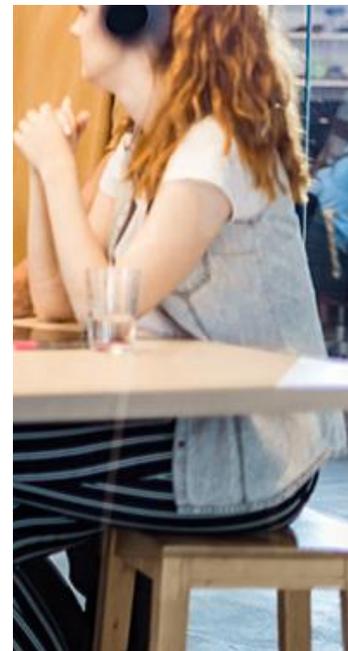


Retail services efficiency review 2022

Report for Ofwat

December 2022



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Background and objectives

The background

Ofwat are currently preparing for PR24, which will ultimately set price controls for water and sewerage companies for the period 2025 to 2030.

Ofwat have set out four ambitions and principles for how they will approach and design the price review:

- increasing focus on the long term
- delivering greater environmental and social value
- reflecting a clearer understanding of customers and communities
- driving improvements through efficiency and innovation

The price limits that are set by Ofwat are based on an efficient level of costs for each company. Historically, this has been done through benchmarking cost allowances against the most efficient companies in the sector.

Ofwat are also keen to ensure that efficiency improvement opportunities for example, through anticipated improvements in technology and investment, are also taken into account.

In developing its approach to residential retail at PR24, Ofwat want to explore external benchmarks for retail services.

Objectives

We have been asked to undertake a review as follows:

- **Benchmark** the water sector's performance to assess the extent to which cost and performance variances are within management control or due to external influences
- **Assess how an efficient level** of Retail Cost to Serve could be determined, providing an objective and sustainable perspective in how to challenge water companies
- Assess the different **management approaches** of companies within the sector
- Assess variance in performance since PwC last undertook a similar review in 2017 and seek to explain any movement

It is specifically not the intention of our work to advocate for any policy or regulatory outcome, but rather to help inform discussions with an evidence base drawn from objective analysis.

Approach

We have analysed water company performance taken from the Annual Performance Reports of each company, combined with additional data and information provided by those companies and econometric data provided by Ofwat. For comparison with other sectors, we have used statutory accounts and other published sector sources along with data from Contact Babel relating to customer service metrics. We have set out a more detailed approach in the Approach and Context section (from page 15).

Our review focuses only on retail costs associated with household bad debt, debt management, customer service and metering.



Executive Report



Sector trends at a glance

The previous 5 years has seen **Retail costs rise initially and then fall showing only a marginal increase over the five year period**. But not all cost components or companies have performed equally

Since 2017, Retail Cost to Serve* ("RcTS") was increasing through to 2020 but has since reduced; this has been driven, in particular, by growth in Customer Service and Doubtful Debt costs over this period (fig. 1.1).

An analysis of the key components of the RcTS between 2017 to 2020 shows that:

- Customer Service costs per household steadily rose by around <1% per annum**. Although a small drop of around 1% was seen in 2022
- Debt Management costs have varied over the years but have broadly reduced at a rate of around 1.5% p.a.**
- Doubtful Debt (Bad Debt) Costs has shown the greatest variance** over the period growing by around 52% in 2019-20 but then falling back to 2017 levels in 2021-22. **Average growth rate over the 5 years is less than 0.5% p.a.**
- Meter Reading costs per metered property shows an annual cost reduction of around 4% p.a.** likely due to increasing Smart meter penetration. The overall cost of meter reading per household has reduced by around 5% p.a.

By comparison, **energy companies' indirect costs follows a broadly similar pattern of increasing costs per household through to 2021**, although there was a slight dip in costs in 2020. However there is insufficient granularity in the data to explain why there was a slight fall in 2020

When analysed by company over the last 5 years (fig. 1.3), we observe that:

- Those **companies that had the highest cost bases in 2017 have experienced the greatest increase** in costs over the last 5 years, and conversely
- Companies that had the **most efficient Retail operations have on the whole been able to achieve further reductions** over this period

Note: The basis for our analysis is the nominal cost (Historic cost accounting).

* Definition of costs used with 'Retail Cost to Serve' included on page 16.

fig. 1.1 - Retail Cost to Serve by household over time*

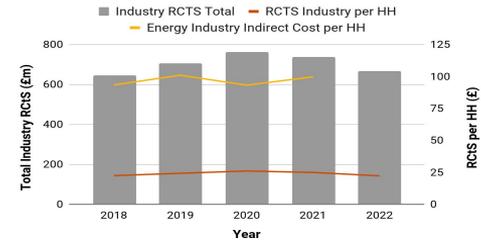


fig. 1.2 - Retail Cost to Serve by cost component over time

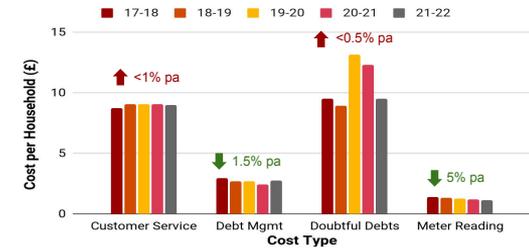


fig. 1.3 - Movement in Retail Costs between 2017 and 2022

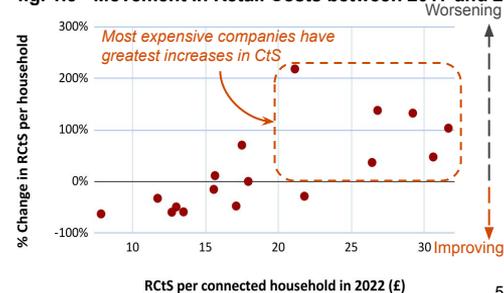


fig. 1.4 - Average Bad Debt as percentage of Revenue by Industry

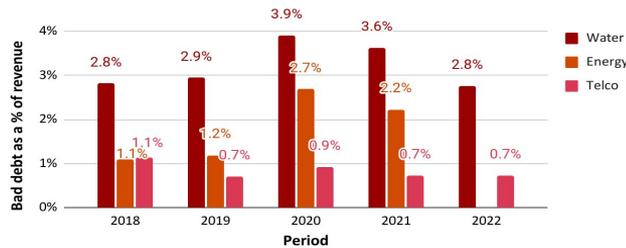


fig. 1.5 - Debt Management Cost over Time

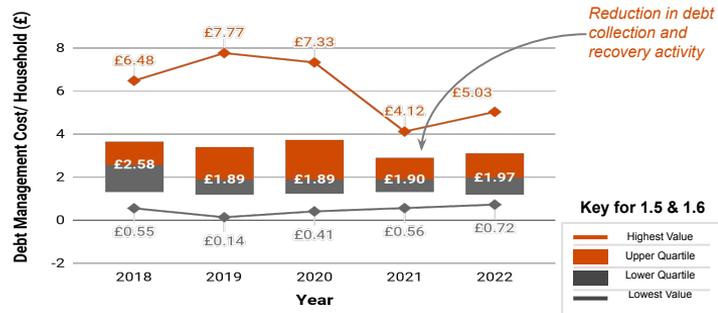
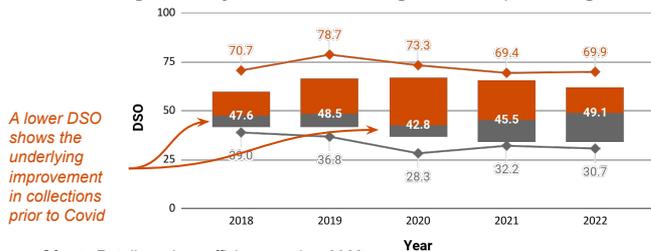


fig. 1.6 - Days sales outstanding over time (excluding outliers)



Impact of covid

Since the outbreak of Covid in the spring of 2020, **Covid has had significant positive and negative influences on the Retail Cost to Serve**

Covid hit water companies a matter of days before the financial year end of 31 March 2020. With the short window to publish Annual Performance Reports, water companies had to make quick decisions on the provisions they would need to make in their year end accounts to reflect the level uncertainty over the recoverability of customer debts caused by the pandemic.

Through our analysis we can see five ways that Covid impacted performance

1. Companies generally made **additional provisions for Bad Debt in the expectation of increased payment defaults** fig. 1.4. This increase was also experienced by energy companies and to a lesser extent Telcos
2. The **expected wave of payment defaults didn't materialise** and a number of companies were **able to unwind or repay some of these excess provisions** resulting in a lower Bad Debt charge in 2022
3. Government and water industry **action to safeguard customers resulted in a significant reduction in collection and recovery action**. With less money spent on Debt Collection Agencies and Litigation, the Debt Management cost base reduced considerably for the biggest spenders (fig. 1.5)
4. The **average Days Sales Outstanding (DSO) deteriorated during the Covid years** reflecting the changes in collections and recovery action and the impact of payment holidays taken by some customers (fig.1.6)
5. The move to **home working has helped accelerate the switch to digital channels** for Customer Service (fig. 1.8 on next page). While we can see the switch to these channels in operational KPIs, **we have not seen the efficiencies fully flow through to the RCtS**. Companies have not yet been able to realise the cost reductions that have been enabled through this operational efficiency gain

What else has changed since PwC's last report in 2017?

Before Covid, water company performance was heading in the right direction overall although there remain significant gaps between the best and worst performers

Increased use of digital channels

- Fig. 1.8 shows that companies were showing healthy year on year growth in the number of customers engaging through lower cost digital channels. Although the associated efficiency savings have yet to be seen in any significant way in the Retail Cost base (fig. 1.7)

Bad Debts and Debt Management costs were reducing

- Whilst Bad debts and Debt Management costs were on an improving trend before Covid, this improvement is underpinned by a general improvement in the collection of debt (fig. 1.6 on previous page). Companies have been using behavioural nudges, more targeted collection techniques and increasing the take up of Direct Debit which seems to be bearing fruit

Meter Reading costs were falling despite increasing meter penetration

- Meter reading - costs per metered property (fig. 1.9) shows year on year reduction through to 2021. There is insufficient data to be certain but the increasing smart meter penetration (now 53% of meters) is likely to be a key contributor to this trend

fig. 1.7 - Customer Service cost per connected household



fig. 1.8 - Online Self-Service Contacts (5 year view)

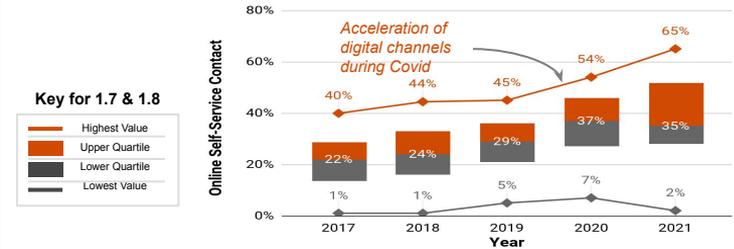
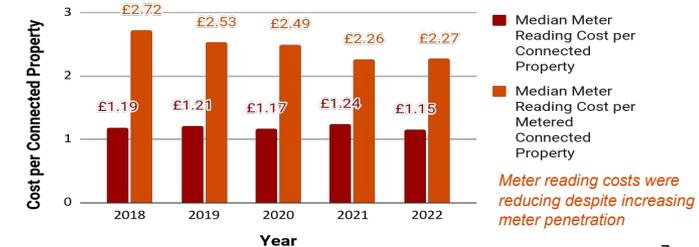


fig. 1.9 - Median Meter Reading costs/Connected properties



Cross sector benchmarking

We've looked at cross sector benchmarks to assess the relative efficiency of water companies. While these **benchmarks highlight that operational performance gaps exist** in the water sector, we are unable to draw a direct link between better operational performance and lower costs in those sectors due to limitations with the available data

Benchmarking the key high level metrics of DSO and Bad debt charge provide useful context for comparison. However, there are limitations with the cross sector data:

- There is no comparable data for overall RCtS - Energy and Telco's Indirect/Operating Costs include significant Sales and Marketing costs and there is no breakdown provided to be able to exclude these
- While we can see **opportunities to improve operational metrics** in line with other sectors, **it is not possible to directly relate these differences to cost to serve**

We have assessed a range of operational and financial benchmarks to consider the opportunity for water companies to:

- **Reduce Bad debts** (pages 28 to 34) and **Debt Management costs** (pages 25 to 27)
- **To reduce customer service costs** (page 35 to 46)

The water sector is unique which makes direct comparisons less meaningful. For example there are some structural differences that puts Telcos and Energy companies at an advantage:

- **Significant prepaid sales** reduce overall payment delays and bad debt
- They are **able to exercise significant leverage to secure payment** e.g. disconnection and the fitting of prepayment meters in Energy
- Can offer **meaningful discounts for Direct Debit** without concerns over the revenue cap
- They are able to exercise **more control over credit risk**, especially in Telcos
- While **water companies benefit from the greater affordability of water bills**, these are perceived to **rank below other debts** (for debtors) in terms of perceived importance to pay

Metric	What this shows?	Data Points	Water	Energy	Telco	Notes
Days Sales Outstanding (DSO)	Deteriorating performance of Energy Retailers means water companies are now quicker at collecting debts but remain slower than Telcos	DSO (2019)	49 days (42 to 66)	49*	21*	* Telco (c. 25%) and Energy (c. 15%) are both impacted positively by significant amounts of prepayment income which distorts DSO downwards
Bad debt charge as % of revenue	The water sector consistently writes off more debt than either the Energy Retailers or Telcos	Bad debt rate (2019)	2.9% (1.7 to 3.5%)	1.2%**	0.7%*	* More prepayment, credit controls and leverage (disconnections, especially in Telco) ** More leverage (prepayment meters in Energy)

Our analysis suggests that cross sector benchmarks are less meaningful for comparison of performance and costs in Water

Note: While DSO and Bad Debt data was available through to 2021, we have used 2019 data for Bad Debt as it was unencumbered by exceptional Covid provisions; While DSO also remains unaffected by Covid especially in sectors that have a later reporting date (e.g December year end). Water company values are the performance of the median water company and the range in parenthesis is the sector Q1 and Q3 values.

Recommendations: Where can Debt Management costs be challenged further?

The **cost of living crisis will severely test water companies' debt management approaches**. They'll need to balance treating customers fairly, providing appropriate affordability support and maintain cash flows

The key challenge when it comes to controlling Debt Management costs is the efficient use of resources. This is about building data led solutions that drive the delivery of key operational processes. This includes:

- **Identifying financially vulnerable customers early** and moving them out of standard collection journeys into **affordability engagement** ones
- **Targeting affordability campaigns** at customers who are most likely to benefit
- **Targeting Direct Debit campaigns** at customers who are most likely to use it
- **Finding former customers with residual debts in the current customer portfolio**
- **Tailoring collection communications** to align with preferred communication styles, channels and **behavioural nudges**
- **Pre-legal assessment** of cases to ensure that legal action is the most appropriate recovery path and that the company stands a reasonable chance of securing payment of the debt plus costs
- **Aligning billing and collections cycles to customer circumstances**. One example would be to align to term times in properties that are most likely to be occupied by University students

These tailored strategies will cost less to deliver because they are finely targeted meaning **less wasted resources, better recovery of legal costs and increased success rates** for the deployed campaigns.

Recommendations: Where can companies drive further efficiencies in Customer Services?

There are **clear opportunities for companies to reduce cost to serve while improving C-MeX** by realising savings enabled through increased use of digital channels

Analysis of the underlying metrics of customer service operational efficiency reveals significant performance variation between companies within the sector. Lower quartile performers need to improve operational excellence to close the gap on their peers.

When we look across the sector as a whole and **compare against comparative sectors** we can see that:

- **Channel Performance is improving** i.e. Companies are getting more customers on-line
- **Channel shift is not leading to reduced customer service costs:**
 - Average handling times have increased through the period and are higher than cross sector averages
 - Companies are not realising cost savings due to the efficiency gains made. This is likely because end to end processes remain inefficient or companies are not releasing capacity that is created
- **Attrition is significantly higher than comparative sectors and is likely causing a number of operational challenges leading to inefficiency**
 - High levels of attrition appear to have led to recent declines in service levels putting companies behind other sectors on metrics such average speed to answer and abandonment rates

These are the areas that need to be addressed to drive further efficiencies and in doing so the sector should look to the hallmarks of leading customer service organisations and consider how they **can achieve**:

- **Better delivery of fast, simple, and personalised customer journeys through automation** of end to end processes
- **Improved Accountability for end-to-end customer journeys within teams** rather than in functional silos
- Lean structures with **people focused on value adding tasks with repetitive activities being automated**
- “Democratisation” of **data which is accessible to people in real time underpinned by connected systems**



Efficiency assessment: What is a good level of Bad Debt in the sector?

10 companies achieved Bad Debt levels below 2.5% of revenues in at least 1 of the 4 years before Covid. We believe this would be a minimum aspirational level of performance, in positive economic conditions, subject to an adjustment for local deprivation levels. But, achieving this in the next 3 to 5 years may prove challenging for some

Indicative range
for WOC outliers*
in positive
economic
conditions

**0.8% to
1.2%**
of Revenue

Indicative range
for the rest of the
sector in positive
economic
conditions

**1.4% to
2.5%**
of Revenue

The cost of living crisis is expected to have a significant impact on bad debt related costs which will need to be considered when setting efficiency targets

Bad debt performance has been variable and we believe most companies have some capacity for improvement. In particular, those companies that are currently performing in the lower quartile who are writing off up to 65% more debt than the median performing company in the sector.

We've considered the performance of companies from a range of angles as set out in the Retail Efficiency Assessment section of this report (page 51 to 59). **Focusing on** the 4 years from 2015 to 2019, during positive economic conditions, we note:

- Sector benchmarking shows **water companies write off significantly more debt** than energy companies (page 29). **The average level in the sector was 2.9%, with a broad range from 0.6% to 4.3%**
- **There are 3 WOCs that consistently achieved the lowest levels of bad debt** in the sector, each averaging between 0.8% to 1.2% between 2016 and 2019, and they all **achieved 0.8% at least once** during this time. We have separated these from the wider population for considering efficiency in the sector
- **Of the remaining 14 water companies, 7 companies have demonstrated that they can achieve bad debt levels of less than 2.5%** (page 54) during at least 1 year, with the **best performer achieved a level of 1.4%** demonstrating the inherent difficulties these companies have in sustaining low bad debt levels in the sector
- While deprivation probably accounts for some of the Bad Debt performance variation in the sector, there is a **proportion that is likely to relate to the varying levels of efficiency** between companies (page 35)

Therefore, we would challenge the sector to aspire to achieve performance in the range 1.4% - 2.5% (or 0.8% - 1.2% for the 3 WOC outliers as these should aim to at least sustain current levels of performance).

Deprivation modeling suggests **bad debt levels could rise significantly over the coming 3 to 5 years** due to the cost of living crisis however it's too early to tell for how long and how deeply the economic impacts will be felt (appendix 17 to 19).

We understand that Ofwat use models to set a bad debt challenge for each company based on a range of variables such as local deprivation levels and migration. Therefore the ambition level for some companies could be different from the range we set out here. Moreover, Ofwat's models could take account of the size of customers' bills. This is a key driver of bad debt costs and a distinguisher between WOCs and WASCs. This could reduce the need to assess WOCs and WASCs bad debt costs separately.

Assessing an efficient Cost to Serve in the sector?

Assessing the efficiency of the RCtS in the sector is complex and there are many variables to be considered. Some of these are external factors, some are the result of operational trade-offs but other times it is down to different levels of operational efficiency and management approaches

While a certain degree of the cost and performance variance in the sector can be attributed to external factors such as deprivation, there is strong evidence that some of the differential is due to different management approaches and the levels of efficiency within the sector.

In considering what an efficient level could be, Ofwat will need to understand and challenge each of the following areas:

	Issues	Examples	Considerations for Ofwat
1	External variables	<ul style="list-style-type: none"> Deprivation: income deprivation Transience: movement in and out of a water company area Average bill size Level of Joint billing arrangements Company type (WOC/W&SC) and size 	<ul style="list-style-type: none"> Applying scaling factors and adjustments to the RCtS challenge based on the level of deprivation and transience in the region, average bill size, company type and making adjustments for those that benefit from lower levels of joint billing arrangements Seek a more detailed view of both measures to identify material differences in the levels of the most deprived households in a region
2	Regional specific variables	<ul style="list-style-type: none"> Welsh Landlord regulations 	<ul style="list-style-type: none"> The extent to which these regulations offer Welsh companies benefit through improved bad debt performance
3	Relevance of comparison from other sectors	<ul style="list-style-type: none"> Less control over new customer onboarding and data capture compared to Telcos Less leverage than Energy & Telcos to encourage prompt payment Less leverage for encouraging Direct Debit Perceived lower priority of water bills over other household bills 	<ul style="list-style-type: none"> Cross sector benchmarks should be used only as a sense check and point of reference when it comes to debt management and bad debt comparisons Customer Service performance benchmarking is highly relevant and should be used to challenge efficiency of delivery
4	Management decisions (trade-offs)	<ul style="list-style-type: none"> Trade-offs between Capital and Operating expenses The degree of revenue sacrifice to offset debt management costs Companies have not realised the cost efficiencies from switching customers to digital channels Companies are using legal recovery as a blunt collection tool and incurring significant unrecoverable legal expenses 	<ul style="list-style-type: none"> Assess the degree by which companies are sacrificing revenue through "self funded schemes" in the absence of sufficient cross subsidy Establish a sector wide operational performance dashboard to track and compare operational performance metrics and create a competitive edge

The future looks uncertain

The current **cost of living crisis is likely to put** pressure on water company efficiency. The economic outlook over the longer term is uncertain and it is **difficult to predict how long this pressure will be felt**

Whilst clear opportunities exist to improve the efficiency of retail operations, the sector faces into headwinds resulting from the current cost of living crisis. In the short term, we would anticipate trends as follows:

- Staff attrition levels are already high and **water companies will be under pressure to increase wages and working conditions** to improve retention
- **Wages across the economy are expected to grow** due to the current inflationary pressures although it is **unlikely that this growth will outstrip inflation**. The Bank of England recently predicted a **fall in real incomes of 3.7% across 2022 and 2023**
- **Deprivation levels are likely to deteriorate** and the degree of **financial inequality in the economy may widen***

We can therefore expect to see tangible cost pressures for water companies

- **Customer service costs are likely to rise**, due the wage increases
- **Debt Management costs are likely to increase** as there will likely be more missed payments
- **Bad debt costs will rise** due to increased levels of default
- **C-MeX could also suffer** if water companies are not able to stem the tide of attrition and retain a sufficient level of experience and expertise in their teams

However, it is hard to predict how long the impact of these challenges may be felt, and the impact on retail efficiency for companies. For example:

- Will there be further government **interventions that soften the financial impact of soaring Energy costs** on households and reduces pressure on bad debt?
- Will **rising unemployment rates reduce pressure on staff attrition and salary inflation?**
- To what extent **will potential rises in bad debts be covered by increases in provisions** made in the current and next financial year?
- To what extent will companies are able to **offset any adverse effects with improvements in efficiency?**

This uncertain future is likely to have a material impact in the ranges for Retail Cost to Serve and Bad Debts mentioned in the earlier pages. We anticipate that Ofwat will take this into account when it sets the challenges for the water companies in PR24

Note*: See for example, the following IFS article <https://ifs.org.uk/articles/who-most-affected-rising-mortgage-interest-rates>

“

Detailed Report



Approach & context

What costs have we assessed?

Our analysis focuses on the 4 main areas that make up the majority of a company's retail operating expenses (OpEx). For this report, we define this as Retail Cost to Serve (Appendix 1)

Our review has focused on the four largest components (fig. 2.1), including:

- Debt Management activities (e.g. debt collection through internal processes or agencies, legal action)
- Customer Service activities including billing (e.g. sending invoices/payment requests to customers, handling disputes on water bills, general account handling and complaints)
- The Bad Debt charge which represents the amount of receivables the company writes off in a financial year as it does not expect to be able to recover them
- Metering activities including in person Meter Reading visits (for dumb meters), drive-by AMR Meter Reading, and more sophisticated AMI Meter Reading that can be done remotely

In this report we seek to examine companies' performance and management approaches to explore the extent to which this might be possible.

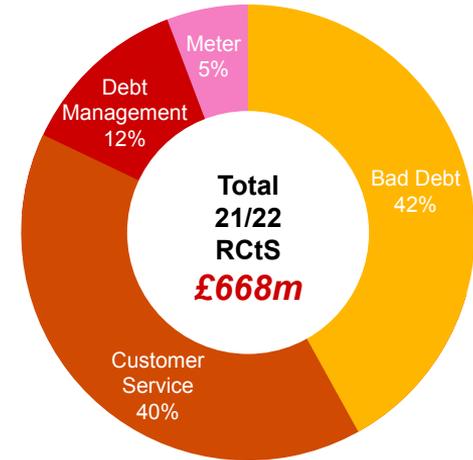


fig. 2.1 - Breakdown of Retail Cost to Serve

Companies need to balance managing costs across all areas of retail cost to serve. However, notably, Debt Management related costs (including the Bad Debt charge) accounts for 55% of the Retail CtS



Our approach

As part of this work, we've utilised several sources of data to provide a wide ranging view on the current cost to serve and understand how it compared to similar industries

APR Analysis

Each water company publishes an Annual Performance Report (APR) which sets out a range of Financial and performance metrics for the retail and wholesale components of their businesses. We have analysed a number of the key metrics regarding the Retail Cost to Serve (RCtS) and some associated performance metrics.

Company quantitative and qualitative questionnaires

Ofwat issued a 3 part information and data request to all 17 water companies covering more operational metrics and a qualitative questionnaire to enable us to understand some of the different management approaches adopted across the sector.

The qualitative questions were included to provide an understanding of some of the challenges faced by the water companies, the actions they have been taking and plan to take in the future to address cost to serve challenges.

Cross sector benchmarking

We've gathered data from a mix of published and proprietary sources from similar sectors such as Telecoms (TMT), the Public Sector, and Utilities in order to provide a cross sector comparison of certain Customer Service and Debt Management metrics.

Deprivation and Bad Debt-related costs

Ofwat provided us with data on deprivation mapped to the water companies' regions. We analysed the identified deprivation proxies from 2017 to 2021 by noting which companies operate in deprived areas and whether this has changed. We then identified whether the Covid years (March 2020 to mid-2021) had an impact on the trend and thus are outliers.

Then we calculate correlation coefficients between Bad Debt costs and the deprivation proxies. Finally, we provide some scenarios, taking into account how the current economic situation might play out to impact the deprivation variables and the efficient level of Bad Debt. We use Ofwat's models at PR19 to assess the impact on Bad Debt.

All our analysis is based on nominal values (Historic Cost accounting). We have not adjusted historical numbers to account for inflation

Data assumptions & limitations

Through undertaking this analysis we have had to work with imperfect data sets. We have made certain assumptions and we note the following limitations

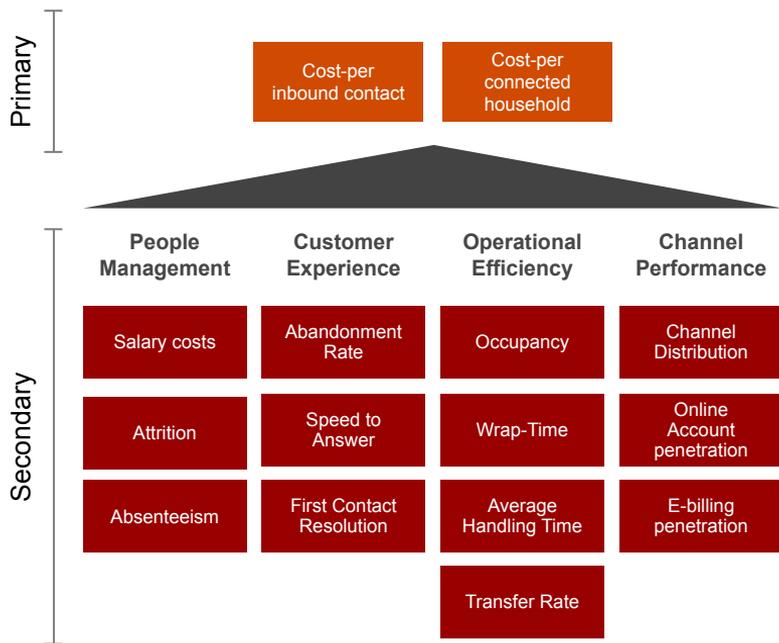
- The APR and questionnaire data used is not taken from audited statutory accounts, but per Ofwat's requirements should be able to be reconciled to a company's audited financial statements, we have not performed this reconciliation
- There were varying levels of completeness in the data requests and so we have been unable to calculate some metrics where there was not enough data (either by company or by year)
- There is a small date misalignment of annual data when comparing water company reports with the statutory accounts for Energy and Telcos and for the Economics data. All statutory data is taken from the individual company's year end date, whilst the Economics data runs from January to December of any stated calendar year
- Some data sources (e.g. IMD) are not available every year. In some cases we have used data extrapolated by Ofwat to fill in the gaps
- Given the ever changing situation, it might be challenging to forecast the change in economic variables by simply relying on historical trends. The global pandemic further complicates this
- The IMD is calculated differently for Wales, and so we have used Ofwat's methodology for aligning the Welsh IMD with that for England
- There is no vacant dwellings data available for Welsh Local Authorities. Our analysis on voids vs vacant dwellings covers only the English water companies
- Companies will make day to day trade-offs to reach what they perceive to be the most efficient use of their available resources and so it is unclear if variations relate to inefficiency in delivery or deliberate decisions of companies
- The external data sourced for deprivation has required us to build in certain assumptions to accommodate limitations
- Comparable sector data is very limited. Our analysis (beyond the Contact Babel data) is therefore based on statutory account data and limited, summary level data, for energy companies for Indirect Costs. This data point includes costs for sale and marketing activities as well as the RCTs components reported by water companies



Customer Service Efficiency measures

Cost efficiency analysis has focused on customer enquiry and complaint handling (network and non-network)

fig. 2.2 - Customer Service analysis undertaken



To assess retail Customer Service cost efficiency we have primarily used the APR Retail Customer Service Cost data. In order to draw meaningful comparisons across the sector, we have assessed on a 'per inbound contact' and 'per connected household' basis, with the latter being the better measure of overall cost efficiency given that retail Customer Service costs incorporate cost types that are not related to inbound customer contact demand.

At a secondary level of analysis, we have assessed company performance against the quantitative elements that drive Customer Service cost efficiency, people management, customer experience (service levels), operational efficiency and channel distribution. To the left is a summary of the supporting metrics that have been analysed in detail to provide a view of the relative cost efficiency of Customer Service within the water sector.

Data was received from the water companies against these metrics for the past five years and this data was used as the source of analysis.

The economic context

Bad Debt cost drivers in England and Wales have followed a steady trend since 2015, while the Covid years might be viewed as outlying for some drivers

Deprivation (fig. 2.3)

Analysis of the Index of Multiple Deprivation (IMD) shows that from 2015 to 2019, there was a clear reduction in Income Deprivation in all regions of between 9% and 13% meaning that, on average, people were better off. As this data is based on surveys conducted every 4-5 years, we do not have data on company-level deprivation for the Covid years. ONS data suggest that unemployment and people claiming unemployment benefits increased in 2020, but has been coming down since end of lockdown in 2021.

Households with default (fig. 2.4)

There was a decrease in the percentage of households with a default registered against them from 22.7% in 2015 to 21.0% in 2019. This improving trend accelerated, potentially due to the governments Covid support schemes, between 2019 to 2020. On average over the 5 years since 2015, companies saw the percentage of households with default fall by 15%, and by 8% if we exclude the final year (2020). As the proportion of households with default captures customers struggling to pay bills, it is reasonable to assume that as this number decreased so did the amount of customers who would default on their water bills. This would result in water companies experiencing a reduction in their debt related costs (including the Bad Debt Charge) than they have in previous years.

Migration (fig. 2.5)

Prior to Covid, migration (the movement of people between regions) was steadily increasing across all regions. However, in 2020 migration dropped and has remained stable during the following years. This trend is probably due to the impact of covid lockdowns as well as national and international restrictions on travel. This could be reflected in companies experiencing lower demand in the contact centre and home moves teams.

fig. 2.3 - Income deprivation

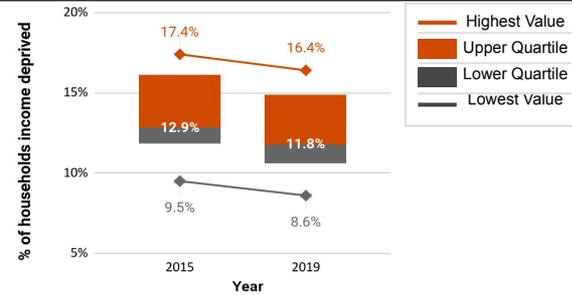


fig. 2.4 - Household defaults*

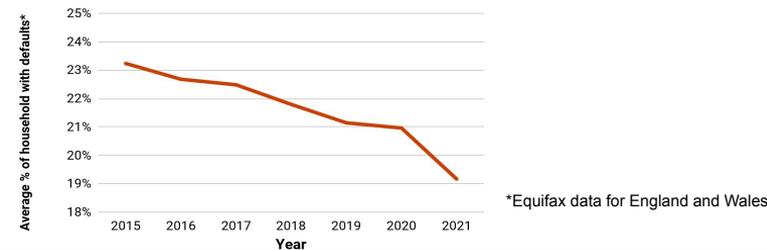


fig. 2.5 - Migration

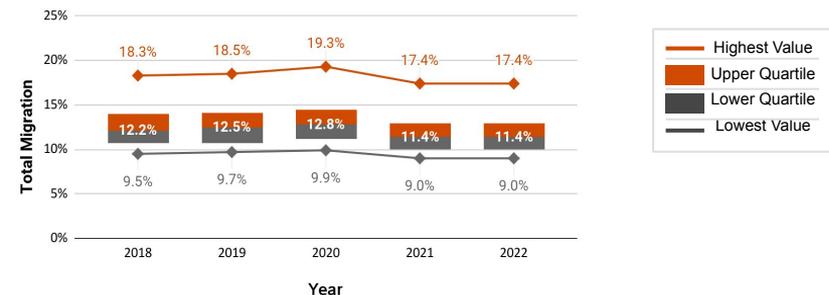


fig. 2.6 - GDP Growth projections

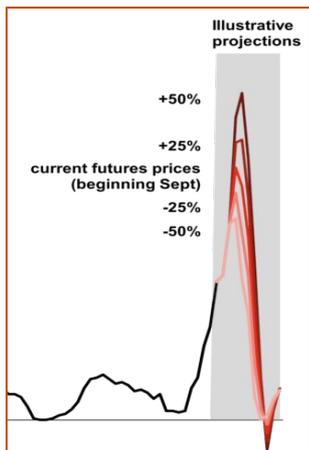
Annual average real UK GDP growth	2022	2023	2024
Mild winter scenario	3.6%	0.2%	0.6%
Harsh winter scenario	3.1%	-1.3%	-0.3%

Source: PwC analysis

fig. 2.7 - Annual CPI inflation, illustrative projections based on changes to Energy futures prices



Source: UK Economic Outlook
September 2022, PwC
<https://www.pwc.co.uk/economic-services/ukeo/ukeo-septemb er-2022.pdf>



The economic context (continued)

We can expect a reversal in the falling deprivation trend due to the coming cost of living crisis which is likely to put a strain on household finances

Covid measures have ended

Government legislation and the water sector's decision to largely cease late stage debt recovery action during Covid resulted in less stress on Debt Management costs and, to a certain extent, demand on the contact centre. In contrast however, water companies saw a significant increase in demand for Affordability support which provided a counter balancing cost pressure to the contact centre in 2019/20.

Going forward

PwC's UK Economic Outlook (fig. 2.6) model predicts the UK will enter a recession as early as this year. This is largely due to surges in inflation as the cost of living crisis impacts all demographic groups (fig. 2.7); our scenario analysis suggests even with government intervention to freeze household Energy bills, inflation could peak between 10% to 13%.

The data currently available on deprivation and other Bad Debt indicators does not capture the unfolding Energy and cost of living crisis. However, we would expect these challenges, coupled with a likely recession increasing unemployment rates, to have an impact on household finances and therefore deprivation and ability to pay during the period 2022-2025. In this report, we provide some scenario testing on how large changes in deprivation might impact Bad Debt (Appendix 17 to 19).

Moreover, it is likely that the economic downturn will not have a proportionate impact on all water companies (Appendix 19). Instead, we expect that the customers in more deprived areas will feel more strongly the impact of a recession on their finances, as they may have less cushion to fall on. Customers who become unable to pay their water bill in a recession are "marginal customers". "Marginal customers" are customers who in normal times, are capable of managing their bills, but may struggle in a downturn.

Note: This work has been completed prior to the announcement of the mini budget by the Chancellor on 23/09/2022 and so this has not been reflected in the analysis carried out.

Overview of benchmarking

How does Water compare to similar sectors?

Similarities with other sectors makes comparing customer service highly relevant, although care in interpretation is still necessary. However, differing legal and regulatory regimes make comparisons of Debt Management measures less meaningful

For this report, we've undertaken cross sector benchmarking to provide some context and comparison with these other sectors. These benchmarks are discussed in more detail on the following pages but the headline points are summarised here:

fig. 3.1 - Summary sector benchmarks

Metric	Data Points	Water	Energy	Telco	What this shows?	Notes
Days Sales Outstanding	DSO (2019)	49 days (42 to 66)	49 days*	21 days*	Some water companies lag significantly behind the average energy company	* Telco and Energy are both subject to significant amounts of prepayment income
Days of unbilled debt	Unbilled Debtor Days (2021)	85 days (73 to 89)	39 days*	9 days**	Water companies are far slower at billing compared to Energy and Telcos	* high values encourage more frequent billing in Energy ** Significant advanced billing in Telcos
Bad debt charge as % of revenue	Bad debt rate (2019)	2.9% (1.7 to 3.5)	1.2%*	0.7%**	Water sector consistently writes off more debt than in either Energy or Telcos	* More leverage (prepayment meters) in Energy ** More prepayment, credit controls & leverage (in Telco)
Call transfer rate	Call transfer rate (2021)	7% (3 to 11%)	10%*	15%	Water agents are tend to transfer fewer customer calls to other agents or departments than in Energy or Telcos	* Data is for all utilities as no data is available for just Energy
Average Handling Times (AHT)	Average handling time (2021)	577 seconds (484 to 702)	390 - 521 seconds	Data not available	Water calls last longer compared to Power & Utilities companies and a broader cross sector average	AHT is a product of call complexity & efficiency. It can't be inferred that because water companies have a higher AHT that they are less efficient
Staff Absence & Attrition	Absence rate Attrition rate (2021)	4.5% (3 to 6%) 31% (23 to 35%)	9% 10%	10% 18%	Water sector has the lowest levels of absence across the sector but also has some of the highest levels of attrition	
Average speed to answer	Average speed to answer (2021)	114 seconds (54 to 216)	150 seconds	25 seconds	The worst water companies are taking longer to answer calls than Energy. While none match Telco performance	
Abandonment rate	Abandonment rate (2021)	8% (4 to 12%)	6%	4%	Abandonment rate is generally the highest from the selected industries. The worst in Water are a long way off	
First contact resolution	First contact resolution (2021)	79% (59 to 83%)	76%	78%	Generally first contact resolution is the best among selected industries, although some in Water fall short	
Occupancy rate	Occupancy rate (2021)	86% (71 to 89%)	82%	80%	Occupancy levels are broadly better than in other sectors but the worst performers are off the pace	Quality and quantity of data return was lowest for these two metrics. Conclusions should be drawn with caution

Note: Water data is the median company performance with the data range in parenthesis the Q1 to Q3 performance. Other Sector references are the median company performance.

Customer Service Benchmarking Considerations

It is important to consider a range of measures when assessing the effectiveness and efficiency of Customer Service operations

Cross-sector comparison

In order to draw cross-sector benchmarking comparisons we've used data from Contact Babel "The UK Contact Centre HR & Operational Benchmarking Report - 11th edition, 2022" and "The UK Contact Centre Decision-Makers' Guide 2022 - 19th edition", as well as APQC.

To draw meaningful comparison across sectors, it is important to consider the various qualitative factors that influence cost efficiency (see fig. 3.3). Consequently, we have chosen the sectors that we feel are the closest match to the water sector. This includes:

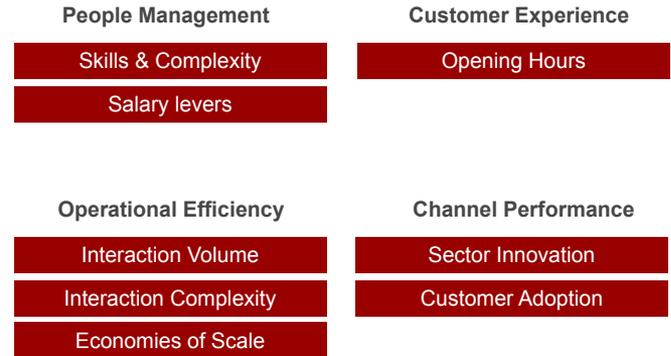
- Broader Utilities industry
- Public Sector
- Technology, Media and Telecom

Inter-sector comparison

Our analysis has also considered the correlation between retail Customer Service costs and migration and deprivation proxies to understand whether greater levels of transience and lower levels of economic prosperity lead to higher Customer Service costs.

Our analysis has not taken into account regional labour market variations and the influence this has on staff salaries.

fig. 3.3 - Qualitative factors that influence cost efficiency



Debt Management

Debt Management Cost

Efficient debt management is delivered through data led approaches that minimise unrecoverable costs and maximises efficiency. Some companies have a way to go as evidenced by the sharp drop in costs when recovery action was suspended

Key observations

- There was a 27% drop in the average Debt Management cost from 2018 to 2019, where it has remained largely stable until 2021. This is consistent with our experience that companies were becoming more efficient with debt management at this time. The cost reduction seen in 2021 is indicative of the curtailment of debt recovery actions a result of Covid
- Debt management costs tend to be significantly influenced by different management approaches and operational efficiency. The most efficient companies across this and similar sectors are maximising the use of Direct Debit and electronic communications to reduce collections headcount and postage costs; they're also using data to ensure legal action is only used where there's a realistic chance of recovering the debt plus legal costs; and that DCA costs are optimised. We would point to the narrowing of the gap between the highest cost companies and Upper Quartile (and to the average cost) as being indicative of the relative inefficiency of some companies in the recovery activities that were curtailed for all in 2021
- When looking at a company by company level, the least efficient companies were spending on average more than four times the amount per household on Debt Management activities than the most efficient companies prior to Covid
- While many companies have shown a reduction in Debt Management costs over the years since the first Covid lockdown other seem to be spending more despite the easing of debt recovery action during this time
- There is a clear correlation between debt management costs and average bill size; probably because these bills are more affordable for customers. As a result companies with the lowest average bill value have the lowest debt management costs (appendix 5)
- We have not been able to identify comparable data points for other sectors where reporting requirements are less prescriptive

fig. 4.1 - Debt Management Cost over Time



Economic Considerations

The correlation of Debt Management costs to variables such as IMD, % of households in default and Council Tax pay rates has indicated a weak positive (and in the case of Council Tax, negative) correlation, meaning that when these variables change, we would expect to see small movements in the average Debt Management cost in the same direction (or opposite for Council Tax).

What does this mean?

- There was a large drop in Debt Management costs per household during the first full year of Covid-19, which is likely due to the reduction in action taken by companies in line with the government and sector policy of pausing legal enforcement on debtors
- The increase in average costs in 2022 is then likely the result of resuming debt collection activities after the government ended its pause on such actions being taken
- The lack of movement for some companies is a possible indicator that either:
 - Debt collection strategies pre-Covid made minimal use of more costly legal enforcement, or
 - They used legal enforcement but were highly successful at recovering the costs from debtors

Management approaches: Debt Management

The variance in cost is mainly due to efficiency. We would encourage companies to trust that good debt management practices may result in some short term pain but will ultimately deliver in terms of efficiency, effectiveness and C-MeX

The approach to Debt Management across water companies is often a trade-off between the investment in Debt Management activities, the effectiveness of the activity and the impact of activities on customer satisfaction as measured by C-MeX, which companies will need to balance. Based on our experience and the result gathered from Ofwat's qualitative questionnaire, we would make the following observations regarding the different management approaches:

- Some companies have invested heavily in the area of Affordability. This investment has included larger dedicated teams for managing schemes and actively encouraging take up of the schemes; Use of the 3rd parties to undertake assessments and ensure objectivity in the assessment process; while others have invested in self funded schemes to maximise the support they can provide. These costs are not generally Debt Management costs but they do have the effect of reducing Debt Management costs and Bad Debts. This is discussed in more detail on page 45 (Customer Affordability)
- There is a wide variance in the penetration of direct debit, with the best performers converting over 74% of customers to Direct Debit while the laggards are achieving penetration in the low 60% area. This along with the fact that some legacy payment methods such as payment cards and Standing Orders are still used in a small number of companies shows that there is opportunity to extend the use of Direct Debit further to encourage more on-time payments and as a result reduce the exposure to Bad Debt and lower Debt Management costs
- A theme emerging from the qualitative response to Ofwat's information request is that there is a need to be more data led when informing collection and recovery strategies. Such an approach will not only drive better outcomes for customers but should also reduce Debt Management costs and ultimately Bad Debt



Bad Debt

Sector comparison: Bad Debt & DSO

Comparisons with other sectors provides context. What is more important than the number comparison is any difference in trend; Telcos appear less impacted by Covid. Water companies should consider if there are learnings they can take from this

Key observations

- Bad Debt and Collections performance in each sector will be affected differently by economic pressures due to a range of factors as set out later in this report (see page 61 to 65). In short, while water companies benefit from having a lower, more affordable, bill value compared to Energy (in particular), both Energy and Telcos operate in legal and regulatory environments that may be more beneficial in the context of debt collection
- Water companies still have a higher bad debt charge than Energy and Telcos (see fig. 5.1). Whilst the absolute amount in the sector had been trending downwards up to 2018, this subsequently peaked at 3.9% in 2020. Energy companies also saw a peak in in 2020 but like Water, bad debts levels are starting to improve. Telcos saw a slight increase in 2020 but has remained consistently low over the period measured
- The bad debt rate for water companies remains higher than comparable sectors although the gap between the most comparable (Energy) appears to be narrowing (fig. 5.1).
- Water companies have maintained a comparatively stable DSO performance compared to Energy across the period. During this time, energy companies have seen deteriorations in DSO and since 2021 have seen the highest DSOs across the 3 sectors (fig. 5.2).
- Compared to other sectors, water companies have closed the DSO gap and are now getting paid more quickly than energy companies but are still lagging behind Telcos (fig.5.2). The relative improvement compared to Energy is likely due to the relative size of Water debts and the impact of Covid payment holidays on the less affordable Energy debts. While the comparison with Telcos probably reflects the skew towards prepayment.

fig. 5.1 - Average Bad Debt as percentage of Revenue by Industry

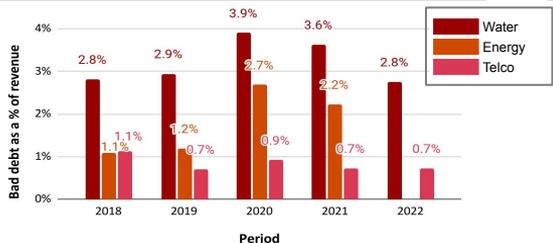
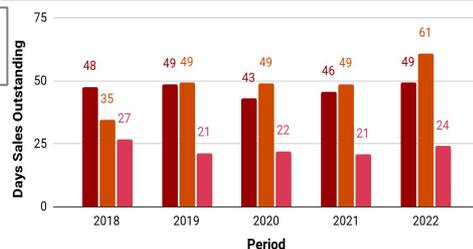


fig. 5.2 - Average Days Sales Outstanding by Industry



What does this mean?

- Water company collection rates have not been impacted as greatly by Covid as energy companies, who have also seen the greatest rise in bad debt costs
- This mismatch could either reflect a more prudent position being taken by water companies or that while energy companies may be slower to collect now but have greater success in recovering debt over the long term
- Energy and Telcos have certain advantages that mean that they are able to collect more debt from customers sooner and have a better eventual recovery rate, as measured by the amount of debt they write off (Bad Debt)
- Benchmarking of cross sector collections (DSO) and bad debt performance provides a useful comparison and context but does not amount to a realistic objective for water companies to aspire to

Note - Cross sector comparisons for DSO based on financial statements of 8 Energy & 9 Telcos cos. Bad Debt metric is based on data from 7 Energy & 6 Telcos due to the bad debt charge not being published by certain companies. The data across Energy & Telcos is limited from 2021 due to the different publishing schedules of each company. Water performance based on Household customers only, other sector's data includes non household. However in our 2017 report, we noted DSO performance in the water sector was broadly similar with or without non household debts and the associated revenue. In the absence of contradictory data for other sectors, it is reasonable to assume the same applies and the comparison is relevant

Bad Debt Charge over time

Companies with the highest bad debts are writing off up to 65% more than the median performers. These companies in particular will need to challenge their approaches against leading practice to identify opportunities for improvement

Key observations

- For this analysis we've used a smoothed dataset* provided by Ofwat which takes any element of Bad Debt that was subsequently released due to over provisioning and removes it from the graph (fig. 5.3). In appendix 2 we set out the actual Bad Debt rate as reported at the time and the 'Corrected' Bad Debt rate, which includes other specific Covid Bad Debt charges that were recorded elsewhere in the Regulated Accounts
- Average Bad Debt rates remained consistent at around 2.8% - 2.9% from 2016 to 2019. However, in 2020 there was a steep rise as companies made additional provisions in anticipation of a wave of Covid related Bad Debts
- Fig. 5.4 shows that water companies wrote off 81% (2020) to 97% (2019) of bad debts that they provide for suggesting they are reasonably successful at recovering this doubtful debt
- Ofwat's qualitative questionnaire identified that a number of companies made a specific provision for Covid that has since been unwound (reversed) while others have simply rolled forward the charge into their ongoing BAU Bad Debt calculations. This means that the residual impact of Covid on Bad Debt will be difficult to distinguish from the ongoing Cost of Living crisis impact for some companies
- Bad Debts currently cost the average water company £3.30 (nominal) for each household served, excluding the costs associated with chasing payments (Debt Management Costs)

fig. 5.3 - Bad Debt Charge over Revenue (Smoothed)

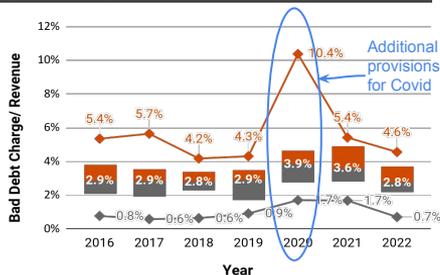
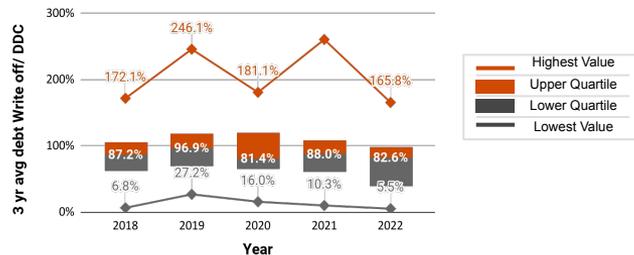


fig. 5.4 - 3 year average write off over yearly Bad Debt charge by company



What does this mean?

- Before Covid most companies were improving and the gap between best and worse was narrowing
- The expected wave of Covid related Bad Debt did not materialise for most companies and they've been able to return to pre Covid levels and release the excess provisions
- Yet, the difference between the best and worst performers remains wide and could suggest either varying levels of prudence in provisioning, or that efficiencies are available for the highest chargers

Note*: Companies were given the opportunity by Ofwat to adjust their bad debt data in 2022 to reflect any element of Bad Debt that was subsequently released.

Bad Debt correlation analysis

Our analysis shows there continues to be a correlation between the economic variables and Bad Debt-related Costs. However the correlation analysis for the Covid years is distorted

Key observations

- The level of deprivation in each water company region has had a significant impact on the level of Bad Debt for each company
- Based on a simple correlation coefficient and scatter plot analysis (Appendix 3), we find evidence for a relationship between the deprivation proxies and bad debt costs, in coefficients larger than 0. The relationship between the % household with defaults and costs, however, is not statistically significant
- We note that the correlation coefficient between Income deprivation part of the Index of Multiple Deprivation (% households income deprived) and Bad Debt-related costs is higher and statistically significant. However, we have to keep in mind that we only have two values for this variable - in 2015 and 2019, which is when the IMD was published, while the other years have been imputed
- Total migration correlation is negative and statistically significant for the entire period and the pre-covid years; we expect migration to be positively correlated with costs (due to more effort of retail team to collect bills from a transient population). This is likely due to the relationship being affected by another factor, such as deprivation
- Council tax collection rates are negatively correlated with Bad Debt costs, as expected. However, there is a large difference between the pre-covid and covid years. This is due to the suspension of council tax collection activities during lockdown
- We also note there was a strong correlation between the average bill size and the bad debt cost; smaller companies having fewer bad debts (appendix 5)

Note*: A debt is registered in default when a creditor reports to a Credit Reference Agency that the debtor has failed to fulfil its obligations to make payment for a period of more than 90 days from the date that payment was due. Most Financial Services companies and retail utilities contribute to these data sharing schemes each month creating a rich data source for creditors

fig. 5.5 - Bad Debt correlation analysis

Economic Variable	Retail Cost Variable (Unit cost)	Correlation all period	Correlation pre-covid	Correlation covid	Delta Covid v Pre-covid
% households with defaults (Equifax)	Bad Debt + Debt Management	0.19	0.20	0.22	0.01
Total migration	Bad Debt + Debt Management	-0.24	-0.24	-0.16	0.08
Income score (IMD)	Bad Debt + Debt Management	0.45	0.46	0.51	0.05
Council tax collection rate	Bad Debt + Debt Management	-0.36	-0.45	-0.26	0.19

Note: statistically significant correlations are in bold and italics
Bad Debt-related costs is defined as the sum of doubtful debts and Debt Management costs.

What does this mean?

- Companies operating in areas with higher levels of Income deprivation are likely to incur higher Debt Management costs
- Companies operating in areas with lower Council Tax collection rates are likely to incur higher Debt Management costs
- It is difficult to draw conclusions from the correlation between migration and debt-related costs, as the relationship is likely influenced by another factor, i.e. deprivation
- The Covid years had a material impact on the correlation coefficient between Debt Management costs plus Bad Debt and council tax collection rate. These years are outlying and might distort the analysis

Days Sales Outstanding

While performance has been improving the gap between the worst and median performers is significant and shows that some companies still have a way to go in delivering effective collections and recovery strategies tailored to customer needs

Key observations

- The average DSO has increased in the last 5 years despite a decrease in 2020. The worst performer has remained at approx 150% of the median. There has been a shift away from a compacted lower quartile in 2018-2020 to a more even split in 2021 and 2022, signalling a greater variance in responses (fig.5.6)
- Prior to Covid, most companies were improving their DSO positions meaning they were collecting their debts more quickly. Some have managed to continue this improving trend through the Covid years, taking advantage of higher levels of disposable income. This has happened despite a reduction in the level of recovery action being taken during this period
- The data relating to unresponsive debtors (those that have made no payments in the previous 12 months) has a number of gaps and is skewed in terms of data towards the most recent years. The analysis broadly shows that unresponsive debtors has tracked at around 3% of customers. There is no sector comparative data available for this metric (fig.5.7)

What does this mean?

- Water companies were getting better on the whole but some companies have room for improvement
- There has been insufficient focus on unresponsive debtors in previous years
- There are typically an estimated 900k customers nationally that go at least 12 months without making a payment (3% of 30 million households)

fig. 5.6 - Days sales outstanding over time (excluding outliers)

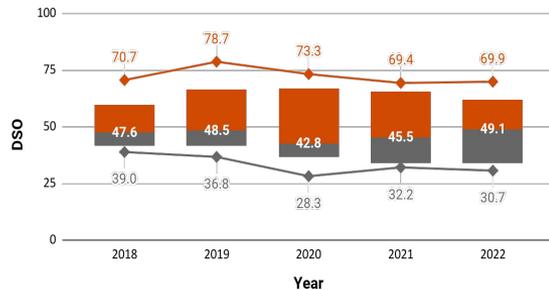


fig. 5.7 - Unresponsive debtors



Void Properties

Some companies need to do more to bring occupied voids into billing and implementing effective engagement strategies to secure payment

Key observations

- Void properties account for around 4.4% of connected properties and have remained broadly stable for 5 years (fig.5.8)
- From 2020 to 2021, the percentage of void properties compared to long term vacant dwellings has decreased to 535% from 691%. This means there were 5 times as many void properties as there are vacant dwellings across the sector (fig.5.9)
- This is not a perfect comparison as it doesn't necessarily follow that all long term vacant dwellings should be identified as voids or vice versa as the vacant dwellings data may be subject to certain anomalies. However, we judge that is a reasonable proxy to highlight where potential may exist to bill more properties
- However, identifying occupied voids and commencing billing is part of the challenge. Often such 'occupied voids' will prove to be some of the hardest properties to recover payment from
- Our analysis shows that analytical assessments make up the majority of void identification methods. While in-person visits are used by most companies, the number of these visits accounts for less than 10% of void investigation activities (fig.5.10)
- We note a positive correlation between the bad debts and void properties as a percentage of long term vacant dwellings
- We've not been able to identify comparable data points for other sectors where reporting requirements are less prescriptive

What does this mean?

- There is a hardcore of "occupied void" properties that water companies are unable to identify
- Some companies are better at identifying occupancy than others and the level effort put into void investigations is inconsistent
- Companies could be doing more to identify occupied voids and bring them into billing and as a result, potentially lower bills for the customer base
- Void identification incentives will need to be considered alongside the knowledge that any improvement here could result in increased Debt related costs which may offset the gains from lower bill values (see correlation between bill size and Bad Debt related costs appendix 5)

fig. 5.8 - Void properties over total connected properties

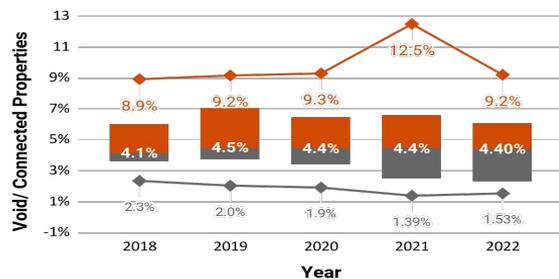
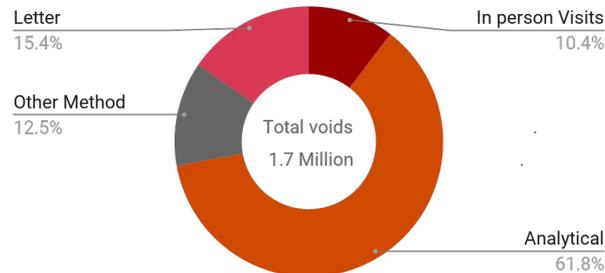


fig. 5.9 - Void properties as % of long term vacant dwellings



fig. 5.10 - Total industry void identification by type 2022



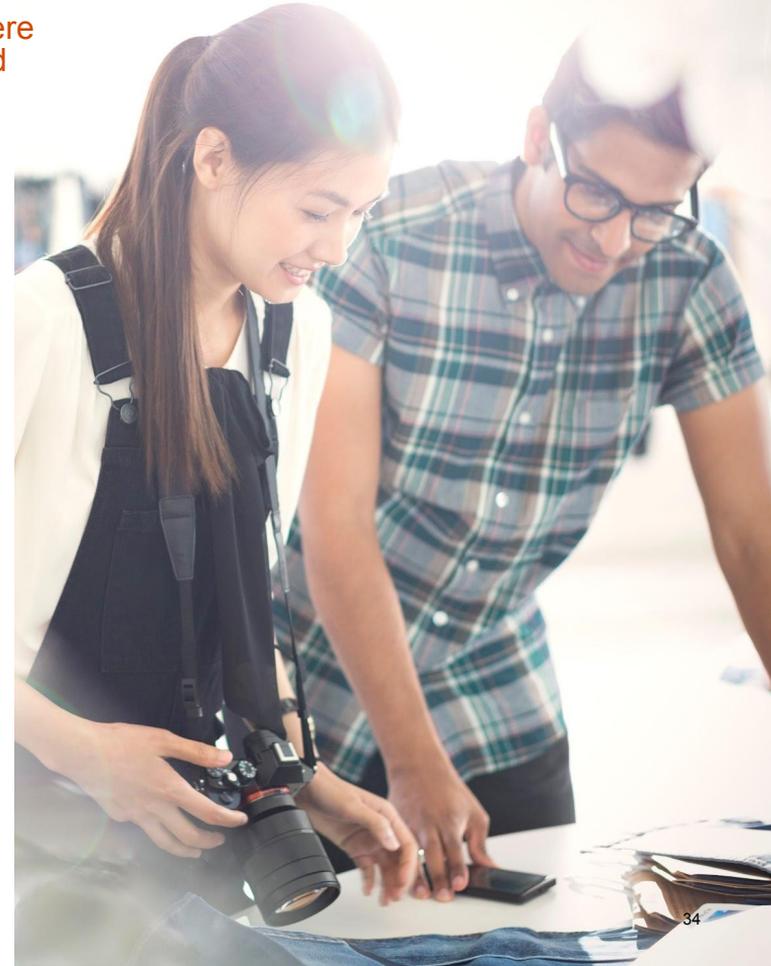
Management approaches: Bad Debt

On the whole, companies are getting better at managing bad debt but there is still more that can be done by some of the outliers to reduce bad debts and bring more void properties into productive billing (i.e. billing and getting paid)

Each water company has their own basis for calculating a bad debt provision. In general terms these are based on the likely recovery of debts based on historical collection performance.

Based on our experience and the results of Ofwat's qualitative questionnaire, we would make the following observations regarding the different management approaches:

- There was a variety of approaches by companies to provisioning for Covid, some greatly increased their charges whilst others show no significant no changes to the bad debt charge. It is likely that the cost of living crisis will again result in some companies making increases in their provisions as they expect customers will find it increasingly harder to pay for their bills
- DSO shows a general improvement in the collection performance of companies. While the increase in adoption of direct debits has played a part, we have seen different levels of maturity in collection strategies ranging from a broadly defined 'one size fits all' to approaches that are more tailored to different customer types
- The level of voids has remained constant throughout the five year period. However the comparison to Local Authority vacant dwellings suggests that there may be considerably more voids than there are vacant dwellings across the country. And the rate of variance is different by company. The level of investment in void detection is substantially different among companies with only 3 companies investing more than 50% of their void investigation budget on "in person visits". But the reality is that some properties that may be difficult to identify a named occupier for are likely also to be very difficult get payment from
- Our correlation analysis comparing Bad Debt to Debt Management Cost (Appendix 4) shows a weak correlation between the two, indicating that companies with high bad debts are spending more on debt management. The weak correlation suggests that there are some outliers to general pattern meaning that some companies are getting a better return (in bad debt terms) from their investment in debt management costs, indicating different strategies may be deployed
- In our experience, other comparable sectors don't appear to have the same issue with occupied void properties. Energy companies are far more likely to disconnect unoccupied properties, which will be fitted with a prepayment meter or be reconnected once a new occupier has been identified



Customer Services

Customer Service benchmarking summary

Leading performers are servicing a greater proportion of contacts through online channels and are demonstrating greater levels of operational efficiency as shown through measures such as average handling times, and are doing so whilst also performing against C-MeX

When we look across the sector as a whole and compare against comparative sectors we can see that across a number of the available metrics the sector is performing broadly in line with others. In terms of driving further efficiency we can note that:

Channel Performance is improving:

- Companies are getting more customers on-line

However, channel shift is not leading to reduced customer service costs:

- Average handling times have increased through the period and are higher than cross sector averages.
- Companies are not realising cost savings due to the efficiency gains made. This is likely because end to end processes remain inefficient or companies are not releasing capacity that is created

High levels of attrition are impacting service levels and customer experience:

- Attrition is significantly higher than comparative sectors and is likely causing a number of operational challenges causing inefficiency
- High levels of attrition appear to have led to recent declines in service levels putting companies behind other sectors on metrics such average speed to answer and abandonment rates

Cross-sector benchmarking is a helpful activity to understand the extent to which further improvement is possible but has limits. It should be noted that in a customer service context the qualitative factors of differing industry segments do impact comparability.

Our analysis indicates that the performance variation shown between companies within the sector, where evidently comparability is not an issue, offers greater scope to challenge companies to improve efficiency.

In 2021, the highest cost companies were £6.04 (77%) more expensive per connected property than the average while the lowest cost companies were £9.91 (249%) less than the average. Critically, underlying metrics of cost efficiency in customer service also show wide performance variation too.

Dimension	KPI	Water	Cross sector average	Public Sector	TMT	Utilities
People Management	Agent Absence	5%	8%**	5%**	10%**	9%**
	Agent Attrition	31%	15%**	12%**	18%**	10%**
Operational Efficiency	Call Transfer Rate	7%	10%**	5%**	15%**	10%**
	Average Handling Time (seconds)	577	363** - 367*	Not available		390*** - 521*
	Occupancy	86%	Not available		80%***	82%***
Customer Experience	Call Abandonment	8%	5%**	7%**	4%**	6%**
	Average Speed to Answer (seconds)	114	40**	60**	25**	150**
	First Contact Resolution	79%	78%**	72%**	78%**	76%**

*Call Centre Helper
**Contact Babel
***APQC

Customer Service cost efficiency trends

Companies have enabled efficiency savings through moving customers to online channels but have yet to realise the associated cost reductions

Key observations

- In order to assess cost efficiency in retail Customer Services, the cost of retail Customer Services per connected household (fig.6.1) was used as the primary measure with which to analyse performance across the sector
- This measure shows that cost efficiency has not improved over the past 5 years and that there is a significant level of performance variation within the sector. The median cost per connected household has increased by £0.42 (6%) since 2017. In 2021, Customer Service costs per household were £6.04 (77%) higher for customers of the worst performer compared to the average performance and £9.91 (249%) higher than customers of the best performer
- The cost per inbound contact has broadly tracked at an average of £9.24 to £10.00. While some companies are considerably more expensive or cheaper than this, it is unclear if this reflects inefficiency or simply a different profile of contact requiring different conversation (fig.6.2)
- The median online self-service contacts have increased from 22% to 35% over the past 5 years (fig.6.3). This increase in lower cost customer interactions are not resulting in any significant reduction in Customer Service Costs. This is discussed more on page 46
- Comparable data points across other sectors for customer service cost efficiency on a per household or per inbound interaction basis are not identifiable, primarily due to the inability to compare the retail customer service cost to serve category like for like with other sectors

What does this mean?

- There has been a significant shift to lower cost to serve online channels
- However, this has yet to result in any significant overall reduction in cost efficiency
- Retail Customer Service costs per inbound contact and cost per connected household have increased over the last five years despite the shift to self serve

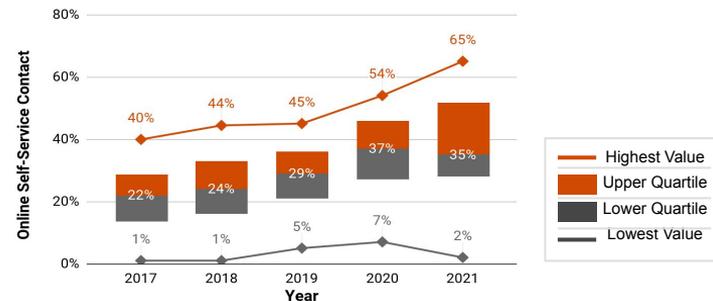
fig. 6.1 - Cust. Service Cost per Household* (5 year view)



fig. 6.2 - Cust. Service Cost per Inbound Contact (5 year view)



fig. 6.3 - Online Self-Service Contacts (5 year view)



Cost Efficiency vs Customer Experience

Current performance of companies show that a good customer experience can be delivered in a cost efficient manner

Key observations

- The analysis shows a weak negative correlation between retail Customer Service cost and the C-MeX score (fig.6.4) and a weak positive correlation for the correlation between C-Mex and cost per inbound contact (fig.6.5). There are some anomalies between the two sets of analyses, with some companies showing quite different levels of efficiency against the two metrics. This could be due to anomalies in the data capture and the fact that not all retail Customer Service costs are related to the servicing of inbound contact volume
- Overall, however, this analysis has shown that companies can increase their levels of cost efficiency without it being at the expense of the levels of customer experience that they deliver, as shown by the negative correlation coefficient on the cost per connected household vs C-Mex
- Lower cost to serve (digital) channels increasingly the channel preference of customers, though non digital channels remain important for certain segments and contact types. Customers, irrespective of sector, frequently cite the importance of 'getting the basics right' as a key factor in overall satisfaction levels

What does this mean?

- A highly efficient customer service team scores well on C-MeX. These companies are likely to have fewer hand-overs, more first time problem resolution and lower waiting times
- Highly efficient companies are also probably making best use of digital and online self-serve channels that many customers prefer

fig. 6.4 - Cost per connected household vs C-MeX score

CC
-0.26

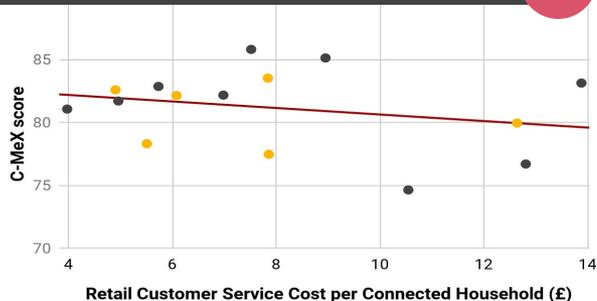
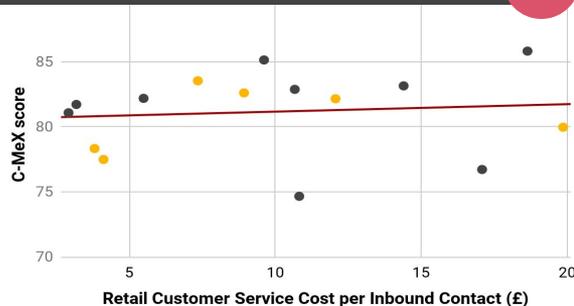


fig. 6.5 - Cost per contact vs C-MeX

CC
0.10



● Water only companies

● Water and sewerage companies

Customer service efficiency improvement opportunities

Achieving end-to-end process automation to realise the benefits of channel shift and a focus on handling times

Key observations

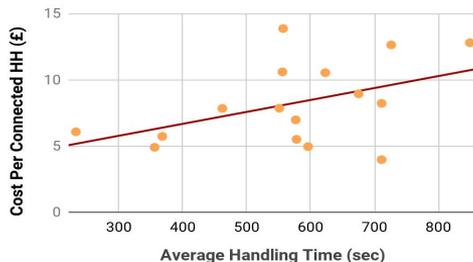
- Leading performers are servicing a greater proportion of contacts through online channels and are demonstrating greater levels of operational efficiency as shown through measures such as average handling times (fig. 6.6)
- Compared to other sectors, water companies have higher average handling times that power and utilities companies and the cross sector average reinforcing the suggestion that there may be inefficiencies (fig. 6.7)
- Given the strong correlation between online contact rates and inbound cost per contact (fig. 6.8) there are compelling reasons why water companies should continue with the strategy to get more customers to engage online. However, as we discuss on page 46, the challenge for water companies is how to ensure these efficiencies result in a reduction in customer service costs
- However, for the sector as a whole:
 - Although customer self-serve has increased (online-self serve contacts have increased from 22 to 35% - see appendix 12), this has not resulted in a decrease in customer service costs per connected household and implies the efficiency has not been realised
 - Average handling times have increased (possibly due to simpler tasks being automated) throughout the period (appendix 13) and companies are behind wider utilities sector benchmark averages, suggesting even the better performers in the sector lag behind
- Contact centres have increasingly adopted first contact resolution as a headline metric of performance over AHT. The measure better indicates the effectiveness of handling a customer contact. There was a poorer quality and quantity of data return against this metric from companies which meant it was not used as part of the analysis

What does this mean?

- Increasing digital channel penetration within the sector should help drive greater efficiency and customer satisfaction
- Companies need to also focus on internal interfaces and process automation in order to realise the business benefits of technology enabled transformation
- Further investigation is required to understand a) the reason for the increase in handling times over time and b) the causation for the discrepancy in performance with the wider utilities sector

fig. 6.6 - Average Handling Time vs Cost per connected household

CC
0.46



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fig. 6.7 - Average Handling Time - Industry Benchmark

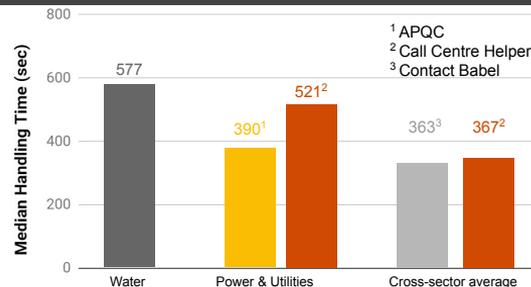
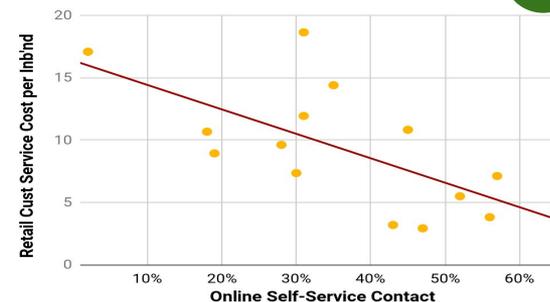


fig. 6.8 - Online Self-Service Contact vs Retail Customer Service cost per inbound contact

CC
-0.68



Customer service efficiency improvement opportunities

Addressing high attrition levels that have coincided with a decline in service level

Key observations

- Service levels as measured by call abandonment rates (fig. 6.9) and average speed to answer (fig. 6.10), have increased throughout the period, showing a sharp increase since 19/20 and 20/21 and this is likely to have been Covid related as the sector responded to the pandemic and remote working (see appendix 7)
- Service levels are also higher than comparative sectors, although overall measures of customer experience such as the UK Customer Satisfaction Index does show recent improvement across the sector and a favourable comparison to Energy
- Agent attrition is currently at its highest levels in the past 5 years, with a sharp uptick post pandemic (see appendix 10) and are significantly higher than comparative sectors (fig. 6.11)
- Spans of control are within expected ranges at 1:11 and therefore has no bearing on the efficiency of customer service
- The average customer service salary (Appendix 10) for the median paying water company in 2021 was £23,115. Additional data would be required to understand average salary by level in customer services, in order to compare against wider utilities benchmarks where average salary is £20.2k new agent, £22.8k for an experienced agent, £30.8k for a team leader and £48.4k for a manager level*

What does this mean?

- High attrition levels in the sector, post-Covid, have undoubtedly put upward pressure on costs and are impacting service levels
- The extent to which comparative salary levels are a driver of this will require further analysis based on available data points
- Companies should consider their wider employee experience and root causes of attritions, including offering alternative career pathways and focusing on the benefits derived from automation and self-serve that allow for a more strategically focused and value adding customer service agent role

fig. 6.9 - Abandonment Rate - Industry Benchmark*

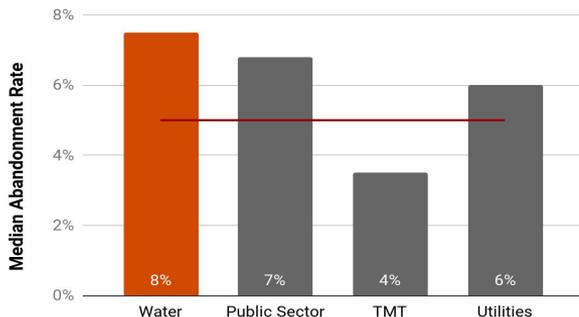


fig. 6.10 - Average Speed to Answer - Industry Benchmark*

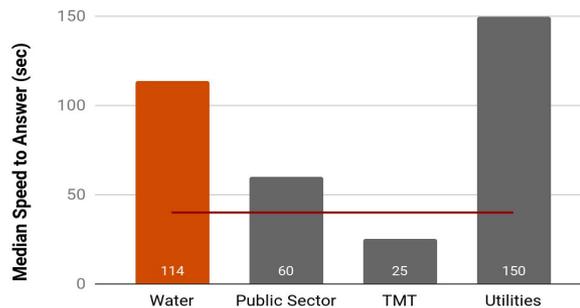
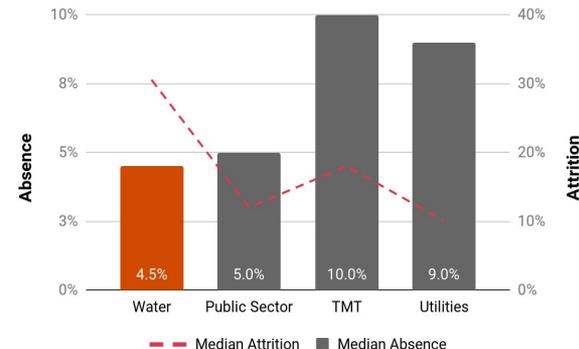


fig. 6.11 - Absence and Attrition - Industry Benchmarking*



*ContactBabel - "The UK Contact Centre HR & Operational Benchmarking Report - 11th edition, 2022"

Customer Service economic correlation

Regional variations in transience and deprivation do not appear to have a significant effect on the efficiency of Customer Service operations

Key observations

- Our analysis shows there is only a weak correlation between the cost of Customer Service and the level of migration in a region
- Similarly, the analysis also shows only a weak correlation between Deprivation levels and the cost of Customer Service
- We have also seen very little change in either Correlation scenario as a result of the Covid pandemic
- This would suggest that differing management approaches of the companies are a driver of the performance variation as opposed to variations in the customer base across water company areas

*N.B. Our analysis has not taken into account regional labour market variations on individual water company average salaries and the influence this has overall cost efficiency. External benchmarking data shows a regional variation of 17% between the highest and lowest salaries paid to new agents. However, analysis only shows weak correlation (0.12) between customer service costs per connected households and average contact centre salaries - suggesting that lower pay isn't a strong driver of increased efficiency in the water sector.**

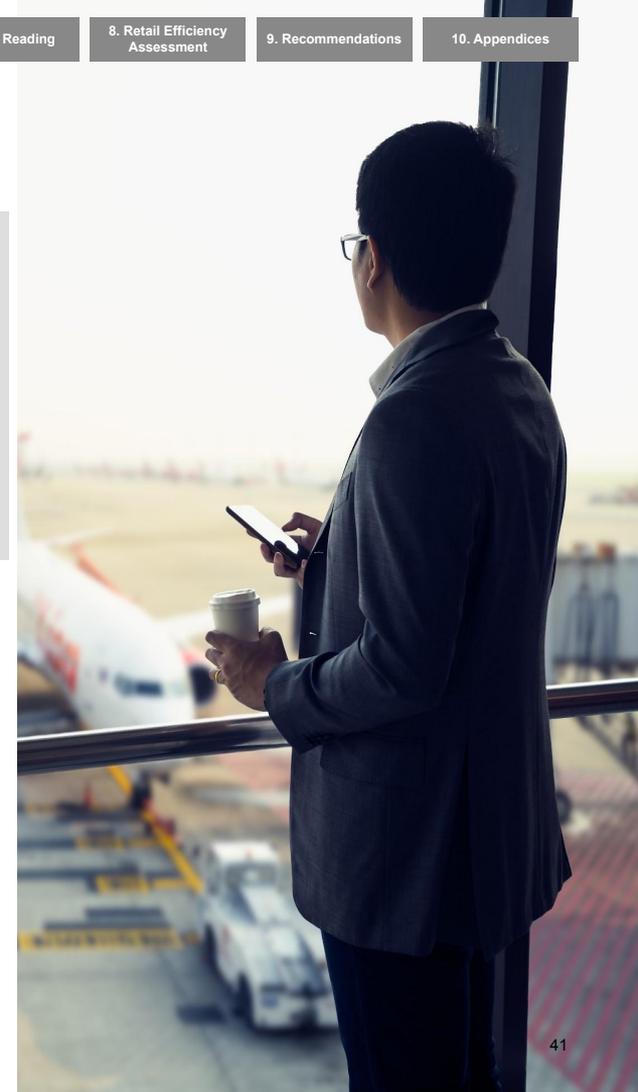
fig. 6.12 - Customer Service economic correlation

Economic Variable	Retail Cost Variable (Unit cost)	Correlation 2013-2020	Correlation pre-covid	Correlation covid	Delta Covid and Pre-covid
Total migration	Customer Service	0.04	0.05	0.09	0.04
% households with defaults (Equifax)	Customer Service	0.21	0.25	0.16	-0.09
Income score (IMD)	Customer Service	0.07	0.08	0.11	0.02
Council tax collection rate	Customer Service	-0.17	-0.13	-0.13	0.00

*ContactBabel - "The UK Contact Centre HR & Operational Benchmarking Report - 11th edition, 2022"

What does this mean?

- Economic circumstances do not have a material impact on Customer Service costs
- It is more likely that variations in performance between companies are due to different management approaches



Achieving frontier performance on Customer Service cost efficiency

The best performers in terms of C-MeX have some of the lowest RCtS in the sector demonstrating there does not need to be a trade-off between cost and service performance

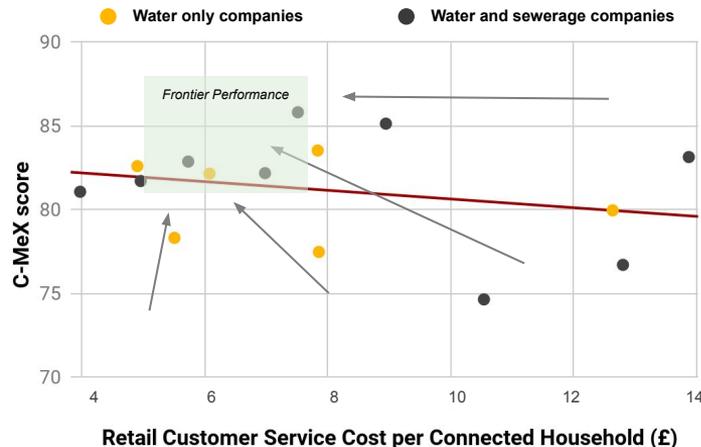
Conclusion on level of efficiency improvement available

- Frontier performance requires the balancing of cost efficiency and customer satisfaction and the sector evidences companies who are achieving this. There is a clustering of companies who are achieving top half performance on cost per connected household (£7.84 and below) and C-MeX (82 and above)
- Review of both the companies qualitative and quantitative responses, as well as additional analysis, do not indicate, any obvious structural characteristics or advantages of the frontier performer nor the lower performers; in terms of size, location, deprivation levels, outsourcing approach etc. Though it should be noted that the largest water and sewerage companies are the least cost efficient
- Appendix 6 to 15 contains further analysis of underlying cost efficiency performance metrics. The analysis reveals equal levels of performance variation as we see at the headline cost per connected household level, as well as the areas in which the sector benchmarks favourably against comparative sectors and those areas in which further improvement is possible. Improvement in these areas should drive improvements in overall cost efficiency

Future outlook

- Whilst clear opportunities exist to improve the efficiency of retail Customer Services, the sector does face into headwinds as result of current attrition levels and potential salary inflation that put upward pressure on costs (Appendix 11)
- Attrition amongst contact centre agents has shown a sharp increase post-covid and is a high when compared against other sectors. There is a risk that this level of attrition could be eroding experience and reducing the levels of skills as experienced staff are replaced with potentially less experienced ones. If this is happening it is likely to impact both efficiency and service levels
- Correlation analysis conducted for this report has shown that, historically, there has not been a clear link between deprivation levels and Customer Service cost efficiency (page 41). However, this cannot be guaranteed to continue based on the future economic outlook

fig. 6.13 - Cost per connected household vs C-MeX score



What does this mean?

- Our analysis shows that companies operating at a low to moderate cost (around £5 to £8 per household) are delivering some of the best C-MeX scores. This suggests that either:
 - a. A well executed delivery of an efficient operating model can deliver the best levels of service, and
 - b. Costly and inefficient service delivery is unlikely to deliver good levels of service

Unbilled Debtor Days

Companies should strive for more frequent billing for customers that pay on receipt of bill. Any extra cost should be covered by improved recovery of debts (due to early collection contact) and fine tuning meter read schedules for instalment plan customers

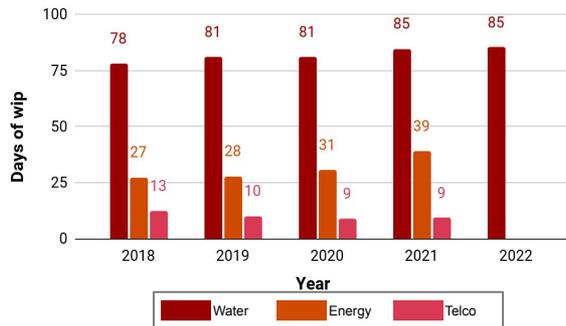
Key observations

- Unbilled Debtor Days (fig. 6.14) give an indication of how frequently a company bills its measured customers. Other sectors bill more frequently than Water. In Energy the bill value is considerably higher than in Water and may act as incentive for more frequent billing. But overall low billing frequency will also be positively impacted by the level of prepayment meters in Energy. Telcos collect billing data daily via network usage feeds, and as with Energy a significant proportion of sales are via Pay As You Go Sim cards where no bill is required
- The Unbilled Debtor Days (fig. 6.15) median has been increasing year on year, rising from 78 days in 2018 to a high of 85 days in 2022. The quickest companies to bill are doing so every 30 to 40 Days which is unusual for the sector, while the slowest are billing after more than 120 days. The speed of billing is important for a few reasons:
 - More frequent meter reads can be more costly unless the reads are collected automatically. AMI meters send in multiple reads per day, every day while some companies receive 2 to 4 reads per week from AMR meters due to innovative arrangements with Local Authorities to collect drive-by reads via bin lorries
 - More frequent reads produce a more accurate bill with which the customer can relate, which in theory, means fewer billing queries
 - However the frequency of meter reads for customers on monthly instalment plans is less significant than those that pay on receipt of bill. In this case an earlier bill means that collections and recovery process can commence earlier

fig. 6.14 - Unbilled Debtor days over time



fig. 6.15 - Unbilled Debtor days by sectors



Note - Measured income used in the graph for water companies has been calculated by taking regulated revenue and multiplying it by the companies meter penetration for the year. This is to serve as a proxy and aims to remove distortion in results of varying meter penetration levels. The comparative industry data is taken from statutory accounts

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What does this mean?

- Companies are taking longer to bill than in other sectors and the time to bill is getting steadily longer
- Some companies are probably using Smart readers to facilitate earlier billing in order to reduce bill shock and bring forward collections processes for unresponsive debtors
- Some companies may be seeking to minimise meter reading costs by minimizing the amount of meter reading that is performed during the year. This is likely to be the case with companies that have a relatively low penetration of smart meters as opposed to dumb meter

Exceptional billing and billing adjustments

Accelerating the roll out of AMR and AMI meters is likely to reduce the level of billing adjustments as well as reducing the cost of meter reading

Key observations

- When meter reads fall outside of certain parameters a billing exception is created. These exceptions are reviewed and adjusted or released based on the outcome of that review. The significance of exceptional billing is that it constitutes rework and therefore cost but can also be a source of revenue leakage. Bill adjustments can often result from a review of exceptional bills, resulting in a reduction (or sometimes an increase) in the bill value. These adjustments directly impact the revenue line but may also have an indirect impact on the level of Bad Debt and Debt Management costs
- The average volume of exceptional bills (fig. 6.16) has climbed slightly in recent years, peaking in 2021 at around 1.8% of all bills raised which appears to be driven by a large outlier for the worst performing company. There has been a consistent worst performer operating at over 6% throughout the period despite the median of 0.9%-1.8% whilst the best performer has minimal exceptional bills
- The average number of bill adjustments (fig. 6.17) broadly tracks to the average number of exceptional bills as we would expect. However, the rate of bill adjustments is around 3 to 4 times higher than the rate of billing exceptions suggesting that most billing adjustments are not related to exceptional billings but more likely home moves

fig. 6.16 - Exceptional bills identified over total annual bills raised

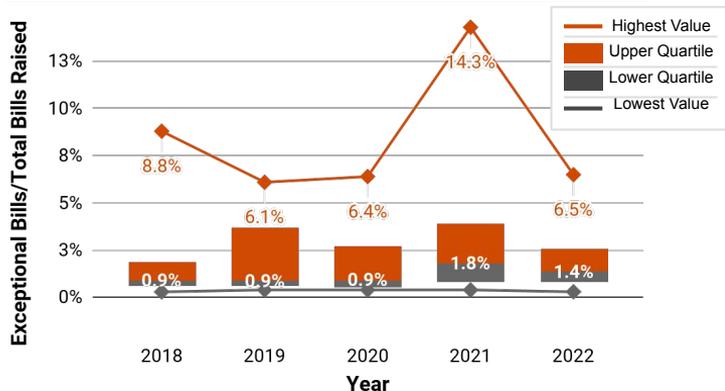


fig. 6.17 - Bill adjustments over total annual bills raised



What does this mean?

- The average level of exceptional bills doubled in 2021 driven in part by at least one significant outlier. Performance returned towards pre Covid levels in 2022
- The corresponding spike in the number of bill adjustments could have at least two potential causes:
 - Customers have been issued adjustments to make water bills more affordable, or
 - The increase in the level of read estimates has prompted more customers to provide self reads and subsequent bill adjustments

Customer Affordability

Companies need to proactively drive affordability scheme take up and ensure that they are able to support those customers in financial difficulty to the extent to which it is required

Key observations

- Companies estimated the total number of financially vulnerable customers in their region. This is a view that many have acquired through data provided by Credit Reference Agencies at an individual customer level. It is notable that this number has been steadily increasing over time which is in contrast to the Experian and ONS data that we have analyzed that shows that all measures for Deprivation have been improving (fig. 6.18). This is a disconnect that we are unable to resolve however it is likely that the water companies' eligibility criteria are not aligned to the deprivation metrics available to us (specifically IMD, Households in default and Council tax collection rates); these measures are quite broad and may therefore not capture the granularity of the issue. For example, while average levels of deprivation have improved, the situation for the already deprived and those on border line deprivation may have become worse but are being masked by improvements in other demographic areas
- Utilisation of affordability schemes (including Social Tariffs and other schemes aimed at helping customers in financial difficulty) has steadily increased over the 5 year period, broadly in line with the water companies' view of affordability (fig. 6.19). It is interesting to note though that the spread of scheme utilisation (customers on an affordability scheme v capacity) has narrowed over time. This has been driven mainly by the laggards (those in the lower 50 percentile of this measure) gradually doing better at moving customers onto these schemes
- There are 5 businesses whose affordability schemes are oversubscribed suggesting demand for schemes is outstripping the companies' budget for them. In some cases (we're aware of 3 companies), this results in additional investment in affordability by the companies themselves unless/until they're able to agree an improved cross subsidy with their customers
- Some companies appear to have seen a sizeable fall in the utilisation of their Affordability schemes between 2019 and 2021. Whilst it may appear these companies may have removed customers from the scheme it's more likely to be due to companies creating more capacity. Table 2N 'Residential retail – social tariffs' was not published prior to March 2021

fig. 6.18 - Number of financially vulnerable customers over total households

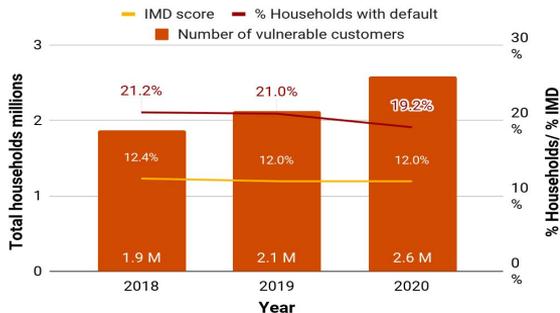


fig. 6.19 - Customers on affordability scheme over scheme capacity



What does this mean

- The decrease in deprivation levels reflected by the economic variables may be at odds with the increase in vulnerable customers.
- Moving customers to affordability schemes reduces pressure on Debt Management costs and Bad Debts. Whilst this adds to the Customer Service costs which includes the costs associated with running these schemes
- When schemes become oversubscribed companies face a dilemma to either remove customers from the schemes or provide additional company investment into the schemes
- It appears that Government interventions may have minimised any increase in demand (and eligibility) for affordability support during Covid

Management approaches: Customer Service

Companies need to ensure that the end to end processes as well as the customer journey are as efficient as possible. This includes process automation to support digital journeys

The wide performance variation within the sector especially relating to Customer Service cost efficiency, minimal efficiency benefit achieved as a result of channel shift, combined with benchmarking of process efficiency metrics all point to the adoption of different management approaches

- One striking finding from our analysis is the fact that despite moving significant volumes of customers to digital channels, this has not resulted in an overall reduction in retail customer service costs per connected household. This leads us to consider two possibilities:
 - The use of digital channels is accompanied by inefficient back office routines to handle and process the digital interactions
 - Resource savings are being redeployed on other activities and are not being released. One such example would be to deploy this capacity to increase the take up of the company's Affordability Schemes, with wider impacts on Debt Management and Bad Debt costs
- There is no consistent approach to Customer Service operations models. A number have used a hybrid model of some activities being insourced whilst other are outsourced; other companies have kept the majority of activities in-house
- While there is a tendency to have dedicated teams for Debt Management, some companies will field early stage inbound collection contact via the Customer Service centre
- Companies have stated that technology initiatives are high on the agenda for their plans to drive improved efficiency through:
 - reducing the number of applications used by contact centre agents
 - providing agents with improved data and insight
 - enabling better servicing of customers across channels
 - solutions that deliver process automation



Meter Reading

Meter Reading

Increasing the penetration of smart meters will drive operational efficiency savings however there will be a short term cost implication in terms of meter installation costs

Key observations

- Metering costs for the median company have broadly fluctuated between £1.15 and £1.24 per household (fig. 7.1). This is in contrast to the sector average cost per property reducing by around 5% (page 5, fig.1.2). This is due to the different measures used (flat v weighted average)
- Average meter penetration increased year on year; this trend is seen across all companies except two outliers who reported unlikely drops in meter penetration for 2021 and 2022, we have removed these from our analysis to avoid distortion (fig. 7.2)
- The variance in the rate of penetration growth potentially differentiates those that have progressed with a universal metering programme compared to those that are growing primarily through consumer led demand, and while most companies are increasing their penetration, as evidenced by the trend upwards, there remains a large difference between the best and worst performers
- Appendix 16 compares the metering cost for each company (anonymised) and suggests that lower costs are likely to be the product of different management approaches rather than being directly related to the total level of meter penetration or the use of smart meters
- A higher proportion of meters results in greater variability of bill values. It also brings with it a proportion of estimated bills. These are activities that result in additional contact centre demand that simply does not exist in an unmeasured billing environment
- We also note that Smart Meters (AMR and AMI meters) now account for around 53% of all installed meters. While there is no data to assess the penetration of smart meters over time there is a strong likelihood that this is a major factor in the reduction of metering costs per metered property (fig. 7.3) over the last 5 years
- We have not been able to identify comparable data points for other sectors where reporting requirements are less prescriptive

What does this mean?

- Companies with higher meter penetration are likely to receive more customer contacts which can drive increased cost
- The increased use of Smart meters give companies (and customers) the opportunity to identify leaks earlier, helping to keep bill values and leaks down
- In normal circumstances, measured bills are expected to be lower than unmeasured bills and therefore are more affordable. As a result the recoverability of measured bills should be higher and associated costs of Debt Management lower

fig. 7.1 - Meter Reading costs/Connected properties



fig. 7.2 - Overall meter penetration over time



fig. 7.3 - Meter costs per metered property



Meter Penetration by Type

Some companies have a significantly lower level of meter penetration than others and smart meters are generally a small proportion of installed meters

Key observations

- 5 water companies have consent to pursue compulsory metering due to water scarcity in their regions. However only two of these companies currently have over 75% meter penetration. While 3 of the 5 companies with the highest level of meter penetration have achieved this without compulsory metering (fig. 7.5)
- Around two thirds of companies have made only a limited use of AMI and AMR meters. Average smart meter penetration has increased between 2021 and 2022 from around 14% to 19%. The apparent reduction in the high end of the normal range (Q1 to Q3 performance as depicted in the chart's bars), is more likely to reflect the low proportion of new smart v dumb meter installs (fig. 7.4)
- The vast majority of meters installed as of 2022 are basic for most companies, with an exception for some who have installed a number of AMR. There is currently limited use of AMI, with only 5 companies recording any percentage penetration (2 of the 5 with a level not observable on the graph)
- With AMR/AMI data only available in the APR from 2022 onwards, a more detailed and insightful analysis can be completed when multiple years of data is available

fig. 7.4 - Smart Meter Penetration (AMI & AMR combined)

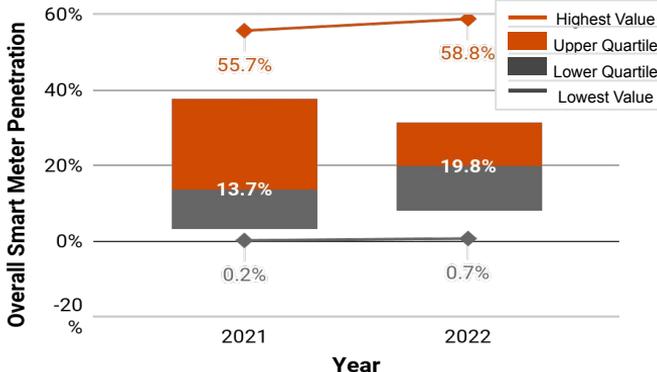
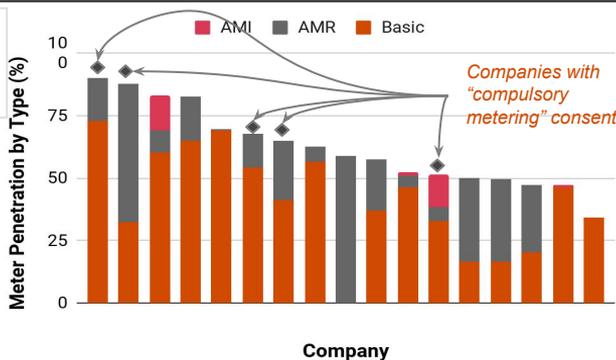


fig. 7.5 - Overall meter penetration by type by company 2022



What does this mean?

- Smart meters, while potentially more costly to install are easier to read meaning that they can be read more frequently providing companies with the ability to help customers reduce their consumption and detect potential leaks earlier and manage bill shock with customers
- There are still a lot of unmetered properties across all of the water companies, representing a big gap in being able to effectively and correctly charge everyone for their water usage
- Whilst technology has been developing to allow for more constant and remote monitoring of water usage, it appears that there has been a reluctance to install these meters even in recent years

Note - There was very limited data available for AMI v AMR penetration in 20-21, so the above chart shows the percentage penetration of AMR and AMI meters combined (Smart). However due to the data being available in 21-22, the penetration has been broken down by meter type for the second chart.

Management approaches: Meter Reading

There are short term cost considerations in installing meters. While these costs will be higher for smart meters, companies will need balance these with the rewards in terms of improved recovery and lower RCTs

Some companies have made good investments in increasing their meter penetration since 2017, however, there is still a sizeable minority of properties in certain regions that remain unmetered. While 5 companies have permission to undertake compulsory metering, the increase in meter penetration has also been observed across a number of other companies.

From our light touch review of metering, we've identified the following management approaches that are worthy of note:

- Most companies have yet to make a significant investment in Smart metering technology, this is likely to be a commercial decision based on the installation costs compared to the perceived benefits that can be realised during the AMP
- However, some companies have made the investment and will now be reaping the benefits of more regular and accurate billing information, lower consumption, earlier identification of non-payment (and therefore starting collection processes sooner) and an improved ability to manage bill shock
- While AMR meters still require a meter reader to (at least) drive by a property, we are aware that some companies have introduced innovative alliances (for example with Local Authorities) to enable these meters to be read by enabled bin lorries every other week
- Two companies have reported declining meter penetration. We assume this is a rebaselining of data following a change in their reporting systems however, this should be investigated further

Note: There is no comparative data available from other sectors



Retail Efficiency Assessment

Retail Efficiency Assessment

Companies with highest RCTs* have generally not reduced their retail costs over the last 5 years

Key observations

- The average RCTs per household increased year on year from 2018 to 2020, before changing to a downward trend in 2021 and 2022 to a level similar to 2018. The total industry RCTs also follows the same trend (fig. 8.1)
- The variation in RCTs per connected household, was significant. Companies with the highest cost to serve reported values at just over 4 times as much as those with the lowest (£31.65 vs £7.84 in 2022) (fig. 8.2)
- While the best companies delivered RCTs of less than £17.50 per household
- 9 companies (in blue) increased average cost per household over the five years while 8 (in red) reduced retail costs. We note that only one of the 7 companies with RCTs in 2022 in excess of £20 per Household, has reduced their costs over the period. While of the 10 companies with RCTs below this level, 7 companies have delivered reductions (fig. 8.3)
- Our analysis (page 41) shows that there is no material correlation between Customer Service Costs and Deprivation however the analysis on page 31 shows a much stronger correlation exists between Deprivation and Bad Debt related costs.

What does this mean?

- The large variation in RCTs between companies suggests there are inefficiencies that companies can address
- Companies with a propensity to have high levels of cost in the retail operations tend to find it difficult to achieve efficiency savings
- The optimum level of efficiency can't be measured by looking at the best performers in each component of RCTs due to trade-offs. Instead we should consider those companies that have achieved the best balance across all components.
- The current range of 'good' performance achieved across the sector is an RCTs per connected property of between £13.49 to £17.50 per household

fig. 8.1 - Water Industry Retail Cts (Total v. per Household) over time

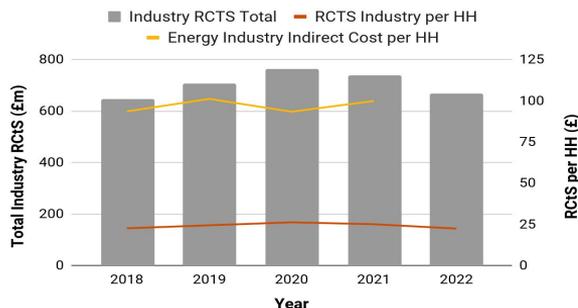
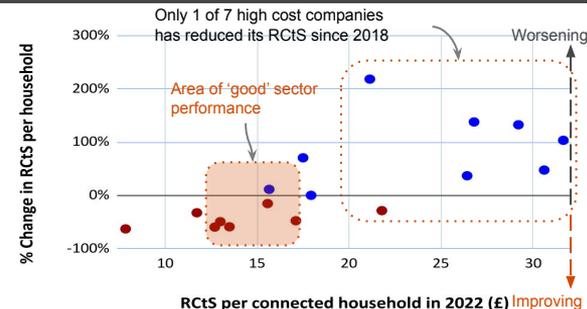


fig. 8.2 - Industry breakdown of RCTs 2022



fig. 8.3 - Movement in RCTs between 2017 and 2022



Note*: RCTs comprises the costs relating to customer service, metering, debt management and bad debt



What level of Bad Debt could companies strive to achieve?

Assessing Bad Debt levels in the sector is complex. There are many variable to consider in order to cut through to key question; What does good look like?

Our cross-sector benchmarking analysis (page 29) shows that despite water companies doing comparatively well at collecting debts owed by customers (as measured by DSO), Bad Debts have grown significantly in comparison. This mismatch could either reflect a more prudent position being taken by water companies or that while energy companies may be slower to collect debts, they have greater success in recovering debt over the long term. From our review of qualitative responses to Ofwat's questionnaire, we believe that the answer lies somewhere between greater prudence in provisioning and lower levels of efficiency.

Our correlation analysis between bad debt costs and a range of deprivation indicators (appendix 3) suggest only a limited correlation exists between the two. In simple terms while there is a correlation between the two variables, the biggest influence (around 80%) on Bad Debt costs lies outside of deprivation; a proportion of this is likely to relate to inefficiencies and over prudence in provisioning policies (as highlighted on page 31).

In 2017 we highlighted in our report that some WOCs are able to deliver class leading performance due to their generally lower levels of deprivation combined with the operational benefits that come from lower levels of joint billing arrangements. The three stand out performers in 2018-19 were three of the four best performers identified in our 2017 study. Aside from these stand out performers, the rest of the WOCs do not seem to realise any such benefits.

To determine a target level of Bad Debt for the sector, Ofwat would need first to consider a position that is unencumbered by economic crisis. We have therefore used the pre-Covid era as basis for our assessment of this question.

What level of Bad Debt could companies strive to achieve? (continued)

We've analysed the performance across the sector in the years before Covid. 10 companies have achieved Bad Debt levels below 2.5% of revenues in the previous 4 years

Fig. 8.5 shows the Bad Debt cost charged to the P&L for each of the 4 years from 2015/16 to 2018/19 for each water company.

During this period:

- 3 WOCs each achieved an average Bad Debt position in the range 0.8% and 1.2% of revenue and they all achieved 0.8% at least once during this time. We have separated these from the wider population for considering efficiency in the sector as 'WOC outliers'
 - The remaining 3 WOCs were only able to deliver performance in-line with that of W&SCs. In the absence of any contradictory information, we would classify these as "W&SC Like" for the purpose of this analysis
- Of the remaining 14 water companies, 7 companies have demonstrated that they can achieve bad debt levels of less than 2.5% during at least 1 year, with the leading performer achieving a level of 1.4%. As discussed elsewhere in the report, there are inherent challenges which limit the potential bad debt performance for water companies

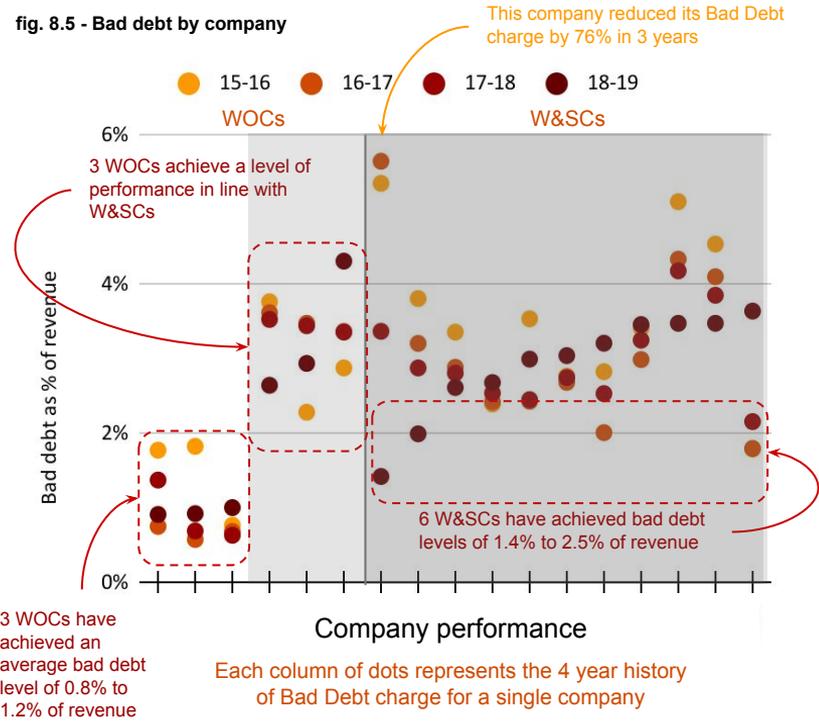
Therefore, in considering an aspirational performance for the sector*, we would suggest:

- WOCs outliers - the performance achieved is comparable with other sectors, therefore the minimum ambition should be sustaining their historical average performance over the 4 year 0.8% to 1.2% of revenue
- For all other companies, there are potential steps they can make to improve bad debt performance and we would challenge the sector to aspire to achieving a performance of below 2.5%, and within the range of 1.4 - 2.5% as a reference guide for performance

Note: We understand that Ofwat use models to set a bad debt challenge for each company based on a range of variables such as local deprivation levels and migration. Therefore the ambition level for some companies could be higher than 2.5%

Note*: In periods of positive economic conditions. The cost of living crisis is expected to have a significant impact on bad debt related costs which will need to be considered when setting efficiency targets. Appendix 17 to 19 sets out how, according to our limited modelling exercise, differing levels of deprivation in the regions could impact the relative Bad Debt and Debt Management costs of companies in an economic downturn.

fig. 8.5 - Bad debt by company





What can Ofwat infer from the performance in other sectors?

Comparisons to other sectors provides a useful point of reference and can help to shine a light on areas of underperformance especially in the area of customer service performance. However benchmarks of debt management performance and bad debt are of less significance

Sector nuances which sets Water apart from comparable sectors

- Water companies have far **less control over new customer onboarding and data capture** compared to both Energy and Telcos. Because of the remote nature of Telco services, these can be connected and disconnected remotely. This means customers will rarely move into a property without having to set up an account and in the process prove their identity and complete a credit check. While this is not entirely the case in Energy, it is essentially for those accounts that represent a tangible credit risk. For example a new occupier at a property will, in most cases, only be able to consume Energy without setting up an account where a prepay meter is already installed. While water companies have an obligation only to connect a supply for the homeowner or registered occupier, it is impractical to disconnect properties when customers move out and reconnect when a new customer moves in
- **Less leverage than Energy & Telcos to encourage prompt payment.** Energy or Telco customers can be disconnected for non payment although in Energy this is more difficult to achieve due to welfare commitments of energy companies and instead the primary recourse with customers who are not paying is the installation of prepayment meters. This action both recovers arrears on an account and protects future revenue by ensuring it is paid for before it is consumed. Whilst this is hugely beneficial, it does not fully protect energy companies from incurring bad debt losses. Debtors can move out and leave their debt on a prepayment meter. Also, it is not always possible to install a prepayment meter due to access issues - both in terms of gaining access to make the installation and also ensuring easy access to the site of the meter for the occupier
- **Less leverage for encouraging Direct Debit.** While it is possible for water companies to offer incentives for customers to sign up to Direct Debit the unique nature of the industry means that there are practical reasons why this is not widely pursued by companies. Specifically, any bill discount offered would need to be offset by bill increases on non-direct debit customers. Given that the majority of bad debt is derived from non DD customers, this would have a direct impact on an increased level of bad debt
- **The perceived lower priority of water bills over other household bills.** This relates to two specific issues:
 1. Customers consider that the consequences of non payment of a water bill to be less significant than other main household bills
 2. Debt charities typically advise customers to pay water bills only after other household bills have been paid

What should Ofwat consider when assessing RCtS efficiency? (1/3)

Ofwat will need consider how it applies a challenge that encourages good management practice and efficiency and acknowledges the complex trade-offs that company management have to make in their day to day decision making

When comparing water companies, there are several reasons why one company can operate at a lower cost base than another or perform at a different level. Some of this can be due to different management approaches, values, the maturity of the business or the quality of decisions taken; but some is due to factors that are outside of management control. The challenge for Ofwat is to consider those issues outside of management control and support improvements with those that are within their control.

Explaining Bad Debt Costs:

- Our analysis has shown that there is a correlation between Income Deprivation and the Bad Debt related costs (which include Debt Management costs and the Bad Debt Charge). This confirms the intuition that companies operating in more deprived regions face higher bad debt costs as more customers struggle with their bills. We note that Ofwat included deprivation proxies in its PR19 models. Ofwat used two proxy variables in two econometric specifications - “percent of households with defaults”, a variable sourced from Equifax, and “proportion of households income deprived”, sourced from the ONS and Welsh Statistical Authority Indices of Multiple Deprivation (IMD) datasets

Considerations:

- Ofwat should continue to explore possible improvements of modelling Bad Debt costs and the predictive capabilities of the models, such as a separate model for bad debt-related costs due to their unique profile and large percentage out of total retail costs. However, the use of bottom-up models would require clarity around how costs are delineated
- Ofwat should consider testing additional proxies for deprivation. Ofwat already uses one variable from the Equifax dataset, however it also includes additional variables, including “delinquency” (accounts that have been in default for more than three months)
- The IMD datasets provide a multifaceted description of deprivation, not only limited to income. The most important limitation to using the IMD dataset is its availability for only the years of 2015 and 2019. Ofwat extrapolates the data, however this risks inconsistencies, especially when forecasting an uncertain future. It is thought the ONS may publish an update to the IMD soon*. If this occurs during the Price Review, Ofwat should consider this updated data as well as alternative datasets including the wider data set that Ofwat already provides
- We recommend that Ofwat consider incorporating the migration proxy in one of the two models at PR19. Controlling for deprivation “nets off” the impact of people not being able to pay their bills on bad debt, while controlling for migration “nets off” the impact of people moving house, which increases retail costs. We recommend testing models that include a deprivation proxy, as well as the migration variable

Note*: A [consultation paper](#) outlining the changing deprivation trends due to the pandemic and economic landscape was published in July 2022.



What should Ofwat consider when assessing RCTs efficiency? (2/3)

Ofwat will need consider how it applies a challenge that encourages good management practice and efficiency and acknowledges the complex trade-offs that company management have to make in their day to day decision making

Average bill size

- The lower the bill, the more affordable it is. As a result, companies with the cheapest water bills achieve the best recovery rate for less cost. Similarly, low value bills are less likely to generate inbound contact. However, as the bill value is somewhat dependent on retail costs, there is a risk of simultaneity bias. In addition, inclusion of average bill size might result in perverse incentives - higher bills might result in higher allowances. However, we expect the simultaneity bias and the perverse incentives to be small, as the relationship between retail costs to serve and bill value is not one of straight-forward pass-through. There are also additional regulatory backstops to preventing companies from raising bills without justification
 - **Considerations:** Ofwat already includes average bill size as an explanatory variable in its models - it is reasonable to keep this variable

Dual billing arrangements

- Meter reads for water supply are the basis of calculating the sewerage charge. Where a company providing water-only services in an area has a joint billing arrangement with a sewerage service provider, a combined bill will be issued. Where there is no joint billing relationship, the water is billed separately and the customers will receive it earlier. The combination of early receipt of a low value bill means the company which only supplies water is more likely to receive payment than the company issuing the sewerage-only bill. This situation can relate to both WOCs and W&SCs
 - **Considerations:** Ofwat already includes the proportion of dual service households in its “other retail costs” models, but not in its total retail cost models. There might be merit in testing the inclusion of this variable in the top down models, if not already done so, as in theory dual service could impact the total costs (including bad debt costs)

Customer numbers

- The number of customers served by companies will have a direct impact on retail costs - total retail costs increase as number of households served increases. The impact on unit costs is uncertain - fewer customers served might reduce unit costs due to smaller geography and lower level of complication with the service delivery. However, larger companies have greater ability to achieve economies of scale
 - **Considerations:** Ofwat should continue to include a variable for scale. However, as there are multiple way to measure scale (i.e. number of connected properties; number of households billed, geographical size, population density etc.), it is worth testing these different specifications

What should Ofwat consider when assessing RCtS efficiency? (3/3)

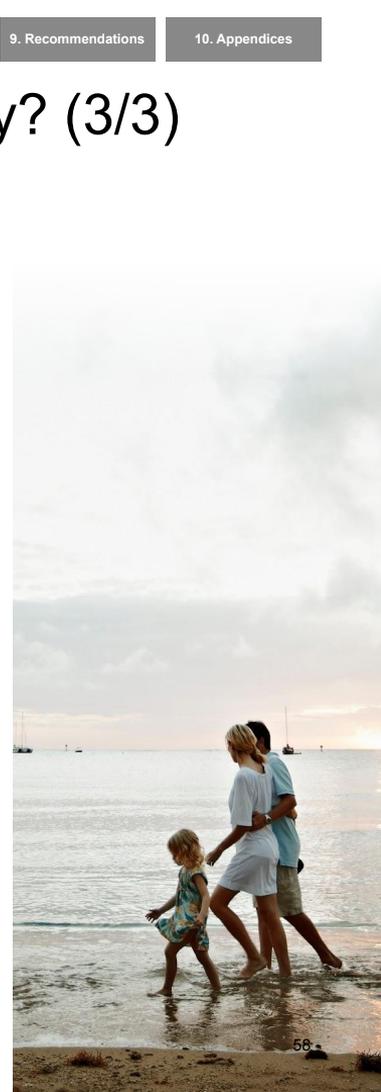
Ofwat will need consider how it applies a challenge that encourages good management practice and efficiency and acknowledges the complex trade-offs that company management have to make in their day to day decision making

Welsh Landlord regulations

- Welsh water companies benefit from “Regulation 5 of the water industry (Undertakers Wholly or Mainly in Wales) (Information about Non-owner Occupiers) Regulations 2014”. This makes it compulsory for landlords to pass on basic information to water companies within 21 days of the start of a new tenancy. Failing to do so within the deadline means that the landlord will become jointly liable for water and sewerage charges. This basic information includes the tenant’s full name, date of birth (where available), the start date for the tenancy. These are key pieces of information that enable the company to accurately identify occupiers, and the period of occupancy, and gives them an advantage over companies operating in England
 - **Considerations:** Ofwat should consider the extent to which these regulations offer Welsh companies benefit through improved bad debt performance

Customer Service performance benchmarking

- Measures of customer service performance included in this report highlight relevant points of comparison. Although, many of these benchmarks are subject to interpretation and are therefore less clear indicators of opportunity. For example the Average Handling Time measure is influenced by countervailing issues; A company that moves a high volume of simple contacts on-line will be delivering efficiency savings however the remaining calls that come into the contact sector are likely to be the more complex matters which take longer to handle. However certain metrics are highly relevant and could be used as a meaningful benchmark to drive efficiency
 - **Considerations:** Ofwat should consider encouraging water companies to share operational KPIs to a sector wide benchmarking dashboard to serve as the basis for driving operational efficiencies and improvements in Customer Experience. Where comparable data points are available from other sectors, this could also be incorporated to enable cross sector challenge
 - **Considerations:** Ofwat should consider defining an industry standard methodology for calculating key operational metrics (especially the Average Cost Per Contact) to ensure that any cross sector benchmark is fair and comparable
- One other observation in this report is that some companies are not achieving the cost reduction that would be expected from increasing Online Self Service Contacts. This represents a further area for legitimate challenge of the RCtS
 - **Considerations:** By gathering the above operational KPIs Ofwat will be able to draw the comparison with Customer Service Costs and identify companies that have unrealised costs reductions. These companies could be targeted with additional cost challenges in lieu of the unfulfilled cost savings that have been enabled



Other confounding factors that Ofwat should be aware of

Ofwat will need to be mindful that the role of management includes making strategic and tactical decisions in the best interest of the business; they have a legal obligation to shareholders and, in the case of Water, a regulatory obligation to customers. In making these decisions, they may sacrifice cost or performance in one area (or at one time) to realise benefits elsewhere.

Management discretion and decision making

Examples of trade-offs which Ofwat will need to be aware of:

- Companies are regularly making strategic decisions about where to spend money and the possible risk and rewards from doing so. This can be **trade-offs between Capital and Operating expenses** such as deciding not to spend money on installing smart meters to save on the capital expenditure and as a result forgoing the operational cost savings of lower meter reading costs
- **There are also trade-offs within operational retail costs base.** For example the investment in void visits is assessed alongside the relative benefits and risks of identifying occupancy, and bringing households into billing; properties that in many cases have a low prospect of recovery due to the nature of these properties; attracting higher debt management costs and most significantly a higher bad debt charge
- Another operational trade-off is between debt management costs and bad debts. The use of legal action varies considerably in the sector. Some use it as a blunt instrument, taking action against large numbers of debtors without due consideration for the recoverability of the associated costs, while others take very little action in fear of incurring unrecoverable costs and, in some cases, in fear of damaging C-MeX scores. Good practice lies somewhere in between; Take targeted legal action where there is a good chance of recovering costs. The success of this tailored strategy would be measured by lower Debt Management costs and Lower Bad Debts:
 - **Considerations:** The operational benchmark dashboard mentioned on the previous page would create a competitive edge between companies and drive efficiencies across the sector
 - **Considerations:** Ofwat may want to consider an efficiency incentive mechanism that encourages and rewards companies that are able to deliver good C-MeX scores while delivering an efficient retail operation

However, there may be one further area of trade-off Ofwat may want to consider when assessing the RCtS challenge; that is where the trade-off is not between two cost areas but between revenue and cost.

- **The level of cross subsidy allowed by water company customers** (to support financially vulnerable customers), varies widely across the sector; this variance is not reflective of the need in the region. Where the allowable support falls short of the needs of vulnerable customers, some companies are implementing self funded* affordability schemes. These are essentially funded through reductions in bad debt but in practical terms the water company is sacrificing revenue, which would otherwise have been written off, in a effort to encourage financially vulnerable customers to make regular payments. The degree of revenue sacrifice to offset debt management costs is therefore a significant variable that Ofwat should consider
 - **Considerations:** Ofwat should assess the degree by which companies are sacrificing revenue through such schemes and take this into consideration when challenging RCtS

Note*: "Self Funded Schemes" is terminology used by some companies to describe affordability schemes that are not funded through cross subsidies or charitable donations of the business.

What can companies do better?

An introduction to our qualitative assessment

We have based our qualitative assessment on the analysis of company and sector data as well as insights we have gained from working in the relevant sectors

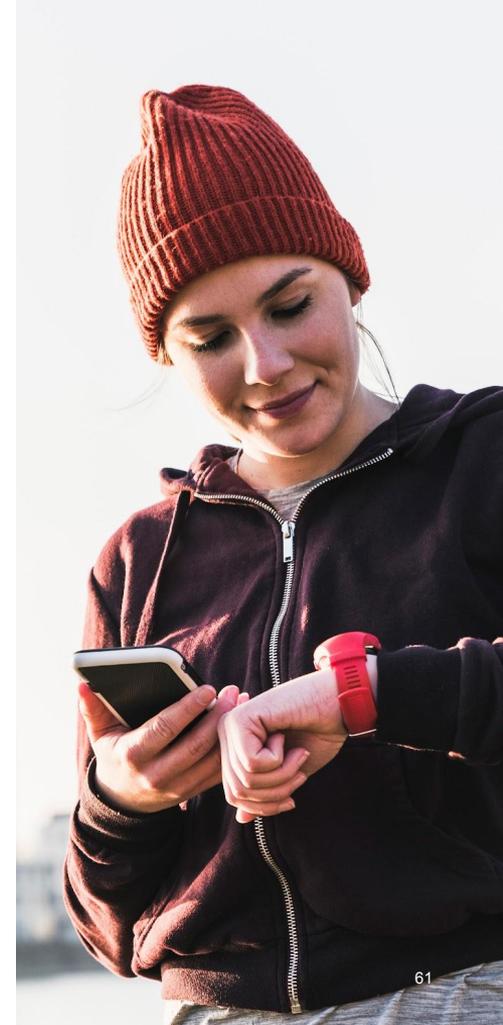
We've undertaken a qualitative assessment of the water companies approach to its Retail Operations under the general headings of Meter Reading, Customer Services and Debt Management. The qualitative assessment is based on a combination of:

- Information received from companies in response to Ofwat's information and data request
- Our interpretation of the data provided by water companies and other external data sources Ofgem and Contact Babel for a range of comparative performance and customer service metrics

The comparison between sectors is interesting and adds context but it is important to note that there are significant differences in the operational and legislative landscapes that these industries operate within, for example:

- water companies are not permitted by law to disconnect for reasons of non-payment nor fit a prepayment meter to a property
- It is difficult for energy companies to disconnect domestic properties however they are able to instal a prepayment meter to control non-payment risk going forward and recover arrears. However, the is only partially effective as not all properties may be fitted with a prepayment meter and once fitted the recovery of arrears is often incomplete due to debtors vacating the property before arrears recovery is complete
- Telcos have far commercial flexibility to bill and collect payments in a way that significantly reduces their exposure to debt. Customers that represent a credit risk (eg due to existence of phone contract) will have to prove residency and identify and be credit checked before being granted credit
- Local Authorities have the threat of criminal enforcement, including committal (imprisonment) as a significant lever to encourage payment compliance. While they will rarely use this ultimate sanction it is a very effective deterrent and results in upwards of 96% of council tax customers paying their full annual charge with the year it is raised

We have also used our experience across the sector and the comparative sectors to take an objective view of these differences to take a view as to whether water companies are making the most with the cards they have been dealt. We acknowledge that water companies can't do everything that Energy and Telcos can do to encourage prompt payment but have sought to highlight where the companies could do more. We note that the water companies tend to agree on the areas where we see opportunity as evidenced by their response to Ofwat's questionnaire.



Qualitative benchmark

Differing legislative and regulatory regimes make it difficult to make direct like-for-like comparisons between water companies and other similar sectors. This schedule seeks to identify some of the known differences we have observed between the sectors. The RAG rating compares how well each sector fares in comparison. The text is a summary of what we see

Measure/area	Water	Energy	Telco	Public Sector
Customer onboarding & Identification	Occupier change hard to spot. Data used for retrospective moves. Lower volumes	Change of occupancy still a challenge for non-contracted	Good control over change of occupancy & new customers	Generally good for big ticket items such as Council Tax
Customer payments	Pushed well but DD is not a requirement for new customers	Prepayment meters and DD discounted tariffs	DD and or prepayment are the norm in the sector	Pushed well but DD is not a requirement for new customers
Affordability support	Good support through cross subsidised schemes & Water Direct	Limited support through Energy Direct & affordability schemes	Some social tariffs - still limited Ofcom pressure building	Good benefits regime in the sector. Single person discounts
Collections approach	Growing use of data led tailored approaches	Growing use of data led tailored approaches	General one size fits all. Blunt force approach	General one size fits all. Blunt force approach
Leverage	Limited. No disconnection. Data share & litigation use growing	Limited disconnection & prepay. Data share & Litigation widely used	Disconnection is the primary form of leverage supported by data shae	Committal a good deterrent for Council Tax though not widely used
Late stage recovery	Growing use enforcement. Inefficient, poor cost recovery.	Reliance on prepayment meters. Limited use of enforcement	Tendency to sell delinquent debt	Enforcement widely used through magistrates courts
Metering & billing	Advance billing & in arrears billing. Instalment plans. Few smart meters.	In arrears billing. Instalment plans. Prepay meters. More smart meters.	Mostly advance billing. Good visibility of consumption for customer	Advance billing. 10 month Instalment plans. Annual charge.
Customer experience	Customer contact triggered, to a greater extent, by service issues. Focus is on doing the basics brilliantly.	Competitive market with high customer price sensitivity and focus on experience as a differentiator to drive customer lifetime value	Competitive market with high customer price sensitivity and focus on experience driving customer lifetime value. Propensity to use Tech	Wide segmentation of customer needs to be catered for esp. vulnerable segment
Operational efficiency	Largely inbound service demand and narrower breadth of contact types than Public Sector	Sales and service focus and mix of inbound and outbound interactions	Sales and service focus and mix of inbound and outbound interactions.	Broader range of interaction types and services
Channel performance	Progress on account management and billing but ability to digitise and automate a higher proportion of operational contact types	Higher sector innovation due to new market entrants without legacy system disadvantages	Higher sector innovation due to new market entrants without legacy system disadvantages. Propensity to use Tech	Push to self-serve but requirement to maintain physical and face to face services

fig. 9.1 - Sector differentiation heat map

Key:

Unfavourable

Some disadvantages

Advantageous

Neutral

fig. 9.2 - 11 Key areas for assessing the end to end process maturity
(PwC Industry Presentation 09/2017)



- 01** Continue to use insights to drive strategies and identify changing customer behaviours
- 02** More use of analytics, supplemented by more feet on the street to identify occupancy
- 03** Identify & address low value plans. Continue to show flexibility to keep customers paying
- 04** Actively convert customers from Standing Order and Payment Card/Book to Direct Debit
- 05** Continue with data led approaches utilising the full breadth of incentives in a targeted way
- 06** Data led approaches to better align billing to customer needs
- 07** Data led identification & transitioning customers to schemes. Sufficiency of schemes
- 08** Continual monitoring & management of suppressed accounts
- 09** More refinement and tailoring of messaging, nudges & telegraphing consequences
- 10** Utilising the full range of consequences, e.g. Data Share, Litigation, DCA
- 11** Monitor engagement and take active steps to engage unresponsive debtors

Generally good, not consistently applied

Occasionally good. More focus required

Debt Management optimisation

Our 2017 report set out the key pillars of good practice. Good progress seems to have been made but some opportunities remain

Fig. 9.2 illustrates our assessment, based on our analysis and experience in the sector of how well companies are addressing the 11 key areas we identified in 2017.

On the whole we have seen **generally good progress in a number of areas by a number of companies** although in other areas we can see only **limited examples of where good practice is being applied**. We highlight below those areas that need closer attention by a greater number of companies:

- 02** A number of companies have called out their use of analytics for void property investigations. However this does not seem to be widely used in the sector. Face to face visits is not a key feature of void strategies for many companies
- 04** DD penetration is still relatively low for many. Companies could be more proactive in driving uptake. Aligned to this, some companies are extending the use of Apple Pay and Google pay. Need to target payment card and standing order payers to eliminate these old fashioned payment methods
- 06** Billing algorithms are still producing a relatively consistent level of exceptions. The subsequent billing adjustments suggest a need for review and refinement. In addition we've seen little evidence of tailored billing strategies being applied, e.g. there are very few examples of billing (and collections) approaches for student accommodation being aligned to term times
- 07** Our analysis shows a number of companies are significantly under subscribed on their Affordability schemes. It also known that these schemes do not meet the needs of all customers and supplementary assistance is required but bt always provided as evidenced by the low levels (and lack of reporting) on low value payment arrangements where instalments don't cover current consumption
- 09** Many companies referenced the need to leverage data insights to be more targeted with messaging and collection strategies to drive efficiency and effectiveness
- 11** The level of unresponsive customers is concerning across the sector. Companies will need to use data insights combined with targeted engagement campaigns and incentives to address this

Where can companies drive further efficiencies in Customer Services?

Research supports the intuitive understanding that good service delivery is best achieved by those organisations that are lean, efficient and operationally dynamic

Attributes of lean and customer centric organisations and current trends

High performing customer service organisations exhibit some common attributes:

- Delivery of fast, simple, and personalised customer journeys through automation of end to end process
- Accountability for end-to-end customer journeys within teams rather than in functional silos
- Lean structures with people focused on value adding tasks with repetitive activities being automated
- “Democratisation” of data which is accessible to people in real time underpinned by connected systems

Research backs this up. 70% of high performing companies say their Customer Service department is well connected with other internal departments compared to only 55% in low performers. 65% of high performing companies say they are using automation compared to 41% in low performing companies. With 89% of those companies using automation stating a major or moderate benefit in terms of time saving. Phone remains the most used channel for most organisations, but the channel is evolving, with 53% of service organisations now utilising digital transcription of phone service this reducing the time taken for agents to type up notes (wrap time).*

Whilst an immediate priority focus for service organisations currently is addressing employee enablement (technical skills and training), over a slightly longer time horizon investment in artificial intelligence and machine learning emerges as the no.1 priority for reshaping the service organisation and customer experience delivery.**

The sector is still some way from achieving this maturity of capability. Companies identify in their forward looking improvement plans the need to integrate technologies across the end to end service value chain and this will be a key enabler to improving customer service and increasing efficiency.

* Salesforce: State of Service 2022

**Dimension Data Customer Experience Benchmarking Report



Customer Service optimisation

The analysis performed has highlighted that companies can have both a lower Customer Service cost and higher C-MeX score, and it's mainly down to efficiency

In our 2017 presentation to the water industry event we identified that there are 4 main areas where water companies can drive improvements in cost per contact, and we have summarised below what key actions we believe can help improve efficiency.

Overlaying all 4 areas is technology. While we have seen that many companies are adopting innovative solutions into their business practices, they don't yet seem to be realising the full benefits from doing so. We believe the following areas need the closest attention:

02 Customer experience

Analysis has showed that the leading companies in the sector are able to deliver cost efficiently and perform well against C-MeX. Companies need to focus on delivery of fast, simple and personalised customer journeys which will be enabled through automation of end to end process. Leading organisations are increasingly organising themselves around end to end customer journeys rather than functional silos and integrating systems and connecting data across the service value chain

04 Channel Performance

We have seen that there has been good progress in moving customers to self serve but that more needs to be done to realise the benefit. Companies need to automate processes beyond the initial customer interaction but combine this with a move to leaner structures with people focused on more strategic and value adding activities

fig. 9.3 - 4 main areas to drive Cost-per-contact improvement (PwC Industry Presentation 09/2017)

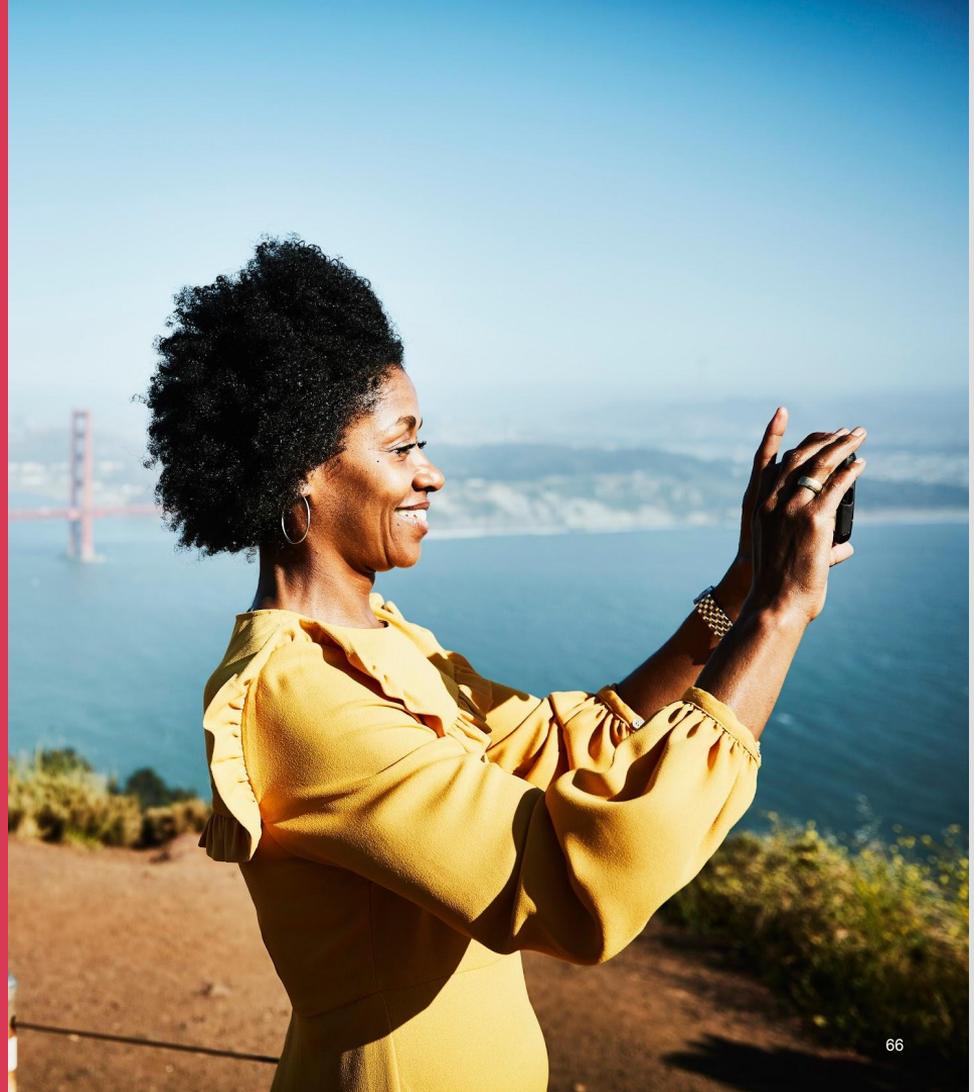


- 01 High levels of attrition. Loss of quality and experience across the sector.
- 02 The best Customer Service is often delivered by the most efficient companies.
- 03 Operational efficiency has wide performance variations across the sector.
- 04 Need to drive end to end automation beyond the initial contact

Note: To maintain clarity and consistency with the 2017 report we have discussed billing related issues under Debt Management optimisation although billing is a component of the Customer Service cost



Appendices



Appendix 1

2018 vs 2022 Retail CTS per household

Key observations

- There is a positive relationship between the 2022 RCtS per household and the percentage change in RCtS since 2018 (fig. 10.1)
- The industry average highlights that Debt Management costs and Meter Reading costs per household have fallen over the five year period, whilst Customer Service costs have marginally increased, doubtful debts was by far the most erratic, though it ultimately ended up at roughly the same figure it was in 2018 (fig. 10.2)

fig. 10.1 - % Change in RCtS from 2018 to 2022 vs RCtS per connected property in 2022

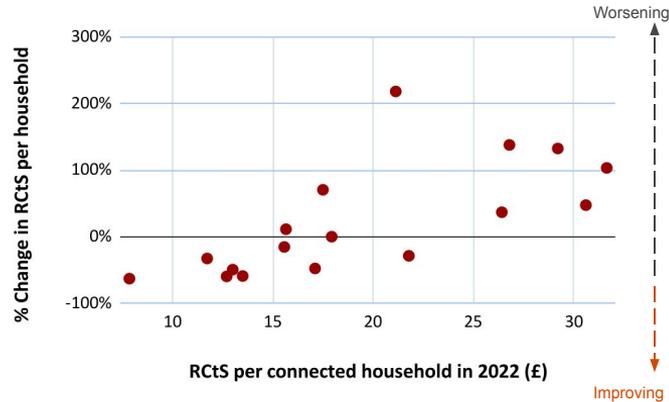
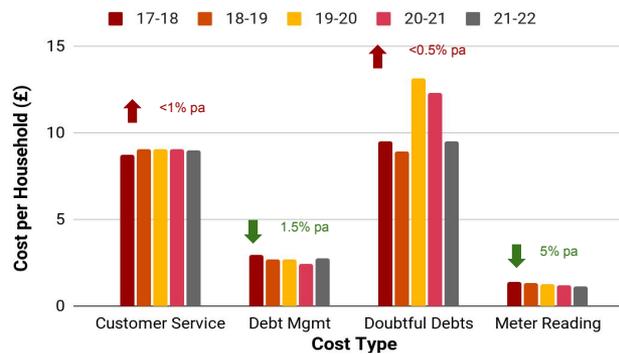


fig. 10.2 - Movement in each RCtS component from 2018 to 2022



What does this mean?

- Companies that already had fairly efficient cost per connected property in 2018 have continued to become more efficient, even in the face of the challenging situations posed by Covid
- Those who were performing poorly on the other hand have continued to get worse, resulting in a larger schism between the best and worst performers

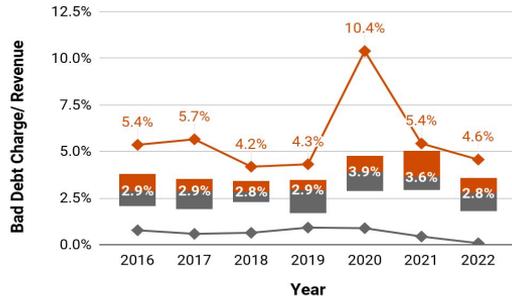
Appendix 2

Bad Debt Charge as a percentage of Revenue over time

Key observations

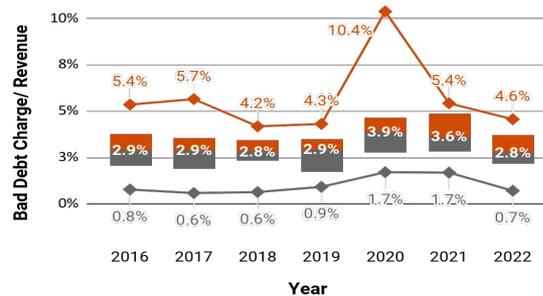
- Companies made adjustments to their Bad Debt provisions to cover additional Bad Debt losses they expected to incur as a result of Covid in 2019-20. Some companies simply increased the Bad Debt Charge (cost of Doubtful Debt line in table 2c of APR) while others reported this as an exceptional item elsewhere. Ofwat therefore undertook an exercise to identify all these Bad Debt costs (corrected) and then smooth the impact (smoothed) over the subsequent years to better reflect the period over which the costs were likely to relate. In our report we have chosen to use the smoothed analysis but have provided here the comparative original and corrected versions of the analysis. It should be noted that this “smoothing” and “correcting” only has a material impact on the higher performing end of the scale. This reflects the limited amount of additional data provided by water companies to support Ofwat’s analysis

fig. 10.3 - Bad Debt Charge over Revenue (Original)



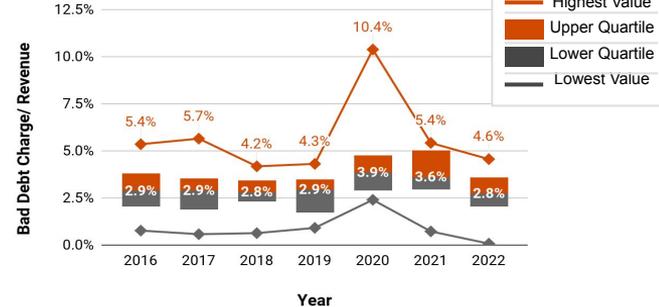
This is the Bad Debt charge as stated in the Annual Performance Report under the cost of Doubtful Debts in table 2c.

fig. 10.4 - Bad Debt Charge over Revenue (Smoothed)



This is the smoothed Bad Debt charge as calculated by Ofwat. This removes any over provision and subsequent release where applicable. The total over 3 years (2020-2022) should remain the same as original or corrected data (if available).

fig. 10.5 - Bad Debt Charge over Revenue (Corrected)



This is the “corrected” Bad Debt charge as calculated by Ofwat. This includes any amounts not originally reported in table 2c of the APR. Thus this includes any Bad Debt related costs that were initially excluded from Bad Debt provisions (e.g. classed as atypical etc).

Appendix 3

Correlations between Bad Debt costs and economic variables in more detail

Key observations

- The percentage of households in default is positively correlated with debt-related costs but the relationship is not very strong. A coefficient of determination (R^2) of 3.1% reflects the proportion of the variation in Bad Debt costs predicted by the variation of the % of households in default. This means that around 97% of the variation in the variable is explained by other factors. The low correlation and low R^2 could be due to limitations of the variable as a proxy, rather than a lack of correlation between deprivation and Bad Debt costs
- Percentage of households income deprived (IMD) is positively correlated with debt-related costs but note the assumptions around the data extrapolation (see slide 21). A coefficient of determination (R^2) of 20.5% reflects the proportion of the variation in Bad Debt costs predictable by the variation of the % of households income deprived. This means that around a fifth of the change in costs is related to the change in the % of households income deprived
- Council tax collection rates are negatively correlated with Bad Debt costs. A coefficient of determination (R^2) of 19.9% reflects the proportion of the variation in Bad Debt costs predictable by the council tax collection rate. This means that around a fifth of the change in costs is related to the change. However, there is difference in the correlation between the pre-covid and covid years. This is due to the suspension of council tax collection activities during lockdown

What does this mean?

- Deprivation described by measures such as % of households in default, % of households income deprived and council tax collection rate show the expected correlation with Bad Debt costs, although the latter appears to be stronger
- Council tax collection activities were affected by Covid, which means the correlation with Bad Debt costs for these years may not be representative

fig. 10.6 - Relationship between debt-related costs and Equifax variable

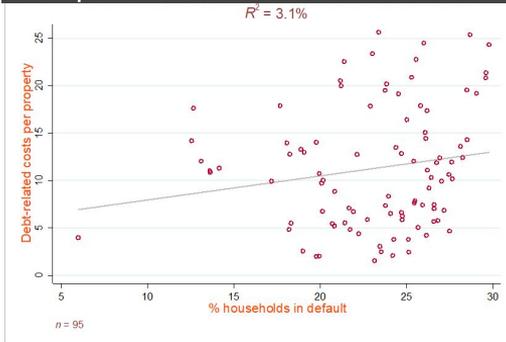


fig. 10.7 - Relationship between debt-related costs and Income IMD variable

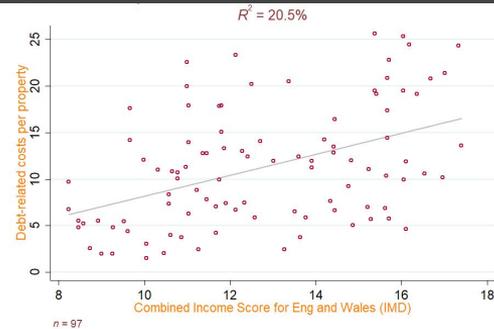
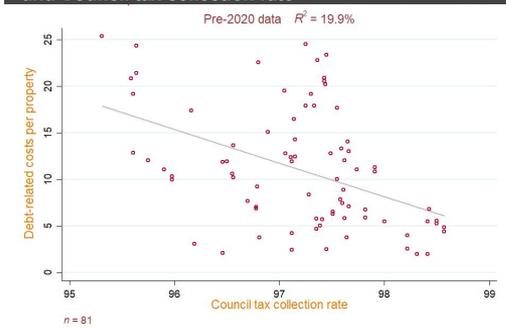


fig. 10.8 - Relationship between debt-related costs and Council tax collection rate



Appendix 4

Bad Debt compared to Debt Management Cost

Key observations

- For both 2018 and 2022, there is a positive correlation between Bad Debt as a percentage of revenue and the Debt Management cost per household
- The correlation is greater in 2018, which suggests that household Debt Management cost was less closely linked to the Bad Debt as a percentage of revenue compared to in 2022
- There is large variation between the individual company performance as illustrated by the proximity of the dots vs the trend line in the below charts

What does this mean?

- As Bad Debt increases relative to revenue, the amount of Debt Management cost increases
- The likely reason for the positive correlation instead of a negative one is that those companies who are incurring higher debt are reacting by increasing their spend in Debt Management
- This means that the causation relationship is Bad Debt driving Debt Management, the opposite of what we originally hypothesized

fig. 10.9 - 2018 Bad Debt/ Revenue vs. Debt Management Cost by company

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0.28

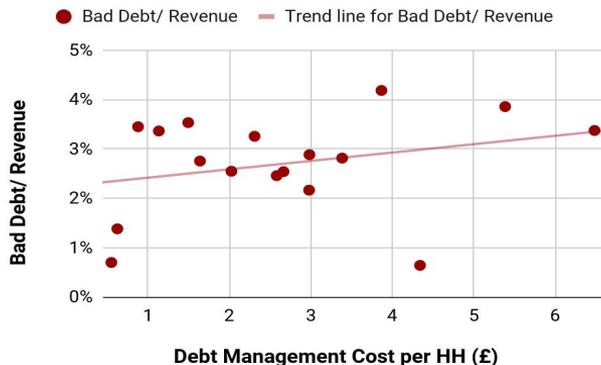
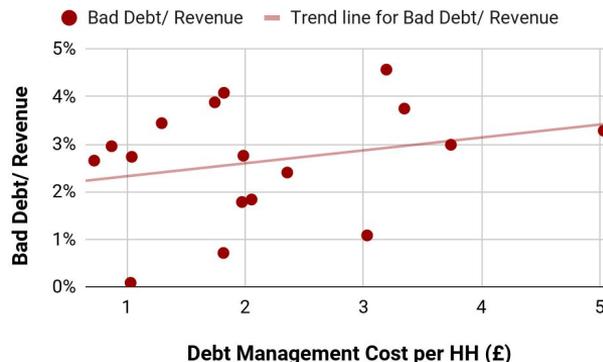


fig. 10.10 - 2022 Bad Debt/ Revenue vs. Debt Management Cost by company

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0.26



Appendix 5

Correlation between scale and RCtS and bad debt costs

Key observations

- The correlation between bill value and Debt Management costs (including the bad debt charge) is relatively strong, meaning that companies with higher bills tend to have levels of bad debt
- Likewise the correlation between Bad Debt and Bill Value is relatively strong however the correlation between company size and RCtS is relatively weak
- But analysis suggests that there are still other factors apart from bill size that impact these Bad Debt related costs. We have previously identified the correlation with Deprivation but there remains a component that is likely to relate to different management approaches and levels of efficiency within the sector

What does this mean?

- Lower value bills cost less to collect and are ultimately more successfully recovered than higher value bills
- Companies that lower their bills for customers should expect to see reductions in the costs associated with debt management and bad debts

fig. 10.11 - Relationship between Debt management costs & Bill Value

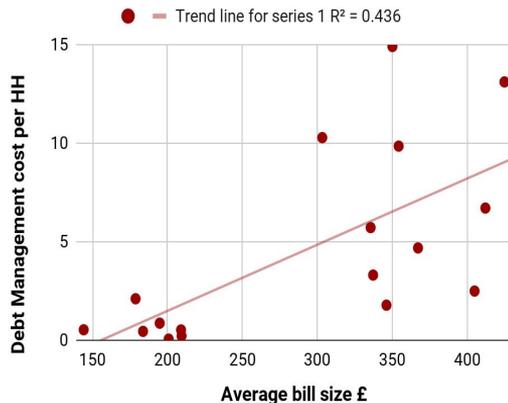


fig. 10.12 - Relationship between Bad Debt and Bill value

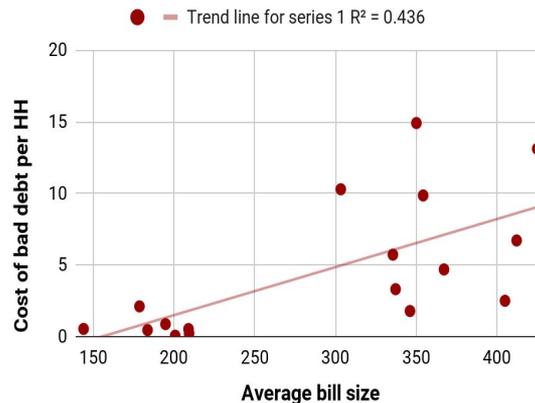
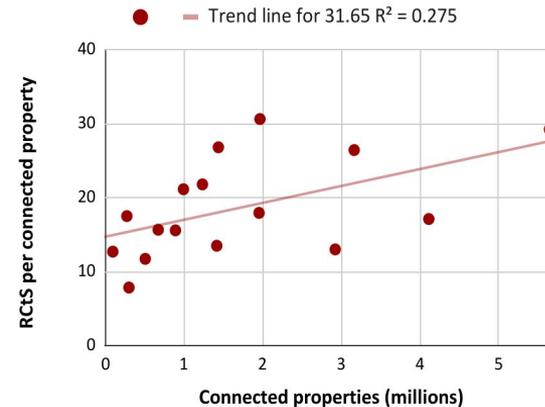


fig. 10.13 - Relationship between Company size and RCtS



Appendix 6

Customer experience: Telephony channel performance

Key observations

- Service levels as measured by call abandonment rates and average speed to answer, have increased throughout the period, showing a sharp increase since 19/20 and 20/21 and this is likely to have been Covid related as the sector responded to the pandemic and remote working
- Median performance and above shows a trend back toward pre-Covid levels in 21/22
- However, for lower performers in the sector there is a continued decrease in service level, particularly with regards to average speed to answer
- We have included a 5 year view analysis of the FCR data, but it should be noted that the quality and quantity of the return data was low, with the graph showing some spurious results - the return suggests that median performance has increased by 11% over the 5 year period. This is an important metric as, it should, measure the customer's own perception as to whether their enquiry / issue has been resolved.

What does this mean?

- Service levels delivered through the telephony channel have been impacted by Covid
- For the lower performers in the sector, this suggests ongoing operational issues with regards to staffing as a result of Covid-19
- The challenge will be to bring service levels back in line with pre-covid levels, without reducing cost efficiency whilst at the same time meeting customer demands for greater personalisation of service

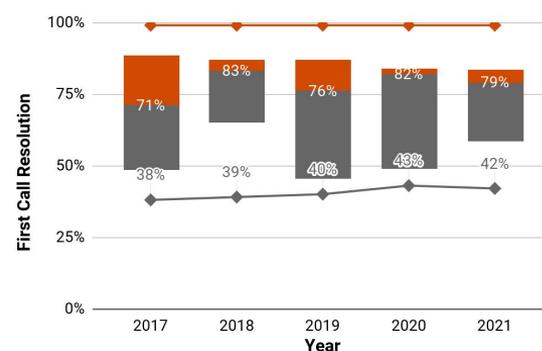
fig. 10.15 - Call Abandonment Rate (5 year view)



fig. 10.16 - Average Speed to Answer (5 year view)



fig. 10.17 - First Contact Resolution (5 year view)



Appendix 7

Customer experience: Service levels

Key observations

- The average speed to answer is higher in the water sector compared to the public and TMT sectors, as well as the cross-sector median, which indicate an opportunity for improvement in the service levels provided within the water sector. The water sector also has higher abandonment rates than any other comparative sector
- These poor performing service levels could be driven by an increase in both metrics over the last 5 years (fig.10.19 and fig.10.20) which could be a result of the response the water sector had on managing the pandemic's effects
- Whilst FCR is in line with other sectors, as mentioned above, conclusions should be drawn cautiously given the low quality of the data return

What does this mean?

- Service levels in the water sector are lower compared to similar sectors across most metrics
- There is opportunity for improving customer experience levels in the water sector in terms of Average Speed to Answer and Abandonment Rate in order to match the performance levels of comparable sectors

fig.10.18 - First Contact Resolution (FCR) - Industry Benchmark*

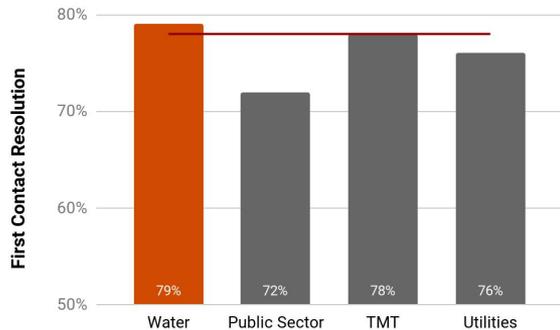


fig.10.19 - Average Speed to Answer - Industry Benchmark*

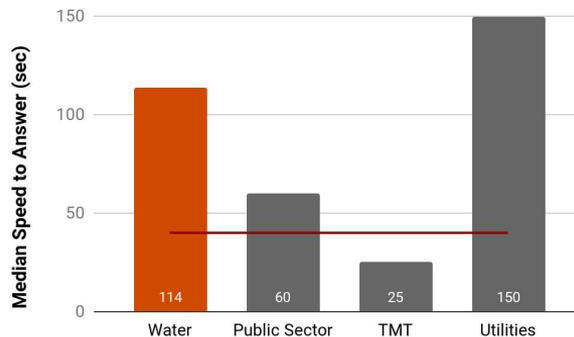
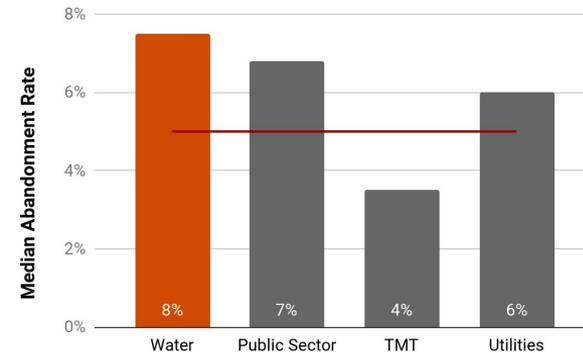


fig.10.20 - Abandonment Rate - Industry Benchmark*



Appendix 8

Customer service cost efficiency trends

Key observations

- Analysis shows a weak negative correlation between retail Customer Service cost and the C-MeX score (fig.10.21) and a weak positive correlation for the correlation between C-Mex and cost per inbound contact (fig.10.22). There are some anomalies between the two sets of analyses, with some companies showing quite different levels of efficiency against the two metrics. This could be due to anomalies in the data capture and the fact that not all retail Customer Service costs are related to the servicing of inbound contact volume
- However, in our experience, companies can reduce operating costs through delivering a more efficient, tech enabled service whilst improving the quality of service the deliver for customers. This is not reflected as strongly as we would expect in the correlation analysis due to these limitations in the data points and the fact that companies are yet to reap the operational efficiency gains from increased use of digital channels by customers
- Lower cost to serve (digital) channels are increasingly the channel preference of customers, though non digital channels remain important for certain segments and contact types. Customers, irrespective of sector, frequently cite the importance of 'getting the basics right' as a key factor in overall satisfaction level
- Correlation analysis between cost per contact and trustpilot review data on water companies shows a strong relationship between better customer satisfaction and cost efficiency. However, this analysis should be treated with caution as for 7 out of the 17 companies there are less than 100 reviews, hence we have excluded these companies from our analysis

What does this mean?

- Current performance of companies show that a good customer experience can be delivered in a cost efficient manner
- A highly efficient customer service team scores well on C-MeX. These companies are likely to have fewer hand overs, more first time problem resolution, and lower waiting times
- Highly efficient companies are also probably making best use of digital and online self-serve channels that many customers prefer

fig. 10.21 - Cost per connected household vs C-MeX score

CC
-0.26

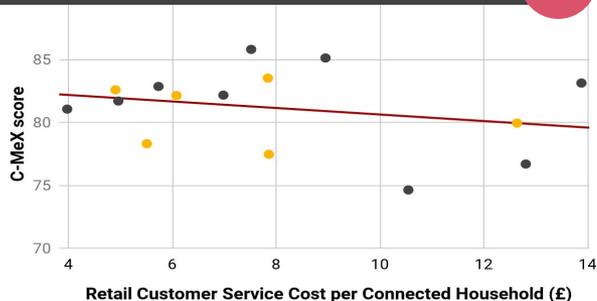


fig. 10.22 - Cost per contact vs C-MeX

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0.10

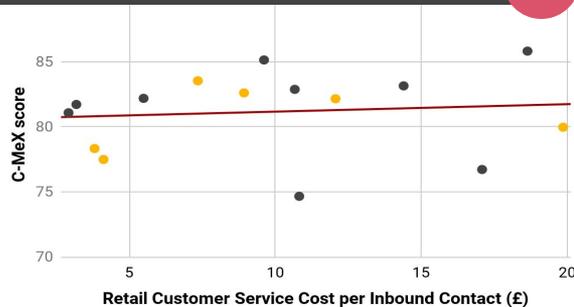
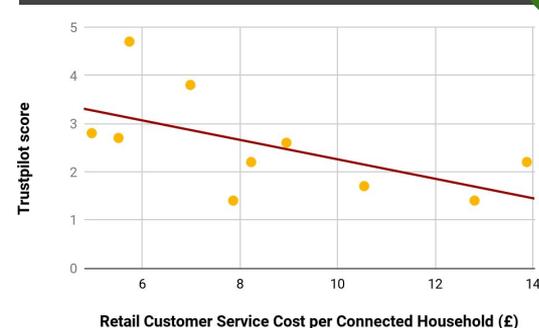


fig. 10.23 - Cost per contact vs Trustpilot score

CC
-0.59



Appendix 9

People management: Attrition and absence

Key observations

- Agent attrition is currently at its highest levels in the past 5 years, with a sharp uptick post pandemic
- The range has narrowed between upper and lower quartile of (35% and 23% in 21/22) and the increase in attrition between 20/21 and 21/22 has been consistent across all the companies falling within this range
- Short term absence has, surprisingly, stayed relatively consistent, despite the Covid pandemic

fig. 10.24 - Agent Attrition (5 year view)

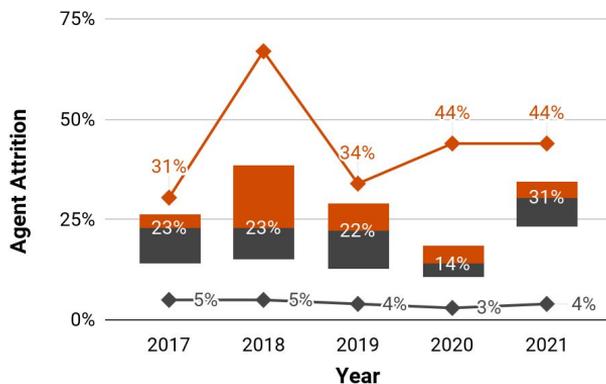
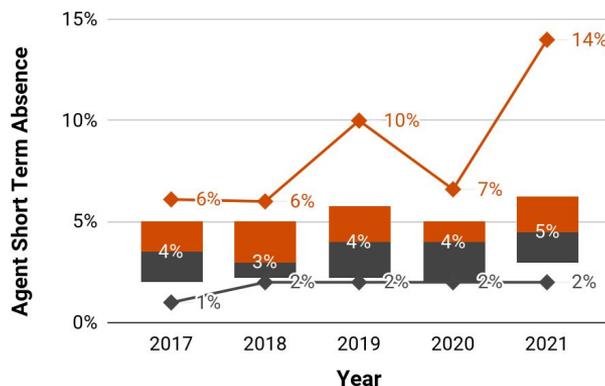


fig. 10.25 - Agent Short Term Absence (5 year view)



What does this mean

- The recent decline in service levels is likely to have been caused by an increase in the attrition of customer service agents
- Increased levels of attrition present a number of operational challenges, particularly with regards to training and the speed to competence of new agents to meet required levels of efficiency and effectiveness

Appendix 10

People management: Absence, attrition & agent salaries

Key observations

- Not only has attrition increased within the sector over the past 12 months, the sector is showing levels of attrition that put it above comparative sectors
- Short term absence rates are running at a lower level than similar industries
- The salary level of the median paying company has increased by 12% over the past 5 years (an annual growth rate of 2.8% p.a.). While this is above the annual inflation rate over this period (2.0%), this is in line with salary increases seen over the same period across sectors, where agent salaries have increased by between 7.5% for experienced agents, 13% for entry level agents and 12% for team managers*
- The average customer service salary for the median paying water company in 2021 was £23,115. Additional data would be required to understand average salary by level in customer services, in order to compare against wider utilities benchmarks where average salary is £20.2k new agent, £22.8k for an experienced agent, £30.8k for a team leader and £48.4k for a manager level

fig.10.26 - Absence and Attrition - Industry Benchmarking*

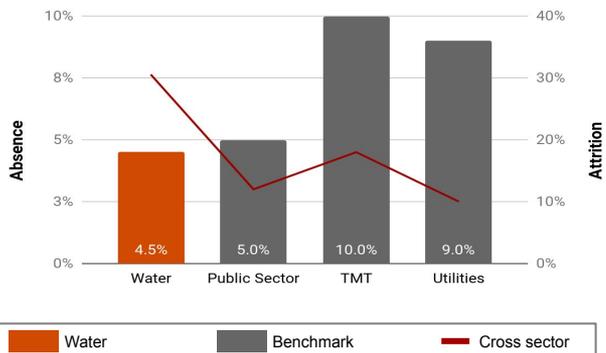


fig.10.27 - Contact Centre Employee Average Salary (5 years view)



What does this mean

- Attrition rates are higher than in comparative sectors
- Sustained attrition at current levels will continue to negatively impact levels of cost efficiency
- Looking forward, inflationary pressure on salaries in order to better attract and retain staff may add further pressure to costs
- Companies will need to take care to offset any potential increase in salaries with other efficiency savings to guard against increasing the RCTs

*ContactBabel - "The UK Contact Centre HR & Operational Benchmarking Report - 11th edition, 2022"

Appendix 11

Channel performance: Channel shift

Key observations

- There has been significant increase across the whole sector with regards to the shift of customers and contacts to online channels. This trend has been building for several years and is not specifically a reaction to Covid restrictions
- Median performance increased between 2017-2021 from 22% of contacts being serviced via online self-service to 35%; e-billing penetration increased from 8% to 29% over the same period; and online account penetration from 11% to 34%
- There is wide variation across the sector, for example, in 20/21 25% more contacts were being serviced through online self serve channels for upper quartile performers compared to lower quartile performers
- There is a strong negative correlation between the level of self serve contact by customers and the cost of Customer Services

What does this mean?

- The shift to lower cost digital channels has not led to a corresponding reduction in overall cost efficiency for the sector as a whole which suggests that the sector has yet to realise the efficiency benefits associated with channel shift.
- However, the opportunity is clear. Those companies who have achieved greater levels of channel shift demonstrated greater levels of Customer Service cost efficiency

fig. 10.28 - Online Self-Service Contacts (5 year view)

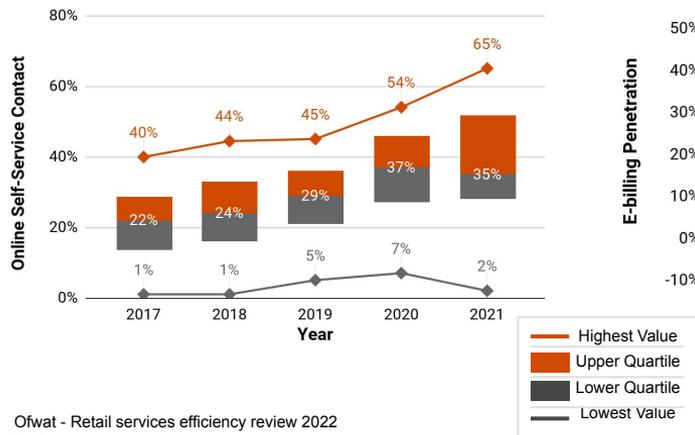


fig. 10.29 - E-billing Penetration (5 years view)

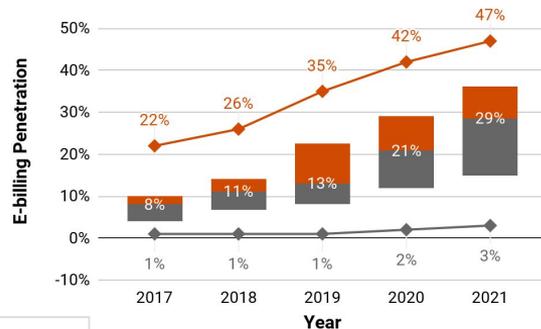
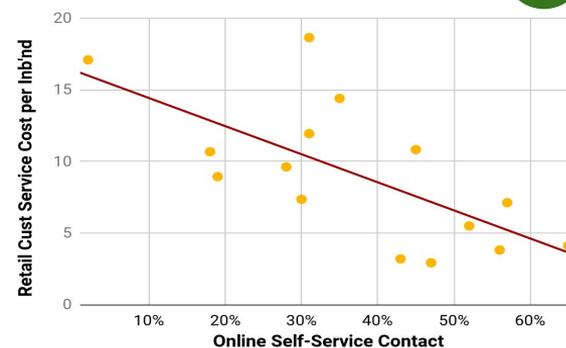


fig. 10.30 - Online Self-Service Contact vs Retail Customer Service cost per inbound contact



Appendix 12

Customer service efficiency: Average handling times

Key observations

- Average handling times and wrap times have increased over the period. Median performance with regards to AHT has gone from 468 to 577 and wrap from 126 to 171 (all values in seconds)
- This trend is in line with other sectors. As a greater proportion of 'simple' transactions are moved to online channels, the remaining transactions that require an agent to handle tend to be more complex in nature and therefore take longer to complete
- There is wide variation in performance with upper quartile performers having 31% higher handling times and 38% higher wrap times than lower quartile performers

fig. 10.31 - Average Handling Time (5 years view)

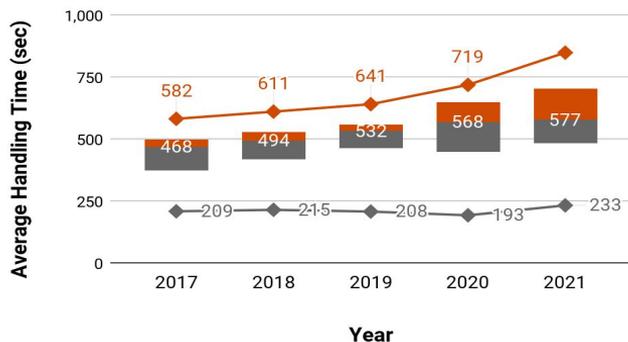
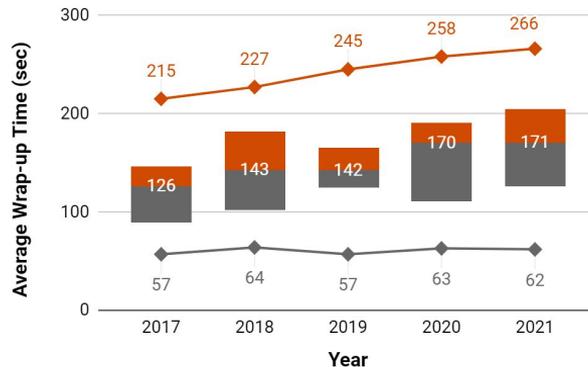


fig. 10.32 - Wrap-up Time (5 years view)



What does this mean?

- Average handling times have increased, perhaps driven by greater interaction complexity (an effect of channel shift)
- Sector wide improvements in efficiency could be delivered through reductions in the variation in performance between companies with regard to handling times
- Companies should look to analyse the reasons for the increases seen in handling times. In particular, making sure that performance management approaches have adapted to hybrid working

Appendix 13

Customer service efficiency: Average handling times

Key observations

- Different benchmarking sources indicate quite different AHTs for power and utilities but a similar figure for a cross sector average of AHT
- Call types and associated complexity are a key driver of duration and so care does need to be taken when drawing conclusions when benchmarking AHT metrics
- Whilst the scale of the performance differential ranges depending on the data source referenced for power and utilities. The finding is clear, AHT is high versus other sectors
- There, is also a meaningful correlation between average call handling time and Customer Service costs.
- To improve performance, qualitative responses from companies highlight that high on the agenda are technology initiatives that will drive improved efficiency through; reducing the number of applications used by contact centre agents; providing agents with improved data and insight; enabling better servicing of customer across channels and solutions that deliver process automation

fig. 10.33 - Average Handling Time - Industry Benchmark*

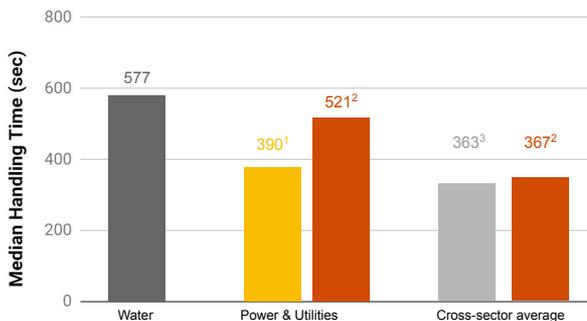
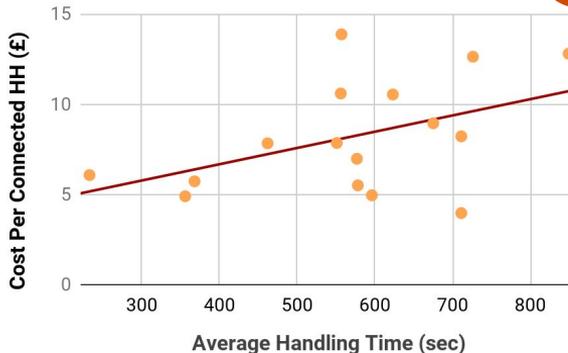


fig. 10.34 - Average Handling Time vs Cost per Connected Household



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0.46

What does this mean?

- In addition to the inter sector variation with regards to customer service operational efficiency metrics. Water companies are also taking longer to handle customer calls than other Power & Utilities companies
- It is unclear the extent to which this performance variance across sectors is a product of operational inefficiency or the types of calls being fielded
- Companies need to take care to ensure that inefficiencies are eliminated to ensure the resultant costs savings can be passed on to customers

Appendix 14

Customer service efficiency: Agent occupancy

Key observations

- The quality of the data return on the occupancy metric was of lower quality and quantity than the return against other metrics in this analysis. For example, the highest and lowest occupancy rates in the 5 year trend graph are clear and obvious anomalies
- The five year trend graph shows a significant decrease in the interquartile range over time, with the data for 2021 looking more aligned to expected performance than the data in the earlier years of analysis
- The median occupancy rate of 86% in 2021 is in the expected range of 80%-85% and this is in line with other sectors

fig. 10.35 - Agency Occupancy (5 years view)

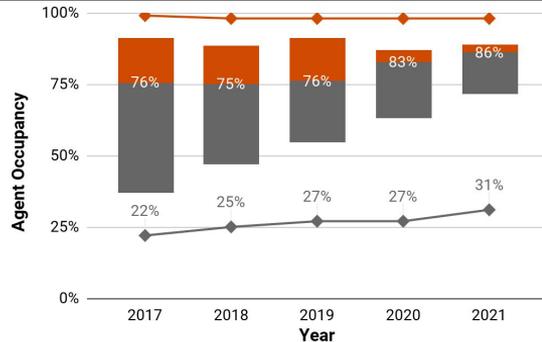
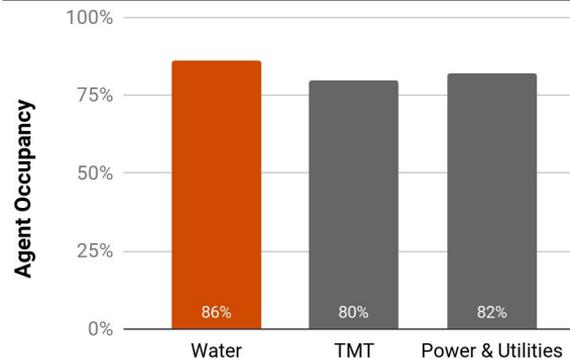


fig. 10.36 - Agent Occupancy Rate - Industry Benchmark*



What does this mean?

- Because of the quality and quantity of the data return against this metric, conclusions should be treated with caution
- Occupancy is a metric that demonstrates productive time or time spent by agents on call related activities as a % of 'logged in time'
- An occupancy rate above 85% would suggest agents are at risk of burnout and a low occupancy rate would suggest that staffing levels have not been optimised for the level of demand that the operation receives
- What this metric does not show is productive time as a % of total available time

Appendix 15

Customer service efficiency: Call transfer rates

Key observations

- A decrease in call transfers can be observed over the 5 year period, perhaps as a result of the effort to cross skill agents across interaction types as highlighted through qualitative responses. Whilst the interquartile range has narrowed over time, there is still significant variation between best and worst performers
- When comparing the performance of the sector as a whole against comparative sectors, we can see that Water has a lower transfer rate than TMT, utilities and an average across sectors

What does this mean?

- Transfer rates for the sector compare favourably with cross-sector averages
- Higher call transfer rates lead to additional costs due to double handling and lead to poor customer experience
- Whilst Water compares favourably to a number of cross sector averages, further improvement to upper quartile performance could be achieved by providing agents with better and easier access to customer and operational data

fig. 10.37 - Call Transfer Rate (5 years view)

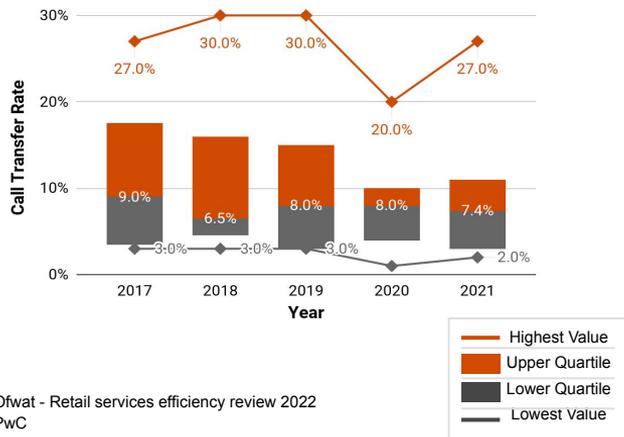
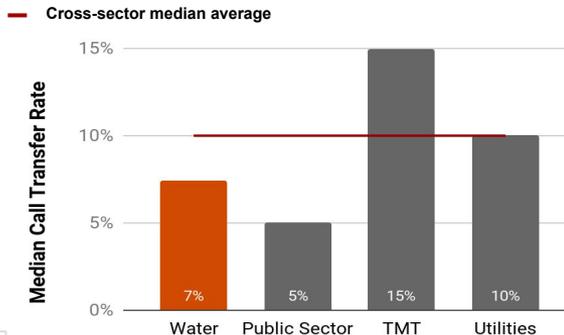


fig. 10.38 - Call Transfer Rate - Industry Benchmark*



*ContactBabel - "The UK Contact Centre HR & Operational Benchmarking Report - 11th edition, 2022"

Appendix 16

Analysis of metering performance

Key observations

- 5 companies are operating at higher than the average cost per connected property and one provided no data on the proportion of smart meters
- AMI reads are received automatically without the need for a meter reader and therefore offer a significant reduction in metering costs
- AMR requires at least a drive by read and therefore attracts costs however this should be significantly lower than the cost of reading a dumb meter
- Some companies have implemented innovative solutions that enable AMR meters to be read more frequently
- There is no meaningful correlation between Smart meter penetration and costs per household
- The 3 companies with the highest metering costs are all WOCS
- Performance amongst the largest companies is fairly evenly spread

What does this mean?

- There is no obvious pattern to explain why one company can operate with a lower metering cost than another. It is therefore likely to come down to different management approaches
- Rolling out smart meters has the ability to reduce meter reading costs in the long term as long as companies are able to realise the efficiency savings that they enable

fig. 10.39 - Metering cost per company v Smart meter penetration

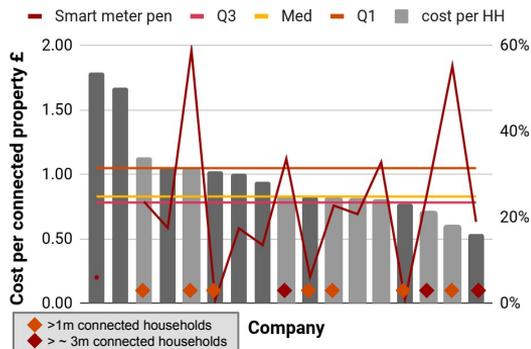


fig. 10.40 - Metering cost per household v meter

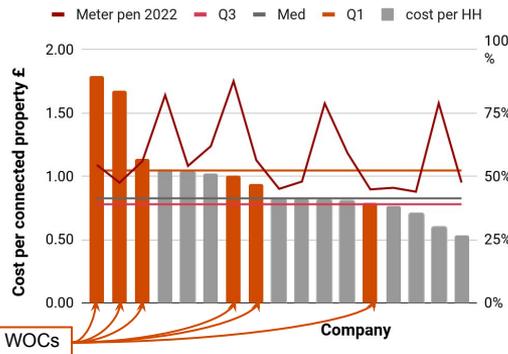
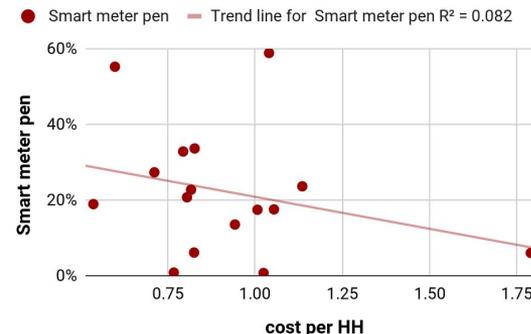


fig. 10.41 - Metering cost per household v meter penetration



Appendix 17

Economic scenario modelling

- We provide scenarios on how deprivation may be impacted over the next seven years - a **baseline**, **mid case**, as well as a **reasonable worst case** and **reasonable best case**
 - **Baseline scenario** takes the same values of the % households with defaults and IMD variables used by Ofwat in their PR19 Retail Model, i.e. no change in deprivation from assumptions at PR19
 - **Mid case** considers deprivation rises by 20% for four years, after which it drops to baseline
 - **Reasonable worst case scenario** follows the profile of the 2009 Financial Crisis - it assume deprivation increases by 40% for four years, then it drops for 20% more than baseline for three years, finally dropping to the baseline in the last year
 - **Reasonable best case scenario** which continues the downward trend in deprivation. Calculations of forecast for % household with default uses real data including the year 2021 extrapolated using a linear trend, while the forecast for % households income deprived uses a linear trend extrapolation of Ofwat's forecasted data

What does this mean?

- The current economic outlook could lead to deprivation increasing for all regions. We have provided four scenarios with a "reasonable worst case" indicating deprivation could rise by 40% in the next 5 years, while a reasonable best case assumes a continuation of the fall in deprivation
- We assume that a reasonable worst case scenario follows the profile of the 2009 Financial Crisis - a sharp increase in deprivation, followed by a decrease.
- We also provide forecasting for a reasonable best case scenario, which follows the trend in reduction of deprivation.

fig. 10.42 - Unemployment rate % - profile of the Financial Crises used for modelling

Source: ONS

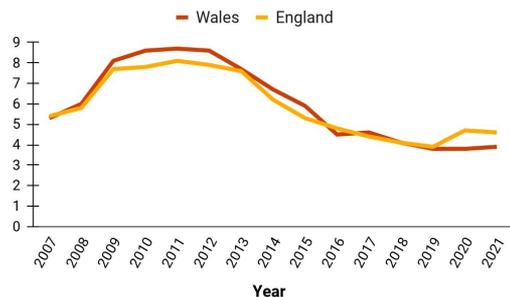


fig. 10.43 - Scenarios of changes in % household defaults (Equifax variable) for the average water company

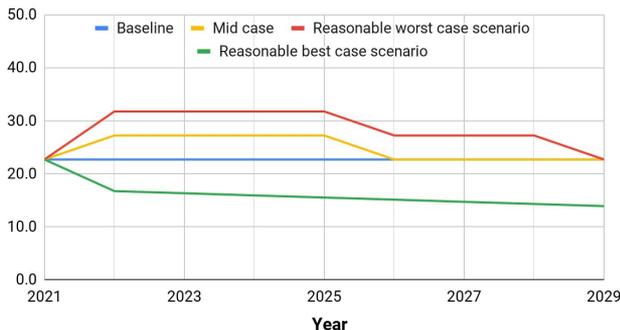
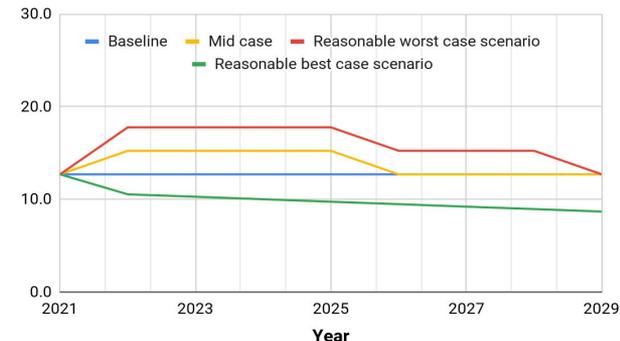


fig. 10.44 - Scenarios of changes in % households income deprived (IMD variable) for the average water company



Appendix 18

Economic scenario modelling: Average deprivation

Key observations

- We apply the scenario profiles to the retail cost models used by Ofwat at PR19 (Model 1 and Model 2)
- Assuming Bad Debt costs maintain the same relationship to deprivation, a likely impact is a material increase in Bad Debt-related costs in the case of an economic downturn
- The Model with % households with defaults (Model 1) shows a greater change in Bad Debt than the model including the % households income deprived variable (Model 2)
- If the prevailing trend continues, we should expect that efficient bad debt levels decrease
- This analysis is for illustrative purposes - it is limited by the use of Ofwat's models and data at PR19 - updated models will increase model forecasting ability

What does this mean?

- The current economic outlook could have a material effect on Bad Debt levels if it persists. Changes to baseline of deprivation due to a potential economic downturn can translate into changes of up to 85% or 48% of efficient Bad Debt costs for the average water company
- Our modeling shows that Bad Debt costs can rise significantly if deprivation rises, while it should fall if the current trend persists
- However, updates to the models can improve forecasting of effects on efficient bad debt costs

fig. 10.45 - Modelling of bad debt for company with average level of % households with defaults

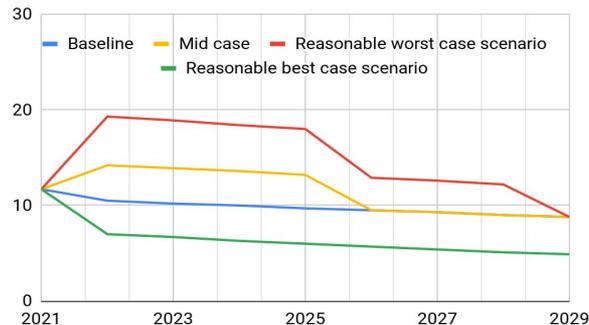
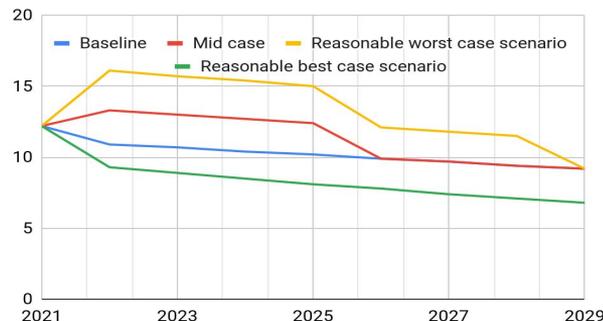


fig. 10.46 - Modelling of bad debt for company with average level of % households income deprived



Appendix 19

Economic modelling: Regional variance

Key observations

- Efficient Bad Debt increases significantly under the two downturn scenarios, with companies operating in more deprived areas experiencing a larger increase in Bad Debt costs. Companies operating in more deprived areas also see a proportionately smaller decrease in bad debt costs in “reasonable best case” scenario
- We present the model forecasts for two representative companies - one operating within the upper quartile of deprivation and another in the lower quartile of deprivation
- The representative company in the upper quartile of deprivation would experience an increase of 118% in the first years between baseline and worst case scenario, while the model predicts a difference of 67% for the company at the lower quartile of deprivation using model reRDC1. Cost differentials using model reRDC2 vary from 70% to 41%

What does this mean?

- An economic downturn is likely to impact strongly the most deprived regions. Companies with higher deprivation levels might experience higher levels of Bad Debt increases
- According to the model, an economic downturn is likely to have larger impact on more deprived areas, who already experience higher Bad Debt costs. This is due to the assumed percentage increase in deprivation leading to higher absolute deprivation levels in already deprived areas
- A continuation of the trend in deprivation decrease results in less bad debt costs for all companies, but companies in less deprived areas benefit the most

Analysis using Ofwat Model reRDC1

fig. 10.47 - Modelling of bad debt for company within the lower quartile deprivation

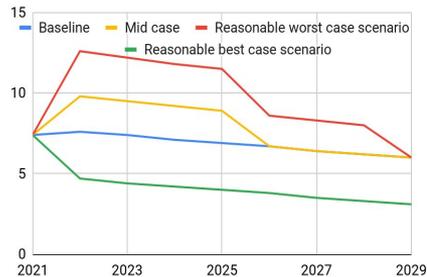
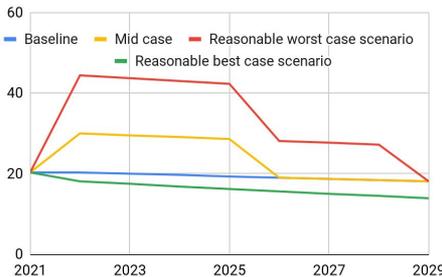


fig. 10.48 - Modelling of bad debt for company within the upper quartile deprivation



Analysis using Ofwat Model reRDC2

fig. 10.49 - Modelling of bad debt for company within the lower quartile deprivation

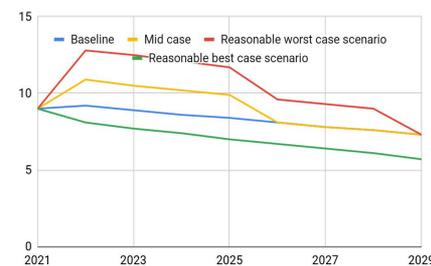
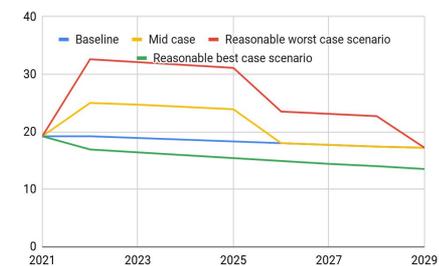
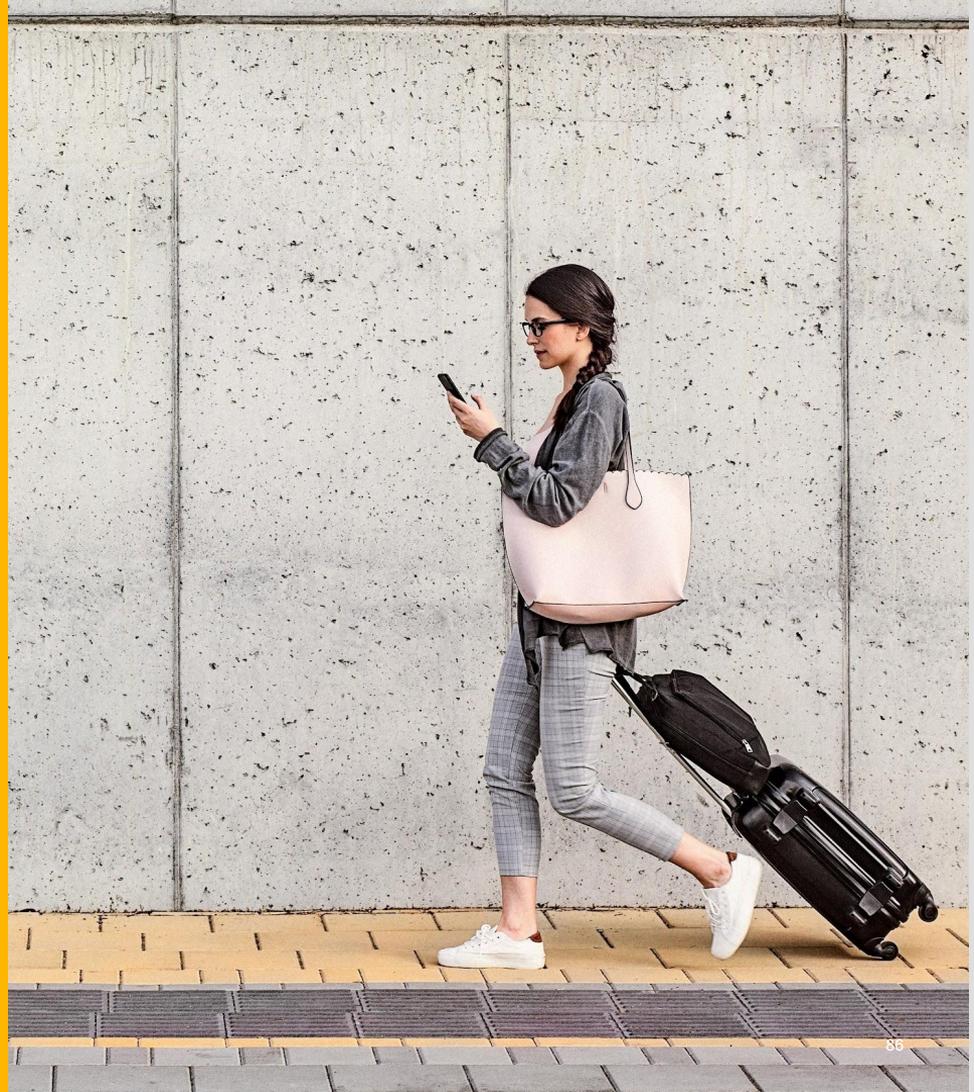


fig. 10.50 - Modelling of bad debt for company within the upper quartile deprivation





Glossary



Definitions of Retail Operating expense as defined by the Regulated Accounting Guidelines

Term	Definition
Customer Service - household	The costs associated with providing the following services for the appointee's household customers: • billing; Regulatory reporting requirements for new appointees in 2021-22 – guidelines and line definitions 10 • payment handling, remittance and cash handling; • charitable trust donations; • vulnerable customer schemes; • non-network customer enquiries and complaints; • network customer enquiries and complaints; and • investigatory visits (where the cause of the investigation is not a network issue). Excludes Customer Services costs incurred in providing services to a third party's customers.
Debt Management - household	All costs relating to the management of debt recovery for the appointee's household customers – monitoring of outstanding debt, including issue of reminders and follow up telephone calls, managing and monitoring field recovery of debt, includes costs of customer visits, managing and monitoring external debt collection routes including debt collection agencies and legal. Excludes costs incurred relating to the management of debt recovery for a third party's customers.
Doubtful debts - household	The charge/credit to the profit and loss account for bad and doubtful debts for household customers. This should include only the appointee's doubtful debts and not doubtful debts relating to a third party.
Meter Reading - household	Costs associated with Meter Reading for household customers – including ad hoc read requests, cyclical reading, scheduling, transport, physical reading, reading queries and read processing costs, managing meter data plus supervision and management of meter readers. Income from Meter Reading commission should be netted off these costs. Excludes costs associated with Meter Reading for third parties.

Other definitions

Metric	Definition
DSO	Days Sales Outstanding Calculated as Trade Debtors x 365 / Annual Revenue Measures the average age of outstanding debts and is indicative of how long it takes the average customer to make payment
Unbilled Debtor Days	Measured Income Accrual * 365 / (Regulated Revenue*Meter Penetration)
Meter Penetration	Total number of water meters / total number of connected properties (has also been calculated by meter type) The proportion of Households that have a water meter installed. Households without a meter installed are generally charged based on the rateable value of the property or an assessed charge based on occupancy and expected consumption.
RcTs/CtS	Retail Cost to Serve / Cost to Serve. This is the amount of money that the company spends on delivering its Retail Operations
DD	Direct Debit. This is an automated payment method. Customers on DD are more likely to pay their instalments on time if there are sufficient cleared funds in their bank account
KPI	Key Performance Indicator
WOC	Water Only Company
W&SC	Water & Sewerage Company

Technical terms (1 of 2)

Term	Definition
Correlation Coefficient	A statistical measure of the degree to which changes to the value of one variable predict change to the value of another. In positively correlated variables, the value increases or decreases in tandem.
Coefficient of determination (R2)	The coefficient of determination is the proportion of the variation in the dependent variable that is predicted from the independent variable(s). It is also a measure of the fit of a regression line.
C-MeX	The customer measure of experience (C-MeX) is designed to incentivise water companies to provide an excellent customer experience for residential customers, across both the retail and wholesale parts of the value chain.
Deprivation	In this context Deprivation is used to describe households that struggle financially to pay their bills.
Transience	See migration.
Migration	The percentage of internal and external migration into a region.
Bad Debt	Debt that is written off from a company's financial statements because the company has been unable to secure payment from the customer.
Bad Debt Charge	This is the charge made to the company's profit and loss account to reflect Bad Debts incurred. In simple terms this is in effect an adjustment to correct revenue that has been recognised but should be reversed.
Bad Debt Provision	The total value of doubtful debt in the company's accounts. This is debt that company believes it has no realistic chance of recovering. Companies are required to reflect in their accounts the realistic realisable value of the Trade Receivable assets. The bad debt provision is the mechanism that is used to do this. The bad debt provision is calculated based on the expected recovery rate of debts and is topped up each year through the annual bad debt charge.
Void properties	These are properties identified as being (in simple terms) unoccupied. These properties are not billed.

Technical terms (2 of 2)

Term	Definition
Vacant Dwellings	These are properties that are considered by Local Authorities to be unoccupied for the purposes of charging Council Tax. Vacant dwellings are classified as Long Term or Short Term vacant. For the purposes of our analysis we have focussed only on long term vacant dwellings as being properties unoccupied for 6 months or longer. There are a number of reasons why properties become empty. These include the death or ill health of an owner, the property being subject to probate or other legal disputes, or a landlord being unwilling or unable to let the property.
Percentage households with default	Refers to the percentage of households in the region where at least one individual living there has met Equifax's definition of default.
Correlation	Refers to the measure of Pearson's correlation coefficient, i.e. a measure of the strength and direction of the linear relationship between two variables.
Inbound contact	Contact from customers received in a Customer Service Contact Centre. This will typically be via phone as well as a range of digital communication channels such as Chat Bots.
Connected Households	The number of households that receive a water supply whether metered or not.
Cross-Sector Average (Customer Service Benchmarking)	These benchmarking figures incorporate a wider set of vertical markets including: Finance, Housing, Insurance, Manufacturing, Outsourcing, Public Sector, Retail and Distribution, Services, Technology, Media and Telecoms, Transport and Travel, and Utilities.

Thank you

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