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Agenda

Advancing economics in business

Watered-down incentives? Bad debt in the water industry

In the context of rising consumer debt levels, outstanding debts to water companies in England and Wales have continued to increase in recent years, with written-off debt rising by 65% since 1998/99. Has the incentive for customers to pay their bills been 'watered down' by the 1999 ban on disconnections? What steps might be taken by the industry and the regulator to address the challenges of bad debt?

In recent years, UK consumer debt has continued to increase, passing the £1 trillion mark in November 2004, making headlines and raising questions about the long-term sustainability of household borrowing levels.[1] This sustainability has concerned some in the water industry in England and Wales, where bad debt has been a contentious issue since the ban on disconnections, which was introduced in 1999 as a means of protecting public health. Since then, the proportion of written-off outstanding debt has risen by 65%, from £69m in 1998/99 to £114m in 2004/05 (ie, from 1.3% to 2.2% of household revenue billed). In 2004/05, bad debt cost the water industry just over £185m: £114m due to bad debt write-off, and the remainder due to the cost of outstanding revenue collection.[2] The cost of collecting outstanding revenue has also risen over the same period, from £2.44 to £2.82 per household.

There are two main categories of non-paying customers: 'can't pays' and 'won't pays'. 'Can't pays' are those who are not able to pay their bills, either due to low income or unaffordable credit commitments. 'Won't pays' are those who refuse to pay their water bill for reasons other than personal affordability—eg, they may take issue with the level of water bills or the service received from their water company.[3] This category also includes those that have moved house and not paid the arrears on their bill, intentionally or otherwise.

- **What are the changes in bad debt levels over the past eight years, and has the ban on disconnections reduced incentives for customers to pay their bills?**
- **What are the provisions for bad debt under the current regulatory regime and what steps can be taken to address the specific challenges faced by the water industry?**
- **Is the water industry disadvantaged with regard to the collection of debt, and is there scope to improve this position without reintroducing the power to disconnect?**

Watered-down incentives?

The ban on disconnections applies to primary private dwellings, schools and hospitals—it does not apply to commercial customers. An important question which therefore arises is whether this policy has had an impact on non-commercial bad debts in the water sector.

Comparisons across time

Ofwat, the water industry regulator, began collecting data on bad debt only with the ban's introduction in 1999. Consequently, while comparisons can be made between the base year of 1998/99 and subsequent years, the lack of time series data prior to 1998 makes identifying any causal effects of the ban a difficult task. Table 1 compares data from 1998/99, the financial year in which the ban was introduced, with that of the three most recent financial years. It shows that total outstanding bad debt across the industry has risen by 37% from the base year to 2004/05, nearing the £1 billion mark.[4] However, this £1 billion is a cumulative amount based on over four years worth of outstanding debt, rather than just one year. While the overall level of bad debt has grown over the period, it is important to note that the rate of growth has been in decline, suggesting some stabilisation in recent years. In addition, this measure overstates the extent of bad debt since it includes all late payments, not only bad debt. Ofwat will be introducing new reporting requirements in 2006, which will collect information on revenue outstanding for less than three months. There will then be the potential to net off this category from total outstanding revenue to try to account for late payment of bills which does not mature into bad debt. It should also be noted that the outstanding revenue figures include revenue which is written off: *excluding*

Table 1 Changes in bad debt levels, 1998/99–2004/05 (£m, 2004/05 prices)

Length of arrears	1998/99	2002/03	2003/04	2004/05	% change over period
< 12 months	381	367	377	400	5
12–24 months	175	204	203	204	17
24–48 months	148	254	224	224	51
< 48 months	705	825	804	828	17
> 48 months	n/a	n/a	120	134	11[1]
Total outstanding bad debt	705	825	924	962	37

Note: Household revenue outstanding includes revenue written off. [1] Refers to the period 2003/04–2004/05.
Source: Ofwat data and Oxera calculations.

write-off, the total outstanding debt has risen from £636m to £848m (33%) between the base year and 2004/05. In the context of the total amount of household revenue billed each year, outstanding household revenue covering up to 48 months (including revenue that is written-off) increased from 12.8% in the base year 1998/99 to 15.73% in 2004/05. In 2004/05, all outstanding revenue including that over 48 months was 18.27% of household revenue billed in that year.[5]

The data provides useful insights into the changing age profile of bad debt in the water industry, with arrears of less than 12 months rising by 5% compared with a growth of 51% for arrears of 24–48 months. This more rapid growth of more mature debt might suggest that the ban on disconnections has reduced incentives for customers to pay their bills in the medium term. While data on arrears of greater than 48 months is not available until 2003/04, the table shows that, between 2003/04 and 2004/05, these arrears have grown by approximately 11%.

Within the industry picture of increasing bad debt levels, the company picture is mixed: bad debt levels have actually fallen for two companies since the ban on disconnections. While company-specific data on bad debt is published by Ofwat, it has not made available formal analysis of company-level drivers. Possible drivers could be smaller bill increases (or larger decreases) relative to the rest of the country; changes in regional employment and prosperity; and improved collection techniques from companies. The fact that there have been decreases in bad debt for some companies could indicate that the impact of the ban on disconnections might not be clear-cut, thus requiring further work to understand the drivers of bad debt.

There is some evidence to suggest a generally low awareness of the ban among customers.[6] It could be argued therefore that the incentive for a customer to pay their bill is unchanged if they are unaware of the ban, compared with a situation in which disconnection was allowed. However, it could also be argued that it is the absence of water companies' ability to threaten disconnection that conditions incentives on customers, rather than their awareness of the ban itself.

Overall, evidence from the water industry is not conclusive: bad debt levels have risen since the ban on disconnections, but without a full understanding of the drivers of bad debt, it is difficult to determine causality. Given this difficulty, comparisons with other domestic bills might provide further insight.

Comparisons with other domestic bills

Comparison between water bills and other domestic bills shows that relative bad debt levels are higher in the water industry than elsewhere—possibly due to the ban on disconnections. Table 2 makes comparisons between water bills and rent, Council Tax and energy bills, showing the average outstanding arrears on domestic bills in 2004, in absolute terms and relative to the average bill for that year.[7] Energy bills are a useful comparator given that they are also utility bills, but also because energy suppliers have greater potential for minimising outstanding debt, given their ability to install pre-payment meters and threaten disconnection. Council Tax also provides a comparison, being a nationwide household bill with an arguably stronger power of collection than water companies (while local authorities cannot 'disconnect' non-payers from local services, non-payment of Council Tax is a criminal offence and carries a fine). In addition, we might expect the relative amount of outstanding debt to be lower than that of water companies, because the 'can't pay' group is likely to be smaller for Council Tax due to low-income exemptions.

The data shows that water bills are the third-highest outstanding domestic bill, after rent and Council Tax. The average outstanding amount of £325 is 130% of the average water bill for 2004. The comparative figure for energy bills is only 60%. Given that one of the two differentiating factors between energy and water companies is the ability to threaten disconnection, this data might suggest that incentives for household customers to pay water bills have been weakened by the ban. The difference may also reflect the effectiveness of

Table 2 Arrears on domestic bills

Type of bill	Average amount outstanding (£)	Average bill (£)	Average amount outstanding as a proportion of bill (%)
Rent	377	n/a	n/a
Council Tax	338	967	35
Water	325	249	130
Gas/electricity	181	298	60

Note: Average energy bill is based on 50% average annual gas bill and 50% annual average electricity bill in 2004. As bills vary by payment method, average annual gas and electricity bills are calculated assuming a weighting of 10% pre-payment, 45% standard credit and 45% direct debit.
Source: Department of Trade and Industry (DTI) (2004), 'Over-indebtedness in Britain: A DTI Report on the MORI Financial Services Survey 2004'; DTI (2005), 'Quarterly Energy Prices', December; Ofwat (2004), 'April's Water Bills still Lower than in 1999', press notice 14/04; and Office of the Deputy Prime Minister (2004), 'Local Government Finance: Council Taxes 2004/05', March.

pre-payment meters in reducing bad debt. In addition, the data on Council Tax arrears shows that the average proportionate amount of outstanding debt is still much lower than for water bills—30% compared with 130%—suggesting that both the relatively stronger power of collection by local authorities and the smaller 'can't pay' category have a material impact on reducing the level of bad debt.

Given the prevalence of bad debt in the water industry over and above that experienced in other sectors, the increases in bad debt over time, and the financeability constraints faced by water companies over the period 2005–10, are there adequate provisions to address stakeholder concerns

Non-payment provisions

Ofwat tackles bad debt in two ways:

- a projected level of bad debt included in companies' initial price limits;
- provision of a Notified Item for bad debt.

At the 1999 periodic review of water charges (PR 99), the baseline used to project bad debt was the level experienced in the base year 1998/99. At the last periodic review, PR 04, Ofwat provided additional support to companies by moving the baseline for bad debt projections to the 2003/04 level. The regulator did not allow for increasing levels of bad debt over the 2005–10 period in line with annual bill increases.

The Notified Item is asymmetric in nature—that is, only companies can apply to increase their allowance for bad debt: Ofwat cannot initiate an interim determination to reduce the allowance for bad debt should its level fall below that allowed initially in price limits. During the 2000–05 control period, six companies applied for increases in price limits due to increasing bad debt levels: of these, five were granted additional revenue, as shown in Table 3.

When using the Notified Item for bad debt, companies are obliged to demonstrate that the increase in bad debt is due to the ban on disconnections and that it has made reasonable efforts to recover this debt. Companies have typically demonstrated this by providing Ofwat with evidence of their revenue-recovery efforts, and making comparisons between household bad debt and non-household bad debt.

The consequence of these arrangements for bad debt is that when some customers cannot or will not pay, others must pay. It is estimated that this feedback effect accounts for around 4% of the average water bill for paying customers (including collection and interest costs in addition to debt write-off).[8] This could create further affordability problems and additional non-payment. As

Table 3 Use of a Notified Item for bad debt increases, control period 2000–05

Company	Year	Amount applied for (£m, NPV)	Amount awarded (£m, NPV)
Dee Valley	2001	Information not publicly available	0.32
Yorkshire	2002	50.7	51.8
Severn Trent	2002	74.3	61.8
Northumbrian	2003	58.6	58.2
United Utilities	2003	163.7	140.2
Anglian[1]	2003	26.8	0

Note: NPV, net present value. [1] In the case of Anglian Water, no allowance for bad debt was granted as Ofwat assessed at draft stage that, given the whole range of upward and downward cost pressures, Anglian had actually experienced a decrease in cost pressures. Anglian subsequently withdrew its claim.
Source: Ofwat (2002/03), various interim determinations.

well as being perceived as unfair (especially for low-income customers who do pay their bills), there are also associated risks: a scenario could arise whereby the feedback effects of non-payment reach such a level that bills increase beyond a certain point, creating a spiral of further affordability and bad debt problems. However, current levels of bad debt and bills do not suggest that such a scenario is likely in the current control period.

In dealing with bad debt, both Ofwat and water companies face the same challenge: identifying the appropriate level of bad debt allowance for a company, both with respect to its individual circumstances relative to other companies and for the industry as a whole—that is, what is a cost-effective level of debt recovery for the industry?[9] This article now considers how this challenge might be addressed.

Policy implications: can't pay, won't pay?

Solutions to the problem of bad debt depend largely on the drivers of debt—ie, when future policy is being determined, the key underlying question to be considered is why different groups are not paying their bills and what the implications of this are for policy development.

If the majority of bad debt is driven by the 'can't pay' group, the appropriate question is why these people can't pay: are bills unrealistically high or is the social security system failing to provide adequate support for those on low incomes? Should social tariffs be introduced such as the cap on water bills that has been announced in Northern Ireland, limiting the amount of disposable income spent on water?[10] Alternatively, if the majority of bad debt is driven by 'won't pays', the appropriate questions could be, for example: what can be done to provide these customers with an incentive to pay? Should the ban on disconnections be reintroduced for these customers? Or might their non-payment be reflected in their credit rating? In between these two extremes are customers with both 'can't pay' and 'won't pay' characteristics. Policy makers will have to consider both categories.

If different policy solutions can be applied to 'can't pays' and 'won't pays', can these groups actually be identified? The current information available to Ofwat and to water companies is unlikely to be sufficient to differentiate between these groups. However, 'can't pays' could be identified through both national benefit system data and credit rating data. The former could be used to identify those on low incomes that face affordability problems due to low income, while credit rating data could be used to identify those facing affordability problems due to onerous credit commitments. The 'won't pay' category can then be identified as the difference between the 'don't pays' and the 'can't pays'. This assumes that the 'won't pay' group exists, and indeed there is evidence of this. For example, Water UK cites a research project by Equifax which found evidence of 'defiant and calculating debtors who are able to pay their bills', with more affluent households in 'Exclusive Urban Neighbourhoods' in the debtor file than might be expected.[11]

Moves are afoot to improve the provision of credit-related data between utility companies, lenders and credit reference agencies.[12] WaterUK has recognised complications that water companies face regarding data sharing between themselves due to data protection issues.[13] For example, it is difficult to trace customers who have changed address: it is estimated that these 'leavers' now account for 25% of household bad debt.[14]

While data sharing could be improved, Ofwat and the water companies need to determine the level of effort that should be made by companies in recovering debt.

An economic level of debt recovery

Categorising bad debt customers into different groups depending on their reasons for not paying is a first step in addressing the problem, yet it does not reveal the 'economic level of debt recovery' for water companies. The parallel to this is the economic level of leakage reduction for companies: it is not merely enough for companies to know the state of the network and why leaks are occurring, they also need to know which leaks are economically efficient to fix. Companies could apply the same principle to bad debt collection. The current arrangements for bad debt recovery do not provide firms with a clear incentive to pursue efficient debt recovery. Companies might expend too much effort in proving to Ofwat that they have taken sufficient steps to recover debt, or they might exert inefficiently low levels of effort on the basis that there is no clear understanding of the efficient level of debt against which they can be measured.

So how might the efficient level of debt recovery be identified? One way would be to undertake an industry-wide research project, categorising customers by non-payment type and testing bad debt recovery options and prevention techniques—eg, pre-payment; monthly rather than quarterly or annual billing for those with constrained finances; referring customers to financial planning advisers; and different stages of county court judgment procedures. Such measures are already undertaken by different companies to various degrees. These cross-sectional results could be collated to identify the efficient level of debt-recovery effort for different customers. The efficient level of effort for individual companies could then be assessed, based on

the identification of the characteristics of non-paying customers. The details of such a system may have to be limited to industry stakeholders to prevent damage to incentives for customers to pay their bills.

Conclusions

An examination of the data relating to bad debt in the water industry suggests that the incentive for household customers to pay their bills may have been weakened by the ban on disconnections, with average amounts of outstanding debt far outweighing energy and Council Tax comparators. The differences cited between water, energy and Council Tax bills suggest that water arrears might be reduced by providing alternative payment options and increasing targeted support for those on low incomes, or strengthening water companies' powers of collection. In addition, many options exist to manage bad debt through improved data sharing and analysis, enabling companies to further refine procedures for dealing with different categories of non-paying customers. Ultimately, an efficient level of debt recovery could be identified, allowing companies to behave in a way that benefits both shareholders and customers alike and enabling Ofwat to ensure that debt recovery costs for each company are no higher than necessary.

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[1] Financial Services Authority (2005), 'Financial Risk Outlook 2005', p. 41.
[2] Ofwat, 'Industry Level Comparisons in Household Revenue Outstanding and Associated Recovery Costs', Regulatory Director letters, various years. Data released by Ofwat regarding bad debt relates to both water and sewerage services.
[3] 'Can't pay' customers who are unable to pay their water bill due to other credit commitments might be classified as 'can't pay' in the short run (assuming that they genuinely cannot afford to pay their water bill), but if this behaviour persists in the longer run, they might be classified as 'won't pays' if their ongoing spending choices exclude payment of their water bill over the long term.
[4] The 37% increase overstates the increase in bad debt over the period since the base year does not include data for debt covering a period of greater than 48 months (2003/04 was the first year in which this data was collected).
[5] Data provided by Ofwat.
[6] Ofwat and Watervoice (2003), 'Paying for Water: Customer Research', September.
[7] The relative proportion of the outstanding amount for rent is not calculated.
[8] Water UK (2005), 'Future Regulation for the Water Industry: A Consultation', July, Annex 4, and Oxera calculations.
[9] Individual circumstances relative to other companies could be driven by, for example, regional differences that affect bad debt collection and the efficiency and effectiveness of companies' handling of bad debt.
[10] The Northern Ireland water bill cap is between 1.5% and 3% of disposable income.
[11] Water UK (2005), op. cit.
[12] *Agenda* (2005), 'Accentuating the Positive: Sharing Financial Data between Banks', December, available at www.oxera.com.
[13] Water UK (2005), op. cit.
[14] Water UK (2005), op. cit.