

Agenda

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Water Draft Determinations: a stake in the ground

Ofwat, the water industry regulator for England and Wales, has put forward draft proposals which would mean that, on average, water company bills would drop slightly in 2010, with fairly stable prices thereafter up to 2015. This is in contrast to the price increases sought by the industry over the same period, of 2.5% per annum on average. What are the main factors driving such divergent views?

Every five years, Ofwat sets limits on the prices that the UK's 21 water and sewerage companies are allowed to charge. As part of the current periodic review process (PR09), the companies set out their own thoughts in April 2009 on what bills should look like over the 2010–15 period. Ofwat has now put its stake in the ground, publishing its Draft Determinations for water and sewerage charges, on July 23rd.

In line with previous periodic reviews, the regulator has taken a different view to that of the industry. While the companies have argued that price increases will be required, averaging a post-inflation increase of 2.5% per year over the five-year period, Ofwat's view is that, following a slight fall in 2010, bills should, on average, remain fairly stable, resulting in an effective reduction of around 0.2% per year.

The diverging opinions of Ofwat and the industry are mainly down to differing perceptions of the costs that companies are likely to incur over the next five years. While, in their Final Business Plans, the companies had argued for total capital expenditure (CAPEX) of £24.2 billion over the five-year period, Ofwat has proposed that £20.8 billion would be sufficient for the companies to fulfil their functions. CAPEX feeds indirectly into the price control, and is remunerated through a depreciation allowance and an allowed return on capital.

As regards the latter, Ofwat has adopted a post-tax cost of capital of 4.5%, which is significantly lower than the estimates put forward by most of the companies. Operating expenditure (OPEX) is also an important element of price limits, feeding directly ('£ for £') into customer bills. While Ofwat has included an allowance of £3.59 billion per annum, averaged over the five years, the water companies had argued for £3.85 billion.

Having said this, under Ofwat's proposals, what actually happens to customer bills over the 2010–15 period could turn out to be somewhat different. For example, because the UK Climate Impacts Programme's (UKCIP) latest scenario analysis for climate change was published two months after the water companies had submitted their Final Business Plans, Ofwat has excluded around £1.5 billion CAPEX previously earmarked by the water companies (using earlier UKCIP scenarios) for dealing with the effects of climate change on water supply and demand. This has instead been treated by the regulator as a 'notified item', which (if this spend does materialise over 2010–15) could trigger revisions to the price limits. A number of other areas of expenditure have, similarly, been excluded from the proposed price limits but will be treated as notified items.

Draft, final and beyond?

As regards bills, it is interesting to compare the views of Ofwat and the industry at this draft stage in PR09 with the same positions at the previous review in 2004 (PR04). As illustrated in the box below, in PR04 Ofwat and the industry broadly agreed that bills would need to rise, while disagreeing over the extent, with the industry asking for 6.2% per annum, and Ofwat deeming 3.1% to be more appropriate. By contrast, in PR09, Ofwat's view in the Draft Determinations is that bills can remain fairly flat.

Final Business Plans

At the last review Ofwat did, nonetheless, change its position between the Draft and Final Determinations, ultimately allowing an annual 4.2% rise in bills. It will be interesting to see to what extent Ofwat sticks to its position this time around, or whether the companies can convince Ofwat of their case before the Final

Determinations, due to be published in November. If they cannot, they have the option of seeking a referral of the price control settlement to the Competition Commission (CC).

However, referrals take up managerial time, and the outcome is not a 'one-way street'. The CC would go over individual cases with a fine toothcomb and, while it might allow more funding than Ofwat in certain areas, it could allow for less in others—especially weaker areas of a company's case, which might otherwise have remained undiscovered. The companies may need to take a step back and form an objective view of the merits of their case—which areas are stronger and which are weaker. This is relevant both to any discussions with Ofwat prior to the publication of its Final Determinations, and in deciding whether the CC route would, in practice, be a viable option.

What is of note in PR09 is the particularly striking gap between the positions of the smaller water-only companies (WOCs) and Ofwat on the required price limits. On average, the WOCs, despite proposing a higher 'K' (price limit) factor than the larger water and sewerage companies (WASCs), came off significantly worse in the Draft Determinations. The Draft Determinations also vary significantly by company. For example, of the WASCs, Yorkshire Water and Welsh Water have the least deviation between their position and that of Ofwat on the K factor, while Thames and Southern have the greatest.

CAPEX forecasting incentives

Ofwat's approach to CAPEX has developed significantly since PR04, with two main measures introduced in PR09 to encourage the companies to take greater 'ownership' of their Business Plans (rather than viewing the periodic review process as a bidding exercise). First, the water companies have needed to support their expenditure forecasts with cost-benefit analysis across the entire Business Plan. Second, Ofwat's introduction of the capital incentive expenditure scheme (CIS, an application of 'menu regulation') is intended to incentivise the companies to put forward truthful, accurate, forecasts of their CAPEX needs—rather than to game the system.

With regard to the CIS, Ofwat has, in its Draft Determinations, indicated how it thinks the various water companies have scored. Some explanation is useful here. Under the CIS, the CAPEX forecasts put forward in a company's Final Business Plan are treated as that company's view of the CAPEX 'baseline'. The Draft Determinations, following a series of challenges (relating to the necessity of the proposed CAPEX schemes, the solutions adopted, and their costs), represent Ofwat's own view on the appropriate CAPEX baseline for the company concerned.

In its Draft Determinations Ofwat has published the ratio of each company's baseline compared with Ofwat's assessment of that baseline. These ratios range from 107 (in respect of sewerage services supplied by Wessex Water) to 165 (in respect of water services supplied by Sutton & East Surrey Water). In terms of the CAPEX allowances included within the draft price limits, Ofwat has then included its own baseline assessment for each company, plus an additional allowance of 25% of the difference between its baseline and the baseline as assessed by that company.

Once prices are set, the way the CIS is then intended to work is that companies with lower CIS ratios can retain a greater amount of outperformance (ie, if they deliver the CAPEX for less than the level assumed in the price limits).¹ However, Ofwat's view is that, while the companies' CIS ratios (as indicated in their Final Business Plans) have improved on the levels indicated in their Draft Plans, the fact that no company has a ratio below 100% means that 'companies had not taken a balanced approach to risk across all cost drivers'² in terms of incorporating central estimates or trade-offs between expenditure areas. This seems to relate to Ofwat's earlier position that the leading companies should be able to submit a Business Plan below the baseline figures assumed by Ofwat, thereby securing more favourable incentives and greater rewards for outperformance. As it turns out, given that all the water companies have ratios above 100, several of them now face penalties under the CIS even if they do succeed in delivering the expenditure allowed for in the price limits.

Table 1 Industry and Ofwat's proposed price limit (K) factors

	Final Business Plans	Draft Determinations	Final Determinations
PR04			
WASCs	+6.3	+3.3	+4.3
WOCs	+5.5	+2.2	+3.1
All	+6.2	+3.1	+4.2
PR09			
WASCs	+2.5	-0.1	?
WOCs	+4.9	-1.1	?
All	+2.7	-0.2	?

Source: Ofwat (2004), 'Future Water and Sewerage Charges 2005–10: Draft Determinations', August; Ofwat (2004), 'Future Water and Sewerage Charges 2005–10: Final Determinations', December; Ofwat (2009), 'Future Water and Sewerage Charges 2010–15: Draft Determinations', July.

Moreover, they now have less of an incentive in terms of retaining the benefits of outperformance than would otherwise have been the case.

Essentially, the CIS is intended to penalise (or at least reward to a lesser extent) those companies that are seen to deliberately forecast high CAPEX in their Business Plans, against which they subsequently deliver low CAPEX once prices are set. It is not clear, however, that all the exclusions to the baseline adopted by Ofwat are aimed squarely at punishing 'Machiavellian' or 'gaming' behaviour. For example, some issues will simply come down to the different perceptions of Ofwat and the various water companies of the available evidence.

In addition, while the companies have scope to influence Ofwat's own baseline in the run-up to the Final Determinations, it is not clear how much flexibility they will have at this stage in revising their own individual baselines and in providing further evidence in support of this. Philip Fletcher, Ofwat Chairman, stated in July 2008 that:

the CIS process provides less scope for a company to rethink once it has submitted its Final Business Plan. While we will accept new evidence through representations following Draft Determinations to take account of significant changes in outputs or scope we will not allow a company to submit wholesale changes to its plans.³

Nonetheless, it remains to be seen what happens in practice.

CAPEX by purpose

More than 60% of the CAPEX covered by the CIS methodology comprises capital maintenance. In this respect, Ofwat has provided for significantly less non-infrastructure (ie, above-ground) maintenance expenditure than the levels requested by water companies across the industry: thus far, Ofwat has allowed expenditure of £7.9 billion against the £8.5 billion requested over the five-year period.

This is driven by two main factors. First, using its top-down serviceability approach, Ofwat has assessed almost all of the companies as having 'stable' serviceability. This is somewhat different to its view in PR04, in which some were assessed as having 'marginal' (or even 'deteriorating') serviceability. Hence, using this approach alone (once efficiency targets have been applied) would not, in itself, constitute a case for increased spend. Second, Ofwat has scored the robustness of companies' own bottom-up ('common framework') assessments of their capital maintenance needs. According to Ofwat's asset

management assessment (AMA), companies typically score just over three out of four. Both assessments will have led to challenges to the maintenance spend put forward by the companies.

As regards the water quality and environment programme, Ofwat has included in the price limits almost 100% of the statutory part of the National Environmental Programme, with the main exclusions relating to non-statutory schemes—a number of which had been excluded by Ofwat on the basis of its own research of customers' views. While the companies had sought a total of £5.2 billion (across all Business Plans taken together), they have been awarded £4.4 billion in the Draft Determinations (again, over the five-year period).

Ofwat has also pared back the amounts put forward by companies to deal with improving the supply–demand balance. The companies had, industry-wide, requested £3.4 billion, of which they have been allowed only £2.5 billion. A significant exclusion of companies' requested spend concerns metering. It appears that Ofwat has not been persuaded of the cost–benefit cases put forward by certain companies, which had proposed further meter roll-out but which operate in areas without significant supply–demand issues. Ofwat has also cut companies' proposals to tackle leakage, providing only for the maintenance of current levels or for a slight decline. Ofwat's view is that further expenditure would be too costly at the margin and would represent 'poor value'.

On enhancing service levels, the water companies had requested £1.8 billion, but only £0.9 billion has been proposed. Ofwat did allow for expenditure to address sewer flooding, but challenged companies' forecasts of the number of 'new problems' that would emerge. In addition, while most (around 90%) of the proposed schemes to reduce odour at sewerage treatment works were allowed for in the Draft Determinations, the solutions adopted and estimates put forward by various water companies were challenged by Ofwat.

OPEX and efficiency

In addition to cuts to proposed CAPEX, Ofwat has proposed allowing less OPEX than companies had requested in their Final Business Plans. In contrast to CAPEX, Ofwat's approach to OPEX has not altered significantly since PR04. Despite various industry reports on suggested alterations to its regime, as well as guidance from the CC, Ofwat has stuck with its core approach of undertaking econometric modelling to compare companies at one point in time. The Draft Determinations are based on a comparison of 2007/08 data.

In their Full Business Plans, the companies had requested increases in OPEX of around 12% to address upward cost pressures including increases in rates, pensions, power costs, bad debts and the impact of the Traffic Management Act 2004. The Draft Determinations, in contrast, allow for an increase of 3% only. It is worth noting, however, that, due to the current uncertainty, some of the forecast OPEX not allowed by Ofwat will, nonetheless, be covered as 'notified items' or addressed through other potential future recovery mechanisms.

Some of the more recent cost increases seem to have been taken into account in the Draft Determinations through Ofwat using the cost level in 2008/09 as the starting point for the OPEX allowance in PR09. This is in contrast to the approach used by Ofwat in previous reviews, which used data from the previous one to two years, and did not allow for any cost increases in the interim, unless these were robustly justified by the company. This is perhaps an acknowledgement by Ofwat that base costs have indeed increased, but could be flattening out—ie, Ofwat has allowed for recent, observed, increases within the price control from the start, but does not project significant increases into the future due to the uncertainty of forecasting them.

Having identified the cost base from which to project future allowances, Ofwat has then established what efficiency improvements should be expected for each company over the next five years. In doing so, it has aggregated two separate components: 'catch-up' improvements to the best-performing water companies, based on a series of econometric models, and a continuing improvement factor (or 'frontier' shift).

These catch-up factors range from 0% (for the frontier companies) to 2.9% per annum (for the most inefficient companies) in water services, and from 0% to 2.2% per annum in sewerage services.⁴ These are comparable to the catch-up ranges in PR04 (respectively 0% and 2.7%, and 0% and 1.5% per annum). As such, on the basis of Ofwat's assessment, there does not appear to have been much convergence in AMP4 (ie, companies do not appear to be bunching around the efficiency frontier any more than they were five years ago). It is also of note that the basis for all of this analysis is 2007/08 data. Ofwat has yet to analyse the 2008/09 data, but will do so for the Final Determinations, which may lead to change in a number of these 'company-specific' targets.

In addition to these catch-up rates, Ofwat has included a continuing improvement factor for technological improvements. Net of input price inflation, the regulator has assumed rates of 0.25% per annum for OPEX, in both water and sewerage services. While this is lower than the rates used in PR04 (of 0.3% for water and

0.5% for sewerage per annum), this assumption is higher than that proposed by Ofwat's consultants, commissioned to review this issue, as well as Water UK, and is also higher than the preliminary position of Ofgem, the GB energy regulator, on the issue with respect to the electricity distribution network operators (DNOs).⁵ All of these views suggested industry frontier shifts, net of input price inflation, of around zero.

Financial issues

In addressing financial issues, Ofwat acknowledges the risk to customers of setting the cost of capital too low in terms of the potential effects on companies' credit ratings and their ability to deliver CAPEX programmes at an efficient cost. However, Ofwat maintains that water is a low-risk business, a situation which is further supported by the package of risk mitigation mechanisms in the regulatory regime.

A consideration of some features of the regulatory regime gives an insight into the reasons for investors' perceptions of the sector as low-risk. For example, investors in the sector have a degree of protection against general price inflation, as a result of both the regulatory capital value (RCV) and tariffs being indexed to the retail prices index (RPI). Investors are also offered protection through the pass-through mechanisms in the water sector, which are designed to deal with externally driven changes to requirements once prices have been set; these include 'interim determinations' of prices for material changes, and 'logging up' of expenditure for less material changes in requirements.

As highlighted above, the water companies' CAPEX forecasts have been revised downwards in Ofwat's Draft Determinations. Many of these revisions feed into lower growth in the projected RCVs, which are expected to increase by 9.4%, on average, over the period. This compares to 13% growth in 2005–10. This has two effects that lower bills relative to companies' Final Business Plans: a reduction in the depreciation allowance; and a reduction in the base used to calculate the monetary value of the return on capital (the cost of capital multiplied by the RCV).

Ofwat's assessment of the level of risk in the water industry is reflected in its proposed real cost of capital of 4.5% post-tax (5.1% vanilla).⁶ This is significantly lower than at PR04 (5.1% post-tax), and below the estimates proposed by most of the companies. It is useful to compare Ofwat's proposals with the CC's recommendations for Stansted Airport's price control over the five-year period which took effect from April 1st 2009.⁷ The option of a CC referral on the cost of capital alone may look unattractive, given the CC's views in the Stansted case. Moreover, while the cost of capital adopted by Ofwat may be an issue for certain

companies, this will need to be assessed as part of the overall package in the Draft Determinations.

In addition, while a single cost of capital has been set for the WASCs, the two largest WOCs (South East Water and Three Valleys Water) have been allowed a premium of 0.1% on the cost of debt, with all other WOCs allowed a premium of 0.4%, to reflect the difficulties of the smaller companies relative to WASCs in accessing sources of debt. Interestingly, since credit ratings agencies have argued that smaller companies in the water sector have greater exposure to specific risks (asset and revenue concentration, exposure to event risks), Ofwat has adopted a lower gearing assumption for smaller companies (52.5%, in comparison with the 57.5% for the WASCs).

In addition to assessing the weighted average cost of capital (WACC), Ofwat has modelled the financeability of the various water companies, given their CAPEX commitments, under a notional capital structure based on opening gearing of 57.5%. This modelling tests whether companies will maintain financial ratios consistent with a 'strong BBB+/Baa1 rating' over the course of AMP5.⁸ Owing to their greater exposure to specific risks, the WOCs were required to attain higher ratios than the WASCs.

In terms of any remedy should financeability problems become apparent, Ofwat is of the view that equity injections would be an appropriate means of alleviating the financing constraints that might result from large CAPEX programmes. This will have an effect on one company (Thames Water) in particular, the Draft Business Plan of which assumes an injection of equity amounting to 15% of opening notional equity—necessary to address the deterioration in financial ratios projected as a result of its large CAPEX programme. Ofwat has included an allowance for additional funds to cover the cost of equity issuance, estimated at 5% of the value of equity to be issued.

In conclusion ...

Ofwat and the water companies will have much to discuss over the coming weeks and months. The regulator is determined to keep bills down to protect consumers, particularly in a recessionary environment. The difference between what the water companies want and what Ofwat is proposing does vary by company. Each company will need to identify where it has a stronger case for arguing for more funding, where its areas of weakness lie, and, crucially, whether it has sufficient evidence to support its case.

¹ Ofwat (2008), 'Capital Expenditure for 2010–15: Ofwat's View on Companies' Draft Business Plans', December.

² Ofwat (2009), 'Future Water and Sewerage Charges 2010–15: Draft Determinations', July 23rd.

³ Ofwat (2008), 'Ofwat City Briefing: Philip Fletcher's Presentation', July 1st.

⁴ Since its January efficiency report, Ofwat has amended the regional wage and other special factor adjustments in its comparative efficiency analysis. These amendments generally improve companies' efficiency positions relative to the January report, particularly those of the south-east companies. Ofwat (2009), 'Relative Efficiency Assessments 2007–09: Supporting Information', January 29th.

⁵ Ofgem (2009), 'Electricity Distribution Price Control Review: Initial Proposals—Allowed revenue—Cost Assessment', August, para 4.95.

⁶ Post-tax cost of equity, pre-tax cost of debt.

⁷ Competition Commission (2008), 'Stansted Airport Ltd: Q5 Price Control Review', October 23rd, report presented to the Civil Aviation Authority.

⁸ Ofwat (2009), 'Future Water and Sewerage Charges 2010–15: Draft Determinations', July 23rd, p. 114.

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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