



ECONOMIC
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Financial Performance Monitoring, 2016-2017

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Economic Consulting Associates

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Contents

Abbreviations and acronyms	iii
1 Introduction and Summary	1
1.1 Background	1
1.2 Summary results	2
2 Performance against allowances	4
2.1 Return on Regulatory Equity	4
2.2 Expenditure	7
2.3 Financing costs	11
2.4 Rewards and penalties for delivery of outcomes	14
2.5 Turnover and revenue variances	15
3 Gearing and debt	17
3.1 Gearing	17
3.2 Debt composition	17
3.3 Credit ratings	19
4 Profit and dividends	20
4.1 Profits	20
4.2 Dividends	22
A1 Data tables	26
A1.1 RORE	26
A1.2 Cost of debt	27
A1.3 Gearing	28
A1.4 Debt	28
A1.5 Dividends	30

Tables and figures

Tables

Table 1 Contribution of different factors to average RORE	7
Table 2 Wholesale totex	8
Table 3 Retail costs	10
Table 4 Outturn RPI inflation – November to November	13
Table 5 Net ODI rewards	14
Table 6 Revenue variance	16
Table 7 Profit and margins, 2015/16 and 2016/17	20
Table 8 RORE	26
Table 9 Debt costs – allowed and actual	27
Table 10 Gearing	28
Table 11 Composition of debt	28
Table 12 Debt maturity	29
Table 13 Dividends, 2015/16 and 2016/17	30

Figures

Figure 1 Base case and cumulative RORE (as at 2016/17)	5
Figure 2 Breakdown of cumulative RORE (as at 2016/17)	6
Figure 3 Variance (%) between actual and allowed totex (2015/16 and 2016/17)	9
Figure 4 Variance (%) between actual and allowed retail costs (2015/16 and 2016/17)	11
Figure 5 Nominal cost of debt (2015/16 and 2016/17)	12
Figure 6 Real cost of debt (actual and allowed)	12
Figure 7 Gearing	17
Figure 8 Type of debt	18
Figure 9 Maturity of debt	19
Figure 10 Post-tax profit margins, 2015/16 and 2016/17	21
Figure 11 Dividend yields, 2014 to 2017	23
Figure 12 Dividend cover, 2014 to 2017	24

Abbreviations and acronyms

ANH	Anglian Water
APR	Annual Performance Report
AFW	Affinity Water
BWH	Bournemouth Water
BRL	Bristol Water
DVW	Dee Valley Water
E&W	England & Wales
ECA	Economic Consulting Associates
FD	Final Determination
NES	Northumbrian Water
ODI	Outcome Delivery Incentive
ONS	Office of National Statistics
PC	Performance Commitment
PR14	Price Review 2014
PR19	Price Review 2019
PRT	Portsmouth Water
RCV	Regulatory Capital Value
RORE	Return on Regulatory Equity
RPI	Retail Price Index
SES	Sutton and East Surrey Water
SEW	South East Water
SRN	Southern Water
SSC	South Staffs Water
SVT	Severn Trent
SWT	South West Water
TMS	Thames Water
totex	Total expenditure
TTT	Thames Tideway Tunnel
UU	United Utilities
WASC	Water and Sewerage Company
WOC	Water Only Company
WRFIM	Wholesale Revenue Forecasting Incentive Mechanism
WSH	Dŵr Cymru
WSX	Wessex Water
YKY	Yorkshire Water

1 Introduction and Summary

The Consumer Council for Water (CCWater) commissioned Economic Consulting Associates (ECA) to analyse and report on the 2016/17 financial performance of the England and Wales (E&W) water companies.

The purpose of this report is to provide CCWater with an overview of the companies' financial performance in 2016/17, highlighting any implications for Ofwat's 2019 price control review (PR19), emerging risks for consumers, and opportunities for the sharing of any outperformance. We compare performance in 2016/17 to 2015/16 (the first year of the current price control) and consider performance across the two years in aggregate, where relevant.

1.1 Background

Ofwat determined the allowed revenues of the E&W water companies for the current price control period through a price review which concluded in 2014 (PR14) and which involved some significant changes from the previous price review. Changes to the *process* included companies engaging more with consumers and their representatives, in developing their business plans, to understand the outcomes consumers want. Changes to the *form of price control* included four separate price controls, financial rewards and penalties for performance in delivering outcomes, and the adoption of a total expenditure (totex) approach to assess efficient expenditure for wholesale activities.

To maintain engagement with consumers through the price control period, Ofwat also changed the monitoring and reporting framework, so that companies report their performance to customers and other stakeholders, including Ofwat. This included the introduction of Annual Performance Reports (APRs). Ofwat has used the information in companies' APRs to report on their financial resilience in the first two years of the PR14 price control.¹

In this report, in analysing the financial performance of the E&W water companies, we rely mainly on data presented in their APRs.² Whilst there is overlap with Ofwat's monitoring financial resilience report, we seek to provide a more consumer centric focus, in keeping with the purpose of the report. In particular, we consider the sources and implications of

¹ Ofwat produced a pilot report on financial resilience in October 2015 (http://www.ofwat.gov.uk/wp-content/uploads/2015/10/pap_tec20151015finmon.pdf), its first full report (covering 2015/16) in November 2016 (<https://www.ofwat.gov.uk/wp-content/uploads/2017/05/Monitoring-financial-resilience-updated-May-2017.pdf>) and a second report (covering 2016/17) in November 2017 (<https://064f1d25f5a6fb0868ac-0df48efcb31bcf2ed0366d316cab9ab8.ssl.cf3.rackcdn.com/wp-content/uploads/2017/11/Monitoring-financial-resilience-2017-Report.pdf>)

² We produced for CCWater, in July 2017, a similar report based on companies' 2015/16 APRs. This report includes data both from companies 2016/17 APRs and their 2015/16 APRs (where appropriate).

out- or under- performance, eg performance against component parts of allowed revenues and regulatory mechanisms.³

An important context for this report is the PR19 price review. In December 2017, Ofwat published its final methodology for PR19, which requires companies to submit business plans by September 2018. Ofwat will publish its initial assessment of these in January 2019, with draft determinations following in March/April (for exceptional and fast-track plans) and July for others. Ofwat intends to publish final determinations by December 2019.

1.2 Summary results

Companies' financial returns are summarised in the Return on Regulatory Equity (RORE) that Ofwat requires them to report. Across the first two years of the price control, there is a relatively even split between the number of companies out-performing their base case ROREs (nine out of seventeen) and those under-performing (eight), and with ROREs in the range from 11% to just under 4%. This mix of out- and under- performance is in contrast with the same period in the previous price control, when we witnessed out-performance across all companies and which led to water companies returning some of the out-performance to consumers.

Companies' returns come from several sources, including their performance against allowances set in their PR14 Final Determinations (FDs) for total expenditure (totex), retail costs, and the cost of debt, and financial rewards for delivering against Performance Commitments made to customers. Our analysis of the sources of companies' returns found that:

- ❑ **Out-performance of expenditure allowances was the main contributor (on average) to RORE and was driven by totex efficiencies.** Companies' performance against FD allowances for wholesale totex and retail costs was the main contributor to ROREs across 2015/16 and 2016/17 (adding 0.7%, on average, to the base case RORE). Totex comprises the majority of these allowances - at £9,080m in 2016/17, compared to £908.2m for retail cost allowances. Whilst performance varies by company, a majority (ten out of seventeen) have spent less than their expenditure allowances, driven by under-spend against totex allowances (there has been slight over-spend against retail cost allowances). Where companies are out-performing against their expenditure allowances, they retain part of this as an additional return, and a share is subsequently passed to consumers. For these companies, out-performance should also be reflected in the expenditure forecasts in the business plans they are currently developing for PR19 and are due to submit to Ofwat in September. Outturn values will also inform the setting of allowances by Ofwat at PR19.
- ❑ **On average, companies under-performed against their cost of debt allowances in the first two years of PR14, but with improvements in 2016/17.** Across the first two years of PR14, the ROREs for all but four companies were reduced as a result of under-performing against their allowed cost of debt, with a reduction in

³ Ofwat changed its reporting guidance for 2016/17, requiring companies to provide a breakdown of their return on regulatory equity (RORE).

RORE of 0.36% on average). However, most companies' performance against the allowed cost of debt improved in 2016/17 compared to 2015/16, with fewer under-performing. This improvement was largely the result of an increase in inflation.⁴ With higher inflation in 2017/18, it seems likely that there will be further improvement in companies' performance against debt cost allowances in 2017/18. More generally, evidence on companies' actual cost of debt will affect consideration of the appropriate cost of capital for PR19.

- **Across the sector, rewards from delivery performance were relatively modest, but one firm accounted for over half the sectors' net rewards.** Across the sector, net rewards from companies' delivery against PCs made a relatively small, positive contribution to RORE in the first two years of the price control (increasing RORE by 0.14% on average). Across the two years, five companies had net penalties, whilst twelve had net rewards; total net rewards almost doubled from 2015/16 (£35m) to 2016/17 (£68m). A striking feature of the performance payments is the prominence of Severn Trent; in both 2015/16 and 2016/17 their net rewards accounted for over half the total net rewards of the sector. Indeed, in 2016/17, just one of Severn Trent's Outcome Delivery Incentives (ODIs) resulted in a reward that accounted for *over half* of the sectors net rewards (£35m out of £68m).⁵

In 2016/17, there was a slight reduction in the average level of gearing across the sector (from 71.5% in 2015/16 to 70.5%, weighted by RCV), although this remains above the notional gearing level for PR14, set by Ofwat, of 62.5%. In November 2017, when Ofwat published its report on financial resilience, it noted that two companies (Southern and Northumbrian) had been placed on "negative outlook" by the credit rating agencies. Since then, Ofwat published its final methodology for PR19 (including an early indication of the cost of capital), following which six companies are now on a negative outlook. Under Ofwat's notional gearing approach, risks associated with capital structure are borne by shareholders, not consumers. More actions by companies (e.g. refinancing and/or gearing reductions) to manage the indicated changes at PR19 may become evident.

⁴ See section 2.3 for a discussion on the impact of inflation on debt costs.

⁵ The ODI for which Severn Trent received this reward was external sewer flooding. These values are expressed in nominal terms.

2 Performance against allowances

In this section, we analyse the financial performance of the E&W water companies⁶ against expectations from the time of the PR14 price control.

First, in section 2.1, we compare companies' returns across the first two years of the price control against the expected (or 'base case') returns calculated by Ofwat at PR14.

Companies' returns come from several sources and are expressed as a percentage of regulatory equity (ie the RORE).

Second, we consider the key sources of these returns, typically through comparison of outturns to Ofwat's PR14 price control allowances for each of the first two years of the price control. We separately consider the following factors affecting returns:

- ❑ *Total expenditure on wholesale activities.* At PR14, Ofwat set totex allowances for each company's wholesale activities. If a company achieves totex efficiencies and spends below the allowances, it retains a portion of this saving thereby earning a higher return. Customers will subsequently share in these efficiencies. Evidence of out-performance can inform companies' business plans as well as the setting of allowances by Ofwat at the next price control.
- ❑ *Retail costs.* As with totex, evidence on retail cost performance can inform companies' business plans and the setting of price control allowances.
- ❑ *Debt costs.* If companies' interest rates on debt are lower than that allowed for by Ofwat they will make a return. Companies' interest rates could be lower than allowed for several reasons, including for factors outside of companies' control (such as general movements in the cost of debt or unanticipated inflation). In such circumstances, Ofwat expects companies to consider what to do with this out-performance. Moreover, companies' outturn interest costs may inform Ofwat's determination of the cost of capital at the next price control.
- ❑ *Rewards and penalties for delivery of outcomes.*

Third, and finally, we present companies' turnover from regulated activities, including differences between allowed and actual revenues (note: variances between actual and allowed revenues are not retained and do not affect companies' returns).

2.1 Return on Regulatory Equity

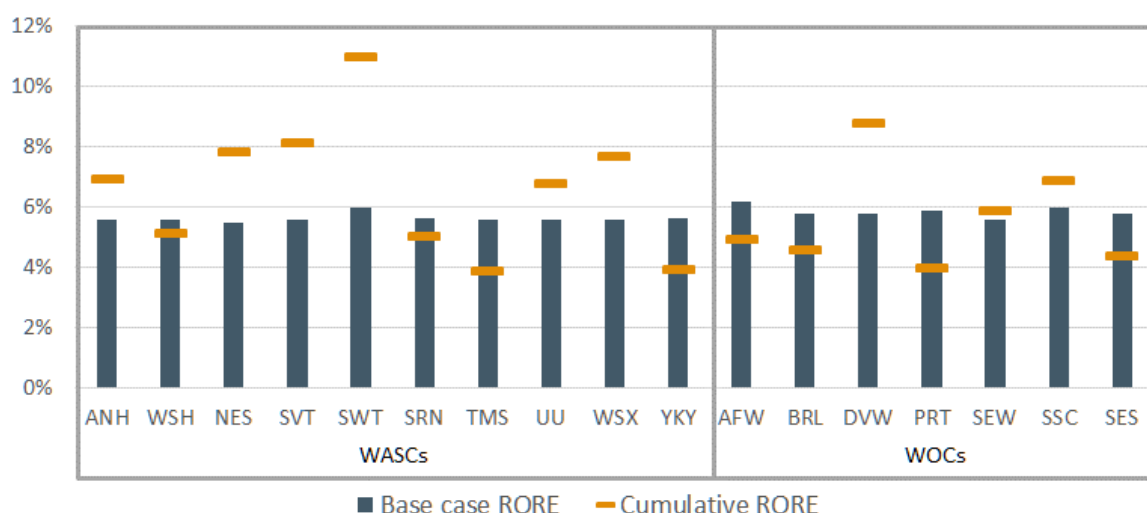
In PR14, Ofwat used the RORE as a key metric. RORE is a measure of the returns available to shareholders over the duration of a price control. RORE was developed by Ofgem as part of its fifth electricity Distribution Price Control Review and was intended to broaden the debate on returns available to shareholders away from an "excessive focus" on the allowed

⁶ On 1 April 2016, Bournemouth Water transferred into South West Water – for 2015/16 we separately present data for these two appointed entities, but for 2016/17 we present data for the integrated entity. Also, unless otherwise stated, we present data for Thames Water excluding the Thames Tideway Tunnel (TTT).

cost of capital. RORE includes returns available to shareholders from a range of sources (eg cost out-performance, incentive payments and penalties, cost of debt, etc.), as we describe further below.⁷

In the Final Determinations at PR14, Ofwat presented a base case RORE for each company, reflecting the expected return.⁸ Figure 1 reports companies' PR14 base case ROREs and their outturn 2016/17 ROREs (these outturn values are cumulative, reflecting performance in both 2015/16 and 2016/17).

Figure 1 Base case and cumulative RORE (as at 2016/17)



Source: *Monitoring financial resilience, Ofwat, November 2017.*

Across the sector, there is a relatively even split between the number of companies outperforming their base case ROREs (nine out of seventeen) and those under-performing (eight). Across the first two years, outturn ROREs range from 11% (South West Water) down to just below 4% (Thames Water and Yorkshire Water). This sector wide view masks slight differences between the WASCs and WOCs – with three out of the seven WOCs having outturn ROREs greater than the base case, compared to six of the ten WASCs.

This spread in performance around the base case contrasts to the PR09 price control period, for which we estimated that *all* companies experienced returns in excess of their base equity return across the first three years. We noted at the time that this “*pattern of outperformance provides some evidence that Ofwat’s assessments in PR09 were favourable to the companies. If regulatory assumptions are fair, we would expect poorer performing companies to make lower than normal returns and the better performing companies to make above normal returns.*”⁹ Whilst by no means conclusive, the current spread in returns either side of the base case is more consistent with fair regulatory assumptions than all companies outperforming.

⁷ Note that RORE does not necessarily align with actual returns; not least because it is based on a notional capital structure (of 62.5% in the case of PR14), rather than actual capital structure.

⁸ More broadly, Ofwat used RORE to assess the impact of risks in PR14, asking companies to provide a range for RORE based on a 10% probability of the outcome being below the range and a 10% probability of the outcome being above the range.

⁹ *Ofwat PR14 Review: 2010-2013 Financial analysis across the sector, April 2014, ECA report for CCWater.*

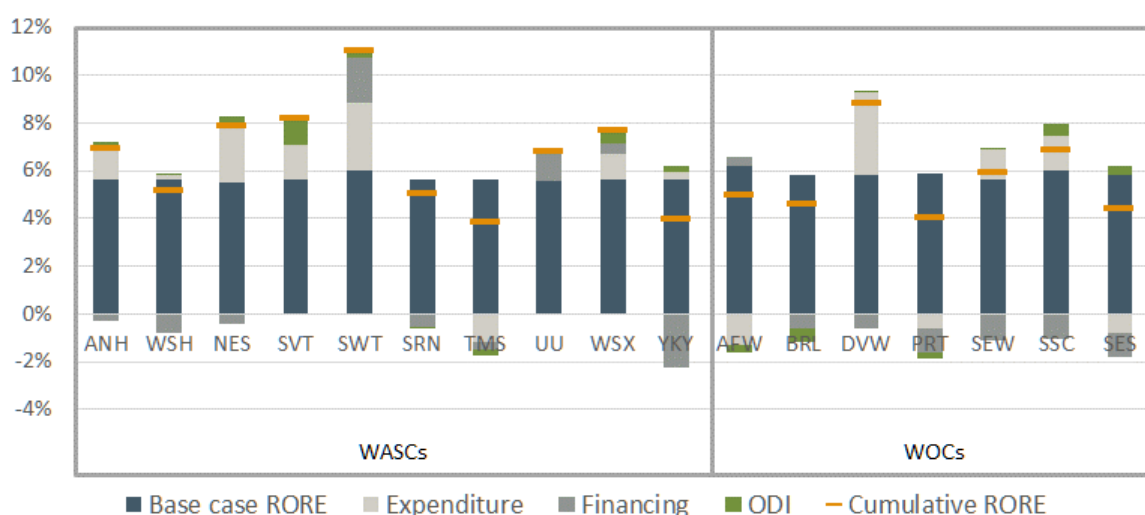
This current spread in performance of the water companies is also in contrast to the energy network companies (across gas and electricity transmission and distribution) which are *all* expected to have equity returns in excess of their base level¹⁰ in their current price control periods. Some of those energy network companies with amongst the highest return have voluntarily returned monies to customers. Within this context, Ofgem has stated that this “*is important because profits of network companies need to be seen to be legitimate.*”

Whilst there may not have been consistent out-performance across all water companies, some companies have out-performed, as already noted. South West Water has the largest RORE (at 11%). Through its ‘Watershare’ scheme, established at PR14, it has already shared some of its cost and financing out-performance with customers. For 2015/16 this amounted to £3.1m (which was reinvested in service improvement) and in 2016/17 to £4.5m. Also, as a not-for shareholder business, Dŵr Cymru gives its shareholders a say in how surplus funds (estimated at around £30m/year in PR14) are re-invested.

In Figure 2 we present a breakdown of companies’ ROREs. Ofwat’s guidance for reporting RORE identifies five components, which Ofwat reports in the following three categories:

- ❑ *Expenditure*, comprising:
 - ❑ The company’s share of totex out- or under-performance (*excluding* any differences arising from the re-profiling of totex within the period)
 - ❑ The company’s share of out- or under-performance against retail costs
 - ❑ The impact on RCV run-off of any totex out- or under-performance
- ❑ *ODI*, comprising the impact of ODI or SIM rewards or penalties
- ❑ *Financing*, comprising the difference between the actual average interest rate paid on debt and the allowed interest rate (both in real terms).¹¹

Figure 2 Breakdown of cumulative RORE (as at 2016/17)



Source: Monitoring financial resilience, Ofwat, November 2017.

¹⁰ See Ofgem’s 2016/17 Annual Reports for the energy networks subject to the RIIO framework: <https://www.ofgem.gov.uk/network-regulation-riio-model/network-performance-under-riio>

¹¹ https://www.ofwat.gov.uk/wp-content/uploads/2016/08/prs_web20160817regrep406.pdf

A number of headline observations can be made regarding the components of outturn ROEs in Figure 2:

- ❑ A majority of companies (ten out of seventeen) are *out-performing* expenditure allowances (covering both wholesale totex and retail costs) across the first two years of the price control. Moreover, performance against expenditure allowances is the main influence on outturn ROEs relative to the base cases – as shown in Table 1. Although not shown in Figure 2, there is a difference in the average performance across wholesale and across retail (with companies, on average, out-performing on totex but under-performing (by a lesser amount), on average, on retail costs). We consider totex performance in section 2.2.1 and retail costs in section 2.2.2.
- ❑ All but four companies are *under-performing* on financing (cost of debt allowances). On average, across the first two years of PR14, companies' debt costs have *reduced* outturn ROE by 0.36%. We consider this further in section 2.3, noting the improved performance in 2016/17, compared to 2015/16, largely as a result of increased inflation.
- ❑ A majority of companies (twelve out of seventeen) received net rewards for delivery against Performance Commitments (PCs). On average, these increased outturn ROE by 0.14%. We further consider Outcome Delivery Incentives (ODIs) in section 2.4.

Table 1 Contribution of different factors to average ROE

	Average of <i>absolute values</i>	Average
Base Case ROE		5.73%
Expenditure	1.18%	0.70%
Financing	0.81%	-0.36%
ODI	0.32%	0.14%
Cumulative ROE		6.22%

Source: Monitoring financial resilience, Ofwat, November 2017, ECA calculations.
Note: averages unweighted.

2.2 Expenditure

2.2.1 Total expenditure on wholesale activities

In PR14 Ofwat adopted a total expenditure (totex) based approach to assessing efficient expenditure for the wholesale price controls. This approach was intended to remove the perceived bias towards capital intensive solutions that might arise from the separate assessment of operating and capital expenditure.

Table 2 shows allowed and actual wholesale totex, for 2015/16 and 2016/17, along with the differences, which are shown in percentage terms in Figure 3. In 2016/17 actual totex was

just over £8.6bn compared to allowances of just under £9.1bn. Across the sector, companies underspent against their allowances by £441m (just under 5%). In 2015/16, whilst allowances and actual totex were lower, underspend was slightly larger (at £576m, or 6.8%).

Table 2 Wholesale totex

<i>(£m, nominal terms)</i>	2015/16			2016/17		
	Allowed totex	Actual totex	Difference	Allowed totex	Actual totex	Difference
Anglian	852.9	724.9	128.0	1055.7	814.7	241.0
Dŵr Cymru	568.6	469.0	99.7	574.0	601.4	-27.3
Northumbrian	505.7	457.0	48.7	533.8	446.0	87.8
Severn Trent	1064.6	1030.3	34.3	1236.7	1088.0	148.7
South West	363.3	288.9	74.4	410.1	350.5	59.7
Southern	563.1	453.6	109.5	627.3	533.1	94.2
Thames	1590.4	1644.2	-53.8	1602.8	1736.7	-133.9
United Utilities	1080.9	1248.0	-167.1	1149.0	1293.7	-144.7
Wessex	362.7	325.5	37.2	391.2	331.6	59.6
Yorkshire	789.4	600.7	188.7	768.3	746.5	21.8
<i>WASC sub-total</i>	<i>7,741.6</i>	<i>7,242.0</i>	<i>499.6</i>	<i>8,349.0</i>	<i>7,942.1</i>	<i>407.0</i>
Affinity	259.5	229.4	30.1	267.6	268.7	-1.1
Bournemouth	30.2	25.0	5.3	n.a	n.a	n.a
Bristol	93.4	69.8	23.6	94.9	82.9	12.0
Dee Valley	22.4	16.3	6.1	27.2	21.4	5.7
Portsmouth	28.8	27.5	1.4	31.8	31.7	0.2
South East	159.9	155.8	4.1	171.9	158.4	13.5
South Staffs	84.6	80.7	3.9	87.2	85.6	1.6
Sutton & East Surrey	45.1	43.1	1.9	50.6	48.1	2.5
<i>WOC sub-total</i>	<i>723.9</i>	<i>647.4</i>	<i>76.4</i>	<i>731.2</i>	<i>696.8</i>	<i>34.4</i>
Industry totals	8,465.5	7,889.5	576.0	9,080.2	8,638.9	441.3

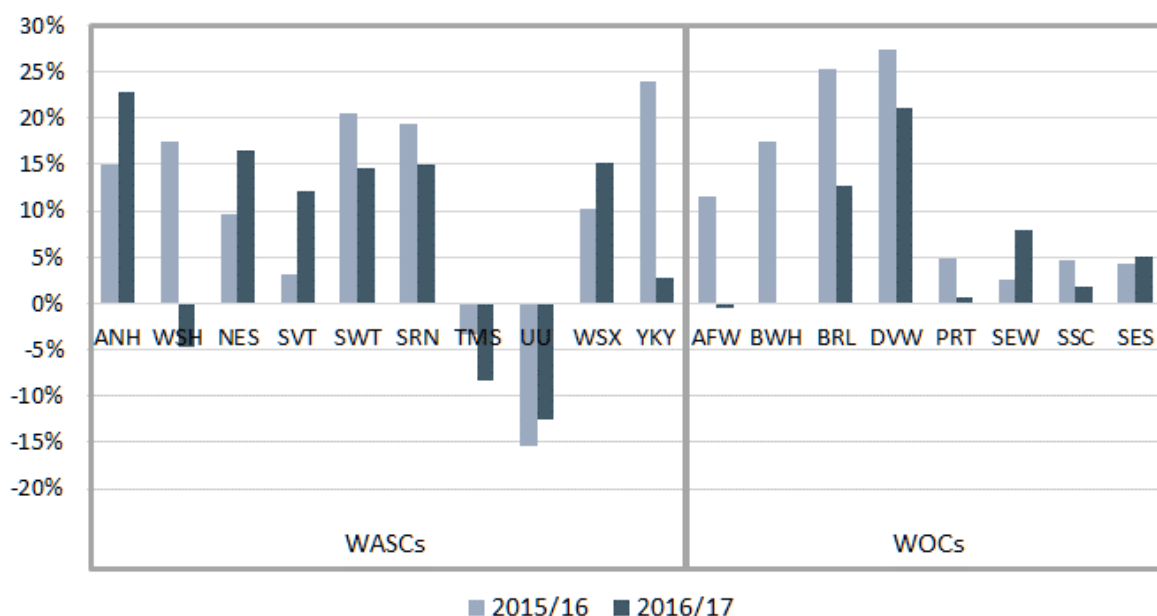
Source: APRs, ECA calculations

Underspend against allowances can reflect totex efficiencies, but may also arise from a re-profiling of expenditure within the price control period (ie expenditure may have been deferred to later in the price control, or brought forward). This is not the case for the totex performance reported under RORE, for which companies should have made adjustments to

actual totex for re-profiled expenditure.¹² To illustrate this point, in both 2015/16 and 2016/17, United Utilities' outturn totex is in excess of its allowance. However, this is due to it bringing expenditure forward within the price control. In terms of its RORE, it expects to /neither under- or over-perform on totex for these two years.

The positive values reported by most companies for the totex component of RORE show, therefore, that at least some of the totex underspend against allowances is due to efficiency. For these companies, the efficiencies should be reflected in their business plans for PR19. As the current price control period progresses, the extent of genuine out- or under-performance on totex will become more apparent.

Figure 3 Variance (%) between actual and allowed totex (2015/16 and 2016/17)



Source: APRs. Note: (1) variance calculated as allowed – actual; (2) Thames Water includes TTT.

2.2.2 Retail costs

At £931m in 2016/17, retail costs across the industry are substantially lower than wholesale totex, at £8,639m, and have a correspondingly smaller impact on customers' bills. In contrast to totex, across the industry, actual retail costs were *greater* than allowed costs, but only by some £22m (or 2.4%) in 2016/17. This represents an improvement compared to 2015/16 when, across the industry, actual costs were greater than allowed costs by £61m (or 6.8%). Table 3 compares allowed and actual retail costs, along with differences (Figure 4 shows the difference as a percentage of allowed costs).¹³

Five of the ten WASCs (compared to three in 2015/16) and four of the seven WOCs (three in 2015/16) spent less than their allowed retail cost (i.e. out-performed). Severn Trent achieved

¹² Note: there are further differences between the return on totex included within RORE and the differences between allowances and expenditure shown in Table 2. In particular, companies only retain a share of their totex out-performance and RORE is expressed post-tax.

¹³ The costs cover both household and non-household price controls, with the allowed household retail costs adjusted for the actual number of customers.

the largest out-performance in 2016/17 (as in 2015/16) of £33m, compared to an allowed cost of £122m. In 2015/16 they attributed their out-performance to a range of factors, but with a reduction in doubtful debts being the largest. In 2016/17 doubtful debts were also a key element of out-performance for Severn Trent (at just over £10m favourable to the FD), along with other operating expenditures on household retail activities (at just under £11m favourable to the FD).

Table 3 Retail costs

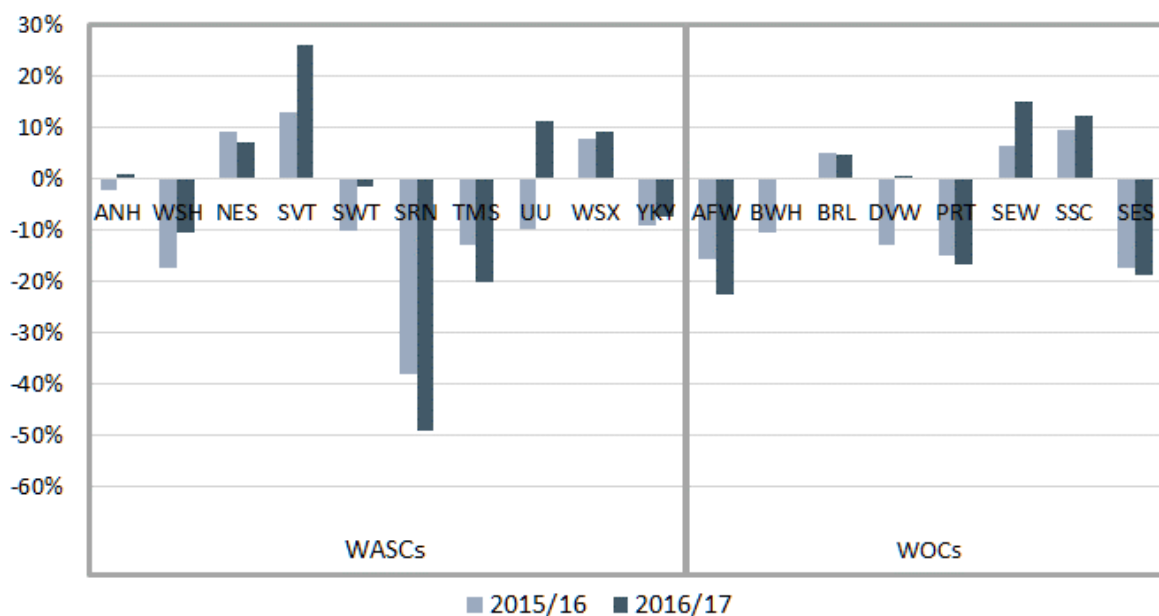
<i>(£m, nominal terms)</i>	2015/16			2016/17		
	Allowed retail cost	Actual retail cost	Difference	Allowed retail cost	Actual retail cost	Difference
Anglian	79.3	81.2	-1.9	82.1	81.5	0.6
Dŵr Cymru	58.6	68.8	-10.2	57.1	63.2	-6.1
Northumbrian	56.1	51.0	5.1	56.8	52.8	4.0
Severn Trent	119.1	103.8	15.3	124.9	92.3	32.6
South West	30.3	33.3	-3.0	36.1	36.7	-0.6
Southern	62.9	86.9	-24.0	62.0	92.5	-30.5
Thames	168.1	190.0	-21.9	167.6	201.3	-33.7
United Utilities	142.2	156.2	-13.9	138.4	123.0	15.4
Wessex	32.8	30.3	2.5	33.5	30.5	3.0
Yorkshire	56.9	62.1	-5.2	58.5	63.0	-4.5
<i>WASC sub-total</i>	<i>806.4</i>	<i>863.6</i>	<i>-57.2</i>	<i>817.2</i>	<i>836.9</i>	<i>-19.7</i>
Affinity	29.8	34.5	-4.7	29.3	35.9	-6.6
Bournemouth	4.8	5.3	-0.5	n.a.	n.a.	n.a.
Bristol	10.4	9.9	0.5	10.8	10.3	0.5
Dee Valley	2.6	3.0	-0.3	2.7	2.7	0.0
Portsmouth	4.5	5.2	-0.7	4.6	5.4	-0.8
South East	21.1	19.7	1.4	21.6	18.3	3.2
South Staffs	16.0	14.5	1.5	16.2	14.2	2.0
Sutton & East Surrey	5.8	6.8	-1.0	5.8	6.9	-1.1
<i>WOC sub-total</i>	<i>95.0</i>	<i>98.9</i>	<i>-3.9</i>	<i>91.0</i>	<i>93.8</i>	<i>-2.8</i>
Industry totals	901.4	962.5	-61.1	908.2	930.6	-22.5

Source: APRs, ECA calculations

Whilst at an industry level the extent of over-spend against retail cost allowances reduced in 2016/17, there was not a universal reduction. For example, both Southern Water and Thames Water over-spent against their allowances in 2015/16 and the extent of their over-

spend increased in 2016/17. In relative terms, Southern Water (at around 49%) had the largest under-performance in 2016/17. As in 2015/16, Southern attributed its under-performance to a range of factors, including increases in bad debt provisions and costs related to the transformation and outsourcing of the customer service centre.

Figure 4 Variance (%) between actual and allowed retail costs (2015/16 and 2016/17)



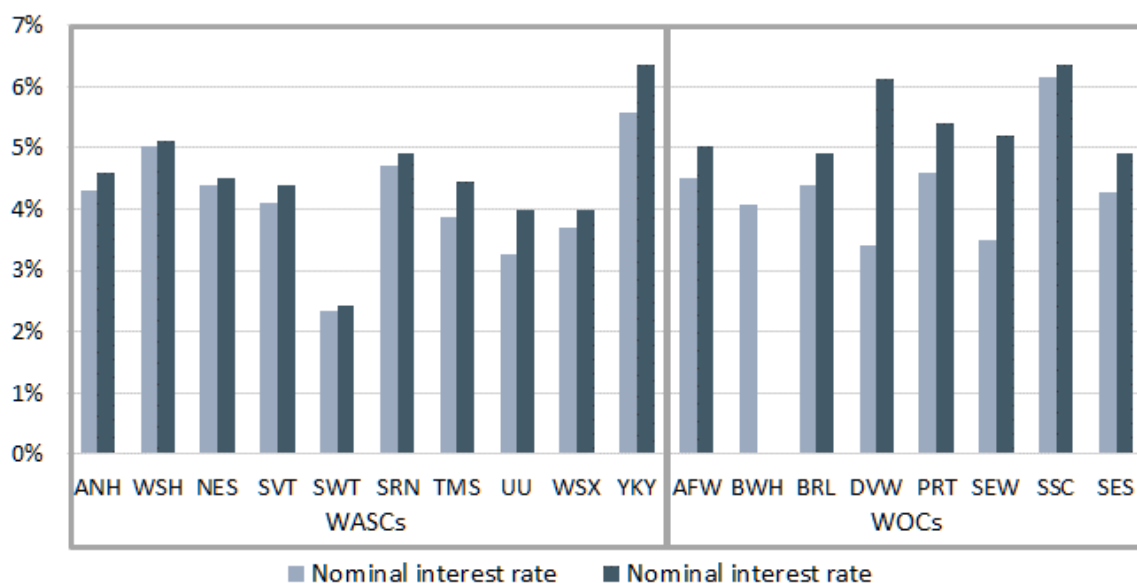
Source: APRs. Note Note: (1) variance calculated as allowed – actual; (2) Thames Water includes TTT.

2.3 Financing costs

In this section, we consider companies’ actual and allowed debt costs. As Ofwat has stated, where companies outperform their cost of debt due to low interest rates or due to unanticipated inflation, it would expect them to consider how to best use this out-performance. Outturn financing costs can also inform determination of the cost of capital.

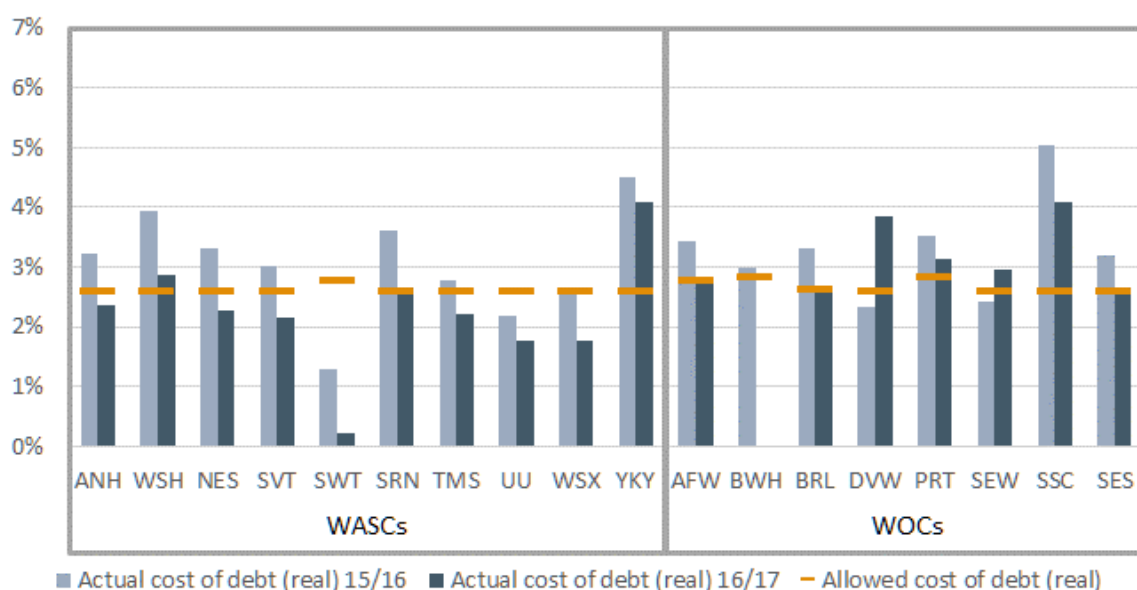
In 2016/17, all companies experienced an increase in their nominal debt costs from the previous year, as shown in Figure 5. This increase is a consequence of a higher inflation rate increasing the interest costs on companies’ indexed linked debt (see section 3.2 for a discussion on composition of debt).

Figure 5 Nominal cost of debt (2015/16 and 2016/17)



Source: APRs. Note Thames Water includes TTT

Figure 6 Real cost of debt (actual and allowed)



Source: APRs. Note (1) Actual real debt costs have been converted into real terms using the November to November RPI inflation rate; (2) Thames Water includes TTT.

Although companies' *nominal* debt costs increased in 2016/17, *real* debt costs have fallen for most companies¹⁴ (see Figure 6) as the higher inflation rate in 2016/17 reduced the real cost of companies' fixed rate debt. This matters because Ofwat's allowance for the cost of debt at

¹⁴ The two exceptions being Dee Valley and South East Water.

PR14 was set in *real* (not nominal) terms, at 2.6% for most companies (this is shown by the orange lines in Figure 6).¹⁵

Across 2015/16 and 2016/17 companies have (on average) under-performed against debt costs, as noted in section 2.1.¹⁶ However, Figure 6 shows a marked improvement in performance for 2016/17, driven largely by the higher inflation rate. Whereas in 2015/16 just four companies out-performed their real cost of debt allowance, in 2016/17, seven companies out-performed their allowed real cost of debt, with another four performing just slightly above their allowance.

RPI inflation is higher again in 2017/18 (see Table 4), which suggests, other things equal, that further improvements in performance against debt cost allowances in 2017/18 are likely.¹⁷ It should also be noted that companies' out- or under-performance against allowances is affected by unanticipated inflation. In estimating the real cost of debt for PR14, Ofwat incorporated an RPI inflation assumption of 2.8%. As shown in Table 4, in 2015/16 and 2016/17 out-turn inflation has been below this. This means that Ofwat's assessment of the real cost of debt overestimated the effects of inflation for that proportion of debt that is not index linked. Consequently, shareholders bear a cost from the unanticipated difference between the indexation of the RCV (based on the lower, outturn RPI inflation) and the absence of indexation on fixed and floating rate debt.

Table 4 Outturn RPI inflation – November to November

	2015/16	2016/17	2017/18
RPI inflation rate (Nov-Nov)	1.05%	2.19%	3.88%

Source: ONS, ECA calculations

Across companies, some of the more noticeable differences in performance are:

- ❑ South West Water report a real cost of debt that is significantly lower than other companies'. South West Water has a relatively high proportion of fixed rate debt amongst the WASCs (see Figure 8, further below) and it has the lowest (indicative) interest rate on that fixed rate debt across the sector (at 2.2%). Through their Watershare scheme, customers are able to benefit from this out-performance within the price control period.
- ❑ Yorkshire Water and South Staffs Water have actual costs of debt that are notably higher than the allowed cost of debt in both 2015/16 and 2016/17. In the case of South Staffs, it has a high proportion of index-linked debt which is at the highest indicative rate across the sector. In the case of Yorkshire Water, it has a mix of debt types, but the interest cost on its fixed and index linked debt are relatively high. Across the sector, the impact of financing costs on RORE are largest for Yorkshire Water (around -2.3%).

¹⁵ Differences are for the two companies to which Ofwat give 'enhanced' status in PR14 (South West and Affinity) and the two companies to which Ofwat gave company-specific uplifts on the cost of capital (Portsmouth and Bournemouth).

¹⁶ Note that effect of debt costs on RORE are calculated on the basis of the notional capital structure. Data presented in this section reflect companies' actual capital structure.

¹⁷ Looking further forward, the Office for Budget Responsibility forecasts a gradual decline in inflation through 2018 and 2019, before RPI inflation stabilises around 3%.

2.4 Rewards and penalties for delivery of outcomes

In PR14, Ofwat increased the focus on companies delivering outcomes that consumers want. Part of this involved setting reputational and financial incentives (known as Outcome Delivery Incentives, ODIs) for companies to deliver service levels (Performance Commitments, PCs) against outcomes that customers value.

Financial ODIs provide for penalties or rewards depending on company performance. For most companies, their penalties or rewards are calculated over the current price control period to be included in allowed revenues at the next price control period. The exceptions are Anglian, Severn Trent and South West, who have in-period adjustments for some of their ODI rewards or penalties (i.e. their performance can result in changes in allowed revenue in the current price control period). Partly because the outcomes framework was new, Ofwat limited the impact of financial ODIs to no more than two percentage points of the RORE per year (ie a cap and collar). The PCs and ODIs vary across companies.

Table 5 shows the ODI rewards net of penalties accrued in 2015/16 and in 2016/17. We have not included any forecasts of rewards and penalties through to the end of the price control period.

In 2016/17, at an industry level, net ODI rewards were around £68m, up from £35m in 2015/16, and all but two WASCs and three WOCs received net rewards. The net rewards across the industry are attributable to the WASCs, as across all WOCs there was net ODI penalty of £0.4m.

The majority of the net rewards across the sector, as well as the increase in 2016/17, are attributable to Severn Trent. In 2015/16 Severn Trent had net rewards of just under £20m (out of £35m in total) and in 2016/17 over £43m¹⁸ (out of £68m). Of their rewards in 2016/17, just over £39m were from their ODIs on internal and external sewer flooding (around £4m and £35m respectively) – these two ODIs for Severn Trent accounted for over half of the sectors net rewards in 2016/17.

Table 5 Net ODI rewards

<i>(£m nominal terms)</i>	Net ODI rewards 2015/16	Net ODI rewards 2016/17
Anglian	11.8	5.5
Dŵr Cymru	1.0	3.0
Northumbrian	4.8	5.4
Severn Trent	19.8	43.6
South West	1.9	4.2
Southern	-1.5	-
Thames	-14.0	-16.3
United Utilities	2.5	7.3

¹⁸ These are the ODI net rewards reported in Severn Trent's APR, uplifted for inflation. These include close to a £1m reward for leakage performance that the company has decided *not* to collect.

<i>(£m nominal terms)</i>	Net ODI rewards 2015/16	Net ODI rewards 2016/17
Wessex	5.4	6.0
Yorkshire	6.1	9.5
<i>WASC sub-total</i>	<i>37.8</i>	<i>68.3</i>
Affinity	-1.7	-1.8
Bournemouth	-	n.a.
Bristol	-1.2	-0.2
Dee Valley	0.0	-0.0
Portsmouth	-0.3	-
South East	-0.1	0.4
South Staffs	0.6	0.9
Sutton & East Surrey	0.2	0.3
<i>WOC sub-total</i>	<i>-2.6</i>	<i>-0.4</i>
Industry totals	35.2	67.9

Source: APRs, ECA calculations

2.5 Turnover and revenue variances

Table 6 shows allowed and actual revenues.¹⁹ Across the industry, actual revenue was £11,812m in 2016/17, up slightly from £11,712m the previous year, whilst allowed revenues were £11,821m, up from £11,616m. WASCs share of revenue is over 92%.

Across the industry, in 2016/17, actual revenues have been slightly lower than allowed revenues (adjusted for actual numbers of household numbers) by 0.1%. This compares to 2015/16 when actual revenues were greater than allowed revenues by around 0.8%. It should be noted that revenue variances are not retained as financial gains or losses but corrected within the price control period or in the next price control period. In PR14, Ofwat also introduced the Wholesale Revenue Forecast Incentive Mechanism (WRFIM). As well as adjusting companies' allowed revenues for over- or under-recovery of wholesale revenue,²⁰

¹⁹ The actual revenues we present are those governed by the price control and differ from the headline revenues presented in companies' APRs by excluding non-price control revenue from third parties and including certain grants and contributions. These exclusions make the actual revenues comparable to allowed revenues. In terms of the allowed revenues, we also apply the adjustments from the Final Determination for the actual number of household customers and meter penetration (for details see: http://www.ofwat.gov.uk/wp-content/uploads/2015/10/det_pr20141212hhretail.pdf).

²⁰ Companies must use their best endeavours to correct for over-recovery of wholesale revenues within the price control period. In contrast, under-recovery of wholesale revenues is added to allowed revenues in the next price control period (accounting for inflation and financing costs).

this mechanism incentivises accurate forecasting by penalising companies for any under- or over-recovery of wholesale revenues outside of a threshold.

Table 6 Revenue variance

(£m, nominal terms)	2015/16			2016/17		
	Allowed revenue ²¹	Actual revenue	Variance	Allowed revenue	Actual revenue	Variance
Anglian	1,187.3	1,181.8	-0.5%	1,213.8	1,222.3	0.7%
Dŵr Cymru	731.1	729.7	-0.2%	738.6	747.2	1.2%
Northumbrian	775.1	779.2	0.5%	789.7	793.7	0.5%
Severn Trent	1,519.4	1,545.6	1.7%	1,549.9	1,541.1	-0.6%
South West	496.2	506.0	2.0%	537.9	552.4	2.6%
Southern	793.3	798.5	0.7%	806.9	806.2	-0.1%
Thames	2,011.7	2,035.7	1.2%	2,037.7	2,038.0	0.0%
United Utilities	1,705.0	1,712.5	0.4%	1,742.9	1,710.4	-1.9%
Wessex	507.2	519.5	2.4%	517.1	524.1	1.4%
Yorkshire	965.0	980.9	1.6%	989.2	979.8	-0.9%
<i>WASC sub-total</i>	<i>10,691.3</i>	<i>10,789.4</i>	<i>0.9%</i>	<i>10,924.4</i>	<i>10,915.2</i>	<i>-0.1%</i>
Affinity	307.0	304.8	-0.7%	310.6	311.8	0.4%
Bournemouth	39.6	40.5	2.1%	n.a.	n.a.	n.a.
Bristol	114.0	111.8	-1.9%	113.6	111.5	-1.9%
Dee Valley	24.7	23.9	-3.4%	25.6	25.2	-1.5%
Portsmouth	38.4	38.8	1.1%	39.1	39.8	1.9%
South East	221.1	219.1	-0.9%	226.4	224.5	-0.8%
South Staffs	119.6	123.0	2.9%	119.9	123.0	2.6%
Sutton & East Surrey	59.9	60.5	0.8%	61.1	61.2	0.1%
<i>WOC sub-total</i>	<i>924.4</i>	<i>922.3</i>	<i>-0.2%</i>	<i>896.4</i>	<i>897.1</i>	<i>0.1%</i>
Industry totals	11,615.7	11,711.7	0.8%	11,820.8	11,812.3	-0.1%

Source: APRs, ECA calculations

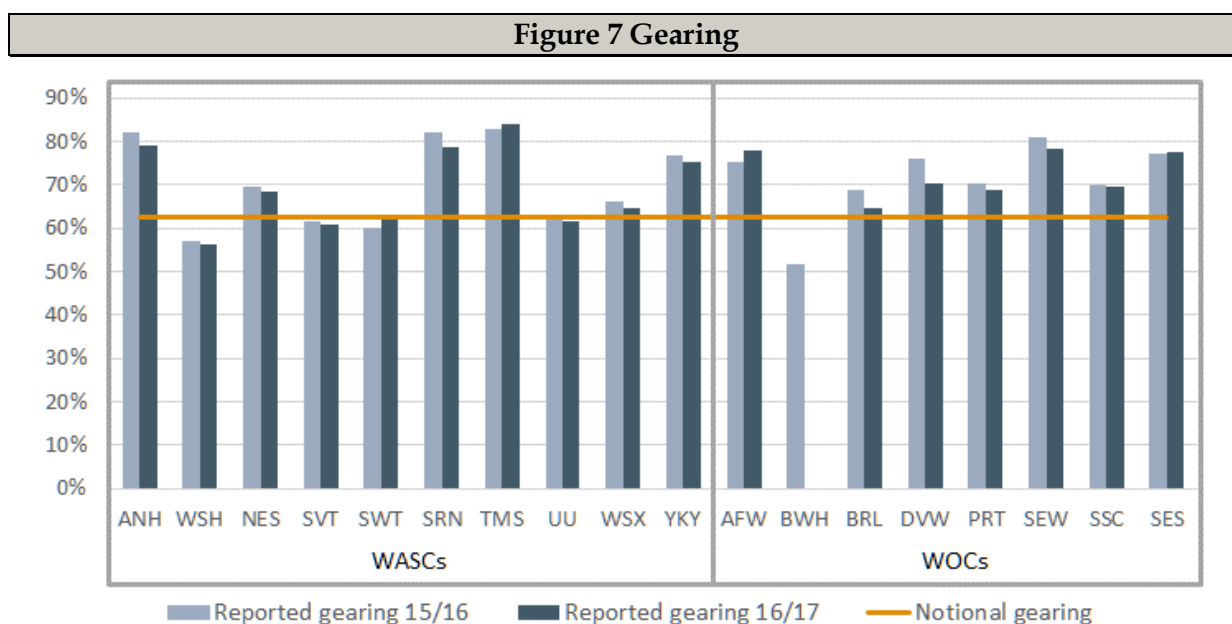
²¹ These are FD revenues adjusted for actual household retail numbers.

3 Gearing and debt

3.1 Gearing

Figure 7 shows companies' gearing in 2015/16 and 2016/17 (measured as the ratio of net debt, i.e. gross debt minus cash and short-term deposits, to the RCV) and notional gearing assumed by Ofwat for PR14 (of 62.5%).

Gearing ranges from 56.4% (Dŵr Cymru) to 84.1% (Thames). Compared to 2015/16, gearing is slightly lower across the sector in 2016/17 (70.5% versus 71.5% weighted by RCV). However, companies have continued to maintain gearing levels well above Ofwat's notional level of 62.5% in the low-interest environment. The slight reduction in gearing across the sector is driven by a slightly lower gearing among WASCs (70.3% versus 71.3% weighted by RCV). Gearing among the WOCs is slightly higher in 2016/17 (75.1% versus 74.8% weighted by RCV), although this is largely a result of Bournemouth Water being removed from the calculation in 2016/17 (following the merger with South West Water). In 2016/17, gearing is also somewhat higher across the WOCs than the WASCs.



Source: APRs. Note: Thames Water includes TTT.

We comment in section 4 on implications of profit and dividend levels for gearing.

3.2 Debt composition

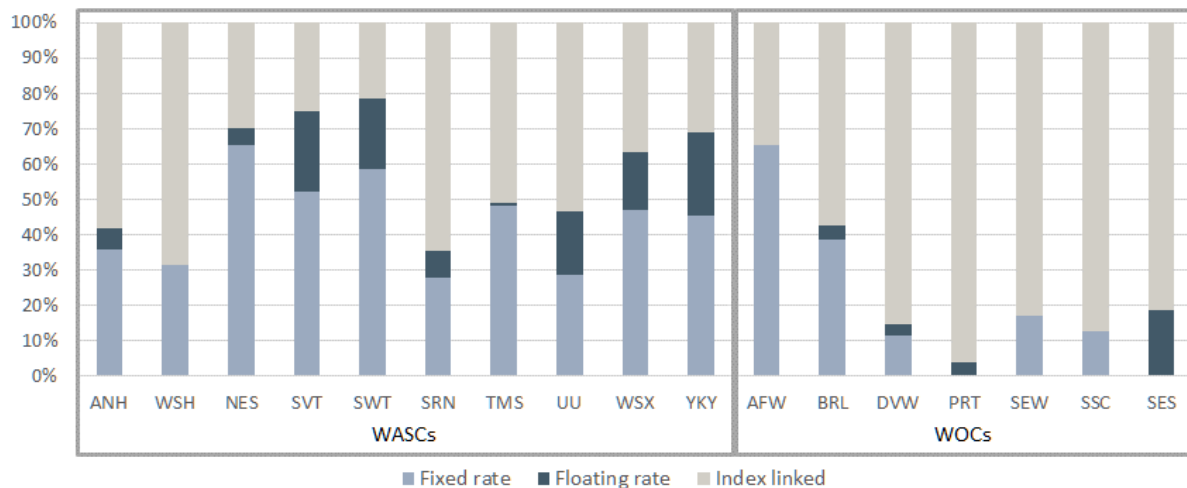
Figure 8 shows the proportions of the different types of debt held by the companies (i.e. fixed rate, floating rate, or index-linked), while Figure 9 provides a breakdown of the maturity of the debt. These values are for 2016/17; the change from 2015/16 was relatively limited (with, perhaps, the most significant that South Staffs, which previously had 83.75%

of its debt with a more than 20 years' duration, now having most of its debt (86.5%) with maturity in the 5-20 year range).

These figures show a mix of debt types and maturities; however, there are some apparent differences, particularly between WASCs and WOCs:

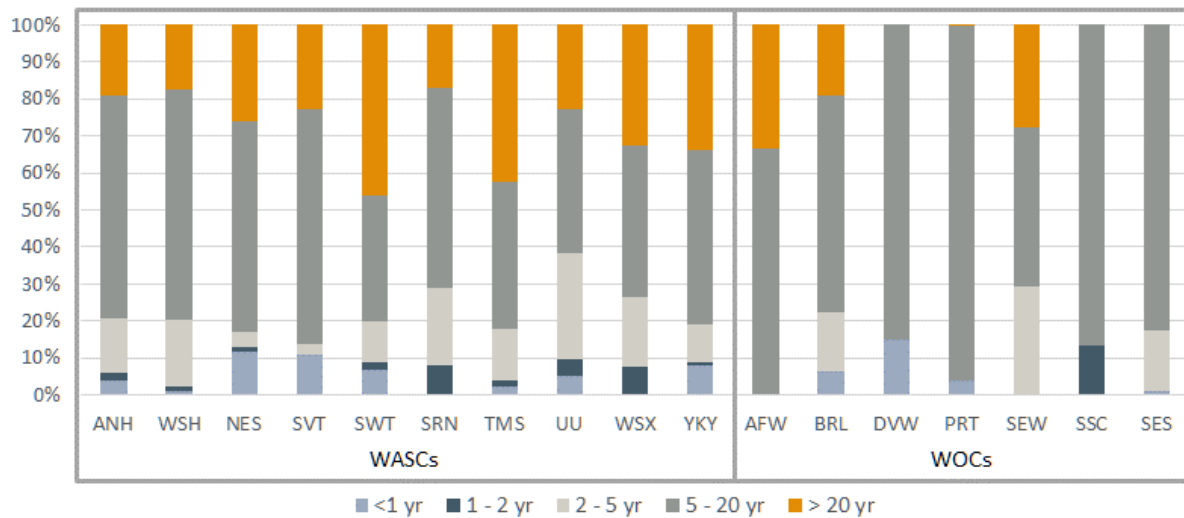
- ❑ WOCs tend to have less diverse mixes of debt types and durations than the WASCs. This may, in part, reflect the relative size of the WOCs and their ability to access capital markets.
- ❑ WOCs tend to have more index-linked debt (and less floating and fixed rate debt) than the WASCs. This suggests that the WOCs will be less affected by changes in inflation (see discussion in section 2.3).
- ❑ WOCs tend to have less very long-term debt (over 20 years) than WASCs, with four (Dee Valley Water, Portsmouth, South Staffs, and Sutton and East Surrey) having none. WOCs also tend to have less shorter-term debt (ie up to 2 years).

Figure 8 Type of debt



Source: APRs. Note: Thames Water includes TTT.

Figure 9 Maturity of debt



Source: APRs. Note: Thames Water includes TTT.

3.3 Credit ratings

Most companies are required by their licenses to have an investment grade credit rating. As was noted in Ofwat’s financial resilience report published in 2 November 2017,²² all companies currently pass this threshold. At the time, two companies had been placed on ‘negative outlook’: Southern Water and Northumbrian Water. Ofwat had noted that Southern Water’s negative outlook was particularly concerning given it currently holds a Baa2 rating with Moody’s, which is only one notch above a minimum investment grade rating of Baa3. On the positive side, Yorkshire Water had, around that time, had its outlook upgraded from negative to stable after restructuring its finances.

However, following the publication of Ofwat’s PR19 methodology, the list of companies placed on negative outlook has grown from two to six, with Anglian Water (Osprey) Financing, Portsmouth Water, Severn Trent, and Yorkshire Water joining Southern Water and Northumbrian Water.²³ Moody’s stated the changes in outlook reflect the companies it considered most exposed to a likely fall in allowed returns from 2020 due to the PR19 methodology.

Under Ofwat’s notional gearing approach, risks with capital structure are borne by the shareholders, not consumers. Following publication of the PR19 methodology (and, in particular, the indication of a notably lower cost of capital), more action by companies to manage this expected change may become evident (e.g. refinancing and gearing reductions).

²² <https://www.ofwat.gov.uk/publication/monitoring-financial-resilience-2016-17/>

²³ Utility Week, ‘Six water groups ‘most exposed’ to cut in returns’, 21 December 2017: <https://utilityweek.co.uk/six-water-groups-exposed-cut-returns/>

4 Profit and dividends

4.1 Profits

Table 7 compares the profits and margins (expressed as a percentage of appointed revenues) of the water companies for 2015/16 and 2016/17. Across the industry, in 2016/17, operating profit margins (calculated as operating profit divided by appointed revenues) ranged from 13.3% to 44.6%, with an average of 31.2%.

Relative to 2015/16, operating profits were down across the industry, falling from 33.5% to 31.2%. In terms of operating profits, WASCs continue to outperform WOCs at 31.7% versus 24.9%.

Most of the water companies have maintained similar operating profit margins to 2015/16, with Dŵr Cymru and Thames being slight negative exceptions, and Yorkshire being a positive exception.

Table 7 Profit and margins, 2015/16 and 2016/17

	2015/16				2016/17			
	Operating profit		Post-tax profit		Operating profit		Post-tax profit	
	£m	Margin %	£m	Margin %	£m	Margin %	£m	Margin %
Anglian	339.8	29.1%	325.1	27.9%	355.0	29.4%	193.7	16.0%
Dŵr Cymru	161.2	21.8%	53.8	7.3%	97.9	13.3%	-52.6	-7.1%
Northumbrian	362.1	46.9%	240.5	31.1%	339.5	43.3%	185.6	23.7%
Severn Trent	514.6	33.6%	318.7	20.8%	516.5	33.8%	308.9	20.2%
South West	207.4	41.1%	156.7	31.1%	232.9	41.8%	146.7	26.3%
Southern	285.6	35.6%	117.4	14.6%	247.6	31.2%	-79.8	-22.7%
Thames	721.1	35.2%	440.2	21.5%	525.4	25.7%	17.4	0.9%
United Utilities	567.5	33.3%	365.3	21.4%	580.3	34.4%	364.3	21.6%
Wessex	238.1	46.4%	152.0	29.6%	230.4	44.6%	142.1	27.5%
Yorkshire	253.5	26.3%	230.3	23.9%	314.4	31.9%	-267.4	-27.1%
WASC sub-total	3,650.9	34.0%	2,400.0	22.3%	3,439.9	31.7%	858.9	7.9%
Affinity	70.1	23.5%	51.7	17.3%	56.2	18.5%	23.4	7.7%
Bournemouth	10.1	25.3%	6.5	16.4%	n.a.	n.a.	n.a.	n.a.
Bristol	35.3	32.3%	27.8	25.4%	28.7	26.2%	19.3	17.6%
Dee Valley	4.6	19.9%	3.1	13.6%	4.3	17.7%	1.5	6.3%
Portsmouth	8.6	21.6%	4.5	11.3%	6.1	15.3%	2.9	7.4%
South East	72.0	33.4%	41.9	19.5%	75.7	34.2%	22.5	10.2%

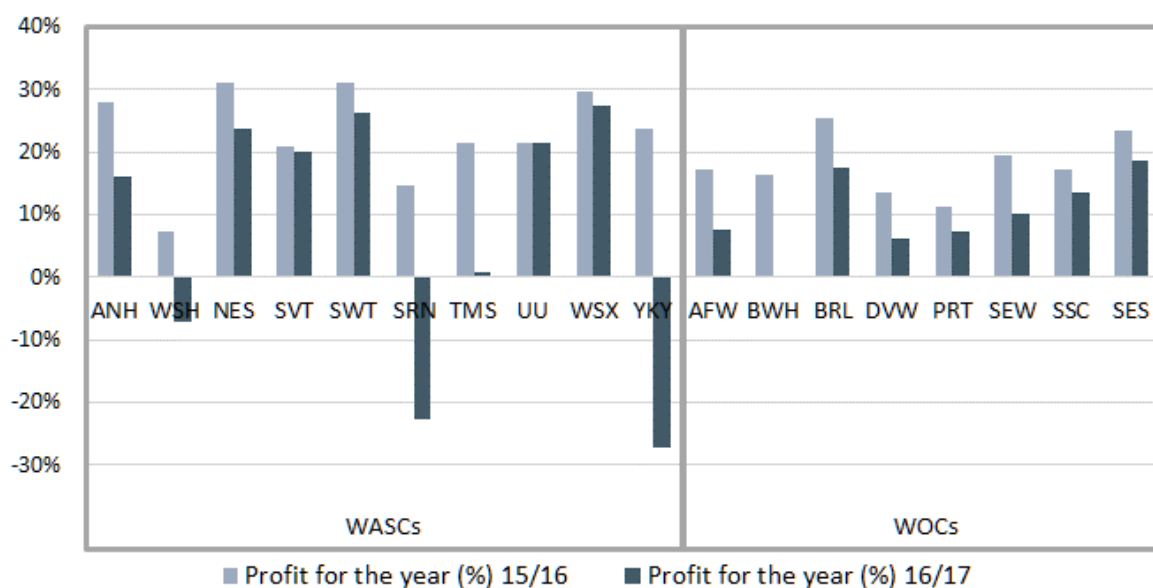
	2015/16				2016/17			
	Operating profit		Post-tax profit		Operating profit		Post-tax profit	
	£m	Margin %	£m	Margin %	£m	Margin %	£m	Margin %
South Staffs	32.1	26.7%	20.6	17.2%	29.2	24.6%	16.0	13.5%
Sutton & East Surrey	19.0	31.6%	14.0	23.4%	17.9	29.6%	11.3	18.7%
WOC sub-total	251.7	27.8%	170.2	18.8%	218.1	24.9%	96.9	11.1%
Industry totals	3,902.6	33.5%	2570.2	22.1%	3,658.0	31.2%	955.9	8.2%

Source: APRs, ECA calculations. Note: Thames Water includes TTT.

4.1.1 Post-tax profit margins and financial instrument liabilities

Although operating profit margins across the WOCs are lower than the WASCs, WOCs post-tax profits in 2016/17 were higher on average (at 11.1% versus 7.9%). This is a reversal from 2015/16, when WASC post-tax profits were 22.3% and WOCs were 18.8%.

Figure 10 Post-tax profit margins, 2015/16 and 2016/17



Source: APRs. Note: Thames Water includes TTT.

This is largely due to multiple WASCs incurring large fair value²⁴ losses on financial instruments in 2016/17. Notably, Anglian recorded a £116m loss (equivalent to 9.6% of appointed revenues), Southern a loss of £417m (52.5%), Thames a loss of £206m (10.0%), and

²⁴ 'Fair value' is similar to 'mark-to-market' value, but is adjusted to take into account the impact on value of the risks of default by counterparties, plus other adjustments. Fair value is required to be used for financial accounting purposes under generally accepted accounting principles.

Yorkshire a loss of £467m (47.4%). In contrast, South East was the only WOC to record a financial instrument fair value loss of £14m (6.2%).

Financial derivatives are used by WASCs for hedging as part of risk management policies rather than speculative trading. The mark to market value of many companies' financial derivatives have turned to large liabilities, largely due to the persistent low-interest rate environment. Financial instruments' mark-to-market values can be extremely volatile and do not necessarily reflect what their realised value will be and should not affect cash-flows.²⁵ However, in its recent credit outlooks, Moody's highlighted the large, negative mark-to-market values of Southern and Yorkshire's financial derivatives.

In the case of Southern Water, Moody's stated they found Southern's -£1.3bn mark-to-market portfolio of inflation-linked derivatives, equivalent to 29% of its RCV, to be 'credit negative' due to "(1) ... while the cash flows received under the swaps boost interest cover as calculated for the purposes of financial covenant metrics, they do not result in long-term cash flow benefit and may serve to undermine the value of the creditor protections; (2) the need to refinance accreted inflation with index-linked instruments in order to preserve its funding mix; and (3) the large mark-to-market position may reduce shareholder willingness to support credit quality by reducing dividends and/or injecting equity."²⁶

In its credit opinion of Yorkshire Water,²⁷ Moody's commented on Yorkshire's portfolio of inflation-linked derivatives having a mark-to-market value of -£2.6bn, which reflects the company's funding costs being locked in at rates significantly above the current market for the long-term. Moody's highlights this portfolio as a 'credit challenge', but also notes that recent measures undertaken by Yorkshire, including re-couponsing a portion of its index-linked swap portfolio on 22 June 2017,²⁸ have reduced its exposure to a persistently low interest rate environment.

4.2 Dividends

Figure 11 displays dividend yields across the water companies from 2014 to 2017. Table 13 in Annex A1.4 compares the gross values of dividends paid to external shareholders²⁹ in 2015/16 and 2016/17.

²⁵ Southern Water notes in their APR that "The risk of this mark-to-market value crystallising is extremely remote given that it can only crystallise under certain conditions of a default of our financing covenants, in which case operations of the company are protected and will continue."

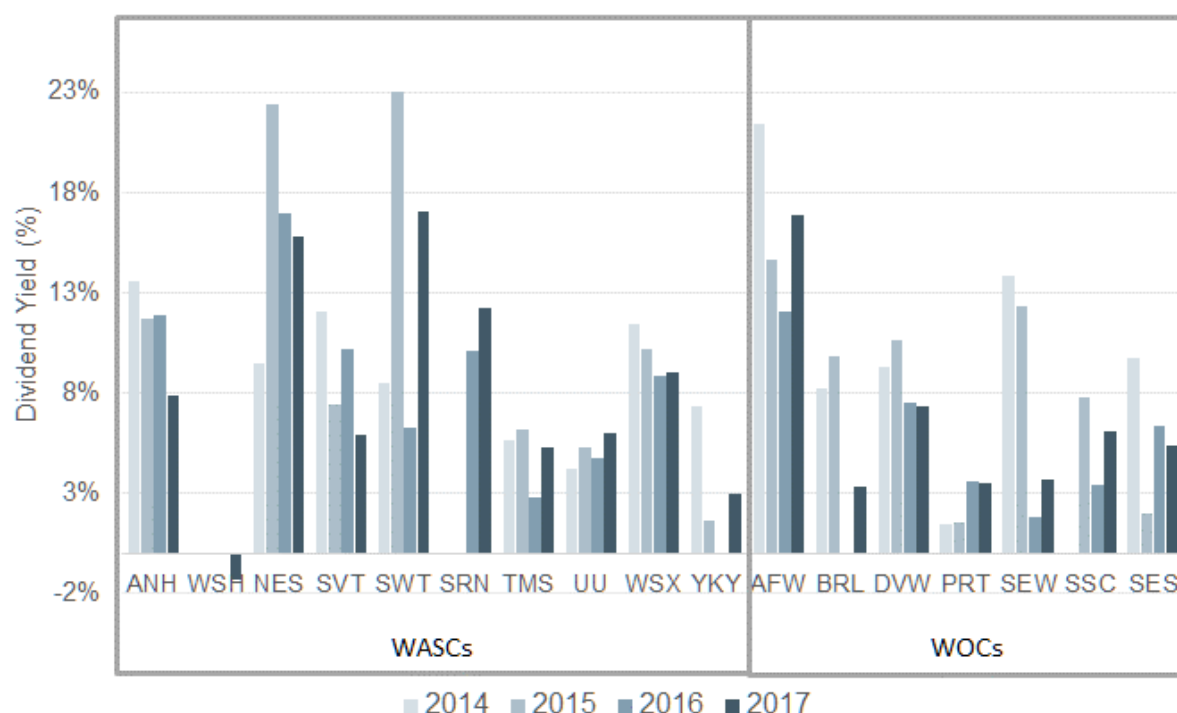
²⁶ Moody's Investors Service, 'Moody's affirms Southern Water's ratings, negative outlook', 19 December 2017.

²⁷ Moody's, 'Credit Opinion: Yorkshire Water Services Limited', 5 July 2017.

²⁸ Yorkshire Water Services Ltd, 'Interim Report and Financial Statements: For the six months ended 30 September 2017', pg 11.

²⁹ Companies report total dividends in their APR. However, dividend yields (and dividend cover) are reported excluding "any dividends paid to a holding company solely to enable that company to pay interest on an intergroup loan from the appointee" (pg 37, RAG 4.06 – Guideline for the table definitions in the annual performance report, October 2016, Ofwat). We have calculated the dividends paid to external stakeholders from the actual regulatory equity, dividend payments and dividend cover reported in the APRs.

Figure 11 Dividend yields, 2014 to 2017



Source: APRs, Ofwat. Note: Thames Water includes TTT.

Industry-wide, dividend yields have been lower since 2015. Weighted by RCV, dividend yields were 7.4% in 2014 and 7.7% in 2015. This fell to 6.3% in 2016, recovering somewhat to 7.0% for 2017.

The fall in dividend yields has been more dramatic among WOCs, which had RCV-weighted average dividend yields of 13.1% in 2014 and 11.1% in 2015, falling to 5.4% in 2016, and then rising to 8.2% for 2017. This is largely driven by the significant decline in dividends from Affinity, Bristol, and South East, recovering somewhat since.

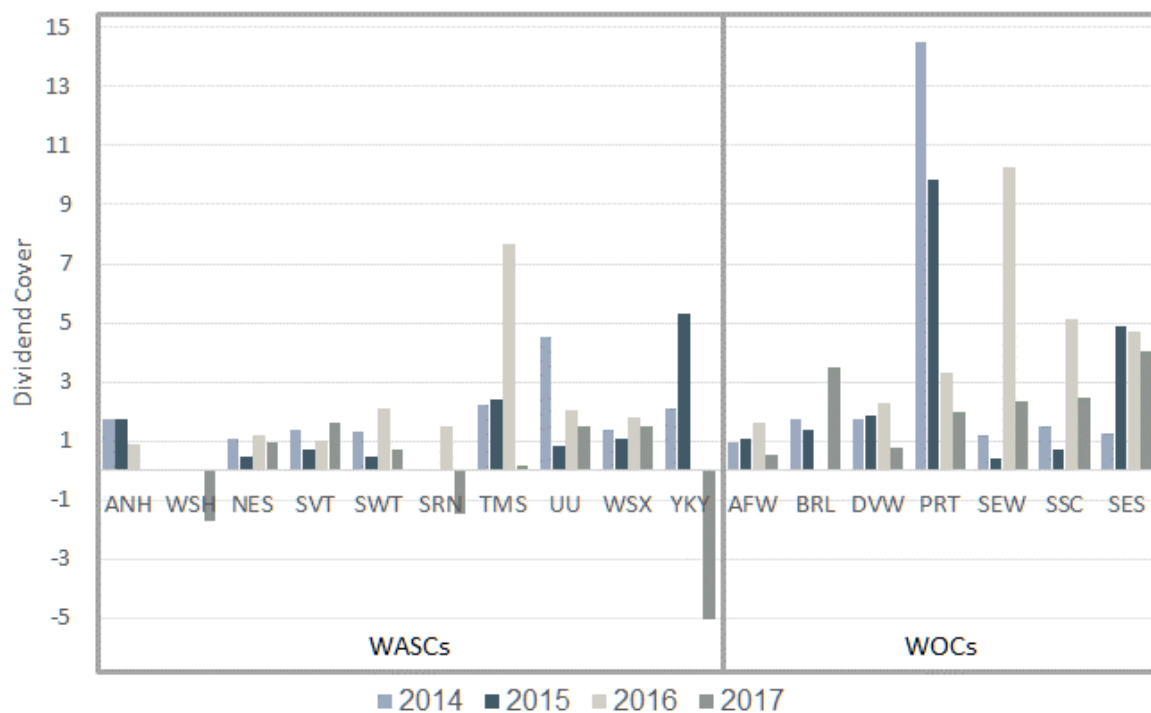
WASCs' RCV-weighted dividend yields have been more stable: 7.1% in 2014, 7.5% in 2015, 6.4% in 2016, and 6.9% in 2017. This WASCs-wide number masks some significant up-and-down swings in dividend yields by Northumbrian and South West, and Southern's return to issuing dividends.

For 2017/18, Thames Water, which issued dividends of £82.4m (2.7% dividend yield) in 2015/16 and £109.2m (5.3%) in 2016/17, announced it would not be issuing a dividend in 2017/18 in order "to focus on improvements in operational performance."³⁰

Figure 12 Dividend cover, 2014 to 2017 shows the dividend covers (post-tax profits divided by dividends paid to external shareholders) from 2014 to 2017. A dividend cover of one indicates that profits are paid out in full to shareholders. A dividend cover of above one indicates that some profit is retained and that gearing will reduce (unless they take on more debt to keep gearing stable).

³⁰ Thames Water Utilities interim results for the period ended 30 September 2017: <https://corporate.thameswater.co.uk/Media/News-releases/Interim-report-2017-18>

Figure 12 Dividend cover, 2014 to 2017



Source: APRs, Ofwat. Note: Thames Water includes TTT.

Industry-wide (weighted by RCV), there was a large decline in dividend cover from 2.6 in 2016 to 0.0 in 2017. This was largely driven by the drastic decline in post-tax profits among some WASCs (notably: Dŵr Cymru, Southern, Thames, and Yorkshire – see discussion in 4.1.1). These major exceptions aside, dividend covers were relatively stable across the industry between 2016 and 2017.

WASCs saw their dividend cover (weighted by RCV) fall from 2.4 to -0.2. WOCs’ dividend cover fell from 5.0 to 2.0, remaining well above 1.0, with much of this fall attributable to South East’s dividend cover falling from 10.3 to 2.3.

ANNEXES

A1 Data tables

This annex contains data underlying the charts presented in the main body of the report. All data are for 2016/17, unless otherwise stated.

A1.1 RORE

Table 8 RORE

	Base case RORE	Expenditure	Finance	ODIs	Total
Anglian	5.60%	1.37%	-0.32%	0.27%	6.92%
Dŵr Cymru	5.60%	0.20%	-0.80%	0.10%	5.15%
Northumbrian	5.50%	2.40%	-0.40%	0.40%	7.85%
Severn Trent	5.60%	1.50%	0.00%	1.05%	8.15%
South West	6.00%	2.85%	1.90%	0.25%	11.00%
Southern	5.65%	-0.05%	-0.52%	-0.04%	5.04%
Thames	5.60%	-1.19%	-0.30%	-0.27%	3.86%
United Utilities	5.59%	-0.06%	1.12%	0.13%	6.78%
Wessex	5.60%	1.11%	0.44%	0.53%	7.68%
Yorkshire	5.65%	0.28%	-2.27%	0.28%	3.94%
Affinity	6.19%	-1.28%	0.37%	-0.35%	4.94%
Bristol	5.80%	-0.06%	-0.55%	-0.60%	4.59%
Dee Valley	5.80%	3.50%	-0.60%	0.05%	8.80%
Portsmouth	5.88%	-0.62%	-1.01%	-0.27%	3.99%
South East	5.60%	1.31%	-1.09%	0.07%	5.89%
South Staffs	5.98%	1.46%	-1.07%	0.50%	6.87%
Sutton & East Surrey	5.80%	-0.79%	-0.99%	0.36%	4.38%

Source: Monitoring financial resilience, Ofwat, November 2017.

A1.2 Cost of debt

Table 9 Debt costs – allowed and actual

	Allowed cost of debt (real)	Actual cost of debt (real)
Anglian	2.6%	2.4%
Dŵr Cymru	2.6%	2.9%
Northumbrian	2.6%	2.3%
Severn Trent	2.6%	2.2%
South West	2.8%	0.2%
Southern	2.6%	2.6%
Thames	2.6%	2.2%
United Utilities	2.6%	1.8%
Wessex	2.6%	1.8%
Yorkshire	2.6%	4.1%
Affinity	2.8%	2.8%
Bristol	2.6%	2.6%
Dee Valley	2.6%	3.9%
Portsmouth	2.8%	3.1%
South East	2.6%	2.9%
South Staffs	2.6%	4.1%
Sutton & East Surrey	2.6%	2.6%

Source: APRs, Final Determinations, ECA calculations

A1.3 Gearing

Table 10 Gearing

	Actual gearing	Ofwat notional gearing
Anglian	79.1%	62.5%
Dŵr Cymru	56.4%	
Northumbrian	68.4%	
Severn Trent	60.7%	
South West	61.9%	
Southern	78.5%	
Thames	84.1%	
United Utilities	61.4%	
Wessex	64.7%	
Yorkshire	75.4%	
Affinity	78.0%	62.5%
Bristol	64.6%	
Dee Valley	70.2%	
Portsmouth	68.6%	
South East	78.4%	
South Staffs	69.4%	
Sutton & East Surrey	77.7%	

Source: APRs, ECA calculations

A1.4 Debt

A1.4.1 Debt composition

Table 11 Composition of debt

	Fixed rate debt	Floating rate debt	Index-linked debt
Anglian	35.8%	5.8%	58.4%
Dŵr Cymru	31.5%	0.0%	68.5%
Northumbrian	65.5%	4.8%	29.8%
Severn Trent	52.3%	22.7%	25.0%
South West	58.5%	19.9%	21.6%

	Fixed rate debt	Floating rate debt	Index-linked debt
Southern	28.1%	7.5%	64.5%
Thames	48.4%	0.7%	50.9%
United Utilities	28.8%	17.8%	53.4%
Wessex	47.2%	16.3%	36.5%
Yorkshire	45.3%	23.6%	31.1%
Affinity	65.4%	0.0%	34.6%
Bristol	38.7%	3.9%	57.4%
Dee Valley	11.6%	3.2%	85.2%
Portsmouth	0.3%	3.8%	95.9%
South East	17.1%	0.0%	82.9%
South Staffs	12.7 %	0.0%	87.3%
Sutton & East Surrey	0.1%	18.7%	81.2%

Source: APRs

A1.4.2 Debt maturity

Table 12 Debt maturity

	<1 yr	1 - 2 yr	2 - 5 yr	5 - 20 yr	> 20 yr
Anglian	4.1%	1.7%	14.9%	60.4%	18.9%
Dŵr Cymru	1.1%	1.2%	18.1%	62.1%	17.6%
Northumbrian	11.7%	1.3%	4.1%	56.7%	26.2%
Severn Trent	11.0%	0.0%	2.9%	63.2%	22.9%
South West	6.9%	2.1%	10.8%	33.9%	46.3%
Southern	0.0%	8.0%	20.9%	54.0%	17.1%
Thames	2.1%	1.9%	13.7%	39.9%	42.4%
United Utilities	5.0%	4.6%	28.8%	38.9%	22.8%
Wessex	0.3%	7.3%	18.9%	40.8%	32.8%
Yorkshire	7.9%	1.1%	10.2%	46.8%	33.9%
Affinity	0.0%	0.0%	0.0%	66.6%	33.4%
Bournemouth	0.8%	0.8%	2.5%	95.9%	0.0%
Bristol	6.4%	0.1%	15.9%	58.6%	18.9%
Dee Valley	14.9%	0.0%	0.0%	85.1%	0.0%
Portsmouth	3.8%	0.0%	0.0%	95.9%	0.3%
South East	0.0%	0.0%	29.5%	42.7%	27.8%

	<1 yr	1 - 2 yr	2 - 5 yr	5 - 20 yr	> 20 yr
South Staffs	0.0%	13.4%	0.0%	86.5%	0.0%
Sutton & East Surrey	1.1%	0.0%	16.5%	82.5%	0.0%

Source: APRs

A1.5 Dividends

Table 13 Dividends, 2015/16 and 2016/17

	Dividends (£m, 2015/16)	Dividends (£m, 2016/17)	Change in dividends (£m)
Anglian	145.2	121.9	-23.2
Dŵr Cymru	-	30.2	+30.2
Northumbrian	200.0	200.8	+0.8
Severn Trent	306.0	190.4	-115.6
South West	74.9	213.1	+138.2
Southern	79.6	121.5	+41.9
Thames	57.6	109.2	+51.7
United Utilities	180.4	224.3	+44.0
Wessex	84.0	94.0	+10.0
Yorkshire	-	45.4	+45.4
WASC sub-totals	1,127.6	1,351.0	+223.4
Affinity	8.8	43.0	+34.2
Bristol	-	5.5	+5.5
Dee Valley	1.4	1.9	+0.6
Portsmouth	1.4	1.5	+0.1
South East	4.1	9.8	+5.7
South Staffs	3.4	6.5	+3.1
Sutton & East Surrey	3.0	2.8	-0.2
WOC sub-totals	26.0	71.0	+45.0
Industry totals	1,153.6	1,153.6	268.4

Source: APRs. Dividends paid to external shareholders.