

# **Equity Financeability**

**A report prepared for Water UK**

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## Summary of Key Points and Recommendations

1. An essential starting point in the analysis of financeability is an understanding of what it is that causes regulated firms to exhibit weak interest cover ratios. Although it is sometimes claimed that the root cause of a financeability problem is a large investment programme, this is almost always not the case. Instead, financing difficulties start when regulators' decide to fund only part of companies' nominal interest payments in price controls.
2. Equity injection is a viable and effective fix for problematic financial ratios. However, if assumptions about equity injection are used in an unconstrained way, Ofwat effectively absolves itself of any responsibility for the impacts that its price control calculations have on a company's financial profile and credit quality. This is tantamount to ignoring financeability altogether.
3. Ofwat in its 2014 forthcoming price control review should expand the reach of its financeability tests to include equity financeability tests. Ofwat might signal that it will use equity injection as a fix for financeability only if it is able to provide through price limits for:
  - a. at least a stable profile for earnings per share, EBITDA/equity and/or earnings/equity metrics;
  - b. a non-negative cash return to shareholders within each five-year period; and
  - c. no expectation of repeat equity injections over successive control periods.

Ofwat would benefit from input from investors on these suggestions and should look to begin a dialogue on equity financeability during the next 12 months.

4. Ofwat should also revisit its policy of making allowance for the costs of equity injection conditional on there being actual equity issuance. This policy ignores the option that companies have of injecting equity via dividend sacrifice and so can unfairly leave shareholders alone to carry the costs of putting company finances on to a sustainable footing.
5. If the equity financeability tests show that equity injection is only a partial fix for weak cover ratios, and if the scope for issuing index-linked debt has been exhausted, Ofwat should look at NPV-neutral revenue advancement as part of the package of measures that ensure a business is able to finance its functions. This could either mean an explicit advancement of revenues or, within the new totex regime, a tilting of the allocation of expenditure to fast/pay-as-you-go money and slow/RCV money.

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## 1. Introduction

This is a discussion paper commissioned by Water UK for the purposes of stimulating and informing debate on the financing and regulation of water companies.

The paper develops the idea of 'equity financeability'. Its main purpose is to show that there should be a limit on Ofwat's ability to fix problematic financial ratios by assuming that a company will raise new equity. We seek to show, in particular, that new equity formation should only be relied upon if: (a) shareholders see a prospect of getting a cash return on their investment within a relatively short horizon; and (b) Ofwat exhibits an indifference towards the form that that equity injection takes.

The paper is structured into four main parts:

- section 2 contains a reminder of the reasons why a company that has been handed a return in line with its cost of capital may exhibit weak financial ratios;
- section 3 looks at the conditions that shareholders might legitimately attach to equity injection as a financeability fix;
- section 4 explains how Ofwat should ensure financeability if, as a result of these conditions, equity injection alone is insufficient to restore ratios to an acceptable level; and
- section 5 concludes with a summary of our recommendations.

## 2. Why Companies Might Not Be Financeable: A Reminder

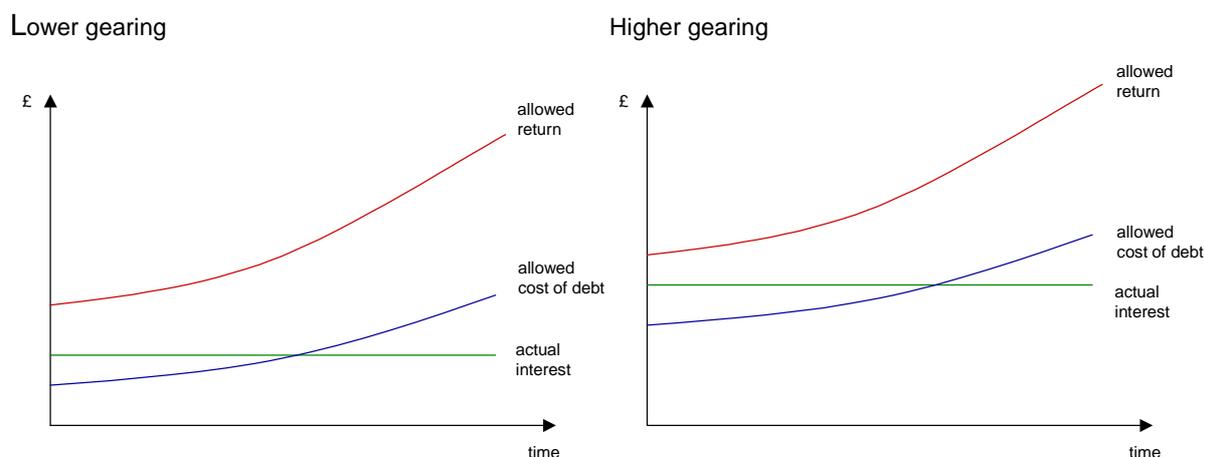
### 2.1 The real/nominal mismatch

First Economics has written extensively on the subject of financeability during recent years.<sup>1</sup> The main contribution that we have made has been to show that the origins of financeability problems lie in a mismatch between the real rate of return that regulators incorporate into price limits and the nominal interest payments that companies make to most lenders. Specifically, our analysis has shown that by compensating investors for the effects of inflation via the indexation of the RCV in line with out-turn RPI inflation, and not in year in the allowed cost of cost of capital, regulators create short-term weakness in cashflow which is manageable when gearing is low but which causes rating agencies and lenders considerable difficulty when gearing gets higher.

Figure 1 illustrates this diagrammatically.<sup>2</sup> The left-hand side depicts a company with Ofwat's assumed PR09 gearing and the right-hand side depicts a company whose RCV and gearing level has moved higher due to high levels of investment. The companies are otherwise identical. Both charts comprise a green line representing the nominal interest payments going out to lenders, a red line representing the income coming in from customers through the inclusion of a real rate of return on the RCV in price limits, and a blue line representing the implied allowance for the cost of debt within the rate of return calculation. In both cases the green line is flat (because interest payments to lenders are assumed in this illustration to be fixed in money terms) and the red and blue lines grow over time (primarily because the real rate of return is applied to an RCV that grows in line with inflation).

The different shape of the green and red/blue lines depict the real/nominal mismatch mentioned above. In the left-hand chart, it can be seen that the regulator's allowance for the cost of equity (i.e. the gap between the red and blue lines) produces sufficient profit to accommodate this mismatch. But in the right-hand chart, a higher proportion of debt and a lower proportion of equity mean that the buffer is much smaller. Although in aggregate the right-hand company is being provided with sufficient income to cover its real-life interest bill and still make a profit, the amount of profit earned is not sufficient in the short term to generate the sort of interest cover (i.e. the red line divided by the green line) that rating agencies demand from companies with a strong investment-grade credit rating. Accordingly, the right-hand company would fail Ofwat's ratio tests and be judged unfinanceable.

**Figure 1: Returns and interest payments (out-turn prices)**

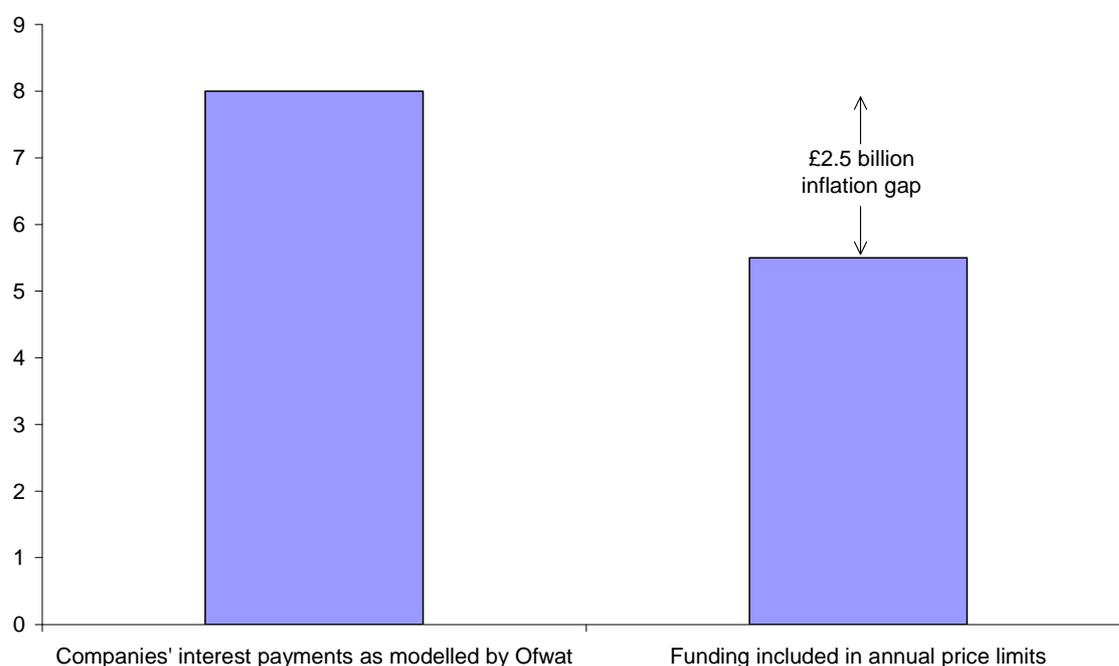


<sup>1</sup> See, for example, [www.first-economics.com/financeability.pdf](http://www.first-economics.com/financeability.pdf)

<sup>2</sup> To keep things simple and to fix ideas, we describe a situation in which all of a company's debt is in nominal terms, and where the company has reached a steady state in its investment programme and no longer experiences negative cashflow. We recognise that in real-life a company will have at least some index-linked debt (which will alleviate the problem we are about to describe) and is likely to be investing historically high amounts in its network (which will exacerbate the problem).

To give some sense of the scale of the issues this creates, we calculate that the water industry's interest bill in AMP5 (i.e. the green line over years 1 to 5) was projected in PR09 to be approximately £8 billion and that the funding contained within AMP5 price limits for these payments (i.e. the blue line) is less than £5.5 billion. This leaves £2.5 billion of interest costs for companies to pay for out of equity returns/retained profits, albeit knowing that an equivalent amount of money will be added to the RCV via the annual RPI indexation mechanism. In a majority of cases this was just manageable, but in the case of three companies – Bristol Water, South East Water and Thames Water – interest cover didn't quite meet the rating agencies' benchmarks and Ofwat had to look for fixes to financeability issues.

**Figure 2: The inflation gap (£ billion)**



It is perhaps worth emphasising at this point that the reason this outcome arises is because a regulator thinks intuitively in terms of long-term net present value (NPV) whereas lenders and rating agencies care at least as much about cashflow in the short and medium term. When these two worlds collide, a regulator can find it is unable to satisfy rating agencies' ratios and is forced to assess what steps it should take to discharge its duty to secure that companies are able to finance their activities.

## 2.2 Ofwat's statements in PR09

Ofwat's explanation of financeability problems in PR09 was slightly different from the one that we have just outlined. Although recognising that the real/nominal mismatch is an issue, it said that financeability issues are 'brought about by' continuing large capital programmes and the consequent rapidity in the growth of the RCV.

In this way of looking at things, companies with financeability issues have found that they have been unable to satisfy the requirements of rating agencies because they are growing their businesses too fast. Like all other firms, whether regulated or unregulated, the affected companies have discovered that there is a point at which their ability to finance new capex by issuing new debt runs out. When this point is reached, it quite naturally becomes necessary to fund the expansion of the RCV via other means.

Although this story has immediate appeal, we think that it gets the cause of a financeability problem back to front. As our own explanation in section 2.1 shows, it is unarguably right that financeability problems would not have emerged if companies were not embarking on large capital programmes (i.e. if they were not increasing their gearing). But to our mind the effect of this investment is best characterised in terms of the way that it exposes the real/nominal mismatch where otherwise it would remain hidden (i.e. where otherwise the gap between the green line and blue line could be paid for out of equity returns with a good margin to spare). Viewed in this way, the scale of investment is possibly best characterised as a catalyst that triggers a reaction that reveals a deeper, more fundamental issue with the regulatory calculation.

One way to see this distinction is to look at precisely what is causing the rating agencies difficulty when a regulated company fails financeability tests. Specifically, it is almost always<sup>3</sup> interest cover metrics that fail a rating agency's ratio analysis rather than the level of gearing or the total level of indebtedness. To our mind what this is saying is that the RCV is perfectly capable of supporting more debt except for the fact that annual cashflows, as determined by the regulator, are too weak. In effect, the real/nominal mismatch is artificially constraining companies' ability to borrow at a point that sits some way below where capital markets would otherwise start to balk at new debt issuance.

This suggests to us the root of the problem is in the regulatory framework rather than in companies' balance sheets. Notwithstanding the challenges that large investment programmes present to the capital markets, water companies would not fail financial ratio tests if it were not for the way in which Ofwat sets returns.

### **2.3 Looking ahead to PR14**

There is no reason to think that this issue will not be a feature again in Ofwat's PR14. A combination of companies' likely starting gearing levels and continued investment will continue to expose the real/nominal mismatch and put pressure on interest cover ratios in AMP6.

If anything, the financeability issues are likely to affect more companies than in PR09 as a result of changes in the ONS' measurement of inflation. We cover this issue in more detail in our accompanying paper 'The effect of changes in the RPI calculation on allowed rates of return, revenues and financeability in the water sector'. The key points that are relevant to this discussion are as follows:

- changes that the ONS made during 2010 to its method of collecting certain price data, and which the ONS confirmed in January 2103 would not be corrected, unwittingly increased the 'formula effect' between CPI- and RPI-measured inflation by around 0.5 percentage points;
- if one assumes that the Bank of England will set monetary policy to meet the government's CPI inflation target of 2.0%, this means that the long-run rate of RPI-measured inflation has increased by 0.5 percentage points;
- Ofwat will want to factor this higher rate of RPI inflation into its PR14 price control calculations. The ONS' changes will be especially relevant in the cost of debt calculation, where Ofwat can assume that more of a company's interest costs will be paid for through the indexation of the RCV so leaving a lower real cost of debt to be paid for in year via the real rate of return;

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<sup>3</sup> Regulators are not always explicit about which ratios fall short, but in the numerous reviews we have worked on in a range of industries we have yet to encounter a situation in which a firm's notional debt-to-RCV ratio is the source of financeability difficulties. Instead, it is invariably the post-maintenance interest cover ratio or FFO/interest that cause the problems.

- this will serve to exacerbate the real/nominal mismatch (i.e. the size of the gaps between the red/blue lines and the green line in figure 1) and worsen any financeability issues that the sector faces. As an initial quantification of this effect, our indicative calculations suggest that post-maintenance interest cover ratios might be expected to fall by around 0.1 times.

All other things being equal, the expectation in the lead up to the next price review can reasonably be that Ofwat is going to spend more time than in PR09 looking at possible solutions to financeability problems. Importantly, this change in circumstances is a direct consequence of the practice of setting allowed returns in real terms. It cannot be explained by changes in gearing or any other of the determinant's of a firm's credit quality, all of which are unaffected by a change in the expected rate of RPI-measured inflation.

### **3. Equity Injection**

#### **3.1 An evaluation**

In the circumstances that we have just described, it was once Ofwat's practice to add 'revenue uplifts' to companies' price limits to restore interest cover ratios to an acceptable level. This approach was discontinued after PR04 following criticism of Ofwat for giving firms returns in excess of their cost of capital. It has subsequently become conventional regulatory practice for Ofwat and regulators in other sectors to make assumptions about equity issuance as their 'fix' for problematic ratios. Such assumptions have two distinctive attributes:

- they constitute an effective and comprehensive remedy for weak interest cover – i.e. the swapping of debt for equity directly reduces the amount of interest that must be paid out to lenders, boosting cover ratios and making it possible for a company to attain a rating that would otherwise be out of reach; and
- at a time of concern about affordability, they have a minimal impact on customers' bills. The only apparent cost to customers comes from Ofwat's conditional 5% allowance for transaction costs, which is a relatively small amount in the overall price calculation.

Companies have a somewhat different perspective:

- they wonder why Ofwat's preferred solution for a quirk in the regulatory calculation is to call on shareholders to place new equity, with the inconvenience this causes and, in some cases, the potential it brings for interference to carefully designed ownership structures;
- they note that the allowance for transaction costs is not payable unless there is real-life evidence of new equity issuance, meaning that other ways of remedying financial ratios – such a dividend sacrifice – go unrecognised by Ofwat even if they cause shareholders a certain amount of pain; and
- most importantly, they worry that equity issuance will in future become a 'get out of jail free card' for Ofwat, insofar as any price control determination and any base case financial projections can be deemed financeable provided that Ofwat assumes a sufficiently large equity injection.

As Ofwat finalises its methodology for the 2014 review of water and sewerage charges, we think it would be helpful to all stakeholders if Ofwat were to signal that it will not treat equity injection as a free lunch. We think that this can best be done in two parts:

- by Ofwat signalling that it will place limits on equity issuance assumptions through an 'equity financeability' test; and
- by revisiting the conditional 5% allowance for issuance costs.

We give more detail on both of these points below. Please note that these ideas are very much for discussion, especially with actual equity investors who will be able to shed greater light than we can on the requirements that they have of regulated water companies.

#### **3.2 An equity financeability test**

##### *Equity metrics*

Ofwat's PR09 financeability test focused exclusively on credit metrics, particularly post-maintenance interest cover and the debt-to-RCV ratio, so as to determine whether companies would be able to access new borrowing at a reasonable cost. In the 2014 price review, Ofwat could extend its analysis to include metrics that are important to equity

investors so as to determine whether companies will be able to expand their equity bases at a reasonable cost.

This analysis would go beyond the proposed return on regulatory equity (RoRE) measure. RoRE is fundamentally a value metric rather than a cashflow metric. The calculation starts from the allowed cost of equity and then adds and subtracts any out-performance/rewards and under-performance penalties that companies might earn within a five-year period. It makes no allowance for the diversion of equity returns to deal with the real/nominal interest mismatch that we highlighted in section 2.

The metrics that we have in mind are:

- earnings per share;
- EBITDA divided by total equity; and
- earnings divided by total equity.

All three of these measures, in their different ways, show how much in-year profit a company is able to generate for each unit of equity. The metrics are important to investors because they show how much of an actual return their investment produces within a 12-month period. As such, there is a close parallel to the concern that lenders show about cash interest cover even within a regulatory regime in which a regulator provides for a company to earn its full cost of capital in NPV terms.

Our sense is that Ofwat ought to be testing whether the highlighted equity metrics, as a minimum, show a broadly stable profile over the five-year period ahead. Concern would arise if this is not the case. Declining equity metrics would, in effect, tell investors that the point at which their investment pays back a cash return is moving further and further away, so leaving investors out of pocket for longer. This may be a tenable proposition in certain situations, but it should not be a default feature of the regulatory regime – i.e. the onus should be on Ofwat to justify why it is acceptable to burden investors with declining earnings and/or cashflow.

This is especially important in circumstances where credit metrics are expected to breach minimum thresholds and shareholders are to be asked to inject new equity. In such circumstances, it would be very difficult for Ofwat to present a price control package which shows declining equity metrics after an equity injection takes place. An equity investor that is preparing to put new money into a company would not normally find it acceptable to be told that a requirement for new funds is to be rewarded with inexorably declining profits. They would expect instead to see that an equity injection stabilises a regulated company's finances and puts the business on a path to improving profitability.

In practice, this might mean that equity injection needs to be looked upon as part of a package of measures that safeguard financeability. We explore in section 4 what the other elements of the package might include, focusing especially on NPV-neutral revenue adjustments within the price control calculation. By actively intervening to ensure that equity metrics remain broadly stable, Ofwat ought to be able to show investors that it is using equity injection within defined limits and not as a stand-alone panacea for all financeability ills.

#### *Cash returns within the five-year period*

A second possible strand in an equity financeability test might involve looking at the cumulative total of equity injection and dividends over the five-year period covered by a price review. This extends the idea that investors look beyond regulatory calculations of NPVs and brings into focus the actual cash return that equity provides can extract from each price control that Ofwat sets.

Our proposition here is that shareholders have a right to expect that they will make at least some net cash return within a five-year period. That is to say that total dividend payments over five years less any equity injection should come out to a positive number.

If this is not the case, a regulator is essentially telling shareholders that the entirety of the cash return that they might legitimately expect to earn on their equity investment is to be deferred to future price control periods. This, to our mind, means that shareholders are essentially investing in regulatory commitment and regulatory credibility – a notion that has some truth to it, but which also cannot be stretched beyond a certain breaking point.

The rule that we are proposing would serve in practice to limit the size of any equity injection that Ofwat can assume to a maximum of approximately 25% of the equity within a notional balance sheet or around 15% of the starting value of the RCV.<sup>4</sup> If Ofwat needs to show not just that the cash return over five years is non-negative, but that the cash return is non-trivially positive, the thresholds for equity financeability would need to be set somewhere below these absolute limits – say, 5-10 percentage points lower, depending on the message that the regulator wishes to send.

### *Repeat injections*

Financeability tests typically have a five-year horizon. Although we recognise that the detail behind each subsequent five-year period cannot be established before the relevant price control review, we also think that it is important that a regulator should have due regard to the likely need or otherwise for repeat equity injections.

The point of principle here is that equity injection should not be a short-term sticking plaster. If the regulatory calculation produces weak financial ratios across multiple control periods, the fix that the regulator selects should put the company back on a stable long-term footing. It should not be seen as a bridging solution which leaves the regulator having to address the same issues all over again in five years time.

A particular concern that we have in this regard is that there should not be a continual call on shareholders for new equity. If financeability issues – weak credit metrics, consequent low net cash return to shareholders – are forecast to reoccur, concerns about the availability of equity at a reasonable price become much greater. It is one thing to ask shareholders to show patience and trust for one five-year period; it is something else to ask them to extend that patience or trust to two or more price controls.

The rule here might be that the financial model should show that no more than one equity injection is required within a ten-year period. This will ensure that any short-term sacrifice on the part of shareholders in one five-year period is rewarded with five years of stability and more normal shareholder returns thereafter.

### *Summary*

Our proposed 'for discussion' equity financeability test therefore comprises three distinct strands. They are that there should be:

- at least a stable profile in in-year profit per unit of equity metrics;
- a non-negative cash return to shareholders within each five-year period; and
- no expectation of repeat equity injections over successive control periods.

Combined together, these tests ought to provide greater assurance than at present about the availability and pricing of new equity. They do this by placing a limit on the amount of

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<sup>4</sup> The maths here assumes gearing of around 60% and a 5% per annum dividend yield.

equity injection that Ofwat can assume into its price control decisions and by forcing Ofwat to take other remedial measures to address any remaining weakness in financial ratios.

### **3.3 Allowance for costs**

We would characterise the above test as a necessary but not sufficient condition for ensuring that regulatory assumptions about equity injection do not harm the interests of shareholders. Even with the above safeguards, equity injection still has a cost. The final issue that we have to address is whether Ofwat is allowing appropriately for this cost in its determinations.

Frontier Economics is looking at the direct and indirect costs of rights issues in a separate report and we do not seek to duplicate this analysis here. Our concern is that Ofwat should recognise that equity injection may just as easily take the form of dividend sacrifice rather than equity issuance and that the costs of such sacrifice should be recognised within the regulatory calculation.

#### *Theory*

There is an extensive academic literature linking dividend policy to share prices and company valuations.

The information content of dividends hypothesis, developed from work by the likes of Miller and Modigliani,<sup>5</sup> says that changes in dividend yield send a signal to investors about a firm's future prospects. Increases in dividend payouts are generally taken to be a signal that management confidence in future earnings growth has strengthened, prompting positive share price reaction. Dividend cuts are read a signal that the outlook for future profits has deteriorated, resulting in a lower share price.

The clientele effect hypothesis postulates that different investors are attracted to different types of company. Some investors might have a strong preference for stocks that pay high dividend yields. If expectations about future cash payouts are confounded, such investors will factor uncertainty into their valuation of their investment and may in extremis choose to sell their shares. Both of these things will typically have a negative impact on a company's equity valuation.

#### *Market practice*

Recent research provides real-life evidence of firms' reluctance to change dividend policy. DeAngelo, DeAngelo and Skinner<sup>6</sup> found that firms that have historically paid large dividends have 'sticky' dividend policies and seek wherever possible to continue growing payouts over time. Meanwhile, a 2005 survey of Chief Financial Officers by Brav, Graham, Harvey and Michaely<sup>7</sup> found that directors consciously set conservative dividend policies that prioritise stability and consistent and seek to avoid having to cut dividends except in extreme circumstances.

Such behaviours can also be seen in the actions of listed regulated companies that have undertaken rights issues and equity placements in recent years:

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<sup>5</sup> Miller and Modigliani (1961), Dividend Policy, Growth and the Valuation of Share, Journal of Business.

<sup>6</sup> DeAngelo, DeAngelo and Skinner (2004), Are dividends disappearing? Dividend concentration and the consolidation of earnings, Journal of Financial Economics.

<sup>7</sup> Brav, Graham, Harvey and Michaely (2005), Payout policy in the 21st century, Journal of Financial Economics.

- United Utilities prior to its 2003/2005 rights issues assured investors that took up new shares that dividend yield would initially remain broadly unchanged and increase in real terms to the end of AMP3;
- Scottish & Southern committed to maintaining its track record of delivering real dividend increases in every year since 1999 even when placing £500m of new equity (equivalent to approximately 5% of market value) in 2009; and
- National Grid maintained an existing target of achieving 8% per growth in its dividend up until March 2012 when launching a £3.2 billion rights issue in 2010.

### *Implications for regulation*

As things stand, Ofwat only recognises the costs of equity injection if a company actually issues equity. Some of the owners of water and sewerage companies may, however, find it more practical and less costly to expand the equity base by giving up dividends that would otherwise have been taken out of a company. We are thinking here especially of owners that do not have stock market listings and/or which might not have ready access to spare cash – e.g. closed funds.

Ofwat's existing approach to equity injection does not offer any compensation to companies with such preferences. It is in these cases that the accusation that Ofwat's price review methodology is tantamount to ignoring financeability altogether really bites. If directors opt to cut dividends, they in effect assume full responsibility for problematic financial ratios without any accommodating adjustment within the price control calculation.

Our proposition is that Ofwat in PR14 should treat rights issues and dividend sacrifice as equally valid, equally effective fixes for financeability issues. A policy of indifference towards the form of equity injection should also be accompanied by an even-handed allowance for costs. Our gut instinct is that the costs that dividend cuts impose on shareholders are unlikely to be any lower the costs of a rights issue, as seen in the real-life choices that companies have made in the past to maintain dividend yields at the time of rights issues even in the knowledge that this will increase the total quantum of new equity to be raised. This suggests that the 5% cost allowance should be payable regardless of the method of equity injection. But we would also wish to leave open the possibility of differentiated allowances pending further research into this matter.

We also propose that the cost allowance is provided from now onwards on an unconditional basis. In part, this reflects practical considerations – i.e. it may be quite difficult for Ofwat to ascertain whether some of the companies that it regulates have reduced their payouts as a result of financeability issues. But it also seems to us that there would be a logical inconsistency in regulating companies on the basis of notional balance sheets and then potentially ignoring evidence that the notionally efficient company requires more equity on the grounds that the actual company has chosen its own, different capital structure. We have always understood Ofwat's policy on financing to be that customers pay for the efficient cost of robust financing arrangements and that shareholders take the risk if a company departs from the regulatory template. Conditional allowances for equity injection seem to muddy this policy and make it unclear exactly what customers are paying for.

## 4. Other Tools for Restoring Financeability

### 4.1 Overview

We noted in section 3 that the introduction of an equity financeability test could reposition equity injection as a partial and potentially incomplete fix for problematic financial ratios. This leads to the question of what other tools Ofwat should deploy in order to satisfy its duty to ensure that a company is able to finance its activities.

Ofwat, in common with other regulators, has previously highlighted two main options.

The first is assumptions about index-linked debt. Insofar as index-linked issuance eliminates the cashflow mismatch between nominal interest payments and real returns – and insofar as rating agencies recognise the better match in their calculation of cover ratios – it seems right and proper that Ofwat should expect companies to issue as much index-linked debt as is efficient and practically possible. It has previously been recognised, however, the practicality is an issue, especially with the changes that the index-linked market has seen since the financial crisis of 2008-09. This means that index-linked debt assumptions are also likely to provide an incomplete fix.

This brings in revenue adjustments as the next most logical response to problematic ratios. Following criticism of the NPV-increasing revenue uplifts that Ofwat allowed in PR04, the convention in regulation nowadays is that revenue adjustment should mean NPV-neutral revenue advancement.

### 4.2 NPV-neutral revenue advancement: an explanation

One can see the logic of this position by going back to figure 1 in section 2 of this paper. In these charts the blue lines and the green lines have the same present value, but with revenue coming into companies more slowly than companies pay out to lenders. If a regulator were to tilt the blue line/red line towards the green line, there would come a point (most likely well before the lines went flat) at which companies had sufficient income and sufficient interest cover to satisfy rating agencies and lenders. Customers would pay a little bit more in the short term, but a little bit less in later control periods and would be no worse and no better off in the long term.

In practice, there are different ways in which this advancement of revenues could be brought about by Ofwat:

- the CAA<sup>8</sup> and the Northern Ireland Utility Regulator<sup>9</sup> have advanced revenue explicitly by adding to income in the immediate five-year period alongside either a corresponding and contemporaneous reduction in the value of the RAB or a public promise to deduct a corresponding amount of income at future reviews;
- Ofgem in the energy sector used to have a policy of accelerating the depreciation of investments added to companies' RCVs and/or expensing capital expenditure on a pay-as-you go basis, albeit in a manner that has attracted some concern; and
- in its most recent RIIO reviews of energy network price controls Ofgem has boosted short-term cashflow via favourable splits of totex between fast/pay-as-you-go money and slow/RCV money and via shorter payback periods for the depreciation of the RCV.

We see the first and the third of these as perfectly viable options for Ofwat in PR14. If the real/nominal mismatch leaves companies with too little cashflow in the 2015-20 period, Ofwat could quite easily accept either an explicit advancement of revenues or a small

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<sup>8</sup> CAA (2005), NATS price control review 2006-10: CAA decision.

<sup>9</sup> Utility Regulator (2012), Northern Ireland Electricity transmission and distribution price controls 2012-17: final determination.

increase in the amount of totex that is to be remunerated via fast/pay-as-you-go money. That is to say that however it is labelled, there should exist an NPV-neutral profiling fix of this type which simultaneously passes a three-pronged test of being acceptable to the rating agencies, of giving rise to no unintended interference to other aspects of the regulatory calculation, and of providing a permanent and comprehensive fix to the problems caused by weak financial ratios. We know that Ofwat certainly considered NPV-neutral revenue adjustments a viable option back in 2006, although we are not aware of any firm proposition being developed before or during PR09.

The obvious downside of a reprofiling approach is that, by definition, it adds to customers' bills in the short term, albeit with an offsetting reduction in bills in the long term. It is wrong, however, to conclude that higher bills are always a bad thing, and in this particular case we think it is worth asking whether the increase in prices places an undue burden on current customers or whether it unwinds an intergenerational cross-subsidy that perhaps shouldn't be there in the first place. We say this mainly because the timing with which investors in regulated sectors get compensated for the eroding effects of inflation looks slightly curious – rather than have customers pay as inflation occurs, the regulatory calculation, through the indexation of the RCV, defers compensation to future control periods and future generations of customers.

Our experience is that in other capital intensive industries it is more common to see charges set in such a way as to cover the nominal rather than real cost of capital. For example, in the Competition Commission's recent inquiry into the rolling stock leasing market it was accepted by all parties that the providers of capital should be able to earn a rate of return in line with their nominal cost of capital each year. This demonstrates that in unregulated industries with discrete assets of finite lives and with no long-term guarantee that an individual firm will enjoy continuity of supply, it doesn't make sense to postpone compensation for inflation indefinitely. Rather, firms have to take payment from current customers or risk not receiving payment at all.

Note that this may be a particularly pertinent observation for the water industry at the current time. With government and regulator looking at changes to industry structure, including the introduction of competition at different stages in the value chain, it is by no means certain obvious that investors are indifferent between being paid now and money logged up into RCVs. Indeed, one might also ask whether Ofwat isn't distorting future competition by giving incumbents price limits that include only a real rate of return when new entrants, who do not have price controls and associated RCVs, are likely to have no choice but to recover their financing costs as they are incurred.

We recognise in saying this that investors value the long-term link between regulated firms' revenues and RPI and we are certainly not suggesting that this link should be broken. Rather, we are suggesting that, as part of an overall package of measures that ensures companies' financeability, there ought to be a way of compensating for inflation in a more sophisticated way so as to eliminate the weakness in cashflow that the current approach creates.

## 5. Conclusions and Recommendations

We can summarise the main points to emerge from this paper as follows.

6. An essential starting point in the analysis of financeability is an understanding of what it is that causes regulated firms to exhibit weak interest cover ratios. Although it is sometimes claimed that the root cause of a financeability problem is a large investment programme, this is almost always not the case. Instead, financing difficulties start when regulators' decide to fund only part of companies' nominal interest payments in price controls, causing the sort of inflation gap that we identify in figures 1 and 2.
7. Equity injection is a viable and effective fix for problematic financial ratios. However, if assumptions about equity injection are used in an unconstrained way, Ofwat effectively absolves itself of any responsibility for the impacts that its price control calculations have on a company's financial profile and credit quality. This is tantamount to ignoring financeability altogether.
8. Ofwat in its 2014 forthcoming price control review should expand the reach of its financeability tests to include equity financeability tests. Ofwat might signal that it will use equity injection as a fix for financeability only if it is able to provide through price limits for:
  - a. at least a stable profile for earnings per share, EBITDA/equity and/or earnings/equity metrics;
  - b. a non-negative cash return to shareholders within each five-year period; and
  - c. no expectation of repeat equity injections over successive control periods.

Ofwat would benefit from input from investors on these suggestions and should look to begin a dialogue on equity financeability during the next 12 months.

9. Ofwat should also revisit its policy of making allowance for the costs of equity injection conditional on there being actual equity issuance. This policy ignores the option that companies have of injecting equity via dividend sacrifice and so can unfairly leave shareholders alone to carry the costs of putting company finances on to a sustainable footing.
10. If the equity financeability tests show that equity injection is only a partial fix for weak cover ratios, and if the scope for issuing index-linked debt has been exhausted, Ofwat should look at NPV-neutral revenue advancement as part of the package of measures that ensure a business is able to finance its functions. This could either mean an explicit advancement of revenues or, within the new totex regime, a tilting of the allocation of expenditure to fast/pay-as-you-go money and slow/RCV money.

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