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Agenda

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A time for sharing? Within-period performance-sharing in the UK

In March 2014, the Water Industry Commission for Scotland (WICS) published its draft determination for Scottish Water's charge caps over 2015–21. The draft reflects a number of new regulatory developments, including the introduction of within-period performance-sharing between Scottish Water and customers. Such arrangements are also starting to emerge in other regulated sectors in the UK, but what are their possible implications?

WICS's draft determination for the Strategic Review of Charges 2015–21 (SRC 2015–21),[1] which sets out its proposals for the charge caps that will apply to Scottish Water over this period, includes the introduction of a mechanism to allow Scottish Water to share performance with customers within the regulatory period. Such a development is a shift away from the performance-sharing embedded in the 'pure' RPI – X regulation originally envisaged by Professor Stephen Littlechild.[2] For example, under the original RPI – X model, customers benefit from outperformance through a one-off adjustment to price limits at the start of the next regulatory period. This shift away from the outperformance-sharing embedded in RPI – X regulation reflects a broader trend within the regulated sectors towards more expedient sharing of outperformance.

Looking at WICS's draft determination proposals, this article considers how they compare with the original outperformance-sharing model. It also examines the general shift towards greater performance-sharing in regulated sectors, and explores why such performance-sharing arrangements are emerging, and their possible implications.

Draft determination proposals

WICS's proposals reflect a number of regulatory developments. First, the total household charge cap proposed for the six-year period is linked to consumer price index (CPI) inflation rather than retail price index (RPI) inflation. Traditionally, WICS and other regulators in the UK have used RPI inflation. A total charge cap of CPI – 1.8% will apply from 2015 to 2021 (equivalent to CPI – 0.3%, on average, over the regulatory period).[3] Furthermore, to give household customers more certainty, the charge caps in the first three years are set in nominal terms. The household charge cap is subject to nominal charge increases of no more than 1.6% each year from 2015 to 2018.[4]

Second, the draft determination is consistent with an agreement on both price and service levels that was reached between Scottish Water and the newly established Customer Forum.[5]

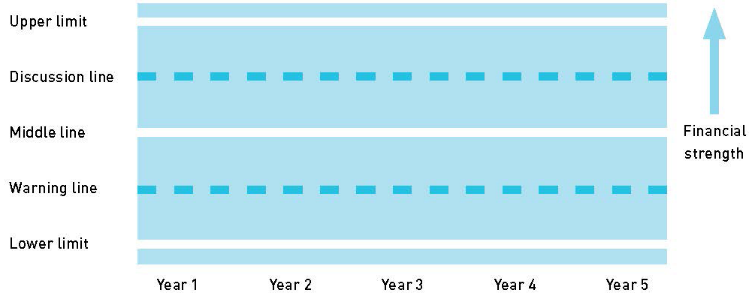
Third, a mechanism has been established to monitor Scottish Water's financial performance during the regulatory period—the 'financial tramlines' are expected to show Scottish Water's financial performance, as measured by cash-based financial ratios. Based on the ratios used by the credit rating agencies, these financial ratios have been selected to show Scottish Water's creditworthiness.[6]

An important feature of the financial tramlines is that they enable customers to benefit as quickly as possible when Scottish Water outperforms the regulatory assumptions—i.e. they allow within-period outperformance-sharing.[7]

Similarly, the financial tramlines are expected to work symmetrically—i.e. they will show when financial performance is below a certain level and some form of remedial action is required. For example, if Scottish Water moved below a 'warning line', WICS would require the company's management to explain, in a delivery plan, how and when performance would improve.

The financial tramlines are illustrated in Figure 1.

Figure 1 Financial tramlines



Source: Water Industry Commission for Scotland (2013), 'Strategic Review of Charges 2015: Innovation and Choice', May, p. 57.

The draft determination sets out the target financial ratios at each financial tramline, and how the tramlines are envisaged to work, as follows.[8]

- If the company outperforms the regulatory settlement, its financial strength will increase towards the discussion line. It will be free to retain the savings it generates while its financial strength lies between the middle and discussion lines.
- If its financial strength reaches the discussion line and is forecast to remain above this for the remainder of the price control period, the company will begin discussions with its customers and the Scottish government about how outperformance should be used—for example, to reduce charges, provide additional customer service improvements, improve the condition or performance of the assets in place, or build up the company's financial reserve.
- If its financial strength reaches the upper limit, and is forecast to stay there for the remainder of the price control period, the company will use the proceeds of outperformance over that limit to the benefit of customers. At this point, the outperformance will be automatically shared with customers in ways such as those mentioned above.
- If the company underperforms the regulatory settlement, its financial strength will decrease towards the warning line. This line is intended to provide an early signal that financial performance has declined. As discussed above, Scottish Water will be required to explain how and when performance will improve. The intention of the delivery plan is to assure WICS, the Scottish government, and the Customer Forum that performance will not worsen. WICS will comment on the delivery plan.
- If the company breaches the lower line, WICS will review Scottish Water's performance and take action to ensure that the company is in an appropriate financial position in future. For example, such a response might entail a reduction in the capital investment programme, an increase in customer charges, or potentially, in exceptional circumstances, a revision to the position of the financial tramlines. In deciding what is appropriate, WICS will be mindful of its duty to protect the interests of customers.[9]

The principle of within-period performance-sharing like that introduced in Scotland has been observed in other countries, such as the USA.[10] Its application has also been discussed in the context of economic regulation in the UK—although, as noted above, it is a shift away from the performance-sharing that has been embedded in RPI – X regulation in the UK since the 1980s.[11]

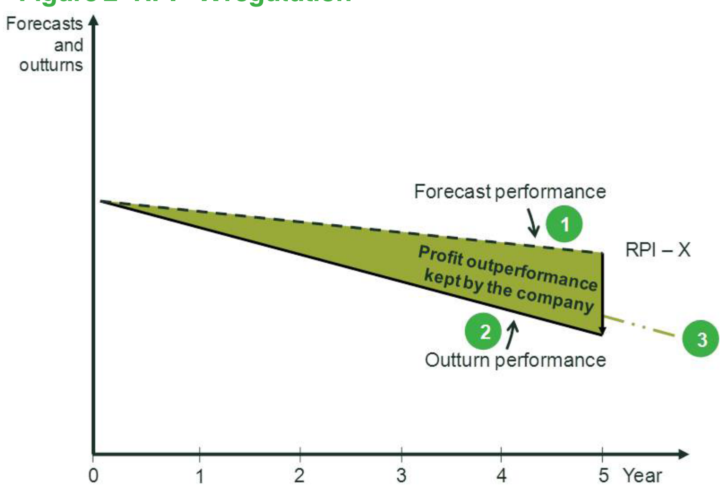
Performance-sharing in RPI – X regulation

As set out in Professor Littlechild's influential paper, the incentives that underpin 'pure' RPI – X regulation are based on a very simple profit motivation. The regulator sets annual charge caps according to a forecast level of costs, and the company can earn higher profits by spending less than this level. In doing so, the company has revealed information about the 'efficient' level of costs. The regulator can then use this lower 'efficient' level (i.e. outturn costs) as the starting point when setting the charge caps for the next regulatory period.

The outperformance is ultimately passed through to consumers at the start of the next regulatory period, as depicted in the three steps presented in Figure 2:

1. the annual charge cap (RPI – X) is 'set in stone' based on forward-looking cost assumptions;
2. if companies outperform the regulator's cost assumptions, they keep the additional profits; if they underperform, they bear the losses;
3. any outperformance can eventually be passed on to consumers at the following price review through a one-off adjustment.

Figure 2 RPI – X regulation



Source: Oxera.

Under the performance-sharing embedded in RPI – X regulation, the company keeps all profit outperformance achieved within the period—i.e. the shaded area between the forecast and outturn performance.

When there is within-period performance-sharing, however, some of the outperformance achieved is shared with consumers early, before the end of the control period, which is what makes it different to the original form of RPI – X regulation.

An interesting question is whether we are observing a wider trend towards within-period performance-sharing in regulated sectors in the UK, or whether this development is unique to the Scottish water industry.

Performance-sharing in other regulated sectors

Across the border from Scotland, Ofwat, the economic regulator of the water industry in England and Wales, has similarly encouraged the water companies to move towards within-period performance-sharing. Indeed, in its methodology for the price review in 2014 (PR14), Ofwat set out what it considered would be the general aspects of a high-quality plan, one aspect of which is the proposal for:[12]

> a reasonable balance of risk and reward between customers, investors and other stakeholders, with efficient proposals to share 'pain and gain' with customers

So how did the water companies respond to this challenge set by the regulator?

South West Water was one of two water companies whose business plans passed Ofwat's high-quality threshold, and pre-qualified for enhanced status.[13] One of the strengths of its business plan, as highlighted by Ofwat, was that it provided:[14]

> a pledge to share the benefits of success fairly between customers and investors through an independently monitored and transparent performance sharing framework called 'WaterShare'

Based on the same premise as the financial tramlines, WaterShare is intended to give customers the potential to gain 'in period' from the outperformance of cost-efficiency targets, and other opportunities. Customers can be expected to benefit through reinvestment in services or a reduction in bills.

WaterShare is also expected to highlight when costs are higher than anticipated, and the requirement for regulatory assessment of a net loss position.[15] Performance would be tracked through a 'WaterSure' scorecard that would be published annually and reviewed by an independent panel.[16]

Examples of within-period performance-sharing are not limited to the water sector. In electricity transmission and distribution, as part of its final determination for Northern Ireland Electricity (NIE), the UK Competition Commission (now the Competition and Markets Authority) decided that a form of within-period performance-sharing should be introduced for NIE, called the 'cost risk-sharing mechanism'.[17]

Under this mechanism, NIE's revenue allowance is adjusted for differences between the operating and capital expenditure forecasts assumed in the determination, and the outturn level of operating and capital expenditure:[18]

> Differences between forecast and out-turn CAPEX would lead to an adjustment to NIE's RAB (and consequent adjustments to maximum regulated revenues). Differences between forecast and out-turn OPEX would lead to an adjustment to NIE's maximum regulated revenue.

The Competition Commission decided that 50% of such differences should be passed through to consumers within the regulatory period on an annual basis.[19] Its rationale for introducing the mechanism is to provide some financial protection to consumers and NIE against inaccuracies in its estimates of NIE's efficient expenditure.[20]

So what is the rationale for this recent evolution of RPI – X regulation, and what are the possible implications?

Rationale and possible implications

First, it is worth considering why RPI – X regulation was introduced in the first place in the late 1980s. This form of regulation was introduced following a wave of privatisations of former state-owned utility providers. One of the priorities at the time was to provide strong efficiency incentives for these newly privatised companies to reduce their costs and become more efficient. As such, under 'pure' RPI – X regulation, they were allowed to keep all profit outperformance achieved during the period.

So what has changed?

- **Customer involvement in regulated sectors**: the move towards within-period performance-sharing has coincided with the move towards greater customer engagement in regulated sectors. This is not surprising, as the two arise from similar objectives: to improve consumers' perception of the legitimacy of charges, levels of service performance, and, ultimately, profits.

- **Accepting that information asymmetries exist**: to some extent, regulators have accepted that they are unable to fully overcome information asymmetries with regard to the scope for efficiency improvements. Indeed, within-period performance-sharing protects against the scenario that the regulator sets an efficiency challenge that is too lenient, and charges that are too high. Similarly, to some extent, within-period performance-sharing may help to protect against the scenario that the regulator sets an efficiency challenge that is too aggressive, and the company is adversely affected as a result. Indeed, as set out above, this appears to be consistent with the Competition Commission's rationale for the cost risk-sharing mechanism.

- **Sharing risk as well as reward**: similar to the above points, part of the move towards within-period performance-sharing is to share risk between companies and customers. Economic regulators use uncertainty mechanisms to account for risk. To some extent, performance-sharing is part of the suite of uncertainty mechanisms—i.e. to recognise that unexpected events can happen within a regulatory period, and that not everything can be foreseen when charge caps are set.

So what are the implications?

The trend towards greater within-period performance-sharing could continue, particularly if the level of customer engagement in regulated sectors continues to increase. The experience from the UK provides some useful practical considerations for designing a within-period performance-sharing regime, as follows.

- **Flexibility**—to what extent is the performance-sharing mechanical, and to what extent does the company have the flexibility to share outperformance as and when appropriate? For example, the proposed NIE cost risk-sharing mechanism is tightly defined and mechanical, but the financial tramlines in the Scottish water industry appear to give Scottish Water more flexibility to share outperformance with customers. Such an approach could be in place to empower the company to take full ownership of its decisions regarding outperformance-sharing.
- **Regulatory rules**—if performance-sharing is mechanical, when does it happen? For example, is the outperformance accumulated over the period, and shared at the end? What percentage is shared with consumers?
- **Incentive design**—what are the implications for the package of efficiency incentives, including the strength of both the reputation-based incentives and the financial incentives? For example, WICS considered that the financial tramlines should strengthen the incentive for Scottish Water to outperform, because if the company outperforms and delivers extra benefits for customers then its reputation will be enhanced.[21]
- **Governance and monitoring**—what governance arrangements underpin the performance-sharing? South West Water, for example, has proposed that an independent panel will review its WaterSure scheme each year.

The trend towards within-period performance-sharing shows that RPI – X regulation has evolved, and continues to do so to meet the priorities of the day. Within-period performance-sharing is one of the most recent evolutions, but it is likely not to be the last.

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[1] Water Industry Commission for Scotland (2014), 'The Strategic Review of Charges 2015–21: Draft Determination', March.

[2] See Littlechild, S. (1983), 'The Regulation of British Telecommunications' Profitability', Department of Industry, reprinted in I. Bartle (ed.), 'The UK Model of Utility Regulation', CRI Proceedings 31, University of Bath.

[3] WICS provided an indication of the charge cap that would have applied had the regulators continued to use RPI. This is equivalent to a total charge cap of RPI – 6.3% from 2015–16 to 2020–21. See Water Industry Commission for Scotland (2014), 'The Strategic Review of Charges 2015–21: Draft Determination', March, p. 4.

[4] The draft determination also includes proposals for the wholesale charge cap, and default tariffs over 2015–21. Wholesale charge caps set limits on the wholesale charges that Scottish Water can collect from the licensed providers in the non-household retail market. Default tariffs are the maximum tariffs that the licensed providers can charge non-household customers for a standard level of service. Their purpose is to provide a safeguard to non-household customers, given that the non-household retail market is subject to competition rather than regulation.

[5] The Customer Forum was established to engage with Scottish Water throughout SRC 2015–21. Further details are set out in Water Industry Commission for Scotland (2013), 'Strategic Review of Charges 2015–21: innovation and choice', May, pp. 26–41.

[6] Oxera advised WICS on the development of the financial tramlines mechanism. See Oxera (2012), 'Regulatory "financial tramlines" for Scottish Water', note prepared for WICS, 14 February.

[7] Scottish Water's performance on the financial tramlines will be assessed using a three-year rolling average. Water Industry Commission for Scotland (2014), 'The Strategic Review of Charges 2015–21: Draft Determination', March, p. 91. It is understood that this is to avoid one-off events, which could materially affect performance in a single year, but not be representative of any overall trend in performance.

[8] Water Industry Commission for Scotland (2014), 'The Strategic Review of Charges 2015–21: Draft Determination', March, pp. 17–8.

[9] Water Industry Commission for Scotland (2013), 'Strategic Review of Charges 2015–21: innovation and choice', May, p. 59.

[10] For example, the US Federal Communications Commission (FCC) has used profit-sharing. See, for example, Lyon, T.P. (1996), 'A Model of Sliding-Scale Regulation', Journal of Regulatory Economics, 9, pp. 227–47.

[11] This concept is also referred to as 'sliding-scale regulation'. See, for example, Mayer, C. and Vickers, J. (1996), 'Profit-sharing regulation: an economic appraisal', Fiscal Studies, 17:1, pp. 1–18.

[12] Ofwat (2013), 'Setting price controls for 2015–20 – final methodology and expectations for companies' business plans', July.

[13] Affinity Water was the other company that pre-qualified. Pre-qualification for enhanced status meant that the two water companies were invited to accept Ofwat's guidance for risk and reward and seek to secure enhanced status. Companies with enhanced status benefit from reputational incentives from being recognised as enhanced companies, an earlier draft determination, and some additional financial rewards.

[14] Ofwat (2014), 'Setting price controls for 2015–20 – pre-qualification decisions', March, p. 5.

[15] South West Water (2013), 'WaterFuture: South West Water Business Plan', December.

[16] The WaterShare scheme is in addition to the total expenditure (TOTEX) efficiency-sharing incentives, as discussed below.

[17] Competition Commission (2014), 'Northern Ireland Electricity Limited price determination: final determination', March.

[18] Competition Commission (2014), 'Northern Ireland Electricity Limited price determination: final determination', March, p. 5–16.

[19] Competition Commission (2014), 'Northern Ireland Electricity Limited price determination: final determination', March, p. 19–11 sets out how the Competition Commission expects the cost risk-sharing mechanism to work in practice.

[20] Competition Commission (2014), 'Northern Ireland Electricity Limited price determination: final determination', March, p. 5–11.

[21] Water Industry Commission for Scotland (2013), 'Innovation and choice', May, p. 57.