

Forgive us our sins – Experimental evidence on arrears forgiveness and bill payment from Nairobi, Kenya

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Forgive us our sins – Experimental evidence on arrears forgiveness and bill payment from Nairobi, Kenya

Fuente David^{1,2*}, Mulwa Richard^{2,3}, Mwaura Mbutu⁴, Gitu Josiah⁴, and Joseph Cook^{2,5}

Abstract

Energy and water utilities need financial resources to maintain existing infrastructure, increase in capacity to meet growing demand, meet environmental regulations, and invest in climate resilience. Considerable attention has been paid to innovative means of financing the transition to universal access to water and sanitation services and the global transition to a clean energy future. This paper examines the foundation of utility finance – customer bill payment. We partner with Nairobi City Water and Sewerage Company to test the impact of an unconditional arrears forgiveness program on customer bill payment behavior. To our knowledge, this is the first study to experimentally test the impact of an arrears management program. We find that providing customers unconditional arrears forgiveness was not effective at improving customer bill payment and, in fact, made bill payment worse in the short run. Customers in our treatment group were less likely to make a payment towards their bill, less likely to pay their full bill on time, and accumulated more arrears over the six months following our intervention than untreated households. Our results suggest that one-off debt amnesty may inadvertently reduce compliance, and that utilities should consider conditional or alternative assistance measures.

Keywords: Water, sanitation, utility policy, RCT, arrears, bill payment

¹ University of South Carolina

² Environment for Development-Kenya

³ University of Nairobi

⁴ Nairobi City Water and Sewerage Company

⁵ Washington State University

* Corresponding author

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Funding: Environment for Development Initiative MS-746

1.0 Introduction

Energy and water utilities need revenue to cover the costs associated with routine operations and maintenance, replacing infrastructure as it ages, and system expansion to meet new demand. In addition to these core expenses, utilities need revenue to finance system improvements to meet new service quality or pollution abatement requirements and to ensure infrastructure is resilient to climate-related shocks. In the Global North, utilities have largely relied on the stability of their revenue streams to attract capital to finance these core infrastructure requirements. Investments in energy and water services have traditionally been considered safe as customers are willing to pay for essential services and pay promptly to ensure service continuity. Utilities in the Global South have not had the same success in attracting capital, particularly in the water sector, but efforts are being made to improve the creditworthiness of utilities (Advani, 2012; Advani et al., 2011; Joffe et al., 2008).

Over the past several decades, multiple factors have combined to undermine the financial sustainability of water utilities in both the Global North and Global South: underinvestment in ageing infrastructure, the increased threat of climate change, and increasing economic inequality. While considerable attention has been paid to identifying innovative ways to finance the transition to universal access to safe, affordable, and resilient water and sanitation services (OECD, 2019; WaterAid, 2021; Blended Finance Task Force, n.d.), less attention has been paid to the foundations of utility finance – reliable revenue collection and customer bill payment.

The magnitude and extent of the global utilities' arrears problem is not well known. However, utilities failed to collect 40 billion USD in outstanding water debt and nearly 100 billion USD in electricity debt annually (Theron-Ord, 2017; Liemberger and Wyatt, 2019). Evidence from individual utilities in the Global South suggests that the problem may be larger and more widespread than previously thought. For example, Szabo and Ujhelyi (2015) indicated that in 2011 households owed municipal governments in South Africa approximately 4 billion USD. However, utility arrears are not just a problem in low and middle-income countries. Recent data from the United States' Low Income Household Water Assistance Program indicate that nearly 20% of American households are in debt to their water utility (OCS, 2025).

Utilities have traditionally relied on the threat of disconnection to compel on time payment by customers. However, the COVID-19 pandemic and shifting global sentiments about the human rights to essential services have made service disconnections politically unpopular (Fincher et al., 2023; Amaechina et al., 2020; Pierce et al., 2024). This is particularly true in the water and sanitation sector where water is often viewed as a merit good (Hanemann and Whittington, 2024) and the human rights to water and sanitation have been formally recognized by the United Nations since 2010 (UNHRC, 2010).

There are several actions utilities can take to ensure customers can afford their bills for essential services, broadly termed "customer assistance programs" or CAPs. (See Adams et al. (2024) for a review on energy CAPs in the United States and Cook et al. (2020) for a global review of water CAPs). While many CAPs are intended to help customers stay up to date on their bills, arrears management plans may be needed for customers who have fallen behind on their payments.

Arrears management plans span a wide range of assistance programs and can yield multiple benefits. They can take the form of a simple repayment plan where customers repay a small amount of their unpaid balances over a specified period. Arrears management plans also include programs that provide unconditional debt forgiveness as well as those that pair timely repayment with debt

forgiveness. For example, customers enrolled in the city of Philadelphia's Tiered Assistance Program¹ are eligible for debt reduction each time they make a payment and are eligible for complete debt forgiveness after two years of monthly payments. Such conditional arrears forgiveness programs may avoid the moral hazard associated with unconditional arrears forgiveness and may help customers develop the habit of paying their bills on time. Arrears management plans thus have the potential to improve utilities' financial stability by keeping customers on the system and, ideally, helping customers develop the habit of paying their bills. If so, the benefits of arrears management plans would also extend to the broader customer base who benefit from a utility that has the financial resources to maintain and improve service quality.

The issues of personal debt forgiveness and utility arrears have received relatively limited attention in the academic literature. Scholars have examined student loan repayment (Kuan et al., 2025) and forgiveness (Catherine and Yannelis, 2023) in the United States. However, unlike utility debt, student loans are an investment in human capital that is typically paid off over a long period. Utility debt is also dissimilar to loans for tangible recourse assets like cars or real estate. Scholars have paid considerably more attention to tax payment (Alm, 2019; Hallsworth, 2017; John and Blume, 2018; Chirico et al., 2016; Antinyan and Asatryan, 2020). While much of the early tax payment literature focused on taxpayer behavior in high income countries, more recent attention has been paid to tax payment in the low- and middle-income countries (Collin et al., 2024; Mascagni and Nell, 2022; Santoro, 2024). The payment of income and property taxes to fund public goods is, however, distinct from the payment for interruptible utility services enjoyed directly by individual households.

Several studies have examined the problem of utility arrears, but very few interventions have empirically tested the impact of programs intended to improve bill payment. Exceptions include Rockenbach et al. (2023) who examined the impact of a psychological commitment information treatment on customer bill payment and Tonke (2024) who examined the impact of a water conservation campaign on bill payment as a secondary outcome in Namibia. Rockenbach et al. (2023) found that removing information frictions and commitment techniques increased payments by 29%, but only the removal of information frictions had a lasting impact. Tonke (2024) found that providing households information about conservation strategies did not decrease payments. They interpret this as an improvement in bill payment due to payments remaining stable despite a modest (5%) decrease in water use.

The literature on arrears management plans is largely descriptive and focused primarily on the energy sector in the United States (Adams et al., 2024). There has been limited attention to the application of arrears management plans in the water sector in the United States, or elsewhere, and scant attention to the implementation of arrears management plans in low- and middle-income countries. To our knowledge, this study is the first experimental evaluation of a utility arrears forgiveness program. This study therefore adds to a small but important literature on customer arrears in the energy and water sectors globally and the potential for arrears forgiveness to improve customer bill payment in low- and middle-income countries.

There are several mechanisms through which arrears forgiveness might affect customers' bill payment behavior. On one hand, arrears forgiveness presents the potential for moral hazard (Rowell and Connelly, 2012): customers who receive arrears forgiveness may expect that it will

¹ <https://cap.phila.gov/tap/>

be available again in the future, providing a disincentive for them to pay their bills promptly or in full. Arrears forgiveness could thus make customer bill payment worse.

On the other hand, arrears forgiveness might improve customer bill payment through several plausible mechanisms. Customers might view arrears forgiveness as a gesture of good will by the utility that would increase their inclination to pay their bills promptly. Szabo and Ujhelyi (2015) hypothesize this good will effect to explain the observed improvement in bill payment behavior in South Africa. Customers in arrears may also feel that paying their bills and making steady progress towards reducing their arrears may be unattainable. This may prevent them from attempting to reduce their debt. Psychological research suggests that shortening the distance to a goal may increase individuals' drive, and ability, to reach the goal (Hull, 1932; Kivetz et al., 2006). Arrears forgiveness may therefore provide customers an opportunity for a psychological reset by shortening the 'distance to a goal' that may have seemed far out of reach.

In this study, we partner with a large public water utility in the Global South to experimentally test the impact of an arrears management plan on customer bill payment behavior. In particular, we test the impact of a one-time, unconditional arrears forgiveness program on three measures of customer bill payment behavior in Nairobi, Kenya. Our treatment group consists of 876 residential customers of Nairobi City Water and Sewer Company with arrears on their accounts at the time of our study. Overall, we find that providing customers unconditional arrears forgiveness was not effective at improving customer bill payment and, in fact, made bill payment worse across our three outcome measures in the short run. The remainder of the paper is structured as follows. Section 2 describes the study location and empirical strategy. Section 3 presents the main results of our study. Section 4 provides a discussion and conclusion.

2.0 Empirical strategy

2.1 Study location and experimental context

This study was implemented in Nairobi, Kenya in partnership with Nairobi City Water and Sewerage Company (NCWSC). As the economic hub of East Africa, Nairobi is home to nearly 5 million people (KNBS, 2023). NCWSC provides water and sanitation services to over 240,000 residential customers, commercial customers, and industrial customers. They also sell water through a network of staffed and automated (pre-paid) kiosks to households in informal settlements who typically lack a private, household connection to the piped water network. According to WASREB, Kenya's national water regulator, NCWSC serves approximately four million people, 82% of the city's population (WASREB, 2024).

At the beginning of our experiment, residential customers in Nairobi accounted for 89% of customer accounts, 47% of water sales, and 58% of total arrears. Approximately half (45%) of residential customers had unpaid balances (arrears) of over 407 KSH (~3.45 USD²), the monthly minimum charge at the time of the study. A quarter of residential customers had arrears over the median bill of 3,150 KSH (~27 USD).

NCWSC has a formal disconnection policy for customers who are behind on their bills. According to NCWSC's official policy, bills are due seven days after the bill date and customers have a seven-

² 1 USD= 118 KSH at the time of the study

day grace period to pay their bill.³ On the fifteenth day after the billing date, “disconnection of the services shall be carried out for overdue debts” (NCWSC, 2021). Like many utilities, however, this policy is not strictly enforced for a variety of operational, financial, and political reasons.⁴ NCWSC does not impose any late fees or penalties for overdue water bills.

2.2 Study design, identification strategy, and potential mechanisms

This study tests the impact of an unconditional arrears forgiveness program on residential customers’ payment behavior. The study was preregistered at American Economic Association’s registry for randomized trials (AECTR-0009598) and received ethical approval from NACOSTI (Ref No. NACOSTU/P/13/8073/406) and the University of South Carolina’s Institutional Review Board (Pro00121799). In consultation with NCWSC, the study was limited to customers with arrears between 500 and 5,000 KSH (4.25 USD to 42.50 USD) as of June 2022. This range was selected in collaboration with NCWSC to accommodate the project budget and to ensure arrears were salient, but not reflective of severe or chronic non-payment issues. After stratifying on deciles of arrears, 10,000 customers meeting this eligibility criteria were randomly assigned to treatment-eligible ($n=5,000$) and control groups ($n=5,000$). Cognizant of the threat of moral hazard, NCWSC required documentation that customers formally acknowledged that the arrears forgiveness was a one-time program. Thus, customers in the treatment group were ordered randomly and then contacted by a team of survey enumerators via the phone number on file with NCWSC to ask if customers were interested in participating in the one-time arrears forgiveness program and to record their acknowledgement that the program was a one-time opportunity. In our experimental context, asking customers to formally acknowledge the one-time nature of the program may serve as a form of ‘cheap talk’ to potentially buffer against the threat of moral hazard (Cummings and Taylor, 1999). Enumerators also asked customers a set of simple questions about their knowledge of arrears and reasons they had difficulty paying their bill on time. Customers who expressed interest in the program and who acknowledged the one-time nature of the program were enrolled in the program until the budget for the study was exhausted. In total, the study enrolled 876 customers in our treatment group.

Customers in the treatment group were contacted in July and August of 2022. Credits equal to the arrears on their June 2022 bill were applied to their accounts shortly after they agreed to participate in the one-time debt forgiveness program. Customers were notified of the payment by NCWSCs payment system via SMS. As specified in the study registration, our main outcome measures examine customers’ payment behavior for six months after the credit was applied to their accounts. In particular, we estimate the impact of the arrears forgiveness program on three measures of customer bill payment behavior: 1) the number of times a customer made any payment towards their bill over the observation period (*anypay*), 2) the number of times a customer paid their current monthly bill in full over the observation period (*payfull*)⁵, and 3) the total amount of arrears accumulated over the observation period (*arrears*). For practical purposes, we consider a

³ All billing at NCWSC is done electronically via SMS. Thus, customers receive their bills immediately once they are generated.

⁴ Service disconnections are not directly observed in the administrative billing records. See Coville et al. (2023) for a detailed discussion of the variable enforcement of the disconnection policy in Nairobi.

⁵ The “full” bill by our definition includes only the prior month’s billed consumption. In the case of a customer with accumulated arrears, this does not mean the customer paid the entire balance due. In a sense, this measures whether customers are staying “current” and not falling farther behind.

customer's bill paid in full (*payfull*) if their payment was within 10 KSH of their previous bill. We also consider any payment made by a customer (*anypay*) as a payment over KSH 1. We construct each of these outcome measures from information contained in NCWSC's customer billing records.

Because of randomization, average treatment effects can be identified by examining the differences in means in the post treatment period. We also employ a difference-in-difference strategy that employs six months of pre-treatment data. Arrears forgiveness for the treatment group was applied to customer accounts on a rolling basis as they confirmed interest in participating in the program. The post treatment period for the customers in the treatment group is defined as the period after they were provided arrears forgiveness (July and August 2022). We use August 2022 as the start of the post treatment period for the control group.

3.0 Results

At the beginning of our experiment (June 2022) customers in our sample used an average of 14 m³/month of water and had an average bill of 1060 KSH/month. Customers had an average unpaid balance of 1950 KSH on their accounts, slightly higher than customer's average monthly bill. We observe no statistical difference in average water use or arrears in between the treatment and control groups. (See Figure SI 1 in the included Supplementary Information for the distribution of arrears in the treatment and control groups).

As noted above, customers in the treatment group were contacted by enumerators to confirm interest in participating in the arrears forgiveness program.⁶ Seventy-two percent of customers in the treatment group were renters⁷; the majority of owners (85%) reported living at their property. As part of the screening survey, enumerators asked customers if they were aware that they had arrears on their accounts. The vast majority (90%) of customers in the treatment group were aware that they had unpaid balances on their account. Customers were also asked whether and why they had problems paying their water bills. Seventy-three percent of customers reported having trouble paying their bills and reported a variety of reasons (Figure 1). Customers largely cited issues with income as the driver of their bill payment problems. Approximately one-third of customers reported expenditure shocks ("unexpected large expenses") and irregular income as a primary reason that had difficulty paying their bills on time. Notably, however, 30% cited forgetting the bill due date as a reason for missing payments.

Table 1 presents a summary of our main results for the outcome variables and timeframe specified in our pre-trial registration. Column (a) shows that randomization achieved balance in the pre-treatment period for our three outcome measures. Prior to the experiment, customers in both the treatment and control groups made approximately two payments in the six months prior to treatment and paid their bill in full twice. Although households randomly assigned to the treatment group had higher average accumulated arrears than the control group in the six months before treatment, the difference is not statistically significant.

⁶ Three percent of customers in the treatment group that were contacted were not interested in receiving arrears forgiveness.

⁷ Their mobile numbers were on file with NCWSC and these renter households were directly responsible for paying their water bills.

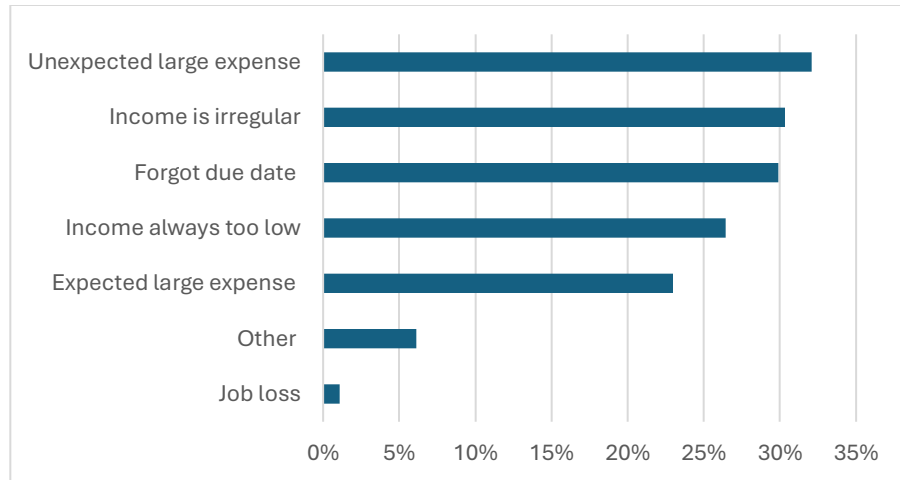


Figure 1. Reasons customers had trouble paying their bills (n=636).
(Note: Customers were allowed to select multiple reasons.)

Make any payment (# times in past 6 months)	Pre (a)	Post (b)	Diff (Post-Pre) (c)
Treatment	2.24(0.049)	1.92 (0.051)	-0.32 (0.07)***
Control	2.32 (0.02)	2.27 (0.023)	-0.05 (0.03)
Diff (Treatment-Control)	-0.08 (0.056)	-0.35 (0.058)***	-0.27 (0.08)***
Pay bill in full (# times over past 6 months)			
Treatment	2.19 (0.049)	1.83 (0.048)	-0.36 (0.068)***
Control	2.26 (0.021)	2.22 (0.022)	-0.045 (0.03)
Diff (Treatment-Control)	-0.07 (0.059)	-0.39 (0.057)***	-0.31 (0.079)***
Arrears accumulated in past 6 months (KSH)			
Treatment	29 (217)	1749 (113)	1720 (244)***
Control	-214 (72)	459 (59)	674 (93)***
Diff (Treatment-Control)	-243 (194)	1289 (149)***	1046 (244) ***

Table 1. Summary of main experimental results for the three outcome measures of interest: number of payments (*anypay*), number of current bills paid in full (*payfull*), and arrears (*arrears*) accumulated six months after treatment. (Notes: *, **, *** denotes 10%, 5%, and 1% level of significance, respectively. Standard errors presented in parentheses. One-time arrears forgiveness is not included in the post treatment measure “Post”.)

Examining simple post-treatment differences in means between the treatment and control groups (column (b)), the arrears forgiveness program reduced the number of payments customers made

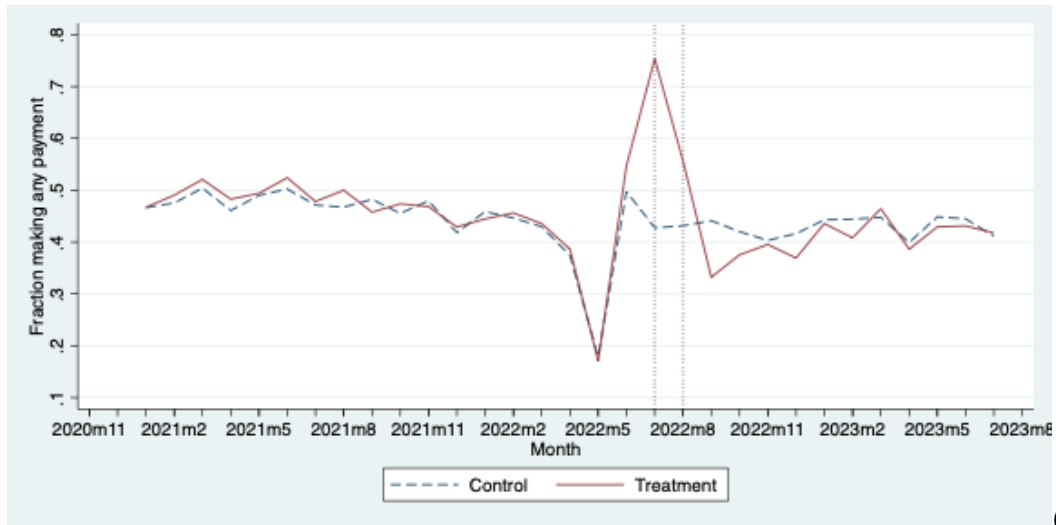
(*anypay*) in the post treatment period. In particular, the arrears forgiveness resulted in approximately a 15% decrease in the number of payments made by customers in the six months following treatment (i.e., 0.35 fewer payments on a pre-treatment mean in the control group of 2.32). The arrears forgiveness program resulted in a similar magnitude decrease in the number of times customers paid their bill in full (*payfull*) in the six months after treatment. Consistent with the impact on customer bill payment behavior, the arrears forgiveness program had an adverse impact of the amount of arrears customers accumulated in the 6 months after treatment. These results hold, but are slightly smaller in magnitude, when we employ a difference-in-difference model specification to capture sectoral time trends in bill payment (column (c) in bold). (See Table SI 1 for the econometric results of the difference-in-difference model.)

We examine heterogeneous treatment effects with difference-in-difference models for customers with pre-treatment arrears above and below the median arrears (1613 KSH) of customers in our study sample (Table 2). The negative impact of arrears forgiveness on customer payment behavior remains statistically significant across our three measures of payment behavior in both high and low arrears subgroups. However, the customers with high pre-treatment arrears were less likely to make any payment, less likely to pay their current bill in full, and accumulated more arrears in the six months after the intervention than those with low pre-treatment arrears.

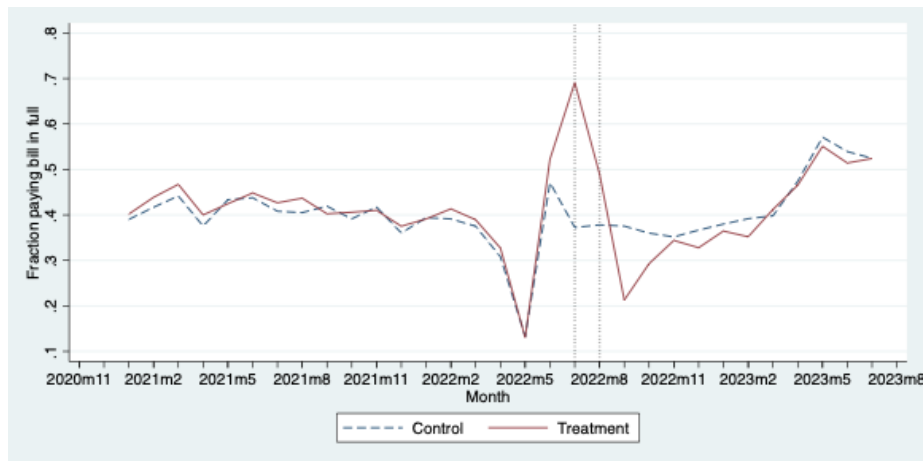
Figure 2 highlights the trends of our three outcome measures over the study duration, including 12 months of post-treatment data. Customers in the treatment group exhibited worse payment behavior for each outcome measure of interest in the months immediately following the arrears forgiveness intervention. However, this deterioration in payment behavior relative to the control group attenuates over time. When we expand our post treatment observation window from six to eight months, we find the effect of the arrears forgiveness intervention on the number of payments made (*anypay*) and number of full payments (*payfull*) made is no longer statistically significant (Table SI 2). The difference in arrears accumulated post treatment remains statistically significant, but only at the 5% level and at half the magnitude.

	(1) No. payments over 6 mo. (<i>anypay</i>) below median	(2) No. payments over 6 mo. (<i>anypay</i>) above median	(3) No. full payments over 6 mo. (<i>payfull</i>) below median	(4) No. full payments over 6 mo. (<i>payfull</i>) above median	(5) Change in arrears over 6 mo. (<i>arrears</i>) below median	(6) Change in arrears over 6 mo. (<i>arrears</i>) above median
Post*Treat	-0.19*** (-2.68)	-0.35*** (-4.63)	-0.25*** (-3.58)	-0.39*** (-5.18)	793.8*** (3.56)	1290.5*** (2.68)
Post	-0.24*** (-8.05)	0.13*** (4.52)	-0.23*** (-7.77)	0.14*** (4.80)	854.4*** (7.58)	493.0*** (3.26)
Treat	-0.081 (-1.20)	-0.067 (-0.84)	-0.068 (-1.02)	-0.060 (-0.76)	-46.5 (-0.25)	511.8 (1.25)
Constant	2.71*** (94.81)	1.94*** (61.87)	2.65*** (94.49)	1.88*** (61.26)	-433.3*** (-4.95)	5.76 (0.05)
Observations	5,740	5,724	5,740	5,724	5,773	5,782
R-sq	0.011	0.0055	0.012	0.0066	0.020	0.011

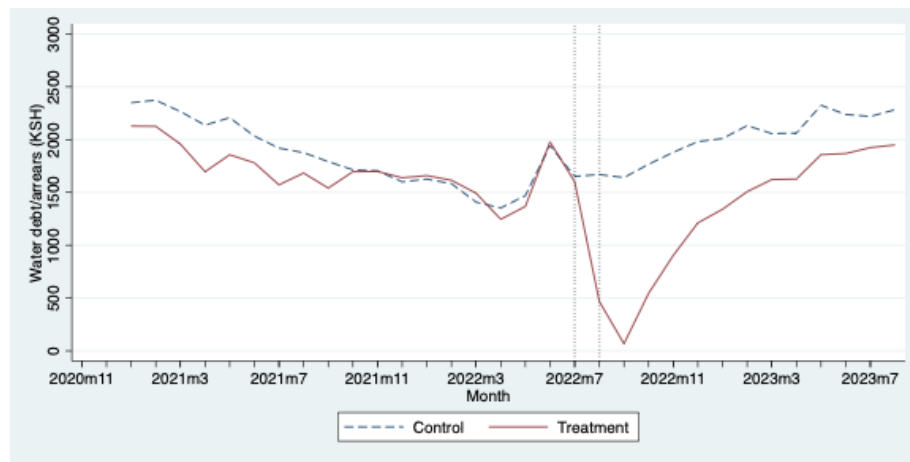
Table 2. Difference-in-difference results for the three outcome measures of interest: number of payments (*anypay*), number of current bills paid in full (*payfull*), and arrears (*arrears*) accumulated six months after treatment for customers with above and below median pre-treatment arrears. (Notes: *, **, *** denotes 10%, 5%, and 1% level of significance, respectively. Standard errors clustered at the account level. T-statistics presented in parentheses. One-time arrears forgiveness is not included in the post treatment measure “Post”.)



(a)



(b)



(c)

Figure 2. Trends in fraction of customers making any payment (a), fraction paying their bill in full (b), and arrears (c) among treatment and control groups. Treatment periods noted by vertical dashed lines. (Note: Panel (c) plots *monthly* values of arrears, while our key outcome measure is the amount of arrears accumulated over 6 months.)

Examination of treatment effects by month 11 months after the intervention indicates that there is no statistical difference in the number of payments made or number of full payments made by customers in the treatment and control groups four months after the intervention (Figure SI 2 Supplemental Information). We observe no statistical difference in the amount of arrears accumulated in treatment and control groups seven months after treatment (Figure SI 3 in Supplemental Information).

4.0 Discussion and conclusion

At the start of our study nearly half of NCWSC's residential customers had unpaid balances on their accounts. Customers in our treatment group reported being cognizant of the arrears on their account and over two thirds reported having problems paying their bills. When asked the reasons for this trouble, customers largely pointed to income-related issues. Despite water bills in Nairobi being relatively low, this suggests that some form of financial assistance or flexible payment plan might help improve customer bill payment. In this study, we test the impact of one type of an arrears management plan, an unconditional arrears forgiveness program, on customer bill payment behavior. Consistent with economists' traditional concerns about moral hazard, we find that providing customers arrears forgiveness had a detrimental impact on their bill payment in the short run. Customers who received arrears forgiveness were indeed less likely to make a payment towards their bill or pay their bill in full, and they accumulated more arrears in the six months after receiving arrears forgiveness than customers who did not. However, this negative impact on customer bill payment behavior attenuated over time. This suggests that while the intervention was not effective at improving customer bill payment, it does not appear to have had a lasting detrimental impact on customer payment behavior.

Previous work in South Africa suggested that outreach efforts by utilities might create a sense of goodwill among customers that could lead to improved bill payment behavior (Szabo and Ujhelyi, 2015). It is plausible that providing customers arrears forgiveness could create a sense of goodwill towards the utility, particularly in comparison to the education campaign conducted in Szabo and Ujhelyi (2015). This does not appear to be the case in our experimental context. We also do not find evidence that unconditional arrears forgiveness provided customers a psychological reset to 'shorten the distance to a goal' of helping them stay on track with bill payment (Hull 1932; Kivetz et al. 2006).

Confirming our institutional partner's concern that arrears forgiveness might disincentivize customers from paying their bills, it seems likely that arrears forgiveness indeed posed a moral hazard. However, moral hazard in this context should not necessarily be interpreted as customers simply waiting for another handout. The bill payment behavior of customers who received arrears forgiveness was statistically indistinguishable from customers in our control group the medium to long run (four to 12 months after the intervention). Violette (2021) posited that customers might view utility arrears as a form of micro-loan from utilities and that customers might use arrears as a means of consumption smoothing to match irregular, or insufficient, incomes in the face of competing financial pressures. Indeed, nearly a third of customers in the treatment group who reported having difficulty paying their bills on time indicated that irregular income was an important reason they were in arrears. Customers using utility arrears as a micro-loan seems plausible in contexts where the perceived – or actual – threat of disconnection is low, particularly in relation to other services. For example, immediate payment for service is often required for

medication, medical services, pre-paid cellular service, and pre-paid electricity service, which is quite common in Nairobi. While moral hazard may be at play in our experimental context, it is possible that providing customers arrears forgiveness relieved one financial pressure that allowed them to focus on other consumption priorities. This may have turned their attention from away from attempting to stay current on their water bills in the short run.

To our knowledge, this study represents the first experimental evaluation of an arrears management plan. Overall, we find that providing customers unconditional arrears amnesty had a negative impact on customer bill payment behavior in the short run, but did not have long run detrimental effects. The results of our study suggest that scaling up such a program would not improve customer bill payment in Nairobi. However, unconditional arrears forgiveness is one type of an arrears management plan. An arrears forgiveness plan that is conditional on customers making regular payments to their bills may be a more effective means of improving customer bill payment behavior. While a conditional arrears forgiveness program would require more institutional capacity to implement, it provides customers an incentive to pay their bills in a timely manner and may contribute to the development of positive bill payment habits.

Many customers in our treatment group reported having trouble paying their bills for financial reasons. Thus, it is possible that targeted customer assistance programs may be necessary to help customers stay current on their water bills. To the extent that customers use utility arrears as microloans to smooth consumption, utilities may need the credible threat of disconnection to compel customers to pay their bills. More research is needed to understand what types of interventions work in different contexts, for different types of customers to improve customer bill payment. Reliable customer bill payment is the foundation of utility finance. Ensuring customers pay their bills in a timely manner is critical to helping utilities finance the transition to high-quality, resilient water and sanitation services for all and a clean energy future. Testing approaches to addressing this challenge should be a high priority for utilities, governments and donors alike.

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