounting separation submission, 2013-15 Accounting separation tables, PR14 Totex expenditure reconciliation model. PR14 excludes retail.

In Table 10.1 positive performance relates to underspend (ie outperformance by companies).

10.2 PR14 retail expenditure vs allowances

Table 10.2: PR14 retail expenditure vs allowances

Company	Retail expenditure vs allowance
Anglian Water	10%
Welsh Water	-7%
Northumbrian Water	12%
Severn Trent Water	22%
South West Water	7%
Southern Water	-28%
Thames Water	-2%
Unitied Utilities Water	7%
Wessex Water	14%
Yorkshire Water	5%
Affinity Water	-3%
Bristol Water	17%
Dee Valley / Hadren Dyfrdwy	15%
Portsmouth Water	7%
South East Water	26%
South Staffs Water	14%
SES Water	-15%

Source: Company annual performance reports, 2015-20, Table 2C, allowances taken from PR14 final determinations.

In Table 10.2 positive performance relates to underspend (ie outperformance by companies).

11. Annex B – Indicative impacts of full CPIH indexation: selected metrics

Our analysis of the incremental impact on financeability and customer bills of a switch to full CPIH indexation at the start of the PR24 control period, is based on the approach used in our December discussion paper, ie we focused on two metrics: (1) the **Adjusted Cash Interest Cover Ratio (ACICR)**, and (2) the **average nominal bill**, and considered three scenarios. Scenarios (a) and (b) start with price controls that are indexed 60% by CPIH and 40% RPI (which was roughly the end point for the PR19 determinations):

- **60% (a)** – This scenario aims to approximate ACICR and customer bills if we did not reprofile cashflows.
- **60% (b)** – This scenario contains the same assumptions as (a), except that where necessary, we advance in-period revenue to achieve an average 1.5x ACICR.
- **100%** – This scenario assumes a starting CPIH-linked RCV share of 100% and reprofiling as described in Scenario '60% (b)' where necessary.

For each company the indicative impact of full CPIH indexation is assessed by comparing the results obtained under scenario '100%' against the appropriate baseline (either '60% (a)' or '60% (b)', as appropriate). This is meant to provide a more realistic comparison to our PR19 baseline, as at PR19 we advanced in-period revenues to achieve ACICR target thresholds for certain companies, with attendant impacts on customer bills.

Since at PR19 United Utilities and Severn Trent proposed changes to RCV-run off rates that were equivalent to a full CPIH transition and that such changes were supported by customers, these two companies have not been included in the analysis.

As we can be seen from the below, the switch to 100% CPIH indexation provides a significant boost to ACICR compared to baseline scenarios for all companies.

Table 11.1: Adjusted Cash Interest Cover Ratio

	Starting CPIH RCV (%)	2020-21	2021-22	2022-23	2023-24	2023-24	Average
Anglian Water	60% b)	1.48	1.52	1.51	1.49	1.49	1.50
	100%	1.62	1.63	1.61	1.59	1.60	1.61
Dŵr Cymru	60% b)	1.47	1.48	1.50	1.51	1.54	1.50

	100%	1.64	1.65	1.67	1.68	1.71	1.67
Hafren Dyfrdwy	60% a)	1.89	1.81	1.70	1.65	1.64	1.74
	100%	2.09	1.99	1.86	1.79	1.77	1.90
Northumbrian Water	60% b)	1.45	1.49	1.51	1.52	1.53	1.50
	100%	1.65	1.69	1.71	1.72	1.73	1.70
Southern Water	60% b)	1.51	1.52	1.51	1.48	1.49	1.50
	100%	1.62	1.61	1.58	1.56	1.57	1.59
South West Water	60% a)	1.44	1.48	1.54	1.57	1.62	1.53
	100%	1.65	1.70	1.77	1.81	1.87	1.76
Thames Water	60% b)	1.51	1.51	1.49	1.49	1.50	1.50
	100%	1.66	1.64	1.62	1.62	1.65	1.64
Wessex Water	60% b)	1.48	1.49	1.50	1.50	1.53	1.50
	100%	1.60	1.60	1.61	1.62	1.65	1.61
Yorkshire Water	60% b)	1.53	1.51	1.49	1.48	1.49	1.50
	100%	1.62	1.60	1.58	1.58	1.60	1.59
AFW Affinity Water	60% b)	1.53	1.50	1.48	1.50	1.50	1.50
	100%	1.64	1.60	1.58	1.59	1.60	1.60
BRL Bristol Water	60% a)	1.45	1.48	1.52	1.57	1.62	1.53
	100%	1.66	1.69	1.74	1.80	1.86	1.75
PRT Portsmouth Water	60% b)	1.50	1.48	1.49	1.48	1.54	1.50
	100%	1.64	1.62	1.62	1.59	1.63	1.62
SES Water	60% b)	1.48	1.45	1.47	1.51	1.58	1.50
	100%	1.65	1.61	1.62	1.66	1.74	1.66
South East Water	60% b)	1.46	1.48	1.50	1.51	1.54	1.50
	100%	1.61	1.63	1.63	1.64	1.66	1.63
	60% b)	1.52	1.52	1.48	1.48	1.50	1.50

South Staffs Water	100%	1.73	1.69	1.62	1.60	1.60	1.65
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From table 11.2 below, we see that the highest increase in household bills from moving to the 100% CPIH scenario from the baseline of scenario is £12 (Wessex Water). In any case, we note that higher bills for the period being modelled would reverse over time relative to the base case, as the bill-increasing impact of a higher real WACC is offset by the countervailing impact of an RCV which is indexed to a structurally lower measure of inflation.

Further, we note that the UK Statistics Authority's planned reforms to RPI from 2030 mean that any bill impact would be forestalled rather than prevented altogether if we retained the approach of keeping a share of PRI-indexed RCV.³⁰

Table 11.2: Nominal household bill per year

	Starting CPIH RCV (%)	2020-21	2021-22	2022-23	2023-24	2023-24	Average	Average change vs baseline
Anglian Water	60% b)	£417	£423	£431	£430	£435	£427	
	100%	£424	£428	£435	£434	£439	£432	£5
Dŵr Cymru	60% b)	£446	£457	£462	£466	£471	£461	
	100%	£457	£467	£471	£474	£479	£470	£9
Hafren Dyfrdwy	60% a)	£314	£320	£325	£335	£349	£329	
	100%	£316	£322	£326	£336	£350	£330	£1
Northumbrian Water	60% b)	£344	£350	£356	£364	£372	£357	
	100%	£354	£358	£364	£371	£378	£365	£8
Southern Water	60% b)	£373	£395	£401	£399	£398	£393	
	100%	£378	£398	£403	£402	£401	£396	£3
South West Water	60% a)	£492	£495	£486	£486	£485	£489	
	100%	£506	£507	£496	£495	£492	£499	£10
Thames Water	60% b)	£384	£399	£410	£416	£424	£406	

³⁰ The UKSA intends to bring the data and methods of CPIH into RPI from 2030. In effect this means RPI will be aligned with CPIH from this point. See [Response to the joint consultation on reforming the methodology of the Retail Prices Index](#), November 2020

Creating tomorrow, together: consulting on our methodology for PR24
Appendix 10 – Aligning risk and return

	100%	£394	£410	£419	£420	£429	£414	£8
Wessex Water	60% b)	£418	£433	£453	£459	£472	£447	
	100%	£425	£443	£466	£474	£488	£459	£12
Yorkshire Water	60% b)	£411	£396	£394	£404	£409	£403	
	100%	£416	£400	£398	£408	£414	£407	£4
AFW Affinity Water	60% b)	£158	£166	£176	£192	£190	£176	
	100%	£159	£167	£177	£194	£192	£178	£2
BRL Bristol Water	60% a)	£175	£176	£177	£179	£180	£177	
	100%	£177	£178	£180	£181	£182	£180	£3
Portsmouth Water	60% b)	£102	£104	£106	£108	£111	£106	
	100%	£103	£105	£107	£108	£111	£107	£1
SES Water	60% b)	£184	£188	£191	£191	£191	£189	
	100%	£188	£191	£193	£194	£194	£192	£3
South East Water	60% b)	£205	£210	£214	£218	£221	£213	
	100%	£205	£209	£213	£217	£220	£213	£0
South Staffs Water	60% b)	£143	£143	£144	£144	£146	£144	
	100%	£141	£141	£142	£142	£145	£142	-£2

**Ofwat (The Water Services Regulation Authority)
is a non-ministerial government department.
We regulate the water sector in England and Wales.**

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