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Microfinance, Inequality and Poverty

Master Thesis

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Executive summary

By offering small loans, usually priced at interest rates below those of informal lenders, microfinance institutions enable the poor to engage in self-employment and build a steady stream of income, which they can use for consumption and to save in order to eventually escape poverty. However, little attention has been given to the question if and how this activity might influence the income distribution of an economy and those of the poor in particular. Do microfinance institutions merely provide the poorest people with enough funding to escape extreme poverty, or do lasting effects emerge from micro-lending that aid individuals located at the bottom of the income distribution to receive a greater share of income and therefore reduce income inequality?

The following examination tries to discover whether any income inequality reducing effects emanate from microfinance activities and what it implicitly means for poverty reduction. For that reason we perform a panel regression on a data set consisting of 52 developing countries around the world over a time span of 15 years, from 1999 to 2013. In order to account for short-term economic fluctuations we create 5-year averages and further control for unobserved effects by employing a fixed- and random effects model and additionally pooled OLS for comparison.

We approach our quest to identify income inequality reducing effects from microfinance activities from two perspectives. At first, we regress the Gini coefficient on the gross loan portfolio per capita, our measure of MFI intensity, and on a set of macroeconomic variables, amongst other things the educational attainment and real GDP growth. Subsequently, we try to examine whether any income inequality reducing effects actually accrue to the poor by regressing the share of income held by the lowest decile of the income distribution, our measure of relative poverty, on the same set of explanatory variables too.

In order to test our baseline results for sensitivity concerning the chosen dependent and explanatory variables, we perform additional robustness checks. We replace the Gini coefficient, our dependent variable, for the ratio of the income held by the top decile to bottom decile and furthermore for the ratio of the top quintile to bottom quintile. To check our original results we also substitute our initial explanatory variable for the number of active borrowers per capita. Finally, we additionally test explicitly whether regional effects have any influence on our results by adding regional dummy variables into our regressions.

Our original framework provides mixed results concerning income inequality reducing effects of microfinance activities. We do find statistical evidence for a negative association between the Gini coefficient and the gross loan portfolio per capita for the fixed- and random effects models but the economic magnitude is very small, namely a reduction of inequality of 0.05 percent for a 10 percent increase in the gross loan per capita for the latter model. Concerning the effect of the MFI intensity and the income share held by the bottom decile of the income distribution, we only find a positive statistical evidence for the random effects model and the size of the effect is almost zero. Our robustness checks may indicate a sensitivity issue regarding the chosen measure of MFI intensity, as the number of active borrowers per capita is only weakly statistically significant. Furthermore, we do not find any statistical evidence for income inequality reducing effects if the income share ratio of the top- to bottom decile is used. However, we do find strong statistical evidence for income inequality reducing effects if instead the ratio of the top- to bottom quintile, as the dependent variable, is chosen and also strong evidence for a positive association between the gross loan portfolio per capita and the income share held by the bottom quintile.

We conclude that our empirical results provide mixed evidence concerning decreasing effects of income inequality from microfinance and its influence on poverty alleviation may remain subdued. As we do not account for various sources of endogeneity, which may have arisen due to our econometric approach and potential issues regarding our data set, for example measurement error and sample selection may exist, our results merely offer possible associations rather than a causal relationship between inequality and microfinance.