

## Response to the Ofgem RIIO ED1 draft determinations – financial issues

Report prepared for British Gas<sup>1</sup>

September 2014

### Executive Summary

#### *Introduction and overview*

CEPA has been commissioned by British Gas to provide support in its response to Ofgem on the RIIO ED1 draft determinations. This independent CEPA paper focuses on Ofgem's proposed changes to its approach to setting the cost of capital allowance and financeability.

It finds that Ofgem has not justified the proposed changes to the cost of debt indexation mechanism and those changes conflict with established regulatory principles. The proposed changes are likely to lead to windfall gains to distribution network owners, blunt incentives for efficient financing and lead to unintended consequences at the next network price review.

A change in approach at this late stage and contrary to the Strategy Decision is not indicative of good regulatory practice.

#### *Conflict with regulatory principles*

In the RIIO ED1 Strategy Decision (March 2013), Ofgem stated that the cost of debt indexation approach would be '*based on a 10-year simple trailing average index (with provision for companies to justify alternatives in exceptional circumstances)*'<sup>2</sup>. This approach had been developed as part of the RIIO handbook, building on longstanding Ofgem approaches to establishing the allowed cost of debt, was implemented for RIIO GD1 and T1 and accepted by companies and investors, including three companies as part of the ED1 process. Ofgem now propose a change to the index for *all* slow-tracked ED1 companies, giving an estimated uplift in allowance of over £120m. As such, it is hardly a surprise that there has been little resistance to this move from companies and City commentators, although we note that Moody's find this change unwarranted in terms of financeability and credit negative in terms of the stability of the regime.

Ofgem's proposed gradual move to a 20-year trailing average seems to be based on claimed actual costs of two companies (ENWL and NPG), but will reward all slow-tracked companies.

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<sup>2</sup> Ofgem (2013) RIIO ED1 Strategy Decision – Financial Issues

For RIIO T1, the cost of debt mechanism was adjusted for one rather than all networks<sup>3</sup>, to reflect the company specific circumstances. It is therefore consistent with precedent (including from Ofwat) that if there is a justification for change it can be made for specific companies only.

The use of a trailing average is intended to match the cost of debt allowance to efficiently incurred costs over time and thus there will inevitably be periods where the allowance is more generous than the actual cost of debt, whilst there will also be periods where the allowance is less than the actual cost of debt. It is not appropriate that a company keeps the benefits when the allowance is above the index, yet an uplift is applied to the allowance in periods when it is below the actual cost of debt.

Ofgem also risks unintended consequences in its proposed change. If companies set out actual costs and profiles that are different to the index at the point of time of the next energy price control, will Ofgem change the index again? Ofgem should maintain its focus on the long established principle of rewarding the notional efficient company over time. The ten year trailing average approach has been widely debated and accepted by investors and Ofgem has not presented sufficient evidence to change this approach.

#### *Generosity of index and the notional efficient company's performance*

The current index provides significant headroom for the notional efficient DNOs' costs of debt. One of the drivers of this headroom is the 'halo effect.' As Ofgem noted in the RIIO ED1 Strategy Decision, the halo effect that applies to regulated network companies is due to a guaranteed revenue stream, a RAB-backed asset value, an absence of volume risk and competitive pressures, and a well understood regulatory regime. The size of the halo effect is estimated as 53bps for embedded debt and current Ofgem analysis suggests this is of similar magnitude at present.

Other factors are also likely to make the index generous compared to actual costs, including: yield curve effects (whereby the shape of the yield curve allows companies to reduce actual costs); the inclusion of unrepresentatively high rates in the index during the period of the Global Financial Crisis; and that fees and issuance costs do not offset this headroom as much as Ofgem has stated. If the change in approach is predicated on regulatory principles, the breakeven inflation measure used should similarly move to 20 years to ensure that the calculations are made on a consistent basis.

#### *Actual cost of debt: caution required*

Ofgem has indicated that it has considered the actual cost of debt of the DNOs against the benchmark iBoxx indices as part of its check on the cost of debt. But the actual cost of debt should only be used as a cross-check rather than a basis for setting a cost of debt allowance. When looking at the debt portfolios, it is not sufficient to simply consider the actual

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<sup>3</sup> To reflect issuance profiles. There were also adjustments across the sector in the equity beta and notional gearing assumptions.

weighted cost of embedded debt that the DNOs have, as this can provide a misleading picture. Ofgem will need to make an adjustment for inefficiently incurred or junior debt, the treatment of bonds that are driven by shareholder rather than company objectives and ensure that calculations are made with an appropriate adjustment for funged bonds.

An example is the ENWL bond issued in 2013 at a credit rating of BB+ (i.e. below investment grade status) – it is not clear to us why this would be the case for a regulated utility. Moving the yield down to the benchmark level for this one bond reduces the weighted cost of embedded debt for ENWL by 33bps<sup>4</sup>. A further example is the 31 year bond issuance by ENWL (at the time Norweb) in Autumn 1995 was at a time when the network was subject to a bidding war and was eventually acquired by North West Water. Ofgem should assess whether this bond issue was driven by shareholder needs or part of an efficient financing strategy. The decision to exclude bonds linked to acquisitions or transactions is established in precedent by the Civil Aviation Authority.

Ofgem themselves noted in DPCR5 a reason for why uplifts were not required for the cost of debt allowance to cover higher embedded debt costs<sup>5</sup>:

*“Some of the embedded debt is over ten years old and over this period many of the DNOs have changed ownership. Investors purchasing a DNO will factor in any difference in the cost of any embedded long term debt and the typical allowed cost of debt set by Ofgem when agreeing a purchase price.”*

CEPA’s analysis of actual embedded debt costs confirms that no adjustment to the cost of debt mechanism would appear necessary for SPEN, SSE or UKPN. For ENWL and NPG, there needs to be greater evidence provided on why their debt financing decisions can be considered efficient before any adjustment can be made.

### *Cost of equity*

Ofgem themselves have stated that the cost of equity estimate of 6.0% contains headroom. If Ofgem believe that the proposed cost of debt mechanism reduces risk for DNOs, then the equity beta of the DNO should similarly fall.<sup>6</sup> We have pointed out in previous submissions why the cost of equity should be reduced.

### *Financeability*

Notional gearing has a marginal impact on the cost of capital around the current level. A reduction in the notional gearing level may be a way to improve financeability metrics for the DNOs and mean that further financeability adjustments are not necessary.

The principles around financeability and regulatory precedent state that the regulator should consider financeability in the round and if a financeability concern is identified, the onus is on the company to deal with this, e.g. through reduced dividends or equity issuance.

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<sup>4</sup> From 2.87% to 2.54% in real terms.

<sup>5</sup> Ofgem (2009) DPCR5 Final Proposals – Financial Issues, December 2009, p9.

<sup>6</sup> It should be noted that risk is allocated from DNOs to consumers rather than disappearing.

NPV-neutral adjustments still raise the costs for RIIO ED1 consumers and increase the likelihood of financeability issues in future periods due to lower future cashflows. The Competition Commission dealt with a similar issue for the NIE determination, placing the onus on NIE rather than consumers for the price control period.

Companies regulated by Ofgem have typically and consistently outperformed the central RoRE estimate and Moody's state that DNO outperformance on incentives is likely to increase for RIIO ED1. By underestimating RoRE returns, financeability adjustments are made that are unnecessary, thus it is important that the plausible outcomes are representative of expectations.

#### *A note on Ofwat PR14*

Ofwat have only allowed an uplift to the cost of capital where the company has demonstrated that an uplift is justified due to exceptional company specific circumstances and that the uplift would be of benefit to consumers. Ofwat also has a lower trough and lower peak for their RoRE ranges compared to Ofgem's RIIO ED1 RoRE range, with gain sharing mechanisms introduced in the water sector for consumers to share in RoRE outperformance. Ofwat is intending to review evidence pointing to lower allowed cost of capital being appropriate. When compared to RIIO ED1 proposals, PR14 draft determinations appear tougher on financial issues.

#### *Conclusion*

A change to the cost of debt mechanism has not been justified by Ofgem, and the proposed change risks windfall gains to companies. The evidence Ofgem has presented, including on actual costs of debt, does not justify even an exceptional adjustment for one company. This is further supported by Ofgem's relative generosity on the cost of equity.

## 1. REGULATORY PRINCIPLES

### 1.1. Introduction

In the RIIO ED1 Strategy Decision (March 2013), Ofgem stated that the cost of debt indexation approach would be *'based on a 10-year simple trailing average index (with provision for companies to justify alternatives in exceptional circumstances)'*<sup>7</sup>. This approach had been developed as part of the RIIO handbook, was implemented for RIIO GD1 and T1 and was accepted by three companies as part of the ED1 process to date<sup>8</sup>.

Ofgem stated that there was to be a change in approach as part of the RIIO ED1 Draft Determinations for slow track companies - a material change which is being consulted upon only very late in the ED1 process. Ofgem's thinking behind the move to a 'trombone' indexation mechanism is as follows<sup>9</sup>:

*'We found that trailing average periods that extend trombone like from a fixed starting point until they reach about 20 years provided the lowest sensitivity to interest rates. Fixed trailing average periods would expose investors to more uncertainty. We consider that a trombone index would therefore have significant advantages in terms of limiting investor risk and improving financeability. This kind of risk reduction would be of value to investors.'*

Whilst risk reduction is of value to investors, the aim of regulation should not necessarily be to do this. For example, risk would be reduced for investors by setting an allowance based on actual debt costs. However this is not good regulatory practice as it clearly does not have optimal incentive properties or if this were to be done, then the cost of equity should be reduced to reflect the decrease in risk. Similarly, 'lowest sensitivity' to interest rates is a criterion that may appear to be a benefit but is one that comes at a cost to consumers and may be of limited benefit for companies and investors who are able to manage such risks e.g. through use of fixed rate debt and other treasury strategies.

To establish a forecast spot cost of debt over RIIO ED1, we have used forward gilt curves alongside the iBoxx A and BBB rated non-financial corporate indices to establish a market implied estimate. With these spot rates we have then calculated estimates for the cost of debt allowance under the original ten-year trailing average and the newly proposed approach (trombone)<sup>10</sup>. The forecast cost of debt allowance for each year is shown in the table below.

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<sup>7</sup> Ofgem (2013) RIIO ED1 Strategy Decision – Financial Issues

<sup>8</sup> Namely SPEN, NPG and SSE in their revised business plans.

<sup>9</sup> Ofgem (2014) RIIO ED1 Draft Determinations – Financial Issues

<sup>10</sup> With data up to 19 August 2014.

Table 1.1: Forecast cost of debt allowance under Ofgem ‘trombone’ mechanism versus original

%	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Trombone	2.54	2.43	2.37	2.34	2.32	2.31	2.30	2.31
Original	2.54	2.43	2.37	2.31	2.20	1.97	1.96	1.98

Source: Markit, Bloomberg, CEPA analysis

The forecast difference in allowance over the eight years of RIIO ED1 is equivalent to £122m for the slow-tracked DNOs from using the trombone approach rather than the original approach.

## 1.2. Principles behind indexation

In the RIIO handbook, Ofgem state that they made ‘a commitment to remunerating efficiently incurred debt costs.’<sup>11</sup> The interpretation of efficiency here makes a difference to whether use of a notional company is consistent with this statement. From a cost of debt efficiency perspective, there are two aspects to consider – the first of these is whether the debt at the time of issue is efficient relative to an appropriate benchmark. The second aspect is how the timing has affected the cost of embedded debt. If a company had issued the entirety of their debt at a time when rates were at their peak (e.g. during the Global Financial Crisis (‘GFC’)) and the yield was equivalent to the iBoxx benchmark, the question is how this debt should be remunerated, partially or fully. Conversely, if all debt had been issued at a rate equivalent to the benchmark, but at a time when this benchmark was at a trough, should the company be given a figure to represent its actual cost of debt, be given the benchmark cost of debt or something in between.

The treatment of these two companies should be conducted on a consistent basis. We have previously noted the flaws in adopting the actual cost of debt for companies given the lack of incentives on the company to outperform, so do not think this is the correct approach.

The use of a trailing average is meant to match the allowance to costs in the long-run and thus there will be periods where the allowance is more generous than the actual cost of debt, whilst there will also be periods where the allowance is less than the actual cost of debt. It is not appropriate that a company keeps the benefits when the allowance is above the index, yet an uplift is applied to the allowance in periods when it is below the actual cost of debt.

The choice of a ten-year trailing average was extensively consulted upon and agreed so as to strike a balance in seeking to remunerate efficiently incurred debt.

<sup>11</sup> Ofgem (2010) Handbook for implementing the RIIO model.

### 1.3. Change of approach

The use of the ‘trombone’ methodology represents a change in approach from the one Ofgem set out in the RIIO handbook, RIIO T1 and GD1 decisions and the Strategy Decision for RIIO ED1. The rationale for such a change is not clear and it does not appear to be based on any new evidence that has been presented since the Strategy Decision. A potential reason appears to be that high embedded debt costs for some (but not all) of the DNOs above the forecast allowance, likely incurred due to company specific financing decisions, could be damaging from a financeability perspective. However, Moody’s commentary on the matter would suggest that the DNOs would easily be able to maintain the target investment grade credit quality with the original ten year trailing average approach under indexation.

Moody’s have stated that the assumptions used *‘should not restrict the ability of a DNO to achieve a rating in the low single-A/ high Baa region,’*<sup>12</sup> that the Draft Determinations were broadly neutral in terms of their credit impact and were not likely to lead to reduced credit quality overall. With the change in the cost of debt mechanism described by Moody’s as *‘marginally credit positive’*<sup>13</sup> in the short term for the DNOs, the financeability rationale would appear to not be justified for RIIO ED1.

Moody’s also highlight how the *‘decision to amend the index for the DNOs so soon after its implementation in other determinations’*<sup>14</sup> is a credit negative. We agree that the change is a negative in terms of regulatory consistency and predictability.

For future price controls in the energy sector, the ‘trombone’ approach does not most likely represent an enduring regime, more of a transition to a longer term trailing average. The debt tenor in other energy sectors (e.g. RIIO GD1 and T1 companies) has been estimated at close to 20 years. The use of the iBoxx ten year plus benchmark indices reflect this maturity. For RIIO GD2 and RIIO T2, it is not clear what the expectation for the cost of debt will be. If companies believe that their actual cost of debt will feed in to the decision of the regulator, this will impact on their financial strategy. The use of a ten year trailing average of the indices was an enduring regime that means that the companies should not be any better or worse off in the medium to long term. By changing the trailing average periods, some periods will have greater weighting and this principle may not hold.

### 1.4. Adjustment for all companies

Ofgem state *‘in their March 2014 business plan submissions, a number of DNOs provided evidence that their circumstances were exceptional.’* This would imply that exceptional

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<sup>12</sup> Moody’s (2014) Special comment: UK electricity networks – RIIO ED1 draft determinations in-line with expectations, 15 September 2014.

<sup>13</sup> Ibid

<sup>14</sup> Ibid

circumstances refer to the DNOs individually and the language used by Ofgem would suggest that not all the DNOs provided evidence to justify exceptional circumstances.

However, contrary to the Strategy Decision, those DNOs which did not provide evidence to justify exceptional circumstances will still receive a higher cost of debt allowance due to a gradual move to a 20-year rather than 10-year trailing average based on the proposals put forward at Draft Determinations.

If there is need for an adjustment, it is not at all clear that the adjustment should apply to all DNOs as this imposes a cost for all consumers. If any adjustment is made, it will give those companies that do not need an adjustment windfall gains due to higher costs from another network. This would be compounding the error of permitting an adjustment for at least one DNO based on actual embedded debt costs.

For RIIO T1, the cost of debt mechanism was adjusted for one rather than all networks<sup>15</sup>, to reflect the company specific circumstances. It is therefore consistent with precedent if Ofgem were to make individual adjustments that it deemed necessary. This approach would also be consistent with Ofwat's approach.

In determining whether an adjustment is needed for a network, the implications of not allowing this adjustment should be considered first. Our assessment of actual embedded debt cost (see Section 3) and Moody's analysis suggests that the companies would still be able to finance their debt at the level of notional gearing without detriment to their credit quality. If no adjustment to the index approach leads to reduced equity returns, Ofgem should determine if this is justified, with one exception. This exception is something that Ofgem themselves noted in DPCR5 as a reason for why adjustments were not required to the benchmark for embedded debt costs<sup>16</sup>:

*"Some of the embedded debt is over ten years old and over this period many of the DNOs have changed ownership. Investors purchasing a DNO will factor in any difference in the cost of any embedded long term debt and the typical allowed cost of debt set by Ofgem when agreeing a purchase price."*

If the company has not changed hands then the exception does not hold. However the reason for the embedded debt costs arise through treasury management policies and financing requirements. If the company have control over their treasury management and would gain from benefits from outperformance, taking the hit from underperformance through reduced equity returns would appear appropriate given there is headroom built in to the benchmarks used to calculate cost of debt allowances. This is the focus of our next chapter.

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<sup>15</sup> To reflect issuance profiles. There were also adjustments across the sector in the equity beta and notional gearing assumptions.

<sup>16</sup> Ofgem (2009) DPCR5 Final Proposals – Financial Issues, December 2009, p9.



## **1.5. Summary**

The change in approach is forecast to increase costs to consumers by £122m in RIIO ED1. However the proposed change of approach has not been justified based on the limited evidence presented by Ofgem. Furthermore, 'lowest sensitivity to interest rates' does not seem an appropriate criterion by which to measure an approach, due to its poor incentive properties. Higher embedded debt costs for two of the networks were expected not to impact credit ratings under the original ten year trailing average approach and an uplift for such embedded debt costs was rejected at DPCR5 by Ofgem, as this would have been reflected in purchase prices for shareholders. Ofgem's proposed change in approach at a late stage and contrary to the Strategy Decision is not indicative of good regulatory practice and has created uncertainty for the RIIO GD2 and T2 price control determinations.

## **2. IS THE BENCHMARK REPRESENTATIVE OF A NOTIONAL EFFICIENTLY FINANCED DNO?**

### **2.1. Introduction**

As we have noted in the section above, the change in approach proposed by Ofgem does not improve economic regulation in the sector from a regulatory principles perspective. Ofgem has indicated that it has considered the actual cost of debt of the DNOs against the benchmark iBoxx indices as part of its check on the cost of debt. We find that the index is not fully representative of the financing costs of a notional efficiently financed DNO, as there is a large degree of headroom for DNOs relative to the index.

Ofgem have previously noted that there are potential higher costs from a regulated network under-recovering than from a regulated network over-recovering and this means that some headroom is justified under an ex-ante price control. However the headroom in practice is already much higher than what would be justified by this line of argument and any further change to the mechanism to increase the forecasted allowance is inappropriate.

In this section we review the potential drivers of this headroom. These include the halo effect, yield curve effects, the indices during the GFC and the use of breakeven inflation. We deduct fees and issuance costs that are not covered under the index, but this has only a modest offsetting effect.

### **2.2. Halo effect**

Ofgem noted in the RIIO ED1 Strategy Decision the halo effect that applies to regulated network companies due to a guaranteed revenue stream, a RAB-backed asset value, an absence of volume risk and competitive pressures, and a well understood regulatory regime. The size of the halo effect is estimated as 53bps for embedded debt. As regulated networks are typically much more highly geared than the market as a whole, this would suggest that the halo effect would be greater than this should the companies possess gearing ratios equal to the broader economy<sup>17</sup>.

On the cost of new debt, Ofgem's own analysis indicates that the halo effect remains of a similar magnitude (c.50bps)<sup>18</sup>. This is not inconsequential, as this amounts to £400m of headroom through the halo effect for RIIO ED1<sup>19</sup>.

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<sup>17</sup> The use of the notional gearing ratio takes into account the higher levels of gearing, so any difference should not affect the calculation of the cost of debt.

<sup>18</sup> See Figure 2.2 on Financial Issues supporting document for Draft Determinations.

<sup>19</sup> Based upon a debt proportion of the RAB of £10bn.

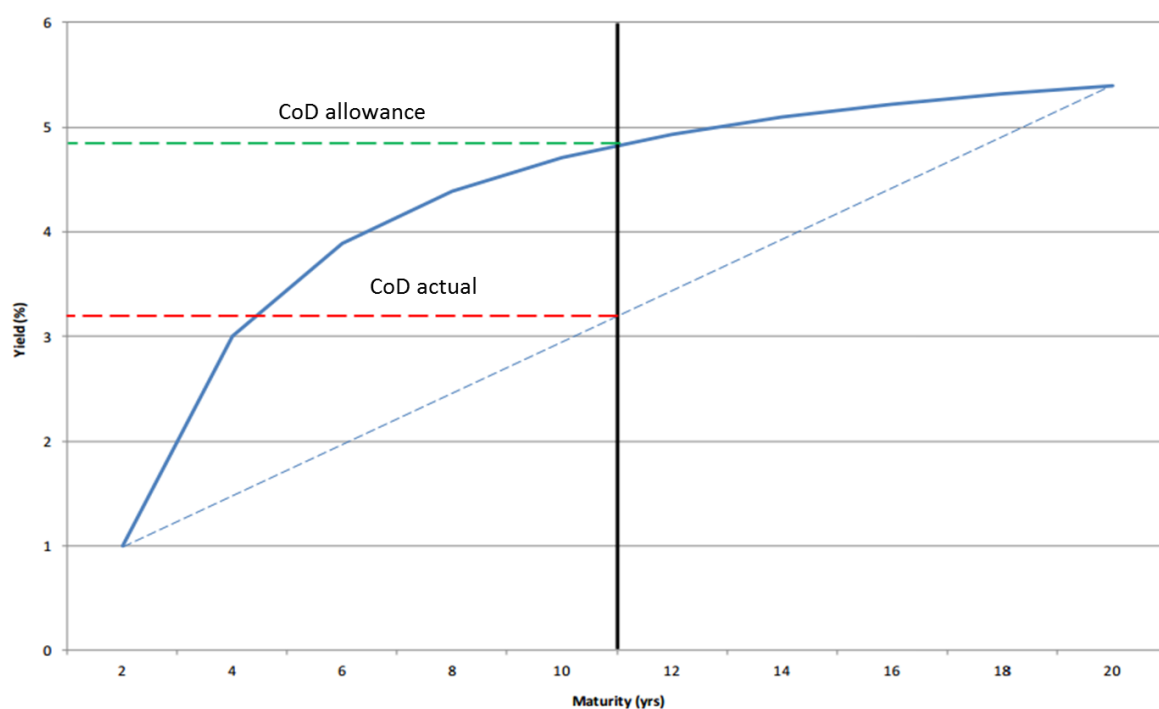
### 2.3. Yield curve effect<sup>20</sup>

The shape of the yield curve is a factor that companies consider when issuing debt. From both a cross-sectional and time-series perspective this creates headroom under the benchmark used for cost of debt indexation for RII0 ED1. The cross-sectional view finds the concave shape of the current yield curve to have a significant effect on the degree of headroom between allowance and actual debt costs since the GFC. In the years with an inverted yield curve, the yield curve was relatively linear, so the cross-sectional effect would not fully counteract this. The inversion of the yield curve in fact has allowed companies to issue at below benchmark costs for long-term debt in the years preceding the GFC, then similarly outperform the benchmark with shorter term issuance after the GFC.

#### *Cross-sectional view*

Using an average for maturity may not reflect the situation faced in the debt markets by companies. If for example a firm was issuing five year and fifteen year debt in equal proportion, the allowance should reflect 50% of the yield from the five year index and 50% of the yield from the 15 year index rather than the yield from the 10 year index. The issue with a simple approach using an average of maturities rather than average of yields is shown in Figure 2.1 with an upwards sloping yield curve.

*Figure 2.1: Illustrative example of differing cost of debt allowance methodologies*



*Source: CEPA analysis*

<sup>20</sup> Similar analysis can be seen in a CEPA report for British Airways; CEPA (2013) Notes on a Cost of Debt indexation approach for Q6, June 2013.

The chart illustrates a case where the yield curve is not linear and assumes that the company has taken equal proportions of debt with two year maturity and 20 year maturity. This means that the average maturity at that time is 11 years.

The green line takes the cost of debt that would be assumed if you took the yield on the 11 year debt, but the red line is the average cost of debt that the company has achieved. It is the concavity of the curve that creates this effect.

An example can be made for a DNO who has issued debt using 5 year, 10 year and 30 year debt in proportions such that the average debt tenor is exactly 20 years<sup>21</sup>.

*Table 2.1: Quantifying the yield curve effect*

Tenor	Amount issued today	Nominal Yield <sup>22</sup>
<i>Cost of Debt Actuals</i>		
5 year	£200m	2.74%
10 year	£200m	3.33%
30 year	£500m	4.03%
Weighted = 20 years	Total = £900m	Weighted average = 3.58%
<i>Cost of Debt Allowance</i>		
20 year	-	3.91%

*Source: Bloomberg*

Based on the current yield curve and indexation methodology, the actual cost of debt for the notional portfolio would be 3.58%, however the allowance based on the indexation approach for 20 year tenor debt would be 3.91%. Thus the DNO in our example would have headroom of 33bps from the cross-sectional part of the yield curve effect, which would affect new and more recently issued debt.

#### *Time-series view*

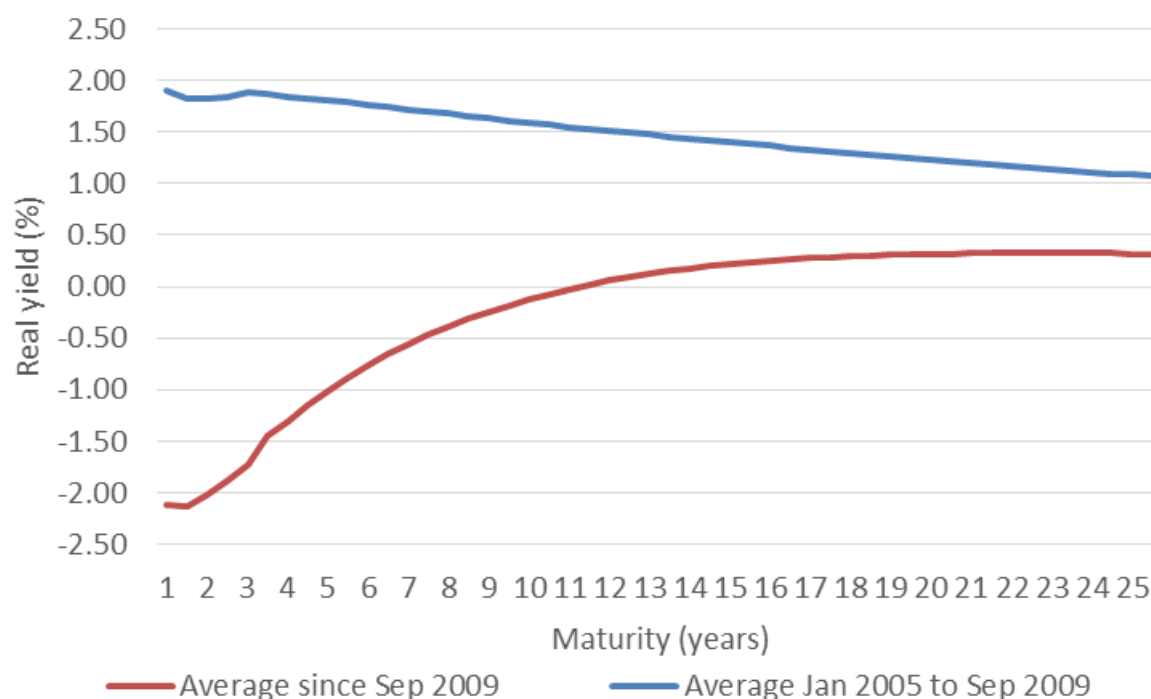
Looking at current debt portfolios of the DNOs, remaining debt issued many years ago by definition will be of a longer term tenor. Shorter term debt will be replaced more frequently and so this debt is likely to have been issued in the recent past. For RIIO ED1, the slope of the yield curve has benefitted the DNOs, with a switch from a downwards sloping yield curve when longer-term debt was issued to the upwards sloping yield curve in recent years when companies have typically issued shorter term debt.

The figure below shows the average yield curve from January 2005 to 1 September 2009 (period with downward sloping yield curves) to the average yield curve from 1 September 2009 to the end of August 2014.

<sup>21</sup> An example would be where a company has £900m of debt; £200m each of 5 and 10 year tenor, £500m of 30 year tenor.

<sup>22</sup> Based on nominal gilts with a notional 100bps spread for all tenors, data from 15 August 2014.

Figure 2.2: Average yield curves on gilts



Source: Bank of England

Analysis of the DNOs existing debt portfolios shows that in the period from January 2005 to September 2009, there were eight bonds issued by DNOs, of which six had a debt tenor of at least 30 years. In the period since September 2009, there were eleven bonds issued, none of which had debt tenor of 30 years or more.

When compared to the benchmark, it shows that the DNOs should have additional headroom from issuance in both periods. From Jan 2005 – Sep 2009, the efficient costs of longer term debt is cheaper than the cost for the 20 year benchmark. From Sep 2009 to the present date, the efficient costs of shorter term debt is cheaper than the cost for the 20 year benchmark.

The shift in the yield curves that has led to this phenomena is market driven (rather than DNO driven), presenting opportunities for DNO treasury strategies to lock in headroom in periods of both downward and upward sloping yield curves.

## 2.4. Global Financial Crisis

The reason for headroom in this case is two-fold: i) the DNOs did not typically issue debt during the GFC; and ii) the benchmark index from which the allowance is set was unrepresentative of the financing environment for DNOs during this period.

The spike in the benchmark rates during the GFC was a significant deviation from trend that will continue to feed into the cost of debt allowance under Ofgem's proposed cost of debt indexation measure until 2028. Rates rose by almost 400 bps in a few months and rates may

be considered to be on average 200 bps above the five-year trend for a one-year period around the GFC. This is shown in the figure below.

*Figure 2.3: iBoxx non-financial corporates A and BBB rated ten year plus debt*



*Source: Markit*

If a ten year trailing average is used, this equates to increase in the cost of debt allowance by 20 bps per annum for ten years, or 10 bps per annum for twenty years. The figures will remain in the cost of debt allowance until 2028/29 following Ofgem's new approach. The impact of this one year that did not affect DNOs actual debt costs is shown in the table below.

*Table 2.2: Impact of GFC on cost of debt allowances*

Time period	Method of calculating allowance (expected)	Basis point impact on cost of debt allowance	Additional allowance for price control period <sup>23</sup>
2010/11 to 2014/15 (DPCR5)	Fixed allowance – based on 10yr trailing average	20bps (i.e. 200bps/10yrs)	£100.0m
2015/16 to 2024/2025 (transition)	Trombone out under indexation from 10yrs to 20yrs	13.33bps (i.e. 200bps/15yrs)	£133.3m
2025/26 to 2028/29	Indexation – 20yr trailing average	10bps (i.e. 200bps/20yrs)	£40.0m
<b>TOTAL</b>			<b>£273.3m</b>

The forecast change in allowances over the period 2010/11 to 2028/29 from a temporary deviation in yields is £273.3m. We accept that this is the nature of using a trailing average period and that DNOs may not have issued debt in periods of lower yields. However, if the DNOs did not issue debt during this period, this amount is a windfall gain paid for by consumers. The trombone mechanism and change in Ofgem’s approach has compounded this issue, as the use of a ten-year trailing average over the period would have only led to a potential windfall gain of £200.0m<sup>24</sup>.

#### *Comparison with utilities index*

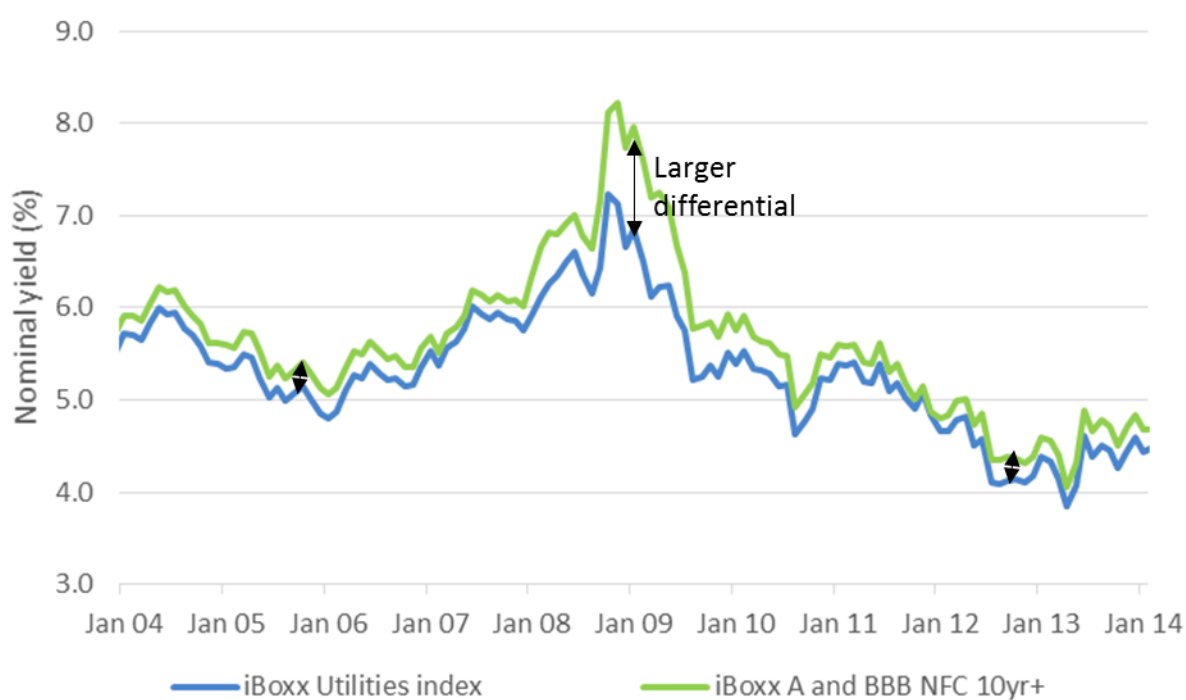
It is more than just the nature of the averaging period that is an issue here; the benchmark was for a period unrepresentative of the market conditions faced by utilities (especially regulated networks). When analysing the iBoxx utilities index relative to the benchmark non-financial corporates indices, the period during the GFC showed that the utilities index at approximately 100 basis points below the combined index that is used in the cost of debt mechanism rather than 10-20bps either side of this period.

The utilities index includes non-regulated utility sector assets and if a suitable index was available for solely regulated utilities we would expect to see that the deviation between spreads would be even greater during the period i.e. an even higher halo effect. The figure below indicates the nominal yields on the iBoxx Utilities index and the iBoxx non-financial corporates ten-year plus indices, illustrating that the non-financial corporates index is especially generous during the GFC.

<sup>23</sup> Assumes a constant £10bn debt proportion of the RAV (real terms).

<sup>24</sup> This is a function of transition – if Ofgem had kept with a consistent method in this time period e.g. a 20yr trailing average throughout, the impact would have been equivalent to £200.0m. It is the nature of the trombone index that gives greater weighting to certain years over this period. For example, 2004/05 drops out of the index.

Figure 2.4: Discrepancy between Utilities and Non-Financial Corporates (NFC) index during GFC



Source: Markit

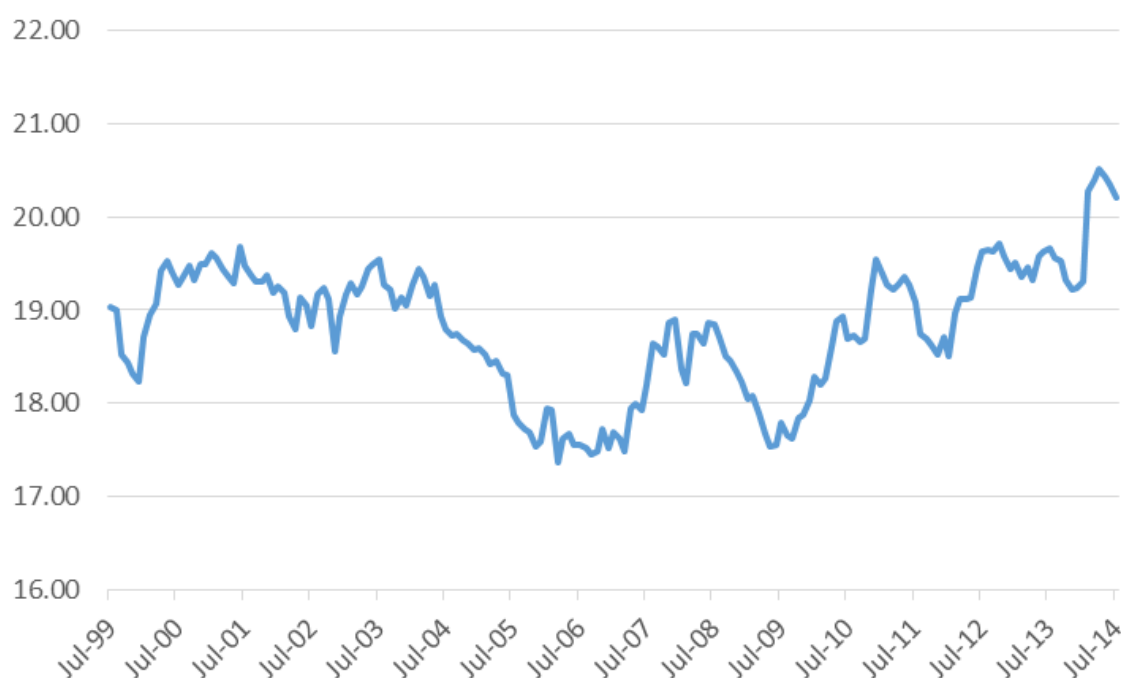
This analysis indicates that the use of the iBoxx non-financial corporates is particularly generous to the regulated electricity DNOs and the use of this period in a trailing average leads to windfall gains for the DNOs at a cost to consumers. Ofgem proposes to further increase the amount of this windfall gain.

## 2.5. Breakeven inflation

Under the proposed 'trombone' approach, for the notionally efficient company, the life of existing assets is 20 years, the trailing average for debt moves to 20 years, the maturity of the debt is approximately 20 years (see figure below) and yet breakeven inflation used in deflating nominal yields is a 10 year breakeven inflation measure. Breakeven inflation on 20 year bonds is provided from the same source as the 10 year measure, and from a theoretical perspective the use of this longer term breakeven measure would be more consistent.



Figure 2.5: Average remaining life for bonds in iBoxx benchmark series (years)



Source: Markit

Use of 10 year breakeven inflation rather than 20 year breakeven inflation is not consistent with the other parameters used in the indexation mechanism. The difference between the ten year and 20 year breakeven inflation figures from the start of April 2005 (when the index will start to 'trombone' out from<sup>25</sup>) has been 41bps<sup>26</sup>.

## 2.6. Fees

Our interpretation of the Competition Commission (CC) approach to fees and issuance costs in the NIE Final Determination differs from what Ofgem's text implies is their understanding. Ofgem state the following:

*'In building up the cost of embedded debt, we recognised the costs of credit wrapped debt where appropriate and recognised 0.2 per cent for issuance costs and other fees, the same assumption adopted by the CC in its final determination for NIE.'*

In the CC final determination, although there is a 20bps allowed for fees and issuance costs, this only appears in the section on the cost of new debt (paragraph 13.76). In this determination, the CC apply a ratio of 90%:10% for embedded debt: new debt. This gives an impact on the overall cost of debt of 2bps, whereas Ofgem have applied this 20bps to the entirety of the cost of debt in their assessment, leading to what appears to be an 18bps error on the cost of debt.

<sup>25</sup> i.e. 10 year trailing start date for the start of RIIO ED1, from which the average starts to trombone out from.

<sup>26</sup> For data up to 18 August 2014 – 20yr breakeven inflation is higher than 10yr breakeven inflation by 41bps.

Looking at the CC final determination for Bristol Water, the fees amount similarly appears to only be utilised for the cost of new debt. In this case, a figure of 10bps was used. The increased fee allowance may be for the special circumstances relating to NIE, the size of issuance and the lack of direct comparators, whilst we would expect the DNOs to be similar to water sector companies in terms of the financial environment they face.

Allowing an issuance cost of 10bps a year for a 20 year bond means that the DNO can recover 2.0% of the issuance amount, which in our view should be more than sufficient. Ofwat have used a 10bps fee on the cost of debt for fees and issuance costs. This amount would of course partially offset the headroom.

## **2.7. Summary**

A number of factors combine to give a degree of headroom for the DNOs up to the index. Fees offset this headroom, but only by a small fraction given the magnitude of some of the effects. The halo effect alone is worth £400m to the DNOs over RIIO ED1. In addition, we identify what we term the yield effect, where both the concavity of the present yield curve and the change in slope over the last decade have been exploited by DNOs to lower their cost of debt for RIIO ED1. There are two other factors that contribute to the benchmark index used being excessively generous vis-à-vis a notional efficiently financed DNO. The first of these is linked to the benchmark index being more unrepresentative/ excessively generous during the period around the GFC. We also think that breakeven inflation should be used that is consistent with the trailing average period, i.e. increasing to 20 years under the proposed trombone mechanism.

It can be seen from the embedded debt profiles for SSE and SPEN that DNOs have been able to capitalise on at least some of this headroom – the actual cost of debt for the DNOs is included in the following section. This is a practical reason why the forecast allowance does not need to be made more generous for the notional efficient company.

### **3. MODELLING THE ACTUAL COST OF DEBT AS A CROSS-CHECK**

#### **3.1. Introduction**

As we noted in our opening chapter, the actual cost of debt should be used as a cross-check rather than a basis for setting a cost of debt allowance or changing parameters within the mechanism.

When looking at debt portfolios, it is not sufficient to simply consider the actual weighted cost of embedded debt that the DNOs have, as this can provide a misleading picture. Given the current upward sloping yield curve and rates at relatively low levels, if DNOs thought that they could influence the regulator, it would be prudent of them to wait in issuing debt (especially short term debt) until the RIIO ED1 settlement in order not to bring down the weighted average cost of debt.

Other considerations for Ofgem include whether actual debt issues could be considered efficient in terms of cost of debt and whether behaviour in terms of the timing and debt tenors chosen are consistent with the actions of a notionally efficient DNO. Due to these considerations and the incentive properties in setting an allowance, the actual cost of debt should at most be used as a cross check.

#### **3.2. Summary of CEPA analysis on actual cost of debt**

Based on our analysis, the embedded debt costs vary substantially across the slow-tracked DNOs. At one end of the spectrum is ENWL, who issued a significant proportion of their embedded debt in the mid-1990s and early 2000s, in a period which is not covered by the current ten-year trailing average and at rates which are above the allowed embedded debt costs allowed by the index. NPG also have debt which was issued in the mid-1990s in their portfolio and the embedded debt costs are above that assumed in the benchmark index for a notional DNO<sup>27</sup>.

On the flip side of this, SPEN and SSE would seem to have a real embedded cost of debt of c.2.1%<sup>28</sup>, which is over 40 bps below the forecast opening cost of debt allowance using indexation<sup>29</sup>. We have set out above that the cost of debt allowance for new debt is likely to be overly generous for notionally efficient DNOs, so we would expect material outperformance for the overall cost of debt for at least these two network groups. UKPN's embedded cost of debt appears to be around the level of the first year cost of debt allowance.

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<sup>27</sup> Our analysis has a pre-adjusted real cost of embedded debt for both of these companies of c.2.9% - this compares to the forecast opening value for RIIO ED1 of 2.54%.

<sup>28</sup> Where we have deflated nominal rates in this paper, unless otherwise stated, we have used the Fisher equation with the assumed inflation rate for RIIO ED1, 3.2%.

<sup>29</sup> For the first year, the existing mechanism for cost of debt indexation and the trombone approach overlap.

In summary, there are two companies that would be set to outperform the allowance, two companies that would underperform the allowance and one company that is around the allowance. Given this is the case, it would appear reasonable to use the original benchmark index for the notional DNO rather than focus on the actual embedded debt levels, even before consideration is given to adjustments needed to actual costs.

### 3.3. Adjustments for calculating the weighted average embedded debt costs

Further analysis should be conducted on actual embedded debt costs. This includes an adjustment for inefficiently incurred or junior debt, the treatment of bonds that are driven by shareholder rather than company objectives and ensuring that calculations are made with an appropriate adjustment for ‘funded’ bonds<sup>30</sup>.

#### Adjustments for inefficiently incurred debt/ junior debt

From our analysis of the actual debt profiles of the DNOs, there are several instances where the bonds are above the benchmarks. There is a question for Ofgem in how this is to be treated in their analysis if a greater focus is given to actual rather than notionally efficient debt costs. This efficiency analysis does not include any bonds issued before the Financial Year 1998/99 as information was not available for our preferred benchmark, the iBoxx indices<sup>31</sup>.

In the table below, we include those bonds that appear inefficiently incurred or warrant further investigation from Ofgem.

*Table 3.1: List of inefficiently incurred bonds from efficiency analysis (in real terms)*

Issuer	Issue date	Maturity date	Benchmark <sup>32</sup> cost of debt	Actual cost of debt	Difference
ENWL	21/03/2013	21/06/2021	-0.10%	2.60%	270bps
SPEN	18/07/2011	17/07/2026	2.09%	2.60%	51bps
UKPN	12/11/2009	12/11/2036	2.55%	2.96%	41bps
UKPN	17/06/2011	31/03/2023	1.83%	1.87%	4bps
UKPN	17/06/2011	30/09/2030	2.07%	2.35%	28bps
UKPN	12/11/2009	12/11/2031	2.64%	3.08%	44bps

*Source: Bloomberg, Markit, CEPA analysis*

The ENWL bond issued in 2013 was issued at a credit rating of BB+ (i.e. below investment grade status). It is not clear to us why this would be the case for a regulated utility, however we do not think that when calculating the actual cost of debt, a yield significantly above the

<sup>30</sup> This is where bonds have been issued in several tranches and so are legally distinct, however on and after the funge date these tranches are combined into just one bond. This one bond will then contain the original tranche and subsequent tranches that have been funged into this.

<sup>31</sup> Nor is this information available for the target credit ratings from Bloomberg.

<sup>32</sup> This has been adjusted for the appropriate tenor – please see Annex C for full details.

benchmark for broad A and broad BBB rated non-financial corporates should be included at the full yield, at least not without further justification of an apparently exceptional cost. The results are sensitive to these adjustments. For example, if the ENWL 2013 bond was replaced with the benchmark cost of debt yield, it would bring the actual cost of embedded debt down from 2.87% under our calculations to 2.54%, namely 33bps.

If the bonds in Table 3.1 were to be included in the analysis at the benchmark rate, the cost of embedded debt over the entirety of the debt portfolio would fall by 33bps for ENWL, fall by 26bps for SPEN and fall by 10bps for UKPN.

As far as we are aware no accurate benchmark exists for the period covering the bond issues in the mid-1990s. This further illustrates the difficulty in using actual debt costs rather than the notional.

### **Treatment of bonds used for acquisition**

The Civil Aviation Authority (CAA) have dealt with the issue of bonds linked to re-financing and acquisition. In the case of RIIO ED1, it should be determined specifically whether any bonds were linked to acquisition of the networks. For example, the 31 year bond issuance by ENWL (at the time Norweb) in Autumn 1995 was at a time when the network was subject to a bidding war and was eventually acquired by North West Water. The bond was issued at a nominal yield of almost nine percent and has a significant impact on the cost of embedded debt for the network at the moment. It may not be an acquisition bond, but the circumstances may have meant that the company did not mirror behaviour of a notionally efficient company.

A similar story can be seen for Northern Powergrid, who at the end of 1994 were subject to a takeover bid from Trafalgar House. In January 1995, a 25 year bond was issued by the network at a nominal yield of over nine percent with a further long-term bond issued later that year. As with the ENWL case, the cost of embedded debt for ED1 is increased significantly by this debt issue.

Ofgem's move away from a notional long-term trailing average to a seemingly greater focus on actual embedded debt costs should mean a much higher burden of proof on the networks to justify their treasury management policy and that the debt issued was consistent with the actions of a notional efficiently financed company. If exceptional and efficient costs can be demonstrated, then company-specific adjustments may be justified.

If some of these earlier bonds were linked to shareholder rather than network interests, and are now leading to costs imposed that are clearly not in the consumer interest, then it does not appear inappropriate that equity holders should be subject to a slightly lower return given the embedded debt liabilities taken on at high rates. On these bonds it should also be proven that any covenant restrictions in place prevented the DNOs from paying down debt and achieving lower debt costs, net of any re-financing costs.

## Adjustment for funged bonds

It is important that Ofgem pick up on the nature of these early bonds and that subsequent issuances have been funged into the bond at a different price to par, changing the effective yield at issue. For example, the ENWL 1995 bond issuance includes two other debt issuances (from 2001 and 2002) funged into the bond. Rather than treat the full £450m at the full 8.875% nominal, consideration should be made to each of the three debt issues, as the original bond amount was £200m, with subsequent £150m and £100m issues in later years. These two subsequent issues were at 132.7% of par value and 143.2% of par value respectively, so the yield to maturity on these issues is significantly below the 8.875% nominal figure that appears at the coupon for the funged bond.

### 3.4. Forecasting the cost of new debt over RIIO ED1

If Ofgem have made an adjustment to the cost of debt indexation mechanism due to differences between the forecast cost of debt allowance and the forecast cost of debt for a benchmark (or actual DNO), it is key that they have done so using an appropriate methodology to calculating the cost of new debt (i.e. debt incurred in RIIO ED1).

The approach that we are most familiar with is the use of implied forward rates for gilt yields, and based on the latest benchmark values. However there does not appear to be consensus in the amount to which the cost of debt is expected to rise/ fall given a rise/ fall in the risk-free rate component.

For the recent airports price control determination (Q6), rather than assume the full difference would be used in making a forecast, the CAA's advisers, PwC, used a 0.80 coefficient to apply to the change in yield implied by forward curves. The use of a coefficient below one makes a significant difference to the cost of new debt estimates, as shown in the table below.

*Table 3.2: Benchmark new cost of debt for each year of RIIO ED1 with different co-efficients*

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
1.0 co-efficient	1.63	1.87	2.03	2.10	2.18	2.29	2.40	2.52
0.8 co-efficient	1.57	1.76	1.88	1.94	2.01	2.10	2.18	2.27

*Source: Markit, Bank of England*

The reason why a 0.8 coefficient was assumed is based upon the debt premium offsetting a rise/ fall in the risk-free rate. This is based on regression analysis conducted by PwC and this was used by the regulator in making their determination.

Although this methodology applies to both the forecast actual cost of new debt and forecast allowance, the nature of the trailing average means that it does have an impact on the calculation of any difference between actual and allowed. Over RIIO ED1, the use of a 0.8

co-efficient would indicate that there is a 14bps over-recovery from using the 1.0 coefficient.

### **3.5. Summary**

The actual cost of debt should only be used as a cross-check rather than a basis for setting a cost of debt allowance. When looking at the debt portfolios, it is not sufficient to simply consider the actual weighted cost of embedded debt that the DNOs have, as this can provide a misleading picture. Ofgem will need to make an adjustment for inefficiently incurred or junior debt (for example adjusting down a single junior ENWL bond to the benchmark reduces the cost of embedded debt by 33bps), the treatment of bonds that are driven by shareholder rather than company objectives and ensure that calculations are made with an appropriate adjustment for funged bonds.

With our analysis of actual embedded debt costs, it appears evident that no adjustment to the cost of debt mechanism would appear necessary for SPEN, SSE or UKPN. For ENWL and NPG, there needs to be greater evidence provided on why their debt financing decisions can be considered efficient.

## **4. OTHER COMPONENTS OF THE COST OF CAPITAL**

### **4.1. Cost of Equity**

In terms of the link between the cost of equity and the cost of debt, Ofgem state that:

*‘We consider that any remaining under provision in the cost of debt is balanced by the headroom in our cost of equity estimate.’*

This is immediately subsequent to the following statement:

*‘Our analysis of the halo effect... indicates that there is some headroom in our cost of debt allowances.’*

These statements are at worst contradictory or at best demonstrating a greater focus on the financial outcome for DNOs rather than consumers. This report does not deal in any depth with the cost of equity, following the cost of equity consultation earlier this year and the submissions made in relation to the consultation and previous consultations, for example on company business plans. However it does indicate that any adjustment to the cost of equity allowance should be a reduction rather than increase.

In addition, we have noted that the proposed approach to the cost of debt indexation mechanism removes risk from companies and therefore the equity beta should be reduced to represent the lower risk from the price control framework. Should the treatment of RPEs be included within an uncertainty mechanism, this would also reduce risk<sup>33</sup> and as such the allowed equity beta should similarly be decreased<sup>34</sup>.

On the RPI formula effect, Ofgem have determined that there should be a 40bps adjustment and there would be no clear rationale for reversing this decision. A change of policy by Ofgem just a few months after a full consultation and subsequent decision on the cost of equity would increase perceptions of regulatory risk. In the NIE determination, the Competition Commission used the Office of Budgetary Responsibility (OBR) forecasts for RPI<sup>35</sup>. The latest OBR forecasts (March 2014) have forecasts up to and including 2018/19. Taking an average of the four years from 2015/16 to 2018/19 would give a figure of 3.65%, so there is an argument that Ofgem’s inflation assumption is too low. Given the stage within the process and the decision having already been made, keeping the current inflation assumption is the best course of action for Ofgem.

### **4.2. Notional gearing**

As Ofgem indicated in the Draft Determinations, there is a relatively small impact on the cost of capital from a change in the notional gearing assumption. This is because an increase in the notional gearing assumption increases the proportion of ‘cheaper’ debt finance, but

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<sup>33</sup> We do not see the risk of labour and material costs as being diversifiable.

<sup>34</sup> As this reduces systematic risk.

<sup>35</sup> Competition Commission (2014) NIE, Final Determination, p17-7.



at the same time increases the cost of equity due to an increase in the equity beta for a given asset beta.

If financial modelling uses the notional gearing assumption then reducing the notional gearing figure may be a more appropriate first step than making a financeability adjustment elsewhere in the price control e.g. the transition period applied to asset lives.

A decrease in the notional gearing level would be consistent with the DNO's current RAV gearing structures, and the cost of capital could look as in the table below.

*Table 4.1: Cost of capital*

	Current figures	Reduced gearing
Notional gearing	65.0%	62.5%
Cost of debt	2.54% (forecast 2015/16)	2.54% (forecast 2015/16)
Risk-free rate	1.5%	1.5%
Equity Risk Premium	5.0%	5.0%
Asset beta	0.38	0.38
Equity beta	0.90	0.85
Cost of equity	6.0%	5.7%
Vanilla WACC	3.75%	3.74%

This is prior to any implications around taxation, but as noted previously this may prevent the need for financeability adjustments that have inter-generational equity impacts and delay falls in consumer bills.

#### **4.3. Ofwat precedent for PR14**

On 29 August 2014, Ofwat released their draft determinations for those companies that had not yet received their draft determination for PR14. Ofwat had set out their financial parameters in their Risk and Reward guidance in January 2014 and the cost of capital parameters remain unchanged for the Draft Determinations. However, Ofwat did indicate that evidence since then would point to a lower cost of debt and a lower cost of equity. Their cost of equity for PR14 is currently set at 5.65%, some 35bps below Ofgem's Draft Determinations for RIIO ED1. There were the following points raised in the determination that are relevant to Ofgem for RIIO ED1, including<sup>36</sup>:

- any companies seeking an uplift to their cost of debt for company specific circumstances must justify this through analysis indicating net consumer benefits from the use of an uplift;

<sup>36</sup> This is set out in Technical Appendices A6 – risk and reward, and A7 – financeability and affordability of Ofwat's August 2014 Draft Determination documents.

- a small uplift of 15bps to the cost of capital was allowed for two companies in the sector (based on small company premia); and
- the previous inflation assumption used for inflation was 2.8% for their risk and reward guidance, however since then the Competition Commission used an inflation rate of 3.25% in their NIE determination, an increase in the inflation assumption is something Ofwat are looking at for the Final Determinations.<sup>37</sup>

#### **4.4. Summary**

Ofgem have noted that there is headroom in the cost of equity figure of 6.0% for the DNOs for RIIO ED1. Ofwat have adopted a lower cost of equity assumption and their own Draft Determinations state that evidence points to use of an even lower value. It is also the case that changes to the regulatory package that allocate risk onto consumers from companies should be reflected in a lower cost of equity assumption (due to the equity beta term). In the cost of debt section we noted the problem with changing a policy decision in a short space of time with limited evidence. The same concern would apply to a reduction in the formula effect (i.e. increasing the cost of equity), especially given evidence that points to the use of a higher (not lower) inflation assumption.

On notional gearing, a slight downwards change has a small pre-tax impact on the cost of capital (pre-taxation). If financeability is a concern due to ratios under modelling of 65.0% notional gearing, a shift down by 2.5% in that assumption may be appropriate if it prevents other adjustments increasing consumer costs in RIIO ED1 due to improvement financeability ratios. We discuss financeability in the following section.

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<sup>37</sup> Ofwat currently have an appointee vanilla WACC of 3.85% using a fixed cost of debt allowance. If a 45bps downwards adjustment was made for a change in inflation assumption, this would give a comparable vanilla WACC of 3.40%.

## **5. FINANCEABILITY**

### **5.1. Introduction**

In addition to the cost of capital, financeability forms a key item in the Financial Issues paper. The RIIO Financeability Study<sup>38</sup> notes some concepts applied for the assessment of financeability in the RIIO price controls, including that the assessment should be made in the round and not focusing on any one financial ratio. Ofgem have illustrated that PMICR for ENWL is below the range for their target credit rating and proposed a new indicator based on the PMICR taking into account other factors, PMICR<sub>G</sub>. We agree with the conclusion that any adjustment for financeability purposes would need to be NPV-neutral and that the onus is on the company to act to correct financeability concerns. However, an NPV neutral adjustment still raises costs for RIIO ED1 and there is an intergenerational equity perspective to consider. A NPV-neutral adjustment also increases risks of financeability issues in future periods due to reduced cashflows, so care is required here. The impact of the transition on asset lives is estimated at c. £475m in increased bills for RIIO ED1.

### **5.2. Previous regulatory precedent**

Following the RPI-X@20 consultation and subsequent Ofgem decision, the RIIO handbook set out principles for financeability<sup>39</sup>. This included that financeability would be considered using a long-term view and take evidence in the round, with credit metrics being just one aspect of this. In terms of the credit metrics, companies are typically considered at the group level rather than simply the regulated proportion of the company, so this needs to be considered when making such assessments. The RIIO handbook also noted an onus on companies to manage short-term requirements and provide equity where necessary.

### **5.3. Return on Regulated Equity (RoRE)**

In general, over recent distribution and transmission price controls companies have been able to exceed the allowed level of RoRE. This appears to have happened to a larger extent in distribution networks, where outturn RoRE has in a few cases even exceeded the upper bound on Ofgem's ex ante plausible range for RoRE. Given that we have information available for three recent price controls in full, we can be confident that the RoRE returns are not due to deferred capital expenditure, which could reduce RoRE in the later years of the price control. The decision to publish an annual report from each network under RIIO T1 in September, along with an annual RIIO T1 report is welcomed and we believe that this transparency of information can help protect consumer value for money and allow stakeholders to understand effective returns and financeability. The GDPCR1 review is less

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<sup>38</sup> Imrecon/ ECA (2002) RIIO Financeability Study

<sup>39</sup> Ofgem (2010) 'Handbook for implementing the RIIO model,' October 2010.

clear on the publication of information, but we see no reason why the same process should not be adopted for RIIO GD1 and ED1 as RIIO T1.

The below table illustrates how the actual RoRE compares to the allowed RoRE. As noted in the previous section, the allowed RoRE in our view was too high and we welcome the Ofgem decision to significantly reduce the cost of equity for the RIIO ED1 price control. The Equity Market Return has been set at 70bps lower for RIIO ED1 than for RIIO T1 or GD1. In the table below though, we use the allowed RoRE for the price control.

*Table 5.1: Summary of RoRE*

Price control	Control Years	Allowed RoRE	Average RoRE (actual)~	Companies at or above allowed RoRE	Companies underperforming allowed RoRE
DPCR4	2005-10	7.50%	8.4%^	12	2
DPCR5*	2010-15	6.70%	11.2%^	14	0
GDPCR1	2008-13	7.25%	9.47%	8	0
TPCR4	2007-12	7.00%	9.15%&	4	0

\*in first two years of price control

^ represents an estimation based on Ofgem figures

~ represents a simple average rather than weighted by RAV

& this includes all four TOs, yet the review document states that the NGGT TO RoRE is understated

Source: [DPCR4 - Ofgem Electricity Distribution Annual Report 2008/09 and 2009/10, p46](#)

[DPCR5 – Ofgem RIIO Financeability Study, p7](#)

[GDPCR1 – End of period review of the first Gas Distribution Price Control Review, p35](#)

[TPCR4 – Report on the performance of transmission owners during the regulatory periods TPCR4 and TPCR4RO, 2007/08 to 2012/13, p14.](#)

Over this period, which generally overlapped with a significant financial crisis, we have 40 data points. Of this amount, 36 were outperforming the allowed RoRE, two had the allowed RoRE and two underperformed. Even the two companies underperforming the RoRE had equity returns of c.7.0% and 5.5%. These returns are still significantly above the debt returns and in our view illustrates the windfall gains that the average company is achieving.

We would expect returns under a well calibrated mechanism to look much more symmetrical given the protections that the networks receive, including from fluctuations in market demand, and believe that the calibration of the metric needs to be re-considered. However Moody's forecast that the slow-tracked DNOs will continue to earn additional revenue through incentive mechanisms on average<sup>40</sup>, and although the incentives are more high-powered, this would lead to the expected positive rewards from the mechanisms/ the amount that consumers pay being higher.

Ofgem have stated for example in the ED1 strategy consultation that the best performing companies should have returns in the low double digits, whilst the worst performing

<sup>40</sup> Moody's (2014) Special comment: UK electricity networks – RIIO ED1 draft determinations in-line with expectations, 15 September 2014.

companies, should have returns at or below the cost of debt. This does not correspond with the results above and illustrates a bias in allowing more generous returns. An equity outperformance of two percentage points is equivalent to an additional cost of £1.1bn to consumers over an eight year price control<sup>41</sup>.

It should be noted that for PR14, Ofwat's RoRE analysis provides a range of 0.2% to 9.1%, significantly lower than Ofgem's RoRE range for RIIO ED1, both at the top end, bottom end and median. In addition to this, gain sharing mechanisms have been introduced for some of the companies as part of their incentive framework for customers to gain from RoRE outperformance beyond a certain level.

#### **5.4. Asset lives transition**

Ofgem has accepted proposals from the DNOs to have a move to 45 year asset lives from the current 20 years for new assets in eight equal increments over RIIO ED1. This means that costs will be higher over the RIIO ED1 price control, but should be neutral on an NPV basis over the life of the asset. Given that the companies have proposed capitalisation rates and the move in asset lives only applies to new assets, it is not clear that the transition is entirely necessary at this point in time and this adds a layer of complexity (albeit a minor one) in the regulatory process.

The impact of applying the transition to asset lives appears to be c.£475m in increased bills for the RIIO ED1 period by our estimations<sup>42</sup>, so the transition period does need sufficient justification rather than simply being a timing issue. Moving to a longer asset life reflects the nature of the assets and so the benefits accruing to different generations of consumer, however the transition for asset lives loses this link. In the RIIO handbook, Ofgem set out that they<sup>43</sup>:

*'will not advance cash flow in light of apparent short-term dips in cash flow metric. We will seek to understand the reason behind such failures... but the onus will be on the company to resolve the situation, including by injecting equity and/or reducing dividend payments as they see fit.'*

The transitional measures included by Ofgem do not appear to have placed the onus on the company and instead have placed the onus on consumers. By making an upwards adjustment for one company, this increases the level of costs for consumers. By making an upwards adjustment at the industry level, the impact of the cost for consumers rises by the multiple of networks<sup>44</sup>. The idea for this in our opinion still holds, namely that<sup>45</sup>:

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<sup>41</sup> This is based upon an Asset Base of £20bn and gearing of 65%.

<sup>42</sup> Our assumptions have used Ofgem's best view for the networks excluding WPD for RIIO ED1, have 70% of totex treated as new assets and a cost of capital of 3.80% and exclude tax implications.

<sup>43</sup> Ofgem (2010) 'Handbook on implementing the RIIO model,' October 2010, p110.

<sup>44</sup> If slow-tracked DNOs were the same size and received the same uplift, the cost to consumers would be five times the level from an industry wide adjustment than from a single DNO adjustment.

<sup>45</sup> Ofgem, op cit, p111

*‘by placing a greater onus on companies to take action to maintain their investment grade credit ratings, it reduces the requirement for Ofgem to make adjustments to other areas of the price control.’*

The Competition Commission discussed the issue of weak financeability metrics (for example, a PMICR of 1.2, as with the RIIO ED1 example) in the NIE Determination. Their assessment found that there were options available to the efficient licence holder to meet the target PMICR ratio and give it flexibility in managing the financing of the RP5 control<sup>46</sup>.

*‘In particular we considered that the efficient licence holder could limit dividends to its equity holders. Adopting this policy would enable the efficient licence holder to fund its capex programme using investment-grade debt and maintain that status on its existing debt.’*

An alternative option put forward by the Competition Commission was to issue fresh equity. Part of the logic behind this decision was<sup>47</sup>:

*‘if shareholders were able to withdraw large sums in periods with strong cash flow, it was reasonable they should also be willing to supply finance in periods of weaker cash flow.’*

## **5.5. Summary**

The principles around financeability and regulatory precedent confirm that the regulator should consider financeability in the round, and if a financeability concern is identified, the onus is on the company to deal with this, possibly through reduced dividends or equity issuance. NPV-neutral adjustments raise the costs for RIIO ED1 consumers and increase the likelihood of financeability issues in future periods due to lower future cashflows. The CMA dealt with a similar issue for the NIE determination, placing the onus on NIE rather than consumers for the price control period.

On RoRE, companies regulated by Ofgem have typically and consistently outperformed the central RoRE estimate. The starting point from Ofgem for RIIO ED1 is a percentage point above that of Ofwat for their PR14 draft determination, plus Moody’s state that DNO outperformance on incentives is likely to increase for RIIO ED1. By underestimating RoRE returns, financeability adjustments are made that are unnecessary, thus it is important that the plausible outcomes are representative of expectations.

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<sup>46</sup> Competition Commission (2014) NIE Final Determination, p17-23.

<sup>47</sup> Competition Commission, op cit, p17-21.