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Microfinance and Poverty Reduction: A Review and Synthesis of Empirical Evidence

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Abstract

This article examines the relationship between microfinance and poverty reduction at the macro-level, using cross-sectional data covering 596 microfinance institutions (MFIS) for 2011. The cross-sectional data are supplemented by a two-period (2005 and 2011) panel data of 1132 microfinance institutions in 57 developing countries. Taking, account of the endogeneity associated with MFIs' loan. We show that a country with higher MFIs' gross loan portfolio per capita tends to have lower levels of Poverty Head Count Ratio and higher level of per capita, confirming the role of microfinance in poverty reduction at the macro level and that poorer countries need to focus more on the equalizing effects of microfinance.

Keywords: microfinance; poverty; gross loan portfolio

1. Introduction

Many existing studies empirically analyse the close relationship between microfinance and poverty. Most of these studies conclude that microfinance's potential in reducing poverty (Armendariz & Morduch, 2005; Bakhtiari, 2011; Gibbons & Meehan, 2002; Johnson & Rogaly, 1997 ; Imai, Arun, & Annim, 2010), is high on the public agenda nowadays, especially after the UN year of Microcredit in 2005 and the awarding of the Nobel Peace Prize to Mohammad Yunus and the Grameen Bank in 2006. Based on this close relationship between microfinance and poverty, several studies have postulated a positive correlate between microfinance and consumption expenditure, especially if loans are taken by women (Pitt & Khandkar,1998 and khandkar, 2005). Indeed, microfinance financial services provide a range of financial products and substantial flow of finance, often to very low-income groups or households, who would normally be excluded by conventional financial institutions ((Kurmanalieva, Montgomery and Weiss, 2003). Microfinance has brought positive impact to the life of clients, boost the ability of poor individuals to improve their conditions and others have indicated that poor people have taken advantage of increased earnings to improve their consumption level, health and build assets (Appah & al (2012)). Today, increasingly microfinance is becoming an important investment opportunity, mainly in developing regions such as Latin America and African, and all major international institution like the European Union, the United Nations, the World Bank, the Asian Bank, and the American Development Bank dedicate funding and research to microfinance. The relationship between microfinance and poverty is still in question and this paper provides some new empirical evidence on the poverty-reducing effects of microfinance institutions. Specifically, by using the cross-country data—including a pane data, we estimate models in which the poverty headcount ratio and Household final consumption expenditure are explained by MFIs' gross loan

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portfolio per capita and certain control variables, namely the Gross domestic product (GDP), international openness, inflation rate, domestic credit and a regional dummy. we find consistently that a country with higher MFIs' gross loan portfolio per capita tends to have lower levels of poverty headcount ratio and higher level of expenditure of consumption which corroborates the poverty reducing role of microfinance. The rest of the paper is organized as follows. The next section provides reviews the relevant literature on microfinance, especially its effect on poverty reduction at the macro level. Methodology specifications are discussed in Section 3. Section 4 shows the analyses and empirical results. The final section offers concluding observations.

2. Literature Review and Hypotheses

The existing literature on the impact of microfinance can be broadly divided into three categories. The first category examines the impact of microfinance on poverty (Hulme & Mosley, 1996; Pitt & Khandker, 1998; Copestake & James, 2002; Khandker, 2005; Tedeschi, 2010). The second strand of literature deals with the impact of microfinance on women's empowerment (Hashemi & al, 1996; Steele & al, 1998; Rahman & al, 2009; Pitt & al, 2006; Garikipati, 2012). The third series of studies highlight other effects of microfinance, such as the impact on education, health, nutrition , consumption level and build assets (Deloach & Lamanna, 2011**;** Gertler & al, 2006; Jacobsen, 2009; Kouassi,2008; Leatherman & Dunford, 2010; Hazarika & Sarangi, 2008). However, most of the evidence of the impact of microfinance interventions around the world remains highly controversial and limited on micro-economic foundations (household or business data). Recent work macroeconomic levels as Imai Gaiha, Thapa and Annim, 2010; Ahlin & al, 2011 concluded that microfinance is a powerful tool against poverty.These studies redirect on macro-economy studies given the mixed results of the impact studies of microfinance at the micro level. They showed that the number of poor people is inferior in countries, where the number of micro-finance institutions is higher compared with countries, where the number of MFIs is lower. (Imai & al, 2010). There are a few recent works that investigate the relationship between the macroeconomics and microfinance activities and/or performance. This acts as a catalyst for development economists to conduct thorough empirical studies to determine the impact of microfinance. (Imai & al (2012)). This research differs from the cited studies in the following two ways. First, we use the poverty ratio as the dependent variable, which is defined herein as the percentage of people below the poverty line in each country and Household final consumption expenditure as a proxy to measure poverty. Finally, we use panel data on 57 developing countries for 1132 microfinance institutions which has the advantage of incorporating individual dimension by a two-period (2005 & 2011) and apply the instrumental variable estimation in order to overcome potential endogeneity in the equation. Our objective is to further examine the **hypothesis** that a country with higher MFIs' gross loan portfolio per capita tends to have lower levels of poverty indices and higher level of expenditure of consumption per capita.

3. Methodology

3.1. Research Goal

The present study analyzes the role of microfinance (gross loan portfolio per capita) and economic growth to poverty reduction at macro level, using cross-country and panel data.

3.2. Sample and Data Collection

Our analysis is based on cross-sectional data covering 596 microfinance institutions in 40 developing countries for 2011. The cross-sectional data are supplemented by a two-period (2000-2005 & 2006-2011)[1] panel data of 57 developing countries in 1132 microfinance institutions with high levels of informational transparency, so we focused exclusively on those 3-5 diamonds levels which is the highest level of disclosure to its outreach, impact and financial data, audited financial statements and rating/evaluations. This is based on the data generated by Microfinance Information Exchange (2011) or MIX and the World Development Indicators 2011 (World Bank, 2011). These poverty estimates are based on the poverty line of US$1.25 (based on PPP—Purchasing Power Parity) per day in 2005.

This estimation method is based on the principle of application of Ordinary Least Squares (OLS) and of instrumental variable (IV) or 2SLS (least squares in two stages), to estimate the effect of gross loan portfolio per

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[1] Poverty data for the panel were constructed by taking averages for 2000–05 and 2006–011.