Proceedings of The National Conference
On Undergraduate Research (NCUR) 2016
University of North Carolina Asheville
Asheville, North Carolina
April 7-9, 2016

The Way She Spends Her Money: Why Women Make Good Microfinance Borrowers in Latin America

Jane Haines
International Studies
American University
School of International Service
4400 Massachusetts Ave NW
Washington, D.C. 20016 USA

Faculty Advisor: Dr. Dylan Craig

Abstract

Development practitioners often see women as the key to sustainable international development success, especially in the microfinance industry. A wide range of research conducted in support of this belief identifies various distinct and individual factors (such as spending habits, familial responsibilities, status, and social networks) as reasons for women's high repayment rates, or as arguments for the utility of microfinance loans made to women. The result is a near-consensus on the status of gender as an important criterion around which to design economic development, but a lack of consistency in explanations of why this should be so, how these variables interact, or whether a more efficient way to target intervention can be found. This study addresses these methodological questions in order to further investigate how it is possible that women are universally considered good microfinance borrowers, even though they borrow under varying, complex socioeconomic circumstances. This study first uses a large-n statistical approach to compare World Bank data on gender equality and lending data from the Microfinance Information Exchange (MIX) in order to uncover trends that exist among microfinance industries in fourteen Latin American states. Using descriptive statistics and a range of gender equality indicators, the study then tests ten notional hypotheses drawn from the literature on women, gender and development. The results suggest that socioeconomic circumstances (such as barriers to market access for women) are indeed important elements in explaining why some women have more success than others as microfinance borrowers. The results also emphasize that more work should be done to critically evaluate the near-consensus on the status of gender in development if firmer conclusions are to be drawn in future.[1]

Keywords: Development, Microfinance, Women

1. Introduction

Gender inequality is one of the most significant barriers to international development we face today. This study investigates how gender is used to advance development goals through microfinance: the provision of access to financial services, namely credit, to poor populations that cannot access a commercial bank. Microfinance institutions use mutual trust between borrower and lender as well as social collateral to achieve high repayment rates. The majority of these lending efforts is targeted towards women and encourages borrowers to engage in social entrepreneurship. However, being born a woman doesn't inherently make anyone financially inferior or in need of development assistance. Instead, this paper outlines how I investigate underlying social constructions that make women good microfinance clients. By understanding factors that affect borrowers across states and economies, development practitioners can begin to incorporate other population groups into this model – those who desperately need microfinance but do not necessarily fit the gender mold to be targeted for it. Additionally, research of this kind can help mold a more progressive view of gender and development. This leads me to ask the question: how is it possible that women are universally considered good microfinance borrowers even though they borrow under varying, complex socioeconomic circumstances?

This results of this study challenge the standard narrative of women's empowerment through microfinance and suggest ways in which microfinance lending strategies might actually be bad for women. The data produce greater consistency in these strategies among states with higher levels of gender inequality and less consistency among states where men and women appear to have access to more financial resources.

2. Theory

Literature covering the topics of gender, development, and microfinance produces several common themes that explain why women are considered crucial elements to producing good microfinance outcomes. In this paper, I theorize that gender targeted microfinance institutions are depending on the same patriarchal gender roles historically used to marginalize women to achieve their financial and social development goals.

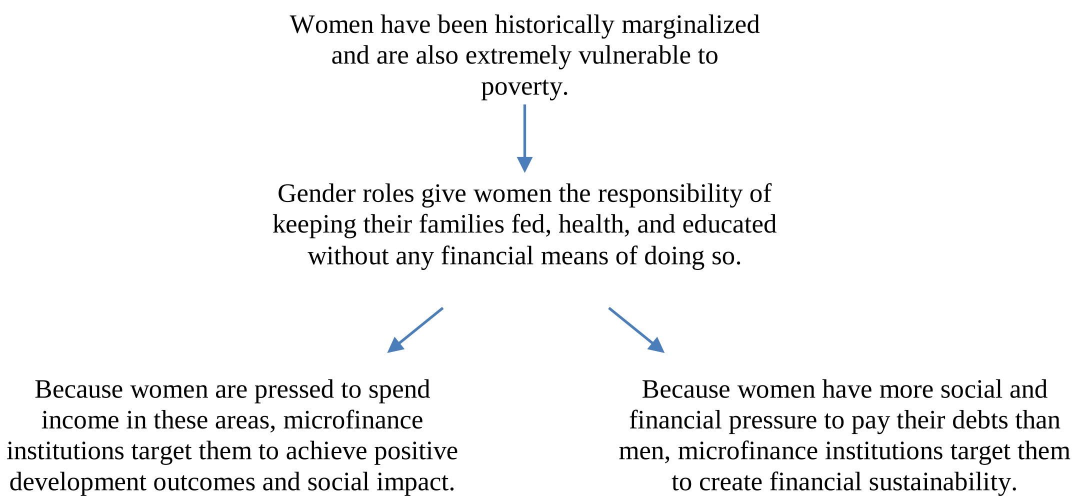

Figure 1. Theory: Gendered power structures create the basis for women-targeted microfinance lending strategies

3. Rationale for Gender-Based Microfinance

In a report sponsored by United Nations Development Fund for Women (UNIFEM) Sylvia Cheston and Lisa Kuhn discuss women in development as one of the most vulnerable demographics to poverty and as investing more resources in their families than men. Not only does this cause them to make better financial decisions to support their families, but an increased focus on education and healthcare produces key development outcomes.[2] In their critique of patriarchal structures as foundations of development discourse, Sylvia Chant and Matthew C. Gutmann, address gender as a set of external social structures rather than characteristics of certain kinds of people.[3] They present a case for incorporating women *and* men into development institutions as gendered decision makers rather than relying on women alone. From this point forward, gender should no longer be synonymous with just women. In terms of hypothesis, this means that while microfinance institutions may appear to grant women more agency, they may actually take it away by manipulating gendered power dynamics that are already used to marginalize women.

4. Literature Review

4.1 The Microfinance Schism

Because gender is so closely tied to poverty, the field of microfinance inherently carries its own assumptions about how to measure development. Jonathon Morduch of Princeton University evaluates how microfinance institutions (MFIs) measure success socially and financially. He challenges the common assumption that "microfinance institutions that follow the principles of good banking will also be the ones that alleviate the most poverty."[4]

Morduch gathers empirical evidence from the field using several MFIs considered socially and financially successful. The structure of this argument is what is most important here: the misconception that financial sustainability produces social sustainability forms the basis for the assumption that women are good for microfinance. According to Morduch's schism theory, the poorest women (most in need of financial services) are not likely to produce the highest repayment rates.[5] This means that in order to produce financial sustainability, an MFI may have to sacrifice some positive social impact on women's lives, and vice versa. This provides motive for MFIs to potentially manipulate women borrowers in a way that produces financial sustainability, but negatively impacts their lives.

Morduch also encounters a significant lack of cross-state comparison in the field, leading him to poke holes in the evidence he does find for and against his hypothesis.[6] This study aims to address that hole by using large-N analysis to test the microfinance schism theory across several Latin American states.

4.2 Ethnography

Because of a lack of quantitative data and the importance of cultural context, the bulk of gender and microfinance literature uses ethnography to describe the social conditions under which MFIs operate. In one of the most famous critiques of women-targeted microfinance, Lamia Karim investigates the assumptions made by microfinance NGOs in Bangladesh to exploit the financial and social roles women play in their communities to widen profit margins. [7] In her paper, Karim references the Nobel-Prize-winning Grameen Bank: one of the first financially and socially successful microfinance institutions established in Bangladesh, as providing a model for the replication of microfinance operations on a global scale.[8] While the Grameen Bank is considered a successful model of microfinance because of its 98% loan recovery rate, Karim finds that intimidation, force, and violence against women have historically been used to recover loan balances from poor borrowers.[9] Karim's study builds upon numerous studies exploring gendered power relations and microfinance, including the famous and heavily cited critique of the bank's lending practices by Anne Marie Goetz and Rina Sen Gupta in 1996.[10]

In yet another paper, Kate Maclean uses extensive qualitative ethnographic study to place the concepts of risk, responsibility, and agency in context with the gender relations of Luribay, Bolivia. The village banking model uses groups of women to create social capital, appearing to empower women who otherwise would not have access to these financial resources. The bank, however, controls interest rates, repayment schedules, and obligatory savings amounts: the very elements of banking that would allow women to tailor financial services to meet their needs.[11] Both studies offer evidence towards the hypothesis that MFIs are relying on existing gendered power structures to produce financial sustainability.

4.3 Applying Large-N Positivism

There is a lack of study of gender and microfinance through large-n or case study research methods. Quantitative studies evaluate the impact of microfinance through financial indicators and women's access to financial services in terms of their productive capacity rather than a social issue. Therefore, women's empowerment (often a goal of gender and development programs) is extremely difficult to measure quantitatively. However, large-n studies can help determine what socioeconomic conditions prompt the creation of MFIs, especially as the Latin American sector grows more commercialized. These conditions will determine how gender relations play out relevant to the critiques and controversies discussed above. In an analysis of 115 countries, Annabelle Vanroose uses cross-country regression to determine where microfinance primarily operates and what trends exist among those areas.[12] This controls for initial differences that makeup a country's economy *before* MFIs are created. These factors separate success and failure due to preexisting conditions from gender relations and other social factors. However, as Vanroose points out, it is extremely difficult to obtain valid data to conduct large-n analysis on MFIs because they interact so much with the informal market.[13] There are no similar studies of the success of gender focused MFIs that examine multiple countries or on a large scale because of this limitation.

Bert D'espallier, Isabelle Guérin, and Roy Mersland use large-n analysis to investigate the assumption that women borrowers produce good financial outcomes for MFIs.[14] By using purely financial indicators, including portfolio at risk, loan loss writeoffs, and provisions, the authors of this study conclude that women do have significantly better repayment rates at MFIs than men.[15] However, they cite that according to a combination of other financial indicators, targeting women as a lending strategy may not make good business sense.[16] My study uses a similar model to evaluate the financial success of MFIs that lend to varying percentages of women as their total clientele. In addition to D'espallier, Guérin, and Mersland's financial evaluation of women microfinance clients, this study introduces gender inequality as an intervening variable for why women may be successful in some states and not others.

5. Methodology and Independent Variables

Based on the literature reviewed and data available, this study is based on a set of hypotheses that use the proposed theory (figure 1) to predict how gender equality indicators might correlate with gendered lending strategies and loan repayment rates. Varying levels of gender inequality among Latin American countries are estimated through economic conditions, health, education, and access to financial services. This study eventually uses these indicators to construct a large-N analysis of borrower success in the Latin American microfinance industry to fill gaps in the literature discussed above.

1. Account at a financial institution
    - Microfinance is successful among women borrowers in states where women have limited access to financial services compared to men. Microfinance is successful among both genders in states where access to financial services is low in general.
2. Borrowed money in the past year
    - Men borrow in higher rates because they often have more market access (formal and informal) than women. Microfinance is more gender targeted in states where men borrow at much higher rates than women.
3. Borrowed from family or friends in the past year
    - Women who report having borrowed from family and friends more when they have less access to the market, causing them to develop strong informal lending and borrowing networks. Women targeted microfinance is successful in states where women have little access to the market because of the existence of these networks.
4. Received wages in the past year
    - Microfinance is less gender targeted in states where a high percentage of women receive their own wages because they are financially independent of their brothers, husbands, fathers, etc. Microfinance is more popular where fewer women receive wages because they are more likely to self-employ and take out a microfinance loan to start or expand their businesses.
5. Labor force participation
    - Microfinance is successfully targeted at women in states where women have low labor force participation rates. MFIs are more present in areas where labor force participation is low in general.
6. Fertility rate and emergency funds
    - Microfinance is successful in states where fertility rates are high and in states where women say it is impossible to come up with emergency funds. Both suggest extreme financial constraints and may increase the want for upward socioeconomic mobility.
7. Adolescent fertility rate
    - Microfinance is successfully targeted towards women in states where adolescent fertility is high because women are marginalized from an earlier age and are more inclined to take advantage of microfinance services.
8. Literacy rate
    - Microfinance is successfully targeted towards women in states where female literacy is significantly lower than male literacy. MFIs lend more equally to men and women in areas where there is little gender disparity in literacy rates.

9. Maternal mortality
    - Microfinance is successfully targeted at women in states where maternal mortality is high because women's healthcare is poor. MFIs are less gender targeted in states where life expectancy is low in general.
10. Paid for school and/or health care fees in the past year
    - Women and Development theory predicts that microfinance is targeted at women in states where women spend money on school fees in greater amounts than men. The proposed theory predicts that gender-targeted microfinance has little correlation with how borrowers spend on these things and more correlation with loan repayment rates.

6. Data Selection and Quality

6.1 Gender Equality Data

To paint a picture of social conditions that make up the varying environments in which MFIs operate, I used indicators of gender equality and financial inclusion. All of this data comes from the World Bank's Gender Equality and financial inclusion databases and each indicator is reported as an average for each state.[17] Indicators are reported for the most recent year available. Although ideally as dependent variables, all gender equality indicators would be measured in years before MFI-reported statistics (independent variables,) data availability is extremely limited and this study aims to depict the general climate of microfinance strategies, not necessarily a cause and effect relationship.

6.2 Data

Financial data comes from the Microfinance Information Exchange database (MIX).[18] Focused on achieving greater transparency in the microfinance industry, MIX has published data on the quantity of MFIs, loan loss rates, percentage of women borrowers, among other indicators of reach and financial success. The MIX database includes MFIs that fall under four categories: banks, non-banking financial institutions (NBFIs,) cooperatives/credit unions, and NGOs.

Because Caribbean states are geographically located far from the entirety of Latin America and exist in a unique cultural context, they are not included in this study. Additionally, because Brazil exists as a large economic and political superpower of the continent and does not share a language with contrastingly small and medium-sized states of Latin America, I also decided to exclude it from data collection.

States included in this dataset are Argentina, Bolivia, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, and Peru. Venezuela, Uruguay and Belize are not included because only one MFI has reported data to MIX in each state and does not provide sufficient evidence to generalize about the industry. There are 355 total MFIs included in the dataset. This dataset excludes 51 MFIs reported by the MIX database in the fourteen states but that do not have any data in the category: "percent of women borrowers."

All financial data is reported during a period of five years (2010-2014). All numerical data including loan loss rate and percent of women borrowers is reported as an average during this time frame, ideally reported annually.[19] The MIX database reports more than 355 MFIs operating in the states selected, although their data has not been updated before 2010. This study excludes these MFIs to ensure the relevancy of my conclusions to reflect the nature of the current microfinance industry.

7. Data Analysis

First, to measure the financial success of MFIs in the context of each state, this study uses the financial indicator of loan loss rate to demonstrate the varying levels of loan repayment according to the percentage of women borrowers. Although development data from the World Bank is broken down by state, MIX data is present for individual MFIs within a state, ensuring a more detailed depiction of where trends exist. This analysis uses descriptive statistics to identify trends and clusters of state averages that represent their individual microfinance industries as a whole.

7.1 Hypotheses 1, 2, 3: Formal And Informal Market Access And Borrowing Habits

The plot of women with an account at a financial institution shows that when women have between 10-30% access to the market, MFIs consistently lend to women at a ratio of 60% female and 40% male. In states where more women hold accounts at financial institutions, the data diverges and MFIs are less consistent with their lending rates to women. The same trend does not exist among men who hold accounts at formal financial institutions. This challenges my theory because MFIs don't necessarily lend to the greatest proportion of women in areas women have the least account access.

Looking at data from individual states, Nicaragua, Peru, Honduras, and El Salvador show the lowest rates of female account holders and lending rates closest to 60%. All four states' microfinance industries can be characterized by relatively low loan loss rates, meaning greater financial sustainability via borrowers' repayment rates. In contrast, states with more female account holders, including Argentina, Chile, and Costa Rica, can be characterized by more spread out loan loss rates, meaning greater variance in repayment rates.

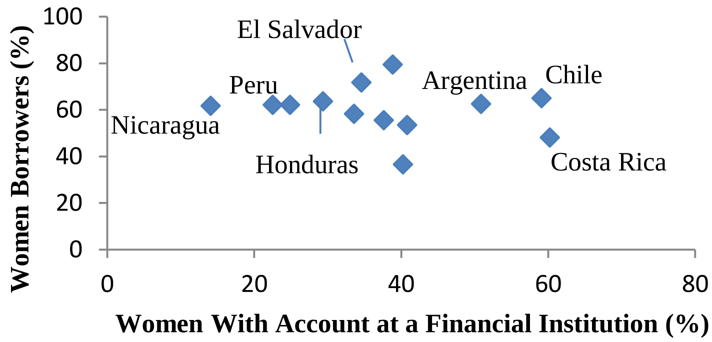

Figure 2: Financial market access and MFI lending rates to women

There is little correlation between the percentage of women who have borrowed money and average percent of women borrowers at MFIs. There is also no correlation between gender disparity in borrowing money, men who borrowed money, and loan loss rates. This lack of correlation may be due to the fact that this category includes money borrowed from financial institutions, employers, family or friends, informal lenders, and borrowing on credit from a retail store. This conclusion is supported by a plot of women who have borrowed money in the past year and men who have borrowed money in the past year.

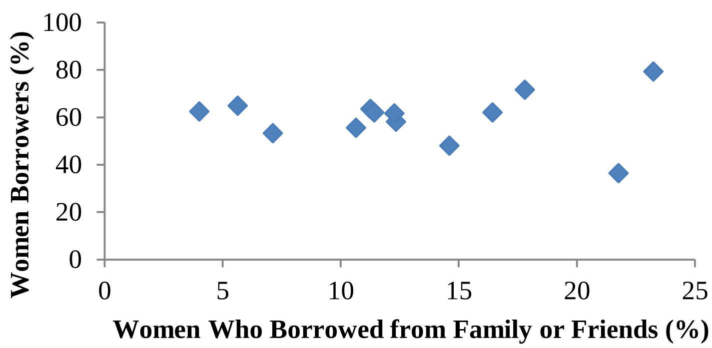

Figure 3: Women's informal borrowing habits and MFI lending rates to women

The general data plot of women's borrowing habits shows that in states where people have lower rates of borrowing from family and friends, MFIs target women more consistently as sixty percent of their total borrowers. When women have higher rates of borrowing from family or friends, MFIs have less consistent gender targeting strategies. The obvious interpretation of this correlation is that MFIs target women borrowers who lack access to this informal market for loanable funds. Reasons for this could include lack of social collateral to borrow from family and friends or lack of financial decision-making power over their husbands. MFIs may provide a formal borrowing alternative for women who cannot or do not prefer to borrow from networks of family and friends. A more cynical interpretation is that MFIs purposefully reach out to women who would not otherwise borrow money to increase their client base and take control of banking specifics that increase financial profitability/sustainability. This is in line with what Kate Maclean observed in her Ethnography of MFIs in Luribay, Bolivia.[20]

When plotted using a formula to calculate gender disparity, Guatemala, Honduras, Mexico, El Salvador, and Chile show about 20% more men borrowing from friends and family than women and a high rate of women borrowers at MFIs in these states. [21]

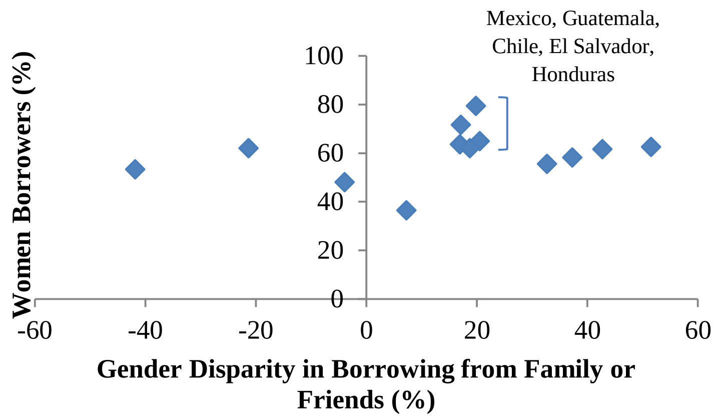

Figure 4: Gender difference in informal borrowing habits and MFI lending rates to women

These trends suggest that MFIs target women in areas where men borrow from family and friends at higher rates than women. This does not support the original hypothesis that MFIs use women's social networks as collateral and pressure for women to repay their loans. Instead, the trends suggest that MFIs target women in regions where women (1) do not have access to an account at a financial institution, and (2) do not borrow from family or friends. The concentration of MFIs targeting women specifically in areas where 20% more men reported informal borrowing habits than women may suggest that MFIs target women in areas where there is a combination of women with no access to the market for loanable funds (from figure 2) and women with only access to the informal market for loanable funds. In these states, women are both in need of stable financial resources and already have some experience with the lending process.

7.2 Hypotheses 4,5,6,7: Control Of Income And Finances

There is little apparent correlation between the percent of women who reported having received wages in the past year and MFI lending rates to women. Throughout the states surveyed, percentage of women having received wages did not produce much variation among which to compare and contrast MFI industries across states.

Overall, fertility rates in the fourteen states did not visibly correlate with loan loss or MFI lending rates to women. On a larger scale, this might be more apparently relevant to the microfinance industry, but so many macro and micro factors contribute to fertility rates that make any trends indistinguishable among the states surveyed.

There is, however, a general increase in women borrowers as gender disparity in the "emergency funds" question increases. [22] Plotting the percent difference of women in answering this question versus men reveals clusters of countries with greater disparity between men and women's perceptions of the household's financial situation. Panama, with the lowest average lending rate to women, was also the only state with more men who answered yes to the emergency funds question than women. Guatemala, Mexico, El Salvador, and Chile showed the greatest differences between women and men who answered yes to the question as well as some of the highest average lending rates to women.

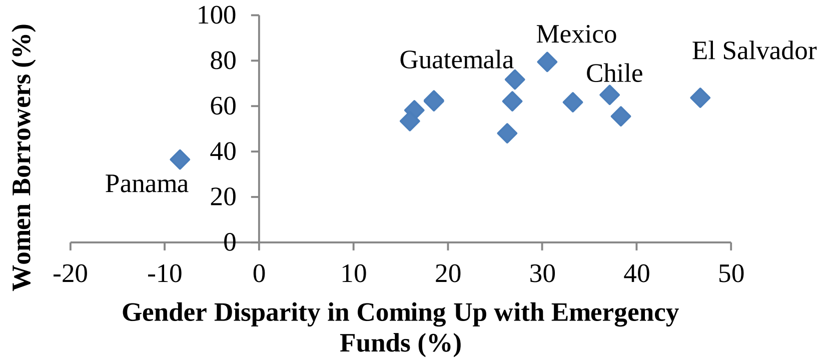

Figure X: Gender difference in access to emergency funds and MFI lending rates to women

This result provides insight into the perception of women and finances within the family. Microfinance highly targeted at women borrowers could imply the persistence of women who have no access to other options of formal account access. Women who generally feel more financial strain may be more likely to access MFI services when they are offered than men who feel less financial strain. Similarly, women may be more motivated than men by the possibility of upward socioeconomic mobility provided by MFIs because they feel they have more to gain and less to lose.

Adolescent fertility rates and MFI lending rates to women produced so significant correlation. This result is not surprising because overall fertility rates did not produce any correlation. This suggests that fertility either may have less influence on women as microfinance borrowers than predicted, or that fertility has too many contributing factors, only some of which influence women's borrowing habits.

7.3 Hypotheses 8,9: Gendered Social Environment

The overall trend suggests that MFIs are less women targeted when female literacy rates are higher. The most interesting point on this plot is Guatemala, which has the lowest female literacy rate of all fourteen states as well as the second highest average rate of women borrowers at an institution. MFIs may be targeting women in low-literacy states because illiteracy makes it virtually impossible for women to borrow from other financial institutions. However, illiteracy often means women cannot dictate, or even understand, the detailed financial terms of their loans, making it easier for MFIs to manipulate loans to best serve their own financial model rather than a woman borrower's lifestyle needs.

The main outliers on this graph are Mexico and Panama, with both the highest and lowest average lending rates to women, respectively. Both states have relatively high female literacy rates but drastically different gendered lending trends. This result both supports and differs from the theory because higher literacy rates are not correlated with lower lending rates to women, but less consistent ones.

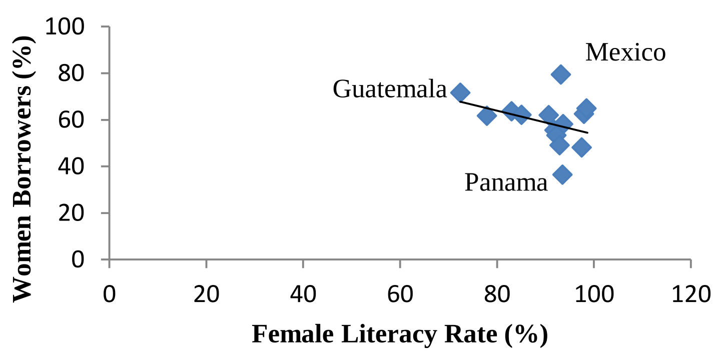

Figure X: Female literacy and MFI lending rates to women

The data produced no apparent correlation between maternal mortality rates and average lending rates to women. However, in states where female life expectancy falls between 76 years and 77 years, MFI lending rates to women are clustered. In states where female life expectancy is much higher, such as Mexico, Chile, Panama, and Costa Rica, average women borrowers span a much wider range.

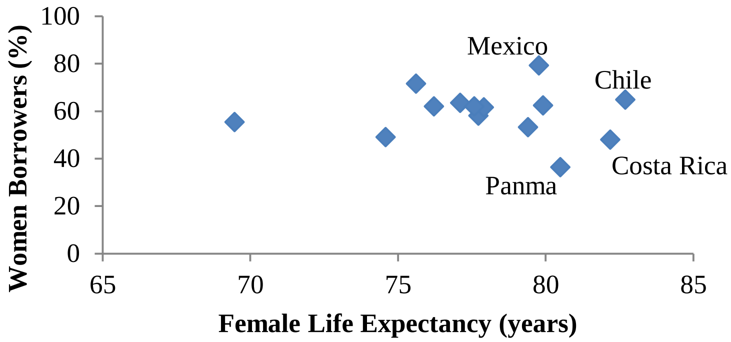

Figure X: Female life expectancy and MFI lending rates to women

Female life expectancy may indicate the general state of women’s health and wellbeing. Higher female life expectancy could mean that women live in a healthier environment, indicative of greater development and better living conditions in general. This may mean they have less want and/or need for microfinance loans, making them less consistently dependable microfinance clients. In states where female life expectancy is lower, women may have less access to health care services or live in less developed conditions in general. This similarity between life expectancy and women borrowers could also indicate these states, Colombia, El Salvador, Nicaragua, and Peru share other similar development conditions in addition to life expectancy that might further explain their similarities in average women borrowers.

7.4 Hypothesis 10: Spending On School And Health Care Fees

Women’s spending habits on school and health care fees did not produce any obvious correlation with MFI lending rates to women or loan loss rates. Because microfinance loans are usually distributed for the purpose of short term business ventures and are repayable within a short period of time, funds loaned by MFIs are most likely not spent on long term investments like health care and education and may be more loosely tied to women’s borrowing and repayment habits.

8. Conclusions

This paper attempted to find correlation between patriarchal structures that exist in microfinance lending environments that might cause microfinance institutions to target women borrowers for positive social and financial outcomes. The main conclusion of this study is that gender inequality and MFI lending rates to women do not vary directly. This is in line with Jonathon Morduch’s conclusion that the poorest borrowers who will benefit from microfinance loans the most do not produce particularly high repayment rates and financial sustainability.[23] Therefore, states with greater gender inequality do not necessarily have MFIs that lend at higher rates to women. Instead, several Central American states hover around an average of 60% women borrowers and generally show higher rates of gender inequality and gendered financial exclusion. In contrast, states with lower levels of gender inequality, like Panama and Mexico, show drastically different average rates of lending to women. In states with low gender inequality and high market access for women, gendered lending strategies are less consistent and may depend more on macroeconomic factors to determine their success.

9. Future Research

A lack of available data proved to be the biggest hindrance to making more substantial connections between social norms and the microfinance industry. The goal of this study was to better understand why MFIs choose to target women borrowers in order to better understand how MFIs can target other underserved population groups, i.e. LGBTQ persons, disabled persons, and minority racial/ethnic groups. However, because there is so little data available on these groups, further studying women borrowers is one of the only ways to better understand how we can serve them better. To further test the theory proposed in this paper, further research could include a discourse analysis comparison of how women interact with their husbands versus how they interact with microfinance institutions. Continuing to investigate how MFIs may contribute to institutionalized patriarchy will help progress the greater dialogue on economic development, women, and gender.

10. Endnotes

1 Thank you to Dr. Dylan Craig, Professor in the School of International Service at American University, who provided so much help in developing the research question and supervising the research process.

2 Susy Cheston and Lisa Kuhn, "Empowering Women through Microfinance," Opportunity International, http://www.gamechangenetwork.org/documents/GenderMainstreaming/FinancialServices/Gender%20Impact/ChestonandKuhn_2002.pdf.

3 Sylvia Chant and Matthew C. Gutmann. ""'Men-streaming'gender? Questions for gender and development policy in the twenty-first century," Progress in Development Studies 2, no. 4 (2002): 270, http://pdj.sagepub.com/content/2/4/269.short.

4 Jonathon Morduch, "The microfinance schism," World development 28, no.4 (2000): 617, http://www.sciencedirect.com/science/article/pii/S0305750X99001515.

5 Ibid., 627.

6 Ibid., 618, 621.

7 Lamia Karim. "Politics of the poor? NGOs and grass-roots political mobilization in Bangladesh," PoLAR: Political and Legal Anthropology Review 24, no. 1 (2001): 93, http://onlinelibrary.wiley.com/doi/10.1525/pol.2001.24.1.92/full.

8 Ibid., 95.

9 Ibid.

10 Anne Marie Goetz and Rina Sen Gupta, "Who takes the credit? Gender, power, and control over loan use in rural credit programs in Bangladesh," World development 24, no. 1 (1996): 45-63, http://dx.doi.org/10.1016/0305-750X(95)00124-U.

11 Kate Maclean. "Banking on Women's Labour: Responsibility, Risk and Control in Village Banking in Bolivia," Journal of International Development 24, Issue Supplement S1 (2012): S104, http://onlinelibrary.wiley.com/doi/10.1002/jid.1744/abstract.

12 Anabelle Vanroose. "What macro factors make microfinance institutions reach out?," Savings and Development 3, no. 32 (2008): 153, http://www.jstor.org/stable/41406468?seq=1#page_scan_tab_contents.

13 Ibid., 169.

14 Bert D'espallier, Isabelle Guérin, and Roy Mersland. "Women and repayment in microfinance: a global analysis," World Development 39, no. 5 (2011): 758, http://sciencedirect.com/science/article/pii/S0305750X10002330.

15 Ibid.

16 Ibid., 770.

17 For more details on the data pulled form the World Bank Database, see http://bit.ly/1MpMY4S.

18 For more detailed information about how MIX sources and reports data, see http://www.mixmarket.org/about/faqs.

19 For more information on how recently financial indicators are reported in each country, visit this link for an index of all MFIs used in this study: https://reports.mixmarket.org/crossmarket/o9mGuNJt.

20 Kate Maclean. "Banking on Women's Labour: Responsibility, Risk and Control in Village Banking in Bolivia," Journal of International Development 24, Issue Supplement S1 (2012): S104, http://onlinelibrary.wiley.com/doi/10.1002/jid.1744/abstract.

21 Gender disparity in borrowing from family or friends =

(% men who borrowed from friends or family – % women who borrowed from friends or family)/% men who borrowed from friends or family

22 Gender Disparity in Emergency Funds = (% women who said it was impossible to produce emergency funds-% men who said it was impossible to produce emergency funds)/% women who said it was impossible to produce funds

23 Jonathon Morduch, “The microfinance schism,” World development 28, no.4 (2000): 617, http://www.sciencedirect.com/science/article/pii/S0305750X99001515.