

## Don't throw the baby out with the (Thames) bath water

**Is our model for the supply of water broken? At Kairos Economics we consider that answers to the current financing challenges lie not in the scrapping of the UK's current regulatory framework for network financing, but in important changes to its implementation. We also highlight the benefits of mandatory public listing requirements across regulated networks, which could form part of the solution.**

As Thames Water attempts to secure extra funding amidst rumours of its collapse, the nation is understandably asking: Is our model for the supply of water broken? Are companies and the regulator acting in consumers' interests? Is re-nationalisation the solution to the problems that have become particularly acute? As would be expected with the management and operation of the UK's multi-billion pound water infrastructure, the answers to these questions are complex.

In this article, we focus our attention on key financial aspects of our current regulatory model, issues with its implementation, and proposals that may help to address some of the recent issues. We shall discuss how **the answer lies not in the scrapping of the UK's current model of regulated private provision, but in changes to its execution.** In order to consider which remedies are worth pursuing, we first review the rationale behind the current regulatory model. Water, sanitation and drainage services are provided by privately-owned companies. These 'monopolies' are regulated by Ofwat to protect the interests of consumers and stakeholders, which includes regulating the revenue that water companies are allowed to recover from their customers. In the absence of competition, regulation attempts to address the issue of whether and how we can incentivise private providers to deliver satisfactory water services to customers cheaply and efficiently.

Broadly speaking, the practice of regulation faces a dichotomy: allow companies to recover the actual costs of providing water services plus a reasonable return (known as 'cost pass-through' regulation), or set a fixed reasonable level of remuneration in advance ('ex ante'), letting companies pocket the difference if they outperform or suffer the consequences if they underperform (known as 'ex ante regulation'). The first regulatory approach – cost pass-through – can incentivise companies to report costs accurately and foster resilience by lowering financial risk, but disincentivise productive efficiency. The second approach – ex ante regulation – can do the reverse, i.e. incentivise over-estimation of costs (so companies can more easily outperform the allowance) and increase the risk of company failures (or near-failures), but incentivise productive efficiency. The current regulatory model for water in the UK lies somewhere in between. For financial returns specifically, the framework

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is predominantly one of ex ante regulation. Ofwat estimates a reasonable return on capital based on the concept of a 'notional capital structure'. This represents the capital structure of a hypothetical company that finances its activities with a mix of instruments that embody certain characteristics (such as a particular gearing ratio, for example), which are set by the regulator. **Importantly, companies are remunerated based on Ofwat's estimate of the return required by debt and equity holders for a company with the *notional* capital structure, rather than their actual capital structures. Under this approach, companies that choose to deviate from the notional capital structure accept the risk that Ofwat's allowed return may be insufficient if their strategy underperforms, but reap the rewards if they outperform.**

This is how the UK's regulatory model for water should work, at least in theory. Companies and their investors accept the bargain that if they choose to deviate from the notional capital structure then they will face the consequences, good or bad. Consumers should benefit from increased efficiency through lower bills, but accept lower levels of resilience. In practice, we have witnessed the following issues with its execution:

- **Ofwat's specification of the notional capital structure has been, and continues to be ambiguous.** There are a number of controllable factors that determine the return that investors expect and which should, therefore, be specified for the notional capital structure, such as the gearing level, the share of index-linked versus nominal debt, the share of floating versus fixed-rate debt, and the investment horizon, for example. However, Ofwat only clearly signals a level of notional gearing, with the rest requiring interpretation of half comments and informal statements. Furthermore, even where Ofwat does make some attempt at specifying the notional capital structure, its methodological approach often means the allowed return is not based on its own specified parameters. For example, if the proposed approach for PR24 of basing the allowed return on debt on an average of industry-wide actual interest costs is confirmed, then it is unclear in advance what the notional capital structure is and it will be practically unachievable. This is because a company wishing to reduce risk by following the notional capital structure would have to issue debt with the same mix and timing of every other regulated water company, which is unknown in advance. The notional structure also changes from one charge control to the next (every 5 years), without the necessary compensation. This introduces uncertainty for investors who are (or at least should be) investing over horizons of 20 years or more, given the nature of the underlying assets.
- **There is uncertainty over whether and how Ofwat will apply its special administration regime** when downside risks materialise. This may be due to the perceived costs and impacts on consumers and investor appetite, if the special administration regime kicks in.

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- **There is little ‘margin for error’ in the allowed return.** Setting the allowed return is difficult. It involves complex modelling of financial market data, in order to estimate what return investors would expect in order to provide the long-term capital needed. Given the importance of the sector for consumers and the billions of pounds worth of critical national infrastructure at stake, it is also the subject of considerable analysis and debate by regulators, consultants and academic experts at each round of charge controls. This complexity, however, leaves room for ‘judgment’.  
**Ofwat, perhaps under political pressure to keep bills low, has erred on methodologies and evidence that have squeezed allowed returns.** Indeed, when four water companies appealed their most recent allowed returns to the Competition and Markets Authority (‘CMA’, where the founders of Kairos Economics provided expert testimony on the allowed return), the CMA increased the allowed return by c.24 basis points, primarily due to a 54 basis point increase on the allowed return on equity. The result of a squeezed allowed return is a lower willingness to invest, and a higher likelihood of company financial difficulties, if financial market dynamics change, or firms experience cost shocks or penalties. The issue is arguably more acute now, given the poor performance of certain companies on quality targets (the potential causes of which we don’t address in this article).

The issues above can be addressed within the existing regulatory framework:

- **Ofwat should specify the notional capital structure more clearly - not just on gearing but also on debt mix and investment horizon - and importantly, set an allowed return based on its own specification** – so that treasurers, company management and investors understand when they’re accepting risk. When adjusting the notional capital structure, Ofwat should only implement changes between the 5-yearly charge controls, if such changes are achievable by a company that chooses to follow the notional capital structure, given the long-term nature of the assets and long term financing that is needed.
- Ofwat should also be clearer on what will happen in scenarios where the downside risk of deviating from the notional capital structure plays out. The UK’s regulatory regime should incentivise greater efficiency by allowing firms and their investors to face the full downside of risks they choose to accept. **It follows that we shouldn’t see the financial failure of firms as a failure of the regime, but rather an expected outcome that consumers accept in exchange for the benefits of allowing companies to determine network financing.** Of course, Ofwat can decide that such an approach leads to sub-optimal levels of financial resilience (and that the costs of reduced resilience exceed the benefits of letting companies fully determine network financing) and constrain firm behaviour accordingly, before risks have materialised. Ofwat already does this to some extent with the licence condition to maintain an investment grade credit rating. Any further constraints, such as gearing caps, require careful

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consideration of the impact of the proposed constraints on outcomes, expected returns (in both directions) and the ability to attract investment.

- **The assessment of the allowed return must not be politicised but should be a technocratic exercise** – using the most robust approaches, financial market data and economic theory. The CMA appeal regime must also be preserved and given the time and attention it deserves, given the important role it serves (there is an ongoing debate on the appeal standard, which we don't go into here).

**A wide range of benefits could also be gained by mandatory public listing of water (and other network) assets**, in particular when raising capital for new investment at subsequent charge controls. This is because the move towards private finance has, in some cases, led to the loss of a number of benefits from public listing including:

- a wider pool of investors, including the participation of consumers as investors. This could not only increase the availability of capital but also serve to align incentives between regulators, companies, investors and consumers. For example, if consumers were to share directly in the profits of regulated water networks, then setting the allowed return may be less politicised;
- greater availability of market data, which would improve the accuracy of estimates of the allowed return; and
- greater transparency and accountability, owing to listing requirements.

In effect this would row us back from some of the more extreme forms of private ownership that we've seen, in favour of a wider range of ownership models where stakeholders can participate as investors. **We suggest that a cost benefit analysis of a mandatory listing requirement across the regulated sectors would be helpful, including a study of potential appetite for greater public ownership of our regulated networks.**

To conclude, before scrapping the existing regulatory regime in favour of an alternative, it is important to consider whether shortcomings can be addressed within the current regime, given the benefits of allowing market forces to determine network financing and the costs of wholesale regime changes, such as lower access to capital, or lower efficiency incentives under re-nationalisation. We consider that shortcomings within the financial aspects of our current regulatory model can indeed be addressed within the existing regulatory framework. However, until Ofwat addresses the issues above, companies and investors face the challenge of uncertain and moving goal posts, which counterintuitively serves to increase risk and therefore the allowed return needed to attract capital. Consumers will ultimately suffer through higher prices and reduced investment appetite – not just in water but across the regulated sectors, when our water and energy networks, in particular, are in need of considerable investment. The regulatory regime must therefore be fit for

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purpose. Mandatory listing of water (and other network) assets could also be an important part of the solution.