ISSUES WITH OFWAT'S APPROACH TO BASE COSTS ASSESSMENT

A report for Southern Water

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Economic Insight

The context at PR24 is that companies need to urgently address the issue of historical underinvestment to maintain the resilience of their assets and continue serving their customers, and the environment, in the long term. However, as we set out in this report, Ofwat's approach to assessing base costs does not allow companies to deliver this required increase in investment. There are three key issues: (i) Ofwat's approach appears to be heavily focussed on minimising costs instead of identifying efficient costs; (ii) Ofwat's sole reliance on top-down benchmarking models, which are based on companies' historical expenditure, risks "baking-in" the systematic underinvestment which needs to be corrected; and (iii) Ofwat's expectation for companies to deliver an ever-stretching level of performance through base costs risks crowding-out the required investment in asset resilience. We would encourage Ofwat to reconsider its approach to ensure that the necessary investment can be delivered.

1 The water industry needs to address the issue of historical underinvestment

The historical underinvestment in the water industry has been extensively highlighted. In particular, it has been widely recognised that water companies need to invest in their assets to ensure that they can continue to provide resilient water and wastewater services to their customers, and serve the wider environment, in the long term. For example:

- The **House of Lords** noted that, since privatisation, demands on the sector have increased, but that "*[l]evels of investment have not risen to match these demands. The result is a network unable to cope, and which relies on releasing polluted water into the environment.*"[1]

[1] *'The affluent and the effluent: cleaning up failures in water and sewage regulation.' House of Lords (March 2023).*

- The **National Infrastructure Commission (NIC)** assessed water company asset management and found that currently "*there does not appear to be a comprehensive and consistent understanding of asset condition across the sector and how this may change in the future. A more complete view of asset health in the sector would support a multi-AMP view of the investment required to maintain asset health and, consequently, service performance and reliability*."[2]

- **Water UK**, in conjunction with Ofwat and the Department for Environment, Food and Rural Affairs (DEFRA) are currently undertaking a collaborative project to identify critical elements of a new regulatory framework for measuring, managing and funding asset maintenance.[3]

In practice, ensuring that companies are undertaking the 'right' level of investment in the resilience of their assets is challenging because it is difficult to identify: (a) what is the 'right' level of asset replacement and capital maintenance; (b) how much does delivering this 'right' level cost; and (c) whether companies are delivering the 'right' level. This issue is further exaggerated because the 'right' level of asset replacement and capital maintenance activity likely differs between companies depending on the health of their assets.

Notwithstanding this, the current situation in the water sector is such that there is an urgent need to increase the level of investment targeted towards ensuring the resilience of assets. Failing this, Ofwat could risk not fulfilling one of its primary duties to "*further the resilience objective to secure the long-term resilience of water companies' water supply and wastewater systems; and to secure that they take steps to enable them, in the long term, to meet the need for water supplies and wastewater services*."[4]

Therefore, addressing this historical underinvestment is one of the key priorities for the water industry at PR24.

2 The approach to base costs assessment is contributing to the underinvestment

Contrary to the above requirement to *address* historical underinvestment, Ofwat's current approach to base costs assessment is likely *contributing* to the issue of underinvestment. Therefore, if not corrected, it would fail to address the issue and, worse still, exaggerate it. Specifically, there are three key problems with Ofwat's approach:

(i) The approach appears to be heavily focussed on minimising costs, instead of identifying efficient costs.

(ii) It entirely relies on top-down benchmarking models based on historical expenditure which, by design, "bakes-in" the historical underinvestment.

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2 *'Letter to Ofwat on asset management.' NIC (May 2023).*
3 *Please see: https://www.water.org.uk/investing-future/infrastructure-health.*
4 *Please see: https://www.ofwat.gov.uk/about-us/our-duties/.*

(iii) It does not recognise the trade-offs companies face in serving customers and the environment.

Below, we detail each of the above concerns.

2A. Ofwat appears to be focussed on minimising costs instead of identifying efficient costs

As per its primary duties, Ofwat must ensure that companies are funded for the efficient costs of delivering high-quality and resilient water and wastewater services to customers. However, Ofwat's approach appears to focus heavily on *minimising costs*, instead of identifying *efficient costs*.

This is evident across the entirety of its approach; in multiple decisions it has taken. For example:

- Starting with Ofwat's overarching approach to considering expenditure allowances, as set out its PR24 Draft Determinations (DDs), Ofwat appears to be prioritising its key considerations the wrong way around (i.e. **prioritising cost efficiency over required outcomes**).[5] Instead, Ofwat should be prioritising them in the following order:

  (i) ensuring that companies have sufficient funding to deliver the outcomes customers care about; and

  (ii) ensuring that customers get value for money and are not paying for companies' inefficiency.

- Ofwat appears to be **heavily focussed on reducing bills for current customers**. This was also highlighted by the House of Lords, who found that "*Ofwat has failed to ensure companies invest sufficiently in water infrastructure, choosing to keep bills low at the expense of investment. Greater investment in the water industry is now urgently needed, accompanied by a single social tariff to protect vulnerable customers from bill increases*."[6]

  The House of Lords report highlighted that "*by 2025 [bills] will have been flat or falling for 15 years in real terms."*[7] However, a real-term falling bill profile is inconsistent in an industry where supply is (largely) constant while the demand is increasing, and relatedly where more investment is required to maintain resilience of supply.

- Across its approach to considering expenditure allowances in its PR24 DD, Ofwat has made **several broad-brush decisions which have the effect of reducing**

[5] *'PR24 draft determinations: Expenditure allowances.' Ofwat (July 2024); page 2.*
[6] *'The affluent and the effluent: cleaning up failures in water and sewage regulation.' House of Lords (March 2023).*
[7] *'The affluent and the effluent: cleaning up failures in water and sewage regulation.' House of Lords (March 2023).*

companies' allowances but may not result in efficient cost allowances since they do not have robust evidence supporting them. By way of examples:

- Instead of allowing companies to pass through increases in business rates, as one might expect in competitive markets, Ofwat has proposed that "*companies recover 90% of any costs in excess of its PR24 cost allowance*" even though it recognises that "*companies have limited control over business rates*".[8]

- Ofwat has rejected companies' Cost Adjustment Claims (CACs) for not being "unique" if other companies (even one other company) face similar circumstances. As an example, Ofwat suggests that "*Southern Water has the largest percentage of its population living in coastal areas of all water and wastewater companies at 41.2%, compared to the industry average of 19%. But its coastal population is comparable to South West Water at 38.8%, who did not submit a similar cost claim*."[9] However, to ensure that companies get efficient costs, Ofwat must consider "unique" circumstances that imply efficient costs would be higher than modelled costs.

- Ofwat has capped individual company allowances at 120% of the company's business plan proposal.[10] However, it does not appear to have considered any evidence on: (a) the need for a cap; and (b) the level of the cap.

- Ofwat has "*put in steps to prevent customers from paying twice*".[11] However, as explained in our report on "Issues with Ofwat's approach to not paying twice",[12] its approach is both conceptually and empirically lacking.

2B. Ofwat's over-reliance on top-down benchmarking models based on historical expenditure

Ofwat's base costs assessment almost entirely relies on its top-down benchmarking models. This approach may not result in efficient cost allowances to correct the historical underinvestment for the following reasons.

- **Models relying on historical expenditure "bake-in" the underinvestment.** This is because the cost allowances predicted by those models are based on data which reflects the historical underinvestment. Put simply, if the wider evidence (e.g. from the House of Lords and the NIC) indicates that companies are not investing enough in maintaining the resilience of their assets, then by definition companies' historical expenditure does not reflect efficient costs of addressing this underinvestment. Therefore, Ofwat's approach of relying solely on historical expenditure could have the effect of perpetuating the underinvestment.

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8 *'PR24 draft determinations: Expenditure allowances.' Ofwat (July 2024); page 48.*
9 *Please see 'PR24-DD-SRN_Cost-adjustment-claims' available here: https://www.ofwat.gov.uk/regulated-companies/price-review/2024-price-review/draft-determinations-models/.*
10 *'PR24 draft determinations: Expenditure allowances.' Ofwat (July 2024); page 195.*
11 *'PR24 draft determinations: Expenditure allowances.' Ofwat (July 2024); page 7.*
12 *'Issues with Ofwat's approach to not paying twice.' Economic Insight (August 2024).*

This issue is further exaggerated if historical expenditure does not reflect efficient costs for delivering expected outcomes in the future. This could be the case, for instance, if: (a) companies have been historically focused on delivering short-term outcomes over long-term resilience (as above); (b) the industry's assets need systematically higher maintenance going forward (e.g. if assets replaced following privatisation all need more maintenance / replacement going forward due to lumpiness of such investment); or (c) customers, and the regulator, expect the industry's assets to deliver better performance in the future (which we discuss in the next section).

- **Econometric benchmarking is a useful tool but has inherent limitations**. Econometric benchmarking can be a useful tool to identify the efficient level of base costs because it uses companies' actual expenditure to predict efficient costs, while controlling for factors that differ between the companies. In practice, however, it relies on multiple assumptions including: (a) that historical expenditure provides a good basis to predict efficient costs going forward (which, as above, may not hold); and (b) the model captures the various drivers of efficient costs (including all differences between companies). The limitations of econometric models are evident in the suite of models that Ofwat has developed because it cannot solely rely on the results of an individual model, due to possible measurement error. Put simply, there is no perfect econometric benchmarking model that can predict the right view of efficient base costs, and therefore, relying on econometric models alone can risk underfunding efficient costs.

We note that Ofwat uses CACs to assess the need for additional base costs allowances which are not reflected in its modelled costs. For instance, of particular relevance to the issue of asset resilience, in its PR24 DD Ofwat has introduced an industry-wide CAC on mains replacement.[13] However, this does not fully address the issue of historical underinvestment because:

(i) It relies on the assumption that the level of mains replacement that companies have historically funded through base expenditure is sustainable. Therefore, to the extent that historical investment has not been sufficient (as the evidence suggests), it does not address the issue.

(ii) It takes a narrow view of the work required to ensure resilience of assets (i.e. the replacement of all Grade 4/5 mains over the next 10 years).

(iii) It is not clear that historical expenditure on mains replacement is necessarily a good reflection of the efficient costs of replacing assets going forward (e.g. if mains that have not been replaced are more expensive to replace).

Additionally, ring-fencing part of base costs allowances in the way that Ofwat has done through Price Control Deliverables (PCDs) could mean that companies only deliver the specific outcomes that Ofwat is focussed on, i.e. replacing Grade 4/5 mains, and other investment required to ensure asset resilience gets crowded-out.

13 *'PR24 draft determinations: Expenditure allowances.' Ofwat (July 2024); section 2.2.1.*

2C. Ofwat's approach does not recognise the trade-offs that companies face in serving customers

There are two issues:

- Firstly, Ofwat's approach to managing the complexity of identifying "what base buys" appears to be to **"assume away" ever-stretching levels of performance in base costs**. For instance, water companies are expected to deliver:
  - **Ever-stretching levels of performance.** By way of example, Ofwat has introduced several new performance commitments at PR24, many of which it expects companies to fund through base costs (e.g. BR-MeX; bathing water quality; serious pollution incidents; etc.).
  - **Impact of regulatory changes.** This includes: (a) changes to regulations / standards for regulatory compliance (including ones implemented part-way through the price control such as changes to the Industrial Emissions Directive (IED) and Farming Rules for Water); (b) increases in Environmental Agency (EA) (and, other regulators') license charges; and (c) compliance with additional reporting requirements.
  - **Frontier shift.** Ofwat expects water companies to deliver 1.0% ongoing efficiency (frontier shift) which exceeds the low and flat productivity performance of the UK.[14]
- Secondly, **the notional firm is not properly defined** across the regulatory framework, which means the (hypothetically) efficient firm cannot consistently deliver across all parts of the regulatory framework. By way of example, performance targets are set independently of cost allowances. This means that it is possible, technically, for the most cost-efficient firm to be the worst-performing firm on (one of many) performance commitments, and vice-versa. In doing so, Ofwat fails to recognise the interconnectedness between costs and outcomes, and in effect expects companies to deliver the highest level of performance at the lowest possible cost. In other words, it does not consider that there may be trade-offs between the costs and outcomes, and within that, between different outcomes.

Together, this implies that the **allowed base costs are not sufficient for the (hypothetically) efficient firm to deliver (both) the increasing levels of performance and long-term asset resilience.** Since the impacts of the former would be more immediately observable than the latter, companies may prioritise the former, thereby crowding-out the necessary investment in asset resilience.

[14] *'The importance of a balanced approach to frontier shift.' Economic Insight (August 2024).*

3 This approach does not allow companies to address historical underinvestment

As highlighted in our report on "Issues with Ofwat's approach to not paying twice",[15] we have serious concerns with Ofwat's approach to costs assessment because it does not allow companies to address the issue of underinvestment. In doing so, it risks repeating the cycle of underfunding contributing to underinvestment that the water industry urgently needs to break out of.

4 Concluding remarks

In summary:

- One of the key priorities for the water industry at PR24 is to address the historical underinvestment in asset resilience.
- Given this context, however, Ofwat's approach to base cost assessment is does not allow companies to address the issue, and may be further contributing to it.
- We would encourage Ofwat to reconsider its approach. Specifically, there are three key issues with this approach:
  - (i) The approach appears to be heavily focussed on minimising costs instead of identifying efficient costs.
  - (ii) The sole reliance on top-down benchmarking models, which are based on companies' historical expenditure, risks "baking-in" the systematic underinvestment which needs to be corrected.
  - (iii) The expectation for companies to deliver an ever-stretching level of performance through base costs risks crowding-out the required investment in asset resilience.
- Failing this, the water industry will be stuck in the cycle of underfunding contributing to underinvestment, which it urgently needs to break out of.

15 *'Issues with Ofwat's approach to not paying twice.' Economic Insight (August 2024).*