

Water Industry Economics

July 2023

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Water and sewerage companies in England & Wales have long-term entitlements to collect revenues from customers to cover the costs of the services they provide.

Some of the key features of this financial framework are set out over the following pages.

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1. Water bills are reviewed and reset every five years

As monopoly companies, water companies must adhere to price limits imposed by the water industry's independent regulator, Ofwat.

Ofwat reviews the level of bills every five years.

At each periodic review, the companies, Ofwat and the two quality regulators (the Environment Agency and the Drinking Water Inspectorate) discuss the service/performance levels the companies are to achieve over a new five-year period and the efficient costs that companies will incur in meeting those targets, including the sizing of companies' investment programmes.

Customers are expected to pay for efficient costs in full – i.e. where staff have to be paid or supplies have to be bought or concrete has to be poured into the ground – the expected cost is passed on to customers because we ultimately benefit from the work done.

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2. We pay for capital expenditure in instalments over the life of the built assets

Ofwat allows companies to recover forecast efficient day-to-day operating expenditures pound-for-pound as costs are incurred.

Ofwat does not, however, ask customers to pay for investments in the year that money is spent. Instead, Ofwat requires us collectively to pay for new investments in instalments over the expected life of the built assets.

By way of an illustration, suppose that it is agreed that a company is to spend £50m building, say, a new sewerage treatment works. The cost to consumers might in this case be set at £1m per annum for a period 50 years, in line with the expected service life of the new plant.

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3. Companies require external finance

To be able to proceed with such projects, if payment from customers is only going to come in gradually over a period of many years, companies need someone to put up the monies that they need to pay for labour, materials, contractors, etc.

Back in the 1980s, it was decided that this financing should come from investors, rather than from government as had been the case in the past.

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4. The total amount that customers owe to companies, and companies in turn owe to investors, is a sizeable sum

As of July 2023, after more than 30 years of sustained investment, the net total amount that England & Wales water companies have collectively invested in the system, but not yet recouped from customers, is just over £100 billion (in 2023 prices).

This 'regulatory capital value', in turn, has been financed by £100 billion in capital taken from private investors.

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5. Companies finance the £100 billion using a mix debt and equity

Some of the capital requirement has been met by companies borrowing money from banks and from the bond market.**

The remainder of the required capital has come from shareholders.

In a few cases the shareholder capital has been injected via the issue of new shares, but most of the time shareholders have contributed by not taking the full value of the returns that they are entitled to (see below).***

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6. Regulators have tended not to prescribe a debt:equity mix

There is no single right mix of debt and equity financing.

Across the sector, the current financing mix is about 70% debt and 30% equity.

The mix varies from company to company and changes every year. There have also been occasions in the past when companies have swapped a portion of their equity finance for debt finance, or vice versa.

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7. We pay a return to investors

Investors can put their money into thousands of possible investments around the world. They are not going to put their capital into water companies unless they receive a reasonable rate of return.

We have to cover this return via our bills. We rely on Ofwat to set returns at a level that is no higher and no lower than is necessary given the returns that investors can make on similar-looking investments elsewhere.

Most companies get exactly the same rate of return (the only exceptions are the very small water companies and the stand-alone Tideway project).

It has long been Ofwat policy that the rate of return does not vary according to a firm's particular choice of capital structure.

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8. Bills for the period 2020–25 provided for an annual return of 5.02%

In Ofwat's last periodic review, completed in 2019 at a time of low interest rates and low inflation, Ofwat assessed that the required return was 5.02% per annum.*

(The return for the period 2025–30 will be decided next year. Ofwat's first proposals published last year would provide for a slightly higher return of approximately 5.3% per annum.)

The 5.02% figure applies across the whole of the £100 billion that water companies have taken from investors – i.e. total water industry financing costs are today several billion pounds per annum, due to the scale of industry investment.

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9. Profits $\Leftrightarrow$ financing costs

Profit is sometimes a dirty word. An optional extra. But in the case of the water industry, profit is really just another name for the financing costs that companies face.

If anyone should ask "why does my water company need to make a profit?", the answer is: because the company has taken capital from investors to support a deal in which customers pay for investment in instalments only over the life of the built assets. And that capital does not come free – i.e. it has a cost.

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10. Investors' actual returns depend on companies' performance

Returns are not guaranteed. With bills fixed for five-year periods by the regulator, companies have to control their costs and meet performance targets if they want to make an actual profit.

If companies spend more than the regulator has forecast, or if they can't meet performance targets, returns may fall below 5%.

If companies spend less than the regulator has forecast, and meet or exceed performance target, they may be able to earn higher returns.

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11. It is possible that a company could under-perform to such an extent that it fails

There is no absolute floor on water company returns.

If a company is having repeated problems living up to Ofwat's expectations then, in extremis, a company could default on its obligations to lenders and an administrator may need to be called in.

Some investors would almost certainly lose money in such an event.

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12. Each new price review requires Ofwat to strike a careful balance

Ofwat therefore plays an absolutely critical role in the set up that we have just described.

The regulator is responsible for, among other things: setting performance levels; estimating efficient costs, including efficient investment costs; calibrating an appropriate rate of return on investor capital; and sizing bills accordingly.

We need Ofwat to get its sums right.

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12. Each new price review requires Ofwat to strike a careful balance (cont'd)

We do not want Ofwat to set bills higher than they need to be.

But, equally, if, as a society, we want water companies to keep investing on our behalf, and if we want the deal in which companies invest now and we pay later to continue, companies have to be able to retain and attract new investor capital.

This capital will only be forthcoming if investors believe that the out-turn returns that they can get from the sector are as attractive as the returns on offer on comparable investments in other industries and other countries.

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Notes

* The precise structuring of this return is slightly unusual. Ofwat didn't provide for the full 5.02% to be paid to companies in cash in year. Instead it provided for an index-linked return, in which companies were allowed to charge around half of the allowed return in bills and accrued the other half via indexation of the regulatory capital value in line with inflation.

** The index-linked debt structure of returns means that water companies often borrow by issuing index-linked debt

*** Equity formation has mostly taken the form of companies accepting the indexation of the regulatory capital value in lieu of a full cash return

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Further reading

A more detailed discussion of these points can be found in the 'Guide to Economic Regulation', available at:

<http://www.first-economics.com/guides.html>