

Bias Correction in Loan Applications for Microentrepreneurs

Abstract

Microfinance institutions play a crucial role in providing credit to individuals and small businesses within both the informal and formal economy, relying on credit assessors to evaluate applications. However, biases can emerge at various stages of the credit assessment process, influencing lending decisions and shaping financial inclusion outcomes. This study examines the presence and propagation of bias in microfinance lending, with a particular focus on sensitive attributes such as gender, economic sector, and level of education. Additionally, it explores how bias manifests across different phases of the credit application and approval process, highlighting the role of credit assessors in either mitigating or exacerbating these disparities.

Leveraging data from a leading microfinance institution, this study investigates how diverse social and economic contexts influence lending patterns. To address these challenges, we introduce a novel methodology to quantify bias at the individual assessor level. This approach analyzes past credit assessments to measure bias at multiple levels across sensitive attributes while incorporating assessor characteristics and comparing evaluations with results across the full financial system. By integrating these insights, the proposed framework provides a robust, data-driven method to assess and mitigate sources of bias in microfinance lending. The findings contribute to the development of fairer credit evaluation models, support salesforce management by providing a clear direction of training to eliminate potential biases and ultimately foster greater financial inclusion and more equitable access to credit for marginalized groups.

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