Fintech and Credit Scoring for the Millennials: Evidence using Mobile and Social footprints

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Abstract

Using a unique and proprietary loan-level data from a large Fintech lending firm in India, we analyze whether unstructured data pertaining to a consumer's social and mobile footprint can act as a substitute for traditional credit bureau scores. We find that the mobile footprint of an individual outperforms the credit score in predicting loan approvals and defaults. Importantly, including measures of borrower's "deep social footprints" based on call logs significantly improves default prediction. We use machine learning based prediction counterfactual analysis to predict the loan outcome for borrowers who were denied credit, perhaps due to the lack of traditional credit scores. We show that using alternate credit scoring using the mobile and social footprints can expand credit as well as reduce overall default rate. Our study has implications for expanding access to credit to those who do not have a credit history but who leave a large trace of unstructured information on their mobile phones that can be used to predict loan outcomes.

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