Southern Water

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Date
17 May 2018

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Dear David,

Putting the sector back in balance: Consultation on proposals for PR19

Thank you for the opportunity to respond to your consultation. This is an important time for the sector as a whole, with PR19 taking place at a time of increased political focus.

Much of this focus has been on the ownership and financing of water companies. We agree that as regulated monopolies providing essential public services, water companies have special responsibilities and a duty to ensure that the sector retains the trust and confidence of customers. We have already begun to take positive actions to this end.

The industry as a whole has successfully delivered more than £130bn[1] of private sector investment and significant improvements in services for customers and the environment under private ownership. However, it has been less effective at demonstrating these improvements to customers and stakeholders, including the benefits of private ownership and effective economic regulation.

These investments and improvements have been delivered by companies with a wide variety of corporate structures – listed public company, private ownership, securitised and debt-financed mutual. All variants have their benefits and challenges, but there is no evidence, either in the service provided to customers, or through instances of financial distress, that one is to be preferred over another. Some of the measures proposed in the consultation appear to single out one particular financing structure and impose special rules on those companies, in the absence of any empirical or theoretical evidence that they would result in a net benefit for customers – nor any evidence of harm arising from the existing regulatory arrangements.

So, while we can support Ofwat's focus on transparency around dividends and executive pay, Ofwat has not provided evidence for - and we do not support - the different treatment of securitised companies with respect to the setting of the allowed financing costs.

[1] Water sector overview, Ofwat, https://www.ofwat.gov.uk/regulated-companies/ofwat-industry-overview/

Aside from our concerns with the proposals themselves, the process followed by Ofwat has also been lacking in a number of respects. It is clear that Ofwat's proposals have been developed in a short space of time and they were not included in the PR19 Final Methodology in December 2017 (or the draft methodology published in July 2017). Moreover, they are subject to a very short consultation period (15 working days), at a time when all companies are focused on finalising their business plans. This limits the ability of all stakeholders to effectively respond to the proposals and presents a risk to the overall Ofwat PR19 process, which has otherwise been robust and clearly signposted with extensive consultation.

The proposals for a one-sided sharing mechanism for highly geared companies represent a reversal of the conclusions of Ofwat's 2016 consideration of the matter. This was included within the consultation "Water 2020: consultation on the cost of debt for PR19", which was accompanied by independent evidence from PwC. Investors have a right to expect that Ofwat would maintain their position, absent any clear evidence that it is no longer appropriate. The current consultation presents no such evidence, but would effectively impose a penalty on certain companies, which could have been neither anticipated nor avoided.

Investors, and ratings agencies place great weight on the predictability of the regulatory regime and these proposals, if implemented, could impact the credit ratings and investability of the sector, ultimately increasing the cost of capital. That cannot be in the interests of consumers, whether in the short or long term.

We expand on these issues below and provide brief responses to Ofwat's consultation questions at appendix 1.

(i) Sharing of outperformance from highly geared structures

Ofwat is proposing that companies with gearing above its (reduced) 60% notional assumption, should include, in their business plans, a mechanism to share the financing gains from higher gearing with customers. In the consultation it sets out the details of such a mechanism.

If shareholders receive genuine, unwarranted windfall gains, it is right that these are shared with customers and Ofwat already has a number of mechanisms in place to do this. However, we do not accept that there are any such gains accruing to shareholders as a result of gearing higher than Ofwat's notional assumptions, consistent with standard finance theory.

Customers already benefit in full from the tax savings associated with higher debt levels. If we were to reduce gearing as a result of these proposals there would be a real impact on our customers' bills though the removal of this tax benefit.

There has been a longstanding regulatory precedent, not just in water but across other UK regulated sectors that the risks and rewards of capital structure sit with shareholders. This has worked well since 1989 with a long track record of financial stability, strong credit ratings and significant investment. We have seen no evidence of any consumer detriment arising from higher gearing that would merit this type of regulatory intervention.

Ofwat has been consistent and clear in its view that capital structures and financing are a matter for companies. The PR19 draft methodology, published in July 2017, reiterated this position, stating clearly that "*Choice of capital structure and financing is a matter for companies and their shareholders*"[2]. Ofwat's 2016 consultation on the cost of debt rejected, on the basis of independent evidence from PwC, a sharing mechanism of the type that Ofwat now propose. Companies and their investors have a right to expect that Ofwat would maintain its clear policy position, absent any clear evidence that it is no longer appropriate.

Where such significant policy changes have taken place in the past, they have been based on good evidence and well trailed, and with sufficient time for companies and investors to take appropriate action in response. For example, the phased switch from RPI to CPI was announced in December 2015, with it taking effect in April 2020.

We would also note that in discussions with Ofwat in relation to our ongoing refinancing, no references to potential adjustments to the WACC at PR19 for highly geared companies were raised.

While Ofwat's proposal is described as a "sharing" mechanism, it is in fact an ex-ante WACC penalty for higher geared companies, without symmetrical sharing of downside risk. We believe this is inconsistent with Ofwat's stated view on capital structures and, when combined with a low base WACC, would appear to run counter to Ofwat's desire for financial resilience. To avoid an effective WACC penalty, companies would need to unwind their financing structures in a short space of time, which would be inefficient and impose significant costs, for no demonstrable benefit.

In summary, we cannot support the proposal for a number of reasons:

- There is no empirical evidence that highly-geared structures enjoy a lower real WACC overall (consistent with Modigliani & Miller (without tax) the WACC of a company is not impacted by leverage). It is inconsistent with standard finance theory in assuming that the cost of debt and equity do not vary with gearing.
- To the extent that equity returns are higher in highly geared companies this represents remuneration for the additional risk borne by investors.
- Customers already benefit from highly geared structures through a lower tax allowance in price limits.
- It represents a departure from previous Ofwat policy. Investors, and ratings agencies, place significant value on the predictability of the regulatory regime and proposals of this type will inevitably impact investor confidence, the investability of the sector and ultimately the cost of capital.
- Ofwat's proposals are essentially retrospective in nature, with companies negatively impacted by historic decisions on financing and corporate structure, made within a particular regulatory context.
- It takes no account of the benefits of highly-geared, securitised structures, for example, the removal of diversification risk which is faced by customers of listed companies.

These points are expanded on in the attached note from Oxera, which builds on their 2002 report 'The Capital Structure of Water Companies' produced for Ofwat[3].

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[2] Page 217, 'Delivering Water 2020: Consulting on our methodology for the 2019 price review', Ofwat, July 2017

[3] https://www.oxera.com/Oxera/media/Oxera/downloads/reports/Ofwat-capital-structure-of-Water-Companies.pdf?ext=.pdf

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(ii) Dividend policy and executive pay

Ofwat intends to require all companies to set out clearly and transparently in their business plans their proposed dividend policies for AMP7 and executive pay.

These are both areas that Ofwat, and indeed all utility regulators, have considered are matters for companies, subject to ensuring that statutory and regulatory obligations are met. Ofwat's intervention in these areas therefore represents a departure from regulatory precedent.

Water companies are already subject to additional regulatory requirements to be transparent about the basis for executive pay and dividend policy. It is not clear that further regulatory intervention is required. Ofwat has not presented any clear evidence that this is an area of significant public concern, or that the current position is contrary to the interests of consumers.

Notwithstanding this, in principle, we would have no objection to setting out in our business plans a set of high level principles relating to pay and dividends. We have already begun to consider what mechanisms and approaches we can put in place to further improve trust and confidence in respect of the latter. However, it is important that the proposals do not effectively bind future company directors in a way that may be incompatible with company law or that would require companies to seek Ofwat's consent to changes in pay or dividend policy. In particular, it would be wrong for Ofwat to apply its IAP assessment in a manner which effectively compels companies to adopt an approach to pay and dividends that incorporates specific policies advocated by Ofwat.

As ever, we would welcome the opportunity to engage further and discuss our concerns with Ofwat.

Yours sincerely,

Craig Lonie
Director of Regulation and Strategy

Appendix 1: Response to consultation questions

We provide brief responses to each of the consultation questions below. These should be read in conjunction with our main response.

Q1: Do you agree that companies should be required to propose mechanisms for sharing financing outperformance in their business plans, and that we should assess such mechanisms in the IAP?

We do not support the proposals in the consultation, for the reasons set out in the main body of our response. Ofwat has not presented any evidence that a specific sharing mechanism is required for highly geared companies.

Ofwat's policy has been consistent and clear that capital structure is a matter for companies, not Ofwat. Where investors are prepared to take on more equity risk in highly geared structures, then higher equity returns are warranted.

It should be for companies to determine whether they wish to offer a sharing mechanism or not. Sharing mechanisms should be focused on sharing the benefits from genuine windfall gains (for example a change in tax rates or significant input price cost shock) that do not represent remuneration for accepting more risk.

Q2: Where adequate mechanisms are not offered in business plans, do you agree we should intervene to impose a sharing mechanism, to ensure customers will receive an appropriate level of benefit from companies with highly geared structures?

We do not agree that a sharing mechanism is appropriate. Customers already receive a tangible benefit from highly geared structures through a lower tax allowance in price limits. It is not clear that there are additional benefits that should be shared with customers. To the extent that equity returns are higher in highly geared companies this represents remuneration for the additional risk borne by investors. Appropriating this for customers, in the way that Ofwat's proposed mechanism seeks to do, changes the risk/reward balance in the sector in a way that will ultimately lead to a higher cost of capital and a higher cost for customers.

Q3. Do you have views on our proposals for the design of the outperformance sharing mechanism for highly geared structures? Do you agree that the calculation should be on a nominal basis and take account of the actual, rather than notional, cost of debt?

A sharing mechanism of any kind is not, in our view, appropriate and the proposed mechanism is not consistent with standard corporate finance theory. It would change the risk/reward balance for investors in the sector, by skewing expected returns in a way that ultimately would be contrary to customers' interests.

Customers of highly geared companies already share 100% of the benefits through the setting of the tax allowance. To the extent that the proposals lead companies to reduce gearing, there would be a tangible customer dis-benefit through the inclusion of higher tax allowances in price limits, with no countervailing benefit for customers.

Q4: Do you agree that companies should explain their approach to dividend policy in their business plans and that our IAP assessment should assess both transparency and how the policy takes account of factors which include obligations and promises to customers, delivery of service to customers, financial resilience and employee interests?

We have no particular concerns about requiring companies to set out, at a high level, their dividend policies in their business plans or other documents. However, while it is reasonable for Ofwat to assess the clarity and transparency of companies' policies as part of the Initial Assessment of Plans (IAP), companies must retain the ability to adapt their dividend policies to the circumstances.

Q5: Do you agree that companies should explain their approach to any performance related element of executive pay in their business plans and that our IAP assessment should assess both transparency and that policies for awards of any performance related element of executive pay demonstrate a link to exceptional delivery for customers?

As with the proposals on dividend policy, we do not have any concerns about explaining our approach to executive pay in our business plans. The IAP assessment should be based on the clarity and transparency of companies' policies, rather than the substance, to avoid the perception that Ofwat is approving or dictating company executive pay policies.

It is also important that all parties are clear what is meant by terms such as "exceptional delivery for customers". This must be agreed by Board Remuneration Committees with respect to the prevailing circumstances of the organisation.

Q6: Do you agree with our proposed revisions to extend the confidence and assurance test area to include trust and with the revised wording of question 3 of this test area?

We believe the IAP assessment should be based on the clarity and transparency of companies' policies, rather than the substance, to avoid the perception that Ofwat is approving or dictating matters that are properly for company directors.

Q7: Do you have any comments on the additional clarification of our approach to financial resilience in the IAP?

The additional clarification is helpful. We agree that stress testing of financial structures is critical, but clearly modelling all of the suggested downside scenarios in an additive way will lead to a draconian outcome and would not be justified. Stress testing should be based on companies' particular circumstances and plausible scenarios. It should also align with the approach taken by ratings agencies. We have been doing significant work in this areas recently, the results of which have been shared with Ofwat.

Ofwat proposals on sharing gearing outperformance

Prepared for
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17 May 2018

Final

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1 Executive summary

As part of a recent consultation, water companies were encouraged to introduce a mechanism to share outperformance that is claimed to result from adopting gearing that is higher than the notional level assumed by Ofwat.[1] This note has been commissioned by Southern Water to review the proposal to share gearing outperformance, and makes the following points:

- the consultation assumes that there are benefits to investors from increasing gearing relative to the notional level, but does not explain or provide evidence for why gearing or securitisation should affect the expected return on assets or the weighted average cost of capital;
- securitisation reallocates risk from lenders to borrowers—a lower cost of debt is simply a reward to the borrower for taking on more risk, which is reflected in a higher equity beta and a higher cost of equity capital;
- in the absence of evidence to the contrary, standard finance theory predicts that, without tax effects, the weighted average cost of capital is independent of gearing, while both the cost of equity and the cost of debt increase with gearing, holding all else constant;
- increasing gearing may result in savings for companies by reducing corporate tax, but the regulatory regime in the water sector passes these savings on to customers; thus, the only advantage to gearing that is consistently recognised by financial theory is not available to the water companies;
- the proposed introduction of an incentive mechanism linked to actual gearing breaches the long-established principle of neither encouraging nor discouraging particular forms of capital structure;
- introducing an incentive mechanism linked to actual gearing in the next price control (AMP7) would not give companies sufficient time to adapt, and therefore effectively acts as a penalty on companies with high gearing, which undermines the regulatory regime and increases the cost of capital;
- some of the theories of capital structure suggest that once personal income taxes are taken into account, the tax pass-through mechanism in the PR19 Final Methodology may already transfer more value from companies to customers than the net tax benefits of gearing, thereby already providing an incentive to reduce leverage;
- the ‘outperformance sharing’ mechanism presented in the consultation gives no consideration to what would be an efficient profile and timing of de-gearing, and there is no allowance for any additional costs that would be incurred by companies that are incentivised to adopt an inefficient timetable for de-gearing.

[1] Ofwat (2017), ‘Putting the sector back in balance: Consultation on proposals for PR19 business plans’, April.

2 Gearing and the cost of capital

This section is structured as follows.

Section 2.1 reviews the statements made in the consultation regarding the relationships between the cost of capital, gearing and securitisation.

Section 2.2 compares the statements made in the consultation with standard theories of capital structure.

2.1 Interpreting the financial framework behind the consultation

The fundamental premise in the consultation document is that high levels of gearing produce benefits for investors:

> …investors can benefit from gearing levels that are higher than this notional structure without sharing any of the benefits with customers.[2]

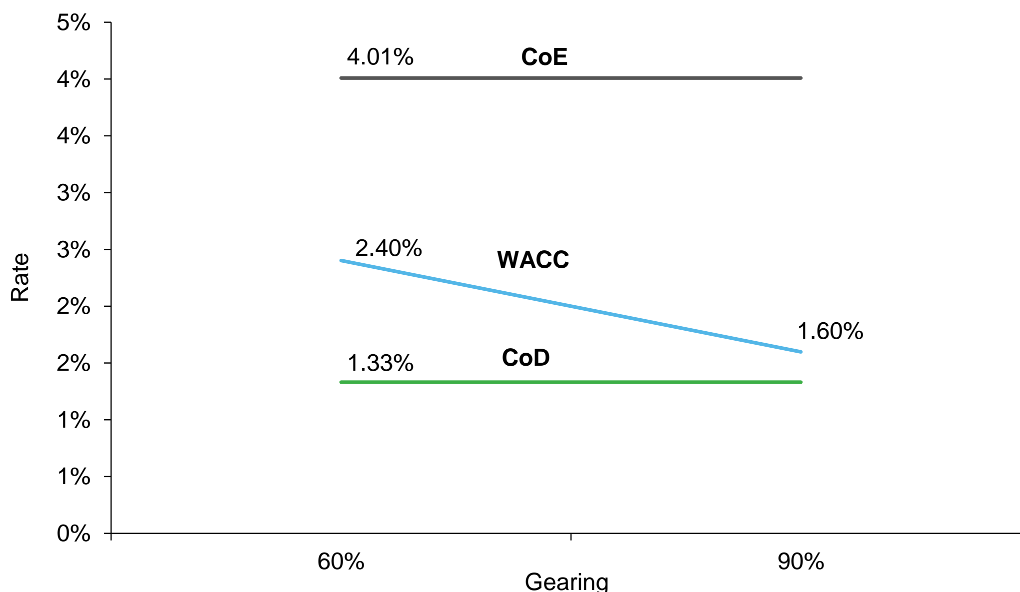
The document continues by stating that:

> This is because investors in such companies take the benefit of the difference between the cost of equity and the cost of debt for the actual proportion of gearing that is above our notional assumption, with no equivalent benefit to customers. Consistent with our approach to benefit sharing on costs and service, we consider it is reasonable for customers to benefit from financing performance associated with high levels of gearing.[3]

This appears to assert—without any supporting evidence—that equity and debt investors will expect the same rates of return on their respective investments whether a company has high or low gearing. This implies that—setting aside any consideration of tax shields—the weighted average cost of capital is negatively (and linearly) related to gearing, or equivalently that the value of the assets increases with gearing. Figure 2.1 below illustrates what the consultation document appears to assume for the cost of capital, cost of debt and cost of equity.

[2] Ofwat (2017), 'Putting the sector back in balance: Consultation on proposals for PR19 business plans', April, p. 14.
[3] Ofwat (2017), 'Putting the sector back in balance: Consultation on proposals for PR19 business plans', April, p. 15.

Figure 2.1 Illustration of the negative relationship between the weighted average cost of capital and gearing implied in Ofwat's consultation



Note: CoE, cost of equity. WACC, weighted average cost of capital. CoD, cost of debt.

Source: Cost of capital and cost of debt figures are sourced from Ofwat (2017), 'Delivering Water 2020: Our final methodology for the 2019 price review', p. 172.

Ofwat then acknowledges that finance theory implies that equity holders will require higher returns at higher levels of gearing, but states that securitisation arrangements enable companies to achieve a lower weighted average cost of capital at a given level of gearing:

> finance theory implies that equity returns increase in linear fashion with gearing but, typically, such theories do not reflect the benefits of securitisation arrangements. The covenants in such arrangements allow companies to achieve a lower cost of debt (and a lower cost of equity) than would otherwise be the case for a given level of gearing.[4]

Securitisation is primarily a means of reallocating risk by giving debt investors greater security over future cash flows. This security enables gearing to be increased but is provided at the expense of equity investors, who assume additional risk from higher gearing and the explicit pledging of future cash flows through securitisation. This may enable a lower cost of debt than would otherwise be the case for a given level of gearing, but not a lower cost of equity.

Although not discussed in the consultation, it may be that the reallocation of risk between lenders and borrowers changes incentives and adds value. If there is an increase in value through this mechanism, it would come through higher expected cash flows rather than a reduction in the cost of capital. This would be at most a second-order effect of securitisation, and it is uncertain whether these gains exist in practice and whether they could be reliably measured.

[4] Ofwat (2017), 'Putting the sector back in balance: Consultation on proposals for PR19 business plans', April, p. 15.

2.2 Gearing, securitisation and the cost of capital

The general contention of the consultation is that the weighted average cost of capital of a securitised company decreases as gearing increases, and is an exception to the 'capital structure irrelevance' proposition developed in Modigliani–Miller (1958):

> That is, *the market value of any firm is independent of its capital structure and is given by capitalising its expected return at the rate ρ_k appropriate to its class.*[5] [Emphasis original]

The basis of the proposition that the market value of a company is independent of its capital structure is that the value of a company is determined by its expected cash flows. This value remains the same regardless of how it is divided between the financial claims of different debt and equity investors. It follows that the expected return on the assets of the company does not change in response to changes in gearing. Equivalently, the weighted average cost of capital does not change in response to gearing and there are no benefits from increasing gearing.

Theories of optimal capital structure have challenged the capital structure irrelevance proposition by extending the analysis to include factors such as:

- corporate taxation and deductibility of interest from taxable profits;
- costs of financial distress;
- asymmetric information and agency costs.

In theory, securitisation may help to reduce asymmetry of information between investors and management, thereby reducing agency costs. There is some support for this effect in the literature, with securitisation having the potential to increase expected cash flows. However, the extent to which securitisation creates value for investors in large, regulated companies is unclear. It seems highly unlikely that any benefits from securitisation would come close to:

> the difference between the cost of equity and the cost of debt for the actual proportion of gearing that is above [Ofwat's] notional assumption.[6]

This is because securitisation reallocates risk from lenders to borrowers. A lower cost of debt is simply a reward to the borrower for taking on more risk, and that is reflected in a higher equity beta and a higher cost of equity capital. It may be that this reallocation of risk between lenders and borrowers does change incentives and add value, but this argument is a subtle one, and the gains are difficult to measure.

In contrast, once taxation of corporate profits is introduced to the analysis, under a taxation regime where interest payments on debt are deductible from taxable profits there may be a benefit to companies that issue more debt and increase leverage.[7] This is a transfer from taxpayers to companies that is built into the tax system in the UK and many other jurisdictions.

Table 2.1 below illustrates the size of the benefit by comparing the same company under two different levels of gearing and using the allowed return

[5] Modigliani, F. and Miller, M. (1958), 'The Cost of Capital, Corporation Finance and the Theory of Investment', *The American Economic Review*, **48**:3, June, p. 268.
[6] Ofwat (2017), 'Putting the sector back in balance: Consultation on proposals for PR19 business plans', April, p. 15.
[7] In a competitive market these benefits would not accrue to investors over the long run, and would instead be passed on to customers through lower prices.

parameters from the PR19 Final Methodology. For ease of illustration, the same cost of debt has been assumed at both levels of gearing, although as discussed above the cost of debt would be expected to increase with gearing. The analysis has been undertaken based on nominal returns, as tax is paid in nominal terms. In this example, increasing gearing from 60% to 80% (a £1bn increase in debt) reduces the tax bill by around £10m.

Table 2.1 Illustration of the tax shield effect

Parameter	Notional gearing	Actual gearing
Regulated Capital Value (£m)	5,000	5,000
Allowed return (%)[1]	5.47	5.47
Tax allowance (£m)	33	23
EBIT (£m)	307	297
Gearing (%)	60	80
Debt (£m)	3,000	4,000
Allowed cost of debt (%)	4.36	4.36
Interest payment (£m)	131	174
Tax rate (%)	19	19
Tax paid (£m)	**33**	**23**

Note: [1] Regulatory cost of capital (vanilla, nominal).

Source: Cost of capital and cost of debt figures are sourced from Ofwat (2017), 'Delivering Water 2020: Our final methodology for the 2019 price review', p. 172.

The tax shield benefit from increasing gearing above the notional level is significantly lower today than it was in the past. This is primarily because interest rates and corporate tax rates have decreased over time. For example, if the allowed return and tax rate parameters are replaced with their values from 15 years ago as used in the PR04 price review,[8] the tax saving from gearing at 80% rather than 60% would be around £32m.

If the framework is extended further by including personal income taxes on dividends and interest, Miller (1977) predicts that, in equilibrium, the corporate tax benefits of debt relative to equity may be reduced or eliminated depending on the relative tax rates on corporate profits, dividends and interest.[9] This manifests itself as an increase in the cost of debt required to generate a specified level of consumption for the recipients of interest payments once income tax has been deducted. The post-tax cost of capital may in this framework be invariant to gearing, implying that the vanilla cost of capital increases with gearing.[10]

In its current methodology, Ofwat already takes account of the tax shield effect by calculating the tax allowance based on the expected interest payments under the actual gearing level. The PR19 Final Methodology has further decreased the potential for companies to benefit from tax shields:

> …we proposed to introduce a reconciliation mechanism to account for changes in the corporation tax rate and writing down allowances under the capital allowance regime...

[8] At PR04, Ofwat allowed a cost of debt (pre-tax, real) of 4.3% and a cost of capital (vanilla, real) of 5.84%. These were converted into nominal terms (because tax is paid by companies in nominal terms) using an RPI inflation assumption of 3%. Tax rate of 30% was used.
[9] Miller, M.H. (1977), 'Debt and taxes', *Journal of Finance*, **32**:2, pp. 261–275.
[10] The vanilla cost of capital consists of the post-tax cost of equity and the cost of debt before deducting the corporate tax shield.

> Where a company increases gearing as a result of financial restructuring, we will claw back the tax benefits for customers at the next price review. This removes the incentive for companies to increase gearing simply to benefit from a lower tax bill.[11]

Companies that adopt gearing higher than the notional level will therefore have lower customer bills in AMP7 than if they were geared at the notional level.

Furthermore, if the corporate tax benefits of debt relative to equity are reduced in equilibrium because of personal income taxes, the PR19 Final Methodology would impose a transfer from companies to customers that exceeds the tax benefits from gearing. This would already provide an incentive to reduce gearing.

The main conclusions of this section are:

- the consultation assumes that there are benefits to investors from increasing gearing relative to the notional level, but does not explain or provide evidence for why gearing or securitisation should affect the expected return on assets or the weighted average cost of capital;
- securitisation reallocates risk from lenders to borrowers—a lower cost of debt is simply a reward to the borrower for taking on more risk, which is reflected in a higher equity beta and a higher cost of equity capital; it may be that this reallocation of risk between lenders and borrowers does change incentives and add value but this argument is a subtle one, and the gains are difficult to measure;
- in the absence of evidence to the contrary, standard finance theory predicts that, without tax effects, the weighted average cost of capital is independent of gearing, while both the cost of equity and the cost of debt increase with gearing, holding all else constant;
- increasing gearing may result in net savings for companies by reducing corporate tax, but the regulatory regime in the water sector passes at least all, if not more than, these savings on to customers; thus, the only advantage to gearing that is recognised by financial theory is not available to the water companies.

[11] Ofwat (2017), 'Delivering Water 2020: Our final methodology for the 2019 price review', p. 185.

3 Gearing and regulation

This section is structured as follows.

Section 3.1 assesses that the proposed gearing outperformance sharing mechanism presented in the consultation is contrary to established regulatory principles towards capital structure.

Section 3.2 highlights two additional concerns with the design of the gearing outperformance sharing mechanism.

3.1 Regulatory principles towards capital structure

The consultation document acknowledges that the established practice of Ofwat is to allow companies and investors to make decisions regarding capital structure, subject to the requirement that financial resilience is maintained:

> Companies are responsible for maintaining their financial resilience. And within the context of this obligation, they are best placed to make decisions about how to finance their activities. This includes the type and term of company borrowing and the proportion of their asset base to finance from debt and equity. This means that if companies make inefficient choices around financing structure or that interest rates change, the company and its investors bear these risks.[12]

This is consistent with the Final Methodology statement for the PR19 price review:

> We set the cost of capital by reference to a notional capital structure. This is consistent with the approach we have adopted in previous price reviews and was supported by respondents to our cost of debt consultation. It incentivises companies to secure efficient costs of finance and protects customers from the risk of companies' financing decisions. It means we set allowances for all companies at an appropriate level for an efficient company.[13]

It is also consistent with the approach followed by the Competition and Markets Authority for the appeal of the PR14 Final Determination by Bristol Water:

> It is consistent with standard regulatory practice that, in the water industry, it is for the companies to decide on their approach to financing. Within each regulatory period, companies are expected to accept the risks associated with the actual cost of finance relative to regulatory assumptions.[14]

In practice, this means that in previous price controls revenues have not been linked to actual capital structures, but instead regulatory assumptions have been made regarding the capital structure for a 'notional' company. These assumptions have included:

- gearing relative to Regulated Capital Value;
- the ratio of existing debt to new debt issued during a price control period;
- the proportion of debt issued as RPI-linked as compared with nominal debt;
- the target credit rating.

Companies have been free to depart from these assumptions and choose actual capital structures that are appropriate to their circumstances, subject to

[12] Ofwat (2017), 'Putting the sector back in balance: Consultation on proposals for PR19 business plans', April, p. 12.
[13] Ofwat (2017), 'Delivering Water 2020: Our final methodology for the 2019 price review', p. 173.
[14] Competition and Markets Authority (2015), 'Bristol Water plc. A reference under section 12(3)(a) of the Water Industry Act 1991', 6 October, para. 10.3.

compliance with limits on gearing specified in company licence conditions. For example, companies may deviate from these assumptions to finance capital programmes, to take advantage of favourable capital market conditions, or to smooth the impact of shocks on the business. Rather than being a fundamental characteristic of the business, as noted in advice to Ofwat in 2002, gearing is a derived variable that reflects the underlying risks and performance of a company.[15]

Given the challenges involved in identifying the optimal capital structure for any particular company (as outlined in section 2), it seems appropriate to leave these decisions to companies and investors. This set of arrangements has historically allowed a range of capital structures to develop in the water industry and has contributed a valuable source of comparative performance data on efficient financing costs.

The consultation paper has presented an example of how a 'gearing outperformance' mechanism might be designed. This would transfer from companies to customers a proportion—suggested to be 50%—of the difference between the allowed base return on equity and the cost of debt (allowed or actual), multiplied by the difference in actual and notional gearing multiplied by the RCV. All else being equal, this acts as an incentive to reduce gearing to the notional level. This breaches the long-established principle of not incentivising a particular form of capital structure.

For a company with higher gearing than the notional level, the gearing outperformance mechanism would act as an additional cost to the company that is unavoidable in the short term. As well as being an incentive mechanism, for these companies it also acts as a levy. The introduction of levies without providing companies with sufficient time to adapt and mitigate their impact undermines the predictability of regulatory regimes. This would be expected to negatively affect assessments of the creditworthiness of the sector and to increase the premium that investors incorporate into expected returns.

In addition, as noted in the previous section, the treatment of tax in the water sector passes at least all of the tax savings from gearing on to customers. Some of the theories of capital structure suggest that once personal income taxes are taken into account, in equilibrium the corporate tax benefits of debt relative to equity may be reduced or eliminated depending on the relative tax rates on corporate profits, dividends and interest.[16] The tax pass-through mechanism may therefore already transfer more value from companies to customers than the net tax benefits of gearing, thereby already providing an incentive to reduce leverage.

The main conclusions from this section are:

- the proposed introduction of an incentive mechanism linked to actual gearing breaches the long-established principle of neither encouraging nor discouraging particular forms of capital structure;
- introducing an incentive mechanism linked to actual gearing in the next price control (AMP7) would not give companies sufficient time to adapt, and therefore effectively acts as a penalty on companies with high gearing, which undermines the quality of the regulatory regime and increases the cost of capital;

[15] Oxera (2002), 'The capital structure of water companies', report for Ofwat, 11 October.
[16] Miller, M.H. (1977), 'Debt and taxes', *Journal of Finance*, **32**:2, pp. 261–275.

- some of the theories of capital structure suggest that once personal income taxes are taken into account, the tax pass-through mechanism in the PR19 Final Methodology may already transfer more value from companies to customers than the net tax benefits of gearing, thereby already providing an incentive to reduce leverage.

3.2 The mechanism proposed by Ofwat

As noted in section 3.1, if companies already have high gearing, they have limited scope to respond in the short term to the incentives created by the suggested gearing outperformance sharing mechanism.

There are two main ways in which gearing can be reduced efficiently:

- through not refinancing debt as it matures, and instead retaining dividends and/or injecting equity;
- through financing RCV growth with a higher proportion of equity.

In most cases, companies will have no choice over when to refinance debt, and can therefore only efficiently adjust their capital structures as existing debt matures. As debt issued in the sector tends to be long-dated, it is likely to take years for companies to make significant capital structure adjustments.

Companies will be funded only for plans that deliver levels of RCV growth that are in the interests of customers. Such growth is likely to be gradual relative to the existing RCV and hence, even if funded entirely from equity, the process of rebalancing capital structure will happen over a period of years.

These methods are not mutually exclusive. In theory they could be used in combination, although the faster the rebalancing, the more likely it is that new equity will need to be attracted to the sector.

The example gearing outperformance sharing mechanism is presented in the consultation with no consideration of what would be an efficient profile and timing of de-gearing. There is also no allowance for any additional costs that would be incurred by companies that are incentivised to adopt an inefficient timetable for de-gearing.

4 Conclusions

In conclusion, the consultation document provides no theoretical or empirical support for its fundamental premise that high levels of gearing produce benefits for investors. Under standard theory, aside from generating tax shield benefits, increasing gearing above the notional level does not change the weighted average cost of capital. The document does not recognise that securitisation reallocates risk from lenders to borrowers, which is reflected in a higher equity beta and a higher cost of equity capital. The document provides no evidence of benefits that could be shared with customers.

Moreover, the proposed introduction of an incentive mechanism linked to actual gearing breaches the long-established principle of neither encouraging nor discouraging particular forms of capital structure. Introducing such an incentive mechanism in the next price control (AMP7) would not give companies sufficient time to adapt, and therefore effectively acts as a penalty on companies with high gearing, which undermines the regulatory regime and increases the cost of capital.

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