

Agenda

Advancing economics in business

What is the future of financeability tests?

‘Up in smoke, down the drain’, the August 2013 article in Agenda’s series on the cost of capital, considered how regulators measure and remunerate risk in the price control. One of the tools that helps them to do this is the ‘financeability duty’. What is this duty, and how has its application changed over time?

Many, if not all, regulators have a financing, or ‘financeability’, duty set out in legislation (see the box below). This duty recognises the need for regulated companies to be able to raise finance on reasonable terms in order to support necessary investment programmes.

Examples of regulators’ financing duties

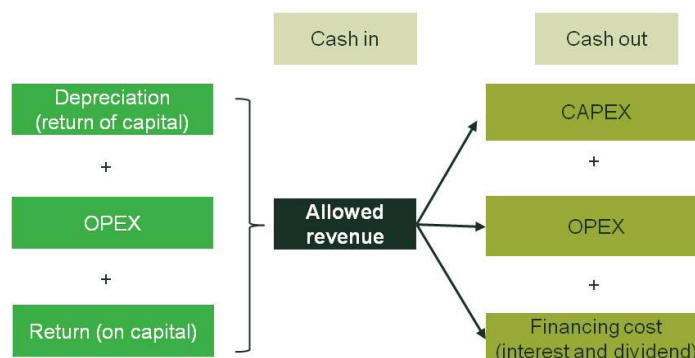
- **One of the primary duties of Ofwat is to ensure that companies are able to finance their licensed activities.**
- **Ofcom, Ofgem, the Civil Aviation Authority (CAA), and the Office of Rail Regulation (ORR) all have secondary duties to have regard to, and act in, a manner such that the licence-holders will not find it unduly difficult to finance their licensed activities.**

Note: Ofwat is the economic regulator of the water industry in England and Wales; Ofcom, the UK communications regulator, which has a financing duty in relation to Royal Mail; Ofgem, the energy regulator for Great Britain; the CAA, the UK regulator of designated airports and National Air Traffic Services; and the ORR, the GB Office of Rail Regulation.

Source: Water Industry Act (1991), Section 2. Postal Services Act (2011), Section 29. Gas Act (1986), Section 4. Electricity Act (1989), Section 3. Civil Aviation Act (2012), Section 1. Transport Act (2000), Section 1. Railways Act (1993), Section 4.

The revenues that the regulated company is allowed to collect from customers typically include two components: a return of capital and a return on capital component (see Figure 1). Taken together, these components ensure that investors recover from customers the money they have put into the business to finance capital investment programmes; that they earn a reasonable rate of return on this investment; and that they do so over the life of the asset.

Figure 1 Cash inflows and outflows of a regulated company



Note: OPEX, operating expenditure. CAPEX, capital expenditure.

Source: Oxera.

If returns are sufficient to remunerate investment, why might financeability problems arise?

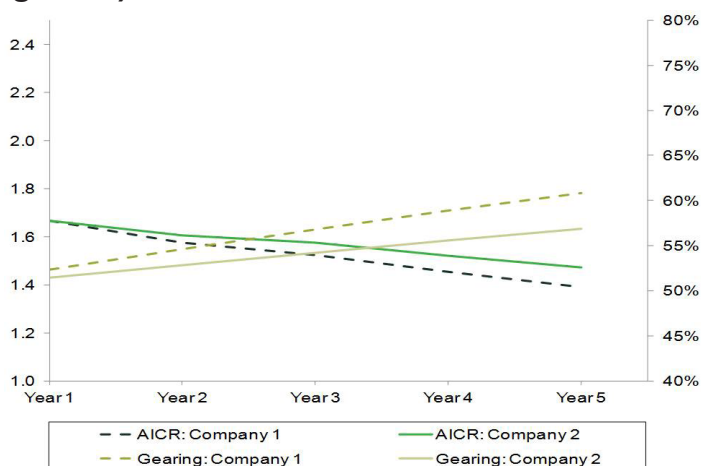
In the short run, a company’s ability to access debt and equity markets could be constrained despite the promise of a return of, and on, capital in the long run. For example, debt investors may be concerned about a company’s short-term cash-flow position and its ability to service interest payments. This is typically measured by interest coverage ratios, which compare measures of cash generation to financing costs. Although the regulatory model is designed to ensure cost recovery in the long run, in the short run the company may be generating insufficient cash after paying for CAPEX and OPEX, which will increase requirements for external financing and put pressure on its own ability to service its financing costs.

In other words, the regulatory projections of cash net of operational cash costs might not always match the expected cash financing costs, which might be of concern to investors.

Figure 2 shows why a company (Company 1) with a

larger capital investment programme (e.g. a large asset improvement programme) will need to borrow more and will have poorer credit ratios than one with a smaller investment programme (Company 2). A larger capital investment programme will be associated with larger cash outflows, increasing the need to raise debt (as shown by a larger increase in gearing over time for Company 1). This, in turn, will lead to higher interest payments as a proportion of the cash flow generated by the business (as shown by a greater reduction in the interest coverage ratio over time).

Figure 2 Impact of capital investment (asset growth) on credit metrics

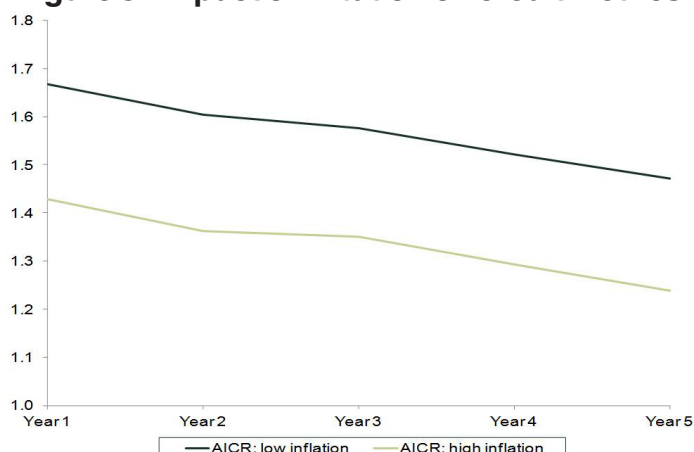


Note: AICR, adjusted cash interest coverage ratio, defined as (funds from operations (FFO) – capital charges)/net interest on debt. FFO = earnings before interest, tax, depreciation and amortisation (EBITDA) – tax. Gearing = net debt/regulatory asset base (RAB).

Source: Oxera.

In addition, in a regulatory model where the company is allowed to earn a real cost of capital on its asset base, even in the absence of a large capital investment programme, the returns provided through the regulatory model may fall short of the required interest payments because companies finance themselves primarily by issuing fixed-rate nominal debt. This issue is exacerbated when inflation is higher—i.e. when the gap between the nominal and the real rate of return is higher. This is illustrated in Figure 3.

Figure 3 Impact of inflation on credit metrics



Source: Oxera.

How do regulators assess whether a company is financeable?

A company's financeability is usually assessed by the 'financeability test'. The test has typically involved modelling the cash flows of a notional company that performs in line with the regulator's assumptions, and checking whether the resulting credit ratios meet the targets required by credit rating agencies to maintain an investment-grade credit rating. The lowest investment-grade credit rating is BBB–/Baa3. Regulators often target a 'comfortable' rating of around BBB+/Baa1 or A–/A3. Examples of the ratios and targets typically used by regulators and rating agencies are provided in Table 1.

Table 1 Targets that informed Ofgem in the most recent transmission and gas distribution price control reviews

Financial indicator	Definition	Fitch		Moody's		Standard & Poor's	
		A	BBB	A	Baa	A	BBB
Gearing (%)	Net debt/RAB	50–65	>65	45–60	60–75	<70	>70
Cash interest cover (times)	FFO/interest expense	4.0–5.0	<4.0	3.5–5.0	2.5–3.5	>3.5	2.5–3.5
Adjusted cash interest cover (times)	(FFO – capital charges)/interest expense	>1.7	<1.7	2.0–4.0	1.4–2.0		
FFO to debt ratio (%)	FFO/net debt			12–20	8–12	>12	8–12
Retained cash flow to FFO ratio (%)	(FFO – dividend)/FFO			1.5–2.5	1.0–1.5		

Note: Different agencies may have different definitions for some of the ratios, and may make adjustments to how the regulator defines them.

Source: Ofgem (2011), 'Decision on strategy for the next transmission and gas distribution price controls – RIIO-T1 and GD1 Financial issues', Figure 4.1

The financeability test highlights the actual volatility of cash flows of a regulated business, which can inform investors about the appetite for, and suitability of, investment in a regulated business.

Financeability solutions

How have regulators responded in the past when they have not been satisfied with the outcome of the financeability test? There are a range of solutions, which can be characterised as **revenue solutions** and **capital structure solutions**.

Revenue solutions—the past?

In reviews prior to those currently in progress or recently completed (since 2009), Ofgem and Ofwat made a number of adjustments to the allowed revenue of the energy and water networks, as follows.

- **Explicit revenue uplifts.** In the 2004 water price review, Ofwat allowed a number of companies additional revenue totalling £430m in net present value (NPV) terms over the five-year price control period, justified on the basis of large CAPEX programmes:¹ the larger

capital programme in our final determinations has exacerbated the financial constraints companies face if they are to maintain an adequate financial position in the last three years of the period. For this reason, price limits are higher than they would otherwise have been in order to maintain financeability in those years.

- **Accelerating depreciation.** In previous electricity distribution and transmission price controls, Ofgem shortened the asset life over which companies' assets were depreciated. This had the effect of bringing forward revenues from future periods by increasing allowed revenues in the short term and decreasing them in the future, all else being equal. For example, if a company spends £100m on a new asset and the asset life is reduced from 40 years to 20 years, instead of receiving £2.5m each year in allowed depreciation for 40 years, the company receives £5m a year for 20 years.²
- **Treating a proportion of CAPEX as pay-as-you-go.** In previous gas distribution price controls, Ofgem allowed companies to recover 50% of replacement expenditure in the year it was incurred rather than over the life of the assets. As with accelerating depreciation, this brings revenues forward from future price control periods.³

All these solutions increase cash flows to improve financeability, either with a corresponding adjustment in future periods or with no adjustment at all.

Capital structure solutions—the present?

More recently, options to address financeability issues have centred on **capital structure solutions**, which include the following.

- **Changing the notional level of gearing.** A reduction in the assumed level of gearing for the notional company will reduce assumed interest payments and improve cash flows and credit ratios.
- **Increasing the proportion of debt assumed to be index-linked.** A company that has issued index-linked debt pays a real rate of interest on the debt, with the face value of the debt increased annually by inflation. This reduces the mismatch between cash inflows based on a real rate of return and cash outflows based on a nominal interest rate, which is relevant for some cash interest coverage ratios. However, this needs to be in the context of a realistic assumption on an achievable level of index-linked financing.
- **Injecting equity/reducing dividends.** Where the projected cash flows prove to be insufficient due to increasing gearing, the regulator might simply assume that the cash-flow 'gap' will be filled by equity investors putting more money into the business and/or accepting lower dividends.

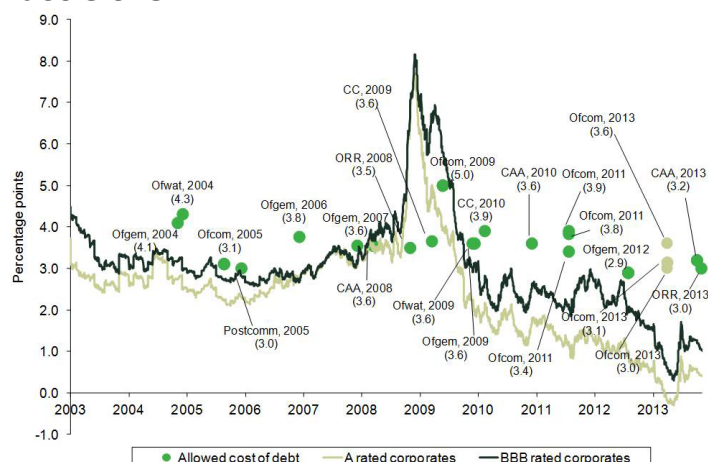
The UK Competition Commission recently used the first of these solutions to deal with financeability issues in the Bristol Water inquiry.⁴ A number of sector regulators have also said that capital structure solutions are their preferred method for addressing financeability issues. Increasingly, the focus is on putting the onus on the companies' management to address any potential short-term cash-flow shortfalls.

What is the future of financeability tests?

As regulators are increasingly leaning towards capital structure solutions to address financeability concerns, what does this mean for the future of financeability tests? In simple terms, capital structure solutions involve changing the assumptions in the regulator's model so that it produces satisfactory ratios. As, theoretically, it might always be possible to change the modelling assumptions so as to produce satisfactory ratios, this raises the question of whether such an approach is consistent with the regulator's financing duty.

First, is there a case for paying greater attention to the company's actual financial position in financeability testing? There is a good rationale for considering a notionally efficient company, in order to preserve the right incentives for companies to finance themselves efficiently. However, when actual capital structures and debt costs deviate materially from the regulator's vision of the notional company, is it appropriate not to give any weight to this information? This could be particularly relevant if financeability tests appear to be met at the notional level of gearing, but not at the actual level of gearing.

Second, since incentive-based regulation was first introduced, interest rates—and subsequently corporate debt costs—have followed a declining trend, at least in Great Britain (see Figure 4). Regulators with a financing duty typically set the cost of debt allowance with reference to both historical and current debt costs. Given the past trajectory of interest rates, this has meant that regulatory determinations have typically 'lagged' movements in the market, with the cost of debt allowance typically set above prevailing market rates.⁵

Figure 4 Cost of debt and regulatory decisions

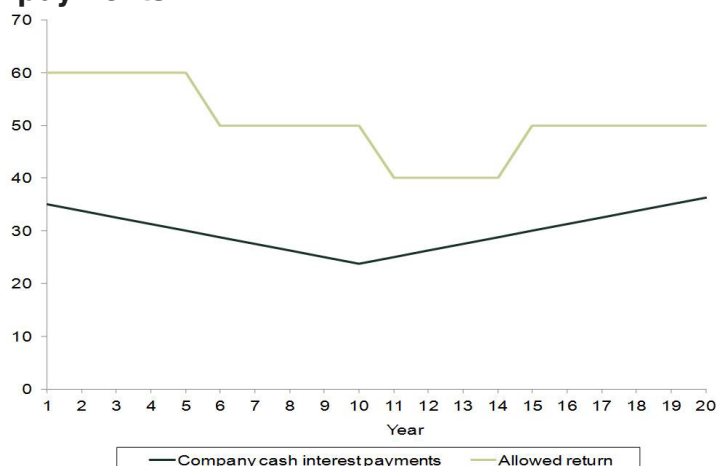
Note: CC, Competition Commission. Pale green dots denote initial proposals, not final decisions.

Source: Oxera analysis, based on regulatory documents and data from Datastream.

With interest rates currently at record lows, largely due to the impact of unconventional monetary policy, and with some recent signs of them rising, it appears much more likely that interest rates will rise rather than fall going forward. This, in turn, raises the question of how the changing interest rate environment will affect the financeability of regulated companies.

In the past, the environment of declining interest rates has typically helped to cushion the mismatch between cash inflows based on a real rate of return, and nominal interest payments. In future regulatory periods, however, as lower interest rates feed into allowed returns with a lag, but spot interest rates start to rise, the mismatch could start to worsen.

Figure 5 shows how actual interest payments compare with allowed returns in an environment of first declining interest rates (years 1–10), and then increasing rates (years 11–20). In an environment of rising interest rates, where the regulator reflects the increase with a lag, cash interest costs could rise faster than allowed returns, putting pressure on credit ratios.⁶ This is illustrated by the narrowing of the gap between allowed returns and interest payments in Figure 5—in particular, in years 11–15.

Figure 5 Allowed returns versus interest payments

Source: Oxera.

To what extent this will create difficulties will differ by company and by sector, and will depend on the composition of companies' debt portfolios as well as new debt requirements. However, this does illustrate that, whereas market conditions in the past may have turned out more favourable than the regulator expected, alleviating any financeability pressures on companies, it may now no longer be possible for regulators to rely on external factors in the same way to improve financeability.

Conclusion

The concept of the financeability test is well established—indeed, for some regulators, the financing duty is part of their primary duty. However, there is not a well-established approach to how regulators should respond when financeability tests indicate a potential problem. In recent years, as interest rates have declined, regulators have moved away from making revenue adjustments, and have been able to rely mainly on adjustments to capital structure assumptions.

As the allowed rates of return are coming down, and interest rates are starting to rise, the external environment may no longer help to alleviate financeability pressures. This suggests that it is still important for the regulator to have a sound economic framework for the test.

¹ Ofwat (2004), 'Future water and sewerage charges 2005-10', p. 16.

² For example, see Ofgem (2004), 'Electricity Distribution Price Control Review: Final Proposals', November.

³ For example, see Ofgem (2007), 'Gas Distribution Price Control Review: Final Proposals', December.

⁴ Competition Commission (2010), 'A reference under section 12(3)(a) of the Water Industry Act 1991', Appendix N, August.

⁵ Oxera (2013), 'Debt in depth: the cost of debt in regulatory determinations', Agenda, April, available at www.oxera.com.

⁶ A similar point was raised by Moody's. See Moody's (2013), 'UK Regulated Utilities: Cash Flow Vulnerable to Low Real Interest Rates', 9 October.