How should Ofwat's approach to price control regulation focus on the long-term?

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Contents

Executive Summary

1. There is a very live debate as to whether the regulatory framework adopted by Ofwat in setting – and resetting – five year price controls on water and wastewater companies appropriately serves the long term interests of customers and the environment. This paper examines whether it does and – if not – what might be done about it.

2. The paper is timely. At this time, there is a strong degree of alignment among stakeholders on the importance of focusing on the long term. In fairness, a consensus on this point has been steadily building over several years – that the water industry is for life (and not simply for the remainder of the five year regulatory period). But what makes things different this time is that Ofwat not only shares this long term objective, but that it has acknowledged two things:

   - first, that the industry – as a whole – is not currently placing sufficient focus on the long term needs of customers and the environment; and
   - second, that at least part of the reason for that resides in the approach Ofwat takes to price control regulation.

   We very much welcome Ofwat's acknowledgement of this second point, which seems to us to be vital if meaningful reform in this area is to be made. We note – for example – that Ofwat has sought to crystallise its expectations for how companies should approach their PR24 plans in the long term context; specifically through a focus on adaptive planning and the development of long term delivery strategies.[1]

3. The main body of this paper considers three different, but related, aspects of price control regulation: the process of the price control review; the way in which cost allowances and service targets are set; and the structure and effect of incentives. In each case, we ask whether the current approach to price control regulation supports the long term objective and – if not – how it might be reformed in order better to do so. Our full set of recommendations are set out in the final chapter of the report.

4. In summary, we consider that many of the features of RPI-X price regulation are producing progressively diminishing benefits. In the past, the incentives in the regulatory regime have been particularly effective in driving efficiency. But, increasingly, those same incentives risk driving mere underspending. That, in itself, would be a significant problem. But it becomes a serious problem given the new and longer term challenges facing the industry, including the need to manage more volatile weather patterns, reduce greenhouse gas emissions, improve resilience, reduce pollutions, meet rising customer expectations, and handle population growth, and to do so with an ageing asset base. A failure to recognise this issue

[1] "PR24 and beyond: Long term delivery strategies and common reference scenarios", Ofwat, November 2021, available at: https://www.ofwat.gov.uk/wp-content/uploads/2021/11/PR24-and-beyond-Long-term-delivery-strategies-and-common-reference-scenarios.pdf

– and reform the regulatory framework accordingly – would potentially undermine the long term focus required, and serve to increase the costs and risks faced by customers in the long term.

5. We recognise that regulators can – understandably – exhibit reluctance to undertake radical reform for fear that it might give rise to unintended consequences or to perceptions that past approaches to regulation have not delivered value to customers, perhaps even to the extent of allowing excessive returns. And we recognise that Ofwat might be particularly vulnerable to this tendency, not least given some of the criticism that has been levelled at the sector, and the way it has been regulated, in the past.[2]

6. But we believe that there are ways in which these fears could be mitigated, paving the way for reforms that genuinely advance the long term interests of customers and the environment. In particular:

   - first, establishing an aligned view on the sector's long term priorities;
   - second, shifting the focus of economic regulation, away from its preoccupation with efficiency (and the associated problem of rewarding under-spending) and towards supporting investment that is rewarded with reasonable, but not excessive, returns[3]; and
   - third, recognising that regulation could be customised where there is evidence that particular companies can demonstrate – through words and deeds – that they have a public purpose which reflects a genuine commitment to the long term interests of their customers and the environment.

7. Such reforms – enabled by specific changes to the way in which base and enhancement allowances are set and incentivised over multiple periods – could transform the longer term prospects of the sector and, crucially, those who depend on its sustained performance.

8. If these adaptations of the price control regime were to be implemented as part of PR24, we believe that the industry could put itself on a trajectory to meet the long term needs of customers and the environment. However, if these – or equally effective – measures are not adopted, we fear that regulation will continue disproportionately to reward short-term goals, to the detriment of future generations.

[2] See, for example, "The economic regulation of the water sector", National Audit Office, October 2015, available at: www.nao.org.uk/wp-content/uploads/2014/07/The-economic-regulation-of-the-water-sector.pdf
[3] The full set of recommendations contained in this report are summarised in chapter 6.

1. Introduction

Purpose

1.1 There is an ongoing debate as to whether the regulatory framework adopted by Ofwat in setting – and resetting – five year price controls on water and wastewater companies appropriately serves the long term interests of customers and the environment and, if not, what should be done about it. This paper examines this question.

Structure

1.2 It begins, in chapter 2, by considering the case for reform. The paper goes on to identify those features of the regulatory framework that might inhibit water companies from acting in the best long term interests of their customers and the environment.

1.3 Focusing on the price control framework, it looks specifically at:

- the price control review process (in chapter 3);
- the way cost allowances and performance commitments are set (in chapter 4); and
- the structure and effect of incentives (in chapter 5).

1.4 In relation to each of these elements, the paper briefly summarises the current regulatory approach (including, where appropriate, how it has evolved over time). It analyses which particular features might serve to undermine or inhibit long-termism, and why. Finally, it recommends how each of these features might be modified with a view to ensuring that – for PR24 and beyond – the industry genuinely focuses on the long term. The recommendations contained in this paper are summarised in chapter 6.

Acknowledgements

1.5 Nothing in this paper is intended – directly or indirectly – to imply criticism of the past approach to regulation taken by the economic regulator, Ofwat. On the contrary, Ofwat is to be praised for encouraging a lively and open debate on this issue, and setting up a Future Ideas Lab in which papers – like this one – can be posted for comment and discussion.

1.6 We would also like to thank Anglian Water for sponsorship of this paper, although all of the views expressed in it are those of Skylight Consulting.

2. A case for reform

Introduction

2.1 In this chapter, we summarise some of the key points that have been raised in this debate thus far. In particular, we consider:

- some history – where we look at previous steps taken by Ofwat to place greater emphasis on the long term;
- the current position – where we consider some of the evidence as to how successful, or otherwise, past efforts to focus on the long term have been;
- stakeholder views on the importance of prioritising the long term interests of customers and the environment; and
- some conclusions – where we note the particularly strong degree of alignment across stakeholders on the need to focus on the long term, and – by extension – conclude that there is a strong case for reform.

Some history

2.2 The question of whether the regulatory framework serves the long term interests of customers and the environment is typically visited – and revisited – in the aftermath of each price control review, with a view to identifying how the framework might best be adapted or reformed in order better to deliver against this objective.

2.3 Ofwat has carried out lessons learned reviews after each of the last four price control reviews (PR04, PR09, PR14 and PR19). Each of these reviews has led to modifications to the next price control designed to promote outcomes that safeguard customers' long term interests:

- for PR09, Ofwat mandated companies to write 25 year Strategic Direction Statements, and set their five year business plans in that context;
- for PR14, Ofwat introduced Outcome Delivery Incentives around service thresholds which included asset health metrics (albeit that such metrics tended to be lagging, not leading, indicators); and
- for PR19, among other measures, Ofwat laid out a series of expectations on companies as to how they should plan, invest and operate to ensure that the water industry would continue to be able to provide a resilient service into the long term.

2.4 These initiatives supplemented detailed administrative requirements on individual companies to plan for the long term including the requirement on water companies to produce Water Resource Management Plans (introduced via the Water Act 2003) and Drainage and Wastewater Management Plans (introduced via the Environment Act 2021). And they supplement further attempts by Ofwat, the Environment Agency and the Drinking

Water Inspectorate to help provide a single position on strategic, cross-company border investments (known as Strategic Resource Options) with the aim of encouraging individual companies to develop regional plans.

2.5 All of these efforts to encourage companies to focus on the long term are well-intentioned. Some – for example, the requirement to set five year plans in the context of a 25 year strategy have done some good (even if only to expose the extent of the gulf between the way in which some companies operate and the extent of their long term ambitions). And none have done any harm. But – perhaps because most of them have been administrative in nature (i.e. placing requirements on companies to produce documentation, rather than achieve outcomes) – it is questionable whether they have made a tangible difference to the capability of the sector to meet the long term challenges it faces.

Current position

2.6 As matters stand today, the future challenges appear to be greater than they ever were:

- there is mounting evidence that the climate is changing, with the UK experiencing more volatile weather patterns (with longer periods of drier weather between more intensive and localised rainfall);
- population growth is set to continue and, as it does, capacity constraints at water and sewage treatment works – and the associated water distribution and sewage collection networks – intensify;
- customer expectations – in terms of the reliability and resilience of the water and wastewater service – appear, if anything, to be rising. Moreover, there is clear evidence that the *value* that customers place on this essential service continues to far exceed the *price* that they pay for it[4];
- environmental expectations – principally in terms of the extent to which the wastewater service protects the natural environment – are also rising. In recent times, public concern has grown about authorised discharges (where untreated effluent is discharged into the environment as a result of insufficient capacity at times of peak flow), especially where such discharges despoil precious, natural environments such as chalk streams; and
- on top of these challenges, the sector is committed to reducing its production of greenhouse gases to 'net zero' by 2030[5].

2.7 These future challenges appear to be particularly stark in the south and east of England, where volatile weather patterns, localised population growth and rising customer and environmental expectations combine.

[4] For example, customers typically pay £1 a day, or a little more, for their water and waste service. Yet when it is interrupted – as it was following the 'freeze thaw' incident in early March 2018 – they quite reasonably demand compensation that runs into tens or hundreds of times that amount.
[5] See https://www.water.org.uk/routemap2030/wp-content/uploads/2021/03/Water-UK-Net-Zero-2030-Routemap-Summary-updated.pdf

2.8 Even absent these future challenges, there is some evidence that the industry is currently not well placed to meet even its current obligations on a sustainable basis. Regardless of whether responsibility for that lies with the regulatory framework (or the companies operating within it), spending on capital maintenance across the industry has – generally – long been kept to a minimum. Moreover, it is estimated that across the industry just 0.2% of sewers and only 0.6% of water mains are being replaced annually[6], carrying the strong implication that industry-wide rates of asset replacement are unsustainably low.

2.9 If the challenge facing the industry – and its preparedness to meet it – is anything like as described in paragraphs 2.6 to 2.8, it would be disappointing if the nature and scale of the challenge had not percolated through to those with the power to do something meaningful about it. The good news – as summarised in the next section – is that it seems to have done so.

An emerging consensus

2.10 History tells us that when a significant mismatch between a regulated industry's capability and society's expectations of that capability is revealed, it can call into question the legitimacy of the entire regulatory, commercial and wider policy framework under which that mismatch developed. Scrutiny – and associated criticism – is not confined to the companies involved, but also to the regulatory authorities and the Government, who are seen to have presided over the development of the problem, perhaps for many years or even decades.[7]

2.11 It is perhaps no surprise therefore that most stakeholders now seem to agree on the importance of meeting long term challenges:

- in much of the research into the priorities of customers undertaken for PR19 evidence points clearly to a consensus that water and wastewater services should be run sustainably. Put simply, actions that improve short term performance (in service or cost) should not be taken at the expense of the ability to maintain service or efficiency in the medium and long term;
- as part of PR19, all of the independent Consumer Challenge Groups set up by companies to oversee their customer research programmes recognised the importance of investing for the long term;
- in its redeterminations of PR19 price controls, the Competition & Markets Authority stated[8] that: 'The legal framework requires us, among other things, to consider the

[6] See Challenge 3, page 12: https://www.water.org.uk/wp-content/uploads/2021/03/Developing-a-2050-Vision-for-the-Water-Sector-Discussion-Paper.pdf
[7] Examples include criticism that has been levelled at essential sectors (e.g. the National Health Service or the gas supply industry) when they do not exhibit expected resilience at times of stress.
[8] See paragraph 3: https://assets.publishing.service.gov.uk/media/60702370e90e076f5589bb8f/Final_Report_---_web_version_-_CMA.pdf

interests of consumers through the lens not only of short-term bills but also in terms of long-term resilience (such as the ability of infrastructure to cope with increasing demand and a changing climate)';

- the Consumer Council for Water defines its ultimate mission as 'Securing a fair deal for water consumers, now *and in the future*'[9] (*our italics*);
- in a recent speech[10], the Chair of the Environment Agency agreed with the recent report from the Committee on Climate Change which noted that we have well-developed policies in place to manage water scarcity, but are not comfortably prepared for what is coming;
- in its recent report 'Strategic investment and public confidence'[11], the National Infrastructure Commission (NIC) identified that the current regulatory system 'requires regulators to be sceptical towards new investment proposals, the benefits of which are often difficult to prove against cheaper, short-term solutions' and also that this same scepticism means that 'addressing long-term challenges such as climate change is insufficiently prioritised'. Accordingly, it called for 'a clearer strategic framework for the long-term investment needs of the country';
- as well as providing broad support for the NIC's report, the Government underlined its commitment to the importance of the long-term in its recent statement of 'The government's strategic priorities for Ofwat: Draft for consultation'[12] in which it stated unequivocally that 'To meet the long-term interests of current and future customers, the environment and wider society, water companies must change the way they plan, invest and operate their services.';
- in its proposed vision for 2050[13], Water UK – the trade body representing UK water and wastewater companies – has called for policy and regulatory changes that are focused on the long term; and
- in a recent discussion paper on the future of regulation[14], the Global Infrastructure Investor Association stated that 'One of the key objectives of any regulatory reform should be to create a regime that aligns the interests of consumers in both the short and long term.'

2.12 In recent years, Ofwat too has advocated the importance of focusing on the long term. In its May 2019 strategy document 'Time to Act: Together'[15], Ofwat explicitly included the strategic goal 'to drive companies to meet long-term challenges'. And, again, in May 2021[16],

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[9] See: https://www.ccwater.org.uk/aboutus/our-strategy/
[10] See: https://www.gov.uk/government/speeches/water-security-in-a-changing-environment
[11] See: https://nic.org.uk/app/uploads/NIC-Strategic-Investment-Public-Confidence-October-2019.pdf
[12] See: https://consult.defra.gov.uk/water-services/government-new-sps-consultation/supporting_documents/newstrategicpolicystatementofwatdraftforconsultation.pdf
[13] See: https://www.water.org.uk/wp-content/uploads/2021/03/Developing-a-2050-Vision-for-the-Water-Sector-Discussion-Paper.pdf
[14] See: 'The Future of Regulation', GIIA, January 2021, available at: http://giia.net/wp-content/uploads/2020/11/The-Future-of-Regulation-GIIA-Nov-2020.pdf
[15] See: https://www.ofwat.gov.uk/wp-content/uploads/2019/10/Time-to-act-together-Ofwats-strategy-1.pdf
[16] See: 'PR24 and beyond: Creating tomorrow together', Ofwat, May 2021, available at: www.ofwat.gov.uk/wp-content/uploads/2021/05/PR24-and-beyond-Creating-tomorrow-together-Executive-summary.pdf

Ofwat made focusing on the long term a clear objective, stating 'We want the price review to support the right long-term solutions for customers'.

2.13 It has acknowledged that past steps to focus on the long term have fallen short. For example, in its PR19 final determinations[17], Ofwat stated that in general the industry was not well placed to maintain a resilient service, observing that 15 out of 17 companies fell short (or significantly short) of having high quality frameworks to secure long term resilience in the round. It concluded that 'Overall, [Ofwat] had significant concerns around companies' ability to demonstrate that they had a framework in place to secure long-term resilience'.

2.14 And in its review of the lessons learned from PR19[18], Ofwat stated that '… there remains a concern the companies are not sufficiently focused on the long term' and that '[Ofwat] have concerns about the long term risk to customers and the environment from asset failure, and the extent to which companies are managing these risks effectively over the longer term'.

2.15 Furthermore, Ofwat has recently publicly acknowledged that insufficient focus on the long term might, at least in part, be driven by its regulatory regime:

- it has publicly reported companies' and investors' concerns about the misalignment between the regulatory framework and its long term objective:
  - in its review of the outcome of PR14[19], Ofwat reported that '…many companies commented that, although they set out longer-term strategic contexts in their business plans, they tended to focus on short-term delivery – where incentives were clear – at the expense of longer-term objectives.'
  - in its 2020 investor survey[20], Ofwat reported that 82% of private equity investors surveyed either disagreed or strongly disagreed with the statement that "Ofwat's regulatory framework aligns the interests of regulated companies and their investors with those of customers over the long term";
- it has acknowledged, in its PR19 lessons learned exercise[21], that '… the potential lag between company action and the impact on customers means resilience is challenging to regulate'; and

[17] See: 'PR19 Final Determinations: Securing long term resilience', Ofwat, December 2019, available at: www.ofwat.gov.uk/wp-content/uploads/2019/12/PR19-final-determinations-Securing-long-term-resilience.pdf
[18] See 'PR24 and beyond: Our reflections on lessons learnt from PR19', Ofwat, December 2020, available at: www.ofwat.gov.uk/wp-content/uploads/2020/12/PR24-and-beyond-Our-reflections-on-lessons-learnt-from-PR19.pdf
[19] See 'PR14 review: Discussion paper on findings', Ofwat, August 2021, available at: www.ofwat.gov.uk/wp-content/uploads/2021/08/PR14-Review-Discussion-paper-on-findings.pdf
[20] See 'Investors' survey 2020 – summary of results', Ofwat, May 2021, available at: www.ofwat.gov.uk/wp-content/uploads/2021/05/Investor-survey-2020-summary-of-results.pdf
[21] See 'PR24 and beyond: Our reflections on lessons learnt from PR19', Ofwat, December 2020, available at: www.ofwat.gov.uk/wp-content/uploads/2020/12/PR24-and-beyond-Our-reflections-on-lessons-learnt-from-PR19.pdf

- it has explicitly stated: 'We need to adapt our approaches including the price review frameworks for England and for Wales to ready them for the future'.[22]

2.16 Furthermore, in its most recent suite of documents[23], Ofwat has invited companies to consider their plans in a long term context, encouraging companies to test their plans against a range of scenarios reflecting future uncertainties relating to climate change, growth, technology and environmental ambition. The aim seems to be to enable resilience, environmental and net zero ambitions to be met within a whole life costs framework, but without creating an undue pressure on customer bills in any given five year period.

2.17 In summary, Ofwat seems to have clearly acknowledged that past steps to promote the long term interests of customers and the environment have not met their expectations. Moreover, they appear to recognise that at least part of the reason for this can be found in the design of its price control framework, implying it needs to change.

Conclusions

2.18 These positions show a remarkable degree of alignment on the need for the industry to address the long term challenges it faces, and – by extension – that the regulatory framework needs to be adapted to encourage them to do so. This, itself, provides a strong platform for reform. But, of course, none of this discussion will make any difference to the outcomes for future generations of customers and the environment unless it is acted upon.

2.19 The remainder of this paper therefore looks in detail at several features of price control regulation in order to examine whether they might cause the long term interests of customers and the environment to be de-prioritised, and how these features might be reformed to deliver a better balance between the short and the long term outcomes.

[22] See: 'PR24 and beyond: Creating tomorrow together', Ofwat, May 2021, available at: www.ofwat.gov.uk/wp-content/uploads/2021/05/PR24-and-beyond-Creating-tomorrow-together-Executive-summary.pdf
[23] "PR24 and beyond: Long term delivery strategies and common reference scenarios", Ofwat, November 2021, available at: https://www.ofwat.gov.uk/wp-content/uploads/2021/11/PR24-and-beyond-Long-term-delivery-strategies-and-common-reference-scenarios.pdf

3. The price control review process

Introduction

3.1 In this chapter, we look at whether there are features of the price control review process that might serve to undermine efforts to focus on the long-term interests of customers and the environment.

3.2 It comprises:

- a summary of the current process;
- an analysis of the current process; and
- recommendations for how the process might be adapted.

Current process

3.3 The economic regulation of water companies in England and Wales is dominated by the five-yearly price control review process. These reviews set the terms on which companies must operate their businesses for a forthcoming five-year period. And – in recent times – the reviews themselves have expanded in scope and duration such that the reviews now typically take as long as the period of regulation to which they relate, and perhaps even longer where companies have appealed determinations to the Competition and Markets Authority. As a result, the industry is permanently in the midst of a price control review.[24]

3.4 In recent times, these reviews can be characterised as having five distinct stages:

- *Learning lessons* – a period of reflection, in which lessons from past reviews (usually the immediately preceding review) are considered;
- *Setting the methodology* – drawing on this period of reflection, and other important factors (including the Government's strategic objectives for Ofwat), the regulator consults on, and finalises, a price control methodology which outlines the approach it intends to take to the forthcoming determinations;
- *Business planning* – These are developed, costed and submitted by companies, usually informed by the needs and priorities of customers, and other important stakeholders; and
- *Assessment of plans* - Ofwat administers a detailed evaluation of plans, with a view to rewarding (or penalising[25]) companies according to the quality of their plans; and

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[24] It is worth noting that recent price reviews have given rise to subsequent mid-term reviews, e.g. to set the terms of conditional allowances awarded to Thames Water and/or to evaluate claims for funding for the 'green recovery'. These additional reviews contribute to a sense that the sector is under continuous regulatory assessment.

[25] Rewards are usually modest, and tend to be procedural (e.g. granting an earlier draft determination) and reputational rather than economic (because of a fear of penalising the customers of companies that produce high quality plans). Likewise, penalties tend to be administrative, e.g. requiring companies to resubmit their business plans, and reputational.

- *Making determinations* – after consulting on draft determinations, Ofwat will determine the cost allowances and service targets (sometimes referred to as cost and service thresholds) that apply to each regulated business, duly adjusted to take into account past performance, and apply a framework of economic incentives around those thresholds.

Analysis

3.5 Perhaps the most striking aspect of the price control review process is the amount of time and effort that goes into the first four stages, when the last stage – the making of determinations – is the only stage that is necessary to fulfil regulatory obligations, and protect the interests of customers and the environment. This – on the face of it – suggests that the process could benefit from some simplification, or at least the question should be asked as to whether the preliminary stages of the review are wholly necessary. So we consider below each of these phases of the price control review to see whether they are in fact necessary and – if so – how they could be streamlined.

3.6 In terms of 'learning lessons', our view – perhaps unsurprisingly given the nature of this paper – is that it is an absolutely vital part of the process. We praise Ofwat for the work it is doing in this area, and the encouragement it is giving to all stakeholders to engage in a process of exchanging perspectives and views on what has worked well and what has worked less well. There are two observations we would make about the lessons learned exercises. First, to be useful, it is very important that companies are given comfort that by participating openly in the process, they are not exposing themselves to risk, e.g. to the risk of enforcement action or adverse regulatory scrutiny. Second, it is important that the lessons are drawn not simply from a 6 month review of the immediately preceding price control review process (e.g. such as the 'lessons learned' exercise on PR14 which was completed by June 2015), but that the effects of price control regulation over the long term is considered. The recent review of the outcomes from PR14 over the period 2015-2020 is a step in the right direction, but this exercise suffers from an implicit assumption that company performance in the period 2015-2020 was driven by PR14, when in fact outcomes in that period were also influenced by PR09 and each of the price reviews before that.

3.7 Setting the methodology is an important phase of the process. This phase should provide clarity on the objectives of the determinations and useful guidance on the process and timetable that will be followed. Typically, however, price control methodology documents set out a very long list of objectives, which can erode clarity of purpose. Furthermore, the documents tend to contain extensive technical detail on the way in which the timetable and the 'building blocks' of the price control will be determined, which can serve to unduly restrict the companies' ability to prepare plans that suit their customer and environmental needs.

3.8 We understand that the principal purpose behind a regulatory assessment of plans is to stimulate the production of high quality business plans. This is a laudable aim. Better plans should, in turn, lead to better outcomes for customers and the environment. However, it is hard to conclude that the process results in what might objectively be regarded as 'high quality' business plans. In PR14, all of the business plans were classified as 'standard' except the plans of two companies Affinity and South West Water (serving a small fraction of customers). And in PR19 - despite the enormous efforts that went into their production – none were awarded 'exceptional' status, the top category, and the vast majority were classified as 'slow track'.

3.9 For this stage of the process to work, companies need to have the freedom to develop plans that genuinely reflect the long term interests of their customers and the environment. Our concern is that – in practice – companies face a strong reputational incentive to produce plans that are well regarded by the regulator, which is a subtly different objective. As a consequence, many companies attach the greatest weight to those features of the plan that the regulator regards as most important, e.g. cost projections, even if customers or the environment might attach greater priority to investment designed to achieve, perhaps hard-to-quantify, improvements in long term reliability of service. A particular bias affecting company business plans is caused by the fact that determinations are ultimately made with reference to cost and service thresholds that are deliberately set independently of individual company needs[26]. This means that there is little downside from submitting highly ambitious plans (i.e. with very low costs and very demanding service projections). This is because those ambitious plans will not be directly translated into cost allowances and service targets[27], and such ambitious plans might win regulatory praise and/or rewards. Some have argued that this has led to a 'race to the bottom' in which companies have competed with each other to demonstrate that their cost projections are more efficient than other companies, and that their service targets are more challenging than those of other companies) rather than simply demonstrating that their business plans faithfully reflect the needs of their customers and the environment in the short, medium and long term.

Recommendations

3.10 Based on the analysis above, we believe that there are several improvements that could be made to the price control process which could help ensure that the price control review process delivered on the long term objective:

- in respect of lessons learned exercises:
    - Ofwat should create the conditions – perhaps including an explicit amnesty from enforcement action – that facilitate the exposure of the true, underlying state of industry assets;

[26] In this context, it is important to note that historically Ofwat has attached a great deal of importance to setting cost and service thresholds independently of the views or condition of the relevant water company. The logic for this is that – if companies expect price controls to be set independently of their actual business needs – it removes the 'moral hazard' associated with deferring expenditure in a way that would allow them to benefit from customers 'paying twice' (or more). This point is considered more fully in chapter 5.

[27] The exception to this might occur to the extent that the company believed that there was a significant chance of an appeal for redetermination by the Competition and Markets Authority.

    - as well as reviewing the process adopted in the immediately preceding price review, Ofwat would be well advised to conduct a longer term analysis of the effect of multiple price reviews on industry capability over multiple periods;

- in setting the next price control methodology:
    - Ofwat should set clear and explicit objectives for PR24. These should not be bland and comprehensive (such that they are effectively meaningless), but reflect a clear choice to 'course correct' the industry away from a short term approach, and towards a long term approach;
    - Ofwat should make such objectives sufficiently explicit that it is possible for stakeholders – including those representing customers and the environment – to hold Ofwat to account in respect of its PR24 objectives, including in respect of promoting the long term interests of customers and the environment;

- in relation to the assessment of business plans:
    - Ofwat should ensure that its price control methodology gives companies as much freedom as possible to develop plans which meet the long term interests of their customers and the environment;
    - Ofwat should avoid unnecessary levels of prescription, or creating procedural, reputational or economic incentives that drive companies to develop plans that do not squarely address long term interests of customers and the environment; and

- in relation to determinations:
    - Ofwat should include in its draft and final determinations an explanation as to how its decisions can be expected to promote its objectives for PR24, including the long term interests of customers and the environment. In doing so, Ofwat should explain how it has reflected companies' long term delivery plans in its determinations.

3.11 We consider that these recommendations would go a significant way towards streamlining and refining the price review process, so that there can be more focus on the long term. But, in our view, unless this is accompanied by adapting the way in which cost allowances and service targets are set (Chapter 4), and the structures of incentives that sit around them (see Chapter 5), sufficient focus on the long term objective will not be achieved.

4. Setting cost allowances and service targets

Introduction

4.1 In this chapter, we consider how cost allowances and service targets are currently set, and how the approach that has been taken in the past might best be reformed to secure increased focus on the long term.

4.2 In common with the previous chapter, it comprises:

- a summary of the current approach;
- an analysis of the current approach; and
- recommendations for how the approach might be adapted.

Current approach

4.3 In setting cost allowances (or thresholds) in price control reviews, Ofwat typically distinguishes between base and enhancement expenditure. It also distinguishes between common and bespoke service targets. As a rule of thumb, base expenditure covers the routine costs that companies incur, and enhancement expenditure covers the costs of enhancing the capacity or quality of the services provided by the water companies.[28] Common service targets are expected to be delivered by all companies, whereas bespoke performance targets vary between companies, according to what they might put forward in their business plan.

4.4 In terms of base cost allowances and core service targets:

- base cost allowances are set by reference to industry cost performance over the preceding seven year period, adjusting for major differences between companies (such as scale effects and geography) using econometric techniques, to which challenge is applied to bring costs into line with 'upper quartile' levels of efficiency; and
- the equivalent core service thresholds are principally[29] set by reference to forecast, 'upper quartile' industry performance (usually without adjusting for history or geography).

4.5 In terms of enhancement cost allowances (and associated bespoke performance targets):

[28] We should add that this broadly held before PR19. However, at PR19, we understand that Ofwat took the view that base expenditure would fund upper quartile (or 'UQ') performance, except in respect of expenditure on leakage.

[29] This is a simplification. But key targets for operational performance – such as interruptions to supply, pollutions and sewer flooding performance – are set in this way.

- enhancement expenditure thresholds are derived through a more bespoke approach. Cost allowances are granted only if stringent tests of need, cost:benefit; and cost efficiency are met, and then enhancement cost allowances are moderated to take into account a judgement of how much of the enhancement expenditure has been (or will be) allowed in base expenditure (so as to avoid double-counting); and
- outputs of enhancement expenditure are defined perhaps in the form of the achievement of project milestones, or bespoke performance targets relating to the enhancement activity, alongside a package of incentives designed to protect customers in the event that output delivery diverges from plans.

4.6 It should be noted that this is an over-simplification of the elaborate approach taken by Ofwat to determine appropriate cost and service thresholds, but it is sufficiently accurate to draw out some of the features that can operate against the long term interests of customers and the environment.

Analysis

4.7 Taking the aspects of setting cost and service thresholds above, we consider that there are a number of ways in which they might be expected to operate against the long term interests of customers and the environment. In terms of base cost allowances and core service targets:

- The approach to setting base expenditure clearly relies on past expenditure being a good guide to the future. But there is good reason to believe that this is not the case. For some time, powerful incentives have applied to companies to minimise expenditure subject only to meeting minimum legal standards, and current performance requirements (which – as we discuss below – principally relate to current performance, rather than capability to meet long term future needs). This means that achieved levels of past expenditure do not necessarily reveal the efficient, sustainable routine costs of running the industry. Instead, they reveal how little companies can get away with spending. If true, this would suggest that base cost thresholds may be set at a level that is unsustainably low.[30]

- If the base expenditure 'starting point' were to be corrected for, there remains a question of what level of challenge should be built into service targets. Under its current approach, Ofwat applies both a forecast efficiency challenge and, in addition to that, forecast improvements to service (based on an assumption that all companies in the industry can, in future, achieve forecast upper quartile

[30] Arguably – if that were the case – one might expect to observe levels of base spending in excess of the cost thresholds set via this method. However, once set, most company managements are unable to make the case to their shareholders that spending above regulatory cost thresholds is justifiable; the benefits simply don't outweigh the costs of doing so. Furthermore, in a totex regime, in which a £1 of expenditure on capex or opex is treated for regulatory purposes as identical, there may be opportunities to substitute expensive capex (which might better serve long term need) with inexpensive opex (thus securing compliance with unsustainably low budgets).

performance costlessly). But there is little science – or knowledge – to underpin such assumptions; they are little more than assertions based on a form of management judgment, rather than rooted in evidence of what can reasonably be achieved by companies managing very different service environments. Of course, it is important that regulators are not taken for a ride, and that customers are not over-charged. But aggressive efficiency and/or service improvement targets can, in themselves, intensify biases in the regulatory regime that lead to underfunding of base allowances, as well as undermine the longer term focus required by the sector.

4.8 In terms of enhancement cost allowances (and associated bespoke performance targets):

- As an economic regulator, it is to be expected that Ofwat will be wary of approving expenditure that might prove unnecessary. As a result – and as was identified in the NIC report – regulators naturally approach proposals for enhancement expenditure with a strong sense of scepticism. In the past, Ofwat has set multiple tests for enhancement expenditure cases (e.g. covering need, cost:benefit, cost efficiency, customer support, evidence that the output could not have been delivered through base expenditure etc.). In each case, all of these tests must be passed. Moreover – in PR14 – Ofwat explicitly demanded that cases satisfied a 'high evidential bar'[31]. In one sense, this is to be applauded: not only does it prevent unjustified investments proceeding, but it also creates an incentive on companies to discover more information and/or evidence to support their case. However, if genuine uncertainty, rather than suspected information asymmetry, is the reason why a business case cannot be proved beyond reasonable doubt, then it is at least questionable whether investment should effectively be blocked (as under the current regime) with the effect of depriving customers and the environment of the long term benefits that such investment might bring. Instead, it would seem to be preferable for the regulatory authority to apply less stringent and exacting tests, e.g. where the burden of proof is to one in which investment cases are seen as desirable 'on the balance of probabilities'. Doing so might better align regulatory policy to the priorities of customers and the environment that the regulatory regime is intended to serve.[32] Moreover, Ofwat's reforms to introduce adaptive planning across company plans provides an opportunity to avoid the unnecessary rejection and/or deferral of schemes if accompanied with appropriate adjustment mechanisms should future needs materially change.

[31] See – for example – the 'Overview' contained in 'Draft price control determination notice: technical appendix A3 – wholesale water and wastewater", Ofwat, August 2014, available at: www.ofwat.gov.uk/wp-content/uploads/2015/10/det_pr1408draftappendixwholesale.pdf

[32] In its final redetermination of the PR19 appeals, the CMA too highlighted the importance of not letting the application of a 'high evidential bar' cause regulators to lose sight of longer-term strategic objectives and pressures. See paragraph 5.487, 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations', CMA, April 2021, available at: https://assets.publishing.service.gov.uk/media/60702370e90e076f5589bb8f/Final_Report_---_web_version_-_CMA.pdf

- Perhaps of even greater concern is the risk – under the current regulatory regime – that a regime which can apply more stringent requirements on outcomes might send a powerful message not to bring forward enhancement cases in the first place. A case in point is Thames Water's recent application for funding for smart metering under Ofwat's 'green recovery' fund, where it appears that the company considers that the outcomes that Ofwat is expecting it to deliver are unachievable within the permitted funding envelope, yet having brought the case forward to the regulator, it no longer has an option to withdraw. All in all, applying for funding – in that case – appears to have made Thames Water's ability to operate with a long term focus harder, not easier!

4.9 It is important to add that, within the current regulatory framework, there is considerable ambiguity about the distinction between base and enhancement expenditure. This means that significant judgement and discretion must be applied in assessing, for example, the extent to which outputs from enhancement investments should have been (or should in future be) provided through base expenditure. A similar issue arises in relation to growth: to what extent should base expenditure cover growth rates? These examples serve to illustrate that there will inevitably always be a degree of judgement in regulatory decision-making. The problem comes if that judgement is always exercised from the perspective of limiting the overall funding of the regulated companies, as that may – in combination with other decisions – inhibit companies ability to fund investments with a long term focus.

Recommendations

4.10 The above analysis tends to suggest that there are a number of biases in the way in which cost and service thresholds are set which could operate against the long term interest of customers and the environment by inhibiting the ability of companies to fund investment.

4.11 It follows that we would recommend that Ofwat:

- makes an adjustment for a tendency by some or all companies to underspend in the past, which – unless adjusted for – could serve artificially to suppress the starting base cost allowance;
- resists the temptation to add layer upon layer of short-term challenge: expecting efficiency improvements as well as cross-industry service improvements to match forecast upper quartile service performance would seem to be unreasonable;
- lowers the burden of proof required for enhancement business cases, lest it ends up rejecting good cases simply on the grounds of limited information; despite their best efforts companies may genuinely not be able to prove beyond reasonable doubt that projects are needed, and yet it might, on the balance of probabilities, still be in the long term interests of customers and the environment for them to proceed[33]; and

[33] We would also recommend giving consideration to lowering the burden of proof further for those companies which have resolutely – and convincingly – adopted a public purpose that enables their customers,

- takes care not to chill (or kill) incentives to bring investment cases forward. Clearer rules should be defined - and adhered to - on the extent to which enhancement cases are covered by base expenditure, and additional outputs should be deliverable by the additional funding alone (not the additional funding, plus an unspecified contribution from base).

4.12 In combination, these steps are likely to contribute to improving the ability of companies to focus on the long term. But – in themselves – such reforms carry some risk that companies might simply choose to channel additional funding to shareholders, as opposed to deploying it to the long-term advantage of their customers and environment. Accordingly, it is important to ensure that companies face appropriate incentives to focus expenditure allowances on the long term needs of customers and the environment. This is the subject of the next chapter.

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and other stakeholders, to draw comfort that they will channel the funding into activity focused on the long term. Exactly what criteria should be adopted for such a move – however – raises questions that go beyond the scope of this paper.

5. Structure and effect of incentives

Introduction

5.1 Perhaps the most important - and yet the least discussed - feature of the price control regime is the very powerful suite of economic incentives that it imposes on companies, and the effects those incentives can have on the long term interests of customers and the environment. These issues are the subject of this chapter.

5.1 In common with the previous two chapters, it comprises:

- a summary of the current approach to setting incentives;
- an analysis of the effects it might have; and
- recommendations for how the structure of incentives might usefully be reformed.

Current approach

5.2 Essentially – with the exception of some hypothecated projects – the regime operates as follows:

- total expenditure thresholds are fixed for five years at a time, and can be expected to be reset, independently, in future periods;
- service targets are set for five years at a time, and can be expected to be reset, independently, in future periods;
- companies are strongly encouraged to 'outperform' against both cost and service thresholds, and to enjoy the rewards from so doing; and
- companies are effectively encouraged to substitute capex for opex (countering the alleged capex bias of regulation up to March 2015) and to take advantage of the benefits from doing so.

Analysis

5.3 The incentives on companies that are created by this framework provide a powerful impetus for companies to minimise expenditure against the thresholds set for the duration of the price control. These incentives are stronger, the higher the proportion of underspending that companies can retain (known as cost sharing factors), and the greater the opportunity to defer – and save money on – capital expenditure whilst serving customers through operating older assets, perhaps beyond their design life (or capacity). To that extent, the structure of incentive created by the regulatory framework might be thought of as providing encouragement to companies to operate in a short-termist manner.

5.4 However, it could be argued that there are factors operating in the opposite direction which serve to offset – or at least mitigate – the incentives on companies to adopt a short-termist approach:

- as discussed above, a key feature of the current price control framework that drives a long term approach from companies is the regulatory promise that future cost and service thresholds will be set *independently* of the condition of the business. Put simply, if companies chose to underspend – or neglect to maintain their assets – it is the company management (and its shareholders) who are on the hook for that. And future thresholds are not adjusted to take such factors into account, thus insulating customers from the effects of that;
- it might reasonably be claimed that powerful Outcome Delivery Incentives (ODIs) attached to service outcomes – and the prospect of powerful ODIs in future price control periods – act to deter short termism;
- at price control reviews, it is open to Ofwat to take into account past performance, including clawing back pure underspending; and
- the threat – and the actuality – of enforcement action (where companies are found to have breached fundamental statutory obligations under sections 37 and 94 of the Water Industry Act 1991) arguably creates a powerful deterrent to management and/or shareholders contemplating skimping on expenditure in the short term.

5.5 But there are important shortcomings in the effectiveness of each of these tools to limit short-termism (and thus genuinely focus companies on the long term):

- the promise to set cost and service thresholds independently is a relatively new feature of the regulatory framework, so expectations among companies and shareholders that it will apply in all future price control reviews are perhaps not as strong as they might be. Moreover, it is never possible for allowances to be set entirely independently (i.e. Ofwat will always need some basis for benchmarking routine spend) which means that companies may doubt the extent to which the regulator can truly hold companies to account for underspending in the short term;
- whilst ODIs do indeed provide a check against cost minimisation, they are effectively in force *on average* for a period of 2.5 years (i.e. until the next 5 year review). Just as importantly, the vast majority of ODIs are linked to *current* service performance as opposed to measures of the capability of the company to serve customers well in *future*, e.g. asset health or skills/motivation of the workforce;
- although Ofwat reserves the right to clawback underspend (as distinct from efficiency), in practice it is very hard for a regulatory body to distinguish between the two, and so underspending tends to be – implicitly at least – allowed by regulation; and
- whilst enforcement action certainly can serve as an effective deterrent against neglect, typically the minimum legal requirements are very broadly defined and open to interpretation, e.g. under section 37 of the Water Industry Act, companies must maintain an effective and efficient network, which case law has tended to define by reference to what Ofwat has 'funded' in the past. And – whilst Ofwat has sought to free itself from that approach to defining minimum legal obligations – it arguably remains constrained by it in all but the most egregious cases.

5.6 Perhaps most importantly of all, the problem with these arguments is that the evidence – as laid out in Chapter 2 – suggests that the industry – as a whole – is insufficiently focused on the long term, and thus that the incentives to encourage them to do so are too weak. It follows that something to rebalance incentives away from the short term, and towards the long term, is necessary, and perhaps as a matter of urgency.

Recommendations

5.7 Against this background, we would recommend undertaking an exercise to rebalance incentives better to reflect the focus on the long term.

5.8 Looking at the industry in aggregate, this would involve:

- reducing the rewards/penalties on spending (relative to cost thresholds) and increasing the rewards/penalties for performance (relative to service thresholds);
- reducing the relative rewards/penalties on shorter term operational metrics, and increasing the relative rewards/penalties on enablers of longer term service performance (including leading measures of asset health); and
- increasing the relative rewards/penalties on environmental performance.

5.9 We see particular advantage in adopting a more supportive approach to expenditure focused on delivering long term outcomes, e.g. increased capital maintenance or the approval of schemes to strengthen the assets (natural or otherwise) needed to meet the long term requirements of customers and the environment, alongside incentive structures that provide comfort that outputs will be delivered, and any underspending will not be disproportionately rewarded (i.e. cost sharing factors that are close to 100%). Using cost sharing factors in this way could reduce the opportunity for companies to 'outperform' to an extent that attracts public criticism, whilst at the same time attracting private funding to invest in the infrastructure customers and environment need in the long term.

5.10 Shifting the focus of economic regulation in this way, i.e. away from its current preoccupation with what it perceives as efficiency (and the associated problem of rewarding under-spending) and, instead, towards supporting investment that is rewarded with reasonable, but not excessive, returns should allow Ofwat to be more confident that approving investment would not expose it to criticism for allowing unduly generous returns.

5.11 Since much of the rationale for economic incentives ultimately stems from concerns that companies cannot be trusted to devote funds to long term objectives, it might also be worth considering adapting the regulatory approach depending on whether a company could be so trusted. For example, if companies could demonstrate that they were more worthy of trust, e.g. perhaps based on their track record or with reference to statements (and associated actions) demonstrating a strong commitment to a public purpose, then the regulator might be more sympathetic to applications for enhancement expenditure, or more willing to allow companies to enjoy slightly greater rewards for efficiency in the belief that they would not seek to pursue strategies of underspending at the expense of future generations of customers. Adopting aspects of what has come to be known as ethical regulation – especially after 30 years in which ethics have arguably played little part in proceedings – just might unlock a surprising amount of energy, goodwill and efficiency within companies, strengthening trust and confidence in the sector with associated long term benefits for customers and the environment.

6. Summary of recommendations

6.1 The recommendations contained in this paper are summarised in this chapter.

6.2 In terms of the price control process, we recommend that:

- lessons learned exercises are conducted openly and take stock of the longer-term effects of price control regulation (not just the process adopted in the immediately preceding review);
- price control methodologies include clear and explicit objectives for the forthcoming price control review – including to promote the long term interests of customers and the environment – such that stakeholders can hold Ofwat to account on the question of whether they have been achieved;
- companies should have as much freedom as possible to develop business plans that meet the long-term interests of customers and the environment, and that assessments of business plans should avoid encouraging companies to win procedural, reputational or economic rewards from submitting artificially low cost projections, or artificially ambitious service improvements; and
- Ofwat should ensure that it fully explains how its draft and final determinations serve the long term interests of customers and the environment, and, in doing so, explain how it has reflected companies' long term delivery plans in its determinations.

6.3 In terms of how Ofwat should adapt the way it sets cost allowances and service targets, we recommend that Ofwat:

- makes an adjustment for a tendency by some or all companies to underspend in the past, which – unless adjusted for – could serve artificially to suppress the starting base cost allowance;
- resists the temptation to add layer upon layer of short-term challenge: expecting efficiency improvements as well as cross-industry service improvements to match forecast upper quartile service performance would seem to be unreasonable;
- lowers the burden of proof required for enhancement business cases, lest it ends up rejecting good cases simply on the grounds of limited information; despite their best efforts companies may genuinely not be able to prove beyond reasonable doubt that projects are needed, and yet it might, on the balance of probabilities, still be in the long term interests of customers and the environment for them to proceed (with an appropriate level of regulatory oversight); and
- takes care not to chill (or kill) incentives to bring investment cases forward. Clearer rules should be defined - and adhered to - on the extent to which enhancement cases are covered by base expenditure, and additional outputs should be deliverable by the additional funding alone (not the additional funding, plus an unspecified contribution from base).

6.4 In terms of the structure and effect of incentives, we recommend undertaking an exercise to rebalance incentives better to reflect the focus on the long term, involving:

- reducing the rewards/penalties on spending (relative to cost thresholds) and increasing the rewards/penalties for performance (relative to service thresholds);
- reducing the relative rewards/penalties (i.e. ODIs) on shorter term operational metrics, and increasing the relative rewards/penalties on enablers of long term service performance (including leading measures of asset health); and
- increasing the relative rewards/penalties on environmental performance.

6.5 We see particular advantage in allying a more supportive approach to enhancement expenditure to tightly defined delivery plans, and cost sharing factors that are close to 100%. Shifting the focus of economic regulation in this way, i.e. away from its current preoccupation with efficiency (and the associated problem of rewarding under-spending) and, instead, towards supporting investment that is rewarded with reasonable, but not excessive, returns should allow Ofwat to be more confident that approving investment would not expose it to criticism for allowing unduly generous returns.

6.6 Since much of the concern about incentives stem from a concern that companies cannot be trusted to devote funds to long term objectives, we also advocate an approach to approving enhancement expenditure that takes full account of broader evidence as to whether a company can be trusted by its customers, and wider society, to do the right thing, which could be assessed with reference to its stated company purpose. The more confident the regulator can be that a company is genuinely committed to serving the long term needs of its customers and the environment, the more supportive should be the regulatory approach applied to that company.