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CREDIT OPINION
6 April 2021

Update

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RATINGS

Thames Water Utilities Ltd.

Domicile	United Kingdom
Long Term Rating	Baa2
Type	LT Corporate Family Ratings - Dom Curr
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Thames Water Utilities Ltd.

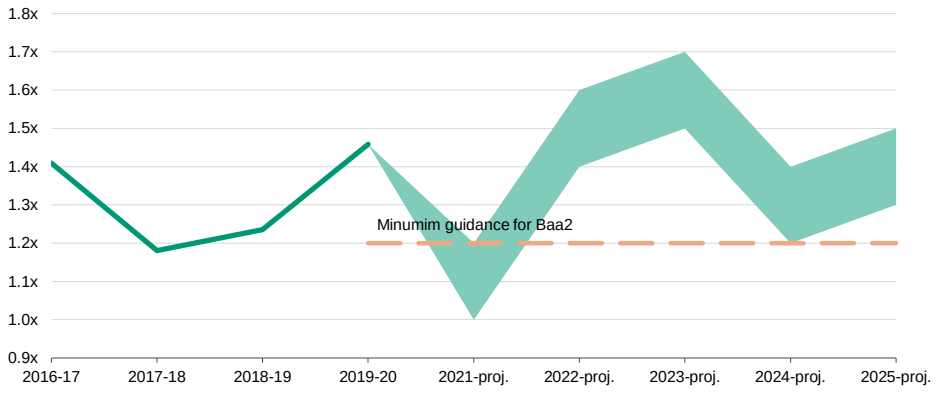
Regular update reflecting HY results and performance YTD 2020/21

Summary

The credit quality of Thames Water Utilities Ltd. (Thames Water, CFR Baa2 stable) is supported by its low business risk profile as the monopoly provider of essential water and sewerage services, its relatively stable and predictable cash flow generation under a well-established and transparent regulatory framework and the creditor protections incorporated within the company's financing structure. The company also benefits from a relatively low cost of debt.

Credit quality is constrained by relatively high gearing, with net debt to regulatory capital value (RCV) currently above 80%, although the company's business plan includes measures to reduce this by 2025. Ofwat's final determination for the five-year regulatory period that started in April 2020 (AMP7) includes a significant cut in allowed returns, material revenue reductions as a result of operational underperformance in AMP6 and difficult performance targets that we expect to result in further financial penalties. High leverage and weak performance will continue to weigh on credit quality.

Exhibit 1
Interest coverage is likely to be in line with guidance for most years of AMP7
Moody's Adjusted Interest Cover Ratio (AICR) and projected range



Moody's Projections (proj.) are Moody's opinion and do not represent the views of the issuer.
Source: Moody's Investors Service

Credit strengths

» Stable cash flow from the provision of monopoly water and wastewater services under a well-established, transparent and predictable regulatory regime

» Debt structural features, including distribution lock-up covenants, dedicated liquidity, and intercreditor and security arrangements, which provide additional creditor protection for event risk and enhance recovery prospects in an event of default

» A lower average cost of debt than highly-leveraged peers and smaller risk from derivative contracts

Credit challenges

» Record of weak operating performance

» Relatively high financial leverage, which constrains financial flexibility

» Lower allowed return and more demanding efficiency and performance targets in AMP7, which will likely increase cash flow volatility

Rating outlook

The stable outlook reflects our expectation that, despite operational underperformance and expenditure above regulatory allowances, Thames Water will achieve an AICR of around 1.3x, on average, over AMP7 and maintain net debt/RCV of 80-85%, including Moody's adjustments.

Factors that could lead to an upgrade

Thames Water's ratings could be upgraded if the company were to significantly improve operational performance, supporting an AICR sustainably above 1.4x with net debt/RCV below 80%.

Factors that could lead to a downgrade

The ratings could be downgraded if Thames Water failed to maintain progress in improving operational performance and addressing past issues, and in particular if its AICR was expected to fall below 1.2x or if net debt/RCV rose above 85%.

In addition, downward rating pressure could result from (1) adoption of more aggressive financial policies, (2) a significant increase in business risk for the sector as a result of legal and/or regulatory changes leading to a reduction in the stability and predictability of regulatory earnings, which in each case are not offset by other credit-strengthening measures or (3) unforeseen funding difficulties.

Key indicators

Exhibit 2

Thames Water' key metrics is a function of its comparably high gearing

	Mar-15	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	AMP7 forward view
Adjusted Interest Coverage Ratio	1.8x	1.7x	1.4x	1.2x	1.2x	1.5x	1.2x-1.4x
Net Debt / Regulated Asset Base	82.8%	81.7%	83.2%	82.4%	83.8%	86.3%	80%-85%
FFO / Net Debt	9.1%	8.2%	6.7%	5.2%	5.1%	6.0%	6%-7%
RCF / Net Debt	7.7%	7.7%	5.3%	4.7%	4.6%	5.6%	5%-6%

All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. We note that the company includes income from grants and contributions to support new network connections within revenues and operating cash flow. We estimate that the company's AICR would be up to 0.2x lower when this income was not included. Moody's projections are Moody's opinion and do not represent the views of the issuer. For definitions of Moody's most common ratio terms, please see the accompanying User's Guide.

Source: Moody's Financial Metrics™

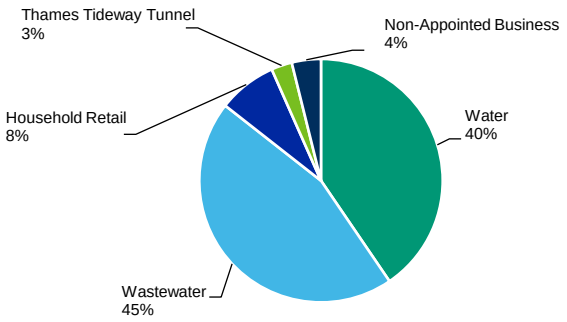
Profile

Thames Water Utilities Ltd (Thames Water) is the largest of the 10 water and sewerage companies in England and Wales by both RCV and number of customers served. The company provides drinking water to around nine million customers and sewerage services to around 15 million customers in London and the Thames Valley. It is the primary operating subsidiary of Thames Water Limited, which is in turn owned by Kemble Water Finance Limited (the financing subsidiary of which is Thames Water (Kemble) Finance PLC, senior secured B1 stable). Since May 2017, the largest shareholders of Kemble are the Ontario Municipal Employees Retirement System (31.8%) and the Universities Superannuation Scheme (10.9%).

Exhibit 3

Thames Water's £2.2 billion revenue is primarily generated from water and wastewater wholesale activities

Revenue split for FY 2019/20

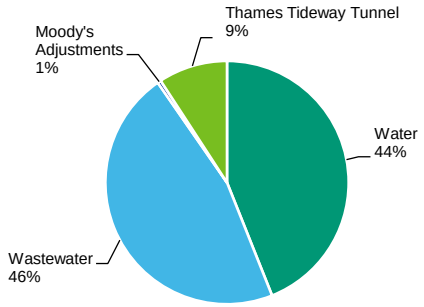


The Tideway segment includes revenue that is collected by Thames Water through customer bills on behalf of Bazalgette Tunnel Limited, the Tideway infrastructure provider. We adjust Thames Water's financial statement to remove the Tideway-related items for the purpose of calculating key credit metrics.
Source: Company reports, Moody's Investors Service

Exhibit 4

Thames Water's RCV was ca. £14.6 billion at March 2020 (including the regulatory midnight adjustment)

RCV split at March 2020



The RCV associated with Tideway is the element of the tunnel infrastructure investment that is carried out by Thames Water itself, in addition to any investment undertaken by Bazalgette Tunnel Limited, the Tideway infrastructure provider.
Source: Ofwat, Company reports, Moody's Investors Service

Detailed credit considerations

Transparent regulatory regime, but falling returns pressure companies' financial flexibility

The UK water sector benefits from a transparent, stable and predictable regulatory regime, which is based on clearly defined risk allocation principles and their consistent application in setting water tariffs by an independent regulatory body, the Water Services Regulation Authority (Ofwat).

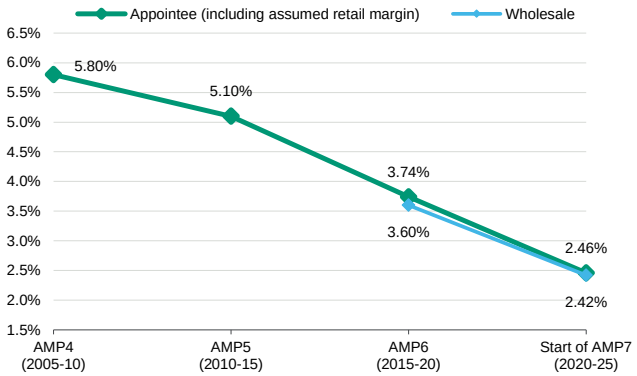
Ofwat has, to date, reset price limits every five years and published its final determination for the 2020-25 period, known as AMP7, in December 2019.

As previously flagged by the regulator, the determination included a significant cut in allowed cash returns to ca. 2.42% for the wholesale activities at the start of the new period, which incorporates the regulator's decision to only link half of the existing regulatory assets as at March 2020 to the Retail Prices Index (RPI), with the remainder and any new additions linked to the Consumer Prices Index adjusted for housing costs (CPIH). As the share of regulatory assets linked to CPIH grows over time, we estimate that most companies will have an average allowed cash return of around 2.5% over AMP7. For comparison and on a like-for-like RPI-stripped basis, allowed returns will fall by close to 50% to 1.92% (1.96% including retail margin) in AMP7 from 3.6% (3.74% including the retail margin) in AMP6 (April 2015 - March 2020).

Exhibit 5

Significant cut in allowed returns, despite lower inflation index

Real (cash) allowed returns

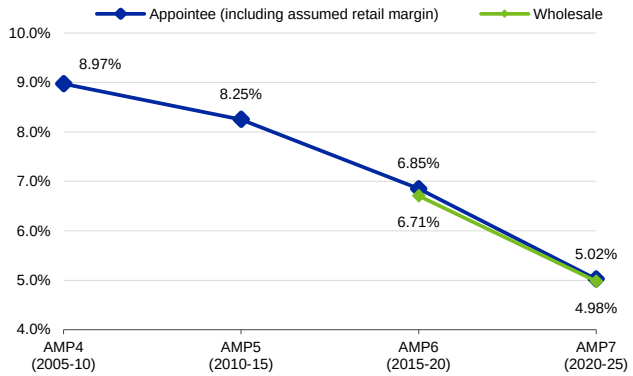


Since PR14, Ofwat has separated retail activities from the wholesale services.
Source: Ofwat

Exhibit 6

Unprecedented cut in nominal allowed returns

Nominal (total) returns including forecast inflation of RCV



Note: Assuming ex ante expectation of 3% RPI inflation and 2% CPIH inflation.
Source: Ofwat, Moody's Investors Service estimates

The final determination incorporated increasing efficiency challenges for companies, including: (1) totex efficiency, with a frontier shift of 1.1%, set at the upper quartile level as opposed to the sector average level; and (2) an outcome delivery incentives mechanism calibrated so that only the top quartile performers can achieve a reward. Consequently, average as well as below average performers could be negatively affected, putting a further strain on companies' cash flows.

The final determination also confirmed companies' commitment to accept the regulator's proposals under the 'Putting the Sector Back in Balance' consultation, which included (1) a sharing mechanism of perceived financing outperformance from high gearing; and (2) increased transparency around dividend and executive pay policies. The 'Putting the sector back in balance' measures marked a change in direction for the regulator, in our view, in response to political and public pressure and evidenced a modest deterioration in the stability and predictability of the regime. The regulator has long maintained that capital structure is a matter for shareholders but, with the new measures, will exert greater influence. Accordingly, in May 2018, we revised the scoring for the stability and predictability of the regulatory regime under our rating methodology for Regulated Water Utilities to Aa from Aaa. At the same time we modestly tightened our ratio guidance.

After four of Thames Water's peers rejected their determination, the Competition and Markets Authority (CMA), the UK's regulatory appeals body, said in its summary final determination in March 2021 that there was insufficient evidence of a financial benefit from higher gearing and that it doubted that Ofwat's proposed mechanism was the right tool to address higher gearing within the sector. While the CMA's ruling would not apply directly to any company that did not appeal Ofwat's determination for AMP7, the appeal body's decision could lead to Ofwat rethinking its approach for the entire sector. However, if Ofwat retained its current approach, and based on Thames Water likely maintaining gearing of up to 85%, we would expect the company to be impacted by the high gearing penalty, although any financial impact would only be visible in the following period, through a true-up adjustment as part of the 2024 price review.

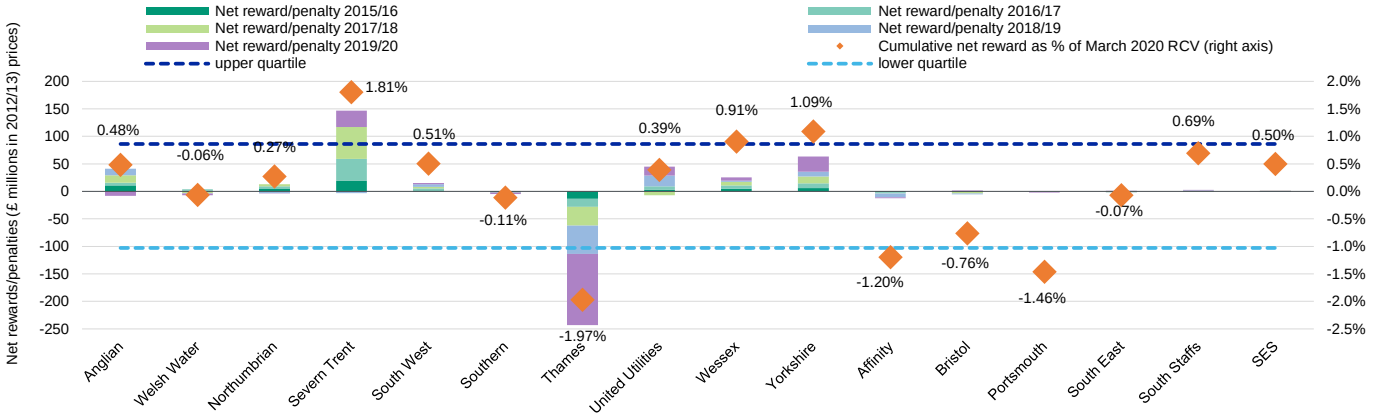
Operational performance remains weak, with challenging AMP7 targets increasing risk of further penalties

Over AMP6, Thames Water accumulated penalties of around £243 million (in 2012-13 prices, prior to Ofwat's blind-year adjustment for 2019/20 performance) for failing to meet performance targets, some of which will reduce revenues over AMP7. Around £130 million (in 2012/13 prices) of underperformance penalties reported in the last financial year of AMP6 relate to a single project, where the company found a simpler and cheaper method to reduce internal sewer flooding incidents than envisaged at the 2014 price review; therefore the penalty is mostly offset by the company not spending the full allowance for this project.[1] The remaining net penalties are primarily associated with the company's performance against leakage and supply interruptions targets as well as the asset health of its water infrastructure in general.

Exhibit 7

Thames Water has seen the most significant performance penalties over AMP6, a large part of which will reduce AMP7 revenues

Cumulative ODI reward/penalties (in 2012/13 prices) in absolute terms (LHS) and relative to March 2019 RCV (RHS)



Source: Companies' annual performance reports, Ofwat, Moody's Investors Service

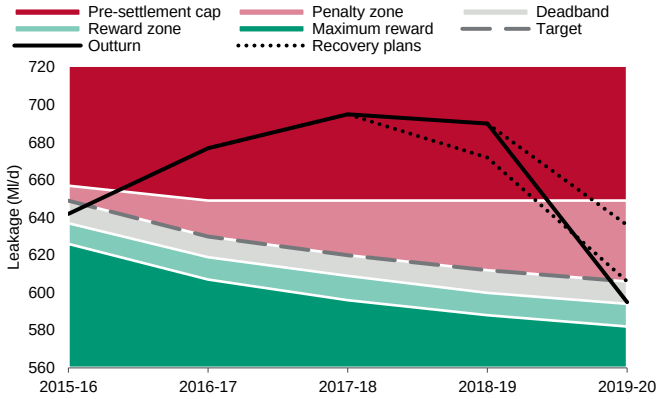
Persistently high leakage, although performance has recently improved

In June 2017, Ofwat announced it had opened an investigation into Thames Water for failure to meet its licence obligations with respect to leakage levels. The investigation concluded in June 2018, with Ofwat accepting Thames Water's proposed remediation package, which included (1) the company' acceptance that £90 million of leakage reduction work had been incurred inefficiently and would not be part customer funded; (2) removal of the maximum penalty cap for leakage for the remainder of the AMP6 period; and (3) the requirement to report monthly on leakage performance against an agreed recovery plan (see Thames Water's leakage settlement is credit negative, 14 June 2018).

While leakage remained above even recovery plan target levels for most of AMP6, Thames Water reported average leakage of 595 megalitres per day (Ml/d) in 2020/21, against the original (and revised) regulatory target of 606 Ml/day. However, Ofwat attributed part of the improvement to a methodological change and imposed a small penalty associated with that. Due to its weak performance in 2018/19, the company had also accrued a £41 million penalty (in 2018/19 prices) in that year to be paid in 2020/21, the first year of AMP7, but will receive a net benefit under the so-called blind-year adjustment (for improved ODI performance in the last year of AMP6) in 2021/22 coupled with recovery of previously undercollected revenues.

Exhibit 8

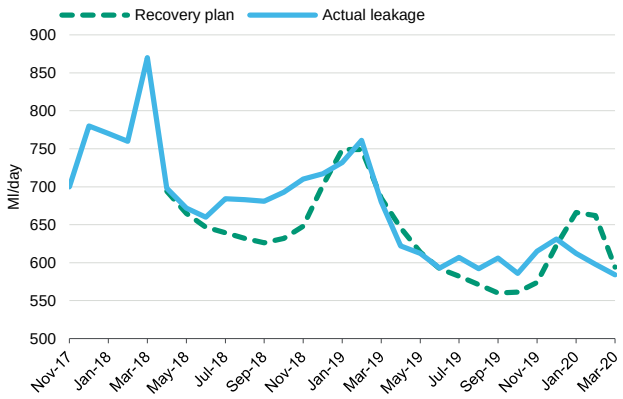
For most of AMP6, leakage levels were significantly above regulatory targets



Source: Company reports, Ofwat, Moody's Investors Service

Exhibit 9

However, the company met the recovery plan target in 2019/20



Source: Company reports

In its PR19 business plan, Thames Water committed to further reducing leakage to 509 Ml/d by 2025, representing a 15% reduction from the recovery plans of 606 Ml/day in 2020.

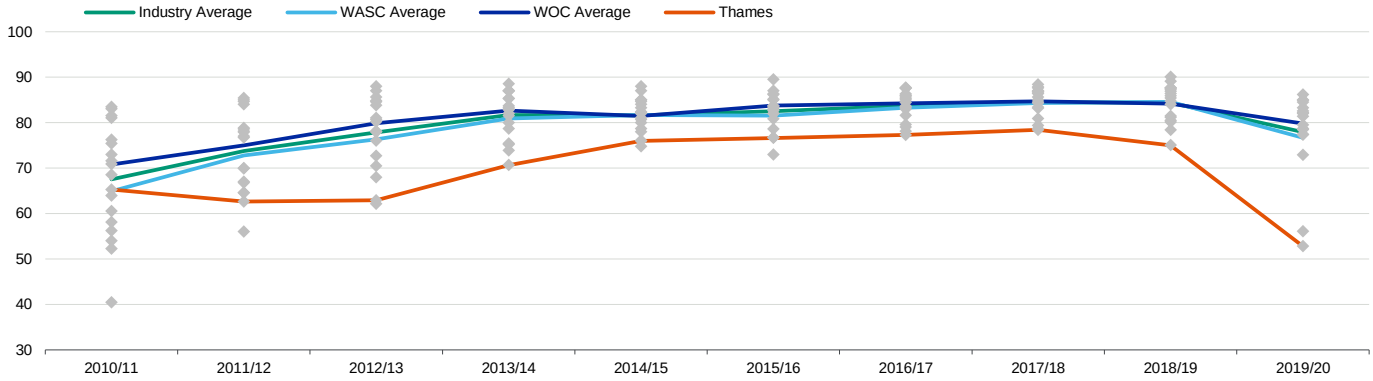
Low customer service scores

Thames Water also remains one of the worst performers for customer service, which is reflected in a £102 million (in 2017/18 prices) revenue reduction in AMP7 for the company's performance over AMP6.

Exhibit 10

Thames had the weakest SIM score in the first four years of AMP6, and will pay the largest penalty in AMP7

Total SIM scores over AMP5 and AMP6 for water and wastewater companies



Ofwat's Service Incentive Mechanism (SIM) consists of two measures: (1) a qualitative measure reflecting customer satisfaction, and (2) a quantitative measure reflecting complaints and telephone contacts received by companies. Scores for 2020/21 also reflect certain elements of the new C-Mex customer service measure that applies from April 2020.
Source: Companies' performance reports, Ofwat

AMP7 penalty ranges

Based on the final determination performance commitments and the operational improvements targeted in its April 2019 business plan, we estimate that Thames Water will incur around £50 million of aggregate ODI penalties from the ten common performance commitments, primarily related to supply interruptions and unplanned outages as well as internal sewer flooding and per capita consumption. For comparison, we calculated the P10 underperformance to P90 outperformance range (including 80% of all probable scenarios) between -£461 million to +£173 million over the period. In addition, given Thames Water's relatively poor performance on customer satisfaction, the company is likely to incur further penalties under the new C-MEX and D-MEX satisfaction measures, potentially up to 12% of residential retail revenue.

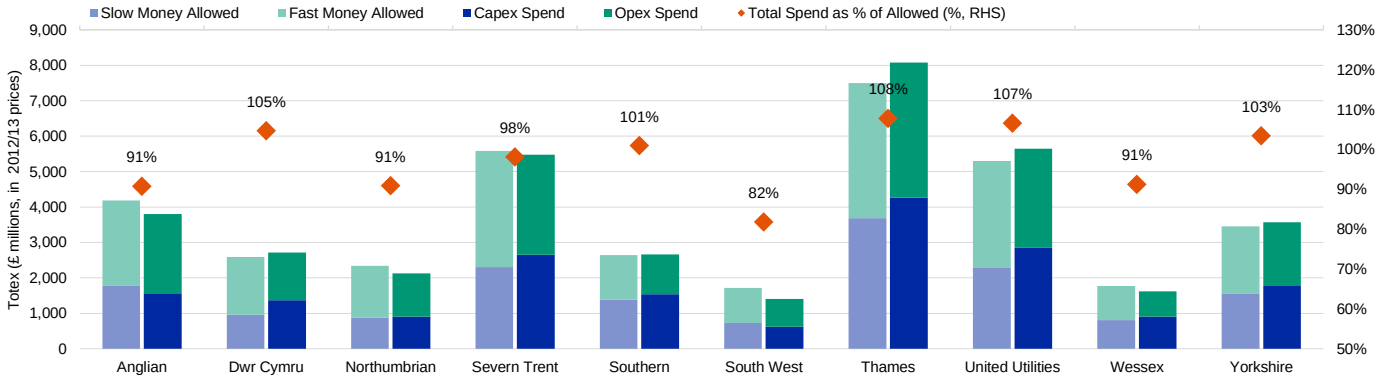
Following totex overspent in AMP6, Thames Water faces ongoing efficiency challenge in AMP7

Over AMP6, Thames Water overspent its totex allowances by 8%. The overspend primarily relates to additional investment in trunk mains replacement, maintenance and leakage reduction works, with the aim to improve operational performance and network resilience.

Exhibit 11

Thames Water's overspend on totex primarily reflects additional investments in its water network

Cumulative spend (in £ millions) over 2015/16 - 2019/20 versus allowed totex



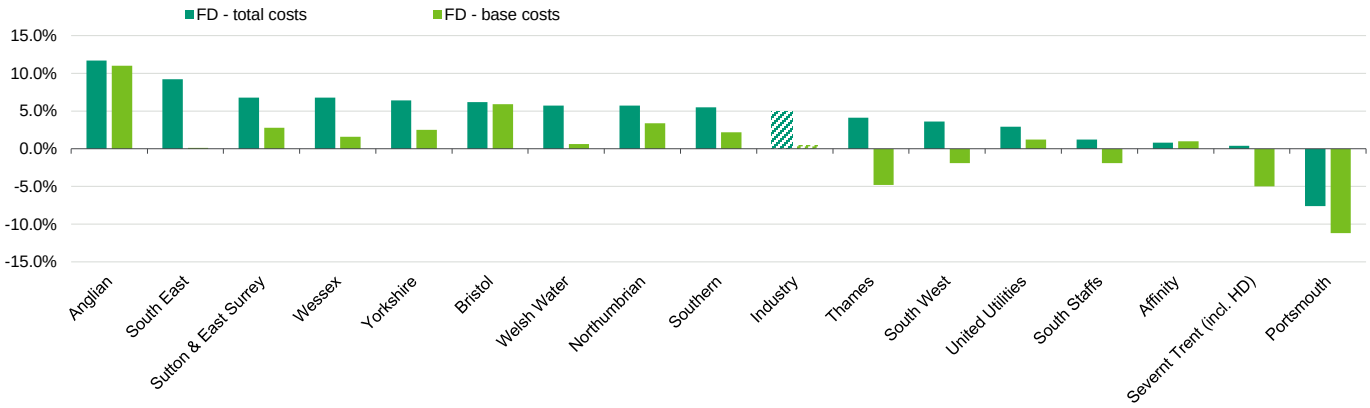
Source: Companies' performance reports, Ofwat, Moody's Investors Service

For AMP7, Ofwat's allowance for base operating and maintenance expenditure, excluding enhancement projects and costs associated with the Thames Tideway Tunnel but including retail costs, was £8.5 billion, roughly £400 million more than the company requested in its alternative, scaled-back investment plan following draft determinations but £600 million less than proposed in its April business plan.

Exhibit 12

While Thames Water's efficiency challenge is below the sector average this reflects the company's alternative low-investment plan

Cost efficiency challenge at final determination (FD)



FD efficiency challenge compares FD allowance against companies' response to draft determination (DD) from August 2019. Comparison of base cost efficiencies may be affected by re-classification from base to enhancement expenditure (and vice versa) between DD and FD.
Source: Ofwat

Under the totex sharing mechanism, only 25% of any overspend would be added to the RCV in 2025. Ofwat decided to apply the lower significant scrutiny cost sharing rate for any underperformance to protect customers. Conversely, 56-68% of any underspend would be subtracted from the RCV or repaid to customers over the 2025-30 period.

Relatively high leverage constrains credit quality

Thames Water's credit quality is constrained by its relatively high leverage. Management has, however, committed to reducing leverage at the operating company, in part because of Ofwat's PR19 high gearing penalty. Deleveraging of Thames Water will be achieved through raising additional debt at Kemble and injecting the cash into the operating company as equity and by limiting distributions.

In its business plan, the group proposed to raise £850 million of incremental debt at Kemble by the end of AMP7 to reduce the operating company's leverage, as measured by net debt/regulatory asset value, to below 78% of RCV from around 82%, excluding Moody's adjustments. Because of differences between the final determination and the company's business plan, the overall amount

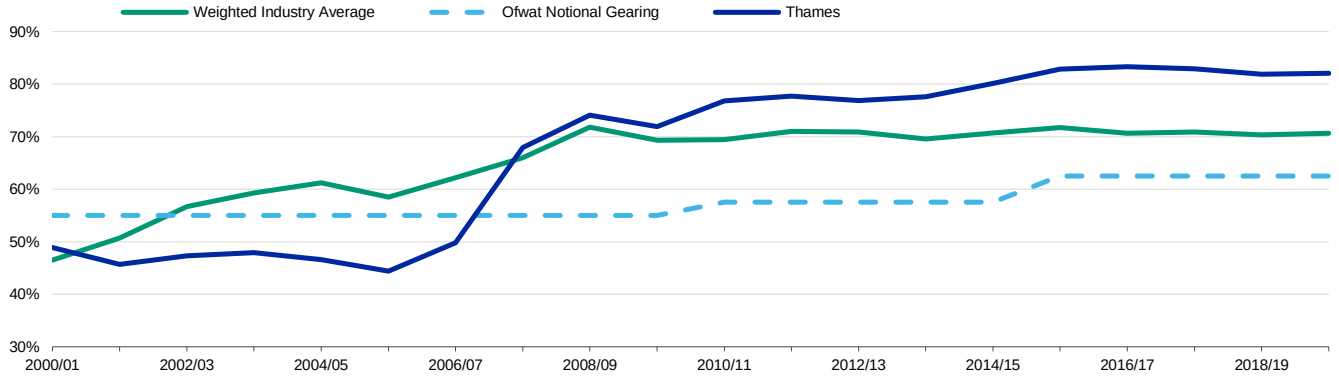
of the equity injection would have to increase slightly or the gearing reduction may be more muted. The first stage of the plan was completed in April 2019, when £250 million was injected into Thames Water, while a further £80 million was received in the first half of FY 2020/21.

Thames Water also plans to constrain net cash dividends to £75 million from wholesale regulated activities, the minimum amount necessary to service debt and other costs at its holding companies, and approximately £20 million from other non-regulated activities.

Exhibit 13

Following the implementation of the highly covenanted financing structure in 2007, Thames Water's leverage increased to above 80% and remains the highest in the sector

Regulatory gearing ratios as reported by companies to Ofwat



Average gearing as reported, and not reflective of Moody's standard adjustments.
Source: Companies performance reports, Ofwat, Moody's Investors Service

Taking into account the fair value of existing borrowings and derivatives, Thames Water had fair value gearing around 109% of RCV as of March 2020. A visible erosion of the equity value could weaken incentives for shareholders to provide further funding.

Structural considerations

The Baa2 CFR is assigned to Thames Water as if it had a single class of debt and was a single consolidated legal entity. It reflects an opinion on the expected loss associated with the financial obligations within the Thames Water group, and consolidates the legal and financial obligations of Thames Water, its financing subsidiary Thames Water Utilities Finance PLC (TWUF) and the intermediate holding company within the group, Thames Water Utilities Holdings Limited. The Baa2 CFR also factors in the credit enhancements of the financing structure.

Debt structural features provide a rating uplift for additional creditor protection

Thames Water's Baa2 CFR takes into account the covenant and security package agreed by the company, which is designed to insulate the company's creditworthiness from that of its ultimate shareholders and improve creditors' protection in a default scenario. The overall covenant and security package is similar to those for comparable highly leveraged financing transactions, and results in a rating uplift of around one notch for credit-enhancing features, embedded in the Baa2 CFR.

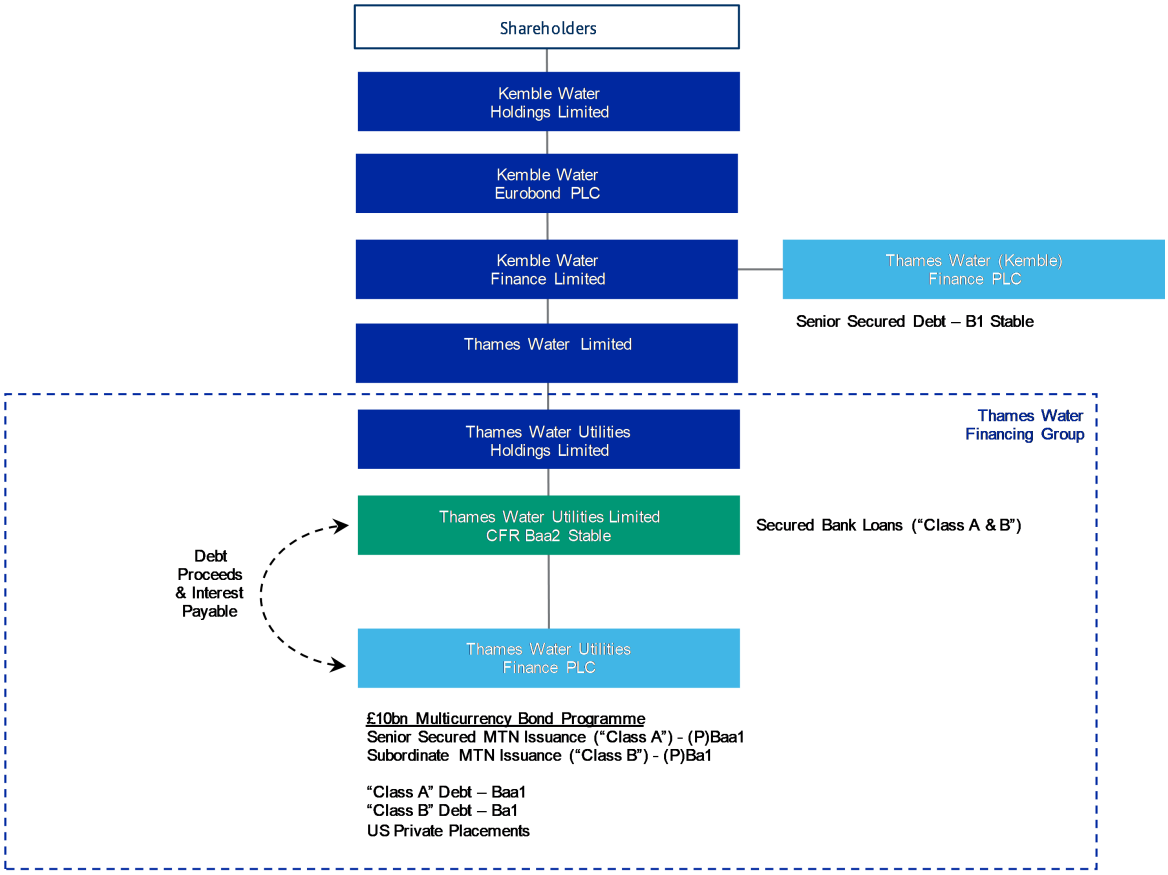
The terms and conditions of its financing arrangements allow Thames Water to increase its indebtedness (on the basis of net debt/RCV) up to 85% before distribution lock-ups come into effect. Failure to maintain a level of adjusted interest cover of at least 1.1x in any single year (or 1.2x on a three-year rolling average) would also trigger the dividend lock-up mechanism. We note, however, that our calculation of both ratios differs from the definition of the financial covenants in the financing documents because of our specific adjustments, particularly following swap restructurings executed by the company in November 2019.

Additional event risk protection provided by the bond covenant and security package also include, inter alia, restrictions on acquisitions and disposals (subject to limited defined exceptions), maturity concentration limits and limitation on non-core activities. In addition, we consider creditor step-in rights if certain trigger events occur.

Recovery prospects in a default scenario can be improved by (1) a first-ranking fixed charge over the shares in the company, plus first-ranking fixed and floating charges over all the assets, rights and undertakings of Thames Water; and (2) the agreement by financial

creditors to give up their individual rights to petition for insolvency proceedings. We recognise the fact that the benefit of the security provided to bondholders is limited because of the regulated and essential nature of the services provided by Thames Water, as governed by its licence and the Water Industry Act 1991.

Exhibit 14
Simplified organisational structure



Source: Moody's Investors Service

We also rate the bonds issued by TWUF under a £10 billion MTN programme (the Programme), guaranteed by Thames Water. The bonds are issued either as part of a senior tranche (Class A debt) or a junior tranche (Class B debt) and are rated Baa1 or Ba1, respectively.

The Baa1 rating of the Class A bonds issued under the Programme reflects the strength of the debt protection measures for this class of bonds and other pari passu indebtedness (together, the Class A debt), the senior position in the cash waterfall and after any enforcement of security. The rating also, however, factors in the subordinated Class B debt (Class B bonds and other pari passu debt), which — while contractually subordinated — serves to reduce the operating company's financial flexibility because Class B debt would continue to be served even in a trigger event as long as sufficient cash remains available. In addition, a downgrade or default of the Class B debt could have an impact on the viability of the company's funding model as a whole because the inability to raise additional Class B debt in the future could undermine the capital structure and, thus, affect the credit quality of the senior debt.

The Ba1 rating of the Class B bonds reflects the same default probability as factored into the Baa2 CFR, as well as our expectation of a heightened loss severity for the Class B debt following any default, given its subordinated position in the cash flow waterfall.

ESG considerations

UK water companies generally face low environmental risk, but exposure to water shortages is rising, particularly in England's South East

Overall, the water companies in England and Wales face relatively low environmental risks compared with other industries. The regulated nature of companies' activities and their investment requirements, including a forward-looking allowance for efficient cost, have been key in ensuring that environmental risk, while present and growing, has not affected credit quality. However, there is an inevitable and high risk of exposure to water shortages, which is likely to grow with climate change. Therefore, investment needs will continue to rise over the next 30 years and the resulting increase in regulated assets and their remuneration will have to continue to be supported by the regulatory tariff framework in order to avoid negative credit implications in the future.

According to an analysis by the UK government's Environment Agency (EA), the southeast of England, which comprises the service areas of Thames Water, Affinity Water Limited (Baa1 negative), Portsmouth Water Limited (Baa1 negative), South East Water Limited (funded through South East Water (Finance) Limited, rated Baa2 stable), Sutton and East Surrey Water plc (Baa2 negative) and Southern Water Services Limited (funded through Southern Water Services (Finance) Limited, rated Baa3 stable), will require additional supply of 1,765 million litres a day by 2050 to offset additional challenges from population growth and climate change as well as increase drought resilience.

Over the 2020-25 regulatory period, Thames Water has been allowed to spend roughly £445 million for improvements in the context of the water infrastructure national environmental programme as well as to increase resilience through improved supply and demand management and increases metering. It also received £179 million as part of Ofwat's allowances for accelerated development of strategic water resources to be ready for investment in the 2025-30 period.

Past operational weaknesses reflected in most significant cumulative environmental fines in the sector

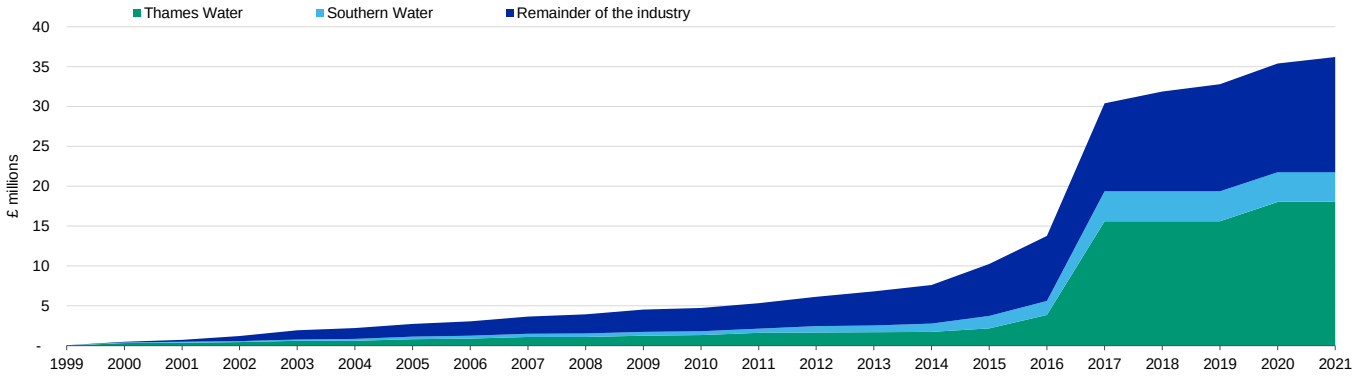
Since new sentencing guidelines were enacted in 2014, large water companies operating in England have faced the possibility of significantly larger fines, specifically for serious or repeated environmental offences (see UK Water Sector: Environmental damage likely to attract more material fines, July 2015). The years following the first use of these guidelines in July 2015 account for 70% of the industry's cumulative fines since 1999.

As of March 2021, Thames Water accounted for 50% of the cumulative fines in the industry. In March 2017, the company received the largest ever fine for five separate, significant pollution incidents on the River Thames during 2012-14, with the penalty amounting to £11.8 million. The action took into account the company's negative track record when requiring a settlement amount well in excess of historical levels. While significantly higher than previous penalties, the fine did not significantly hurt Thames Water's financial profile. The other major offender with respect to environmental discharges is Southern Water, which did not comply with its discharge permits over 2010-17 and also falsified associated reporting data. Southern Water received a significant fine from Ofwat in this respect but a court case opened by the Environment Agency has not yet concluded.

Exhibit 15

Since 2016, fines in the water industry have increased substantially, with Thames Water accounting for 50% of total fines

Cumulative fines since 1999



Cumulative fines for the water industry in England administered by the Environment Agency up to March 2021. Shown in financial years

Source: Environment Agency, Moody's Investors Service

Given long lead times in the legal process, there is a risk that prior underperformance in this area could lead to further penalties in the future. Thames Water was most recently fined £2.3 million in February 2021 for a pollution incident from April 2016.

Overall low exposure to impact of COVID-19

The coronavirus pandemic is regarded as a social risk under our ESG framework, given the substantial implications for public health and safety.

We consider the UK water companies to have an overall low exposure to the impact of COVID-19 due to (1) the regulatory protections against consumption volumes or collected revenues being lower than expected; and (2) companies' solid liquidity profiles that will act as a buffer against short-term stress.

Water consumption by non-household customers will likely be lower than expected in the regulatory year ending March 2021 and companies have been asked by the regulator to support non-household business as well as vulnerable household customers that are struggling to pay. We expect this to result in lower revenue collections, particularly from non-household customers, than assumed in the regulatory determination, primarily during the first half of the financial year ending March 2021. In its half-year results as at 30 September 2020, Thames Water reported that non-household revenues were indeed lower, albeit partially offset by higher usage from metered household customers during the hot spring and summer period.

Under the regulatory framework, a volume-related revenue shortfall can be collected with a two year lag, i.e. in the regulatory year ending March 2023; however, given the unprecedented circumstances, some kind of mutualisation of the impact across the industry, including perhaps a longer-tailed recovery cannot be excluded, particularly if the amounts are significant.

Companies have also been increasing provisioning for bad debt, with an expectation that households may struggle to pay their bills as government support schemes expire. In the six-month period ended 30 September 2020, Thames Water reported an increase in our overall bad debt cost of £7.5 million to £34.9 million, with lower cash collection of current year bills of £23.8 million, shown as a deduction in revenue, and bad debt relating to bills from prior years of £11.1 million, recognised within operating expenses.

Through lower consumption and the impact on revenue, exacerbated by collection delays, the coronavirus outbreak will weigh on financial metrics, in particular interest cover ratios. However, taking into account the regulatory protections we expect the affect to be largely one of timing. In this context, access to cash and other readily available liquidity sources will be paramount in supporting overall credit quality, and Thames Water currently has sufficient resources over at least the next 12-18 months.

Liquidity analysis

Thames Water's solid liquidity will be sufficient to support the company's operating and capital spending over at least the next 12-18 months. It is underpinned by (1) the stable and predictable cash flow generated by its regulated activity; (2) cash balances and short-term investments of around £467 million as of 30 September 2020 (excluding cash associated with the Tideway contract); and (3)

around £2.3 billion of committed revolving facilities comprising a £1,432 million Class A revolving credit facility, a £214 million Class B revolving credit facility, a £370 million debt service reserve facility and a £180 million O&M reserve facility, with a group of 16 relationship banks. At September 2020, £1.6 billion remained undrawn under these facilities and a £110 million £110.0 million Class A term facility was subsequently cancelled in October 2020 on issuance of new Class A bond.

Rating methodology and scorecard factors

Thames Water's Baa2 CFR reflects our Regulated Water Utilities rating methodology, published in June 2018. The methodology scorecard indicates an outcome of Baa2 on a forward-looking basis, in line with the assigned CFR.

Exhibit 16

Rating Methodology Scorecard

Thames Water Utilities Ltd.

Regulated Water Utilities Industry [1][2]	Current FYE 3/31/2020		Moody's 12-18 Month Forward View As of March 2021 [3]	
Factor 1 : Business Profile(50%)	**Measure**	**Score**	**Measure**	**Score**
a) Stability and Predictability of Regulatory Environment	Aa	Aa	Aa	Aa
b) Asset Ownership Model	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Sufficiency & Timeliness)	A	A	A	A
d) Revenue Risk	A	A	Aa	Aa
e) Scale and Complexity of Capital Programme & Asset Condition Risk	Baa	Baa	A	A
Factor 2 : Financial Policy (10%)				
a) Financial Policy	B	B	B	B
Factor 3 : Leverage and Coverage (40%)				
a) Adjusted Interest Coverage Ratio (3 Year Avg)	1.3x	Ba	1.2x - 1.4x	Ba
b) Net Debt / Regulated Asset Base (3 Year Avg)	84.2%	B	80% - 85%	Ba
c) FFO / Net Debt (3 Year Avg)	5.4%	B	6% - 7%	Ba
d) RCF / Net Debt (3 Year Avg)	5.0%	Ba	5% - 6%	Ba
Rating:				
Scorecard-Indicated Outcome Before Notch Lift		Ba2		Baa3
Notch Lift	1.5	1.5	1.5	1.5
a) Scorecard-Indicated Outcome		Baa3		Baa2
b) Actual Rating Assigned				Baa2

(1) All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. (2) As of 31/03/2020. (3) This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate any significant acquisitions or divestitures.

Source: Moody's Financial Metrics™

Ratings

Exhibit 17

Category	Moody's Rating
THAMES WATER UTILITIES LTD.	
Outlook	Stable
Corporate Family Rating -Dom Curr	Baa2

Source: Moody's Investors Service

Appendix

Exhibit 18

Peer comparison

Thames Water Utilities Ltd.

	Thames Water Utilities Ltd. Baa2 Stable			Anglian Water Services Ltd. Baa1 Stable			Yorkshire Water Services Limited Baa2 Negative			Southern Water Services Limited Baa3 Stable *		
(in GBP million)	FYE Mar-18	FYE Mar-19	FYE Mar-20	FYE Mar-18	FYE Mar-19	FYE Mar-20	FYE Mar-18	FYE Mar-19	FYE Mar-20	FYE Mar-18	FYE Mar-19	FYE Mar-20
Revenue	2,018	2,037	2,109	1,312	1,355	1,420	1,027	1,059	1,063	858	876	878
EBITDA	1,079	1,021	1,316	848	651	738	627	435	564	598	536	536
Regulated Asset Base (RAB)	13,895	14,441	14,594	7,847	8,106	7,966	6,457	6,698	6,960	4,948	5,108	5,072
Total Debt	11,556	12,251	13,344	6,400	6,849	7,506	4,910	5,173	5,665	4,160	4,007	3,824
Net Debt	11,451	12,097	12,588	6,112	6,295	6,458	4,882	5,136	5,416	3,884	3,524	3,639
Adjusted Interest Coverage Ratio	1.2x	1.2x	1.5x	1.5x	1.5x	1.7x	1.4x	1.5x	1.4x	1.0x	1.3x	1.1x
FFO / Net Debt	5.2%	5.1%	6.0%	7.5%	7.4%	7.7%	7.8%	6.8%	6.5%	7.7%	9.4%	8.1%
RCF / Net Debt	4.7%	4.6%	5.6%	6.1%	6.3%	6.7%	7.3%	6.1%	5.4%	5.5%	9.2%	7.9%
Net Debt / Regulated Asset Base	82.4%	83.8%	86.3%	77.9%	77.7%	81.1%	75.6%	76.7%	77.8%	78.5%	69.0%	71.7%

All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months. RUR = Ratings under Review, where UPG = for upgrade and DNG = for downgrade. * Ratings represent senior secured debt ratings assigned to finance subsidiary Southern Water Services (Finance) Ltd.
Source: Moody's Financial Metrics™

Exhibit 19

Moody's-adjusted debt breakdown

Thames Water Utilities Ltd.

(in GBP million)	FYE Mar-16	FYE Mar-17	FYE Mar-18	FYE Mar-19	FYE Mar-20
As Reported Total Debt	10,965	10,807	11,089	11,854	13,196
Pensions	260	380	301	339	209
Leases	80	98	87	0	0
Non-Standard Public Adjustments	(299)	(275)	79	58	(61)
Moody's Adjusted Total Debt	11,006	11,009	11,556	12,251	13,344
Cash & Cash Equivalents	(812)	(54)	(104)	(154)	(756)
Moody's Adjusted Net Debt	10,194	10,956	11,451	12,097	12,588

All figures are calculated using Moody's estimates and standard adjustments. Non-standard adjustments remove accrued interest and add derivative accretion.
Source: Moody's Financial Metrics™

Exhibit 20

Moody's-adjusted funds from operations (FFO) breakdown

Thames Water Utilities Ltd.

(in GBP million)	FYE Mar-16	FYE Mar-17	FYE Mar-18	FYE Mar-19	FYE Mar-20
As Reported Funds from Operations (FFO)	1,179	1,132	1,020	1,071	1,189
Pensions	0	45	19	0	21
Leases	8	13	7	0	0
Capitalized Interest	(114)	(76)	(101)	(109)	(98)
Alignment FFO	(203)	(160)	(234)	(146)	(192)
Unusual Items - Cash Flow	0	0	2	3	6
Non-Standard Public Adjustments	(31)	(216)	(121)	(205)	(171)
Moody's Adjusted Funds from Operations (FFO)	839	737	593	613	755

All figures are calculated using Moody's estimates and standard adjustments. Non-standard adjustments relate primarily to the reclassification of interest paid and received to cash flow from operations.
Source: Moody's Financial Metrics™

Exhibit 21

Select historical Moody's-adjusted financial data

Thames Water Utilities Ltd.

(in GBP million)	FYE Mar-16	FYE Mar-17	FYE Mar-18	FYE Mar-19	FYE Mar-20
INCOME STATEMENT					
Revenue	2,040	2,027	2,018	2,037	2,109
EBITDA	1,215	940	1,079	1,021	1,316
EBITDA margin %	59.6%	46.4%	53.5%	50.1%	62.4%
EBIT	730	410	546	467	727
EBIT margin %	35.8%	20.2%	27.0%	22.9%	34.5%
Interest Expense	404	518	608	561	526
BALANCE SHEET					
Cash & Cash Equivalents	812	54	104	154	756
Total Assets	17,258	17,082	17,711	18,545	20,231
Total Liabilities	14,235	14,219	15,015	15,835	17,157
CASH FLOW					
Funds from Operations (FFO)	839	737	593	613	755
Cash Flow From Operations (CFO)	972	737	731	724	810
Dividends	55	157	55	60	57
Retained Cash Flow (RCF)	784	580	538	553	699
Capital Expenditures	(1,298)	(1,260)	(1,070)	(1,108)	(1,137)
Free Cash Flow (FCF)	(382)	(680)	(394)	(443)	(384)
INTEREST COVERAGE					
EBITDA / Interest Expense	3.0x	1.8x	1.8x	1.8x	2.5x
Adjusted Interest Coverage Ratio	1.7x	1.4x	1.2x	1.2x	1.5x
LEVERAGE					
Debt / EBITDA	9.1x	11.7x	10.7x	12.0x	10.1x
Net Debt / EBITDA	8.4x	11.7x	10.6x	11.9x	9.6x
Debt / Book Capitalization	73.4%	74.7%	76.6%	77.6%	76.4%
Regulated Asset Base (RAB)	12,473	13,162	13,895	14,441	14,594
Net Debt / Regulated Asset Base	81.7%	83.2%	82.4%	83.8%	86.3%
FFO / Net Debt	8.2%	6.7%	5.2%	5.1%	6.0%
RCF / Net Debt	7.7%	5.3%	4.7%	4.6%	5.6%

All figures are calculated using Moody's estimates and standard adjustments.
Source: Moody's Financial Metrics™

Endnotes

1 At the 2014 price review, Thames Water was allowed £227 million to construct a new sewer. The £130 million underperformance penalty relates to the cancellation of the original project, and the reduction has been applied to the opening RCV for the AMP7 period.

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