Using Behavioral Insights to Decrease Non-Payment for Water

Arne Robert Weiss*[1], Bettina Rockenbach*[2], and Sebastian Tonke*†[2]

[1]University of Oldenburg – Ammerlaender Heerstrasse 138 26129 Oldenburg, Germany
[2]University of Cologne – Chair of Behavioral Economics Albertus-Magnus-Platz 50923 Cologne, Germany, Germany

Abstract

Utilities such as water and electricity play an essential role for economic development. At the same time, they are a basic human need. These two sides turn non-payments for utilities into a thorny problem. Defaults on payments constrain the maintenance and expansion of infrastructure, in particular in developing countries. Denying access to non-paying customers, however, is problematic (and often legally restricted). In this setting, behavioral interventions may offer a powerful alternative approach to reduce non-payments. In a natural field experiment in cooperation with the national Namibian water provider, we implement two behavioral interventions and a baseline treatment, treating about 10,000 customers over a time span of nine months. Our baseline provides customers with a regular text message containing simplified invoice information. In the other two treatments, we add structural elements to evoke a water-paying self-concept or implementation intentions about future payments. In the first month, the commitment treatments increase payments compared to the baseline by 9% and 18%, respectively. The treatment effects fade out over time, but rebound effects are not observed. We estimate a large and lasting additional effect of the text message itself. Our study demonstrates the power of behavioral interventions in a context where standard economic solutions are limited.

Keywords: nudge, self, concept, implementation intentions, non, payment for public services, developing country

*Speaker
†Corresponding author: tonke@wiso.uni-koeln.de