Distinguishing Constraints on Financial Inclusion and Their Impact on GDP, TFP, and Inequality

Era Dabla-Norris — IMF
Yan Ji — MIT
Robert M. Townsend — MIT
D. Filiz Unsal — IMF

July 8, 2015

Abstract

We develop a micro-founded general equilibrium model with heterogeneous agents and three dimensions of financial inclusion: access (determined by a participation cost), depth (determined by a borrowing constraint), and intermediation efficiency (determined by a monitoring cost). We find that the economic implications of financial inclusion policies vary with the source of frictions. In partial equilibrium, we show analytically that relaxing each of these constraints separately increases GDP. However, when constraints are relaxed jointly, the impacts on the intensive margin (increasing output per entrepreneur with access to credit) are amplified, while the impacts on the extensive margin (promoting credit access) are dampened. In general equilibrium, we discipline the model with firm-level data from six countries and quantitatively evaluate the policy impacts. Multiple frictions are necessary to match the country-specific variables, e.g., credit access ratio, interest rate spread, and non-performing loans. A TFP decomposition finds that most of the productivity gains are captured by a between-regime shifting effect, whereby talented entrepreneurs obtain credit and expand their businesses. In terms of inequality and welfare, reducing the participation cost benefits talented-but-poor agents the most, while relaxing the borrowing constraint or intermediation cost is more beneficial for talented-and-wealthy agents. (JEL C54, E23, E44, E69, O11, O16, O57)

*This paper is part of a research project on macroeconomic policy in low-income countries supported by the U.K.'s Department of International Development (DFID). This paper should not be reported as representing the views of DFID. Townsend also acknowledges research funding from the NICHD. We thank Abhijit Banerjee, Adrien Auclert, Francisco Buera, Stijn Claessens, David Marston, Rafael Portillo, Alp Simsek, Iván Werning, and seminar participants in the IMF Workshop on Macroeconomic Policy and Inequality, and the MIT Macro and Development Lunch for very helpful comments. All errors are our own.