Financeability:
The Key Issue in Regulation Today?

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1. Introduction

During the last 18 months, regulators across the utility sectors have discovered that the traditional 'building block' approach to price setting may not be quite as robust as it had previously appeared. Four successive reviews, carried out by ORR, Ofgem, Ofwat and the CAA, have shown that providing revenues sufficient to cover operating expenditure, depreciation and the cost of capital may not necessarily make regulated companies financeable in the perception of investors and rating agencies.

At a time when most utilities are being asked to finance significant increases in investment, the emerging differences between the regulators' economic calculations and the views of the financial community are troubling. In particular, it should be of concern that regulators are increasingly being presented with a choice between two courses of action: either sticking with the prices they derive from their 'building block' approach and thereby risking companies not being able to finance new investment (and perhaps suffering financial distress); or restoring the financial profiles sought by rating agencies and investors, at the cost of price rises for customers.

In this note, we show how the problem has two main root causes: the trend increase in the levels of debt in companies across regulated sectors; and the growing mismatch that this leads to between the real (index-linked) returns earned by companies on regulatory asset bases ('RABs') and the nominal interest rates payable on debt. We also suggest in outline how these problems might be overcome and identify a number of pieces of work that the regulators might wish to work on together over the next year. The note is organised as follows:

- section 2 explains in more detail why tension has arisen between the economic principles of regulators and the concerns of the financial community;
- section 3 looks at ways in which this tension could, in principle, be reduced over time; and
- section 4 sets out what regulators might do in the short term to prepare themselves for the inevitable re-emergence of these issues in the next round of reviews.

2. The tension between economic principles and financeability

After predominantly or wholly debt-financed companies started to appear in the utility sector around 2001, regulators and government carried out a number of studies to understand better the impact that high gearing might have on the long-term interests of customers. Most of this work focused on the consequences that arise from the removal or depletion of the equity buffer, particularly in relation to the effect on incentives and the risk of financial distress. Until very recently, however, very little attention had been paid to the possibility that high gearing would reveal an inherent incompatibility between the conventional approach to setting the cost of capital and the requirements of most lenders.

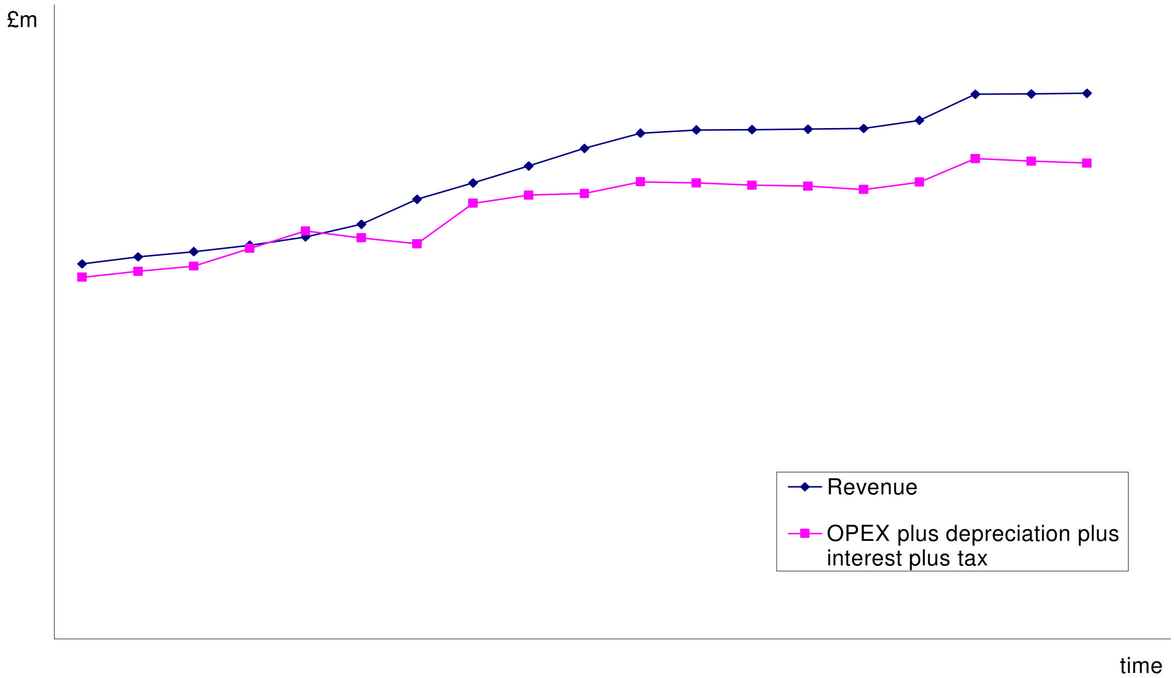
2.1 Compensating for inflation

The key issue here is the way in which investors are compensated for the effects of inflation. ORR, Ofgem, Ofwat and the CAA have all previously chosen to inflate the RAB in line with the retail price index, so that compensation for the effects of inflation comes mainly[1] through the depreciation of the RAB over time. Since depreciation in most industries is profiled over periods of 20 years or more, this means that regulators have, in effect, been spreading compensation for inflation over successive control periods rather than ask customers to pay upfront when the erosion of companies' financial investment is first felt.

This contrasts with the way in which companies typically remunerate lenders for the financing that they make available to a business. Most debt is structured so that the annual interest rate is set in nominal terms, compensating lenders for all the effects of inflation on an ongoing, annual basis, and companies pay back the original (uninflated) principal after (or over) a fixed period of time. Although index-linked bonds have started to appear in regulated companies' balance sheets in recent years, the market for such debt reportedly remains thin and most regulated companies have little alternative but to enter into financing which requires payment for the effects of inflation upfront.

These differences in the timing with which payments go out to lenders and revenue comes in from customers can have significant effects on cashflow for companies that rely heavily on debt finance. By way of an example, we depict below the way in which one regulated company's costs and revenues will move over time if its regulator continues to use the conventional building block model to set prices. The projections show that the company will have only just enough income during the next five-year period to cover interest payments, while 20 years from now there will be a substantial margin between revenues and costs.

Figure 1: Projected revenue vs 'costs', 2005/06 – 2024/25, out-turn prices



[1] Some compensation is also provided as the (real) cost of capital is earned on the index-linked RAB, but these amounts tend to be small in the years immediately after an investment is added to the RAB.

The scale of this timing difference changes over time and depends on the average age of the debt in a company's balance sheet and the relative sizes of inflation and interest rates. However, the relatively recent privatisations of most regulated companies, combined with their high ongoing investment levels, suggests that this gap should still be significant in most cases.

2.2 Why regulators have to consider financeability

In purely economic terms, the profile of a company's revenues should have no bearing on its attractiveness to investors; all that ought to matter is the net present value of future revenues less future costs.

However, there are at least two practical reasons why this is not necessarily the case:

- lenders typically want to be sure that there is a sufficient cushion for risk in the company's annual revenues. Whilst the (real) cost of capital allowance may provide a reward for taking risk, it does not necessarily provide an immediate cushion for absorbing it. This has led rating agencies to argue that default risk increases as the annual ratio of earnings to interest diminishes; and
- whilst the discretionary nature of dividend policies should theoretically give companies some flexibility, from the perspective of shareholders, dividend policy can have a material impact on value – as a general rule, a company that reduces dividends unexpectedly also triggers a reduction in its share price. This deters companies from adjusting dividends in a way that might otherwise provide lenders with the cushion that they require during periods when the ratio of earnings to interest is low.

As far as regulators have been able to ascertain, the emphasis that rating agencies place on the annual relationship between earnings and interest payments is such that lenders will always require evidence of interest coverage well in excess of 1x in order to give an investment-grade credit rating. In the example shown in the above chart, the absence of sufficient interest coverage in the short term is therefore a serious problem – although there is no question that the business will generate sufficient earnings to reward both shareholders and lenders in full for their investment, the company may well not be able to obtain an investment-grade credit rating, thereby jeopardising its ability to finance its ongoing activities.

2.3 Recent experience

It is for these reasons that regulators in recent price settlements have been including as an additional step in their periodic reviews an explicit assessment of the financeability of their proposed conclusions. This assessment is largely made through comparing projected financial ratios for companies against the threshold values for those ratios that are indicated by rating agencies and investors as necessary to maintain credit ratings or debt agreements.

When such tests first appeared in regulation in 1999, Ofgem and Ofwat found that the mismatch between the cost of capital allowance and interest payments was not substantial enough to cause any company to breach the financial ratios that were then considered to be consistent with investment grade. Since this time, companies across the utility sector have undertaken considerable amounts of capital investment financed almost entirely by debt, while the company limited by guarantee and other highly leveraged corporate structures have also emerged, meaning that more and more of the cost of capital has come to be comprised of interest payments. This, in turn, has put financial ratios under pressure to the point where ongoing investment requirements are now in some cases driving current and projected financial ratios to levels close to those traditionally considered unacceptable by investors and rating agencies.

As a result of this, Ofgem and Ofwat in their most recent reviews found that their financeability tests told them that it was necessary to provide higher revenues in the short term than their 'building blocks' approach had calculated. They did this by uplifting revenues to the level that restored ratios to an acceptable level, in effect handing affected companies returns in excess of their cost of capital. It is important to recognise, however, that this is not a one-off fix – the same problem is likely to emerge again in future reviews for so long as regulators persist in compensating highly geared companies for inflation by means of index-linking the RAB while lenders require compensation on an annual basis.

This raises a number of important questions:

- is the approach that Ofgem and Ofwat took last year when allowing companies additional revenue the right one or are there other ways to improve financial ratios which impose a lesser burden on customers;
- should regulators always base their financeability tests on the stated requirements of lenders and rating agencies; and
- if it is accepted that companies' revenue requirements may differ according to capital structure, can regulators continue to remain neutral to the way that companies choose to finance themselves?

3. Issues

3.1 Restoring financeability

Since the root cause of the financeability problems affecting regulatory settlements in the aviation, energy, water and rail sectors lies in the way in which investors are compensated for the effects of inflation, the cost of capital and depreciation calculations would appear to be a sensible place to begin looking for alternative ways of restoring financeability (and in particular, solutions that are more neutral over the long term than the revenue uplifts used by Ofgem and Ofwat).

Two main options present themselves:

- regulators could switch from using the real cost of capital to using the nominal cost of capital when setting prices, thereby compensating companies upfront for the effects of inflation in exactly the same way that lenders are compensated by companies; or
- regulators can accelerate the payment of depreciation so that investors wait less time to receive the proportion of the RAB that is driven by the accumulated effects of inflation.

These are, in effect, variations on the same theme since both approaches involve bringing forward compensation for inflation. The difference is that the first option forces regulators to allow a step change in revenues equal to the effect that a, say, 2.5% inflation-related increase in the cost of capital would have on prices, while the second option is more of a hybrid approach that gives regulators a degree of flexibility to advance only as much of the compensation as they consider necessary to restore financial ratios to an acceptable level.

From a customer's perspective, either option looks intuitively more appealing than the approach that Ofgem and Ofwat took in their most recent reviews. While prices might be no different in the short term (since affected companies' revenue requirements are effectively being driven off the achievement of a given set of financial ratios – at least under the second option), over the long term prices ought to be lower since the RAB would not subsequently increase so much with inflation. Essentially these options should be value-neutral, unlike the current approach. This does, though, depend on being satisfied that lower depreciation allowances in the future will not cause financeability problems of a different kind, particularly given that rating agencies put a certain amount of emphasis on the relationship between income from depreciation allowances and expenditure on renewal and maintenance of the existing asset base.

From a company's perspective, this is not necessarily a zero-sum-game. Whilst these options might preclude the award of additional value, they may strengthen companies' positions in actually receiving in future the value implied by the current RAB. This is because, without such reprofiling, over time the inflation differential will reverse, as shown in the illustrative chart above. This would arguably lead to a situation in which regulators could make settlements at a level below that implied by the building block approach and 'trim' revenues *down* to a financeable level. Reprofiling options that better align the revenues required for the purposes of economics and financeability should reduce the long term opportunities for such regulatory action and thereby reduce the associated threat that is faced by companies.

Another issue with this approach is that even a full-scale switch from a real to a nominal cost of capital may not be sufficient to deliver what lenders claim to be acceptable financial ratios for a very highly-geared company (for example, one with a debt-to-RAB ratio in excess of 80%). For these extreme cases, the cost of equity component in the weighted average cost of capital calculation may be insufficient to provide for both acceptable dividends and retained earnings over and above interest costs. This illustrates that detailed investigations into the requirements of investors are also required, irrespective of any moves to change the way in which regulators compensate for the effects of inflation.

3.2 A regulatory view of financeability

There is a risk that, in assessing financeability, regulators follow without sufficient questioning the financial community's statements of what outcomes are and are not financeable. Investors have an interest in seeking generous regulatory settlements that provide them with value and insulate their risks. Whilst regulators should look for competitive signals from capital markets, they must also remain aware that they alone have the imperative to balance the requirements of investors and customers.

Importantly, this unique role means that regulators' attitudes to the financeability of companies may differ from those of lenders. For instance, it may not be of concern to regulators that individual investors are unwilling to provide capital on particular terms so long as others will provide funds at an efficient price. Further, to the extent that regulators have confidence in the special administration regimes in their sectors, they may not be particularly exposed to the risk of financial failure of one or even several companies, so long as this risk is not systemic to their sector. Even to the extent that regulators' interests are exposed to these risks, they might not necessarily have the same aversion to them as investors. The level of financial confidence that regulators should require in exercising their financeability duties is not necessarily the same as lenders or rating agencies would seek to satisfy their own concerns.

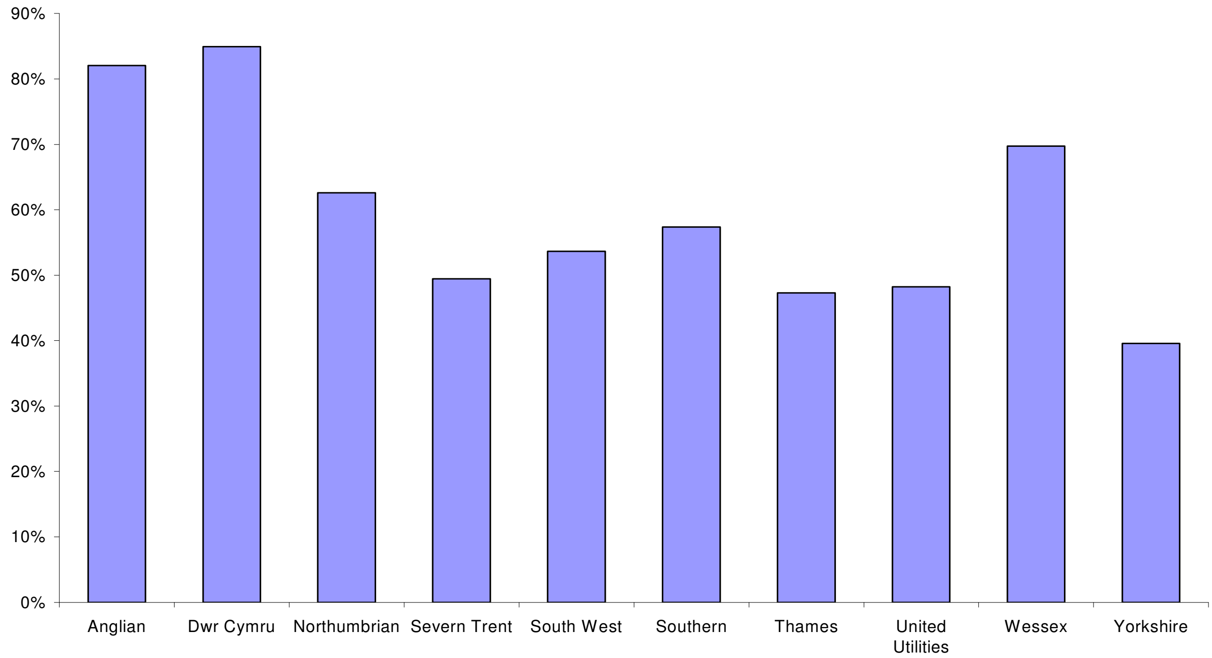
Also, whilst the financeability thresholds set by lenders and rating agencies may look authoritative, scientific and concrete, it must be recognised that that they are essentially based on judgements of business risk, analysis of company accounts, some financial modelling and, in some large part, rules of thumb adopted by convention and generally derived from experience in non-regulated sectors. Rating agencies often appear embarrassed at the reliance that others place on their quantitative analysis and seek to emphasise the qualitative aspects of their decision making.

Regulators therefore need to formulate their own views on the definition of financeability and the associated constraints that they need to respect in their settlements. This will clearly need to be informed by the stated requirements of investors and rating agencies but need not be identical to them. Moreover, there should be significant opportunity for regulators to influence the financial community in setting its requirements for providing finance. After all, regulators are better positioned than most of the investor community to understand properly the financial implications of the regulatory framework, the fundamental business characteristics of the businesses they regulate and to see and understand changes in these aspects of their sectors. There may be an important role for regulators in 'educating' the financial community on the nature and the risks of the businesses they regulate, thereby influencing the limits that are placed on companies' finances.

3.3 Regulatory neutrality on capital structure

Whilst there has been a trend increase in gearing across regulated sectors, in recent years there has also been a distinct divergence in capital structures, with a spectrum of types of companies from lowly-geared and heavily equity-based companies to highly-geared 'structured finance' arrangements. By way of illustration, the chart below shows the recent diversity of gearing levels across the water sector.

Figure 2: Debt to RAB (in real prices) in the water industry, 2002/03



Regulators have observed investors and rating agencies requiring different forms of financial ratio and different thresholds for different capital structures. This makes regulators' assessment of financeability much more complicated – a settlement that allows one company to finance its business might preclude another from doing so – and, in turn, ought to prompt regulators to be concerned about whether one size of regulatory settlement fits all companies' financing requirements.

The safest approach would be to bespoke a financial test for each type of company, respecting its particular financial constraints. However, this would remove the incentive for companies to be efficient in their financing terms. Whilst regulators might ideally respond to this problem by basing their tests on the most efficient capital structure, in practice there are two significant obstacles that need to be overcome:

- firstly, if regulators were to adopt for the purposes of their financeability test their view of the most efficient capital structure, they would risk making companies with other financing approaches unfinanceable. In effect they could be dictating to companies in their sector the capital structure that should be adopted and so effectively surrendering their position of neutrality. If, on the other hand, they were to set their financeability test on the basis of the least efficient structure, that is the one that required the highest additional revenues, then this would award excess value to companies with more efficient financing; and
- secondly, if regulators were to take a more analytical approach, it would be difficult for them to assess the comparative efficiency of each capital structure, that is the additional revenues required to make each structure financeable. This is because each form of company tends to have different financeability parameters: for example, there are a plethora of different gearing and interest cover ratios used in each sector and their application to each company often depends on the financing strategy of the business, the nature of their investors and which agencies provide credit ratings for them.

One approach which might overcome both of these obstacles and allow regulators to maintain their position of neutrality in the long term might be to base their assessment of financeability on more fundamental measures of the financeability of a company, rather than on the rating agencies' or lenders' specific and current views of required ratios. This might allow regulators to set a financeability test on the basis of common parameters that underlie each of the particular sets of ratios for each different financial structure. For example, they could apply interest cover tests based on regulatory accounting definitions of available earnings and which reflect a regulatory view of how 'free' or discretionary companies' cash flows actually are; or test the longer term robustness of the company to business risk by comparing the cushion implied by the excess of the RAB over debt with historical volatilities in spend levels. Regulators could, and should, still have regard to rating and covenant requirements, but should do so primarily to understand the capital market's views of risk and the risk accommodation that can be inferred as required in companies' financial profiles.

In determining the financeability thresholds in such a way, regulators might take an approach equivalent to that which they take to operating costs through the process of comparative competition. Through assessing the financial constraints of different companies, regulators could identify an 'efficiency frontier' of financeability thresholds and set a financeability test for the regulatory settlement on the basis of this efficient level. Under such an approach, just as companies are currently incentivised to deliver operating costs efficiently, or source capital at an efficient price, so they would also be incentivised to source their capital on efficient terms.

4. Next steps

This brief discussion has highlighted a number of issues related to the way in which regulators deal with financeability. Because they are not considerations that have been openly discussed in the determinations made recently by the CAA, Ofgem, Ofwat and ORR, we see merits in regulators now working with companies and customers to develop an understanding of how financeability will be assessed and, if appropriate, safeguarded in the future. There are three main issues to address:

- first, what is the most appropriate way of compensating companies for the effects of inflation? To a neutral outsider, there is an inherent logic in advancing at least some of the compensation for the effects of inflation where investors demonstrably require compensation for inflation on an annual basis. However, the development of the inflation differential and the long run consequences of such a shift in policy need to be modelled carefully to ensure that the reprofiling of revenues does not undermine companies' ability to fund steady-state asset maintenance and renewal in future control periods;
- second, how rigidly should regulators follow the stated requirements of shareholders, lenders and rating agencies in relation to dividend yields and interest coverage? Regulators have until now treated such metrics as binding constraints in the financeability tests, despite economic arguments to suggest that value and risk ought to depend more on fundamental measures and long-term cashflow. Further analysis of their own requirements for financeability and a continued dialogue with the financial community would help regulators to understand how such constraints are formulated and also to educate investors and those who represent their interests about the long-term nature of the regulatory settlement; and
- third, how should the policy of neutrality on capital structure evolve in circumstances where regulators collectively are concerned that high gearing might increase companies' short-term revenue requirements? If the diversity in capital structures continues or increases, and if regulators seek to maintain a neutral position on capital structure, there is a risk that companies will be compensated for inefficient financing strategies by receiving additional revenues when regulators perform their financeability tests. The answer might lie in finding a common basis for comparing the efficiency of different financing approaches which includes the requirement to maintain ratio thresholds as well as the cost of capital itself.

The next review at which these issues will be addressed is the CAA's determination of NATS' new price control, due in May 2005. After that, financeability looks like being a key issue in Ofgem's review of the newly separated gas distribution businesses and ORR's early preparations for its next review of Network Rail. This serves to emphasise the cross-industry nature of the financeability problem and the onus on regulators to work together to find common solutions. Taking forward some of the work identified above would be a good first step in this direction.

About the authors

First Economics is an economic consultancy that advises regulators, companies and government bodies on a wide range of regulatory, economic and financial issues. The two authors of this note have both been closely involved in the debate about the impact of high gearing: John Earwaker led ORR's 2003 review of Network Rail and is now advising the CAA in its ongoing review of NATS; while Duncan Hannan was the co-author of the report produced for Defra and Ofwat in November 2003 on the structure of the water industry and the implications of increased gearing.