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Indian Microfinance Sector: A Case Study

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Abstract

In developing areas of the world with very little economic structure, many activities are not monetized. In other words, money is not used to carry out these tasks because the people in these areas do not have the expendable funds required. In order to combat this problem, micro financing has become increasingly more apparent in these areas of distress. Microfinance is an economic development strategy that allows for those in need to borrow actual money in order to start a business, go to school, or even gain access to everyday living requirements. Microfinance has made tremendous strides over the years, but still faces several obstacles including regulation, loan strategies, and loan consumption. This study will attempt to analyze the microfinance industry in India by challenging certain aspects of its use, as well as offer suggestions that could have beneficial effects upon the industry.

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I. Introduction to Microfinance

IA. Concept of Microfinance

Microfinance refers to small sized loans, savings, insurance, or other financial services that are typically offered to low-income individuals and households. The idea of microfinance stems from the understanding that the men and women of these impoverished areas are unable to develop economically without these loan programs. Microfinance loans can be used for a wide range of activities including growing a business, building assets, and managing risk, just like members of more economically developed areas are able to do. Furthermore, micro financing allows for low-income classes to be able to develop themselves financially without resorting to informal moneylenders and debt collectors who pose a higher risk to borrowers. (Tiwari, Fahad 2017)

The idea of microfinance first gained traction in Bangladesh during the 1970s. Famed economist Muhammad Yunus returned from the United States to his home country of Bangladesh after receiving his Ph.D. from Vanderbilt University in 1969. Upon returning to Bangladesh, he noted the terrible poverty throughout the region. Yunus then developed the idea to implement a new economic approach that loaned small amounts of money to women in order to start or grow businesses in order to improve the local economy. (Muhammad Yunus - Biographical. 2006)

> "Professor Muhammad Yunus established the Grameen Bank in Bangladesh in 1983, fueled by the belief that credit is a fundamental human right. His objective was to help poor people escape from poverty

by providing loans on terms suitable to them and by teaching them a few sound financial principles so they could help themselves." (Muhammad Yunus - Biographical. 2006)

Yunus believed that the key to overcoming economic inequality was by granting these small loans to locals. In doing so, families and groups of individuals would have access to funds that they never had before. "All human beings are born entrepreneurs. Some get a chance to unleash that capacity. Some never got the chance, never knew that he or she has that capacity." Yunus' teachings and motivation were driving forces in the initial advancements of microfinance practices". (Yunus, 2008)

The Grameen Bank's microfinance program became a model for the rest of the world, with replicas of the idea showing up in over one hundred countries worldwide. (Q&A with Muhammad Yunus, 2017) Since its inception, Grameen Bank now operates approximately 2,500 branches in nearly 100,000 villages across the globe. Grameen has been able to lend out over $11 billion worldwide with the vast majority of borrowers being women. (Grameen Bank, 2017)

Typically, those who borrow microfinance loans do not have the collateral that is normally required for a loan. That is why many of these loans are designed to be paid back through group co-guarantees and joint liabilities. This ensures that the loan is paid back on time and each member of the joint liability group is considered a trustworthy and a creditworthy borrower. Two examples include:

Joint Liability Group (JLG) - A JLG is a made up of team of borrowers who are individually selected instead of the institution determining the group. If any member of the group becomes unable to repay their portion of the loan, the remaining members agree to accept responsibility of the remaining sum. This type of loan allows for more borrowers to be involved in a loan, without having too costly of a burden. (Microfinance in India - Sector Overview, 2017)

Self-Help Group (SHG) - A SHG is comprised of a group of people who share the same economic background and want to save money in one accepted fund. The fund can then be paired with banks or microfinance companies to provide additional assistance. The main differences between a SHG and a JLG come down to a few things:

- Not all members of a SHG can borrow; some may only be able to save.
- SHG groups can be connected to third party loans, such as banks and other microfinance institutions
- Members of a SHG are not financially responsible for those who are unable to repay their loans. (Microfinance in India - Sector Overview, 2017)

Microfinance institutions have historically been more prone to lending money to women as opposed to men due to several key factors. The man reason being that women have been more reliable and trustworthy borrowers than their male counterparts. Furthermore, women are less likely to spend earnings frivolously, but instead reinvest their gains or use the money to improve the lives of their families. Lastly, women are usually at or near their homes throughout a regular day. This is especially true in India and means that collection meetings are easier and more accessible. (Microfinance in India - Sector Overview, 2017)

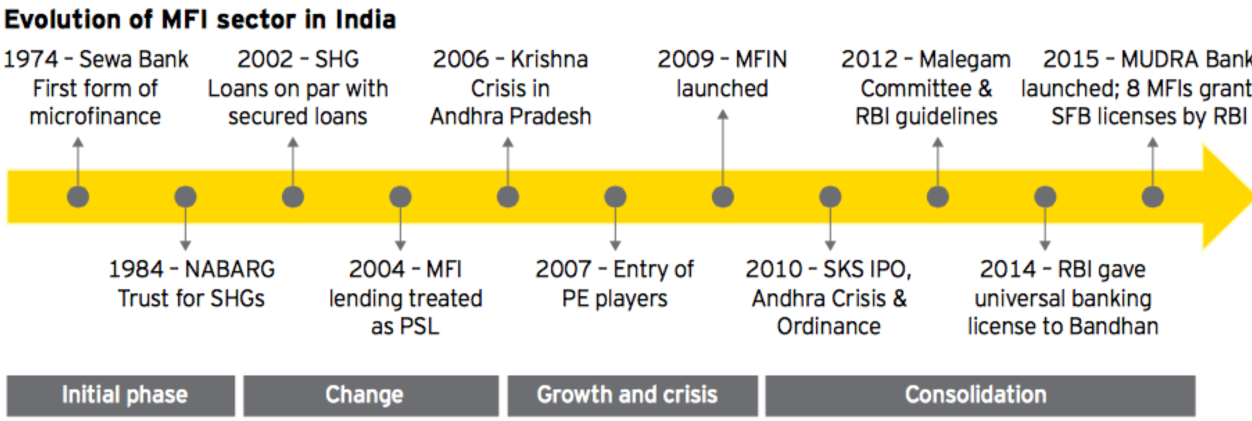
IB. Microfinance in India

The microfinance industry began in India in 1970 with the inception of self-help groups (SHG) to allow for Indians to receive savings and loan tools that had not previously been provided. The first true form of microfinance can be credited to the Shri Mahila Sewa Bank, which in 1974 created the first microfinance institution. Sewa Bank's goal was and is to help the women who are unorganized workers. Unorganized workers in India are categorized as those:

> *Who earn a living through their own small business or through selling their own labor. These are workers who have no fixed employee-employer relationship and depend on their own labor for survival. They are poor, illiterate and vulnerable. They barely have any assets or working capital. But they are extremely economically active, contributing very significantly to the economy and society with their labor. This sector of the economy is called the unorganized sector.* (SEWA Bank: History, 2012)

With 96 percent of women and 92 percent of the overall population in India working in the unorganized sector, it is clear why there was urgency for microfinance. From there, the sector grew into what it is today. (SEWA Bank: History, 2012)

IC. Timeline of Events



(Kanoria, Rawat, 2016)

1974: The Shri Mahila Sewa Sahakari Bank was formed in order to aid impoverished women in underdeveloped areas by offering basic financial services.

1984: India's National Bank for Rural and Agricultural Development (NABARD) promoted SHGs and microfinance companies. Micro financing began to gain traction and other government departments followed.

1991: (not pictured) The industry experienced a strong surge when private organizations began lending money to microfinance companies during the liberalization of the Indian economy. This allowed for the economy to become

2002: Unsecured SHG loans were up to date and proportionate to other secured loans through provisioning norms from Indian banks.

2004: Reserve Bank of India recognized MFIs within the priority sector of the Indian economy and considered them to be a tool for battling oppression.

2006: Government intervention caused some MFIs and other microfinance institutions to close, due to allegations of high interest rates and improper client growth tactics.

2007: Private equity companies increased their presence in the market as the result of high industry growth, supportive regulations, and economies of scale.

2009: The Microfinance Institutions Network was established, which allowed for all NBFC-MFIs to become qualified for membership.

2010: A.P. crisis in which MFIs over lent to borrowers who could not afford payments. Mass defaults and even attempted suicide from debtors. Lead to government interaction and stricter regulations for microfinance industry.

2012: Reserve Bank of India along with Malegam Committee established widespread changes to the entire industry. Total amount on loan books reduced and consolidated.

2014: the Reserve Bank of India formally recognized Microfinance Institutions Network (MFIN). In addition, the largest microfinance organization in India, Bandhan, was given universal banking license by the RBI.

2015: Micro Units Development & Refinance Agency (MUDRA) established in order to help small businesses financially.

(Kanoria, Rawat, 2016)

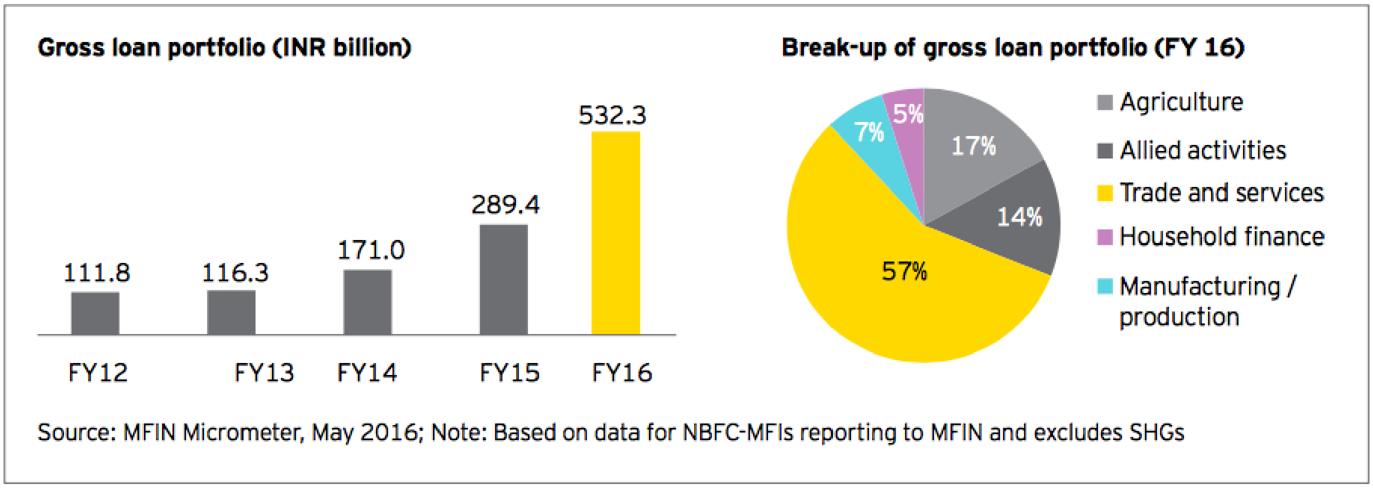
ID. Microfinance Institutions

In modern times, the largest supplier of microfinance loans in India come from defined microfinance institutions, which are often referred to as MFIs. These institutions are categorized as Non-Banking Financial Companies (NBFC-MFIs). NBFCs operate similarly to other financial service organizations by offering loans based on typical credit history metrics, but play a different role in the Indian society. These companies attempt to be fully inclusive to citizens who do not normally have the requirements necessary for a loan. “ NBFCs play a critical role in the core development of infrastructure, transport, employment generation, wealth creation opportunities, and financial support for economically weaker sections; they also make a huge contribution to state exchequer, “

says D S Rawat, the Secretary General of The Associated Chambers of Commerce of India. NBFC are regulated by the Reserve Bank of India, which has fought to reform and improve the industry, moving forward. (Jhajhria, Barlotta, Gala 2017)

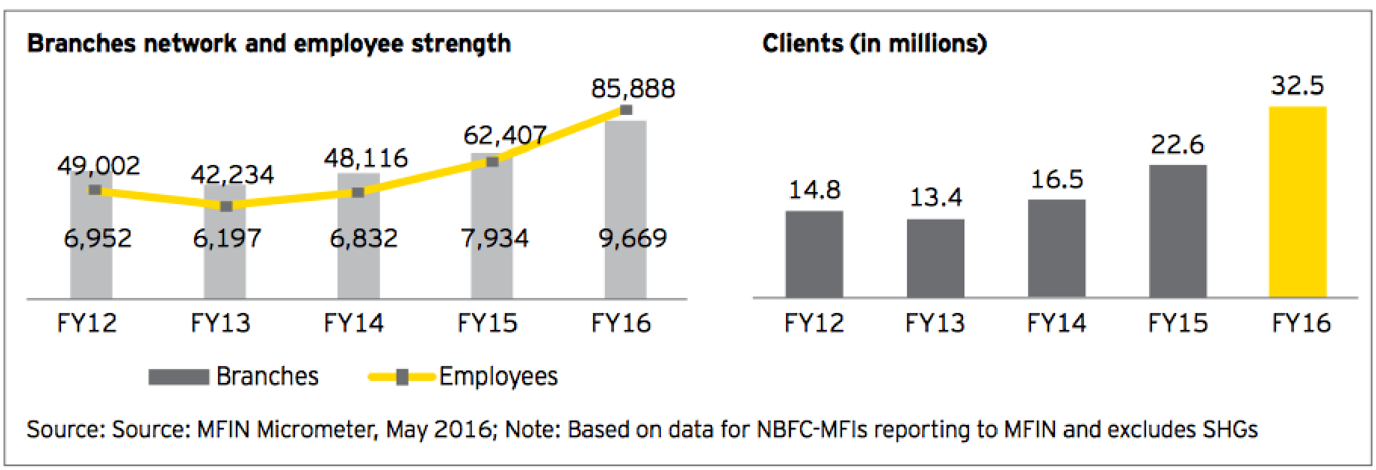
In addition, certain microfinance programs are also offered by banks, which cooperate with SHGs and generate funds through NABARD. This is called SHG-Bank Linkage Program (SBLP) and it accounts for a large portion of the microfinance initiative in India. This report, however, will primarily be focused on MFI microfinance outreach and their impact. (Microfinance in India - Sector Overview, 2017)

The microfinance industry as a whole is made up of approximately 90 percent MFIs. The size of each MFI can vary, and is determined by the amount on each loan book. For instance, small sized MFIs run their books under INR 1 billion while medium sized MFIs range between INR 1 billion - INR 5 billion. Large MFIs consist of any organization that exceeds INR 5 billion on their loan books. Large MFIs make up close to 90 percent of the overall loan portfolio, which includes client accounts and debt funding. The industry as a whole has seen significant growth in recent years. Over the past five years, the gross loan portfolio grew at compound annual growth rate of nearly 50 percent to reach a total loan book amount of over INR 500 billion. This spike in growth has benefitted over 30 million Indians thus far. The industry advancements can primarily be linked to the Reserve Bank of India loosening restrictions on the amount one borrower can take on from INR 50,000 to INR 100,000. Of the total loans, about two thirds were given to those in rural areas while the remaining third consisted of metro and urban centers. (Kanoria, Rawat, 2016)



(Kanoria, Rawat, 2016)

As regulatory requirements became more focused in 2012, the microfinance industry began to slow. After a short shake out period, the remaining organizations began to rapidly expand their networking centers and number of employees. As of 2016, both the number of employees and the number of microfinance branches increased by approximately 15 percent.



(Kanoria, Rawat, 2016)

II. Women Affected by Microfinance Programs

IIA. Introduction

A consistent focus of international development efforts over the last several decades has aimed at the plight and progress of women. The empowerment of women has been a focal point in regards to the emergence of microfinance as a way to battle against poverty and female oppression. Many microfinance lenders and NGOs are solely concerned with reducing gender inequality and improving the financial capabilities of women. Microfinance has become one of the most straightforward and practical ways in which women can empower themselves and avoid economic disparity, especially in India. "With access to financial resources, women are better equipped to meet practical needs, contribute to household resources, and challenge gender inequity." (Mayoux, 2003) In many cases, microfinance is the only place to turn for the unrepresented women of certain distressed areas. Women are often overlooked in the formal labor market, which forces them to find work informally. The work is often unregulated and payments earned can be unreliable. In turn, women also benefit the microfinance organizations because they are known to be more reliable than men when repaying loans. In addition, women are also more likely to allocate their loan towards the livelihood and well being of their family. In tandem, the partnership between the NGO moneylenders and local women allow for major benefits on both sides. (Krenz, Gilbert, Mandayam, 2014)

Highlighted below are two examples of positive Indian economic programs that have aided women of need. The Annapurna Parriwar program was designed to assist women in the urbanized region of the country, Mumbai. In contrast, the SHG, Mission Shakti's goal was to positively impact the lives of dairy farmers in the Mayurbhanj region. It is helpful to look at both urban and rural developmental programs to better gauge the inclusion levels of impoverished Indian women.

IIB. Annapurna Parriwar Program

Although India is considered to be one of the fastest growing countries per GDP, many of India's metropolitan areas lack sufficient infrastructure and employment opportunities. In addition, there is very limited access to education and health care. Mumbai, being one of these affected areas, proves to be a hotspot for economic inequality among these disadvantaged citizens. Due to accelerated economic and cultural change throughout the country, threats arise frequently for India's urban poor. In response to these economic hardships, the Annapurna Parriwar program has been developed to challenge economic distress and promote gender equality by improving the opportunities for women to generate income. (Krenz, Gilbert, Mandayam, 2014)

The Annapurna Parriwar is made up of six local NGOs and is considered one of the foremost microfinance institutions in India. From 1975 to modern day, Annapurna Parriwar has been focused on accomplishing their goal, which is "empowered women in sustainable families." Initiatives include needs-based projects, partnerships, and advocating for those afflicted. In addition to strengthening the lives and capabilities of needy women, Annapurna Parriwar also offers a wide array of services, which include:

- Microloans and savings
- Vocational training and job placement
- Family, legal, and health advice
- Micro insurance
- Child-care and educational sponsorship

Members are prompted to take part in a mixture of services, which will then be packaged and distributed into small monthly loans for each client.

The loans work similar to a joint liability group in that members apply for loans together and are backed by each other. Loans vary in amount from INR 1,000 to INR 35,000 and borrowers are able to increase their loan amounts depending on repayment conduct, business development, and group aptitude. As a group, the partners must save at least 20 percent of earnings as they take up small jobs (laborers, merchants, vendors) to repay the loan. (Krenz, Gilbert, Mandayam, 2014)

A recent analysis was conducted on several women who took part in the Annapurna Parriwar loan program. These women ranged in age and were all considered to be in the very poorest category of wealth. The basis of the study was to determine the level of empowerment these women felt after engaging in the program for over one year.

Financially, these women all felt that they were better positioned to support themselves and their families. The loans provided were able to help these women overcome certain obstacles that had otherwise burdened them. For example, a major cause of illness in Indian slums is credited to poor drinking water. Using loan assets, program members were now capable of making home improvements that increased their sanitation levels, especially in regards to clean drinking water. Furthermore, health benefits are also included in many Annapurna Parriwar loan packages. This allows for further medical advancements in areas that are not accustomed to such treatment. Beyond basic human needs, the women then used remaining funds to pursue personal aspirations like investing in their businesses or saving for a new home. Women are also given advice and insight on financial techniques for strategic spending, saving, and investing.

In addition to increased financial stability, the women felt as though they had achieved an improved mental state. Psychologically, the women who took part in the program all felt happier and more confident in themselves. Prior to the loans being administered, these women tended to avoid certain social situations and encounters due to their feelings of low self-esteem. After receiving the loans, the women felt that they were more respected by the public. As their confidence began to build, they began to participate more actively within the community. This rise in social standing is extremely important because it increases the likelihood that the women will be able to pay back their loans. The increased sense of meaning experienced by these women provides them with greater confidence to pursue resources that will allow them to make steady repayments. The women also felt they had achieved a greater sense of purpose. Instead of having to rely on others, they were now able to provide for their families, manage their small businesses, and save money for the future. (Krenz, Gilbert, Mandayam, 2014)

A large benefit of the program is the JLG structure. The joint liability aspect requires program members to meet regularly with one another, which inherently allows for more trust and dependence within the group. Aside from discussing loan specifics, the women are also able to discuss personal topics outside of microfinance. 'The group is very cohesive; we are closer now so we are able to speak of many more things. We discuss more and are sharing more about each other," said one member of the Annapurna Parriwar program. This practice has lead to increased levels of trust in each other, as well as themselves. "Earlier we did not even know each other but later we made friends with each other and now we are like one big family. We help each other in difficult times," said another. The Annapurna Parriwar program used as an economic alleviation strategy has impacted the women of Mumbai in a multitude of ways by allowing them to feel both empowered and optimistic about their futures. This cultural progression has allowed for increased levels of repayments and a greater sense of why these MFIs are truly in place. (Krenz, Gilbert, Mandayam, 2014)

IIC. Odisha Study

Metropolitan areas of India are not the only regions that require microfinance programs. The rural areas of India represent a large portion of the jobs and labor for the female population. Gender discrimination is still a prevalent issue facing India, especially in regards to its agricultural sector. Nearly ninety percent of India's working female class is involved in industry and agriculture with average pay being thirty to forty percent less than their male counterparts. Research has helped determine the impacts Self Help Groups have had on women who belonged to these rural areas. (Rajpal, Tamang, 2014)

A study was performed in the Mayurbhanj district of Odisha, a rural region in the northernmost part of the state. In Odisha, the Women Self Help Group (WSHG) program began in the early 90s following the efforts made by NABARD to strengthen microfinance programs across India. The WSHG, Mission Shakti was put in place to aid women and children by providing better education, healthcare, and nutrition to workers in the area. In this particular case, the villages of Pantho, Durdura, and Jashipur have been included in the study sample. First, the group of villagers applies for a loan through the WSGH. The WSGH then contacts the bank and relays how the loan will be used and if the borrowers are in good standing to make the loan payments. After developing the loan criteria, the bank will then administer the loan with Mission Shakti, acting as the platform for microfinance activity to take place. (Rajpal, Tamang, 2014)

S. No.	Bank Linkage	Pantho	Durdura	Jashipur	Total
1.	Average Loan per Member	16,100	16,666.7	4,700	**13,184.10**
2.	Average Interest Charged (% per annum)	24	13	24	**20.3**
3.	Average Subsidy Availed by Each Member	6,470.6	8,000	–	**5,227.3**
4.	Average Amount Paid	20,481.21	5,302.66	4,330.90	**9,839.1**
5.	Repayment Ratio (in %)	127.2	31.8	92.1	**74.6**

(Rajpal, Tamang, 2014)

Above is a chart displaying the varying bank loans and repayment structures available to members of each village. On average, the loan provided is INR 13,184.10 with an average interest of 20.3 percent. The average subsidy availed by each member is INR 5,227.30 with Jashipur's data not being made available. The average amount paid per member group is INR 9,839.10 with a repayment ratio of 74.6 percent. (Rajpal, Tamang, 2014)

In order to pay back the loans, many women looked for alternate work within their villages. Tasks performed included bowl making, animal husbandry, rice making, and opening shops. Similarly to the women who began microfinance programs in Mumbai, the women of the Mayurbhanj district all felt that they were more empowered and capable members of society. The effects of the microfinance loans for this particular study were clearly beneficial. Below is a table depicting the impact of SHGs on Employment. (Rajpal, Tamang, 2014)

S. No.	Employment (per Month)	Pantho	Durdura	Jashipur	Total
1.	Average Days of Employment Before Joining Group	17.5	12.5	12.4	**14.1**
2.	Average Days of Employment After Joining Group	18.8	17.6	19.3	**18.6**
3.	% Change in Employment	5.7	40.8	55.6	**31.9**

(Rajpal, Tamang, 2014)

Employment in all three villages increased after the women took part in the microfinance program, especially in the villages of Durdura and Jashipur. The same can be said about the percentage change in overall female employment. Table 3 offers more insight into the impact of the SHG program by displaying the change in income for program members.

S. No.	Monthly Income	Pantho	Durdura	Jashipur	Total
1.	Average Monthly Income Before Joining Group	605	500	450	**518.3**
2.	Average Monthly Income After Joining Group	1,095	1,508	1,350	**1,317.7**
3.	% Change in Income	80.9	201.6	200	**154.2**

(Rajpal, Tamang, 2014)

Average monthly income increased dramatically in all three villages. The WSHG program in this rural sector of India has made a tremendous impact on the women who live there. Those who participated in the program were decidedly left far better off than before the microloan. The loans allowed for the women to gain acceptance and contribute to the overall health of their villages. Their success is directly correlated with the increased levels of income they experienced. (Rajpal, Tamang, 2014)

III. Problems Associated with Indian Microfinance

IIIA. Introduction to Issues

From the outside looking in, the microfinance industry appears to be an effective method for increasing economic opportunities and battling oppression. In reality, there are several flaws that have detracted from what Muhammad Yunus originally intended microfinance programs to be. The underlying question has become whether or not microfinance programs actually help borrowers escape poverty. In some areas of economic disparity, the most necessary step in aiding the impoverished community is only related to basic needs like food and medicine. As important as it is for these depressed areas to gain access to economic relief, it has been questioned whether microfinance programs are enough to actually overcome the widely embedded poverty within these developing regions. (Chester, 2014) There are many cases and reports that have stated that those who have taken part in microfinance alleviation programs have actually worsened their economic situations and status. Although microfinance organizations are entirely focused on alleviating poverty in developing countries, they are distinctly different from any charity. Borrowers must pay back their loans, and with those payments comes heightened interest rates. (Kanoria, Rawat, 2016) These borrowers often see short-term alleviation, but are burdened with much greater economic stress as payments become greater. (Polgreen, Bajaj, 2010) In addition, the industry needs higher levels or regulation in order to make sure that borrowers are being supported correctly. In many cases, MFIs offer sales incentives to employees, which can often lead to over lending to those who are not financially able to support such a loan. Without proper regulation, microfinance can become an insurmountable burden for those who use and sometimes abuse its programs.

IIIB. Areas of Concern

- Collateral Based Lending: All MFIs in India claim to structure their loans based on cash flows of the individual borrower. However, many MFIs have instead been substituting cash flows with some other form of collateral. Usually, this comes in the form of land and sometimes gold. Problems arise through this process because real estate valuations can differ, as well as monitoring and recovery if the borrower defaults. In addition, MFIs have trouble liquidating said assets properly in the case of default. (Pankkal, Kumar, 2010)
- Loan Design: In many cases, the loan design of each product imitates that of a fixed income loan, where each payment is incrementally increased over time. Loans are not given based on the precise need of the client's business. This can oftentimes lead to under lending to certain clients while over lending to others. Also, MFI's tend to imitate their loans and loan packages based on other MFI competitors, instead of designing the loans based on the needs of their clients. Releasing these loans without proper research into the surrounding area often results in poor caretaking and increased default by clients. (Pankkal, Kumar, 2010)
- Loose Underwriting Process: Often times, an MFI staff will not conduct a proper underwriting analysis on a loan appraisal. Reasons for not doing so include the limited resources and size of their staff, incentives based on the sale of larger loan disbursements,

and strategic plans that were designed for private investors who want to get in and out as quickly as possible. (Pankkal, Kumar, 2010)

- No Credit History: Competition between MFI organizations and the pressure to increase size has lead to some companies to offer sizable loans without properly examining a member's credit history. Larger loans are given to groups and individual lenders who have only been through 1-2 loan cycles. They are not properly trained to handle such a loan and are often times not prepared to make these higher payments. In turn, this increases the credit risk of the MFI. (Pankkal, Kumar, 2010)

- Interest rates: A major issue that has arisen from micro borrowing is the level of interest attached to each loan. In some cases, interest rates can reach as high as 20%. Their repayments debilitate borrowers who do not understand repayment methods or are unaware of the high rates. This leads the very same borrowers to seek loans elsewhere in order to pay back the original loan, creating a vicious cycle. (Ghosh, 2017)

- Multiple Borrowing: In some cases, MFIs allow clients take out multiple loans, or take out loans with multiple microfinance organizations. Borrowers overextend themselves, leaving little hope of paying back their remaining balances. In turn, this also affects MFIs whose own commercial loans run the risk of not being repaid. (Ghosh, 2017)

IIIC. The A.P. Crisis

Problems that have arisen due to poor microfinance practices and structure were most apparent in the Indian state of Andhra Pradesh. The A.P. crisis also tackled the root question that has followed the microfinance industry in recent years - are these programs are actually capable of being the poverty alleviation tool so desperately sought after by these areas of need. The underlying issue has to do with MFIs and the reason they were established in the first place. As the microfinance industry in India grew, many MFIs shifted from being considered non-profit entities to strictly for-profit organizations. This problem was especially apparent in Andhra Pradesh, where MFI institutions were able to take advantage of debtors across the region. (Priyadarshee, Ghalib, 2012)

Although the Indian microfinance industry saw a tremendous amount of growth in recent years, no area experienced more of this than Andhra Pradesh. It is here that the AP government created an independent body called the Society for Elimination of Rural Poverty (SERP). SERP was responsible for creating a series of projects called Indira Kranthi Pantham IKP, which was implemented in order to promote SHG's in every district of AP. Each SHG consisted of ten to fifteen female members who were brought together by the IKP program. The group member's main responsibilities included savings, credit, and meeting each week. This series of networks created by the various SHG's became the largest of its kind in India and represented an important framework for micro financing activities, including larger MFIs. This was evidenced by AP containing just over 20 percent of all SHG's in India, despite holding less than 10 percent of India's total population. It is important to note that because of the established microcredit infrastructure in AP, MFIs did not need to educate borrowers or advocate for it's use, like in other states. The interconnectedness allowed for MFI's to cut transaction costs and joint liability. Typically, MFIs are limited in their overall reach because of high transaction costs. It is often difficult and expensive to reach all areas of poverty, especially rural regions. AP's previously established microfinance industry allowed for MFIs to cut these costs by 25-50 percent, thus making them more sustainable. In addition, the community oriented behavior that often makes up rural areas improved repayment rates. Members of each SHG were able to use peer pressure to control group performance through joint liability. Due to these certain characteristics, MFIs began to flock to the region. (Priyadarshee, Ghalib, 2012)

The over saturation of AP by competing MFIs lead to massive over lending to those who could not afford payments. These MFIs, who were working for-profit, began offering multiple loans to the same individual or household. In addition, MFIs did not perform background checks and extended credit to almost anyone who was interested. Soon enough, members were borrowing far beyond their capabilities. Even further, some MFIs were partnering with consumer goods suppliers like television brands to include in their lending packages. Poor people who aspired to own such items purchased even more credit, and the problem only grew worse. Many borrowers had no form of income and it was only a matter of time before waves of people began to default on their loans. The MFIs began taking more drastic measures in order to see their loans returned. For example, forcing defaulted borrowers to take out additional loans from local moneylenders who charged exorbitantly high interest rates. The situation reached its boiling point when overwhelmed borrowers began committing suicide, which sparked media frenzy, leading to government intervention. In 2010, the AP government created The Andhra Pradesh Microfinance Institutions (Regulation of Money Lending) Ordinance. This ruling included regulations aimed at ending the malpractice of MFIs in the AP region and restoring order to the microfinance industry. Restrictions included all MFIs registering themselves with the government, monthly repayments, and penalties for how MFIs went about collecting loans, as well as limits on interest rates. (Priyadarshee, Ghalib, 2012)

Unfortunately, AP repayment rates fell to roughly 2 percent in rural areas and 0 percent in urban areas. The strict stipulations placed on MFIs only enhanced the issues, rather than fixing them. With no form of payments being received by the microfinance organizations, many firms were forced to restructure their debt in order to repay their own bank loans. The crisis also affected MFIs outside of Andhra Pradesh by limiting their ability to receive proper loan amounts from banks. The incident caused the largest number of defaults since the inception of microfinance in India and caused many MFIs to cease operations. (Microfinance in India - Sector Overview, 2017)

IV. Solutions/Recommendations

IVA. RBI Intervention

In response to the surmounting failures that circled the microfinance industry, the Reserve Bank of India (RBI) began to fully regulate all Indian MFIs. This, in turn, removed government control and intervention from any and all microfinance organizations with the aim at avoiding a disaster similar to the A.P crisis. (Microfinance in India - Sector Overview, 2017) The main corrective measures that were taken in order to mitigate any further risk are as follows:

- Not more than 2 different MFIs can lend to the same borrower and the total amount outstanding per customer is capped at INR 50,000.
- Set INR 100,000 as the max level a borrower can owe an MFI

- MFI portfolios must contain at least 85 percent of their assets to be involved in standard meeting loans.
- Interest Rate regulations:
    - Lower than the cost of funds plus 10 percent if large MFI and lower than the cost of funds plus 12 percent for medium to small sized MFIs.
    - The average base rate of the five largest lending banks in India (calculated by assets) and multiplied by 2.75.
- Product Design:
    - Loan Size: INR 35,000 for first loan and INR 50,000 for all loans following the initial loan.
    - If the loan size exceeds INR 15,000 then the tenure of the loan must be greater than 24 months.
    - The frequency of loan repayments can be made at the discretion of the borrower (weekly, monthly, etc.) (Microfinance in India - Sector Overview, 2017)

The RBI's newly enacted set of laws centers around the theme of risk management. Risk management is crucial for any financial institution, but especially for microfinance institutions. MFIs are responsible for distributing loans to the most reliant and unsustainable members of society, who are more likely to suffer if unable to make loan repayments. It is absolutely necessary for microfinance organizations to have a comprehensive and evolving set of rules and standards that will effectively manage risk. (Kanoria, Rawat, 2016)

IVB. Industry Improvements

Moving forward, the following standards should be examined when formulating a more extensive risk management system. The first point stems around decentralization of the industry. This would involve a system in which each MFI is structured to allow loan officers to be conscious and receptive of their client's needs. Although each client comes from a similar background, not all borrowers are capable of making the same payments; therefore, each loan should be treated differently. By understanding the needs of each client, MFI loan officers will be more accommodating and loans will be less likely to be defaulted on. In doing so, the operational effectiveness and efficiency for each MFI would increase, as well as internal costs being lowered. (Kanoria, Rawat, 2016)

In addition, it is necessary for MFIs to have a capable support system. In the case of Andhra Pradesh, MFIs over extended their loans and were unaware of the dramatic effect that this would have on the people of India, as well as their own organizations. A well-designed support system made up of information systems would allow for these institutions to better-forecast future financial trends. Data could be gathered and assessed by upper level members of each MFI to determine what steps should be taken in order to ensure proper loan activities are being fulfilled. These support systems would allow for each institution to manage risk associated with their loan portfolios. By better preparing themselves for prospective economic events, MFIs will be better suited to handle probable, as well as unanticipated situations. This will have a lasting effect on the actual microloan borrowers who will be able to better rely on their institutional lenders. (Kanoria, Rawat, 2016)

Another point involves the proper training of each MFI employee. Each loan officer must know how MFIs operate and exactly what is expected of them. By knowing how to properly handle all loan requests and the borrowers attached to each one, repayments are at a greater likelihood of taking place. In turn, the higher levels of repayment rates would allow for MFIs to expand, as well as encourage impoverished community members who have not taken part in any microfinance practices to begin doing so. Additionally, training employees to a higher degree will lead to a lower employee turnover rate. This would once again increase the efficiency of each MFI, allowing for funds to be allocated more accurately. (Kanoria, Rawat, 2016)

Lastly, the inclusion of male borrowers within microfinance programs is an important area of discussion. Certain cases and trends have developed in India, citing that men are not reliable enough to extend microloans to. Compare to their female counterparts, men are seen as less able entrepreneurs due to overall reliability issues. While historically this has been the general consensus, it is time for the subject to be revisited. An example of male repayments capabilities comes from one of Uganda's microfinance programs. The commercial bank and MFI, Centenary, which began as a trust fund in Uganda during the 1970s is able to lend to both men and women regularly. After struggling to earn profits, the organizations brought German financiers who specialized in microfinance programs. Following their lead and adopting a sophisticated lending approach allowed Centenary to provide loans to both genders without increasing their repayment risk. The institution allows for borrowing from husband and wife as part of the same household, which allows for financial stability and lasting economic alleviation. The study provides evidence to the fact that once MFIs have well structured loan packages and are regulated correctly, both men and women do pay back their loans. MFIs in India may replicate the lending technology that Centenary uses to begin extending loans to qualified men. The method could potentially revolutionize the microfinance industry in India, as well as improve the lasting impact associated with microloans. (Seibel, Hans, 2017)

IVC. Mobile Payments

A major problem occurring in India right now involves the recent ban of 500 and 1,000 rupee notes across the country. The ban is intended to stop corruption and illegal cash holdings, also called "black money." The mandate has provoked pandemonium for lower income Indians who rely heavily on the cash economy. Rushes on the banks and ATMs spiked as swarms of panicked Indians attempted to exchange their expired rupee bills for lower denominations of accepted currency. These banks and ATMs began to quickly run out of cash, which created an even bigger stir. In response, the Indian government raised the limits on withdrawal amounts, further impairing the poor. (Biswas, 2016)

The Indian government hopes that the ban will bring back millions of dollars of unaccounted capital back into the economy. The two notes accounted for 80 percent of current funds in circulation, leading to the rise in black money. Economists fear that over time, people will just be able to replicate their former black money practices with the new currency. The ban poses a huge risk to anyone who holds onto these notes, including farmers and members of the rural community. Often times, these people do not have access to banks, or are unwilling to deposit their savings into one. "Its economics is complex and the collateral damage is likely to far outstrip the benefits," says Professor Basu of Cornell University. Thousands of working class Indians will be left out to dry, which will directly affect their ability to borrow money and make payments with microfinance organizations. (Biswas, 2016)

The problem resides in the fact that 90 percent of all transactions in India take place with cash. India's cash to GDP ratio sits at 12 percent, which is four times the size of countries like Brazil and Mexico. Many poor and working class individuals need to hoard their cash simply because it makes it easier to live their lives. (Biswas, 2016)

The answer to this issue may involve the trend towards e-commerce and m-commerce payment methods. "The increasing digitization of finance, and the move away from cash, could add 6 percent to the annual economic output of the world's developing nations over the next 10 years," according to a study done by the McKinsey consulting firm. (Popper, 2016) The study describes how underdeveloped countries lose out on a great deal of economic capacity because of their attachment to physical forms of money. Businesses and individuals run into plenty of issues by solely relying on cash, which is evident in the case of the rupee ban. The rise of cell phone usage in the developing world is a possible solution that we could see make serious gains in the coming years. Research states that 80 percent of people in these areas of development use and have access to cell phones, with that number expected to rise to 90 percent by 2020. (Popper, 2016)

Progress towards mobile commerce has already begun in developing regions of the world. In Kenya, for example, around three-fourths of adults are using the M-Pesa, which is a digital monetary system developed within the last decade.

> *M-PESA enables you to go further, pushing the boundaries of its core service: mobile money transfer. Experience M-PESA as a payments platform or as your personal bank account through the KCB M-PESA*

account. We are leading the future of mobile money transfer services and transactions in Kenya and the world over. (Monks, 2016)

Although the technology was made popular in Kenya, 30 million users in 10 different countries use it worldwide, including India. Users gain access to transfers, loans, and even health services. The service also offers opportunities for small businesses and The M-Pesa system processed 6 billion transactions in 2016 with that number expected to rise substantially in the coming years. (Monks, 2016)

In India, the idea of the M-Pesa is beginning to take shape. Merchants and retailers in India have begun to receive access to the service through the mobile phone company, Vodafone. How it works is as follows: An Indian retailer simply has to download the Vodafone application on their phone and sign up for M-Pesa Pay. That then gives them the ability to charge customers through their M-Pesa wallet, debit card, or bank account. The payments are all secured and the money is processed almost immediately. The M-Pesa service is beginning to spread across India in both urban and rural areas. Thus far, ten Indian states have adopted the M-Pesa and several developments are being pursued in collaboration with the government to further develop this idea. (Sethi, 2017)

In regards to the M-Pesa and the microfinance industry, little has been accomplished up to now. Vodafone has been able to partner with microloan companies such as Bharat Financial Inclusion and Muthoot Financial in hopes of spreading the mobile payment platform, but the progress has been slow. (Sethi, 2017) I believe that a large rollout in partnership with the government is what it will take for the M-Pesa to produce the results it is capable of. MFIs and other microfinance institutions would be able to distribute digitized loans and collect payments electronically through the M-Pesa system. The development of a digital system of saving and credit will allow for microloan users to better track their funds, as well as develop better techniques for making timely repayments. In addition, this would also help to solve the currency problem that is currently facing India. As a greater amount of people use mobile forms of payment, businesses and the government will be able to transfer funds electronically. This will allow for less cash to be circulated, which will ease the distribution of black money. Prime Minister of India, Narendra Modi vision for India is one that involves a "less cash" society. (Biswas, 2016) This begins from the bottom up, by offering these electronic forms of payments to the impoverished people taking part in microloan activities. The service could take time to develop, especially in rural areas, but the development of e-commerce is one, if not the most pressing issue in India today. The further advancements to the microfinance industry through mobile payments could provide lasting effects in India by strengthening its middle class and reducing poverty. (Biswas, 2016)

V. Final Conclusion

This study aimed at giving a brief history of Indian microfinance practices, it's shortcomings, and most importantly suggestions that could help improve its current state of being. The use of microfinance has proved to be an important poverty alleviation strategy that has withstood the challenges of last several decades. From simple beginnings, the industry has grown exponentially, creating a global network of microfinance organizations that has positively impacted millions of poverty-stricken families and individuals. Significant advancements to the microfinance industry in India in both growth strategies and regulation have allowed microfinance organizations to extend loans to millions of people. The movement has largely focused its effort on women empowerment, using microloans as a platform for social change. Women have been able to integrate themselves into their communities and offer services that few had deemed possible prior to micro financing. Still, Indian micro financing faces several barriers that must be overcome in order for the programs to become the poverty alleviation tool it is intended to be. In order for borrowers to fully escape poverty, certain MFI practices; such as poor loan design, loose credit extension and heightened interest rates, all which can have severe impacts on microloan borrowers, must be addressed. Therefore, it is important that the industry follows market trends and updates loan methods accordingly. In addition, Indian MFIs must know their demographic and how to properly manage their clients. By so doing, they will be able to better develop their outreach and capabilities, further improving the lives of those in need. The underlying message is that these institutions must always be aware of their purpose. Muhammad Yunus' vision when he created the Grameen Bank was to help those in need, not to seek profits. "Human beings are extremely creative and resilient, especially when they are operating within an institutional framework that encourages and supports their actions." (Yunus, 2006) These people innately possess the necessary requirements that will allow them to succeed; they only lack the external financial structures that will enable opportunity. The moment MFIs begin to focus on profit before supporting their members, the entire movement takes a step backward. MFIs are proof that when structured correctly, financial relief is entirely possible. Although several questions remain in regards to the well being of the microfinance industry in India, its practices promote a social and economic change that will continue to have a lasting impact.

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