SETTING A MINIMUM CAPITAL REQUIREMENT FOR THE WATER SECTOR

September 2025

Introduction

The Cunliffe review raised some concerns about historical financial resilience in the water sector. In particular, the ability of companies to absorb a range of shocks. The specific recommendation of the review is for the new regulator to, "have the power to set minimum capital levels for water companies."[1]

The topic of financial resilience is not a new one, but the ability for the regulator to set capital requirements directly would be new.

Ofwat was already considering some interventions in this space. Specifically, at the PR24 Draft Determination, Ofwat raised the idea of restricting companies from paying dividends beyond a set gearing threshold. At the same time, Ofwat noted that they considered gearing above 70% as unsustainable in the long term.

The review paves the way for more direct intervention on capital structure, setting a minimum capital requirement threshold. This differs from the previous route Ofwat was contemplating – which was to attempt to incentivise a given structure through dividend restrictions.

There are many questions about how a minimum capital requirement could best work in practice; and how it would fit together with the wider supervisory approach that is also recommended. Some key points to consider are:

- How could the minimum capital requirement be expressed?
- How does research on optimal capital structure inform the debate?
- How does this recommendation overlap with the wider supervisory approach?

This paper aims to provide some thoughts and ideas to start the process of setting that minimum requirement. It is not intended to be complete or provide conclusions but highlights the areas where further consideration will be important to develop the approach.

[1] Independent Water Commission Final Report, 21 July 2025, Recommendation 57.

How could the minimum capital requirement be expressed?

The review does not specify how the minimum capital requirement should be measured. This leaves it open to the regulator on how to interpret this. Given the prominent role of the RCV in the sector, we assume that this would likely be a key reference point when considering any kind of requirement.[2] But this doesn't have to be the case, and some other regulatory or accounting measures could be used. For example, it could be set in relation to projected totex.

Assuming the RCV is used, then broadly speaking, the regulator could define a maximum gearing level, or could define a minimum capital requirement based around the amount of 'equity' the business has. The two are linked, but how the terms are defined matters for how the requirement is operationalised in practice.

Ofwat has previously viewed 70% gearing as maximum gearing level that is sustainable in the long-term. Typically, Ofwat defines gearing as net debt expressed relative to RCV. So, here, the definition is relatively clear, and net debt figures are already collected as part of regulatory reporting.[3]

An alternative would be to measure some value of equity, and use this to set a minimum capital requirement. This is akin to what is applied in the banking sector, and the review makes reference to prudential regulation in banking as an example that could be drawn upon. The banking sector shows that different definitions of capital are available – and the quantum of capital depends on how broadly scoped the definition is. A brief overview of the banking regulation approach is provided in the box below.

The capital requirements in the banking sector are also expressed relative to assets that are risk-weighted. With different asset types being assigned different levels of risk. Generally, less risky assets receive a lower weighting, meaning the absolute size of minimum capital is lower as a result. An assessment of the risk of a particular water company could well be something considered under the supervisory approach.

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2 Rather than RCV, cashflow or accounting based measures could also be used.

3 See 'Table 1E – Net Debt Analysis' in the Annual Performance Reports (APRs).

Minimum capital requirements in the banking sector (under Basel III)

Banks have two main types of capital that they are required to hold (Tier 1 and Tier 2) and two main ways of assessing how much capital they need (Pillar 1 and Pillar 2).

Types of capital

Tier 1 capital consists of equity, and the disclosed reserves that appear on the bank's financial statements. If a bank experiences significant losses, Tier 1 capital provides a cushion that can allow it to weather stress and maintain a continuity of operations. Tier 2 capital can also provide a further buffer and is made up of components such as undisclosed reserves, unsecured subordinated debt instruments or hybrid financial products.

Quantum of capital buffers

Pillar 1 sets initial capital requirements to cover the main risks incurred by banks: credit, market and operational risk. Pillar 2 consists of a supervisory review process which aims to evaluate the remaining risks the bank incurs.

Through Pillar 2, supervisors review and evaluate banks' internal capital adequacy assessments and strategies, other risks not included under Pillar 1, as well as their ability to monitor and ensure their compliance with regulatory capital ratios. Based on this, supervisors can require banks to hold capital in excess of the Pillar 1 minimum.

The Basel regulations also allow for banks to face additional capital buffer requirements if individual banks are determined to be nationally or globally systemic, in which case their failure would cause more damage.

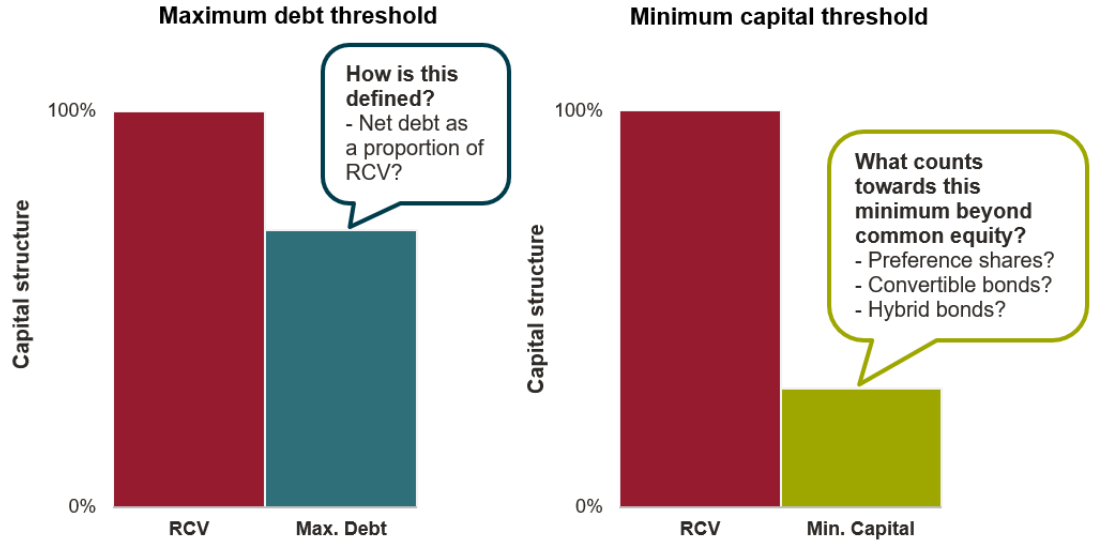
In addition to the capital that a bank must hold at all times, Basel III introduced countercyclical capital buffers. These buffers, which may range from 0% to 2.5% of a bank's risk-weighted assets, can be imposed on banks during periods of economic expansion. This means additional capital can be built up, that can be drawn down during periods of economic stress without leading the bank to breach its capital requirements in periods of stress.

Consequence if required capital buffer standards are not met

If banks do not comply with the required capital adequacy standards then the consequences depend on the extent to which the requirements are breached. Below a certain level, banks are not permitted to continue to operate. If a bank has capital levels between the absolute minimum and the adequacy level set for the bank, then the Basel regulations impose restrictions on the payment of dividends and staff bonusses, until the target capital adequacy is reached.

The two types of broad option discussed above, a maximum gearing threshold, and a minimum capital requirement, are summarised in the figure below. A key challenge is how the minimum capital requirement would be defined. For example, would it be based on some measure from the APRs that is already available? How would more complex instruments be treated?

Figure 1 Different definitions for setting capital requirements



Source: Frontier Economics
Note: Illustrative figures

If the new regulator were to follow Ofwat's previous direction of travel, then it may be that the discussion continues to focus on a maximum gearing level. This is not guaranteed, but if that were to be the direction, how would research on optimal capital structure help set a maximum gearing figure that avoided unnecessary customer detriment?

How does research on optimal capital structure inform the debate?

Across a wide range of infrastructure assets it is common to see debt as part of the capital structure. This reflects the benefits that debt financing can bring in lowering overall financing costs.

Economically speaking, the efficient capital structure is one that balances the costs and benefits of gearing. There are costs to gearing being below the efficient level as well as costs to being above the efficient level.

Where a company is under-geared, it may be failing to fully utilise:

- The tax benefits of interest deductibility (reducing total financing costs inc. tax);
- The benefits of oversight and monitoring by debt investors; and
- The discipline benefits that debt can place on management – providing an incentive to manage cash flows efficiently.

Where a company is over-geared:

- Then there are greater risks to financial resilience; and
- The cost of debt may rise to levels that are inefficient.

An efficient capital structure will ultimately provide best value to customers, since it should strike the best balance between finance costs, tax costs, incentives and resilience. Failure to adopt an efficient capital structure risks failing to strike an appropriate balance between costs and benefits – ultimately to the detriment of customers.

One of the biggest risks when considering a maximum debt threshold is that the threshold chosen encroaches on the optimal level of debt.

Previous Frontier Economics research into the optimal range for notional gearing found that the best way of understanding optimal gearing levels it to draw on the available market data and empirical evidence to estimate a reasonable range. Our review of market evidence consistently showed that a gearing level of 60% (the PR19 notional assumption) lay at the lower bound of the reasonable range for gearing. It also found that comparators from competitive infrastructure finance had also been consistently higher than 60%. For example, the Thames Tideway Tunnel having gearing of around 80% at the time, and Offshore Transmission Operators typically having been financed at gearing levels of 75%-85%.[4]

This calls into question the previous Ofwat view that gearing becomes unsustainable beyond the threshold of 70%, because the market frequently transacts at, and sustains, gearing levels higher than this. The evidence we have reviewed also calls into question the risks of a 'one size fits all' approach to capital structure. Different entities will not all have the same risk profile, and relative risks may evolve over time too.

The Cunliffe review also sets out that, "to support the attractiveness of the sector as a whole to long-term, low-risk, low-return investors it has to present a lower risk profile than has been the case in recent years."[5] [emphasis added]

If a lower risk profile is to be achieved, this also suggests that the optimal gearing level may be higher than in the past. To strike the appropriate balance between optimal capital structure and improving financial resilience careful consideration of risk and reward under the new regulatory model will be required.

How does this recommendation overlap with the wider supervisory approach?

The review leaves open the possibility of different threshold being used across the sector. This ties in with the wider supervisory approach that is recommended, where it is set out that the, "supervisory approach should be forward-looking, judgement-based and proportionate,

4 Frontier Economics (2022), 'Notional Capital Structure'.

5 Independent Water Commission Final Report, 21 July 2025, pg. 325.

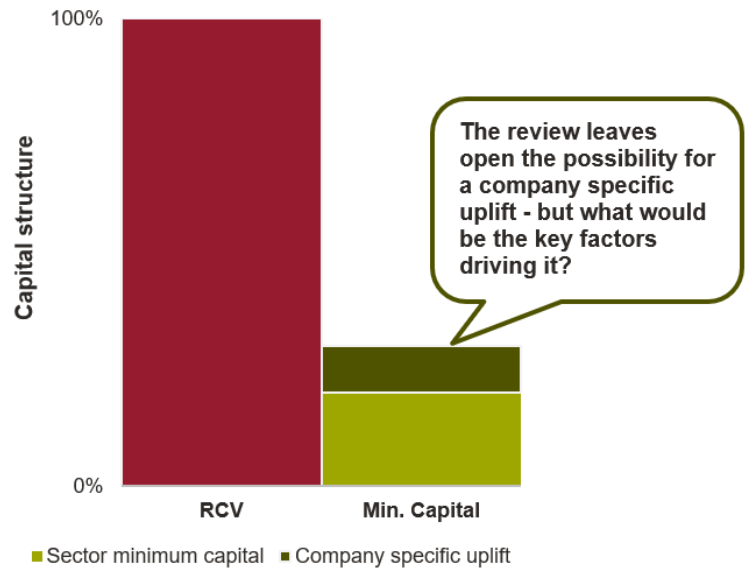
based on company circumstances and risks."[6] The role for judgement and company specific circumstances means that capital requirements may be tighter for those companies that are viewed by the regulator as having greater financial resilience risks.

As set out in our previous paper on the supervisory approach, drawing on approaches from financial services, there could be a quantitative assessment that is undertaken by the regulator. At a minimum, this would include performance around costs, delivery, outcomes and finance. The forward-looking analysis also needs to include a risk assessment. This would test how the metrics could change under a set of standardised scenarios.

Generally, this change in regulatory approach opens up a very wide suite of qualitative factors that could be considered too. And could include factors such as information from the company risk register, legal and compliance risks, as well as a views on skills and capabilities.

An illustration of what this could mean for minimum capital requirements is set out in the figure below – where a company specific requirement is added to a baseline that applies across the whole sector.

Figure 2 Potential links to the supervisory approach



Source: *Frontier Economics*
Note: *Illustrative figures*

Ofwat has previously collected detailed financial data to inform its monitoring financial resilience publication – but the wider supervisory approach opens up far more scope for a qualitative and judgement based assessment to guide capital requirement interventions, and for those to be tailored. Companies therefore need to be ready to engage on their specific financial resilience risks when it comes to minimum capital requirement discussions.

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6 Independent Water Commission Final Report, 21 July 2025, pg. 194.

Takeaways and next steps

It is not clear exactly how a minimum capital requirement will be defined, and what the rules around how different capital is treated will be. Until that is set out, the implications for companies in the sector will not be fully clear. Some definition that is structured around the RCV seems practical, but there is the possibility for alternatives to be considered.

At a sector wide level, there is likely to be an ongoing debate around what the optimal capital structure for a water company is. Getting this assessment right is important to ensure that mitigating financial resilience risks does not come at excess cost to customers. It is critical that this assessment takes into account the wider regulatory reforms that are put in place, particularly where they contribute to a 'lower risk profile' than the one the sector currently has. Work to define the optimal capital range more clearly is key to informing this debate.

At a company specific level, companies should be ready to engage on their specific financial resilience risks, and for that engagement to be forward-looking. This goes beyond the usual list of backward looking financial metrics that are captured on a regular basis. Where risks are identified, understanding those, quantifying them where possible, and demonstrating how they are mitigated is likely to be key for determining any company-specific capital requirements that a future regulator may consider.

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