

Does Group Lending System Matter? The impacts on Women Borrowers

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Empowering Women Changes the World

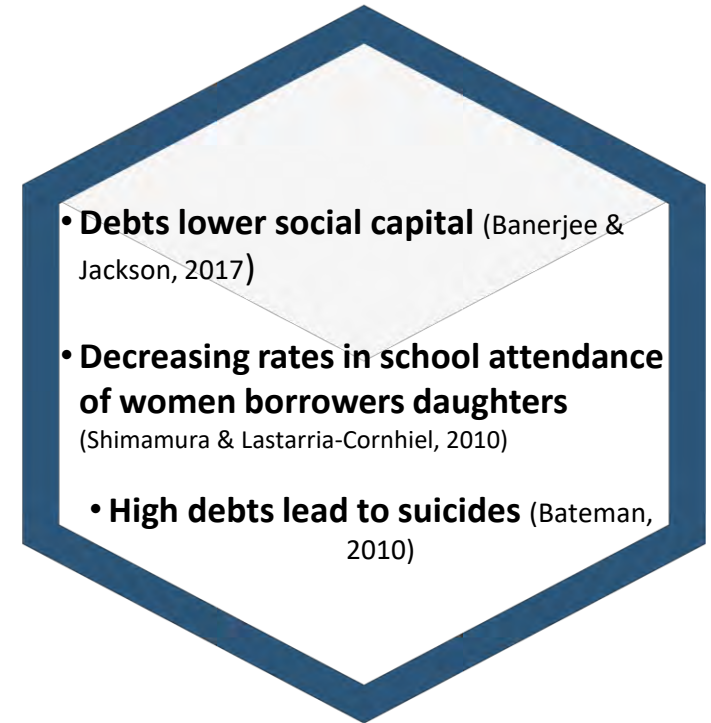


Microcredit Group Lending Model

- Widely popular since Muhammad Yunus established Grameen Bank in Bangladesh in 1976
- Small loans to the poor (mostly women) who are illiterate and unemployed (Kabeer, 2005)
- Promote financial independence and stimulate businesses (Banerjee & Jackson, 2017)
- Loan group meeting with weekly-installment payments (Karlan, 2007)
- Peer-pressure mechanism to keep the defaults low (Wenner, 1995)
- Goals: Poverty alleviation and women empowerment (Yunus, 2007)

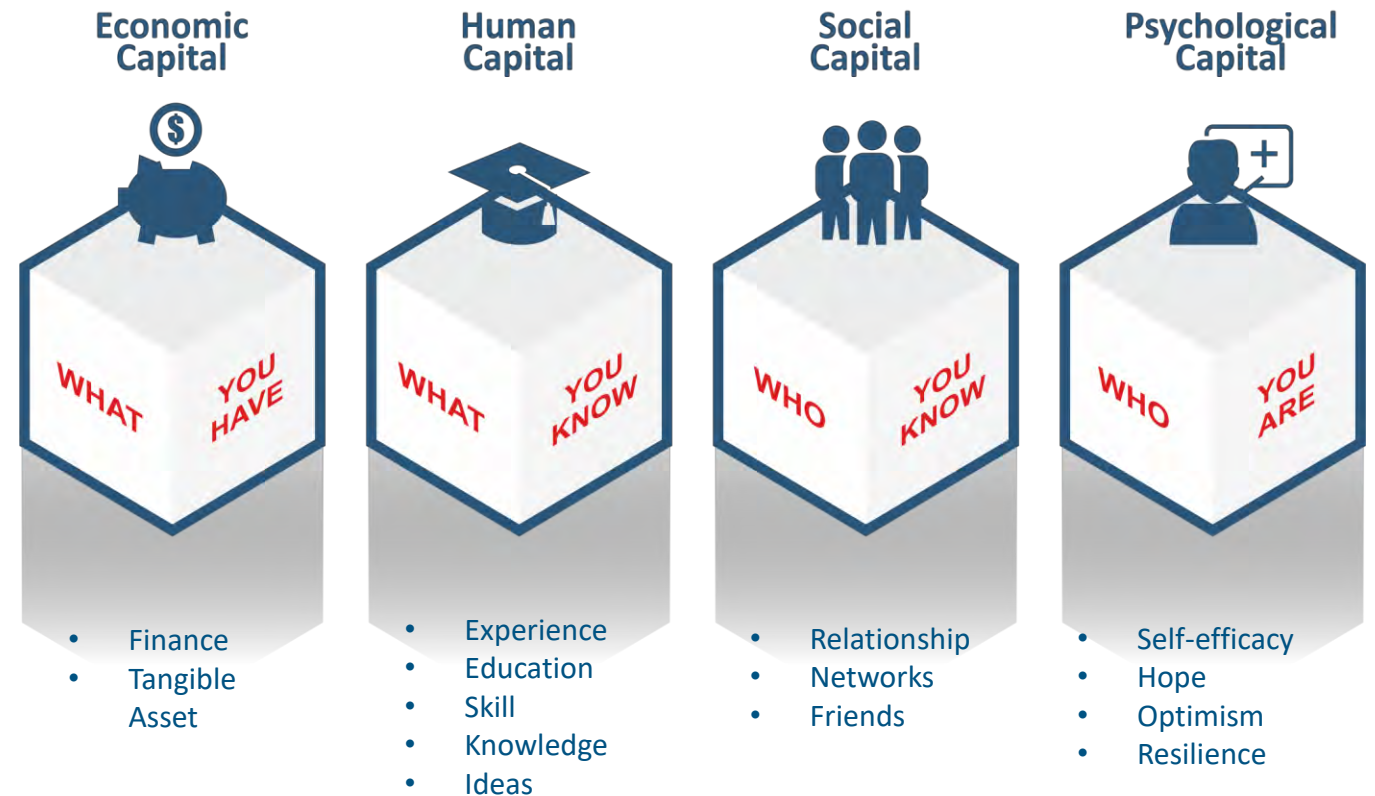


Growing debates on whether microcredit benefits participants due to inconclusive results



Utilising capability approach and expanding beyond economic capital

- Poverty considered as a deprivation of basic capabilities and not merely as constituting a low-income status (Sen, 1999)
- Proposed looking at people's increased capabilities and quality of life to measure the impact of a development project instead of merely using the standard economic variables (Sen 1999, Robeyns, 2005)
- Luthans (2002) introduced psychological capital (Psycap), which consists of self-efficacy, hope, optimism, and resilience.
- By providing the loans to the women borrowers, microcredit programs not only increases the income or the economic capital, but also other capitals.



Source: Luthans et al. (2004, p.46), *Positive psychological capital: Beyond human and social capital*.

Does participation in the microcredit scheme improve ...

- Social Capital and social connections
- Optimism, Self-efficacy, Problem-solving
- Stress levels
- Satisfaction with life

- Our data set comprises only participants in the Loan Groups
- So we cannot compare participants with non-participants to identify impact

Identification Strategy: Length of involvement in the Loan Group.

- Some borrowers have had up to 10 annual loan cycles; others are on their first cycle.
- IF the Loan Group improves well being, then those with longer involvement ought to have better outcomes, *ceteris paribus*.
- The validity of this strategy relies on the length of involvement being exogenous (i.e. Not the decision of the borrower).

Is number of Loan Cycles Exogenous?

This requires us to understand the workings of the organisation providing the loans.

- They open new branches regularly.
- Some branches have been open many years, others very new.
- Clients for a branch are taken from the local geographical area around that branch
- Branches appear to open in a non-systematic way.

Participants from a branch which has been open many years should be comparable with those from a relatively new branch

Mitra Bisnis Keluarga (MBK) – *Family Business Partner*

Total Clients	1,036,737
Total Clients With Working Capital	1,030,297
% Women	100%
% Below Poverty Line	75%
Employees	4,629
Field Offices	515

- One of the largest microcredit institutions in Indonesia
- Established in 2003 with a total of 515 field offices in Indonesia
- All clients are women
- All loan officers are women
- Provides working capital:
 - Starting from \$150 for borrowers in their first loan cycle
 - Up to \$800 for borrowers in higher loan cycles

Data Collection

Survey location	Established	Loan year	Sample size
Pamulang	2016	1,2,3	299
Sawangan	2009	4,5,6,7,8,9	313
Total			612

These two areas are very similar in terms of location, demographics, access to markets, etc

Data Collection → April - May 2018



Descriptive Statistics

Item Description	Percentage
Age Group (years)	
18 - 25	2.5%
26 - 35	21.8%
36 - 45	44.1%
46 - 55	25.9%
Above 55	5.7%
Education level	
No Schooling	3.9%
Elementary School	33.8%
Junior High-School	31.5%
High School	29.3%
Diploma/University	1.5%
Marital Status	
Married	90%

Measures or Psychological and Social Outcomes

Variable	Description
Bonding Social Capital	Social capital within a group or community
Bridging Social Capital	Social capital outside a group or community
Problem Solving	Feels confident to solve long term business problems
Goal Setting	Able to set and work towards business goals
Confident	Perceives herself a successful in her
Handling Difficulty	Able to get through difficult times in business
Optimism	Expects the best in uncertain times
Stress level	Index constructed from a set of 10 Stress-related Questions
Satisfaction in Life	Index constructed from a set of 5 life-satisfaction Questions

Problem: Endogeneity within Groups

- Some borrowers join a group in the first year of its existence, others join later.
- Is there a difference between these two types of borrowers that is related to psychological well being?
- If so, a model explaining well being by number of loans will be misleading.

Model 1: Intention to Treat

Causal variable is number of Loan cycles available, not number of loans actually received by that borrower.

Model 2: Instrumental Variables

Causal variable is number of loans received, instrument is number of loans available in that group, exogenously determined

Model 3: Controlling for Borrower Motivation and initiative

Causal variable is number of loans received; control for when the borrower joined the group – early (motivated first mover) or late (cautious follower)

Results: Typical Model - Intention to Treat, Bridging Social Capital

Explanatory Variables	Coefficient (standard error)
Treatment: Number of Loans Available	.168 (.035)***
Highly Regarded Staff Facilitation	.574 (.281)**
Married	.764 (.390)**
Employed	-.113 (.277)
Age 36-45	.452 (.287)
Age 45+	.692 (.340)**
Secondary Education or higher	.571 (.279)**
Member of a Religious Group	2.935 (.463)***
Attends Religious Activities Regularly	.720 (.327)**
Prays 5 times daily	.144 (.295)

The Base Person: Single, No other employment, Age <36, Primary or no education, No religious activities

Results: Intention to Treat

Outcome Variable	Causal Variable
	Number of Loans Available
Bonding Social Capital	.003 (.003)
Bridging Social Capital	.168 (.035)***
Problem Solving	.009 (.006)*
Goal Setting	.001 (.006)
Confident	.021 (.007)***
Handling Difficulty	.018 (.006)***
Optimism	.006 (.003)*
Stress level	.048 (.073)
Satisfaction in Life	.001 (.072)

Results: Instrumental Variables Model

Outcome Variable	Causal Variable
	Value of Loans Received (Rp million)
Bonding Social Capital	.001 (.001)
Bridging Social Capital	.065 (.014)***
Problem Solving	.003 (.002)
Goal Setting	.001 (.002)
Confident	.008 (.002)***
Handling Difficulty	.006 (.002)***
Optimism	.002 (.001)
Stress level	.007 (.027)
Satisfaction in Life	.015 (.027)

Results: Controlling for Borrower Initiative

Outcome Variable	Causal Variable
	Value of Loans Received (Rp million)
Bonding Social Capital	.001 (.001)
Bridging Social Capital	.050 (.010)***
Problem Solving	.003 (.002)
Goal Setting	.001 (.002)
Confident	.004 (.002)**
Handling Difficulty	.004 (.001)***
Optimism	.001 (.001)
Stress level	-.013 (.020)
Satisfaction in Life	.013 (.020)

- The quality of MBK Staff facilitation plays a key role in psychological and social impacts of the program.
- Those who regularly pray at least 5 times per day tend to experience much better outcomes.
- Other religious activities can help with social capital.

Conclusions so far...

- We find several positive benefits of group membership
- Those who have had more loans or been part of longer-lasting groups will:
 - experience greater social capital among others outside their own group and family
 - have greater confidence about the future of the business
 - have greater self-belief about their ability to handle difficulties in their business
- The quality of staff facilitation and their relationship with group members has a strong positive effect on most indicators of personal well being, as does aspects of religious participation.
- Microcredit group lending is not just about business success of women but also their quality of life through stronger psychological and social capital.

Thank you...

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