

Agenda

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Taking stock: the Bristol Water inquiry

In August 2010, the UK Competition Commission published its final determinations of the prices that Bristol Water can charge its customers over the 2010–15 period. We take stock of what the Commission has said, and explore what the findings might mean for the sector going forward

Every five years Ofwat, the regulator of the water sector in England and Wales, sets the prices that companies can charge customers over the subsequent five-year period. Companies unhappy with this price limit package have the option of seeking a referral to the Competition Commission (CC).¹ As highlighted in an earlier *Agenda* article, this is not a decision that should be taken lightly.²

When prices for 2010–15 were set by Ofwat in November 2009, Bristol Water (henceforth 'Bristol') was the only company to appeal. (Ofwat made its reference to the CC on February 8th 2010.) The CC issued its provisional findings on June 18th 2010, publishing its final report on August 4th.³ Table 1 below compares the CC's decisions on the key building

blocks of the price limits against those sought by Bristol and allowed for by Ofwat. As the table shows, in its final report the CC allowed Bristol a higher annual increase in prices than Ofwat had, albeit back-loaded towards the end of the period. On the key building blocks, what is of interest is that, at 5%, the vanilla⁴ weighted average cost of capital (WACC) allowed for by the CC was less than that assumed by Ofwat—a decision which shows that what goes up can also go down. However, this was offset by the CC providing an additional allowance for taxation.

There was also some movement on capital and operating expenditure (CAPEX and OPEX). The CC provided more CAPEX in its final report than allowed for by Ofwat, albeit less than assumed by the CC in its

Table 1 Summary of findings in the CC Bristol case

Element	Bristol final business plan	Ofwat final determinations	CC provisional findings	CC final report
Average annual price increase (%)	6.0	1.7	2.3	3.2 (back-loaded)
Vanilla WACC (%)	6.7	5.5	5.0	5.0
Net CAPEX before CIS	319.1	227.3	251.2	243.5
CIS ratio	n/a	138	123	128
Net CAPEX after CIS¹	319.1	244.3	265.9	260.5
Additional base OPEX ²	32.4	8.8	16.0	15.7
Additional base OPEX related to CAPEX ²	14.2	9.9	11.9	12.2
OPEX efficiency (base): catch-up + frontier shift	0.6 + -0.6 = 0	0.917 + 0.25 = 1.167	0.917 + 0.25 = 1.167	0.917 + 0.25 = 1.167

Note: OPEX and CAPEX figures relate to totals for the period 2010/11–2014/15 in £m in 2007/08 prices. ¹ As part of Capital Incentive Scheme, projected net CAPEX was increased by 25% x (CIS ratio – 100), up to a CIS ratio of 130. ² From Bristol Water's statement of case (as opposed to its final business plan). n/a = not applicable

Sources: Competition Commission (2010a), 'Bristol Water Plc—A Reference under Section 12(3)(a) of the Water Industry Act 1991: Provisional Findings Report', June 18th. Competition Commission (2010b), 'Bristol Water Plc—A Reference under Section 12(3)(a) of the Water Industry Act 1991: Report', August 4th.

provisional report. This comprised more funding for capital maintenance (eg, pipe replacement and trunk mains relining), and some additional funding for enhancement CAPEX. In practice, this meant that Bristol faced a less harsh CIS penalty than that assumed by Ofwat. The CC also provided additional OPEX funding, although there was less (overall) movement on the OPEX efficiency targets set by Ofwat.

Cost of capital

As noted, the CC adopted a vanilla WACC around 50 basis points less than Ofwat. Differences on the main components of the WACC are provided in Table 2, as are the assumptions of Ofgem, the GB energy regulator, at the most recent electricity distribution price control review (DPCR5), for further comparison.

According to the CC, its view on the WACC is different from Ofwat's because it bases its equity beta estimates on observed betas for quoted water and sewerage companies (WASCs) (as opposed to Ofwat's betas inferred from overall judgement on the cost of equity), and it has a lower assumption on the equity risk premium.⁵ While the CC accepted that Bristol had higher systematic risk than the WASCs (which, in its view, meant that Bristol had an asset beta in the range of 0.32–0.43, as opposed to 0.27–0.36 for the WASCs), converting this into an equity beta (at 60% gearing, and assuming a debt beta of 0.1) still gave a range of 0.64–0.92.⁶ By comparison, Ofwat assumed 0.94 at 52.5% gearing, equivalent to 1.10 at the CC's assumed level of gearing (of 60%).

It is also notable that, in its estimation of Bristol's WACC, the CC rejected two propositions put forward by certain UK regulators (notably Ofgem) at recent determinations:

- **no 'holistic approach' to allowed returns**—at DPCR5, Ofgem sought to follow a 'holistic approach' to allowed returns, taking into account the incentive package and the returns that companies could earn from it.⁷ In the Bristol decision, the CC recognises that there is a *theoretical* link between the allowed return and the scope for outperformance. In other words, the regulator could in principle allow a return on the regulatory asset base lower than the cost of capital if there were a legitimate expectation that companies could *on average* earn positive returns from incentive schemes. However, the CC assumes that its determinations reflect 'central projections' of costs and performance, and that this relationship is therefore largely irrelevant for practical purposes;⁸
- **no systematic reliance on long-term averages**—following its review of the regulatory framework for GB energy networks, Ofgem recently decided to set the cost of debt by reference to a long-term trailing average of forward interest rates, and that the corresponding allowance would be updated annually in a mechanistic way. In the Bristol decision, the CC clearly argues that such an approach would be inconsistent with regulatory duties because companies' financing costs can deviate from long-term averages for significant periods of time, and the resulting variance might impair their ability to finance their functions (if negative), or might harm consumer interests (if positive). The principle that the CC emphasises is that allowed returns should reflect the regulator's best estimate of financing costs for the duration of the price control.⁹

Overall, the CC seems to have adopted a fairly orthodox approach to the estimation of the WACC. However, in its estimation of the asset beta, it has recognised that 'operational gearing' (which it defines as OPEX to allowed revenues ratio) has an impact on companies' risk exposure, and that, under certain

Table 2 WACC assumptions

	CC Bristol inquiry (incl. ranges)	Ofwat periodic review 2009	Ofgem DPCR5
Cost of debt (pre-tax) (%)	3.9	4.0	3.6
Risk-free rate (%)	2.0 (1.0–2.0)	2.0	n/a
Equity risk premium (%)	5.0 (4.0–5.0)	5.4	n/a
Asset beta	0.43 (0.32–0.43)	0.4	n/a
Debt beta	0.1	0.0	n/a
Equity beta (%)	0.92 (0.64–0.92)	0.94	n/a
Cost of equity (post-tax) (%)	6.6 (3.6–6.6)	7.1	6.7
Gearing (%)	60.0	52.5	65.0
WACC (vanilla) (%)	5.0 (3.8–5.0)	5.5	4.7

Note: n/a = not applicable

Sources: Competition Commission (2010b); Ofwat (2009), 'Future Water and Sewerage Charges 2010–15: Final Determinations', November 26th; Ofgem (2009), 'Electricity Distribution Price Control Review: Final Proposals', December.

circumstances, this impact may warrant a differentiation of asset betas within a given sector. Although regulators have previously considered risk differentials *between* sectors, this might open the door to the quantification of risk differentials *within* sectors, and the allowance of 'tailored' rates of return for individual companies exposed to higher levels of risk.

Financeability and tax

The CC made several observations on financeability, which are likely to spur debate on the precise role of financeability tests across the utility sectors. In the course of the inquiry, the CC stressed that it was the responsibility of companies to ensure the financeability of their price control package, by issuing equity and reducing gearing if necessary. The CC made very clear that financeability tests were not the 'finance duty' of regulators:

We do not think that the financeability test derives from the regulator's duty to secure that companies are able to finance the proper carrying out of their functions. This duty is fulfilled by ensuring that the OPEX and CAPEX projections and the cost of debt and equity are adequate. [...] The financeability assessment is a cross-check that other aspects of the determination such as cost of capital and depreciation have been set appropriately.¹⁰

In its final report, the CC rejected Bristol's argument that the CC should take the company's financial structure 'as is' when assessing financeability. The CC agreed with Ofwat that Bristol's financial structure (including gearing) was for the company itself to determine, but at its own risk. The CC also observed that Bristol had, in the past, returned significant amounts of cash to its shareholders and that, had it not done so, its opening gearing would have been lower. The CC emphasised that customers should not pay higher prices to tackle financeability issues arising from a company's past decisions.¹¹

Against this backdrop, the CC began by modelling Bristol's financial profile using its actual gearing, and then reducing assumed gearing until target financial ratios were met. The CC stated that it would reconsider the price control building blocks only if this 'notional' gearing level, to ensure financeability, were unrealistically low (which it did not think was the case for Bristol). Importantly, however, as the CC reduced this notional opening gearing level to improve financial ratios, this gearing level was also reflected in the WACC and, 'for consistency', in the calculation of tax allowances. Thus, what Bristol lost on the WACC it gained in the form of higher taxation allowances. The CC also argued that the regulator should not claw back any tax savings that might arise from higher actual

gearing; the rationale being that, if the notional gearing is taken to represent the regulator's view of an efficient and prudent capital structure, the price control should also reflect this assumption, with any departure being a matter for shareholders.

However, this now leaves open the issue of how regulators might seek to reduce the incentive for companies to gear up going forward, and how any potential disincentives to issue new equity might be tackled.

Operating expenditure and efficiency

There were two main aspects to Bristol's case on OPEX—the initial operating cost allowance (for both base and enhancement OPEX) and the efficiency target—the former being the more significant. Bristol proposed an increase of £32.4m over its base OPEX and £14.2m over its enhancement OPEX from 2010 to 2015. The CC allowed increases of £15.7m and £12.2m respectively (£6.9m and £2.3m higher than Ofwat's allowances in its final determinations).

The main additional OPEX allowances were for pensions, bad debt, abstraction payments and quality enhancements. The CC increased OPEX allowances only where there was sufficiently robust and predictable evidence. For this to be the case the cost increase needed to be based on a central estimate and driven by factors outside managerial control that could not be substantially mitigated. It also needed to be an increase in OPEX that was not already captured in the RPI. Selective use of notified items was recommended where there was considerable uncertainty about the actual cost impact. Overall, the CC's approach to this area was fairly orthodox.

With regard to the efficiency aspect of Bristol's case, the CC examined two aspects of Ofwat's efficiency target: frontier shift (ie, the continuing efficiency target for the whole industry); and catch-up to best practice (ie, the additional target for those companies estimated to be relatively inefficient). Bristol argued that it was more efficient than Ofwat had determined. However, the CC supported the regulator's classification of Upper Band B for the company's OPEX efficiency, based on its assessment that Ofwat's methodology and data were sufficiently reliable to provide an estimate of relative efficiency; its own analysis, including an exploration of the impact of using Ofgem's approach (in particular, the use of an upper-quartile/upper-third benchmark); and an Oxera paper.¹²

On frontier shift, the CC agreed with Ofwat's ongoing efficiency assumption of 0.25% per annum. The CC's own analysis suggested 0.5%, but in order to leave

some potential for outperformance and to account for uncertainty in the calculations, it lowered this to 0.25% per annum. Its higher figure was based on a frontier-shift assumption of 0.9% per annum, offset by real input price inflation of 0.4% per annum. The former is fairly standard—indeed, the CC’s report notes that network industries’ regulatory decisions have converged on 1% per annum in recent reviews. However, the CC’s approach to input price inflation moved away from using historical annual averages because it considers that these do not correspond to recent trends due to the impact of the recession. As such, the CC assumed different assumptions for each year of the price control, with the levels returning to their historical-trend growth rates by the end of the period.

Finally, the CC disagreed with Ofwat that the enhancement OPEX target should be 1.5 times the base OPEX target, and instead proposed that it be subject to the same efficiency challenge as base OPEX.

Final observations

Overall, Bristol gained on OPEX, CAPEX and on taxation. However, what is of note is that the costs to Bristol of the inquiry were around £2.5m. The CC included a portion of these costs, and a portion of its own costs, within Bristol’s price limits. This was based on a judgement of whether, in the areas where Ofwat and Bristol disagreed, the CC agreed mainly with Ofwat or with Bristol. In the end, the CC allowed Bristol to recover around only one-fifth—£600,000—of (the CC plus Bristol’s) costs, as a one-off OPEX allowance in 2010/11.¹³

There are few immediate (or direct) implications for the rest of the water industry from the inquiry, in that other companies cannot now simply seek a revision to their price limits to reflect the above findings. In addition, many of the upward adjustments made in Bristol’s case on OPEX and CAPEX arguably related to its specific situation, rather than to more general points of methodology. It is therefore unclear whether other companies would now be better off had they pursued

the CC route in February. In particular, the CC’s decision on the vanilla WACC may lead some companies to breathe a sigh of relief that they chose not to contest Ofwat’s determination, although this might depend on their tax position.

Of more relevance to the rest of the water industry is that the CC did agree with a number of aspects of Ofwat’s methodology. For example, it broadly agreed with the asset management assessment approach to assess the robustness of companies’ capital maintenance forecasting methodologies, and with Ofwat’s use of the CIS (a mechanism introduced by Ofwat to encourage companies to put forward robust CAPEX proposals in the round).¹⁴ Bristol put forward several criticisms of the CIS, as had many companies in the industry. However, the CC ‘agreed with the principle that companies should have incentives to provide Ofwat with accurate projections of their CAPEX’. Although the CC was less certain that companies should be penalised for proposing schemes that Ofwat disagreed with on the grounds of ‘need’ (such as resilience), it considered that there was ‘sufficient transparency about the CIS’ and ‘sufficient opportunities for companies to abandon such schemes’. The CC had itself also excluded a number of schemes put forward by Bristol (including resilience) on the grounds that the company had not provided strong evidence on the benefits versus the costs.¹⁵

Incentives more generally appear to be a theme throughout the CC report. As discussed, on financeability, the CC emphasised that it should not simply take a company’s financing structure—including its level of gearing and its past dividend policy—‘as is’. In its view, this would not provide incentives for a company to improve its performance.¹⁶ In addition, the CC was keen to highlight that notified items—which, once prices are set, allow for prices to be revised should certain situations arise that are beyond a company’s control—do have a place within the overall regime as a safety valve, but that these should be used sparingly since they can also harm incentives for overall cost control.¹⁷

¹ In practice it is Ofwat that makes this referral, having received notification from the company concerned.

² See Oxera (2010), 'Decision Time: To Go or Not To Go?', *Agenda*, January.

³ Competition Commission (2010a), 'Bristol Water Plc—A Reference under Section 12(3)(a) of the Water Industry Act 1991: Provisional Findings Report', June 18th. Competition Commission (2010b), 'Bristol Water Plc—A Reference under Section 12(3)(a) of the Water Industry Act 1991: Report', August 4th.

⁴ The 'vanilla' WACC is the figure used in the modelling of England and Wales water company allowed returns (the vanilla WACC multiplied by the regulatory capital value, or RCV). The vanilla WACC is a weighted average of the pre-tax cost of debt and post-tax cost of equity. In this setting, taxation on allowed returns is treated separately. It is added in the modelling of allowed revenues as a cost to the business, similar to how OPEX feeds into price limits.

⁵ See Competition Commission (2010b), para 9.16.

⁶ This can be calculated using the following formula: $\text{equity beta} = (\text{asset beta} - \text{debt beta}) \times (\text{gearing}) / (1 - \text{gearing})$.

⁷ Ofgem (2009), 'Electricity Price Control Distribution Final Proposals', December 7th, Ref 144/09, para 3.79.

⁸ Competition Commission (2010b), op cit., para 9.8.

⁹ Competition Commission (2010b), op cit., para 9.7.

¹⁰ Competition Commission (2010a), p. 88.

¹¹ See Competition Commission (2010b), paras 10.7–10.25.

¹² Oxera (2010), 'Bristol Water's Efficiency: An Assessment of Relative Operating Expenditure Efficiency for Water Services', April.

¹³ See Competition Commission (2010b), p. 72, paras 11.1–11.4.

¹⁴ Where companies had forecast 'high' CAPEX in their business plans relative to what Ofwat thought was necessary—as reflected in a 'CIS ratio' significantly above 100—they would be part-funded in price limits for this CAPEX (see Table 1). However, once price limits are in place, a company with a high CIS ratio would earn a lower return than would otherwise be the case (with a lower CIS ratio) and would also earn a lower return if it subsequently went on to 'outperform' on CAPEX.

¹⁵ See Competition Commission (2010b), para 13, p. 6; and para 5.9–5.13, pp. 43–44.

¹⁶ See Competition Commission (2010b), paras 2.23–2.27 and 10.7–10.25.

¹⁷ See Competition Commission (2010b), para 6.18–6.19.

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Gunnar Niels: tel +44 (0) 1865 253 000 or email g_niels@oxera.com

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