

INDUSTRY OUTLOOK

UK Water Sector: Stable Despite Changes to Regulatory Environment

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Our outlook for the water sector in England and Wales is stable. This reflects our expectations for the fundamental business conditions in the industry for the next 12 to 18 months.

Summary

- » The fundamental business conditions for the UK water sector are stable, reflecting steady operating performance and price increases that have been sufficient to offset rising costs.
- » Negative credit pressure will build for water companies in England and Wales over the medium to long term, due to a shifting regulatory landscape associated with Ofwat's ongoing review of regulation. But the full extent of the consequences will not become clear until the regulator publishes more detailed proposals later this year and in 2013.
- » Despite an element of regulatory uncertainty, investor interest in the UK water sector has remained strong. Companies that have needed to raise long-term funding have continued to benefit from low gilt yields and narrowing spreads due to the perceived 'safe haven' status of regulated UK utilities in the context of euro area concerns.
- » The exposure to deteriorating bank counterparty creditworthiness continues to be mitigated by prudent treasury policies, collateral arrangements and a degree of headroom in ratings.

Overview

Companies have completed the second year of the current regulatory period – AMP5 (April 2010 to March 2015) – and operational and financial performance has been broadly in line with expectations. Allowed tariff increases and outperformance against regulatory cost assumptions have enabled companies to achieve returns that, on average, are slightly ahead of the regulatory allowance for the period.

We expect planned regulatory and legal reforms, and a desire to demonstrate the benefit to customers of competition, to lead to a tougher operating environment for companies and a potential deterioration in the overall credit quality of the water sector.

However, these changes will not take effect before the start of the next regulatory period in April 2015 and competition will not come quickly. Based on experience in Scotland, for example, retail competition in England and Wales most likely will not start before 2017. On this basis, we anticipate that negative rating pressure will be slow to develop.

The scale of Ofwat's reforms also point to near term risk related to the execution of the 2014 price review (PR14). With very fundamental changes expected across a broad range of areas and the introduction of a number of new mechanisms, it seems that there is significant scope for unintended consequences. Such risks are, however, mitigated by the usual regulatory protections, including the potential for companies to seek referral to the Competition Commission.

Our ratings incorporate an expectation that the regulatory framework will evolve over time. However, Ofwat's review and, in particular, a notice issued by the regulator in December 2011 seeking to amend companies' licenses, have introduced some uncertainties, a credit negative. Even so, as lower-risk, regulated infrastructure assets, water companies (in common with other regulated UK utilities) continue to benefit from the UK's perceived 'safe haven' status. We note that bond issues have been well received, with low benchmark yields, and companies have been able to raise long-term debt at rates close to and below 5%. This cheap debt will continue to support outperformance against the regulatory determination.

Water utility ratings are unaffected by weakened bank counterparty creditworthiness. None of the highly leveraged companies we rate has a significant reliance – in terms of creditor protection – on a single counterparty. More widely, companies maintain prudent treasury policies and ratings are generally at a level that can tolerate a modest increase in counterparty risk.

With two exceptions, ratings across the sector currently have stable outlooks and the key financial metrics (adjusted interest cover ratio, or ICR, and net debt to regulatory capital value - RCV) are within Moody's guidance for the current ratings. Interest cover ratios are, as would be expected, lowest for the highly leveraged companies, particularly, [Southern Water](#) (Baa2 negative). Companies generally exhibit some headroom against our ratio guidance for gearing although we note that this may be eroded at the end of the current regulatory period due to the difference between Construction Price Index (CoPI) and Retail Price Index (RPI) inflation.

EXHIBIT 1

Credit Metrics Statistics (Ratings and Outlooks as of October 17, 2012)

Rating ^[1]	Outlook	Name	FYE	Adjusted ICR (FFO-IRC&CCD / Net Interest)	Net Debt / RAV	FFO Net Interest Coverage	FFO / Net Debt	RCF / Net Debt	RCF / Capex
Aaa	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Aa	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
A3	Stable	Severn Trent Water Ltd.	2012	1.9x	63.4%	4.4x	14.4%	8.5%	0.79x
A3	Stable	United Utilities Water PLC	2012	2.2x	63.6%	5.2x	13.7%	7.6%	0.64x
A3	Review Down	Veolia Water Central Ltd. [2]	2012	2.3x	60.5%	6.3x	23.2%	16.6%	1.04x
A3	Stable	Wessex Water Services Ltd.	2012	3.1x	68.3%	5.9x	15.1%	7.7%	0.87x
A3	Stable	Dwr Cymru Cyfyngedig (Welsh Water)	2012	1.5x	63.0%	3.1x	11.1%	11.1%	1.13x
A		MEAN		2.2x	63.8%	5.0x	15.5%	10.3%	0.89x
A		MEDIAN		2.2x	63.4%	5.2x	14.4%	8.5%	0.87x
Baa1	Stable	Anglian Water Services Ltd.	2012	1.4x	79.9%	2.9x	8.8%	3.0%	0.44x
Baa1	Stable	Bristol Water Plc	2012	2.2x	54.0%	6.1x	24.7%	22.0%	0.94x
Baa1	Stable	Northumbrian Water Ltd. [3]	2012	2.1x	64.8%	4.4x	13.8%	-2.3%	-0.19x
Baa1	Stable	Severn Trent plc	2012	2.0x	61.5%	4.5x	15.3%	11.7%	1.03x
Baa1	Stable	Sutton & East Surrey Water plc	2012	2.5x	70.6%	6.3x	17.1%	12.7%	0.70x
Baa1	Stable	Thames Water Utilities Ltd.	2012	1.6x	79.0%	3.5x	9.3%	6.1%	0.43x
Baa1	Stable	United Utilities PLC	2012	2.7x	57.7%	6.1x	16.2%	16.2%	1.24x
Baa1	Stable	Yorkshire Water Services Ltd.	2012	1.5x	81.7%	2.9x	8.3%	6.8%	0.72x
Baa2	Negative	Southern Water Services Ltd.	2012	0.7x	83.9%	2.3x	7.5%	6.9%	0.52x
Baa2	Stable	South East Water Ltd.	2012	1.9x	83.6%	3.9x	11.4%	8.0%	0.73x
Baa2	Stable	South Staffordshire Water Plc	2012	2.1x	72.4%	6.1x	18.7%	14.1%	0.99x
Baa		MEAN		1.9x	71.7%	4.5x	13.7%	9.6%	0.69x
Baa		MEDIAN		2.0x	72.4%	4.4x	13.8%	8.0%	0.72x

[1] Rating based on corporate family, not class of debt.

[2] Veolia Water Central Ltd changed its name to Affinity Water Ltd. with effect from 1 Oct 2012. Affinity Water Ltd. also comprises Veolia Water East Ltd. and Veolia Water South East Ltd. after licence unification in July 2012. In this report, we continue to refer to the previous entities as combined data have not been available for the period reviewed.

[3] Ratios exclude Kielder securitisation and other debt at the wider group, that is taken into account to determine Northumbrian Water's rating.

Source: Moody's

Key Trends and Rating Implications

Regulation

Significant changes ahead...

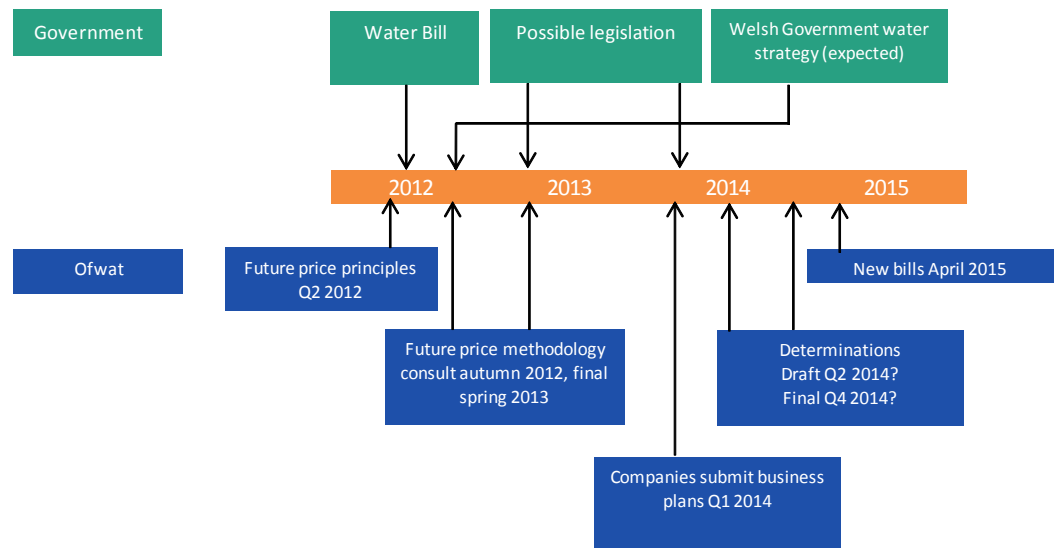
Over the past 12 months, Ofwat continued its extensive review of the regulatory framework of the water sector in England and Wales as part of its *Future Price Limits* project (see Appendix I for further details). Pending further details from the regulator, our preliminary view of the credit implications associated with this shifting regulatory framework includes the following: ¹

- » The financial and thus credit impact of downstream competition may be minimal.
- » The way in which retail price limits are set could prove very expensive for less efficient companies.
- » Ofwat's proposed focus on 'outcomes' rather than 'outputs' will, in our opinion, challenge UK water companies and it seems that performance against regulatory targets will matter more in the future than today. As a result, ratings may, in future, diverge outside of the current narrow range based on operational performances.
- » Overall, credit risk will increase as companies face a tougher operating environment and could be squeezed between potential growth in the cost of capital and a regulator keen to demonstrate that competition has brought customer benefit.

Ofwat will consult on its future price methodology during Autumn 2012 before it is finalised in Spring 2013. We expect detailed proposals to become available only at the final methodology stage.

EXHIBIT 2

Regulatory Timetable



Source: Ofwat/Moody's

¹ See our Special Comment titled "[UK Water Companies: Ofwat's Future Price Limits and White Paper Increase Sector's Credit Risk](#)", February 2012.

...with a heightened perception of risk

The direction and scale of the changes proposed by Ofwat and government has increased the perceived risk for a sector that has to date been seen as very stable and predictable.

Stability and predictability of the regulatory environment is a key factor in our Global Regulated Water Utilities rating methodology. Under this methodology, the framework of the water sector in England and Wales currently scores at Aaa, reflecting our assessment of the regulatory regime as independent and well established, with a more than 20-year track record of being predictable, stable and transparent. We will review the regulatory framework score for this sub factor in light of the changes introduced, or likely to be introduced, by the government and Ofwat. Significant changes could result in our revising the score to Aa or below. A change in our assessment of the stability and predictability of the regulatory environment may not, in itself, result in rating changes, but a less favourable regime could result in downward ratings pressure.

We also note that given the scale of the proposed changes, execution of the forthcoming regulatory review may prove a challenge for the industry.

Company Performance

Inflation driven price rises partially offset by lower demand

All of the water companies we rate saw higher revenues over the second year of AMP5. Whilst allowed price increases for 2011/12 were modest in real terms (0.4% on a weighted average basis across the industry), RPI inflation of 4.7% as at November 2010 meant companies were able to increase prices by up to 5.1% on average (weighted by appointed revenue) for the year.

However, the actual revenue increase across the sector fell below this level. Most companies saw lower demand from commercial customers due to the economic environment as well as from household customers switching to metered water supply. In addition, [Thames Water](#) (Baa1 stable), chose not to increase prices by the maximum amount allowed. Revenue increased by an average of 4.8% across the sector (see Exhibit 3), a marked improvement on the 0.2% decline seen in 2010/11, the first year of the current price control.

EXHIBIT 3

Company Revenue Growth (Actual and Allowed)

	Actual Growth		Allowed Growth (RPI+K) [1]	
	2010/11	2011/12	2010/11	2011/12
Water and sewerage companies				
Anglian Water Services Ltd.	-0.7%	4.1%	-0.4%	4.7%
Dwr Cymru Cyfyngedig	-1.9%	2.7%	-1.0%	3.4%
Northumbrian Water Ltd.	5.1%	7.2%	5.3%	8.5%
Severn Trent Water Ltd.	0.1%	4.8%	-0.7%	4.7%
South West Water Ltd.	1.3%	6.2%	1.4%	8.1%
Southern Water Services Ltd. [2]	-4.4%	10.7%	-0.4%	4.7%
Thames Water Utilities Ltd.	0.4%	4.4%	0.5%	5.1%
United Utilities Water Plc	-2.8%	3.1%	-4.0%	4.5%
Wessex water Services Ltd.	1.3%	5.0%	0.6%	5.0%
Yorkshire Water Services Ltd.	0.1%	2.9%	-0.9%	3.4%
Weighted Average WaSCs	-0.4%	4.7%	-0.5%	5.0%

EXHIBIT 3

Company Revenue Growth (Actual and Allowed)

	Actual Growth		Allowed Growth (RPI+K) [1]	
	2010/11	2011/12	2010/11	2011/12
Water only companies				
Bristol Water Plc	1.0%	8.0%	0.9%	8.6%
Cambridge Water Plc	0.5%	4.3%	-0.7%	3.7%
Dee Valley Water Plc	2.6%	3.6%	0.9%	5.3%
Portsmouth Water Ltd.	-5.0%	3.3%	-4.5%	2.6%
Sembcorp Bournemouth Water	5.6%	4.7%	4.3%	6.8%
South East Water Ltd.	4.7%	5.9%	4.7%	8.6%
South Staffordshire Water Plc	2.7%	3.8%	1.8%	4.7%
Sutton & East Surrey Water Plc	1.2%	5.2%	0.3%	4.7%
Veolia Water Central Ltd. (only)	2.6%	5.6%	1.7%	5.5%
Veolia Water East Ltd.	-4.1%	2.9%	-1.3%	3.3%
Veolia Water South East Ltd.	-0.4%	3.9%	1.5%	5.9%
Weighted Average WoCs	2.3%	5.4%	1.9%	6.3%
Weighted Average Industry	-0.2%	4.8%	-0.3%	5.1%

[1] Allowed growth is as per the PR09 regulatory determination and for Bristol Water based on the Competition Commission review in 2010/11.

[2] Southern Water's numbers are somewhat distorted by the one-off adjustment of its revenue base in 2010/11 after it reviewed its collection record of unbilled charges.

Sources: Companies' Regulatory Accounts/Office for National Statistics /Ofwat/Competition Commission

For the current year, we expect pressure on revenues to continue as the economic environment remains challenging and usage restrictions during the drought and/or heavy rainfall during the summer reduced demand.

For most companies, a large portion of the loss of revenues will be recoverable through the revenue correction mechanism (RCM) at the next price review. The RCM, introduced at the start of AMP5 in 2010, is designed to compensate water companies for lower-than-anticipated consumption by "tariff basket" (largely household and smaller commercial) customers. Any other revenue shortfalls will not be recoverable. However, any resultant permanent reduction in the revenue base, will be taken into account as a lower starting point for the calculation of the price limits in PR14.

Operating cost pressure mitigated by efficiencies and energy costs

In 2011/12, the second year of AMP5, companies experienced an increase in operating costs due to (1) high inflation; (2) higher levels of bad debt due to the poor economic situation (see Appendix III); and (3) the October 2011 adoption of private sewers. In addition, companies also have to bear the cost of the carbon reduction commitment charge and an increase in abstraction charges, which were not allowed for by Ofwat in the 2009 regulatory review (PR09) but are expected to be reflected in the base opex assumptions for PR14. Despite these cost pressures, the industry has performed broadly in line with regulatory assumptions. This is because companies have made efficiency savings but also because most fixed a significant proportion of their energy costs at the start of the regulatory period, at prices below the level assumed by the regulator, and other costs have not increased in line with general inflation.

For the current year, we expect efficiency gains to continue, although early cost savings and the benefit of long-term power purchase contracts will eventually level off. In addition, unusual weather conditions, with the dry winter and wet summer, hurt revenue. Related usage restrictions generate additional costs for affected companies, largely in the South East of England.

The October 2011 adoption of private sewers by the water companies increased the length of their wastewater networks by, in some cases, more than 90%. Initial experience suggests that the costs associated with these new assets, are below initial estimates (see Exhibit 4). This may change over the remainder of the regulatory period because the condition of the sewers remains unknown, and as councils and households become more aware of changed responsibilities, but the overall impact for most companies seems likely to remain modest.

EXHIBIT 4

Private Sewers and Estimated Costs

	Sewerage System total (km)	Private Assets transferred (km)	Percentage Increase	Company estimated likely cost (£ millions)
Anglian Water Services Ltd.	75,931	31,200	70%	£3.3m increase in operating expenditure in 2011/12
Dwr Cymru Cyfyngedig (Welsh Water)	35,500	17,000	92%	£3.3m capital expenditure and £3.6m opex in 2011/12
Northumbrian Water Ltd.	29,724	13,510	83%	£8m in 2011/12
Severn Trent plc	92,000	37,000	67%	Additional opex of £4.7m, exceptional cost of 4.6m and capex of £3.2m in 2011/12; exceptional cost of £4.6m, opex of £30-36m and capex cost of £55-97m for AMP5
South West Water Ltd.	14,710	5,450	59%	Additional operating cost of 2.1m
Southern Water Services Ltd.	38,959	17,000	77%	n/a
Thames Water Utilities Ltd.	109,000	40,000	58%	n/a
United Utilities PLC	76,000	32,200	74%	Since adoption this year, £6m opex and £15m capex, and revised AMP5 cost total of £120m capex and £40m opex
Wessex Water Services Ltd.	35,000	17,000	94%	Opex £1.6m and capex £1.5m in 2011/12; £15.6m in opex and £13.5m in capex forecasted over the AMP5
Yorkshire Water Services Ltd.	53,000	22,000	71%	Additional £5m operating cost in 2011/12

Source: Company Information and Annual Reports

Costs associated with the adoption of private sewers are a “relevant change of circumstances” under companies’ licences meaning that they are able to apply for an increase in prices through an interim determination (or IDoK).² We note, as a practical consideration, that if companies are to recover the additional costs during the current regulatory period then there will be a relatively narrow window for them to do so (companies would have to apply to Ofwat by 15 September 2013). Furthermore, it will be subject to the costs meeting the necessary thresholds and many may fall short of this level.

² Bad debts were also classified as a notified time at PR09, meaning companies can also include additional costs related to bad debts in their IDoK application.

Achieved return on capital slightly ahead of regulatory allowance

Water companies' operating profit (after tax) for 2011/12 has, overall, been modestly ahead of the allowed return on capital (see Exhibit 5). The main outlier amongst the water and sewerage companies (WaSCs) remains Southern Water, driven to a large extent by an ongoing revenue shortfall compared with regulatory assumptions.

EXHIBIT 5

Return on Capital

	Return on Capital 2010/11	Return on Capital 2011/12	Annual Return on Capital per FD
WaSCs			
Anglian Water Services Ltd.	5.4%	5.3%	5.1%
Dwr Cymru Cyfyngedig	5.6%	5.6%	5.1%
Northumbrian Water Ltd.	5.2%	5.7%	5.1%
Severn Trent Water Ltd.	6.1%	5.8%	5.1%
South West Water Ltd.	5.5%	5.4%	5.1%
Southern Water Services Ltd.	1.8%	3.2%	5.1%
Thames Water Utilities Ltd.	6.1%	6.3%	5.1%
United Utilities Water Ltd.	5.2%	5.0%	5.1%
Wessex Water Services Ltd.	6.4%	6.6%	5.1%
Yorkshire Water Services Ltd.	5.5%	5.1%	5.1%
Average WaSCs	5.4%	5.4%	
WoCs			
Bristol Water Plc	4.2%	4.5%	5.0%
Cambridge Water Plc	7.2%	6.8%	5.5%
Dee Valley Water Plc	6.2%	7.6%	5.5%
Portsmouth Water Ltd.	4.3%	5.5%	5.5%
Sembcorp Bournemouth Water	6.7%	7.6%	5.5%
South East Water Ltd.	6.1%	6.2%	5.3%
South Staffordshire Water Plc	6.4%	6.1%	5.5%
Sutton & East Surrey Water Plc	6.1%	6.9%	5.5%
Veolia Water Central Ltd. (only)	3.9%	7.0%	5.3%
Veolia Water East Ltd.	4.8%	4.2%	5.5%
Veolia Water South East Ltd.	3.2%	6.6%	5.5%
Average WoCs	4.6%	6.2%	
Total Industry Average	5.4%	5.5%	

Source: Companies' Regulatory Accounts; Ofwat for allowed return

The achieved return on capital is essentially a reflection of companies' operational performance. Some companies, e.g. [United Utilities Water Plc](#) (A3 stable) and [Wessex Water](#) (A3 stable), also benefit from particularly low funding costs, compared to the regulatory assumptions. We note, however, that for United Utilities the outperformance on finance costs has been offset by lower revenues due to underperformance in AMP4 and lower demand resulting in a below average return on capital. In

2011/12 Southern Water showed relatively low cost of debt on a cash basis, based on its extensive use of index-linked derivative instruments. However, given the frequent accretion pay-down requirement, the positive effect that these swaps currently have on the company's cash flows is likely to diminish over time.

Compared with their larger peers, the water-only companies (WoCs) benefit from a higher level of index-linked debt within their capital structures (please see Appendix IV). We note, however, that the related debt issuances date back to a time before the 2008-09 global financial crisis when monoline guarantees supported issuance by small companies in the index-linked market. Whilst this funding option has now largely disappeared, funding costs have been locked in for the long term. For future capital needs, smaller WoCs may be more reliant on the bank market than their larger peers, which may result in higher funding costs. However, such increase may be at the margin, given that the incremental financing needs tend to be smaller ([Bristol Water](#) (Baa1 stable) being the main exception during the current regulatory period) with capital expenditure (capex) budgets more focused on maintenance work.

For the current year we expect a slight deterioration in the return achievable. Due to the drought conditions earlier in the year, companies have experienced a reduction in demand and therefore revenues. It will be difficult to determine to what extent the reduction in demand was due to the hosepipe ban, the abundant rainfall and/or the economic situation. We note that the lower demand is to some extent offset by avoided costs related to energy, e.g., for pumping water, or water and sewerage treatment. However, companies will also have experienced additional drought-related costs linked to (1) administrative activities (e.g. the application for restrictions) and public relations to effectively communicate the need to save water to customers; (2) buying additional water from neighbouring companies or pumping water across their own service area; and (3) increased leakage prevention, detection and remediation activity.

Service Performance

A mild winter and the "wettest drought in history"

Following two bad winters with extreme cold snaps and alternating freeze/thaw events, the relatively dry and mild winter in 2011/12 allowed all companies to comfortably meet their leakage targets for the year. However, the second dry winter in a row left a number of companies with limited water reserves and, in April 2012, seven water companies based in the South East of England introduced a hosepipe ban for household customers. Almost immediately after its introduction, heavy rainfall across the country led to what was later described as "the wettest drought in history".

Companies will have incurred some additional costs due to the extreme weather but we expect that these will be modest. As mentioned above, companies will be able to recover a significant proportion of revenue lost due to lower consumption during the unusually dry/wet weather through the revenue correction mechanism.

Stable or improving asset serviceability

In terms of asset serviceability, most companies have shown stable or improving performance. However, [Anglian Water](#) (Baa1 stable), [Dwr Cymru Cyfyngedig](#) (Welsh Water; A3 stable), [Severn Trent Water](#) (A3 stable), United Utilities Water, [Yorkshire Water](#) (Baa1 stable) and [South East Water](#) (Baa2 stable) reported marginal serviceability for specific services (see Appendix II for details). In

addition, [Northumbrian Water](#) (Baa1 stable), Severn Trent Water and Southern Water reported underperformance compared with the industry average for some of their key performance indicators, including serious sewerage pollution incidents for Northumbrian Water and Southern Water, and length of water supply interruptions for Severn Trent Water. These have become key focus areas for management to improve going forward.

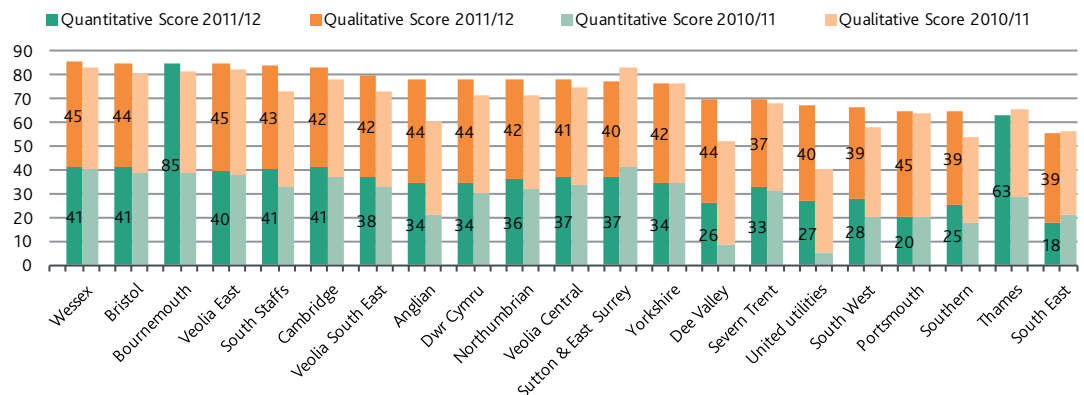
Customer service scores up but comparability of data in question

In 2010/11, Ofwat introduced its new service incentive mechanism (“SIM”) to replace the previous overall performance assessment (“OPA”). Under SIM, companies are assessed on (i) a quantitative measure based on the number of written complaints and phone contacts received, and (ii) a qualitative measure based on a consumer experience survey.

In 2011/12, and in comparison with the previous year, the industry as a whole has improved significantly in both the qualitative and the quantitative measures, creating a relatively close field. However, it seems that the quantitative measure may not be calculated on a consistent basis across the sector and its value may therefore be limited. Nevertheless, when only the qualitative scores, based on the customer survey results, are taken into account, all companies in the sector seem to be performing well.

EXHIBIT 6

SIM scores 2010/11 and 2011/12



Note: Bournemouth and Thames did not publish a split between quantitative and qualitative scores for 2011/12.

Source: Companies' Key Performance Indicators and Regulatory Compliance Certificates, Regulatory Accounts, Ofwat data for 2010/11 and Moody's estimates

Capex broadly in line with allowances

For most companies the level of capex spending remains broadly in line with the PR09 regulatory settlement. Companies continue to be mindful of the development of CoPI, which has been lower than forecast at the time of the final determination and significantly lower than RPI, which is used by Ofwat to write forward the Regulatory Capital Value (RCV) during the period. In order to avoid a potential penalty under the Capital Incentive Scheme (CIS) true-up mechanism in PR14, companies will have to maintain overall capex in line with the CoPI-adjusted allowance over the AMP5 period.

In terms of CoPI-adjusted capex allowance, Anglian Water and Wessex Water have achieved a sizeable level of outperformance while delivering all necessary outputs. They will likely invest at least part of the savings in additional projects to tackle the challenges of climate change.

Bristol Water also continues to significantly underspend compared with its allowance, given the uncertain outcome of the price review referral to the Competition Commission in the early part of 2010/11. The company expects to increase investment over the remainder of the period in order to achieve required outputs.

Southern Water and Veolia Water Central have spent approximately 10% more than their cumulative allowance (adjusted for CoPI), which is partly due to increased expenditure in infrastructure assets to address serviceability issues.

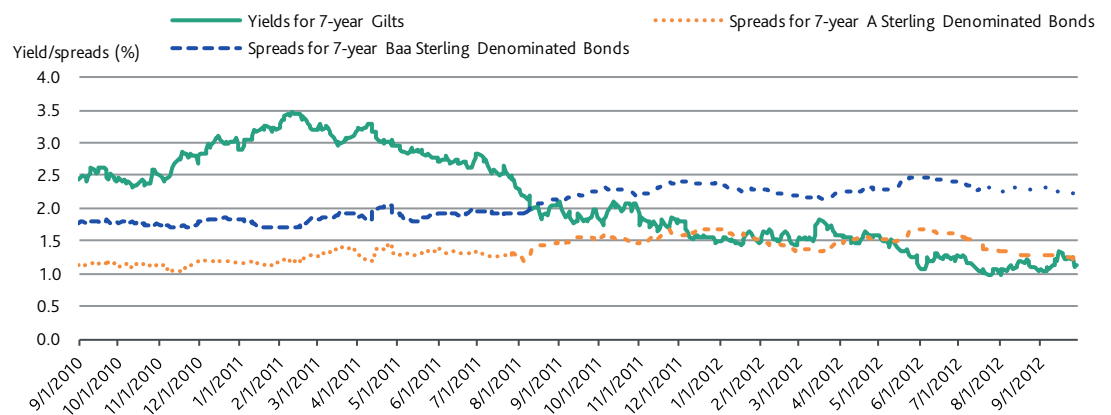
Financing

Cheap debt continues to support outperformance

Despite an element of regulatory uncertainty, investor interest in the UK water sector has remained strong. Companies that have needed to raise long-term funding have continued to benefit from low gilt yields and narrowing spreads due to the perceived 'safe haven' status of regulated UK utilities, effectively benefitting from ever growing concerns in the euro area.

EXHIBIT 7

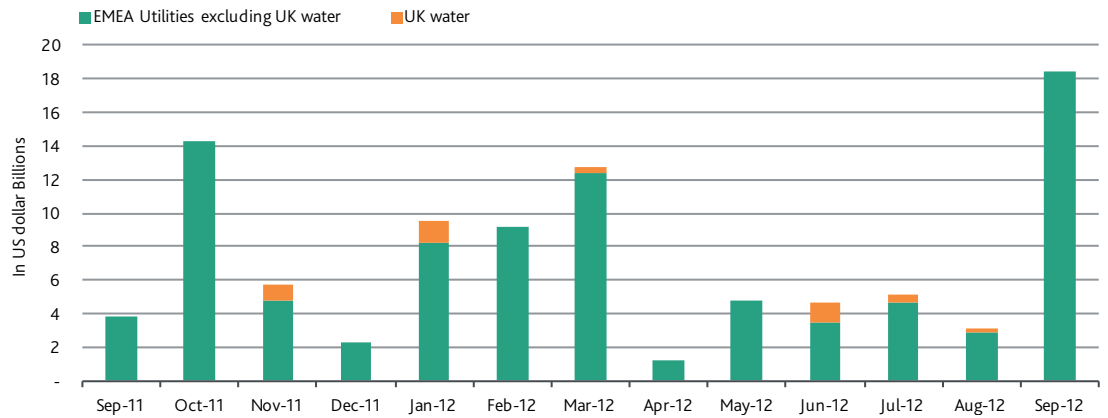
Yields & Spreads



Source: Bloomberg

So far, during 2012 bond issuances by UK water companies have achieved yields on fixed-rate debt broadly in the range of 4.5%-5.0% (for debt rated in the low A category), with Wessex Water issuing a £300 million bond due 2021 with a 4.0% coupon through two issuances in January 2012 and August 2012.

EXHIBIT 8

Debt Issuance

Source: Dealogic

Appetite for index-linked debt remains subdued, with companies largely accessing the fixed rate market during the year. The exceptions are Anglian Water's £65 million 2.05% bond due 2033, issued in June 2012, and Severn Trent's £75 million retail bond due 2022, in July 2012, which followed National Grid's £260 million 1.25% bond due 2021, launched in September 2011 (and subsequently reopened). Whilst this developing market will offer some opportunities it seems unlikely to become a major source of capital.

Index-linked derivatives continue to pose risks for some

With UK water companies able to access the index-linked bond market directly, there has been little activity in terms of new index-linked swaps.

As discussed in a Special Comment earlier this year,³ we believe that derivatives designed to resemble index-linked bonds can pose additional risks for companies, including counterparty risk, which has received increased attention following the deterioration in bank counterparty creditworthiness.

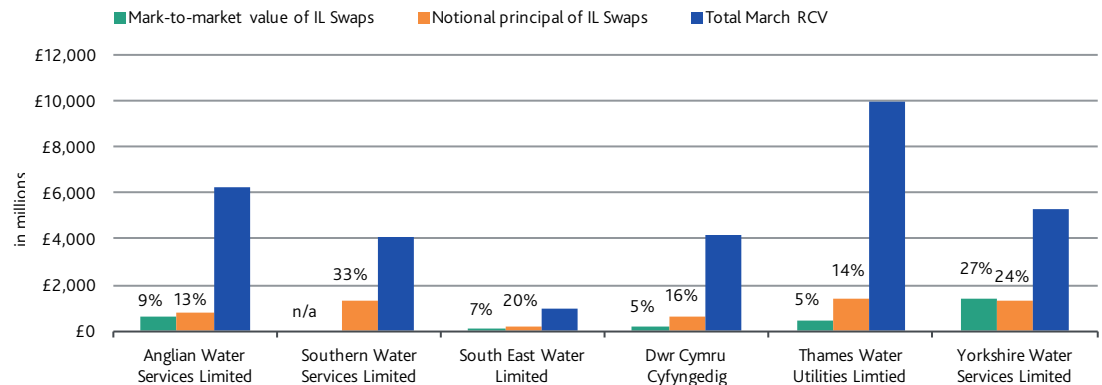
Most highly leveraged companies have detailed hedging policies outlining minimum rating requirements for their bank counterparties. The bank downgrades have had a twofold effect; first, bank counterparties have been required to put in place collateral support agreements under existing derivative agreements, and, second, it has affected their ability to do new deals with a number of the highly-leveraged companies. Hence, we continue to see companies and banks exploring opportunities to re-structure existing derivative agreements.

Among the water companies we rate, Yorkshire Water and Southern Water have by far the largest exposure to index-linked swaps, both in terms of notional amount and current mark-to-market value of the derivative portfolio. For example, Yorkshire Water's swap portfolio with a notional amount of £1.3 billion had a negative mark-to-market value of £1.4 billion as at 31 March 2012.

³ [UK Regulated Utilities: Why Index-Linked Swaps May Not Provide the Same Cash Flow Benefit as Index-Linked Bonds](#), February 2012

EXHIBIT 9

Swap exposure and RCV as at 31 March 2012



Percentages are of respective company RCV and chart shows exposure only for index-linked swaps.
 Source: Companies' Annual Accounts and Investor Reports

Swap contracts for both companies also include five-yearly accretion pay-down requirements. As we outlined in our Special Comment earlier this year, such pay-down requirement means that the swaps do not provide the same long-term cash flow benefit as long-dated index-linked debt and may therefore mask potential cash flow problems. In the case of Southern Water, the entire £1.3 billion of inflation-linked swaps have such pay-as-you-go (PAYG) features in comparison with a relatively small portion (£463 million) of Yorkshire Water's swap portfolio.

For reasons unrelated to its derivatives portfolio, Southern Water is currently relatively weakly positioned within its rating category. Therefore, it would be unlikely to accommodate any potential risk in relation to its swaps, should they materialise, within its current ratings. Yorkshire Water, however, has some headroom compared to its covenants and the lower amount of swaps with PAYG features means that these do not have a significant effect on the company's ratios. However, the magnitude of the mark-to-market value of its derivatives portfolio in comparison with the notional amount illustrates the potentially significant risk for the company's liquidity. However, we believe that this is currently manageable.

Ratings unaffected by weakened counterparty creditworthiness

The exposure of the rated UK water companies to deteriorating bank counterparty creditworthiness is mitigated by a number of factors. Companies pursue prudent treasury policies with a degree of diversification amongst counterparties, collateral and other arrangements, such that the exposure to any single counterparty is limited. Moreover, ratings are generally at a level that can tolerate a modest increase in counterparty risk.⁴

⁴ For further details, please refer to [UK Infrastructure and Utility Companies: Highly leveraged issuers largely insulated from weakened bank counterparty creditworthiness](#), July 2012.

Moody's Related Research

Special Comments:

- » [UK Infrastructure and Utility Companies: Highly leveraged issuers largely insulated from weakened bank counterparty creditworthiness, July 2012 \(143494\)](#)
- » [UK Regulated Utilities: Why Index-Linked Swaps May Not Provide the Same Cash Flow benefit as Index-Linked Bonds, February 2012 \(139368\)](#)
- » [Ofwat's Future Price Limits and White Paper Increase Sector's Credit Risk, February 2012 \(140209\)](#)
- » [Ofwat's Future Price Limits: Case for Ofwat's preliminary model is unproven but credit risks are clear, May 2011 \(132986\)](#)
- » [UK Water Sector: Highly-Leveraged Financing Structures – An Update, June 2010 \(123592\)](#)
- » [RPI-X@20: A Welcome Review of the UK Regulatory Framework but a Step Change Could Raise Credit Risk, June 2010 \(124476\)](#)
- » [UK Regulated Industries: Q&A on Lending against the Regulated Asset Value, November 2007 \(105954\)](#)
- » [UK Water Sector: Q&A on Moody's Approach to New Structured Financings, October 2006 \(100343\)](#)
- » [UK Water Sector: Key Ratios Used by Moody's in Assessing Companies' Credit Strength, March 2006 \(97010\)](#)

Rating Methodologies:

- » [Global Regulated Water Utilities, December 2009 \(121311\)](#)
- » [European Regulated Utility Groups: Methodology Update, January 2007 \(101671\)](#)

Analyses:

- » [Credit Focus Report - Dwr Cymru Cyfyngedig and Southern Water Services Ltd, A Peer Comparison, Oct 2012 \(145812\)](#)
- » [United Utilities, June 2012 \(143562\)](#)
- » [Thames Water Utilities Limited, April 2012 \(141728\)](#)
- » [Anglian Water Services Limited, August 2010 \(125277\)](#)
- » [Severn Trent Plc, April 2010 \(124408\)](#)

Pre-Sale Reports:

- » [Kemble Water Finance Limited/Thames Water \(Kemble\) Finance PLC, March 2011 \(131723\)](#)
- » [Osprey Acquisitions Limited / Anglian Water \(Osprey\) Financing plc, January 2011 \(130658\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Appendix I – Regulatory and Legal Developments

Future Price Limits

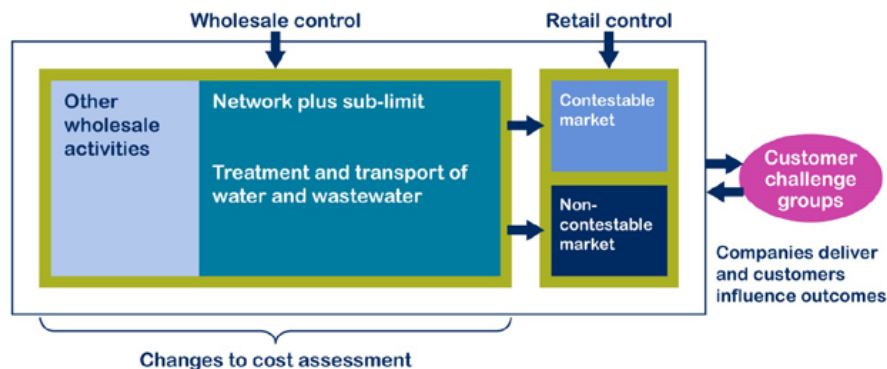
In *Future price limits – statement of principles*, published in May 2012, Ofwat set out six principles that it would apply when setting price limits in the future:

- » **Targeted price controls.** Price controls will use appropriate tools for different parts of the business according to the relevant economic characteristics. Incentives will be focused to deliver the desired outcomes and regulation will be reduced or removed over time if it is no longer necessary.
- » **Proportionate price setting.** Ofwat will use a risk-based approach to compliance to ensure that it focuses its efforts where it matters and reduce any unnecessary burdens.
- » **Effective incentives.** Ofwat will develop clearer, simpler and more effective incentives to drive efficient behavior.
- » **Ownership, accountability and innovation.** Ofwat will set price controls in a way that gives companies ownership of and accountability for delivery of what customers want and need.
- » **Flexibility and responsiveness.** Ofwat will design and use its tools in a way that can evolve as necessary over time to meet changing circumstances.
- » **Transparency and predictability.** Ofwat will continue to regulate in a transparent and predictable manner with changes based on clear evidence and subject to consultation.

Key elements of Ofwat's proposed changes include:

- » Increased customer engagement.
- » A move towards setting outcomes rather than outputs for companies to deliver.
- » Separate price limits for wholesale and retail activities from April 2015.
- » The introduction of totex – i.e. an approach that treats capital expenditure (capex) and operating expenditure (opex) together to eliminate any capex bias.
- » Incentives to trade water, abstract water sustainably and optimise networks.

Ofwat's Future Price Limit Framework



Source: Ofwat

For PR14, we expect that Ofwat will implement separate price limits for retail and wholesale services. However, the previously proposed network sub-limit may not be introduced at that stage. Furthermore, Ofwat is likely to expect companies (in consultation with their customers) to propose the outputs that they will deliver and respective milestones and timelines for achieving these as well as a penalty/reward system to incentivise their delivery. We believe that any further changes may not be achievable in the limited time left to finalise the methodology for PR14, and while Ofwat may wish to introduce a totex approach at PR14, the work required to create a suitable menu may mean that it is delayed into PR19.

Licence Modifications

In December 2011, Ofwat published proposals under section 13 of the Water Industry Act 1991. This legislation allows the regulator to modify the licences of water companies if they so agree and otherwise to refer the matter to the Competition Commission. In its December 2011 notice, Ofwat proposed removing crucial features of the regulatory framework from companies' licences, including five-yearly price reviews and the linkage between prices and the Retail Price Index (RPI).

The proposed changes were rejected by the incumbent water and sewerage companies (WaSCs) and water only companies (WoCs), generally on the basis that such changes were unnecessarily broad and created uncertainty that would undermine the stability and predictability of the regulatory regime to the detriment of companies' ability to raise capital on cost effective terms. Ofwat then extended its engagement process on the proposals and entered into negotiations with the water companies in order to try and find a compromise solution.

In August 2012, Ofwat published an update on the licence modification proposals, saying that any future modification will follow key principles, including (1) protecting the financeability of the wholesale activities; (2) allowing flexibility to adapt to future challenges based on a materiality test; (3) ensuring certainty for PR14; and (4) a transparent consultation process to enhance understanding of the modifications by companies, investors and other stakeholders.

We expect a new section 13 proposal towards the end of October or early November this year. Companies will then have at least 28 days to decide whether they agree with the amended proposals. Ofwat will have the right to refer the matter to the Competition Commission for those companies that do not agree to the changes.

Draft Water Bill

The draft Water Bill focuses on increasing competition in the sector with measures to allow all business and other non-household customers in England to change their water and sewerage supplier. For the time being, Wales will maintain a 50Ml/day threshold for customers to be able to choose their suppliers. The development of competition is further supported by proposals to 'unbundle' licences, to encourage new entrants in segments such as water supply and changes to facilitate increased interconnection and water trading between companies.

Other proposals include:

- » abolition of the “costs principle” which governs the price water companies charge third parties
- » strengthening of Ofwat's powers on supervision and extending the period during which financial penalties can be imposed for certain infringements from currently 12 months to five years
- » powers for Ofwat to change company licences as necessary to implement the planned reforms
- » reform of the special merger regime by introducing a two-tier system that allows the Office of Fair Trading (OFT) and Ofwat to decide whether a referral to the Competition Commission is necessary

The draft Bill is short on detail in many areas. It delegates significant responsibility to Ofwat to develop, for example (i) market codes, (ii) the new access pricing regime to replace the costs principle, and (iii) a new connection charges regime. This increase in Ofwat's powers may provide valuable flexibility in terms of responding to future challenges but may equally worry those concerned about the regulator's current direction of travel.

The Bill is due to be considered by the Environment, Food and Rural Affairs Select Committee in the Autumn of this year. It could be laid before Parliament for the next legislative session (May 2013-May 2014) but this is not certain and its progress will be subject to other government priorities.

Appendix II – Asset Serviceability and Key Performance Indicators

Following a decision by Ofwat to reduce the regulatory burden on companies and incentivise effective communication of their performance to customers, the June Return data tables were abolished and replaced by Key Performance Indicators (KPIs). These KPIs generally include customer service performance (measured by the service incentive mechanism, or SIM, scores), reliability and availability of assets and services, as well as environmental impact factors. In addition, companies can choose additional factors, such as involvement in the community, health and safety of its work force etc.

Companies are monitoring their performance under the KPIs based on internal management targets as well as in comparison with the wider industry average. Areas of concern or greater management focus are identified by colour-coding, with performance in line or better than expected reported Green, areas where performance has slipped only slightly classified as Amber and areas significantly below expectations shown in Red.

We show below details of KPI performance of the UK water companies we rate. We understand that Red or Amber colouring indicates merely that performance could improve or that the company has identified specific issues it needs to focus on. Based on the total SIM score as discussed earlier in the report, all companies have been classified as Green. For this measure, Ofwat defines Green as being equivalent to a SIM score higher than 50. This indicates that the industry's current service performance does not seem to be a particular area of concern for the regulator.

Water and sewerage companies	Serviceability				Internal Sewer Flooding nr	Pollution Incidents (sewer) /1000km	Serious Pollution Incidents (Sewer) /10000km	Pollution Incidents (water) /10000km	Discharge Permit Compliance	Water Supply Interruption hrs per property	Security of Supply Index	Green Gas Emission ktCO2e	Satisfactory Sludge Recycling	Overall DW Quality
	Water non-infra	Water Infra	Sewer non-infra	Sewer Infra										
Anglian Water Services Ltd.	Stable	Stable	Stable	Marginal	99	11.6	2.0	0.8	97.1%	0.40	100%	481	100%	
Dŵr Cymru Cyfyngedig (Welsh Water)	Stable	Stable	Marginal	Stable	47	13.2	2.2	1.1	96.3%	0.40	100%	252	100%	
Northumbrian Water Ltd.	Stable	Stable	Stable	Stable	313	5.9	6.9	0.0	99.4%	0.16	100% north east, 85% essex & suffolk	220.2	100%	99.97 north east, 99.92% essex and suffolk
Severn Trent Water Ltd.	Stable	Marginal	Stable	Stable	78	8.1	2.5	2.8	97.5%	0.61	99%	521.7	99.4%	99.97%
Southern Water Services Ltd.	Stable	Stable	Stable	Stable	126	21.8	9.6	2.2	96.1%	0.40	100%	268	100%	99.88%
Thames Water Utilities Ltd.	Stable	Stable	Stable	Stable	296	3.8	2.9	3.2	99.7%	0.21	100%	741	100%	99.98%
United Utilities Water Plc	Stable	Stable	Marginal	Improving	500	7.0	0.7	1.9	99.0%	0.42	100%	522	99.1%	99.95%
Wessex water Services Ltd.	Stable	Stable	Stable	Stable	37	3.6	1.1	5.2	99.7%	0.60	100%	149	100%	>99.9%
Yorkshire Water Services Ltd.	Stable	Marginal	Stable	Stable	75	9.5	4.3	6.5	97.3%	0.32	100%	394	100%	99.95%
Total WaSCs														
Water only companies														
Bristol Water Plc	Stable	Stable						1.5		0.353	100%	47.488		
South East Water Ltd.	Stable	Marginal						4.18		0.36	100%	83.04		
South Staffordshire Water Plc	Stable	Stable						0		0.11	100%	61.61		
Sutton & East Surrey Water Plc	Stable	Stable						2.9		0.16	100%	30.7		
Veolia Water Central Ltd. (only)	Stable	Stable						10		0.31	100%	116		

Note: Drinking Water Quality not covered by Ofwat guidance and based on company-specific assessment

Source: Companies Regulatory Accounts and Regulatory Compliance Certificates

	Marginal Asset Serviceability	Reasons	Other concerns (Red & Amber)
Anglian Water Services Ltd.	Sewerage Infrastructure	Sewer flooding and pollution incidents higher than agreed with the regulator, add. £7 million prevention capex spend	
Dwr Cymru Cyfyngedig (Welsh Water)	Sewerage Non-Infrastructure	22 waste-water treatment works non-compliant and high number of pollution incidents, but action plan in place for additional investments and improved maintenance procedures	
Northumbrian Water Ltd.			Increase in sewer pollution incidents above average and higher repeat flooding incidents than industry average; key focus area for management to improve
Severn Trent Water Ltd.	Water Infrastructure	Length of water supply interruptions, but ongoing programme to improve performance and expectation that measure returns to stable in 2012/13	
Southern Water Services Ltd.	Sewerage Infrastructure was marginal in 2010/11, but improving performance has resulted in preliminary stable assessment for 2011/12	Increase in pollution incidents, believed by management to be linked to improved reporting rather than deterioration in performance	Water supply interruptions
United Utilities Water Plc	Sewerage Non-Infrastructure	Sewer flooding incidents	
Yorkshire Water Services Ltd.	Water Infrastructure	Supply interruptions and high mains burst rate affected by cold winters in 2009/10 and 2010/11; improvement visible but track record to be established	Sewer pollution incidents and compliance of waste-water treatment works; additional investments focused on that area
South East Water Ltd.	Water Infrastructure	No/Length of water supply interruptions linked to adverse weather and two isolated incidents; management believes overall performance not deteriorated but prudently assessed serviceability marginal to focus management attention	

Source: Companies' Regulatory Compliance Reports, Key Performance Indicators and Regulatory Accounts

Appendix III – Company Bad Debt Charges

	Bad Debt as % of Appointed Revenues 2010/11	Bad Debt as % of Appointed Revenues 2011/12
WaSCs		
Anglian Water Services Ltd.	3.1%	3.0%
Dwr Cymru Cyfyngedig (Welsh Water)	3.3%	3.9%
Northumbrian Water Ltd.	2.7%	2.6%
Severn Trent Water Ltd.	2.3%	2.2%
South West Water Ltd.	3.0%	3.1%
Southern Water Services Ltd.	4.0%	3.8%
Thames Water Utilities Ltd.	2.4%	4.2%
United Utilities Water Plc	4.2%	4.3%
Wessex Water Services Ltd.	2.1%	2.2%
Yorkshire Water Services Ltd.	1.9%	1.7%
Weighted Average WaSCs	2.9%	3.3%
WoCs		
Bristol Water Plc	3.4%	2.4%
Cambridge Water Plc	1.4%	1.0%
Dee Valley Water Plc	1.7%	2.0%
Portsmouth Water Ltd.	1.5%	1.5%
Sembcorp Bournemouth Water	0.8%	0.8%
South East Water Ltd.	2.1%	1.8%
South Staffordshire Water Plc	3.5%	2.9%
Sutton & East Surrey Water Plc	1.1%	0.6%
Veolia Water Central Ltd. (only)	1.6%	2.2%
Veolia Water East Ltd.	2.7%	3.2%
Veolia Water South East Ltd.	3.0%	3.5%
Weighted Average WoCs	2.1%	2.0%
Total Industry Weighted Average	2.9%	3.1%

Source: Companies' Regulatory Accounts

Appendix IV – Debt Profile

Debt Profile of Water Companies as at 31 March 2012

Issuer	Rating [1]	Gross Debt (GBP 'millions)	Net Debt (GBP 'millions)	% of Debt Fixed	% of Debt Index-Linked	Average No. of Years Over Which Cost of Debt Has Been Fixed	Average Nominal Cost of Fixed Debt
Severn Trent Water Ltd.	A3	4,165	4,164	89%	28%	13.6	5.8%
Wessex Water Services Ltd.	A3	1,837	1,626	76%	35%	27.1	3.8%
Dwr Cymru Cyfyngedig (Welsh Water)	A3	2,990	2,690	100%	62%	n/a	n/a
United Utilities Water Plc	A3	5,989	5,989	90%	45%	n/a	n/a
Veolia Water Central Ltd.	A3	466	463	56%	0%	14.0	6.0%
Anglian Water Services Ltd.	Baa1	5,640	4,943	90%	56%	10.3	7.0%
Bristol Water Plc.	Baa1	278	206	84%	57%	n/a	n/a
Northumbrian Water Ltd. [2]	Baa1	2,320	2,214	94%	22%	n/a	n/a
Severn Trent Plc [3]	Baa1	4,399	4,131	93%	26%	12.8	5.8%
Sutton & East Surrey Water Plc [4]	Baa1	160	146	86%	86%	n/a	n/a
Thames Water Utilities Ltd.	Baa1	8,398	7,776	95%	51%	22.1	3.6%
United Utilities PLC	Baa1	5,888	5,567	98%	45%	n/a	approx. 5%
Yorkshire Water Services Ltd.	Baa1	4,219	4,209	[5] 110%	60%	n/a	n/a
Southern Water Services Ltd. [6]	Baa2	3,406	3,295	91%	69%	n/a	n/a
South East Water Ltd.	Baa2	801	773	100%	69%	n/a	n/a
South Staffordshire Water Plc [7]	Baa2	199	196	97%	95%	[8] 1.7	6.2%

[1] Rating based on corporate family, not class of debt.

[2] Excluding Kielder securitisation and other debt at the wider group, that is taken into account to determine Northumbrian Water's rating.

[3] Excluding derivatives.

[4] Excluding preference shares and including unamortised issue costs.

[5] Company is currently over-hedged in expectation of future debt issuance.

[6] Excluding mezzanine debt; index-linked amount includes bonds and swaps.

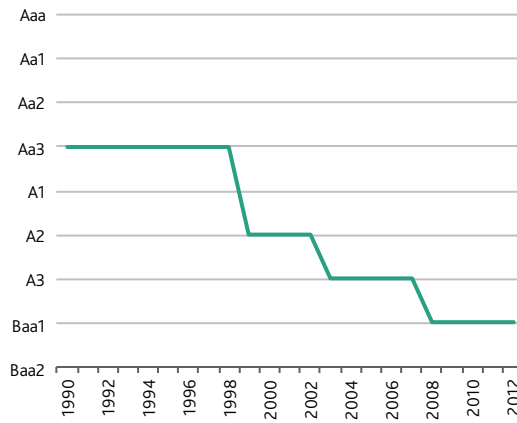
[7] Including debt premium of £13.5 million as at 31 March 2012, which is not taken into account for calculation of leverage.

[8] Excluding long-dated index-linked debt.

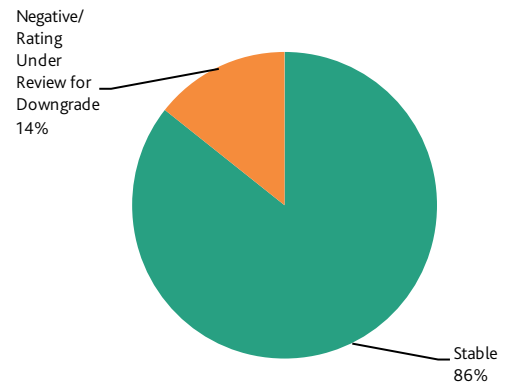
Sources: Company Information, Annual Reports & Investor Reports

Appendix V – Rating History & Outlook

Rating History of UK Water Companies



UK Water Sector - Rating Outlook Distribution 2012



Average sector rating is based on senior unsecured debt rating at operating water companies and corporate family ratings for highly-leveraged transactions. If the actual debt ratings of different tranches for highly-leveraged transactions were taken into account, the average ratings would be closer to A3.

Source: Moody's

Report Number: 146061

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