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## Credit Market Consequences of Improved Personal Identification: Field Experimental Evidence from Malawi

By XAVIER GINÉ, JESSICA GOLDBERG, AND DEAN YANG

*We implemented a randomized field experiment in Malawi examining borrower responses to being fingerprinted when applying for loans. This intervention improved the lender's ability to implement dynamic repayment incentives, allowing it to withhold future loans from past defaulters while rewarding good borrowers with better loan terms. As predicted by a simple model, fingerprinting led to substantially higher repayment rates for borrowers with the highest ex ante default risk, but had no effect for the rest of the borrowers. We provide unique evidence that this improvement in repayment rates is accompanied by behaviors consistent with less adverse selection and lower moral hazard. (JEL D14, D82, G21, O12, O16)*

Imperfections in credit markets are widely seen as key barriers to growth (King and Levine 1993). Among such imperfections, asymmetric information problems play a prominent role, as they limit the ability of borrowers to commit to carrying out their obligations under debt contracts. Borrowers cannot credibly reveal their borrower type (adverse selection), promise to exert sufficient effort on their enterprises (ex ante moral hazard), or promise to repay loans upon realization of enterprise profits, even when such profits are sufficient for repayment (ex post moral hazard). Lenders seek to mitigate asymmetric information problems by imposing collateral requirements, engaging in costly screening of borrowers prior to approval, and, when a credit reporting system is available, sharing credit information with

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<sup>2</sup> To view additional materials, visit the article page at <https://doi.org/10.1257/aer.112.6.2823>.

<sup>3</sup> For reviews of this literature, see Ghosh, Montenegro, and Ray (2006) and Cuning and Udry (2007).

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