Micro-Credit and Income: A Literature Review and Meta-analysis

by

Maia Yang T.D. Stanley*

We review and meta-analyze the research literature of the income effect from participating in an micro-credit program, such as the Grameen Bank. Two recent systematic reviews of microfinance have failed to find positive impacts from micro-lending (Duvendack et al., 2011; Stewart et al., 2012). Our meta-analysis begins with all studies identified by either of these two systematic review. From these, we identified eighteen comparable estimates of the income effect of micro-credit on participant income. To calculate a comparable measure of effect (a partial correlation coefficient), the study needed to report the t-value of the income effect (or equivalent) and the sample size used to calculate it. When converted to partial correlation coefficients, none of these individual effects are sufficiently large to be regarded as practically significant or meaningful. Although the average partial correlation coefficient is statistically positive (p<.001), we identify likely publication selection bias for positive effects (p<.05). When this potential publication selection bias is accommodated, no evidence of an income effect remains. We find no defensible evidence of a meaningfully positive, policy-relevant, income effect arising from micro-lending. As a result, our meta-analysis echoes the conclusions of recent systematic reviews of microfinance.

*Department of Economics and Business, Hendrix College, Conway, AR 72032, USA Stanley@hendrix.edu

The modern concept of microfinance started

Grameen Bank, an institution that has both been the spark and the model for many other institutions. Yet, since its inception, many have begun to criticize whether or not microfinance is actually succeeding in accomplishing the goals it has said it would achieve. Micro-finance institutions (MFIs) claim to give the poor a way to help raise themselves out of poverty by simply providing them with capital they may otherwise have not been able to procure. In addition, many institutions claim to be a powerful tool for empowering women. This goal has also been brought into question.

The following paper seeks to assess microfinance through a small literature review and meta-analysis of fourteen papers. The meta-analysis specifically looks at whether or not there have been any positive effects on income from micro-credit. It also looks at whether there are any positive effects from MFIs providing, in addition to microfinance, business education classes with the thought that such classes may assist in helping borrowers use their loans for income increasing ventures. The structure of the paper is as follows: section

another example of historical microfinance. These cooperatives acted as the modern microcredit self-help group in which the whole cooperative was provided a loan, and they were communally responsible for its repayment (Brandt, et al., 2012, pp. 1-2). Lastly, Wolcott (2009, pp. 1-2) also discusses an early example of microfinance in which very small loans were made to people in need without the requirement of collateral in colonial India. Indeed, micro-credit is not a new trend.

It was in the 70s that microfinance . The modern concept of microfinance is often championed by Muhammad Yunus, a native Bangladeshi educated in the United States who later became a professor at Chittagong University in Bangladesh. In 1974, the beginnings of the now famous Grameen Bank occurred when Yunus lent a small amount of money from his own pocket to a crafts woman he trusted to repay him. Since then, Grameen Bank has garnered a lot of international attention, winning Yunus a Nobel Peace Prize in 2006 (Yunus, 2003). Grameen and the many institutions that have modeled its system claim to not only be a powerful source for alleviating poverty, but many MFIs also claim to empower women, even in traditionally patriarchal societies such as Bangladesh. These institutions assert that they are providing individuals with useful capital at interest rates that are not exorbitant, unlike the informal lenders within these It is also important to note that microfinance began by giving only micro-credit to individuals. Since then, the financial toolbox of microfinance institutions has expanded. A 2012 systematic review, funded by

(DFID), analyzed these expansions by not only studying micro-credit, but micro-savings and micro-leasing (Stewart et al., 2012). In addition to these microfinance instruments, some institutions also provide micro-insurance, and non-financial programs that assist in social development such as business and financial literacy training (Duvendack et al., 2011).

Although microfinance is widely considered to be a great success, it has garnered some criticisms. To place these criticisms in context, MFIs (microfinance institutions) can be divided into individual lending programs and group lending programs (Brandt et al., 2012, p.2).

Individual lending programs are normally offered by commercial institutions. After a thorough check is conducted, a borrower is either given a loan or declined. Collateral and co-signers are required from the borrower Another structure that many MFIs operate under is the goal of empowering women by targeting female borrowers. In many places, this is in direct opposition to the patriarchal culture that resides in these countries. In Bangladesh, according to religious law, women are not allowed to handle money, yet this was one of the exact reasons Yunus (2003) decided that his institution should set the goal of having at least half of its borrowers be female.

In many countries, women still face high levels of discrimination. This means they tend to suffer more when environmental or economic downturns hit. To illustrate this discrimination, two examples within Bangladesh and Africa are relevant. Yunus (2003) cites many examples of

women to be more severe. When food sources are scarce, women and children tend to be those that have less to eat. And, there are many examples of women being left behind to fend for themselves and take care of their children after their husbands have run off. Financially, women are often seen as burdens in Bangladesh because the practice of dowry forces families to pay for their female offspring to get married. To counter this notion that women are a financial drain, the Grameen Bank borrowers must agree to abolish the practice of dowry before receiving a loan (Yunus, 2003).

Another example of why MFIs often target women can be seen in sub-saharan Africa. Africa highlights yet another dimension in which women struggle: HIV related issues (I) n sub-Saharan Africa, young people aged 15-24 carry the burden of HIV infections with half of all new infections among this age group. Young women are particularly 15-

(Erulkar and Chong, 2005, p.1). Erulkar and Chong (2005) further suggest reasons for this rate of HIV infections among females. In the 1998 Demographic and Health Survey for Kenya (KDHS), 21 percent of Kenyan girls reported that they had traded sex for money or gifts in the last yea Erulkar and Chong, 2005, p.1). In countries where women are more financially vulnerable, economic incentives to trade sex in order to survive have been cited

as a likely cause for such high HIV rates among young girls, providing yet another reason why the empowerment of women is one of MFIs main social goals.

The articles chosen for this paper were selected based off of two separate systematic reviews, one published in 2011 (Duvendack et al., 2011) and the other in 2012 (Stewart et al., 2012). Both claim to have evaluated all relevant research on microfinance up to that date. The systematic reviews use a replicable, rigorous, and structured approach to identifying, selecting and synthesizing good quality relevant evidence on any given topic (Stewart et al., 2012). These two systematic reviews conducted their own search to identify every article or paper published on microfinance and then analyzed them according to the comprehensiveness and quality of the research. We believe the articles chosen for this paper to be the best, most-comprehensive research to date given they have already been selected by these systematic reviews. For our research, we

micro-credit makes some clients richer, while others poorer. This 2012 systematic review ed at those who already have some

their businesses do not generate a profit immediately (Stewart et al., 2012, p.105). The only positive result that these reviewers found was that micro-savings had a relatively positive result on clients without causing greater harm to them. In terms of whether or not there are benefits for women in microfinance, there was no evidence found that concluded whether institutions solely targeting women was beneficial or not. This review also concluded that more research of the effects of microfinance should be conducted.

From those studies included in either of these two systematic reviews, which passed these , I identified 15 that claimed to identify impacts of micro-credit on income. From these 15, one fell out as it looked at the impact of micro-savings on income instead of micro-credit.

Despite the abundance of success stories, MFIs have also received much criticism. In response, these institutions and other national organizations have rather recently funded field research to see whether microfinance institutions are meeting their goals. Nonetheless, three broad criticisms remain.

First, one general claim is that no acceptable way has been found to measure or evaluate whether or not MFIs meet their social goals. As a result, MFIs may focus on easily measured financial outcomes. Many institutions operate under a sort of double bottom line in which financial goals for sustainability must be achieved before the MFI can even begin to investigate whether their social goals are being met. This double bottom line is suggested to lead to trade-offs between the social and financial goals of each institution (Copestake et al., 2005). This tension between financial goals and social goals also has other negative effec ignoring the

important issues of whether these loans are socially of financially benefitting women.

In particular, it has been argued that the poorest of the poor use their loans to meet their basic needs first instead of investing in a business or other self-employment that may increase their income and bring

another 30% were used to repay an existing loan, further leading to the implication that loans not used in income generating activities could lead to a cycle of borrowing and greater debt.

Secondly, most research on the effectiveness of microfinance also seeks to study whether or not the loans are reaching the target population. Many criticize that microfinance does not succeed in reaching the poorest of the poor. Quong (2007) investigates the Vietnam Bank for Social Policies (VBSP) to see whether or not the institution is actually targeting the poor. This study concludes,

Only 12% of the poor households in rural areas participated in the program in 2004. Meanwhile, the program covered 6.4% of the nonpoor households. The nonpoor households accounted for a larger proportion of the population, and up to 67.1% of the participants were nonpoor households. The poor households also received smaller amounts of credit than the nonpoor (Quong, 2007, p.171).

Unfortunately, such findings are typical.

The reasons for this lack of successful targeting are many. For one, it is much riskier to lend to the poorest of the poor. As explained above, those individuals that are still attempting to meet their basic needs will more than likely buy items that will be consumed and not invested in a venture that could be profit inducing. Those whose basic needs are being met, therefore, tend to have a greater ability (higher disposable income) to invest in profit increasing ventures, which makes them attractive candidates for the Vietnam Bank for Social Policies. In addition, each country may have its own system of ranking individuals as poor or nonpoor. The Vietnamese government is required to classify potential clients; yet, the number they classify as being poor tend to be much lower than the World Bank s classification of the poverty in Vietnam (Quong, 2007, pg. 159). The Vietnamese government requires that those who wish to join a loan group with VBSP first be classified as poor. Therefore, if the Vietnamese government is under-classifying those that are poor, then the real number of poor people who should be receiving these loans are not. One reason for this under classification is that if there are a large number of outstanding loans to be repaid, the government may decrease the amount of funding that VBSP receives. This

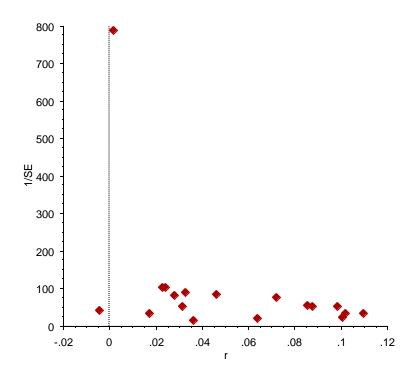
makes it even more likely that VBSP will target those individuals more likely to repay their loans instead of the truly needy.

Thirdly, microfinance may lead to polarization between the poor. James Copestake conducted research in the Zambian Copperbelt to study this stratification because one of the aims of MFIs is to reduce income inequality. While in some areas MFIs may be reducing this income inequality between the very rich and the very poor, Copestake (2002) concludes that they could be leading to greater inequality between the poor, The overall picture that emerges is of a minority of generally richer clients doing well and remaining loyal to CETZAM (The Christian Enterprise Trust in Zambia), while the majority left after one or more cycle Copestake, 2002, p.753). This study further indicates that microfinance may be harmful for the poorest of the poor. One reason for this stratification is an unintended consequence of how many institutions require group to guarantee their full amount of the loans. For example, TRY, a program for women in Nairobi, requires clients to save 50 Kenyan Shillings (KSH) a week (Erulkar and Chong, 2005, pg.4). After each loan cycle is completed, the group can then apply for bigger and bigger loans. For the poorest of the poor, as the loan size gets bigger, it may be harder and harder to repay the loans. In addition, during this time, the borrowing groups are sometimes allowed to drop or pick up a new member. As a result, a polarization between the richer of the poor and the poorer of the poor may occur in which the poorer clients, who find it harder to repay their loans, get dr

754).

The purpose of this meta-analysis is largely We examine whether it is practically useful to base a meta-analysis on existing systematic reviews and what might be gained as the result. In the process, we hope to find some relevant feature or pattern in the micro-credit research literature that the systematic reviews were not able to identify. At a minimum, we expect that meta-analyses that begin with a systematic review will give a more quantitative and objective summary of the research studied surveyed.

Before turning to our statistical meta-analysis findings, our methods must first be qualified and put into their proper context. The fourteen studies identified as evaluating the income effect of micro-credit are very diverse, involving many different countries, programs and ways of measuring this income effect. Thus, one might question whether there is really any common income effect that is shared across these studies. Without forgetting this important limitation, we can, nonetheless, assume provisionally that there is some overall income effect, perhaps one that varies randomly from study to study. Doing so allows us to: combine these effects, gage how large they are and



Clearly, there is one study at the top, Kondo (2007), that is much more precise than any of the others. This study reports descriptive statistics for 618, 906 micro-credit clients but does not report another sample size for its income effect test. If we keep this single point in our meta-analysis, our findings become much sharper with clear statistical significance for business education (see below). However, after further reflection and careful reading, we do not believe that Kondo (2007) actually based his statistical test on 618, 906 micro-credit surveys. Thus, Kondo (2007) is dropped from all of the below meta-analysis.

Conventional meta-analysis

-effects see Table 1. These simple weighted averages reveal two general findings. There is an overall positive income effect due to micro-credit (p<.001). Secondly, this effect is practically negligible and policy irrelevant. Take, for example the random-effect estimate, 0.052. It gives the largest effect size and allows for random heterogeneity among these reported income effects and is therefore the preferred estimate by traditional meta-analysis considerations. According to the widely followed Cohen guidelines, anything smaller than 0.1 or 0.2 is deemed practically negligible (Cohen, 1988). A partial

correlation of 0.052 means that micro-credit can explain only about one-fourth of one percent () of the remaining variation among client incomes. In such cases, statistical significance is irrelevant, and practical import is all that matters.

Table 1: Conventional Meta-analysis

	Pooled	95% CI		Asymptotic	
Method	Est	Lower	Upper	z_value	p_value
+					
-					
Fixed	0.044	0.036	0.051	10.931	0.000
Random	0.052	0.036	0.067	6.649	0.000

Looking at all of the individual effects does little to help. Among these 17 partial correlation coefficients, the largest is 0.11, which is also practically insignificant. Although twelve of seventeen reported income effects are statistically positive (or 71%), their statistical significance is meager compared with the sample sizes employed.

Nonetheless, we further investigate whether there is publication selection bias or if any genuinely positive income effect remains after publication selection is accommodated. The funnel graph (see Figures 1 and 2) is clearly skewed to the right, which is indicative of publication selection bias. The Egger meta-regression is the conventional model of publication selection bias widely used in medical and psychological research,

p40 1 2om5

In contrast, the precision-effect test (PET) on shows no sign of a genuinely positive income effect from micro-credit programs (p>.05). Although it might be fair to attribute this lack of evidence to our small sample, the size of the sample does not explain the small size of the corrected income effect (0.020). The size of the corrected effect is half the practically negligible overall effect size discussed above. Although calls for more studies with tighter research and better program designs are warranted, the current research base gives no indication that micro-credit reduces poverty or that further research will reveal anything dramatically different.

In spite of this small sample of comparable income effects, we decided to investigate one additional program dimension that might induce a positive outcome . We also coded whether the surveyed microfinance programs contained some business education program or training for those receiving the loans (=1), or not (=0). Unfortunately, including reduces our small sample even further to 12, because two studies have insufficient information to identify accompanying support services. Column 2 of table reports the MRA results after term is added to meta-

regression model (2). Now, nothing is statistically significant, although all effects have the expected signs. Regardless, all of the income effects reported in this literature are practically very small whether or not they can be show to be statistically significant.

increase in the availability of small loans, by itself, is unlikely to cause a notable reduction in poverty.

Lastly, we recommend that if further research is conducted that either randomized experiments or a regression-discontinuity design be implemented (Shadish et al., 2001). The regression discontinuity (RD) design is especially attractive for evaluating micro-credit could be identified, separated and placed into

the program while the lesser poor could serve as a natural control group. In this way, the program implementation that used a RD design would also address a number of recent criticisms of microfinance, especially the issue of targeting. RD is considered a very strong quasi-

controlled experiments (Shadish et al., 2001).

Brandt, Laura, Natalya

-analysis detected

315:629-34.

Shadish, W.R., T.D. Cook, and D.T. Campbell. (2001)

. New York: Houghton Mifflin.

Strolli, Ernesto. (2012, December 14). Ernesto Strolli: Want to help someone? Shut up and listen! [Video file]. Retrieved from http://www.ted.com/talks/ernesto_sirolli_want_ to_help_someone_shut_up_and_list en.html (accessed Dec 18, 2012).

-regression methods for detecting and estimating empirical effect

70:103-27.

Stanley, T.D. and Hristos Doucouliagos. (2012).

London and New York: Routledge.

wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2009/07/14/00015834 9_20090714144602/Rendered/PDF/WPS4993.pdf (accessed Dec 18, 2012).

se

Services Project (AIMS), submitted to USAID/ Uganda. <u>http://pdf.usaid.gov/pdf_docs/PNACL035.pdf</u> (accessed Dec 18, 2012). Micro-credit: Evidence 14: 743-55. Copestake, James, P. Dawson, J-P. Fanning, A. Mckay, and K. Wright-Revolledo. (2005). rofinance: A

, 6: 703-

23.

and

International Development: University of Bath. http://w.sa-

Imai, Katsushi S, Thankom Arun, and Samuel K and Household Poverty Reduction: New Evidence from Economics and Business Administration: Kobe Universityhttp://www.rieb.kobeu.ac.jp/ academic/ ra/ dp/ English/ DP2010-14.pdf (accessed Dec 18, 2012). Microfinance Reduce Poverty in Bangladesh? New Evidence from Household Panel Economics and Business Administration: Kobe University. http://www.rieb.kobeu.ac.jp/ academic/ ra/ dp/ English/ DP2010-24.pdf (accessed Dec 18, 2012).

http://www.dartmouth.edu/~jzinman/Papers/expandingaccess_manila_jul09.pdf. (accessed Dec 18, 2012).

A Case Study from the Special Evaluation Study on the Effects of Microfinance Operations on Poor Rural Ho Evaluations Department: Asian Development Bank. http://www.microfinancegateway.org/gm/document-1.9.31105/15.pdf (accessed Dec 18, 2012).

-Term

Synopses of Literature used in Review and Meta-Analysis

Evaluation of a Savings and Micro-credit Program for Vulnerable Young Women in Nairobi (Annabel S. Erulkar and Erica Chong)

Erulkar

-credit

program started by the Population council and K-Rep Development Agency (KDA) in rogram involved utilizing both micro-savings and micro-credit, and in addition acted as a place for young women to seek social support. TRY participants were required to form groups of 15-

micro-credit, training in business and life skills, reproductive health education, and

required to place 50 kenyan shillings (US\$0.65) per week into their savings account (in order to act as collateral against later loan) and meet once a week with their KDA credit

an occasion to share intimate experiences of their lives and troubles, sometimes involving

The study attempts to find the impact of this program on three different variables: Whether or not TRY has contributed to increases in income per capita, savings, and household assets, whether or not attitudes regarding gender have changed after participation in the program, and whether TRY increases knowledge of HIV, reproductive health, and their

between matched samples. Girls who participated in the program were matched very closely to control girls living in the same neighborhood who had the same age, education, marital status, parenthood status, and employment status. The results of the study, overall, were very positive. In terms of income levels, household assets, and savings, girls who participated in TRY had a very significant increase compared to the control girls. There were also significant results in participants holding more progressive gender attitudes and having more knowledge of reproductive health.

Is a Government Micro-credit Program For the Poor Really Pro-Poor? Evidence from Vietnam (Nguyen Viet Cuong)

<u>The Short-Term Poverty Impact of Small-Scale, Collateral-Free Microcredit in Indonesia: A</u> <u>Matching Estimator Approach</u>

(Kazushi Takahashi, Takayuki Higashikata, and Kazunari Tsukada). Takahashi, Higashikata, and Tsukada study the impact of a new NGO, offering collateral free loans, on poverty alleviation one year after the program began distributing loans. According to Takahashi et al., the majority of institutions set up in Indonesia have been for profit institutions, while Yayasan Bina Swadaya Bank Perkreditan Rakyat (BPR-YBS) is a rarity in that it is a nongovernmental organization. Takahashi claims that for profit institutions in Indonesia have the propensity to make profitability their primary goal and have therefore not been as successful at targeting the poor population. BPR-YBS was chosen by this study as the organization to collect data from as BPR-YBS does not require collateral and may therefore be seen as more pro-poor. In addition, the researchers for this paper found out that BPR-

<u>Monitoring the Diversity of the Poverty Outreach and Impact of Microfinance: A</u> <u>Comparison of Methods Using Data from Peru</u> (J Copestake, P. Dawson, J-P. Fanning, A. McKay, and K. Wright-Revolledo)

Copestake, Dawson, Fanning, McKay, and Wright-Revolledo study the effects of microfinance in Peru through utilizing Promuc in Peru, a combination for NGO and not for profit institutions formed in 1994 to advance microfinance to reduce poverty and empower

Evaluating the Impact of Egyptian Social Fund for Development Programs (Hala Abou-Ali, Hesham El-Azony, Heba El-Laithy, Jonathan Haughton, Shahidur R. Khandker)

interventions? Have the benefits been commensurate with the costs? And have the

Egyptian Social Fund for Development (SFD), which is a semi-autonomous agency reporting to the office of th

supporting community-level initiatives, to increase employment opportunities, and to encourage small-

microfinance institutions in that they do not lend directly to borrowers, instead they support small projects that have the goal of benefitting those in poverty. The analysis of this paper rests on the assumption that if micro-credit has an impact, then the Egyptian Social Fund for D micro-credit has an impact.

In terms of the impact of micro-credit, the paper concludes that microlending does seem to lead to higher income per capita in urban areas, excluding farm income per capita. There was also a significant difference between more metropolitan areas and the rest of the country with metropolitan areas having larger levels of expenditure, food expenditure, and income, and lower poverty levels. This was not the case for the rest of Egypt, in fact, it was the exact opposite with lower expenditure and income and higher poverty.

The paper also conducted a test to see if SFD successfully targeted those in poverty

to areas that have a higher headcount poverty rate than the national average (21.6% vs 19.6%) and a lower level of average per capita annual household expenditure (LE 2,292 vs. LE 2,556). In this broad sense, SFD interventions are pro-poor, although at first sight only

Assessing the Impact of Microcredit on Poverty: A Zambian Case Study

(James Copestake, Sonia Bhalotra, Susan Johnson)

This study by Copestake, Bhalotra, and Johnson targeted an organization by the name of PULSE (Peri-urban Lusaka Small Enterprise Project), a group based micro-credit institution that targets borrowers who own a business that is as least 6 months old and is the main source of family income. PULSE members were required to form groups of 25-35 people and attend a weekly training session for 8 weeks. Acting as collateral for loans, PULSE also had a loan insurance fund (LIF) in which mandatory deposits, equal to 10% of the loan amount, were made by each member.

The authors of this study had three aims for characteristics of loan recipients such as gender relative poverty and age of business and to

estimate direct impacts of loans on borrowers, their businesses and their households, and -11). In order to accomplish these goals,

-based sample survey of PULSE

participants, secondary survey data drawn from the wider population of businesses and households, and a cascading set of qualitative focus group discussions and key informant

variance.

The results are as follows. No significant effects on profit growth for borrowers was noticed after receiving their first loan, however, a clearer relationship between profit re raised by

strong correlations drawn between profit growth and the business training that PULSE provided. The analysis also found that the program did not successfully target the poorest of the poor, however, they did achieve in targeting 1/3 of clients who were below the poverty line. The borrowers that were made worse off by joining the program were those that dropped out after their first loan cycle, which, in one period was 52%.

Economic and Social Impacts of Self-help Groups in India

(Klaus Deininger and Yanyan Liu)

This particular paper seeks to study the impact of self-help groups (SHG) by utilizing

<u>Microfinance and Household Poverty Reduction: New Evidence from India</u> (Katsushi Imai, Thankom Arun, Samuel Kobina Annim)

This particular study used SIDBI (Small Industries Development Bank of India) for survey data in order to study whether or not microfinance institutions have povertyreducing effects. They utilized IBR indicators to indicate levels of poverty to test and see if MFI loans were raising people out of poverty. The IBR indicators take into account agriculture, employment (this includes income and type of employment), animal husbandry, transport and household assets, house ownership and housing type, and sanitation. These different indicators that group people into five categories: very poor, poor, moderately poor or borderline, self-sufficient, and surplus. The study also has two definitions of microfinance to analyze impact. One is whether a household is a client of any MFI or not and another is whether a household has taken a loan from an MFI for a productive activity.

The results display a difference between female borrowing and male borrowing. Households with female heads are more likely to be clients, yet males were found more likely to use the loans they procured for productive purposes. Household that had a larger amount of educated people were also more likely to take out a loan for productive purposes. In terms of the effects of the loans on poverty, there was a correlation between loans and poverty reduction. It was also noted that the larger the loan amount, the greater poverty reduction in urban and rural areas. Overall the authors declare that microfinance plays a significant role in the reduction of poverty.

Does Microfinance Reduce Poverty in Bangladesh?New Evidence from Household Panel Data (Katsushi S. Imai and Md. Shafiul Azam)

This study published in 2010 seeks to analyze the effects of microfinance institutions in poverty reduction by using nationally representative household panel data from years 1997 to 2004. Panel data was drawn from 13 Bangladesh Rural Employment Support Foundation (PKSF) partner organizations, which consisted of more than 3000 households for each round, throughout Bangladesh in an attempt to get a representative data set. Control villages were also selected from nearby villages. This research was funded

data of its kind so far in Bangladesh collected with detailed information on a number of socio economic variables, including household demographics, consumption, assets and

Averages of the panel data are as follows. The average size of each household is around 6 people and classifications for education level and occupation were divided into

agricultural wage laborers, non-agricultural wage laborers, small business, professionals,

participate in MFI programs or pull of loans from MFIs.

The results after using fixed effects models are that there is a positive and

due to the positive effect of the productive component for income, and the non-productive -productive loans reduce BMI. The DID-PSM analyses found that those who accessed loans from MFIs in 2004-

Expanding Microenterprise Credit Access: Using Randomized Supply Decisions to Estimate the Impacts of Manila

(Dean Karlan and Jonathan Zinman)

This study looks spefically at Manila in the Philippines by conducting a field experiment in addition to surveys in order to attempt to find the impact of microfinance institutions. The authors use First Macro Bank (FMB), a for-profit institution in order to conduct their experiment. FMB came into being in the 1960s, charges an interest rate of 63% for first time borrowers and is a relatively small institution compares to other MFIs in the Asian area. The study finds that with the development of microfinance institutions that formal borrowing increases while informal borrowing decreases.

In terms of the effects of credit expansion to those in Manila, according to the

<u>The Impact of Three Microfinance Programs in Uganda</u> (Carolyn Barnes, Gary Gaile, and Richard Kibombo)

microfinance insitutions, attempting to find results on the impact of each program as well as who the programs are reaching. The study is focused on FINCA (Foundation for International Community Assistance), FOCCAS (Foundation for Credit and Community Assistance), and PRIDE (Promotion of Rural Initiatives and Development Enterprises) with these three institutions lying within the following cities: Kampala, Masaka, and rural Mbale. All three institutions require that a certain percentage of the Ioan be used for purposes within the clients business. The study was conducted by selecting clients from these institutions and then matching them with non-clients with similar characteristics. These clients were surveyed both for the baseline and the follow on survey. The baseline survey participants were then relocated for the follow on survey.

Results in terms of what clientele base these institutions are reaching overall were positive. According to the baseline survey, these programs were reaching microentrepreneurs that were neither extremely poor nor wealthy, displaying a possible self-selection bias. However, FOOCAS reached some of the poorest households with its services. There were positive and negative results from the feedback within the survey. Many cited the weekly meetings they must attend as too long and feelings of frustration towards having to assist in the repayment of another members loan. However, only 10% of clients claimed that they had gained no benefits from participation. In terms of increases in financial well being, All three microfinance ins wesof incp4(e w6.esea) stration towards

Access to Credit and Its Impact on Welfare in Malawi (Aliou Diagne and Manfred Zeller)

This study analyzes the effects of microfinance in Malawi, a country in which the majority of the poor engage in farming for income. In their research, the author focused on four main institutions: Malawi Rural Finance Company (MRFC), Malawi Mudzi Fund (MMF), Malawi Union of Savings and Credit Cooperatives (MUSCCO), and Promotion of Microenterprises for Rural Women (PMERW) Credit Program. The rural Malawi Finance Company is funded by the World Bank and was started by the Government of Malawi.

population are smallholder farmers who are required to join groups of 5 to 10 people to access seasonal loans for things like fertilizer and longer term loans for farm equipment. The Malawi Mudzi Fund, funded by the International Fund for Agricultural Development is an institution that lends to people requiring nonfarm income-generating loans. Members were organized into groups of five and were individually and cumulatively responsible for the repayment of loans. Most loans were given for small-scale trading

Community Services with financial support from the German Agency for Technical Cooperation. It provides business training and loans to female micro-entrepreneurs.

participation in existing formal and informal credit and savings systems, and to analyze the effects of household access to credit on agricultural productivity, income generation, and the sample

members were selected from participants in the four credit programs. The second half of he sample was equally divided between past participants and households who had never rt are as follows. In

terms of access to and participation in formal and inform credit/ savings systems, 59% were granted access to informal credit while 41% were granted access to formal credit. 56% were rejected for informal loans, while 44% were rejected for formal loans. In terms of effects of credit, the following results were found. Overall, in terms of impacts for

d

farming loans, there was a negative correlation between the loans and crop income. In terms of food expenditure/ security, food expenditure per capita was lower for members than it was for non-members.