EC335 Strategies of Economic Development

In 2006 Prof. Muhammad Yunus and Grameen Bank received the Nobel Peace Prize for their work in microfinance. Prof. Muhammed Yunus is also known as “father of microfinance”. Reflecting on his experience of microfinance in Bangladesh and generally in other countries around the world, what do you think about the following.

What is micro-credit?

Microcredit is an extremely small-scale loan given to poor people to help them become self-employed. Microcredit is also known as "microlending" or "microloan."
The concept of microcredit derived from the idea that skilled people in underdeveloped countries, who do not have access or are excluded from the formal banking sector, could gain entry into an economy through the help of small loans. The idea is that micro-credit could be used to reduce poverty which is why micro-credit has generated considerable enthusiasm (Banerjee, 2015). It is an innovative concept that contributes to the improvements of living standards of poorer people (Mchernan, 2002).

Microcredit is commonly offered to many who live in a barter system, where no actual currency is exchanged. Prof. Muhammad Yunus was the main pioneer of microfinance. He experimented with making small loans, funded by himself, to the women in Bangladesh who did not have the money to buy the materials they needed to make bamboo stools to sell. The initial funding gave them the resource to purchase the materials, with the understanding that the loan would be paid over time as they made revenue. They previously relied on loans that were unfair and under predatory terms.

Microcredit arrangements often differ from traditional banking. Different terms are established to guarantee repayment. The qualification of the loan applier is assessed less strictly in microfinance organisations compared to commercial banks (Ahlin & Jiang, 2005). It is frequent that there are no written agreements in microcredit arrangements. Instead of the standard banking agreements, microcredit can be guaranteed by even an agreement with the members of the borrower’s community, who are obligated to make the borrower work towards paying off the debt. Borrowers may be eligible for larger loans when they successfully pay off their debt (Fisher et al, 2002). The purpose of micro-credit is that it creates an opportunity for poorer people to enter an economic market through the promotion of entrepreneurship and the chance to get out of poverty (Fernando, 1997).

One of the downsides of microcredit is the way it can be misused. For instance, in South Africa, there were some cases where funds were being used for consumption spending rather than furthering any form of business activity. Another problem is that borrowers may not have a steady source of income or may even be using microcredit to generate an income source in order to pay back the microcredit financing. This could resort to the borrower seeking new ways to finance previous microcredit debt.

Why do poorer people need micro-credit?

It is essential to discuss why poorer people may need micro-credit, and how the implementation of micro-credit could potentially lift people out of poverty. It is important to note that many

poor people do not have access to a traditional banking system, or it could be the case that, commercial banks are unwilling to give out small loans to individuals who do not have stable incomes. The unstable income is a huge reason for not lending as the certainty of receiving the money back is ambiguous.

Poor people have low and unstable incomes therefore, micro-credit provides them with the opportunity to manage risk and cash flow. Through these small loans, many poor people are able to start saving. These savings can be used for investment and business activities such as creating a small business. There have been cases where poorer people could not even get the forms to fill-in to apply for a loan in commercial banks. The restricted access emphasizes the need for micro-credit as the alternative to traditional banking methods. It is better for poorer people to take out small loans from microfinance organizations rather than loans sharks who use predatory terms. The international organization CGAP (Consultative Group to Assist the Poor) housed at the World Bank, supports MFI and believes that there is evidence to suggest that MFI lessens poverty (Dufl, 2015). Having access to financial support has been a major factor in enabling people to transform their production and employment activities to exit poverty (Banerjee and Newman 1993).

Thus, micro-credit is a tool to provide poor people the access to some sort of financial support. It is argued that countries with better developed financial systems should be better able to exploit growth opportunities (Schumpeter, 1934). The incorporation of micro-credit would further this idea as poorer people would have exposure to the economic markets and have opportunities to increase economic performance due to the new-found financial stability.

Burgess (2005) sought to test whether state-led rural branch expansion was associated with poverty reduction in India. He found conclusive evidence that indicated, opening branches in rural unbanked locations in India was associated with reduction in rural poverty.

TABLE 3—BANK BRANCH EXPANSION AND POVERTY: INSTRUMENTAL VARIABLES EVIDENCE

	Headcount ratio								Wage	
	Rural			Urban	Aggregate	Rural			Agricultural	Factory
						1961-1989	1977-2000	Survey years		
	OLS		IV	IV	IV	IV	IV	IV	IV	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Number branches opened in rural unbanked locations per capita	2.09** (0.79)	1.16 (1.02)	−4.74** (1.79)	−0.66 (1.07)	−4.10** (1.46)	−4.70** (1.82)	−6.84** (2.81)	−4.21* (2.26)	0.08* (0.04)	0.05 (0.08)
Number of bank branches per capita in 1961*(1961–2000) trend		−0.43*** (0.17)	−0.48* (0.27)	−0.26* (0.13)	−0.46* (0.23)	−0.43 (0.26)	−0.80* (0.45)	−0.46 (0.28)	−0.007 (0.004)	0.01 (0.01)
Post-1976 dummy*(1977–2000) trend		−0.31 (1.23)	−1.42 (2.30)	−2.06 (1.65)	−1.39 (2.03)	−2.13 (2.59)		−1.31 (3.32)	0.04 (0.06)	0.03 (0.06)
Post-1989 dummy*(1990–2000) trend		5.38** (2.47)	−1.08 (2.33)	−0.47 (1.01)	−1.55 (1.76)		−0.45 (2.90)	−0.79 (2.61)	0.11 (0.07)	−0.05 (0.05)
State and year dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Other controls	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
Overidentification test			[0.99]	[0.99]	[0.99]			[1]	[0.98]	[0.99]
Adjusted *R*-squared	0.81	0.83	0.76	0.92	0.82	0.80	0.81	0.73	0.87	0.70
Observations	627	627	627	627	627	460	375	375	545	553

Notes: Standard errors clustered by state are in parentheses; *p*-values are in square brackets. The definitions of the dependent and explanatory variables are in the notes to Table 2 and Table 1, respectively. In the IV regressions, the instruments are the number of bank branches per capita in 1961 interacted with (a) a post-1976 time trend and (b) a post-1989 time trend, respectively. Table 1, column (1), reports the corresponding first-stage regression. In the second row of columns 6 and 7, the number of bank branches per capita is interacted, respectively, with a (1961–1989) and a (1977–2000) trend. The overidentification test we employ is due to John Denis Sargan (1958). The number of observations times the *R*-squared from the regression of the stage-two residuals on the instruments is distributed chi-squared ($T + 1$) where T is the number of instruments. The Data Appendix describes the data sources and the time period for which each data series is available. * Significant at 10-percent level. ** Significant at 5-percent level. *** Significant at 1-percent level.

Table 3 is evidence of the effect of rural branch expansions on poverty outcomes. Column 1 of Table 3 reports estimates from an OLS regression of branch openings in rural unbanked locations on the rural headcount ratio. The coefficient on branch openings in rural unbanked locations is positive and significant. Column 3 to 5 show IV estimates for poverty outcomes. A 4.74 % reduction in rural poverty is shown in column 3 when there is a 1-point increase in per capita branch openings in rural unbanked locations. However, Column 4 shows rural expansion did not affect urban poverty. Column 5 indicates an aggregate reduction in poverty by 4.10 % when opening a branch in an additional rural location per 100,000 persons. In Column 9 we see that there is an increase in the wages of agricultural laborers when there is a branch opening in an unbanked rural location.

On the surface it looks like a "win-win" opportunity, in which the poor could pull themselves out of poverty and microfinance organizations could make profit, for example the SKS in India have made large amounts of profit (Banerjee, 2015).
Nevertheless, an argument against microfinance would be that some corporations have been accused of pushing their clients into debt traps, for instance November 2010 article in The New York Times, appearing in the wake of a rash of reported suicides linked to MFI over-indebtedness (Banerjee, 2015). Reddy Subrahmanyam, an official in Andhra Pradesh, accused MFIs of making "hyperprofits off the poor." Another issue with micro-credit is whether it actually effective as critics argue that micro-credit does not have a positive impact on gender equity due to the a strong focus on lending to women only (Spandana lends only to women, discussed later).

Discuss why poorer people may not have access to credit markets.

Poorer people may not have access to credit market due to various reasons. One reason would be because poorer people generally do not have assets to backup loans consequently, banks

would hesitate to lend. Moreover, as described above, some poorer people may actually be living in a barter system. So micro-credit could be the answer to the lack of financial support from traditional banking systems; for individuals who are pursuing higher living standards. Poorer people struggle to reach the minimum application amount to take loans from banks hence the need for micro-credit (Zaman, 1999). Furthermore, many of the poorer people are illiterate which could be a problem as they would struggle to fill out the paperwork and follow the processes required to receive a loan from a traditional bank.

The lack of stable income or job can be a barrier to entry to the credit markets (Ahmed, 2001). This is because a stable job provides a good credit rating. Commercial banks would have to take risks when lending to those who lack the ability to repay. Moreover, small loans are not very profitable for banks. However, micro-credit does not need collateral as a way to secure repayment. As mentioned, micro credit does not need written agreements in many cases which allows poorer people to enter the credit market.

Discuss how the availability of credit might be able to help someone move out of poverty. Especially, discuss the recovery rate of microfinance loans.

The availability of credit can help someone moved out of poverty. Grameen bank in Bangladesh offered micro-credit services to many customers, lending a total of 3.7 million dollars in 2008 to micro-finance businesses (Ramakumar, 2002). This was in order to give an opportunity for poorer people to start up their own small businesses. The recovery rate of a microfinance loan is far more manageable and realistic for a poorer individual as the loans are smaller. These small loans are usually given as groups to ensure repayment.

One of the mechanisms for securing high recovery rate would be dynamic incentives. The loans are small amounts in the beginning, but they soon become eligible for larger loans when they successfully pay off their debt (Fisher et al, 2002). This gives the borrower an incentive to pay back the loan whilst also acting as a threat to cut off any future payments if loans are not being repaid. Moreover, dynamic incentives also explain the advantages found in lending to women. Many programs that gave loans to women saw beneficial financial advantages. Credit programs such as Grameen Bank and the BRAC had 74% and 94% female members respectively (Morduch,1999).

Group lending concept

Group lending has many advantages; discussed by Ghatak (1999) who shows how group-lending schemes drastically improve repayment rates, allow for lower interest rates, and raises social welfare (Morduch, 1999). His insight to group lending provides us with the understanding of a way to price discriminate which would be impossible with an individual-lending contract. The idea is that group-lending schemes provides incentive for similar types to group together.

He uses the example of 2 types investors (safe and risky) to explain his concept. The risky investors fail more frequently than the safe types, but the risky types have a higher return when successful. The bank knows the percentage of investors that are risky and safe but does not know which specific investors are of which type. Both types of investors want to invest in a project that has an uncertain outcome, requiring one unit of capital.

If they choose not to accept the project, they earn wage income m
Risky investors have a probability of success p_r and net return of R_r
Safe investors have a probability of success p_s and net return of R_s
When either type fails, the return is zero
Returns are statistically independent
Risky types are less likely to be successful $(p_r < p_s)$ but they have higher returns when they succeed
Assume that the expected net returns are equal for both safe and risky types:

$$p_r R_r = p_s R_s = \bar{R}$$

The projects of both types are socially profitable in that expected returns net of the cost of capital, p, exceed earnings from wage labor:

$$\bar{R} - p > m$$

If the project fails, investors pay bank nothing
Bank must set interest rate high enough to cover its per-loan capital cost, p to break even
If both types borrow, the equilibrium interest rate under competition will then be set so that $r\bar{p} = P$ =p, where $\bar{p}$ is the average probability of success in the population.
Since the bank can't distinguish between borrowers, all investors will face interest rate, r.

As a result, safe types have lower expected returns than risky types since:

$$\bar{R} - rp_s < \bar{R} - rp_r$$

the safe types will enter the market only if their expected net return - exceeds their fallback position:

$$\bar{R} - rp_s > m$$

If the safe types enter, the risky types will too.

The safe types will stay out of the market if :

$$\bar{R} - rp_s < m$$

And only risky types might stay in the market.

In that case the equilibrium interest rate will rise so that :

$$rp_r = P$$

The risky types lose the implicit cross-subsidization by the safe types, while the safe types lose access to capital. This second-best scenario is inefficient since only the risky types borrow, even though the safe types also have socially valuable projects (Morduch, 1999).

A group-lending scheme can improve this outcome. It must bring the safe types back into the market in order to do so. Consider groups of two people; each group formed voluntarily. Each individual invests independently but the contract is written to create joint liability. If the

contract fails, each borrower pays nothing and r* if the project is successful. If a borrower is successful, the borrower pay a joint-liability fee c* if the other member fails. The expected return for a safe type with a risky type is:

$$\bar{R} - p_s(r* + (1 - p_r)c*)$$

Similar calculations apply to exclusively risky and exclusively safe groups.

$p_s(p_s - p_r)c*$ is the calculation transfer that a safe type will agree to form a partnership with a risky type as safe types are preferred partners due to less risk.

$p_r(p_s - p_r)c*$ is the expected net gain of a risky type joining with a safe type. The expected gains of risky types are smaller than the expected losses of safe types.

$$p_r < p_s$$

We can conclude that there is no mutual way for risky and safe types to group together and have mutual benefits. Ghatak (1999) shows through this demonstration that a group-lending contract allows more flexibility to charge different effective fees to risky and safe types, yet all groups have the same nominal charges c* and r*. A risky type would have more incentive group with other risky types while safe will group with safe. Therefore, risky will expect higer net returns of :

$$\bar{R} - p_r(r* + (1 - p_r)c*)$$

While safe types receive expected returns of :

$$\bar{R} - p_s(r* + (1 - p_s)c*)$$

As a result, a group-lending scheme can be an effective way of price discriminating which would be impossible with individual-lending. This can explain the estimated 95% recovery rate of micro-credit (Ahlin and Jiang). In the case of India, the National Bank helps fund micro-finance organisations such as the self-help groups in India who are made up of mostly women from the poorest tribes. Spandana was one of the largest and fastest growing microfinance organizations in India, with 1.2 million active borrowers in March 2008 (Duflo, 2015). The loan allowed members from the group to borrow for any purpose. A group would comprise of 6 to 10 women who were all jointly responsible for the loans of their group.

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