THE WATER REPORT
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INVESTORS OPEN UP TO TRADING TO STAVE OFF MORE EXTENSIVE REFORM

Moody's indicates increased sludge and water resources trading is palatable, but cautions new entry upstream carries credit and debt refinance risk.

At its UK Water Sector Conference last month, Moody's made the case for limited upstream reform, pursued in dialogue with investors. It cautioned that the sector's existing financing arrangements could unravel if reform is extensive or if full consideration is not given to business and financing risks.

Working with United Utilities and consultants NERA and Oxera, Moody's scoped out three possible scenarios for the development of upstream reform, each introducing a different degree of competition to incumbent businesses. These are described below.

Scenario 1 – increased trading. In this scenario, there would be increased trading of raw water and sludge between companies. Dr Bill Baker, director and water practice chair at NERA, said: "Sludge trading is possible already and has happened once or twice. We expect trading to be fostered through incentives and regulatory pressure."

This reform option is most likely to be implemented as part of PR19. Ofwat's summer Towards 2020 scoping papers identified sludge and water trading as the two parts of the value chain earmarked to be opened up to greater competitive pressure. Moody's Stefanie Voelz, VP – senior analyst, Infrastructure Finance, observed increased trading would have "very limited implications" on sector credit quality, outside of the fact that exposure to counter-party risk would increase.

Scenario 2 – third party entrants to provide new assets. Here, new entrants rather than incumbent operators would provide any additional water resources and/or treatment capacity and sludge disposal/treatment services that may be required. The incumbents' existing assets would remain operational, and would not be subject to direct competition. New entrants would operate alongside incumbents as parallel providers. Moody's observed: "This scenario can be accommodated within the current legislative framework. Ofwat may introduce separate price controls along the upstream part of the water and wastewater value chain at PR19 to prepare for this scenario at a later stage."

The implications for incumbents of this scenario are far less clear cut. Voelz explained the financial implications could be anything from relatively modest to severe, depending on how a number of crucial issues are handled (see commentary below). Chief among these are how access prices are calculated and how Regulatory Capital Value (RCV) is handled. The issue of access pricing was explored at the conference in detail by United Utilities' chief executive Steve Mogford, who proposed an alternative to allocating RCV along the value chain (see box – United Utilities on pricing framework).

Scenario 3 – full functional unbundling of the value chain. Under this scenario, only the water and wastewater distribution network would remain a regulated monopoly, while all other activities would be open to new entrants. Moody's observed: "In its ultimate form, this transformation assumes a wholesale market in which, for example, treatment facilities would compete for business on a 'merchant' basis, and/ or on a mix of short, medium, and long-term contracts."

Any such scenario is unlikely to materialise imminently. Baker said the Water Act 2014 had not contemplated it, and in fact that it would require "a fundamental rewrite" of legislation. He was "sceptical the gains would outweigh the costs".

Moody's pointed out: "However, while neither the government nor the regulator have indicated that our third scenario is their desired outcome, it could be seen as the logical conclusion of the first two. It also corresponds to the end point of parallel reforms in other sectors such as energy and telecommunications."

Key risks for incumbents

Should upstream reform scenario 2 or 3 be pursued, Moody's identified a number of credit risks that would emerge for incumbent companies.

Changing business mix: Under scenario 2, the ratings agency explained that an incumbent tendering for new investments in other regions might face a deterioration in its own risk profile if the required works were very sizeable, particularly risky and/or the remuneration less certain than its monopoly-based revenue stream. On the other hand, an incumbent facing new entrants will lose the opportunity to grow, and may see its RCV decline in the long run, if ageing assets are replaced by more modern efficient ones of new entrants.

Under a full unbundling scenario, only the monopoly network services would bear similar business risk to today's incumbent. "The remaining activities… would be at risk of cash flow volatility if no long-term contracts for the invested capacity exist." Moody's added that in all scenarios, a detailed counter-party credit risk assessment may become more relevant, particularly where smaller, financially less sound contract parties are relied on for primary cash flow generation.

RCV split? Unsurprisingly, splitting the RCV across the value chain could have profound negative implications. Because the sector was privatised at a significant discount to the replacement value of the assets, RCV remains well below – at around 12% of – the so-called modern equivalent asset value (MEAV). Whichever way you cut the issue, it's difficult. Moody's scoped out some possibilities: "Allocating the majority of the RCV to contestable activities could leave very little value in the network business and call into question its financeability. A split in proportion to the MEAV asset allocation applied to the RCV, while not as negative as full RCV allocation to contestable activities, would still reduce the absolute level of debt that the surviving monopoly can retain if it is to maintain credit quality.

"Leaving the entire RCV with the monopoly activities may also not be without difficulties. Allowing a return on the entire RCV, including assets now used for contestable activities, on top of the separate remuneration for the contestable activities, would ultimately result in customers paying twice for the same upstream assets."

Baker said simply that there is no easy solution. He offered some "partial answers" including not separating the RCV (the retail market offers precedent here as the entire RCV will remain with wholesale businesses after 2017); using other bases for access and trading prices – for instance wholesale-minus-avoided-cost, or LRIC (see UU box); or considering small separations only. Because sludge disposal and treatment represents such a small part of the sector's asset value (c1% of sewerage assets on a net replacement cost basis), he remarked it "is perhaps possible to contemplate that separation". Baker pointed out that Ofwat's access proposals due next month will need to set out an approach to the RCV-discount question.

Returns and asset stranding: Although there would not be direct competition with incumbents' existing assets under scenarios 1 or 2, should lower cost options emerge in the reformed environment, the regulator may toughen up incumbent cost efficiency targets at price reviews. Moreover it is feasible to imagine incumbent fixed costs exceeding the compensation available through access prices, particularly where customer affordability issues are also in play. Scenario 3 carries the distinct horror of asset stranding – "if new and more efficient treatment technologies replace existing treatment works that have not reached the end of their useful lives and companies have not fully recovered their investment, such sunk inefficient costs may not be recoverable," Moody's warned.

Contract finance: Debt investors in third party entrants and incumbents may opt to finance assets over the lifetime of a finite contract, and may require repayment over that time frame. This would contrast with the perpetual refinancing assumption under the existing regulatory framework. Moody's noted: "Funding strategies may need to adapt accordingly, with more use of amortising debt compared to the bullet repayment options prevalent today."

To what extent these issues come into play, and how they are handled if they do, will determine how significantly upstream reform impacts today's water companies. Should existing debt need to be refinanced because of changes to the sector's structure, there would be a high price to pay. Moody's explained that water companies representing around half of the sector's RCV are currently subject to highly-covenanted financing structures. These contain embedded restrictions including, typically, on not abandoning any part of the appointed business or allowing material changes to the licence. They also commonly identify trigger events which prompt distribution lock-ups and additional creditor oversight, including licence changes that would have a material adverse effect on companies' financial performance; and adverse government legislation that could lead to a breach of the financial covenant ratios embedded within the terms of the financing structure.

Moody's warned: "It is important to note that any significant change in pri-

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UNITED UTILITIES ON PRICING FRAMEWORK

At the conference, Mogford argued a "big bang" approach to upstream competition would not be justifiable, but rather that more competition could be beneficial if the Cave Review's policy of incremental change is pursued – "learning at each step along the way about what works and what doesn't". He said initial developments should be focused on the parts of the supply chain where there is most scope for competition – "we agree with Ofwat that there is greatest scope in water resources, and sludge treatment and disposal".

Mogford evaluated each of the three scenarios scoped out by Moody's. He said increased trading looked to have "obvious benefits" and that United Utilities had been exploring a number of trading activities. However, on full unbundling, benefits seemed very unlikely to outweigh costs.

On third party entry for new assets, he said there were potential benefits – if it is implemented correctly. "Transaction costs need to be kept low and access pricing needs to be set in a way which ensures that entry is encouraged where, and only where, it provides for more efficient outcomes and avoids wasteful asset stranding. We think that this can be delivered. With the right framework, it should be possible for industry to accommodate some third party entry even while Ofwat makes good its commitments on remunerating past investments."

Absolutely critical to correct implementation will be getting the pricing framework right. Mogford noted Ofwat is considering disaggregating prices into different components of the value chain to create greater transparency and price signals in potentially competitive elements. That would mean splitting the return across the value chain, which he observed is often taken to mean RCV will need to be split across the value chain too, because it is the RCV that earns a return. But this would lead to the counter intuitive result of high prices in the north and west where resources are plentiful, while in the water stressed south and east prices would be very low. "The reason for this pricing outcome is mainly that allocating the RCV based on asset values will lead to companies with reservoirs having high resource costs," Mogford explained.

Instead, he advocated a system whereby access pricing for the network is set at total wholesale average cost less incremental cost for resources in each Water Resource Zone. Mogford said: "This approach does not require RCV to be split, nor does it require prices for each part of the value chain. The approach will provide sufficient scope for entry where it is efficient, and for water trading. It will also ensure that existing assets are not wastefully stranded, promises in relation to historic investment can be kept, and prices for customers benefit from the potential for new water resources to be used where these can be delivered at a lower cost."

Should Ofwat want to set price limits for each part of the value chain, United Utilities believes a "contracts for difference" approach, similar to that applied in the energy industry to provide scope for low carbon investments could work. These contracts could provide revenue adjustments according to whether market prices would deliver returns on existing assets which are too low or too high – effectively protecting returns on existing assets.

Full details of the pricing approach can be found at http://corporate.unitedutilities.com/documents/upstream-pricing-concept-paper.pdf mary legislation affecting the sector could unravel companies' financing arrangements…Consequently, significant changes to the industry structure, such as envisaged under our hypothetical scenario 3, will likely require complex negotiations between companies and their investors before they can be implemented in the context of the existing financing arrangements. Alternatively, they may lead to material refinancing requirements."

Varied exposure

Incumbents' exposure to upstream reform will vary. Companies with a higher proportion of their assets or costs associated with competitive activities would face a higher risk of potential asset stranding and/or cost-efficiency challenges. Moody's research suggests the greater reliance of north and west companies United Utilities, Yorkshire Water and Northumbrian Water on reservoirs (companies in the south and east rely more on groundwater) increases their exposure. Of the WOCs, Affinty and Bristol have a comparably high proportion of assets linked to water resources, and could therefore also be exposed.

> **Business and financial risk implications need to be considered before legislative or regulatory changes are implemented, as adverse changes might trigger covenant breaches in the sector's financing arrangements.**

On top of that, companies' asset age, asset condition, level of interconnectivity and geographical location will drive risk exposure. Moody's found: "Areas of water stress and existing or future high population density may attract more entrants to provide additional resources and treatment capacity. While this could expose companies serving the south and east of England, a number of these companies currently do not have a high proportion of their assets and costs allocated to potentially competitive activities. Their exposure will therefore also depend on how the access for new entrants is defined.

"Combining geographical needs and asset/cost allocation, we could see increased risk for Affinity Water and Bristol Water on the water resources and treatment side, while Southern Water and South West Water could be exposed if sewage treatment activities were to become competitive and the areas served by these companies attractive to new entrants."

Financing structures are of course relevant too, with highly-leveraged firms more exposed to the evolving reform process. These companies have both restrictive financing structures and less flexibility to accommodate downside scenarios. "If existing debt providers were unwilling to support changes to the structure that are legally required, repayment of the debt could be necessary," noted Moody's.

The agency concluded: "In summary, the sector's credit quality will likely become less homogeneous and direct comparison across companies more challenging."

Outlook

The sector waits for Ofwat's December Water 2020 proposals with baited breath. Baker's take is that sludge liberalisation could be "fullest and fastest", though even here there are multiple hurdles to address. He foresees more water trading will be fostered, with potentially more providers and open procurement of new capacity in the 2020s. He suggested sewerage was not suited to trade or unbundling and that in this part of the value chain "new sewage treatment works provision auctions look to be the limit". In the round, Baker said he expected "costs to militate against more radical solutions" which will no doubt come as music to the ears of many.

Moody's concluded: "To implement upstream reform while maintaining the sector's historic access to low-cost and long-term funding, it will be important that all parties, including investors, are engaged within the debate and understand the rationale for any changes. Investors may decide whether or not to support reform depending on their understanding of the ultimate outcome as well as their appetite for the resulting risk profile in the context of available returns.

"Importantly, business and financial risk implications need to be considered before legislative or regulatory changes are implemented, as adverse changes might trigger covenant breaches in the sector's financing arrangements." TWR

UPSTREAM REFORM - SHOULD WE BE UP FOR IT?

NERA's Baker remarked it would be "hard for there to be less" competition in the water sector than at present. This is despite the fact that the Water Act 2003 provided a framework for upstream competition. United Utilities' Mogford put this down to four main factors: a pricing framework which has lacked transparency and in many cases would not have enabled an efficient competitor to enter the market; a regulatory framework which incentivised companies to invest in their own supplies rather than deal with deficits through water trading; uncertainty about the gains from investigating the potential for selling water; and the economics of the water industry, including high transport costs and limited availability of new resources.

However, faced with a the supply/demand challenge resulting from the twin pressures of climate change and population growth, the government believes competition in upstream activities could help by promoting more efficient use of a scarce resource and more innovation.

In evaluating whether markets should be promoted, Mogford said benefits must exceed costs.

Economic consultancy Oxera has compared potential upstream competition in water against parallels in other sectors including energy, communications and rail. Benchmarked in this way, Craig Lonie, partner at Oxera, said "the benefits in water are just as big, but the challenges are greater due to a cocktail of circumstances". In economic terms, the upstream activities in water are comparable with those of other competitive industries. In the cocktail though are the RCV allocation issue, the fact that water is heavy and difficult to move, and that asset lives in the industry tend to be long.

Lonie said Oxera's observation for Ofwat was: "To establish net benefit, it should focus its efforts in areas where benefits are near term and obvious – water trading or new build where there is a supply imbalance or assets have expired." Oxera added: "Similarly, sludge treatment and disposal activities might be more conducive to competition in the short- to medium-term as there are likely to be fewer interoperability issues and asset lives tend to be shorter."