

# **Artificial Intelligence and Debt Collection: Evidence from a Field Experiment**

## **Abstract**

Collaborating with a European debt collector, we examine the use of artificial intelligence (AI) in collecting and resolving delinquent consumer debt. We build a framework that allows AI to prescribe collection actions for debtors each day and test the framework in a field experiment where a group of debtors is randomly assigned to receive AI-prescribed collection actions. We provide compelling evidence that AI-prescribed collection actions can achieve a higher debt repayment rate with fewer collection actions. Specifically, the repayment rates are 10.10 percentage points higher for debtors who are subject to AI-prescribed actions, compared to a baseline repayment rate of 43.14 percent for debtors who are subject to human-prescribed collection actions. Moreover, we investigate the distributional effects and show that the effect of AI in improving repayment rates is more pronounced in low-income areas. While debtors in low-income areas are less likely to repay with human-prescribed collection actions, there is no significant difference in repayment between low- and high-income areas when AI prescribes the actions. By improving the repayment rates of delinquent debt in low-income areas, the use of AI can contribute to the future credit access and financial health of disadvantaged debtors as an entire group.

**Keywords:** Artificial Intelligence, Debt Collection, Field Experiment, Responsible Finance

**JEL Codes:** D12, G29, G51