Using AI to Promote Financial Re-Inclusion: an Experiment in Debt Collection

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1 Summary

I am a 4th year economics PhD student at the University of California, San Diego. My fields are labor and development economics, and I am interested in financial inclusion and migration topics. My current main project consists on partnering with a firm that uses conversational AI to optimize the debt collection process. I am in the process of designing an experiment that varies both financial incentives and features of the AI to increase borrowers' interest in negotiating their debt and eventually reaching a repayment agreement. If these incentives are effective at increasing repayment, we plan to follow up with a subset of the borrowers up to one year after the intervention to measure downstream effects, using the repayment results as a first stage of an instrumental variable estimation, on financial health and labor market outcomes. For this projects, learning more about other applications of AI in economics and ways in which researchers experiment with it would greatly help me inform the experimental design.

2 Other Projects

Here is a summary of my other ongoing projects:

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- **Exposure to Banking Crisis and Financial Outcomes: Evidence from Immigrants to the US:** Using data on migrants to the US from the National Survey of Unbanked and Underbanked Households, along with country-level data on banking crisis episodes, I estimate the correlation between exposure to banking crises in the country of origin and usage of financial services in the US. My findings are weakly consistent with previous studies that focused on earlier crises episodes: positive correlation on the first 10 years after migrating, but the gap closes afterwards. My estimates suggest that living through a banking crisis increases the probability of being classified as underbanked by 12% (with a baseline underbanking rate of 15%), which is entirely driven by non-bank remittances. Unlike the unbanking result, the correlation with remittances exhibits some persistence across time. Finally, exposed immigrants are also less likely to have savings for a rainy day, albeit only in the first few years after migrating.

- **Intergenerational Persistence of Intimate Partner Violence (with Camila Navajas-Ahumada and Frances Lu):** We study the intergenerational persistence of intimate-partner violence (IPV) in Sub-Saharan Africa. Women who report that their fathers physically abused their mothers are 25.9 percentage points more likely to experience IPV. Place and ethnicity explain one third of the persistence variation, with no additional variation explained by other observed socioeconomic factors. Women who report that their mothers were IPV victims are more likely to find IPV acceptable, which is not explained by a rationalization of their own victimization. IPV persistence is stronger in ethnicities with lower IPV prevalence, emphasizing the role of parental IPV relative to its cultural salience

- **Brain Drain and Brain Gain Within the United States (with Fabian Eckert, Gaurav Khanna, Tatjana Kleineberg, and Collin Wardius):** We study interstate migration dynamics from 1940 to 2019 and calculate brain drain measures at the state level. We try to decompose these measures in supply and demand components, by exploring the concentration of production and employment of college-educated workers. We correlate the brain drain measure with the college wage premium, and with the initial share of college-educated workers in each state, to assess whether migration increases or reduces inequalities in the distribution of college workers across space. We intend to use these metrics to determine who wins and who loses from migration, how these patterns have evolved across time, and what potential implications may be for state policymakers.

3 Committee Members

Craig McIntosh (co-chair), Tom Vogl (co-chair), Gordon Dahl, Krislert Samphantharak, William Mullins