

COMMERCIAL IN CONFIDENCE

Ref 4.3

## PR19 Financial Resilience

September 2018

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## 1. Introduction

Strengthening resilience so that our customers can depend on their water and sewerage services, both now and in the future, is a major feature of our PR19 Business Plan. As set out in Resilience in the Round: Overview Ref 4.1, resilience is the quality that enables us to continue to achieve our aims in the face of sudden shocks and longer-term stresses. We take a ‘whole business’ approach to resilience, and as such our plans for resilience are embedded in almost every element of our PR19 Business Plan. However, in this and the associated resilience documents we are drawing out the main strands of our approach and our plans so that they are clearly visible in line with Ofwat’s guidance.

### 1.1. Background: the Resilience Wheel

In January 2017, we developed a comprehensive framework to assess resilience across the business, based on international good practice and national guidance. The resulting Welsh Water ‘Resilience Wheel’ has three themes: people; infrastructure and environment; and finance and governance. It highlights how the whole of our business has a role to play in maintaining and strengthening resilience.

The Resilience Wheel also reflects the three Ofwat themes of resilience, operational, corporate and financial resilience under a variety of indicators, as shown in Figure 1.

Further explanation of the Resilience Wheel is provided in our overarching approach to resilience, Resilience in the Round: Overview Ref 4.1.

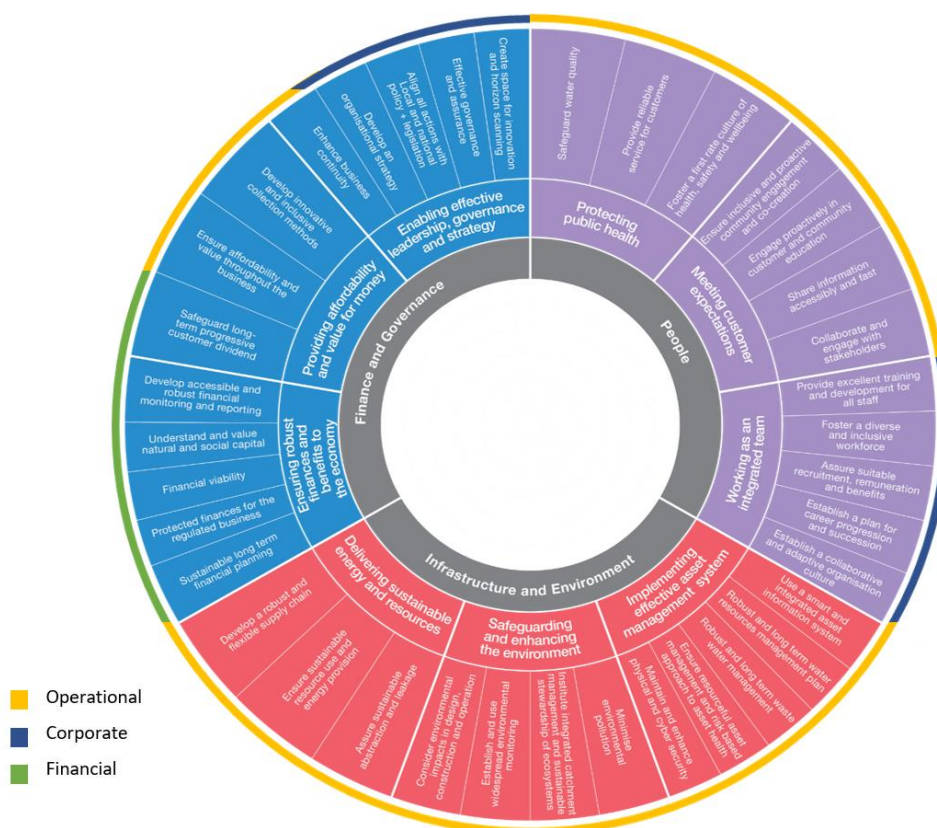


Figure 1: How Ofwat’s three themes of resilience are reflected by the Welsh Water Resilience Wheel. The outer ring of orange, green and blue show the Welsh Water indicators which reflect Ofwat’s resilience themes.

In the latter stages of the development of our PR19 business plans we commissioned Arup to perform a comprehensive assessment of a) our current state of resilience against each element of the Resilience Wheel, and b), the likely state of resilience by the end of AMP7 assuming that our PR19 plans are fully implemented, benchmarked against the rest of the industry. The resulting report can be found in Resilience in the Round: Overview Ref 4.1.

## 1.2. Financial resilience

This document is focused on financial resilience. The other two Ofwat resilience elements, corporate and operational resilience, are covered in two separate (see PR19 *Corporate Resilience Ref 4.2* and PR19 *Operational Resilience Ref 4.4*). However, as recognised by Ofwat, the three key elements of ‘Resilience in the Round’ are highly interdependent, and there is a considerable overlap in particular between operational and corporate resilience.

Throughout the extensive programme of engagement activities that we have undertaken in recent years, the overriding priority for all customer groups has been the continuity and reliability of the essential public services that we provide. As such, ensuring the financial resilience of our business is a core requirement for our customers, so that they can trust us to have the financial resources to provide those essential services, whatever shocks we might face, such as costly extreme weather events or a serious economic recession.

Customers also consistently place a high value on the predictability and stability of bills, wanting to avoid sudden or unexpected price increases. Financial resilience is therefore also important to customers so that we can maintain sufficient financial resources to smooth the impact of any unexpected cost pressure on customer bills.

## 1.3. Structure of this document

This document sets out our assessment of the financeability of the business, which underpins our financial resilience. We have assessed financeability by testing the finances of the company under a range of severe but plausible scenarios.

The remainder of this document is structured as follows:

Section 2 provides background to our current position in relation to financial resilience.

Section 3 explains our approach to financial resilience.

Section 4 sets out the results of our assessment of the financeability of the business under the ‘central’ case as per our PR19 Business Plan submission.

Section 5 sets out the results of our assessment of financeability under a range of ‘stress’ scenarios, in accordance with Ofwat’s guidance.

## 2. Background

Since 2001 when Glas Cymru acquired Welsh Water, the level of gearing (the ratio of net debt to Regulatory Capital Value) has been brought down from around 93% to around 60%. This reflects the high priority placed by the Board on the need to establish a strong and stable balance sheet for the company, so that we can ensure the continuity of finance for the service we provide, and also raise future finance for investment at the lowest possible rates of interest, which is key to keeping down customers' bills in the long-term. The Board initially set itself a target of reducing gearing to around 70% and then, in reaction to the reduced allowed return on capital (WACC) allowed at PR14, set a new public guidance that it would seek to maintain gearing at around 60%. This approach demonstrates the importance that the Board has consistently placed on ensuring the long-term resilience of the business, including its financial resilience.

Having achieved the targeted 60% level early in the AMP6 period, we have since been able to maintain a steady and growing stream of 'customer dividends', which return value to customers consistent with maintaining gearing at around the 60% level to 2020. Following an extensive customer engagement exercise and discussions with stakeholders and the CCG, the Board has used these 'customer dividends' to part finance increased investment in high priority areas for customers (such as reservoir safety and acceptable water quality) and also uniquely to fund an increasing proportion of the cost of social tariffs for those customers struggling to pay their bills – which in other water companies are generally recovered entirely by increased bills for other customers ("cross subsidy").

As shown in the chart below, we have achieved a "win: win" position for its customers in recent years, with a secure financial position with gearing at just below 60% whilst some £150 million is expected to be returned to customers by way of 'customer dividends' between 2015 and 2020.

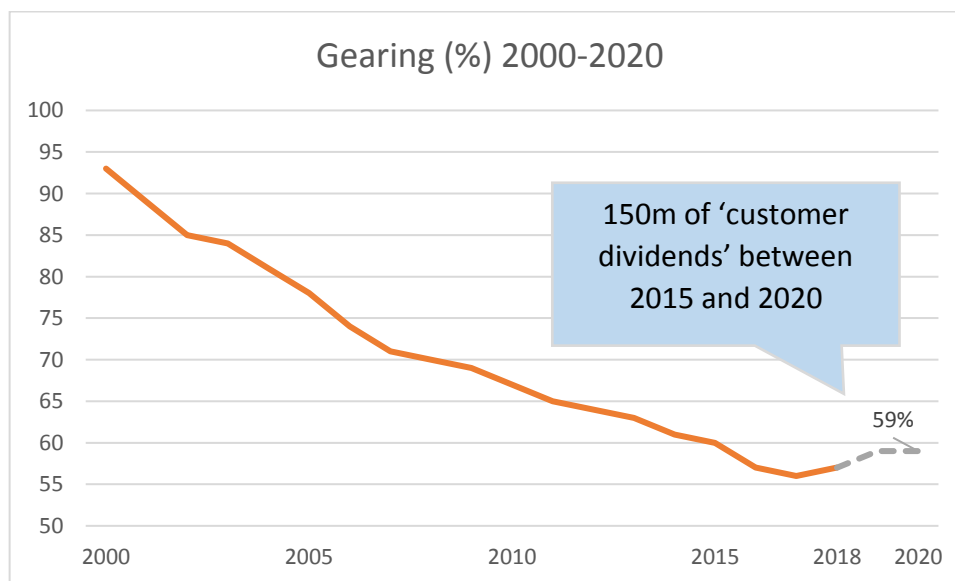


Figure 2.1: Gearing reduction since 2000.

As a consequence of this prudent approach to ensuring financial resilience, we now have the strongest credit ratings in the UK water sector, as shown in the table below. This is highly beneficial for our customers as it ensures that we will always have reliable access to a range of financial markets, so that we can raise finance for investment as and when it is needed, even if market conditions are challenging. Our credit rating also helps us to issue bonds at rates that minimise the interest costs, which are borne by our customers over the long-term.

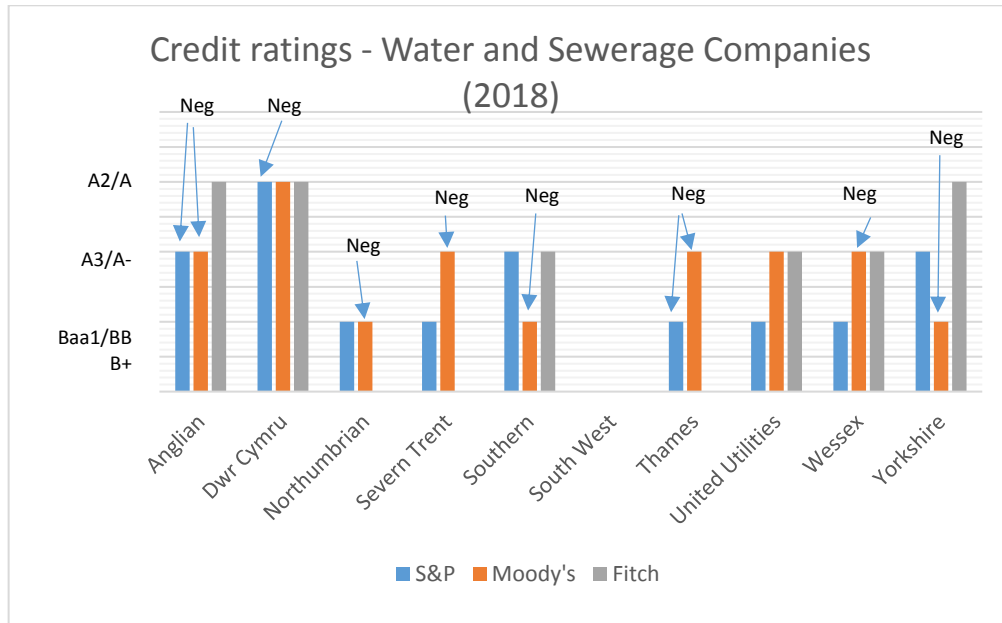


Figure 2.2: Credit ratings of the 10 England and Wales water and sewerage companies as at 9 August 2018. ("Neg" = 'negative watch')

## 3. Our approach to financial resilience

The Board has set out the following approach to ensure our financial resilience post 2020:

- maintain a secure, investment grade credit rating in our central case financial projection and in a range of downside financial scenarios, looking forward to 2030;
- continue to target gearing at or around 60% in our central case;
- maintain a stable level of ‘customer dividends’ consistent with that gearing objective, targeted at areas highlighted by customers through ongoing research and engagement as being of particular importance to them, such as funding part of the cost of social tariffs; and
- enhance customer trust by being transparent about our future financial resilience. For example, we published a 12-year long term financial viability statement to 2030 in our 2018 Annual Report and Accounts.

There is considerable uncertainty about future credit ratings across the sector at present, with all of the three credit ratings agencies signalling that the anticipated tougher financial environment post PR19, notably through the lower allowed return on capital (WACC), is likely to result in downgrades. Indeed, Standard and Poor’s assigned a “negative outlook” to our credit rating for the first time in July 2018. We believe that it is very important that Ofwat do give full weight to the likely impact on credit ratings in making their Final Determinations in December 2019, as strong credit ratings and low financing costs are crucial to our ability to keep down bills for our customers in the long-term. Against this uncertain backdrop we have assessed our business plan post 2020 against the metrics required to maintain a secure corporate investment grade credit rating.

Our assessment of financial resilience has used the Ofwat financial model to calculate revenues and to model the notional company and a number of key financial assumptions as set out below. These assumptions match those set out by Ofwat in its December 2017 Methodology, although these may need to be reconsidered by Ofwat before the Final Determination in December 2019, for example to reflect changing market conditions or the potential impact on sector credit ratings.

Key Financial Assumption	Ofwat PR19 Methodology	Welsh Water Business Plan	PR14
Wholesale Return on capital (WACC):			
Nominal	5.4%	5.4%	6.2%
Adjusted for RPI inflation	2.3%	2.3%	3.5%
Adjusted for CPIH inflation	3.3%	3.3%	
Retail household profit margin	1.0%	1.0%	1.0%
Inflation rates:			
RPI	3.0%	3.0%	2.7%
CPIH	2.0%	2.0%	
Pay As You Go Ratio (PAYG)		46%	63%
RCV Run-off (years)		28.5	37.5

Figure 3.1 Key financial assumptions

A key issue in considering future financial resilience is the likely level of credit ratings, albeit these are a judgement made by ratings agencies at the time and are impacted on by a wide range of factors, so they are subject to a degree of uncertainty. Forecast financial ratios are one input into the credit rating judgement but only one factor. Other issues, such as the rating agency's assessment of the stability and predictability of the wider regulatory regime are also very important – as evidenced by Moody's decision in May 2018 to reduce its assessment of the "stability and predictability" of the UK water regulatory environment from Aaa to Aa. Financial resilience and expected future credit ratings therefore have to be considered "in the round".

Credit ratings agencies do look at a wide range of credit metrics in coming to their judgements on ratings. In considering the resilience of its central case financial projections and potential downside scenarios, the Board has looked at a wide range of evidence and metrics, including in particular the following ratios:

- Gearing
- Ofwat adjusted Interest Cover Ratio (ICR)
- Moody's adjusted ICR
- Ofwat Funds from Operations (FFO) to Net Debt ratio
- S&P FFO/Net Debt.

The Board has assessed financial projections over the period to 2030 against an assurance threshold of maintaining an expected secure investment grade credit rating from at least two of the three main credit rating agencies – Moody's, Standard and Poor's (S&P) and Fitch Ratings.



## 4. Our plans – financeability under ‘central’ case

Following the requirements of the Ofwat Methodology, we have made this financial resilience assessment both on the basis of a *notional company* balance sheet, which has Ofwat’s standard assumptions for opening gearing and interest rates, and also on the basis of the *actual company* balance sheet, which reflects the actual expected gearing and interest rates of a standalone business carrying out the regulated activities of Welsh Water. This approach ensures that financeability is not impaired purely because of past financing decisions taken by the company itself. In our case, there is little difference in practice between the opening gearing of the notional and actual companies, although future assumed dividend policies and interest rates do vary materially between the two approaches

### 4.1. Our plans – central case for ‘notional’ company

The Ofwat PR19 Methodology document defines a notional company structure for the purposes of assessing the financial resilience of companies’ business plans. The key Ofwat assumptions are shown below, with comparison to the equivalent assumptions at PR14:

	PR19	PR14
Opening Gearing	60%	62.5%
Return on equity	7.1%	8.4%
Cost of existing debt	4.6%	5.4%
Cost of new debt	3.4%	4.7%

Figure 4.1 Key Ofwat assumptions

For our notional company modelling, we have assumed a level of dividends payable to shareholders which is consistent with Ofwat’s assumed return on equity – with an opening yield of 2.6% and a rate of dividend growth of 4.5% (i.e. some 1.5% above the assumed 3% rate of RPI inflation). The assumptions made for other key financial parameters, the PAYG and RCV run-off rates, are as set out above, reflecting broadly the “natural rate” of financing the existing assets and the composition of the AMP7 investment programme. The financeability assessment has been performed before taking into account the PR14 outcome delivery incentives (ODIs), totex cost sharing, wholesale revenue forecasting incentive mechanism (WRFIM), the residential retail mechanism and blind year adjustments. On this basis, the central case financial projections for the notional company appear consistent with the maintenance of a secure, investment grade credit rating. A selection of key ratios are shown below:

Notional Company - Central Case	2020	2021	2022	2023	2024	2025
Gearing	60%	61%	61%	61%	61%	61%
Ofwat adjusted ICR	1.7x	1.4x	1.3x	1.3x	1.3x	1.4x
Moody’s adjusted ICR	1.5x	1.4x	1.3x	1.3x	1.3x	1.4x
Ofwat FFO/Net Debt	7.3%	7.3%	7.0%	6.9%	7.1%	7.1%
S&P FFO/Net Debt	6.3%	6.4%	6.1%	6.1%	6.2%	6.3%

Figure 4.2 Notional company credit metrics

For the notional company, the Moody’s adjusted ICR and S&P FFO/net debt are the ‘alternative’ calculations presented in the Ofwat financial model, but do not reflect all the adjustments that these credit rating agencies make in practice for the actual company.

As can be seen, the key credit metrics are all largely stable over the period, after a reduction in interest cover in the first year of AMP7 reflecting the significant reduction in the assumed allowed return on capital (WACC) at PR19. On this basis, the credit ratings of the notional company would come under pressure at the start of the AMP7 period but would be expected to remain in a secure, investment grade. Gearing is largely stable over the period and well within Ofwat's threshold level of 70%.

We have also considered the likely trajectory of credit ratings and financeability after 2025, although this is inherently more judgemental as it makes assumptions as to the PR24 determination. An indicative AMP8 investment programme of around £2.0 billion (in 2017-18 prices) is assumed, which is currently a reasonable expectation given what is known about the future environmental investment programmes (NEP and WINEP). On that basis, customer bills would be expected to show only a modest increase in real terms during AMP8, and credit metrics would be broadly stable, with gearing at around our target level of 60%. This analysis gives a reasonable expectation of financial viability for the notional company to 2030 and demonstrates that the financial parameters we have assumed for the period to 2025 are not storing up resilience issues for the longer term, whether in terms of customer bills or financial resilience.

#### 4.2. Our plans – central case for 'actual' company

We have used our own financial model to assess the financial resilience of a standalone Welsh Water appointed business – that is, the regulated activities of the company which are covered by the PR19 regulatory process. We have made this assessment before taking into account PR14 adjustments for outcome delivery incentives (ODIs), totex cost sharing, wholesale revenue forecast incentive mechanism (WRFIM), the residential retail mechanism and blind year adjustments. The key financial assumptions made are the same as for the notional company, with the following exceptions:

- the dividend policy assumed reflects 'customer dividends' of around £85 million (outturn prices) which it is assumed would be made by the business to fund an increasing proportion of the cost of social tariffs during the period to 2025, as long as this is affordable given the PR19 Final Determination;
- the embedded cost of debt as at 2020 is around 6%, reflecting the higher interest cost on borrowings efficiently made in the past, at a time of significantly higher market interest rates (dating back to 2001); and
- future interest costs assume around an 80 basis points premium to 12-month LIBOR, reflecting the strong credit rating of the company at the current time.

On this basis, the central case financial projections for the actual company appear consistent with the maintenance of a secure, investment grade credit rating. A selection of key ratios are shown below:

Actual Company - Central Case	2020	2021	2022	2023	2024	2025
Gearing	59%	60%	60%	59%	59%	59%
Ofwat adjusted ICR	1.6x	1.2x	1.3x	1.3x	1.4x	1.2x
Moody's adjusted ICR	1.6x	1.6x	1.8x	1.8x	1.8x	1.8x
Ofwat FFO/Net Debt	7.6%	6.9%	7.2%	7.2%	7.5%	7.0%
S&P FFO/Net Debt	6.1%	5.5%	5.9%	6.0%	6.3%	6.4%

Figure 4.3 Actual company credit metrics

As can be seen, the interest cover and cashflow metrics are initially squeezed due to the assumed lower allowed return on capital (WACC). Gearing is acceptable throughout the period, declining modestly to around 59% by the end of the period. Whilst this would in theory suggest that there may be scope for additional 'customer dividends' in the period, the Board would need to judge this carefully at the time, depending on the degree of pressure on the credit ratings of the company, in order to achieve the optimal, long-term value for money for customers.

Overall, the credit ratings of the actual company will come under pressure at the start of the AMP7 period, given the substantial reduction in the allowed return on capital (WACC), but would be expected to remain in a secure, investment grade. There is no need to adjust other financial parameters, the PAYG ratio and RCV run-off rates, away from their assumed "natural levels" in order to support the financeability of the actual company.

We have also considered illustrative financial projections out to 2030, on the same basis as for the notional company. The actual company shows a modestly improving profile of financial metrics in the AMP8 period, reflecting the refinancing of higher cost, embedded debt with cheaper new debt at forecast low rates of interest. Gearing also shows a modestly declining trend, suggesting that there may be scope for the Board to consider additional 'customer dividends' to be paid post 2025, following ongoing engagement with our customers and the CCG.

The financial projections for the actual company show that we do not expect a tax liability to be payable in the period to 2025, reflecting the large capital programme and the reduced level of assumed profitability. We will continue to fully disclose its tax policy, together with its policies for 'customer dividends' and gearing, in our Annual Report and Accounts, as complete transparency on these matters helps us to foster customer trust.

## 5. Our plans – financeability under ‘stress’ scenarios

In order for the Board to be able to provide assurance to customers that the business is financially viable in the long-term, we have also considered a range of downside scenarios, which need to be severe but plausible. Again, we believe it is important to look beyond the next regulatory period when assessing long-term financial viability, so we have considered illustrative projections out to 2030 – which is consistent with the Long-Term Viability Statement published in our 2018 Annual Report and Accounts.

Ofwat have specified a range of stress cases to 2025 that it requires companies to consider:

- Scenario 1. Totex underperformance (10% of totex) over 5 years;
- Scenario 2. ODI penalty (3% of RORE) in one year;
- Scenario 3a. Low inflation RPI 2%, CPIH 1% (1% below central case);
- Scenario 3b. High inflation RPI 4%, CPIH 3% (1% above central case);
- Scenario 4. Increased in the level of bad debts (5%) over current bad debt levels;
- Scenario 5. Higher interest rates on new and refinanced debt (2% above forward projections);
- Scenario 6. Financial penalty (3% of Appointee turnover in one year);
- Scenario 7. Any relevant intercompany financing scenario; and
- Scenario 8. Ofwat Combined Scenario – totex underperformance (10% in each year), ODI penalty (1.5% of RORE in each year) and a financial penalty (1% of revenue in one year).

For us, 10% totex underperformance is approximately £70 million a year, 1.5% of RORE is around £36 million a year and 1% of turnover is some £7 million (all in 2017-18 prices).

Scenario 2 is more severe than we would deem likely for our business as our PR19 outcome delivery incentive range has an upper expected bound at 1.5% of RORE.

We have also considered two further combined stress scenarios, which we consider are “worst case” but not impossible. The first (scenario 8a) involves a combination of totex underperformance and ODI penalties throughout the period, set at levels which are more appropriate for the RORE ranges put forward in our Business Plan. In the second (scenario 8b), these ongoing stresses are combined with a low inflation scenario to 2025.

- Scenario 8a. Welsh Water Combined Scenario - totex underperformance (5% of totex in each year), ODI penalties (0.75% of RORE in each year), 1% financial penalty in one year;
- Scenario 8b. As per 8a, combined with low inflation RPI 2%, CPIH 1% (1% below central case).

### 5.1. Benchmarks

Even under stressed conditions we expect the business to maintain an investment grade credit rating. We have assessed the results of the stress scenarios against benchmarks for a Baa2/BBB rating (one notch above the minimum investment grade) for the notional

company. Under the most extreme scenarios we consider that this could fall by one notch temporarily.

As a result of its financial covenants, the actual company benefits from a 1 notch upgrade on top of the stand-alone financial metric assessment carried out by rating agencies. Taking into account this credit uplift, we have assessed the results of the stress scenarios against financial ratio benchmarks for a Baa3/BBB- rating for the actual company. The credit rating uplift then brings the actual expected rating up to Baa2/BBB in line with the notional company assessment.

Our resilience assessment focuses on the key credit metrics used by Ofwat and the rating agencies. Of these key metrics we consider gearing to be the primary metric. Our ability to maintain a sustainable level of gearing is a key indicator of our long-term financial resilience.

## 5.2. Independent benchmarking

A leading audit firm prepared for us a report benchmarking credit ratings and observed credit metrics across the sector. The report highlights that benchmarking is not as simple as comparing credit metrics against a single threshold for each metric. In practice, wide ranges of credit metrics across companies are observed for the same given rating, whilst actual metrics do not always achieve the guidance levels given by credit rating agencies.

## 5.3. Stressed scenarios for the 'actual' company

We have considered the key credit metrics for the actual company under both the base case and the stress scenarios. In every case, no mitigating actions are assumed.

Under all scenarios gearing remains comfortably within Ofwat's threshold of 70% and the investment grade benchmarks, peaking at 67% in 2024-25 in Scenario 8, the most extreme scenario.

Before taking into account any mitigating actions, the adjusted ICR calculated using the Ofwat definition comes under pressure in AMP7 for scenarios 1, 5, 8, 8a, 8b and can fall below the benchmark temporarily in the most extreme cases, before recovering in AMP8. However, we have also calculated the adjusted ICR using the adjustments Moody's make in practice and in all cases the metric remains above the benchmark.

FFO/Net debt measures, remain above the benchmark in all but scenario 8, where the ratio dips just below the benchmark before recovering in AMP8.

### Mitigating actions

The credit metrics discussed above do not assume any in-year adjustments for the impact of regulatory cost sharing mechanisms or other mitigating effects. An end of AMP7 true-up of 50% of the assumed Totex overspend (in the water resources, and network plus price controls) is applied on 1 April 2025 in all relevant scenarios (1, 8, 8a and 8b).

In addition to the regulatory true-up mechanisms included in the core scenarios, there are a number of mitigating actions that could be taken to address the pressure the severe scenarios create on the financial resilience of the company.

Options for addressing financeability issues include:

- **restriction of social tariff subsidies** - the actual company financial projections assume a £85m dividend to fund social tariffs, in extreme stress scenarios social tariff subsidies could be managed down;
- **issuing a higher proportion of index linked debt** – our plans have been built on the assumption that all new debt is raise on a floating rate. In practice, we operate a hedging strategy and a proportion of our new debt could be raised on an index linked basis. Issuing index linked debt would improve the interest paid during the stress period, with the indexation element deferred until re-paid or re-financed;
- **raise subordinated debt** - subordinated debt could be issued to protect the interest cover ratios of the existing senior debt. The interest rate on any subordinated debt issued would be higher than for senior debt to reflect the increased risk to investors and thus this is only likely to be considered as an option if it is needed to protect the desired rating of the senior debt.

When mitigating actions are taken into account, the stress scenarios (including the combined stress scenarios) in each case would give a reasonable expectation of maintaining an investment grade credit rating when the metrics are considered in the round and would, therefore, be financeable.

#### 5.4. Stressed scenarios for the 'notional' company

We have also considered the key credit metrics for the notional company under both the base case and the stress scenarios. In every case no mitigating actions are assumed

The notional company comes under more pressure than the actual company in the stressed scenarios, in some cases having particular metrics below the assumed BBB/Baa2 benchmarks. However gearing, as the primary metric, remains comfortably within the rating agency guidance, even without allowing for the regulatory true-up mechanism for additional totex expenditure. Gearing peaks in Scenario 8 at 69.9% in 2024-25, which remains just below Ofwat's threshold for gearing outperformance sharing, and falls back in AMP8.

The adjusted interest covers resulting from the most severe scenarios (1, 5 and the combined scenarios) are at or below benchmark during the stress period, although they recover to acceptable levels in AMP8. FFO/net debt measures are also under pressure in the combined scenarios and dip below benchmark levels, before recovering to acceptable levels in AMP8.

#### 5.5. Mitigating actions

The credit metrics discussed above do not assume any in-year adjustments for the impact of regulatory cost sharing mechanisms, particularly for totex additional expenditure or interest rate rises. In addition, as well as the mitigating actions available to the actual company, the notional company could pursue the following additional mitigations:

- Restriction of dividends; and
- Equity injection.

When these mitigating actions are taken into account, the stress scenarios would give a reasonable expectation of maintaining an investment grade credit rating when the financial metrics are considered in the round, given in particular the headroom on the primary gearing measure.

## 5.6. Conclusion of financial resilience assessment

For both the actual and notional companies, our analysis gives a reasonable expectation that the company would remain financially viable to 2030, meeting the minimum requirements in the round for retaining an investment grade credit rating:

- we comfortably outperform the rating agency benchmarks for gearing and stay within Ofwat's threshold for gearing outperformance sharing under all stress scenarios;
- after mitigating actions and the impact of regulatory mechanisms are taken into account, we meet our judgement of the required benchmarks for the key credit metrics in the round; and
- credit metrics improve in AMP8, demonstrating that our PR19 plan is not storing up financeability risks for future periods.