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DEBT DISTRESS PROTOCOLS

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An action project to help financial service providers detect debt distress among their borrowers and administer interventions to alleviate distress.

THE STATE OF DEBT DISTRESS

The microfinance crises in Andhra Pradesh in 2010, and more recently in Assam, portrayed widespread borrower distress and brought to the fore, the importance of detecting and alleviating debt distress. The extent of distress may be further pronounced for low-income households due to multiple irregular streams of income and accompanying fluctuations in repayment capacity. Our recently released report on addressing debt distress summarises the types of interventions required for the prevention, identification, and alleviation of distress.

Identification of Debt Distress

Debt distress or over-indebtedness can be identified through quantitative indicators such as the level of delinquency faced by the borrower. However, distress may manifest before or even without the occurrence of defaults. Qualitative research on household experiences with debt shows that borrowers engage in varied coping mechanisms to repay loans which may range from mild strategies to extreme sacrifices that indicate the presence of distress. Households may pull children out of school, postpone medical care, or sacrifice other such crucial aspects to reconcile their inability to make repayments with their high debt burden. Low-income households are more likely to engage in such sacrifices since they may fear exclusion from debt markets. This fear is often underscored due to the demand-supply mismatch. There exists a very large pool of (currently unserved) borrowers that providers can turn to due to the high demand for loans and their commercial necessities, invariably excluding the current borrowers from the debt market. The issue is further magnified due to the regulatory design surrounding credit decisioning and its implementation.

Debt Distress Prediction Model

Information critical to predicting and identifying debt distress lies with three entities to different extents - the provider who has visibility over the loans it has extended, the credit information companies who hold information regarding borrower's credit activity and finally, the borrower who carries a complete knowledge of past and ongoing experience with credit. Regularly capturing all these sources of information could be prohibitively expensive for policymakers and providers. In this project, we have partnered with the Robert Bosch Center for Data Science and AI (RBCDSAI) at IIT Madras to develop an ML model that can predict debt distress using data readily available with providers.

This project aims to field test the debt distress prediction model and propose provider-level interventions to alleviate distress.

KEY MILESTONES & PHASES

The project has two major phases – to identify & alleviate distress along with five key milestones. These are described below.

IDENTIFY DISTRESS

Identifying Distressed Households by deploying the distress prediction model on a sample of borrowers.

Validating the Model by conducting a household-level survey on the model-identified households to ascertain the model's accuracy.

Improving Accuracy and Interpretability by refining the model based on the findings from the validation survey.

ALLEVIATE DISTRESS

Piloting Alleviation Approaches by field-testing various provider-level interventions to alleviate distress.

Designing Debt Distress Protocols by studying the effects of the deployed interventions and their efficacy at alleviating distress.

OUTPUTS

The project shall result in three distinct outputs:

DEBT DISTRESS PREDICTION MODEL	LIST OF DISTRESS INDICATORS	DEBT DISTRESS PROTOCOL
An ML-based model to predict households that are experiencing debt distress	Indicators that enhance the accuracy of the distress prediction model.	A comprehensive guide on how providers should intervene to alleviate debt distress.

We plan to extensively socialise the outputs of this project amongst relevant stakeholders to enable prompt and wide adoption of the provider-mediated distress alleviation approach. The intended impact of scaling the approach is to provide a pathway for the rehabilitation of borrowers in debt distress and help providers manage portfolio risk more effectively. In the interim, we shall also release regular publications, including featured posts and conceptual explainer pieces as part of the project.

For further details regarding the project, please contact Dwijaraj Bhattacharya @Dwijaraj.b@dvara.com