PR19 – NOTIONAL COMPANY FINANCEABILITY

An exploration of the relationship between the allowed cost of equity and notional financeability
Why is the notional financeability assessment relevant?

- A ‘notional company’ represents an ‘average’ water company. Its financial health sets ‘base-level’ financial resilience for the sector. Actual gearing and performance of the company will impact its credit worthiness. However it is crucial that, when price controls are set, the notional company reflects sufficient financial headroom to achieve an acceptable level of credit rating.

- Rating agencies play a critical role in the sector. Investors rely mainly on their assessments in order to lend money to companies. Over the AMP7 period, the UK water sector needs to raise more than £10bn of debt, even on a conservative basis (>£40bn existing debt, 17 year average tenor + new debt). As a result of Brexit a major source of funding in the form of European Investment Bank is now, effectively, closed off.

- In 2018, Moody’s assessed that the water sector has become more risky, and therefore increased the ratio headroom required for its core Adjusted Interest Cover Ratio (AICR) by 10bps. This was followed by Fitch, who reached a similar conclusion, and also increased its AICR by 10bps.

- Whilst in our experience rating agencies consider a set of ratios (along with their judgment on the general risk to the sector), they do focus heavily on a ‘core’ ratio which appears prominently in their guidance and decisions. AICR ratio is the core ratio for Moody’s and Fitch, and is the main focus of this paper.

- Since privatisation, Ofwat has targeted notional company ratios at a level that are, as described by Ofwat, “well within the investment grade”. At the PR04 and PR09 Final Determinations, Ofwat set a WACC and related levers to ensure that the notional company ratios reflected A-/A3 level. At PR19, Ofwat suggested an early view of WACC and did not advise a level of credit rating. Most companies are targeting Baa1 levels, which seems in line with Ofwat expectations.

- Companies are challenging themselves by cutting dividends and gearing. Equity investors in the Water sector, a significant proportion of whom are pension fund investors, have taken a responsible position by calling dividend cuts or holidays. The allowed cost of equity however plays another crucial role, as it translates directly into the level of headroom on credit ratios – and therefore target credit rating.

- To avoid mixing up arguments between the “Notional” and the “Actual” company, the focus of this paper is on the Notional capital structure only.

- The majority of water companies have been placed on a negative outlook, along with the water sector as a whole being on an unprecedented negative outlook. With Brexit and other macroeconomic risks on the horizon, it is crucial that market confidence is regained by setting notional company ratios at a level that will achieve an acceptable level of credit rating.
What do customers want and how are we (and the sector) achieving it?

- A responsible, financially resilient business that pays a fair return
  
  **Response:**
  - Most equity investors in the water sector, who are mainly pension funds, have taken a responsible position by calling dividend cuts or holidays. Anglian Water proposed no dividends to ultimate shareholders in its base plan.
  - Most companies have used Ofwat’s early view of WACC in their plans despite the fact it results in limited headroom on the notional ratios.
  - The industry on average proposed plans that deliver flat or negative bills despite a significant investment program.

- Protection of inter-generational equity (more than 90% of our customers showed a clear preference to pay their fair share of the bill for the use of the assets)
  
  **Response**
  - We have set our PAYG and RCV run-off rates in line with the natural rates.
  - To do otherwise would unduly shift the costs of serving future customers onto current customers (or vice versa)

- A business that is seen as financially resilient by creditors, stakeholders and markets, and which can raise debt at an efficient cost
  
  **Response**
  - Industry proposed significantly lower dividends in the base plan (Anglian Water proposed no dividends in its base plan)
  - Not introduced PAYG adjustments artificially above the natural rate to solve financeability, all rating agencies have made clear that this is a short-term fix and does not improve financial resilience. Indeed some actively removed these levers in the calculation of ratios\(^1\).
  - Despite reservations, some companies have accepted Ofwat’s gearing benefit sharing mechanism.
  - Some companies have proposed to use AMP6 rewards to solve AMP7 notional financeability.

However, at cost of equity of c4.0% (RPI basis), notional financeability remains very tight relative to the minimum requirements for Baa1 rating.

**Source:**
1. Moody’s Special Comment: *Speed of Money Cannot Address Potential Financeability Concerns*, 16 May 2013
In late 2016, when Ofwat published its Financial Monitoring and Resilience report, just two companies were on a negative outlook (based on their actual structures).

Change to ratings outlook:

Already on negative at Dec 2017:
- Southern Water
- Northumbrian Water

Dec 2017
Outlook changed to negative:
- Yorkshire Water
- Severn Trent Water
- Portsmouth Water

May 2018
Outlook changed to negative:
- Anglian Water
- Affinity Water
- Thames Water
- Wessex Water

With the majority of companies currently on a negative outlook from Moody’s, and on a Baa1 or equivalent level, a possible downgrade will bring the sector to just one notch above the minimum investment grade credit rating.
Economic cases for lower Beta, TMRs & impact on Financeability

- Ofgem recently assumed a lower estimate of Beta of 0.35. In its early view of WACC, Ofwat had assumed 0.37. There are discussions as to whether Beta or even Total Market Returns (TMR) are still appropriate.

- Whilst there will always be different views about the best approach for calculating WACC, the importance of cost of equity for financial resilience should be of primary concern at a time when almost all companies are on a negative outlook. While cost of equity provides returns to investors, it also translates directly into ratio headrooms, and hence financeability, as below:

- If the funded cost of debt exactly matched a company’s cash interest commitments, and cost of equity was zero, AICR ratios would be 1:1 for the notional company. It is however the cost of equity, and the appropriate level of inflation linked debt that helps build AICR headroom. A significantly lower cost of equity has been a major reason for weaker credit metrics in the sector.

With discussions around TMRs and Beta in the public domain from different stakeholders, insufficient attention is being paid to the overall level of cost of equity that is required to maintain financeability. It is critical that the overall cost of equity is consistent with the target level of credit rating in the sector.
Companies find themselves in a challenging position on the cost of embedded debt

Current embedded real cost of debt above proposed PR19 allowance for majority of companies

- **Source:** Moody’s

- As the graph above shows, the embedded debt funding included in the early view of WACC left the majority of the industry in a challenging position. We understand this will be updated as revised data from companies becomes available.

- Moody’s actions, and the general mood towards the sector, have seriously dented investor appetite. A further reduction in the cost of equity can only make the already insufficient AICR worse.

- Even though Ofwat has shown a preference for the use of PAYG, instead of WACC to solve ratios, credit rating agencies remove any PAYG adjustment¹ benefit when calculating these ratios.

**Source:**
1. Moody’s Special Comment: *Speed of Money Cannot Address Potential Financeability Concerns*, 16 May 2013
What credit rating is appropriate for a notional water company?

1. History
   - In previous determinations, Ofwat has targeted an A- credit rating for its notional capital structure. This aimed to ensure the industry retained resilient financeability.
   - Ofwat described its assessment to satisfy its financeability duty as¹:
     “The financeability assessment is a review of the projected levels of a package of financial ratios against target levels that are consistent with those that the credit ratings agencies and the capital markets consider consistent with those needed to maintain a credit rating well within the investment grade range.”
     At the PR09 price control, Ofwat said:
     “We have targeted financial ratios that are consistent with an A-/A3 credit rating.”

2. PR19 funding: Iboxx non-financial debt index
   - For PR19, Ofwat has announced a move to debt indexation and will use the Iboxx non-financial index (Average of A- & BBB+). The average credit rating of bonds within this index is A-/BBB+, and towards A-.
   - Ofwat proposes that it will expect companies to outperform the average Iboxx index by 15 bps. To be consistent, this would necessitate a credit rating closer to A-.

3. Independent experts²
   - Ernst & Young rating advisory recommends that water utilities should continue to target a minimum of A-/BBB+ credit ratings.

The balance of the evidence and the opinion of experts (E&Y ratings advisory) suggests the notional company should target at A-/BBB+ credit rating (three notches above the investment grade). However, most companies targeted ‘Baa1’ level in their business plans (two notches above the investment grade).

Source:
1. Financeability & Financing the asset base – a discussion paper
2. Target credit ratings for water companies at PR19.
What ratios do credit rating agencies consider appropriate for A-/BBB+ credit ratings?

For a notionally geared company (60% on Ofwat’s PR19 assumptions):

- Moody’s guidance for its core ratio AICR:
  - Excluding any PAYG adjustment\(^1,2,3\)
  
- Standard & Poor’s guidance for its core ratio:
  - 9%-13% FFO/net debt\(^4\)

- Fitch guidance for AICR is

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<th>A3</th>
<th>Baa1</th>
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<tr>
<td></td>
<td>&gt;1.7&lt;2.0</td>
<td>&gt;1.5&lt;1.7</td>
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<th>FFO/debt (%)</th>
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<tr>
<td>Minimal</td>
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<tr>
<td>Modest</td>
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<tr>
<td>Intermediate</td>
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<td>Significant</td>
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Significant changes have been announced that take effect at PR19 (discussed on following pages) and credit rating agencies have highlighted them as ‘credit negative’. E&Y’s rating advisory has recommended the notional company should maintain a headroom above the minimum levels to maintain this credit rating. This is consistent with the assumption that the Iboxx non-financial index forms the basis of funding as discussed on the previous slide.

Source:
1. Moody’s: 2018 outlook changed to negative as tough price review outweighs current performance.
2. Target credit ratings for water companies at PR19.
4. We assume that Moody’s “A3” and S&P’s “A-” broadly reflect similar credit rating levels.
# How much headroom does Ofwat's early view WACC provides?

<table>
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<tr>
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<th>Ofwat suggested financeability scenario</th>
<th>Possible scenario (assume half of inflation-linked debt links to CPI)</th>
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<tbody>
<tr>
<td>Assume RCV</td>
<td>£100</td>
<td>£100</td>
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<tr>
<td>Notional debt (60%)</td>
<td>£60</td>
<td>£60</td>
</tr>
<tr>
<td>Inflation linked proportion of debt</td>
<td>33% (^1) ((RPI))</td>
<td>33% ((50%) RPI, 50% CPI linked)</td>
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<tr>
<td>Cash interest (at 4.36% - nominal rates assumed by Ofwat in its December statement; RPI assumed to be 3%; RPI debt coupon =1.33%)</td>
<td>£2.01 = ((£40 \times 4.36%) + £20 \times 1.33%)</td>
<td>£40.2\times (1.36% + 3%) + (9.9 \times 1.33%) + (9.9 \times 2.33%) =1.75+0.47</td>
</tr>
<tr>
<td>Interest (cash)</td>
<td>£2.01</td>
<td>£2.11</td>
</tr>
<tr>
<td>Blended WACC 2.8% (wholesale blended WACC assume CPI.RPI wedge = 1%), or c2.9% when retail margin is included</td>
<td>+2.8</td>
<td>+2.8</td>
</tr>
<tr>
<td>AICR ratio (WACC/Interest)</td>
<td>1.39x or 1.44x including retail margin ((lower than minimum 1.5x))</td>
<td>1.32x ((lower than minimum 1.5x))</td>
</tr>
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- With RPI being phased out and no guarantees in place on the treatment of RPI-RCV post 2025, an efficiently financed notional company is unlikely to raise further RPI linked debt.
- If CPI linked debt were raised, the real coupon will be higher and hence ratios weaker

**Reference:** 1. At PR14 FD, Ofwat assumed that 33\% of 'Notional debt' was linked to RPI. Slide 8 highlights the role of RPI linked debt.
What ratios do credit rating agencies consider appropriate for A-/BBB+ credit ratings?

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<thead>
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<th>PR04</th>
<th>PR09</th>
<th>PR14</th>
<th>PR19</th>
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<tbody>
<tr>
<td>Assume RCV</td>
<td>£100</td>
<td>£100</td>
<td>£100</td>
<td>£100</td>
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<tr>
<td>Assumed notional gearing</td>
<td>55%</td>
<td>57.5%</td>
<td>62.5%</td>
<td>60.0%</td>
</tr>
<tr>
<td>Assumed RPI linked debt (proportion of total)</td>
<td>0%</td>
<td>30%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Assumed cost of debt &amp; inflation (PR04 to PR14 - Ofwat FD assumption)</td>
<td>£55 x (4.3% + 2.5%) + 17.5*(3.6 %) =2.6+0.6</td>
<td>£40.2x (3.6%+ 2.8%) + 21*(2.65 %) =2.28+0.55</td>
<td>£41.8x (2.65%+ 2.8%) + 21*(2.65 %) =2.28+0.55</td>
<td>£40.2x (1.33% + 3%) 4.36%+ £19.8 x (1.33%) =1.74+0.26</td>
</tr>
<tr>
<td>Notional Interest</td>
<td>£3.74</td>
<td>£3.2</td>
<td>£2.8</td>
<td>£2.01</td>
</tr>
<tr>
<td>Return (cost of capital)</td>
<td>+5.81</td>
<td>+5.1</td>
<td>+3.6</td>
<td>+2.8 *</td>
</tr>
<tr>
<td>Notional AICR ratio (WACC/Interest)</td>
<td>1.55x</td>
<td>1.59x</td>
<td>1.29x</td>
<td>1.39x (1.44x inc retail margin) (lower than 1.5x)</td>
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<td>How constraints were removed:</td>
<td>Regulator applied NPV positive ‘financeability revenue uplifts’ to a number of companies to ensure ratios met financeability</td>
<td>Regulator assumed a higher level of RPI linked debt to resolve cash constraint, financeability was achieved</td>
<td>a) PAYG adjustment to support PMICR ratio b) Increase assumption of RPI linked debt (to 33%)</td>
<td>Why tools applied in previous AMPS do not work any more?: Moody’s announced removing any PAYG adjustment from the underlying economic element of credit ratios¹</td>
</tr>
<tr>
<td>Resultant average Wasc PMICR ratio</td>
<td>c1.6x</td>
<td>c1.6x</td>
<td>1.6x (WASC average, with PAYG adjustments)</td>
<td>1.39 or 1.44 with retail margin (below minimum 1.5x required by Moody’s &amp; Fitch)</td>
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<tr>
<td>Target credit rating assumed</td>
<td>Ofwat assumed “comfortably within the investment grade”</td>
<td>Ofwat target: A-/BBB+ (3 notches above the safe investment grade)</td>
<td>Industry targeted Baa1 (two notches above the investment grade)</td>
<td>Most companies target Baa1 (two notches above the investment grade), with some target Baa2 (just one notch above the investment grade)</td>
</tr>
</tbody>
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Source:
1. Moody’s Special Comment: Speed of Money Cannot Address Potential Financeability Concerns, 16 May 2013
What is not yet reflected in the previous analysis (a)

- **Transition to CPIH**
  - Water companies currently rely heavily on RPI linked debt to achieve financeability. Transition away from RPI to CPIH removes the ability to hedge which introduces a new risk. There is currently no established market for CPIH debt.
  
  The Civil Aviation Authority (CAA) has considered and decided against replacing RPI with CPI. The financing issues faced by Heathrow airport are quite similar to those faced by water companies.
  
  - In the consultation, CAA said “We propose that the CAA should refrain from making any changes to RAB indexation until the DMO states a definite plan for the issuing of CPI indexed gilts”
  - In Dec 2017, CAA confirmed its decision and said: **“The choice of RPI or CPI will have serious implications for the RAB and WACC. Indexing the RAB and calculating the real WACC by using CPI would introduce an additional financing risk... the absence of CPI-based financial instruments compounds this financing risk. We consider that a cautious approach on changes to inflation benchmarks is appropriate.”**
    
    Source: 
    *Economic regulation of capacity expansion at Heathrow: policy update and consultation, Dec 2017*

- **Brexit**
  - The UK is going through an unprecedented level of macroeconomic uncertainty. The IMF recently highlighted Brexit as one of the primary risks to the global economic stability.

Sources:
- Transition to CPI creates risks for water and energy networks: Moody’s Jan 16
- Adoption of CPI will transform index-linked market, raise risks for regulated sectors: Moody’s Jan 16
- Water 2020 Proposals are credit Negative: Moody’s Jan 16
What is not yet reflected in the previous analysis (b)

Significant changes have been announced for PR19, most are seen as ‘credit negative’ by the rating agencies:

- **ODIs**
  - Perception of investors and rating agencies that higher powered ODIs are expected to result in more volatile revenues. Rating agencies have highlighted this change as credit negative.

  "In our view, an approach that relies on less-predictable and harder-to-forecast income could decrease the high stability of cash flows for regulated water utilities. This is a key factor in our assessment of Ofwat’s strong regulatory regime from a credit perspective."

  *Standard & Poor’s*

- **Market reforms (Bioresources, Water resources & Retail)**
  - With competition in the asset-intensive part of the sector about to be introduced, downside risks are difficult to predict.
  - Rating agencies have highlighted market reforms as “credit negative”.

Combined, wide ranging ODIs, market reforms and the transition to CPIH represent a step change in increasing the level of risk facing the sector (echoed in statements made by credit rating agencies). With significant macroeconomic risks on the horizon, all stakeholders should take seriously Moody’s reaction, which has been to place the Water sector on a negative outlook.

**Source:**
1. Standard & Poor’s July 2017 Rating report
Conclusion

- At a time when global growth is already showing signs of weakness, the UK economy in particular faces unprecedented political and economic volatility. With most water companies on a negative rating outlook, it is critical for the long-term health of the sector to regain the confidence of markets and rating agencies by showing that the notional company is financially resilient.

- It is worth remembering that with the introduction of debt indexation (that the majority of the industry supported), a key historic issue has now been resolved: indexation of debt to Iboxx non-financial index has removed any potential in-period gains that could happen due to changes in market conditions that are outside companies’ control. Risk has now moved squarely against companies that are exposed to market risks. This is reflected in the rating agency’s view of the sector.

- The UK Water sector has maintained a “stable” rating for over 15 years, this was retained even during the Global Financial Crisis. This is now on an unprecedented “negative outlook” by Moody’s.

- Global debt investors are invested in the UK water sector and they rely heavily on the judgement of credit rating agencies, and their regulators consider these ratings into the level of capital they need to hold against these loans. All credit rating agencies play a critical role in the financing of the sector and in our view it is in the best interest of customers that the notional company demonstrates the ratio guidance of all rating agencies.

- Economic uncertainty associated with Brexit, together with expected inflationary increase over the next AMP period serves to exacerbate financeability issues (due to real funding being serviced by customers and nominal debt costs incurred in financing the industry). With no established market of CPIH linked debt, companies will have limited options to manage that inflationary risk, on top they will be required to manage basis risk between RPI and CPI.

- Average credit rating for the Iboxx non-financial index chosen for PR19 funding is at the top of A-/BBB+. As Ofwat considers its final WACC, it is vital that Ofwat considers whether a headroom is needed above the minimum required notional ratios for Baa1 credit ratings.

For more information

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