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University of Nevada, Reno

**Comparing the Effectiveness of Group Liability Contracts and Individual Liability
Contracts by Bangladeshi Microfinance Institutions**

A thesis submitted in partial fulfillment
of the requirements for the degree of

Bachelor of Arts in Economics / Psychology and the Honors Program

by

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Contracts by Bangladeshi Microfinance Institutions**

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ABSTRACT

Microfinance, the provision of financial services to low-income people, assists over 67 million people in over 100 countries worldwide. One aspect of microfinance is the extension of small loans, or microloans, to those in poverty who wish to pursue entrepreneurial ventures. Known as the birthplace of the modern microfinance sector, Bangladesh today has the highest microfinance penetration rate in the world. There are two principal types of liability contracts employed by microfinance institutions in Bangladesh: group and individual liability. By examining the relationship between liability contract type and microfinance institution performance, this research addresses one of the most crucial topics in microfinance today and compares the efficacy of group liability contracts and individual liability contracts in Bangladesh. Through analysis of online sources and correspondence with Bangladeshi microfinance institutions and borrowers, the findings in this study suggest that individual liability contracts are more effective than group liability contracts because they are associated with higher portfolio quality and higher repayment rates.

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1 RESEARCH QUESTION

Microfinance is used worldwide as a tool to alleviate poverty and empower marginalized individuals. For the past 40 years, Bangladesh has been a visible leader among many developing countries using microfinance to eradicate poverty and provide employment opportunities for the poor. Microfinance is thought to be a more effective approach to poverty reduction than traditional aid programs because it encourages self-sufficiency. In addition to being home to one of the world's most well-known microfinance institutions called the Grameen Bank, Bangladesh is a prime testing site for microfinance models that are subsequently replicated and implemented in other countries.

Liability contract types are among the most significant components of microfinance models that emerged from Bangladesh. The two main liability concepts employed in microfinance are group and individual liability. Under group liability contracts, borrowers form lending groups, which are jointly liable to their group members when making loan repayments. Under individual liability contracts, it is the sole responsibility of individual borrowers to make repayments, as is the procedure employed by traditional banking institutions.

Group liability contracting has long been considered one of the main reasons why microfinance is successful in poor countries. In recent years, however, the effectiveness of group liability contracts has come into question by microfinance researchers around the world. Consequently, microfinance institutions like the Grameen Bank have adopted more individualized liability contracts and have abandoned the group liability contracts that were once integral to their lending models.

The efficacy of group and individual liability contracts in Bangladesh is compared in this research. By means of correspondence with the country's three largest microfinance institutions and their respective borrowers and in-depth analysis of existing research in the field, this paper attempts to determine whether group or individual liability contracts are correlated with higher portfolio quality (greater repayment rates) and higher borrower business quality.

2 LITERATURE REVIEW

2.1 Microfinance in Bangladesh

In 1976, economist Dr. Muhammad Yunus launched one of the first microfinance institutions in Bangladesh called the Grameen Bank (Grameen Bank Performance Indicators 2010). With the notable success of the Grameen Bank came many other microfinance institutions in Bangladesh and other developing nations. After the establishment of the Grameen Bank, over a thousand microcredit-issuing NGOs of various sizes and coverage emerged throughout Bangladesh (BARD, pers. comm.). Today, over 13% of Bangladeshis have a microloan (MIFA 2009).

Microfinance services in Bangladesh are provided by numerous organizations, including nongovernmental organization-microfinance institutions, microfinance banks, government programs, nationalized commercial banks, and private commercial banks (MIFA 2009). Nongovernmental organization-microfinance institutions are the largest of these providers, serving 61% of total microloan borrowers in Bangladesh (MIFA 2009). With an average loan size of about BDT 4,000, or \$49 (CoinMill 2012), the total loan

portfolio of the microfinance sector in Bangladesh is estimated to be greater than BDT 135 billion, or \$1.65 billion (CoinMill 2012), assisting over 30 million borrowers, 90% of whom are women (MIFA 2009). The four largest players in the Bangladeshi microfinance sector are the Grameen Bank, the Bangladesh Rural Advancement Committee (BRAC), the Association for Social Advancement (ASA), and Proshika (MIFA 2009)

Over 60% of Bangladeshi microfinance borrowers live below the poverty line (MIFA 2009). From 2003-2008, the Bangladeshi microfinance sector had an average annual growth rate of 23%, and the growth rate is expected to increase every year because of increases in demand (MIFA 2009). The International Consulting Group estimates that there are over 6 million micro, small, and medium enterprises in Bangladesh, representing 25% of Bangladesh's GDP (MIFA 2009). The World Bank reports that since the early 1990s, the poverty rate has fallen by 20% (BBS 2007), and microfinance services for the poor have played a valuable role in that decrease (MIFA 2009).

2.2 Group and Individual Liability Contracts

2.2.1 Positives Associated with Group Liability Contracts / Negatives Associated with Individual Liability Contracts

Two highly acclaimed aspects of microfinance are the use of group liability contracts and group lending. "Group liability contracts" specifically state that group members are jointly liable to each other when making loan payments. Loans under group liability contracts are made to individuals, but the entire group faces consequences when individual members default on payments (Armendáriz de Aghion and Murdoch 2005).

“Group lending” simply refers to the arrangement when individuals form peer groups to obtain loans or make repayments in group settings; group lending does not imply group liability.

Group liability contracting, a crucial innovation introduced to microfinance by the Grameen Bank, is based upon the requirement that customers form local groups and jointly guarantee the loans made to others in that group in lieu of conventional loan collateral requirements. This is also referred to as “group liability,” “joint liability,” or “solidarity lending.” Borrowers, typically lending groups comprising around five people, are collectively accountable to their microfinance institution by being accountable to each member of their group in a mutual trust arrangement.

In communities where social networks are important, group liability mechanisms play a vital role. Additionally, group liability lending transfers responsibilities from the institutions to the borrowers. From an economic perspective, group liability helps mitigate asymmetric information problems like moral hazard and adverse selection (Armendáriz de Aghion and Murdoch 2005).

Adverse selection problems typically occur when microlenders are unable to distinguish risky borrowers from safe borrowers (Armendáriz de Aghion and Murdoch 2005). These problems often lead to credit rationing because lenders tend to charge borrowers high interest rates to compensate for potential unexpected delinquencies by risky borrowers. Although this is a safeguarding technique for microlenders, it is also problematic because the high interest rates deter safe borrowers from applying for loans (Armendáriz de Aghion and Murdoch 2005).

Group liability contracts may adequately mitigate for adverse selection because in the initial stages of acquiring loans, members select each other for inclusion in lending groups. Because group members typically have more information on prospective members than lenders do, safe borrowers are inherently more likely to rule out risky borrowers and peer-select other safer borrowers when initially forming groups. Safer borrowers, realizing the consequences associated with collective group repayment failure, have a strong incentive to peer-select members for their group who are accountable (Armendáriz de Aghion and Murdoch 2005).

Stiglitz (1990) considers peer monitoring to be largely responsible for the successful financial performance of lending programs like the Grameen Bank (Stiglitz 1990). Peer monitoring refers to the inducement of group members to monitor each other's repayment rates. In addition to selecting other safe borrowers during pre-loan group formation, individual borrowers have an incentive to see that their respective group members are making payments post-loan because their accessibility to microcredit depends on collective group repayment. Evidence suggests that group liability conditions foster cohesion and encourage borrowers to take responsibility for their group, ensure that loans are paid back, and support members who are having difficulties (Daley-Harris 2002). Group liability mechanisms have also been shown to create a sense of peer pressure that effectively assures repayment (Develtere and An Huybrechts 2005).

By traditional banking standards, it is unusual when high repayment rates are achieved by clients who are not able to offer collateral, e.g. microfinance clients. However, many of the microfinance institutions (MFIs) in Bangladesh that utilize group liability contracts report high repayment rates upwards of 95-99%.

Microfinance organizations that utilize group liability contracts demonstrate that high repayment rates can be achieved when borrowers and MFIs have asymmetric information (Natarajan 2004). During the group formation process, borrowers select group members carefully because of the implications of group liability contracts and joint responsibilities. In the presence of asymmetric information (e.g. when matching during group formation), homogenous groups are created through “side-payments” and a mechanism called “signaling” (Natarajan 2004). Signaling, or the matching of safe borrowers with other safe borrowers, can be guided by the offering of “side-payments” to let other potential borrowers know they are worthy group members. In labor economics, this trend of segregated formation is called “assortive matching” (Armendáriz de Aghion and Murdoch 2005). Through signaling, assortive matching of peer groups becomes possible, even in the presence of asymmetric information and limited monetary collateral.

This self-selection technique within groups is proven to be more effective than random matching or formation of groups by institutions (Natarajan 2004), and since many of these potential borrowers are usually not able to offer tangible assets, non-monetary assets like labor side-payments are offered in case of default—like helping with others’ harvests, tilling fields, offering manual labor, etc. Social agreements are made between borrowers by pledging non-monetary collateral (Natarajan 2004).

2.2.2 Negatives Associated with Group Liability Contracts / Positives Associated with Individual Liability Contracts

Laffont and Rey (2003) point out a few negative consequences of group liability contracts. They argue that because borrowers are impacted by the actions of their fellow group members, excessively harsh punishments may be placed upon lagging members by

those monitoring group repayment rates. The dependence of members within a group during peer monitoring can result in group tension and even in the use of brute force (Laffont and Rey 2003).

Montgomery (1996) has described the unnecessary social costs of repayment pressure in group liability lending schemes as heightened perceptions of risk, erosions of trust among members, and exclusion of struggling borrowers. He concludes that the peer pressures created by group lending structures are not conducive to the broader social development goals of microfinance institutions. Additionally, Montgomery (1996) suggests that what plays the greatest role in ensuring repayment is the larger group dynamic of “village organizations.” A village organization refers to a community of borrowers and lenders in which taking out microloans and making repayments becomes the status quo and positively reinforces further repayment activities.

In group-based lending, there is also a tendency for strong people in communities to exclude those who are poorer because of the former’s perception that the latter are lazy or unlikely to make repayments (Daley-Harris 2002). Additionally, risky borrowers interested in applying for microloans have no option but to form groups with other risky borrowers.

In light of such revelations, group liability models have been placed under great scrutiny. Attanasio, Augsburg, Haas, Fitzsimons, and Harmgart (2011) question whether or not group or individual liability contracts have positive borrower impacts. To do a direct comparison, an experiment was conducted at XacBank, a Mongolian microlender. In April 2008, women from 15 villages received access to individual liability loans (experimental group #1); women from another 15 villages received access to group

liability loans (experimental group #2); women from another 10 villages received no access to XacBank loans (control group). After 18 months, data were gathered to measure the impacts of group versus individual liability contracts.

It was found that in villages where group and individual liability contracts were employed, microcredit was used for household purposes rather than entrepreneurial or business purposes (Attanasio et al. 2011). Additionally, in both group and individual liability villages, women with less education benefitted more than women with more education. Access to microcredit, regardless of contract type, was beneficial to women with less education. Lastly, repayment behaviors were found to be similar in both group and individual liability lending villages (Attanasio et al. 2011).

Through this experiment, a number of major differences were found between group and individual liability lending villages. Group liability contracts were found to have a greater impact on women's entrepreneurship than individual liability contracts (Attanasio et al. 2011). At the end of the experiment, less-educated women with group liability contracts had a 29% higher chance of running a business compared to those with individual liability contracts (Attanasio et al. 2011).

Group liability lending also brought a sense of discipline and oversight to women's businesses that individual liability lending did not (Attanasio et al. 2011). It was also suspected that some of the Mongolian women—particularly those less educated—might not have felt comfortable borrowing loan funds alone; these women potentially felt more willing when borrowing as part of a group. Group lending (not necessarily group liability contracts) created a good forum for education for women because they could have face-to-face meetings with financial educators (Daley-Harris 2002).

Although individual liability loans did not prove to be more effective, women with these loans were more likely to operate their businesses jointly with their husbands. In the short-run, their businesses were more also profitable. Overall, Attanasio, Augsburg, Haas, Fitzsimons, and Harmgart's (2011) findings were inconclusive about the efficacy of group liability contracts.

In another study done at the University of Erfurt in Germany, Armendáriz de Aghion and Murdoch (2005) used student participants to understand the logic behind group and individual liability contracts.

In each round of the experiment, participants were given a "loan" they had to pay back. Then, each participant was told they were either lucky or unlucky, indicating either they had high income and the ability to make repayments, or they had zero income and no ability to make repayments. Some groups were allowed to form through self-selection while other groups were formed by the experimenters. One objective of the experiment was to see whether or not "lucky" participants would bail out "unlucky" participants and assist them with their payments.

It was expected that self-selected groups would do better than the groups arranged by the researchers, but the outcomes of the two groups were similar. However, both types of groups had slightly higher overall repayment rates than would be expected under individual liability contracts (Armendáriz de Aghion and Murdoch 2005).

Madajewicz (2004) conducted a similar direct comparison of group and individual liability in credit contracts. She concluded that individual liability loans tend to have a better record of funding and supporting microbusinesses that successfully increase their owners' income (Madajewicz 2004). Businesses created with group liability loans tended

to be smaller than those created with individual liability loans, and their owners tended to remain poor. The poorest recipients of group loans are often poorer than the poorest clients of individual lenders. Madajewicz (2004) recommended that microcredit lenders offer a choice of contracts to borrowers since poorer customers tended to benefit more from group liability loan contracts and wealthier customers tended to benefit more from individual liability loans contracts.

A field experiment was conducted to measure the effectiveness of group liability contracts and individual liability contracts in the Philippines. Of 169 group liability centers, half were converted to individual-liability centers (i.e. treatment groups) to measure the variations in their effectiveness and the other half were not changed (i.e. control groups). The study concluded that there is no increase in default by individual liability groups and that there is greater outreach of these loans due to more new clients joining the treatment groups. The study revealed numerous negative consequences of group liability dynamics, including build-up of group tension, harms to social capital, free-riding, loan heterogeneity, and punishment of good borrowers because of delinquent borrowers (Gine and Karlan 2006).

Gine and Karlan's study (2006) also addressed the role of credit officers during the repayment process and examined the behavior changes of credit officers when working with borrowers under individual liability contracts as opposed to borrowers under group liability contracts. These officers were more strict and demanding of loan repayment in order to protect the performance of the center. In a group liability dynamic, this demand for repayment came from within groups themselves (Gine and Karlan 2006).

It is important to consider that group and individual liability contracts are only one aspect of the lending techniques utilized by microfinance institutions in Bangladesh and around the world. There are many factors that should be assessed when evaluating effectiveness of microfinance organizations, e.g. dynamic and progressive lending styles (when loan allotments are increased with successive loan repayments, serving as a positive reinforcement), frequency of repayment schedules (weekly or biweekly meetings and collection of payments), and nontraditional collateral offered by poor borrowers (Sengupta and Aubuchon 2008). These components come in conjunction with either group liability or individual liability contracts.

2.3 Bangladeshi Lending Contract Comparisons

Group liability methodologies are the norm for microfinance organizations in Bangladesh (MIFA 2009), including the original Grameen Bank (sometimes referred to as “Grameen Bank I”). At its inception, the founder of the Grameen Bank, Dr. Muhammad Yunus, lent \$27 out of his pocket to 42 bamboo stool makers. Since then, the Grameen Bank has allocated over \$5.2 billion in loan funds and has served over 7.5 million borrowers (MIFA 2009), 95% of whom are women (Sengupta and Aubuchon 2008). The Grameen Bank is 95% owned by its microloan borrowers, with the other 5% owned by the Bangladeshi government (MIFA 2009). More than 98% of Bangladeshi villages are covered by Grameen’s network of 2,521 branches (MIFA 2009).

The microcredit issued by the Grameen Bank, called “Grameencredit” is distinctive because, unlike traditional credit, it is “not based on any collateral, or legally enforceable contracts. It is based on ‘trust,’ not on legal procedures and systems” (Yunus

2011). In 1974, over 80% of Bangladesh's population was living in extreme poverty, and Yunus (2003) decided that lack of access to credit is what kept many Bangladeshis in poverty.

When the Grameen Bank was first created as an experimental bank in Jobra, Chittagong, loans were originally issued without a group liability clause. The idea to organize borrowers into groups later originated to take advantage of economies of scale, and the innovation of group liability lending quickly became the Grameen Bank (I)'s trademark.

Group liability lending at the Grameen Bank originally worked in the following format: borrowers first organized into groups of five. Upon agreeing to the Bank's rules, two members received a loan. Once they successfully paid back their loans, the next two group members were offered loans after four to six weeks. After another four to six weeks of repayment, the last member was offered a loan. Only after all members had repaid their loans was additional credit extended to them. If any individual member defaulted on their loan, his/her entire group would be denied access to credit in the future; this was the "joint" liability aspect to loans originally issued by organizations like the Grameen Bank (Sengupta and Aubuchon 2008).

Soon after the inception of group liability lending, it was found that screening and monitoring loans and enforcing debt repayments is greatly reduced in the group format (Yunus 2003). Group liability lending reduced transactions costs for loan officers because loan transactions of groups, rather than individuals, were handled in the same amount of time (Armendáriz de Aghion and Murdoch 2005). Because repayments were collected in

public settings, group lending imposed peer pressure on borrowers; in rural Bangladesh, this sense of shame is a strong disincentive for borrowers to default on loans (Sengupta and Aubuchon 2008).

In 2011, the Grameen Bank began utilizing a more flexible loan repayment model and reinvented itself as “Grameen II.” One vital aspect of Grameen II is that it offers borrowers a variety of repayment options that are individual, not joint, in liability. Yunus (2003) acknowledged some of the downfalls associated with the original group liability model the Grameen Bank initially implemented when he said, “Group solidarity is [was] used for forward-looking joint-actions for building things for the future, rather than for the unpleasant task of putting unfriendly pressure on a friend.” The Grameen Bank’s new types of loans, then, rely more strongly on the assumption that the poor borrowers will pay back and that group liability is not necessary to ensure repayment (Sengupta and Aubuchon 2008).

The Grameen Bank offers two types of loans for income generating activities: basic loans and flexi-loans. A basic loan is a microloan with an individual liability contract. A basic loan is converted into a “flexi-loan” or a rescheduled loan if a borrower has difficulty making weekly installments. A borrower with a flexi-loan is able to renegotiate loan contracts rather than default or impose future credit restrictions on group members (Sengupta and Aubuchon 2008).

Four years before the creation of the Grameen Bank, another microfinance institution called the Bangladesh Rural Advancement Committee (BRAC) was founded. Today BRAC is the world’s largest nonprofit organization, with over 170,277 village organizations, 5 million microloan borrowers, and microfinance programs that service

69,421 villages and 1,716 slums in each of Bangladesh's 64 districts (MIFA 2009).

BRAC offers classes and services to supplement its poverty reduction efforts through microfinance, covering topics like health, education, social development, and human rights (BRAC, pers. comm.).

Additionally, BRAC has a special program called "Challenging the Frontiers of Poverty Reduction—Targeting the Ultra Poor" (CFPR-TUP) that is geared towards the poorest 15% of the poor population in Bangladesh. This program offers income-generating assets, health care services, and training to the poorest Bangladeshis to help them transition into BRAC's traditional microfinance programs (MIFA 2009). BRAC is one of many microfinance organizations that require group liability contracts of their borrowers. BRAC administers individual loans to villagers who form groups of five, but "if any group member defaults, the entire group is punished (denied future loans)" (Develtere and An Huybrechts 2005).

However, the negative consequences of group liability contracts have been taken to heart by microfinance organizations like the Association for Social Advancement (ASA), which requires individual liability contracts of its borrowers. Founded in 1979, ASA's mission is to empower marginalized people by mobilizing them for social action and justice (MIFA 2009). Five years after its inception, ASA shifted its focus to the empowerment of women and offered programs geared towards management, income-generating projects, and the promotion of financial literacy (MIFA 2009).

In 1992, ASA began using microfinance as its primary tool to fight poverty (ASA 2008) and has since become one of the largest and fastest-growing microfinance institutions in the world (Daley-Harris 2002). ASA has over 3,236 branches and 24,021

staff members who service over 5.5 million clients (ASA 2008). ASA is world-renowned for its cost-effective operations, sustainable microfinance model, and reputation as a “donor-free MFI” (ASA 2008). Seven years after its inception, ASA took a firm step against group liability contracts, replacing them with a zero tolerance policy with respect to arrears (Daley-Harris 2002). ASA continues to utilize a “group” environment at its meetings, but liability contracts are strictly individualized (Gine and Karlan 2006).

3 METHODOLOGY

This study was inspired by the current debate about the effectiveness of group and individual liability contracts in developing economies, including Bangladesh. I participated in a study abroad trip to Bangladesh from December 29th, 2011 to January 13th, 2012 with Dr. Debby Jacobson of Case Western Reserve University, Dr. Delwar Hossain of Southern Illinois University Carbondale, Dr. Mizanur Miah of Southern Illinois University Carbondale, and students from Case Western Reserve University and Southern Illinois University Carbondale. This study abroad trip enabled me to interact with various players involved in poverty alleviation efforts in Bangladesh, including the three largest microfinance institutions in Bangladesh: the Grameen Bank, the Association for Social Advancement (ASA), and the Bangladesh Rural Advancement Committee (BRAC).

This study was originally guided by survey research. Because I knew I would have opportunities to personally meet with MFIs in Bangladesh while studying abroad, I decided to conduct a survey and gather data directly from senior management of the

Grameen Bank, ASA, and BRAC to learn specific information unavailable through alternative online sources. Because many online sources do not offer each MFI's performance data for FY (financial year) 2011, completed survey would allow me to learn the most up-to-date performance indicators of the Grameen Bank, ASA, and BRAC.

The survey (found in Appendix A and B) was administered to the Grameen Bank, ASA, and BRAC. The Grameen Bank and ASA initially employed group liability contracts but have since switched to individual liability contracts (Yunus 2002) (ASA 2008). BRAC continues to employ group liability contracts as part of its lending scheme (BRAC, pers. comm.). Because of these three organizations' use of different lending contracts, they were the focus of my survey research.

This study was designed to give precedence to survey responses by the Grameen Bank, BRAC, and ASA. However, only one organization (ASA) partially completed the survey, so attempts were made to answer survey questions for each of the three MFIs through online sources only i.e. microfinance research websites and each MFI's website. ASA's partially completed survey responses were not considered in this study because they could not be compared to any other organization's survey responses. Also, comments made by representatives of each microfinance institution (in-person and via email) were considered. Lastly, comments made by borrowers of each microfinance institutions (in-person) regarding their experiences with loans were considered in this study.

3.1 Survey Design

Bangladeshi microfinance institutions were asked questions regarding their effectiveness in financial year (FY) 2011. Effectiveness was measured by two key factors—portfolio quality (indicators describing repayment) and borrower business quality (success of borrowers' microbusinesses).

The survey informed participants that the purpose of the study was to measure and compare the effectiveness of group liability and individual liability contracts by Bangladeshi microfinance institutions. The survey questions were closely modeled after standard international measures described in a technical microfinance performance guide by the Consultative Group to Assist the Poor (CGAP)(CGAP 2009). The survey design in this study, however, differs from the one described by CGAP because respondents in this study were asked provide data specific to male, female, rural, and urban borrowers for every question. Questions were asked specific to these individuals so the demographic of clients reached by these organizations under group liability and individual liability contracts could be taken into account during this study's analysis to see if a certain type of liability contract may be more or less effective for male, female, rural, or urban borrowers.

A microlender's ability to collect loan payments successfully is a strong indicator of the organization's efficacy. High repayment rates are readily associated with effectiveness of microfinance institutions' lending practices (CGAP 2009). Therefore, questions 1 thru 5 of the survey focused on portfolio quality and asked each organization

to report general lending statistics for 2011 including number of loans issued, amount loaned, average amount loaned, average term of loans, and average interest rate of loans issued.

Next, questions 6 thru 8 of the survey asked organizations to report their “portfolio at risk” or “PAR” at 30 days in FY 2011. This takes into account their outstanding principal balance of all loans more than 30 days past due, outstanding balance of loans that are not more than 30 days late but have been renegotiated (added together, these two items equal the total amount at risk), and outstanding principal balance of all loans in FY 2011.

$$PAR (30 \text{ days}) = \frac{\text{Outstanding balance of regular loans} > 30 \text{ days late} + \text{outstanding balance of renegotiated loans} < 30 \text{ days late}}{\text{Outstanding principle balance of all loans}}$$

The PAR is the most sophisticated measure of portfolio quality used by experienced microfinance institutions (CGAP 2009). In the case that Grameen Bank, BRAC, and ASA would not report their PAR (30 days) (or the data necessary to compute it), questions 9 thru 11 of the survey asked organizations to report data to indicate the “loans at risk” or “LAR” at 30 days in FY 2011. The LAR is a much simpler indicator that counts the number of loans past due instead of loan amounts past due (CGAP 2009). The LAR (30 days) can be found using the number of loans with at least one payment past due more than 30 days, number of renegotiated loans not more than 30 days late (added together, these two items equal the total number of loans at risk) and total number of outstanding loans in FY 2011.

$$\text{LAR (30 days)} = \frac{(\text{Number of regular loans} > 30 \text{ days late} + \text{Number of renegotiated loans} < 30 \text{ days late})}{\text{Total number of outstanding loans}}$$

Next, question 12 of the survey asked organizations to report whether or not they write-off loans. In the case they answered “yes”, they were asked to indicate how much was written off during FY 2011 and what their total outstanding portfolio was at the beginning of FY 2011 to determine their overall “write-off ratio” (if applicable). Write-off ratios are important because they indicate how many delinquent borrowers’ loans were written off, or taken off the MFI’s accounting books, at the end of the year. Once loans are written off, they no longer negatively impact an MFI’s overall repayment rate. Write-off ratios are calculated using the following formula:

$$\text{Write-off Ratio} = \frac{\text{Amount written off during FY 2011}}{\text{Average gross loan portfolio during FY 2011}}$$

Question 13 of the survey then asked each organization to share the repayment rate of loans issued in FY 2011. In order to account for variations in data collection and reporting methods of these organizations, each participant was asked to describe in detail the metrics used to determine the rates of repayment.

The study looked at a number of loan performance indicators, but the most important, or telling, indicators of efficacy were the PAR (30 days), write-off ratio, and repayment rate of each organization.

The next section of the survey focused on borrower business quality, and question 1 of this section of the survey asked organizations how many microbusinesses they funded in FY 2011. Microbusinesses funded through microfinance organizations inherently vary because of a wide range of qualitative and quantitative extraneous factors (e.g. size of microbusiness, type of microbusiness, age of microbusiness, geographical location of microbusiness, etc.), so this survey solely measures microbusiness success according to each MFI as reported through the survey and according to each organization's standards on an interval scale. In this half of the survey, respondents were again asked provide data specific to male, female, rural, and urban borrowers for every question. This was done so the demographic of clients reached by these organizations under group liability and individual liability contracts could be taken into account during this study's analysis to see if a certain type of liability contract may be more or less effective for male, female, rural, or urban borrowers.

Question 2 of this section asked organizations to rate the average success of microbusinesses they funded in FY 2011 on a scale of 1 to 10, with "1" indicating that, on average, microbusinesses were "highly unsuccessful" and "10" indicating that, on average, microbusinesses were "highly successful." In order to account for variations in data collection and reporting methods of these organizations, each organization was asked to describe in detail the metrics used to determine rates of borrower microbusiness success on a 1 to 10 scale. This was done so varying metrics could be considered across organizations when analyzing the survey results.

The last few questions of the survey asked organizations to open-endedly share any comments regarding their respective microfinance institution's use of group liability

contracts (directed towards BRAC) or individual liability contracts (directed towards the Grameen Bank and ASA). Lastly, the survey asked organizations to open-endedly share any additional comments that may be of importance to consider in this research study.

The three organizations studied (the Grameen Bank, ASA, and BRAC) were given paper copies of the survey questionnaires in person. Each organization was given the option to complete either the paper copy or an electronic version of the questionnaire that would be sent to them via e-mail. All three organizations opted to fill out the electronic version of the survey that would then be submitted via e-mail after completion. If not possible for the representatives to complete the questionnaire in English, they were given the option to complete it in Bengali, the official language of Bangladesh. In the latter case, responses would be translated into English for use in this study. Values in the survey could be provided by organizations in either BDT (Bangladeshi taka) or USD (US dollars). Values provided in BDT were converted to USD using the exchange rate of 1 USD = 81.79 BDT (CoinMill 2012). The survey encouraged participants to complete and return the survey within one month of their receiving it.

Correspondence with the three Bangladeshi organizations and representatives was maintained by phone and e-mail. Organizations were informed that after completing the survey they would not be asked to participate in any other surveys or questionnaires. Participants were informed that if they so requested in the survey, they would be sent a copy of the completed research project via e-mail in June 2012.

In the event that information was withheld in these questionnaires by the organizations, non-response was reported, and an independent analysis of each organization's effectiveness and performance was done using publicly available data.

Because only ASA completed the questionnaire, I answered each of the survey questions for the Grameen Bank, BRAC, and ASA to the best of my ability using alternative online sources.

The survey informed representatives that their responses were on behalf of their affiliated microfinance institution, and the main goal of the research study was to compare the effectiveness of group liability contracts and individual liability contracts by Bangladeshi microfinance institutions—not compare the effectiveness of specific Bangladeshi microfinance institutions.

The survey informed respondents that the results of this research study contribute to the field and practice of microfinance by comparing the effectiveness of group and individual liability contracts by Bangladeshi microfinance institutions, and there may be no direct benefits to them as survey participants. There was no cost or compensation given to respondents for participation in the research study. Organizations were provided research investigator contact information to direct all questions regarding survey participation.

After reading the survey's purpose, procedures, confidentiality policy, use of results, benefits, costs/compensation, and research investigator contact information to follow-up with questions, respondents were asked to electronically sign a closing statement verifying their understanding of the above sections and indicating their voluntary consent to participate in the study. Representatives interested in receiving an electronic copy of the completed research study were provided a space in the closing statement section to list the e-mail address the study should be sent to in June 2012.

All three organizations verbally stated that they wished to fill out the survey electronically, and they were offered two electronic choices. To make the survey more accessible to ASA, BRAC, and the Grameen Bank, the original survey (see Appendix A) was uploaded onto SurveyMonkey™, and the link to the online survey (see Appendix B) was emailed to each interested organization. Completing and submitting the survey through SurveyMonkey™ would simplify the process because respondents could answer the survey questions and click “Submit” once filling in all the boxes instead of downloading, uploading, and emailing attachments that may become disfigured depending on their current versions of word processors. In case of any difficulties with the SurveyMonkey™ version of the survey, each organization was informed that they could also choose to fill out a Word Document version of the survey (see Appendix A) as well.

3.2 In-Person Correspondence

3.2.1 Microfinance Institutions and Microfinance Research Institutes

In addition to conducting survey research, conversations were held with representatives from the Grameen Bank, BRAC, and ASA as well as with a major Bangladeshi microfinance research institute, the Bangladesh Academy for Rural Development (BARD), to learn specific rationales for and against the use of group or individual liability contracts in Bangladesh. These conversations revealed justifications for both group and individual liability contracts that were taken into consideration during this study’s research analysis. Microfinance practitioners from the microfinance institutions expressed which liability contract type was more effective given their

research and experience in the field (ASA, pers. comm.)(BRAC, pers. comm.)(Grameen Bank, pers. comm.)(BARD, pers. comm.).

3.2.2 Microloan Borrowers

While travelling in Bangladesh, borrowers from the three MFIs—the Grameen Bank, BRAC, and ASA—from villages across Bangladesh were interviewed in group settings. Borrowers had naturally organized for group collection meetings, where payments are made and loans are discussed with loan officers and other borrowers. One group of borrowers with each of the three organizations was interviewed to discuss borrowers' experience having microloans with group liability contracts (with BRAC) or individual liability contracts (with ASA or Grameen Bank). Interviews with ASA borrowers took place on January 2, 2012 in Shibalaya, Bangladesh. Interviews with BRAC borrowers took place on January 3, 2012 in Sreepur, Bangladesh. Interviews with Grameen Bank borrowers took place on January 8, 2012 in a village 65 kilometers outside of Dhaka, Bangladesh.

All of the borrowers who gathered for these interviews and group collection meetings were women. Each of the MFIs informed these women beforehand that visitors were coming to speak to them about their loans. The question asked to the group of women with BRAC was, “What has been your experience like having a loan with a group liability contract?” The question asked to the group of women with ASA and the Grameen Bank was, “What has been your experience like having a loan with an individual liability contract?” Women with all three organizations were asked, “How does this affect your repayments?” All conversations were tape recorded and translated from Bengali to English. Communication with the women was in Bengali, and their

responses were also in Bengali. When the women could not understand my Bengali (because of my American accent), bilingual loans officers assisted with translations to ensure borrowers fully understood my questions and comments. During each of the interviews, loan officers and managers from each of the three respective microfinance institutions facilitated the group interviews or were present otherwise.

3.3 Correspondence with ASA

A paper copy of the survey was given to a branch manager at ASA in Bangladesh on January 2nd, 2012. He expressed interest in completing the questionnaire and requested that he be sent an electronic version of it to fill out and return through email.

Correspondence continued upon my return to the United States via phone and email (see Appendix C). Communication with this representative was constant via both media. First, the SurveyMonkey™ version of the questionnaire was sent to him. He had difficulties filling it out past the first page because of technical difficulties, so he was sent a Word Document version of the questionnaire. He followed up on almost all calls and emails, and he informed me of ASA's delay in completing the survey because of how busy ASA was with annual reporting at the time. He assured me that progress was steadily being made on the survey with other ASA staff members. A partially completed survey was sent back to me by ASA on Sunday, April 1st, 2012. Because ASA was the only organization to partially complete the survey, ASA's responses were not considered in this study. Instead of using ASA's survey responses, data were gathered about ASA from publicly available sources in order to do an objective comparison with data gathered about the Grameen Bank and BRAC.

3.4 Correspondence with BRAC

A paper copy of the survey was given to a branch manager at BRAC in Bangladesh on January 3rd, 2012. He expressed interest in completing the questionnaire and requested that he be sent an electronic version of it to fill out and return through email. Correspondence continued upon my return to the United States via phone and email (see Appendix D). Communication with this representative was very difficult. First, the SurveyMonkey™ version of the questionnaire was sent to him, but he did not utilize it. Reaching him by email was not effective, as none of my emails received responses by him. Upon correspondence on the phone, he let me know he would like another copy of the survey sent to him at an alternative email address. The survey was resent, and the BRAC representative let me know over the phone a few days later that most of the survey had been completed, and the completed version would be sent soon. Later he said that he completed the entire survey and sent it to me multiple times, though it never arrived in my email inbox, so for this study, data were gathered about BRAC from publicly available sources.

3.5 Correspondence with Grameen Bank

A paper copy of the survey was given to a head office manager at the Grameen Bank in Bangladesh on January 3rd, 2012. He expressed interest in completing the questionnaire and requested that he be sent an electronic version of it to fill out and return through email. He informed me that he would speak to his General Manager who could better direct me to the right person for survey assistance. Correspondence continued upon my return to the United States via phone and email (see Appendix E). Communication

with the original representative was initially successful, though the General Manager did not respond to any messages or calls. First, the SurveyMonkey™ version was sent to both the representative and General Manager, but neither of them utilized it. In the following weeks, the original representative continued to refer me to the General Manager, who still had not responded by email. On March 21, 2012, the General Manager wrote an email on behalf of the Grameen Bank informing me that they will not be able to complete the survey or assist with my research (see Appendix E). Because of their failure to complete the survey, Grameen Bank data for this study was gathered from publicly available sources.

3.6 Microfinance Information Exchange (MIX)

Correspondence with the three MFIs upon my return from Bangladesh made their participation in this research study highly unpredictable. To gather the information needed to compare the efficacy of group and individual liability contracts, other avenues for data collection were explored. In addition to looking at annual reports of the Grameen Bank, BRAC, and ASA, the Microfinance Information Exchange (“MIX”) website called MIX Market™ was used to gather financial and social performance data submitted by the Grameen Bank, BRAC, and ASA from 2010 to 2011. These data are validated and standardized by MIX analysts and organized through MIX Market™ to easily produce side-by-side comparisons of microfinance institutions’ recent performance (MIX Market 2012). Because survey responses were not gathered for more than one MFI (Grameen Bank and BRAC did not respond), MIX Market™ was used to gather pertinent information about the Grameen Bank, BRAC, and ASA for use in this study.

3.7 Considerable Setbacks and Discrepancies

3.7.1 Survey Non-Response

One of the biggest setbacks was non-response by two of the three microfinance organizations considered in this study. ASA was the only organization to fill out the survey, so their responses could not be compared objectively to Grameen Bank and BRAC data found online. Therefore, data for all three organizations were gathered using alternative online sources. This meant that borrower business quality information could not be gathered for any of the three organizations. As a result, there was no evidence to determine relationships between liability contract type and borrower business quality in this study.

As stated earlier, the Grameen Bank and BRAC's non-response required that alternative online sources be used to compare the portfolio qualities of all three organizations. The survey was designed to gather complex loan portfolio information from FY 2011 that is not readily available via online sources yet because many microfinance institutions do not complete annual reporting procedures until much later in the following year. These annual reports often are not available online until months later. Consequently, some of the Grameen Bank, ASA, and BRAC data found online for use in this study are from FY 2010 and not FY 2011 as desired.

3.7.2 Challenges in Communicating with Microfinance Institutions

Another challenge faced in this study was in corresponding with the Bangladeshi microfinance institutions. The only organization to engage in frequent communication with me via e-mail was ASA. BRAC's representative communicated to me via phone that he received my emails, completed the survey, sent it to me as an email attachment,

though I never received this or any emails by him during the course of this study. After calling and emailing him numerous times to obtain the completed survey, it was decided that alternative sources would be used to gather data about BRAC to resume with the study. The Grameen Bank corresponded with me via email until they sent a final email stating they will not participate in the survey (see Appendix E).

Although organizations were encouraged to contact me via phone, they did not utilize this option because of expensive overseas calling rates and an inconvenient 14-hour time difference between Bangladesh and my location in the United States. I initiated all phone conversations and when connections were made, technical difficulties were often experienced with all three organizations on different occasions.

3.7.3 Potentially Biased Responses by Microloan Borrowers

When conducting group interviews with microloan borrowers of the Grameen Bank, BRAC, and ASA, it is important to note that their loan officers and organization's representatives were nearby. This possibly played a significant role in influencing the women's responses. If the women were dissatisfied with their loan's liability contract type or other loan particulars, it seemed as though they would not have voiced their opinions in the presence of their loan officers and managers.

4 RESULTS

4.1 Portfolio Quality and Repayment Rates

In this study, ASA was the only organization to complete the survey. Because two organizations chose not to complete the survey (BRAC and the Grameen Bank), data for

all three organizations were gathered from alternative online sources, including the Microfinance Information Exchange website (MIX). The information provided for each organization in this study reflects the most recent data available, ranging from FY 2010 to 2011.

To easily make comparisons between organizations that employ individual liability contracts (Grameen Bank and ASA) and group liability contracts (BRAC), the abbreviation “*(IL)*” is used to represent “individual liability contracts” and “*(GL)*” is used to represent “group liability contracts” in the following sections.

4.1.1 Statistics of Issued Loans

4.1.1.1 Results

The first measures used in this study to measure “effectiveness” are portfolio quality and repayment rates. In Table 1 (below), standard microfinance performance indicators are listed by organization and year.

Table 1: Statistics of Issued Loans**Questions 1-5**

	Microfinance Institution		
	Grameen Bank, 2011	ASA, 2011	BRAC, 2011
Number of Loans Issued	8,370,998 ¹	4,359,218 ⁴	5,616,383 ⁴
Total Amount (\$ in millions) Loaned	1,383 ²	1,081 ^{1,5}	570 ⁶
Average Amount (\$) Loaned Per Borrower	110 ¹	119 ⁴	188 ⁶
Average Loan Term (years)	N/A	N/A	1 to 2 ⁷
Average Loan Interest Rate (%)	20.0 ³	N/A	15.0 ⁸

¹ Source: MIX Market, MFI Report: Grameen Bank+BRAC. <http://www.mixmarket.org>

² Source: Grameen Bank: Performance Indicators & Ratio Analysis. <http://www.grameen.com>

³ Source: Grameen Bank: Grameen Bank at a Glance. <http://www.grameen.com>

⁴ Source: MIX Market, MFI Report: BRAC+ASA. <http://www.mixmarket.org>

⁵ Converted BDT values from survey to USD. 1 USD = 81.79 BDT. http://coinmill.com/BDT_USD.html

⁶ Source: BRAC, Bangladesh at a Glance 2011. <http://www.brac.net/content/stay-informed-brac-glance>

⁷ Source: BRAC, Annual Report 2010. <http://www.brac.net/content/annual-report-and-publications>

⁸ Source: ACCION: Strengthening Factors. <http://www.accion.org/Document.Doc?id=249>

Figures 1-4 (below) summarize the information found in Table 1.

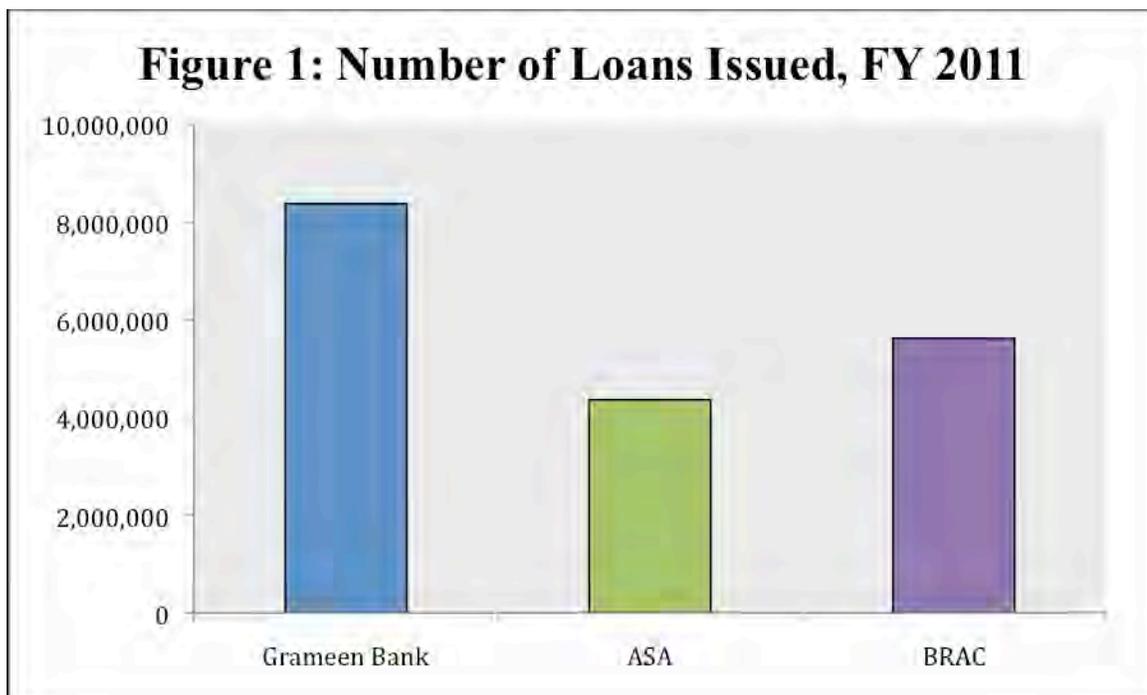


Figure 1 shows that the Grameen Bank (*IL*) issued over 8.3 million loans in 2011, while BRAC loaned over 5.6 million loans and ASA loaned only 4.3 million loans.

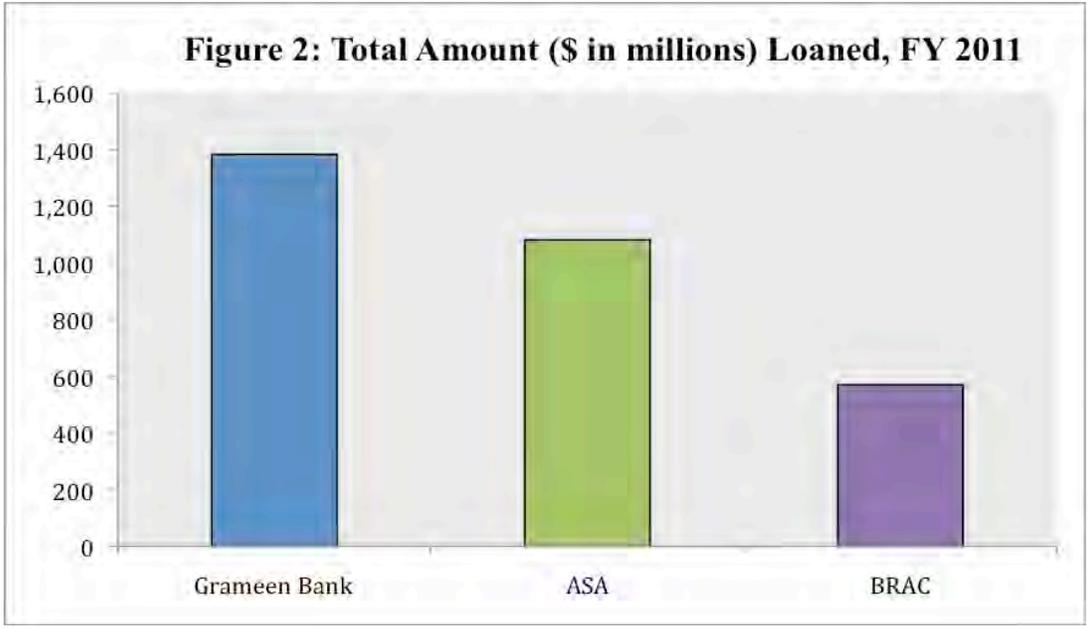


Figure 2 shows that in 2011 the Grameen Bank (*IL*) loaned over \$1.3 billion to its borrowers. This is almost 28% more (\$) than ASA (*IL*) loaned and 158% more (\$) than BRAC (*GL*) loaned in 2011.

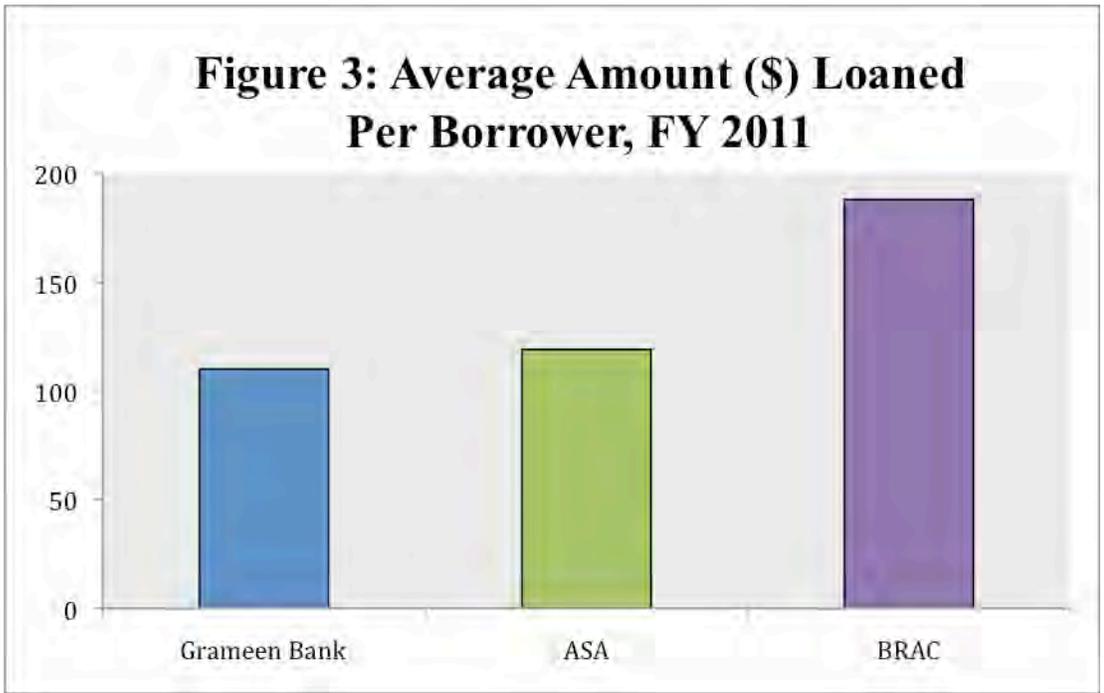


Figure 3 shows that of the three organizations, BRAC (*GL*) loaned the most (\$) per borrower on average. In 2011, BRAC (*GL*) loaned \$188 per borrower, while ASA (*IL*) loaned \$119 per borrower and the Grameen Bank (*IL*) loaned \$110 per borrower.

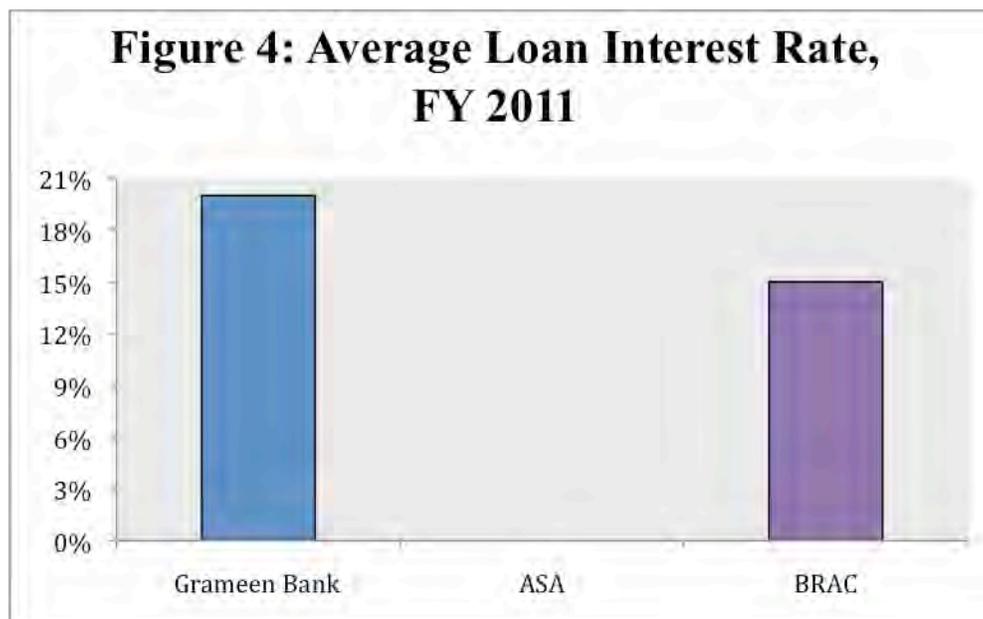


Figure 4 shows that ASA's average loan interest rate in 2011 could not be found using publicly available sources, but of the Grameen Bank and BRAC, the Grameen Bank (*IL*) charged the higher average interest rate on their loans at 20%. BRAC (*GL*) charged a lower average interest rate at 15%.

Figures 1-4 demonstrate that although the Grameen Bank (*IL*) issued more loans and more loan funds than BRAC (*GL*), it charged a higher interest rate than BRAC (*GL*). This may possibly have been to buffer for expected delinquencies from having so many borrowers, relative to BRAC. However, BRAC (*GL*) was able to loan nearly \$188, on average, per borrower, which is over \$50 more than the average amount ASA (*IL*) and

the Grameen Bank (*IL*) loaned to borrowers. Greater amounts may be loaned to borrowers who have group liability contracts because the microfinance institution (in this case, BRAC) may potentially expect repayment of larger loan amounts when group members are jointly liable to each other's loans.

In Table 2 (below), the approximate total numbers of loans issued to male and female borrowers are listed by organization and year.

<u>Table 2: Number of Microloans Issued, by Gender</u>			
<i>Question 1: by Gender</i>			
	Microfinance Institution		
	Grameen Bank, 2010	ASA, 2010	BRAC, 2010
Loans issued to Females	8,039,408 ¹	3,956,416 ²	5,183,317 ³
Loans issued to Males	301,215 ¹	511,081 ²	188,947 ³
Total Loans Issued	8,340,623 ¹	4,467,497 ²	5,616,383 ³

¹ Source: MIX Market, MFI Report: Grameen Bank. <http://www.mixmarket.org>

² Source: MIX Market, MFI Report: ASA. <http://www.mixmarket.org>

³ Source: MIX Market, MFI Report: BRAC. <http://www.mixmarket.org>

Figure 5 (below) summarizes the information found in Table 2.

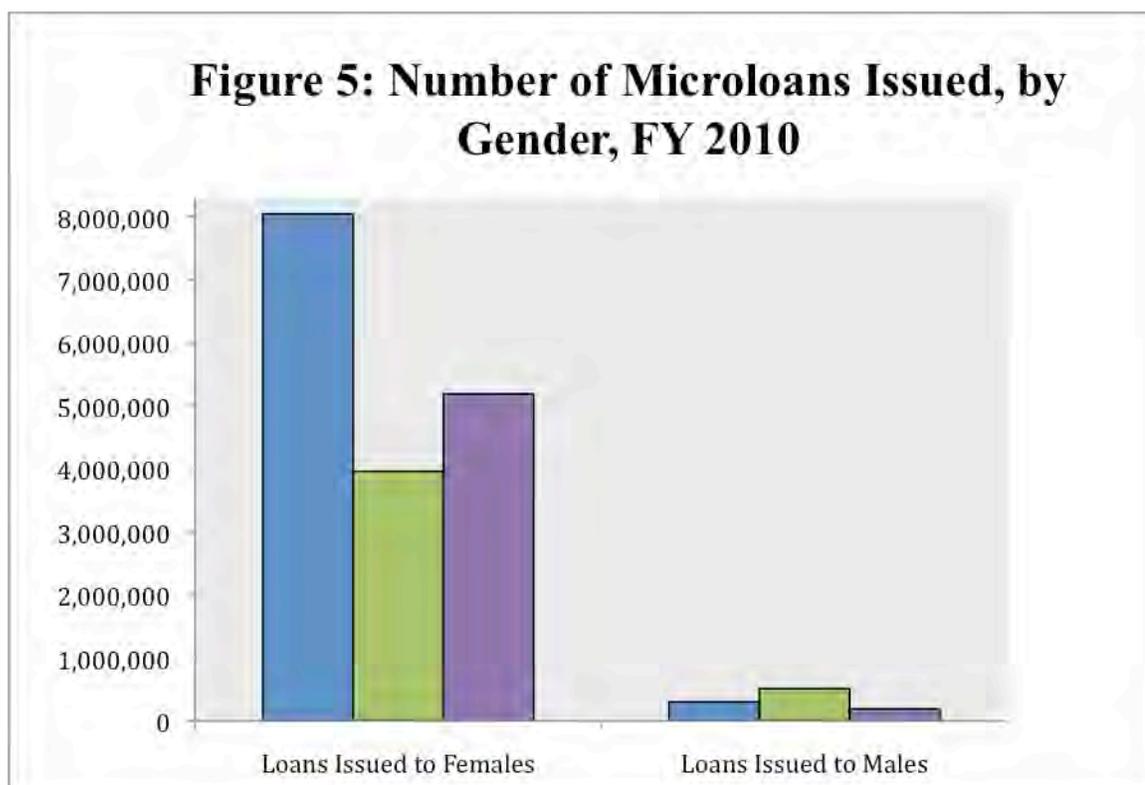


Figure 5 shows the number of microloans issued by the Grameen Bank, ASA, and BRAC by gender. In 2010, Grameen Bank (*IL*) issued over 8 million loans to female borrowers and over 300,000 loans to male borrowers. In 2010, ASA (*IL*) issued over 3.9 million loans to female borrowers and over 511,000 loans to male borrowers. In 2010, BRAC (*GL*) issued over 5.1 million of their loans to female borrowers and nearly 189,000 loans to male borrowers.

In Table 3 (below), the overall percentage of female microloan borrowers is listed by organization and year.

Table 3: Percent of Female Microloan Borrowers**Question 1: Percentage by Gender**

	Microfinance Institution		
	Grameen Bank, 2010	ASA, 2010	BRAC, 2010
Number of active borrowers	8,340,623 ¹	4,467,497 ¹	5,616,383 ¹
Number of active male borrowers	301,215 ¹	511,082 ¹	188,947 ¹
Number of active female borrowers	8,039,408 ¹	3,956,415 ¹	5,183,317 ¹
Percent of female borrowers	96.39% ¹	88.56% ¹	92.29% ¹

¹ Source: MIX Market, MFI Report: Grameen Bank & Others. <http://www.mixmarket.org>

Figure 6 (below) summarizes the information found in Table 3.

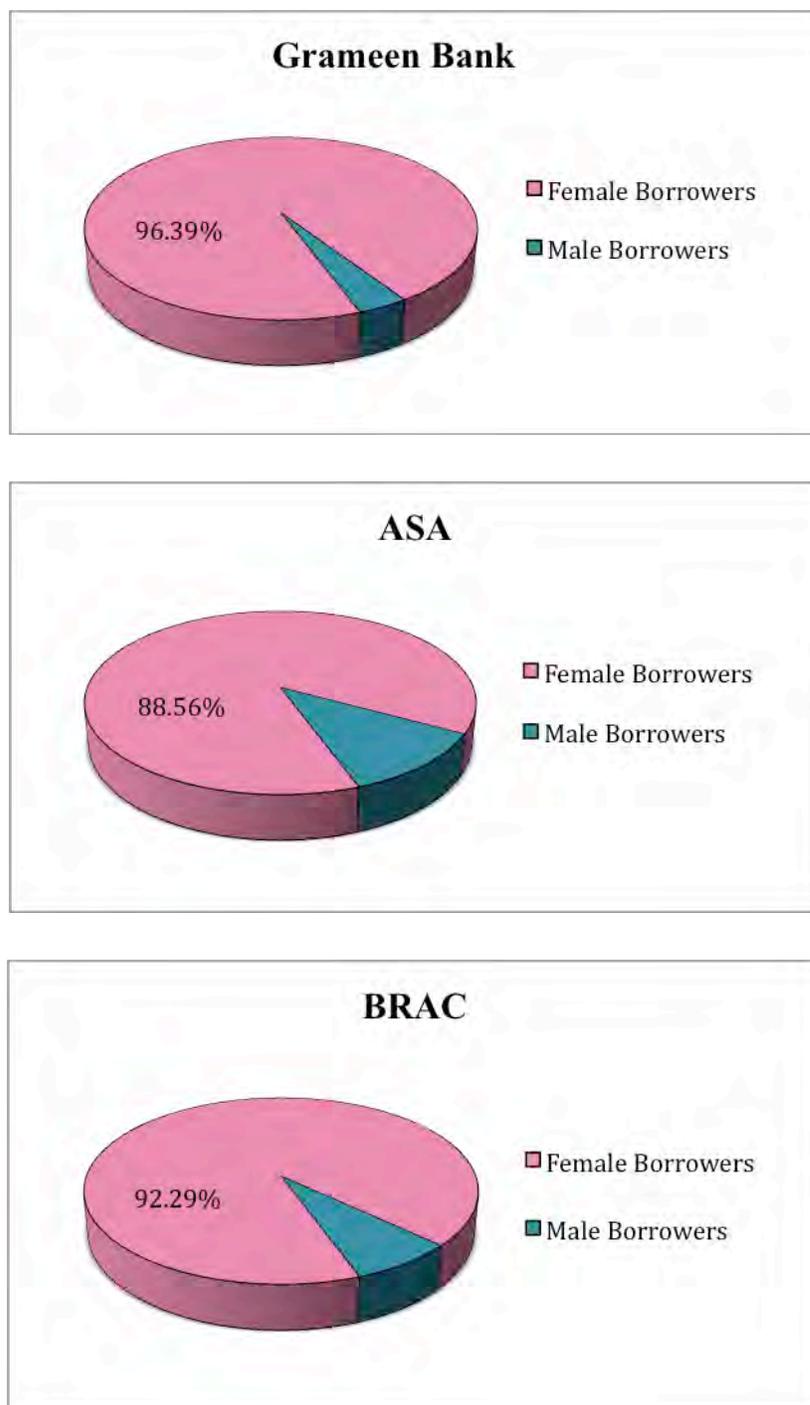
Figure 6: Percent of Female Microloan Borrowers, FY 2010

Figure 6 shows the percentage of active female and male borrowers at each microfinance institution. In 2010, 96.39% of the Grameen Bank's (*IL*) borrowers were women, while in the same year, 88.56% of ASA's (*IL*) borrowers and 92.29% of BRAC's (*GL*) borrowers were women.

Figures 5 and 6 demonstrate that of the three organizations, the Grameen Bank (*IL*) issued the most loans to women (over 8 million) and overall had the highest percentage of active female borrowers (96.39%) in 2010. BRAC (*GL*) issued the second most loans to women (over 5.1 million) and overall had the second highest percentage of active female borrowers (92.29%) in 2010. ASA (*IL*) issued the least number of loans to women (over 3.9 million) and overall had the lowest percentage of active female borrowers (88.56%) in 2010.

4.1.2 Portfolio At Risk

4.1.2.1 Results

The portfolio at risk (PAR) is a measurement of the total outstanding balance of loans past due, not late payments or payments not yet due, divided by the current portfolio (ACCION 2012). Again, the following equation was used to measure the PAR (30) for each organization in this study:

$$PAR (30 \text{ days}) = \frac{\text{Outstanding balance of regular loans} > 30 \text{ days late} + \text{outstanding balance of renegotiated loans} < 30 \text{ days late}}{\text{Outstanding principle balance of all loans}}$$

In Table 4 (below), the Portfolio at Risk (30 days) for each organization is listed by year.

Table 4: Portfolio At Risk (30 Days)			
<i>Questions 6-8</i>			
	Microfinance Institution		
	Grameen Bank, 2011	ASA, 2011	BRAC, 2011
Outstanding principal balance of all loans past due more than 30 days (in million USD)	71.1 ¹	N/A	N/A
Outstanding principle balance of all loans (in million USD)	937.1 ¹	N/A	N/A
PAR (30 days)	7.59% ¹	3.43% ²	7.56% ³

¹ See Table 5: Grameen Bank, 2011 Portfolio at Risk Calculation

² Source: ASA, ASA Performance (2008-2011). <http://www.asa.org.bd>

³ Source: MIX Market, MFI Report: BRAC. <http://www.mixmarket.org>

Because the Grameen Bank did not explicitly list its PAR (30 days) for 2011 anywhere online, the PAR (30 days) value was derived using the Grameen Bank website. Using monthly loan performance indicators from Grameen Bank's monthly reports, Table 5 (below) was constructed:

Table 5: Grameen Bank Portfolio At Risk Calculation ¹

(in million USD)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
Outstanding balance: Basic Loans	872.6	882.4	897.5	894.3	889.5	888.1	876.8	878.4	867.8	867.4	871.8	846.4	877.7
Outstanding balance: Flexible Loans	50.3	51.4	53.2	55.1	57.5	57.7	59.9	61.8	65.1	66.6	68.1	65.9	59.4
Total Outstanding balance	922.8	933.8	950.7	949.4	947.0	945.8	936.7	940.2	932.9	934.0	939.9	912.3	937.1
Total Outstanding of Borrowers Missing 5 to 9 Consecutive Installments ²	13.2	12.2	13.1	12.3	12.0	11.3	11.4	12.6	11.5	11.2	10.1	9.4	11.7
Outstanding balance: Flexible loans ³	50.3	51.4	53.2	55.1	57.5	57.7	59.9	61.8	65.1	66.6	68.1	65.9	59.4
Outstanding balance of late basic loans and current renegotiated loans	63.4	63.7	66.4	67.5	69.5	69.0	71.4	74.4	76.6	77.8	78.2	75.3	71.1
Portfolio at Risk (PAR >30 days)	6.87%	6.82%	6.98%	7.11%	7.34%	7.29%	7.62%	7.92%	8.21%	8.33%	8.32%	8.26%	7.59%

¹ Values derived from www.grameen.com "Data & Reports, Monthly Report Archive" from 2011-01 Issue 373 USD, 2011-02 Issue 374 USD, 2011-03 Issue 375 USD, 2011-04 Issue 376 USD, 2011-05 Issue 377 USD, 2011-06 Issue 378 USD, 2011-07 Issue 379 USD, 2011-08 Issue 380 USD, 2011-09 Issue 381 USD, 2011-10 Issue 382 USD, 2011-11 Issue 383 USD, 2011-12 Issue 384 USD

² This is nearly equivalent to "past due more than 30 days" because Grameen Bank borrowers make weekly installments

³ A flexible loan is not an independent loan. It is a detour from the basic loan, or equivalent to a renegotiated loan

Figure 7 (below) summarizes the information found in Tables 4 and 5.

Figure 7: Portfolio at Risk (PAR 30 Days), FY 2011

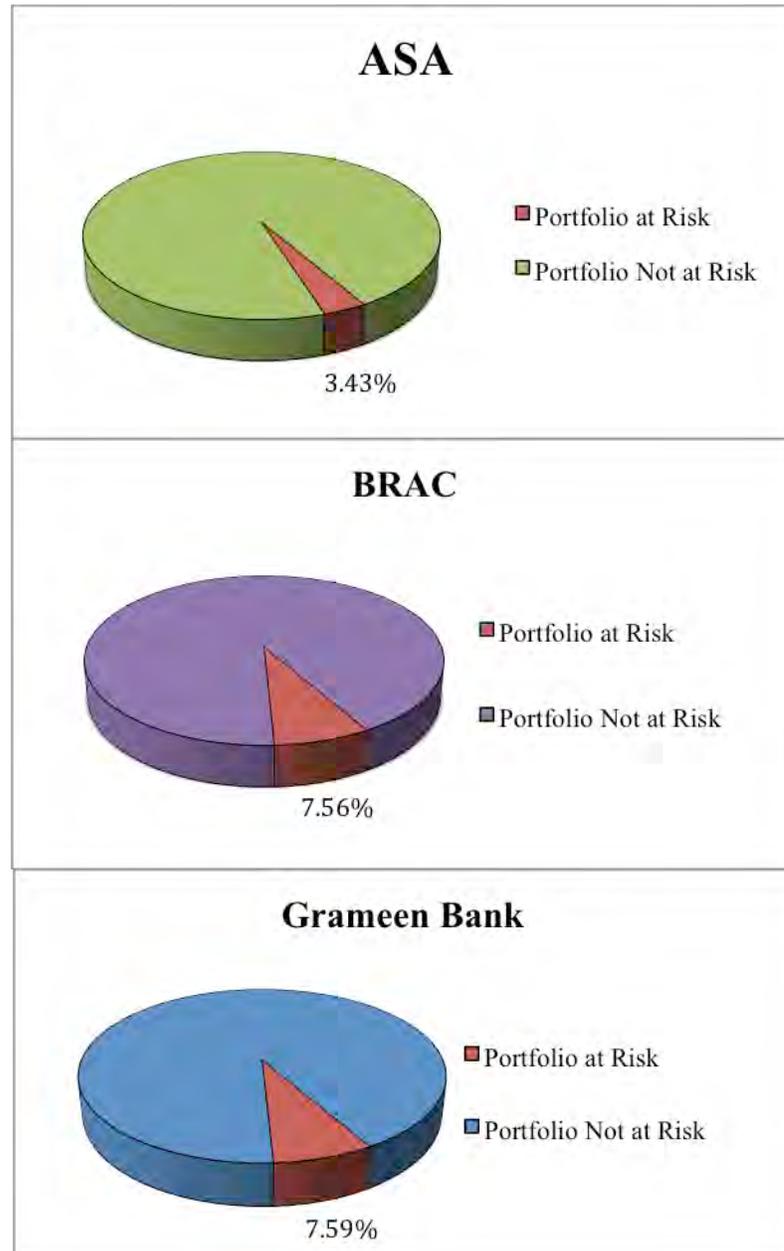


Figure 7 shows the Portfolio at Risk (30 days) for each organization in 2011. This is the most standardized indicator of a microfinance institution's portfolio quality and repayment rate given their outstanding loans and outstanding balance of loans overdue by 30 days. Because this indicator is one of the most significant measures of efficacy used in this study, it was especially important to determine the PAR (30 days) for each organization within the same year (FY 2011) to ensure that each value could systematically be compared to each other. The PAR (30 days) for the Grameen Bank was not readily available to the public, so using monthly reports from the Grameen Bank's website, Table 5 was constructed and the PAR (30 days) for 2011 was derived. In 2011, the Grameen Bank (*IL*) and BRAC (*GL*) had similar PARs (30 days) of 7.59% and 7.56% respectively. However, ASA (*IL*) had a much lower PAR (30 days) of 3.43%. This reveals that in terms of portfolio quality, ASA (*IL*) did exceedingly better during the past financial year than did the Grameen Bank (*IL*) and BRAC (*GL*).

Because the PAR (30 Days) was determined for each of the organizations in 2011, the simplified LAR (30 Days) from Questions 9-11 was not determined.

4.1.3 Write-Off Ratio

4.1.3.1 Results

In Table 6 (below), the Write-Off Ratios as well as the data needed to compute Write-Off Ratios (if available) are listed by organization and year. Again, the equation used to measure the Write-Off Ratio is:

$$\text{Write-off Ratio} = \frac{\text{Amount written off during FY 2011}}{\text{Average gross loan portfolio during FY 2011}}$$

Table 6: Write-Off Ratio**Question 12**

	Microfinance Institution		
	Grameen Bank, 2010	ASA, 2010	BRAC, 2010
Loan Amount Written Off (\$)	17,370,000 ¹	1,940,000 ^{3,4}	18,120,108 ^{4,5}
Average Gross Loan Portfolio	939,129,906 ²	654,193,910 ^{3,4}	536,491,601 ^{4,5}
Write-off Ratio	1.85%	0.30%	3.38%

¹ Source: Grameen Bank: Grameen Bank at a Glance. <http://www.grameen.com>

² Source: MIX Market, MFI Report: Grameen Bank. <http://www.mixmarket.org>

³ Source: ASA, ASA Performance (2008-2011). <http://www.asa.org.bd>

⁴ Converted BDT values from survey to USD. 1 USD = 81.79 BDT. http://coinmill.com/BDT_USD.html

⁵ Source: MIX Market, MFI Report: BRAC. <http://www.mixmarket.org>

Figure 8 (below) summarizes the information found in Table 6.

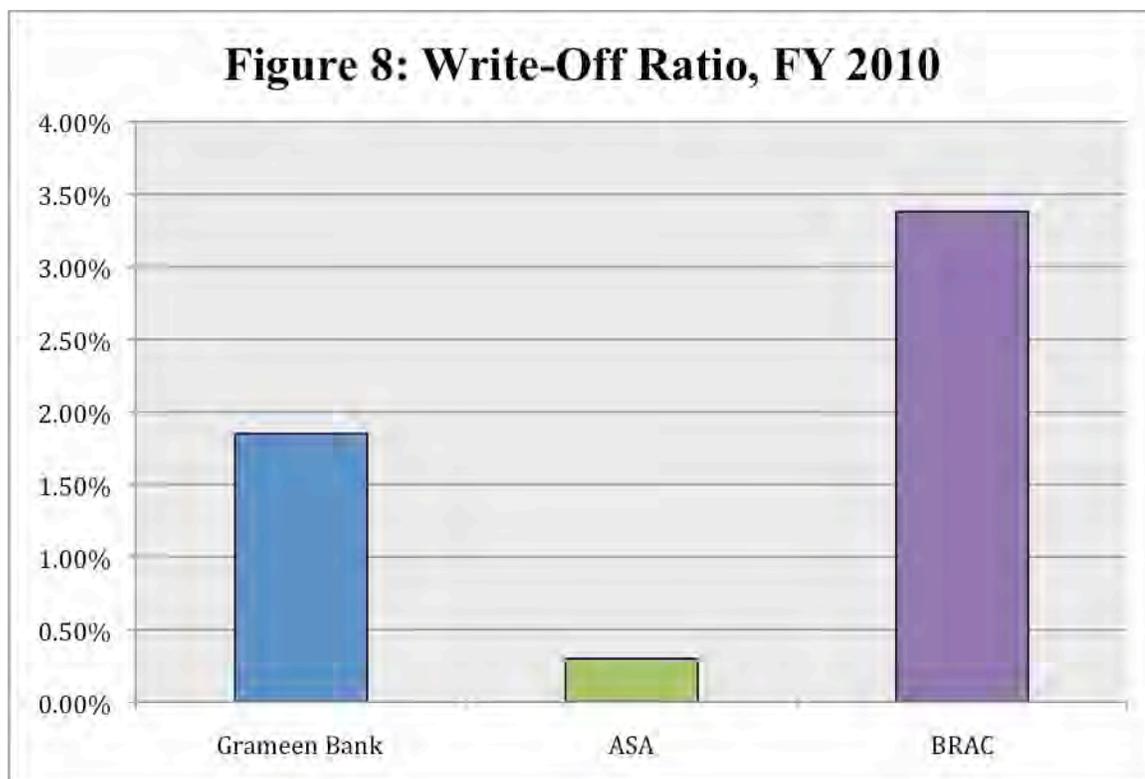


Figure 8 shows the write-off ratios for each of the three organizations. In 2010, ASA's write-off ratio was 0.30%, and in 2010, BRAC's write-off ratio was 3.38%. The Grameen Bank's write-off ratio in 2010 was 1.85%. ASA's (*IL*) write-off ratio of 0.30% in 2011 is a strong indicator of its efficacy, especially compared to the Grameen Bank's (*IL*) write-off ratio of 1.85% and BRAC's (*GL*) write-off ratio of 3.38%.

4.1.4 Repayment Rate

4.1.4.1 Results

In Table 7 (below), the loan repayment rates of microfinance institutions borrowers are listed by organization and year.

Table 7: Repayment Rate**Question 13**

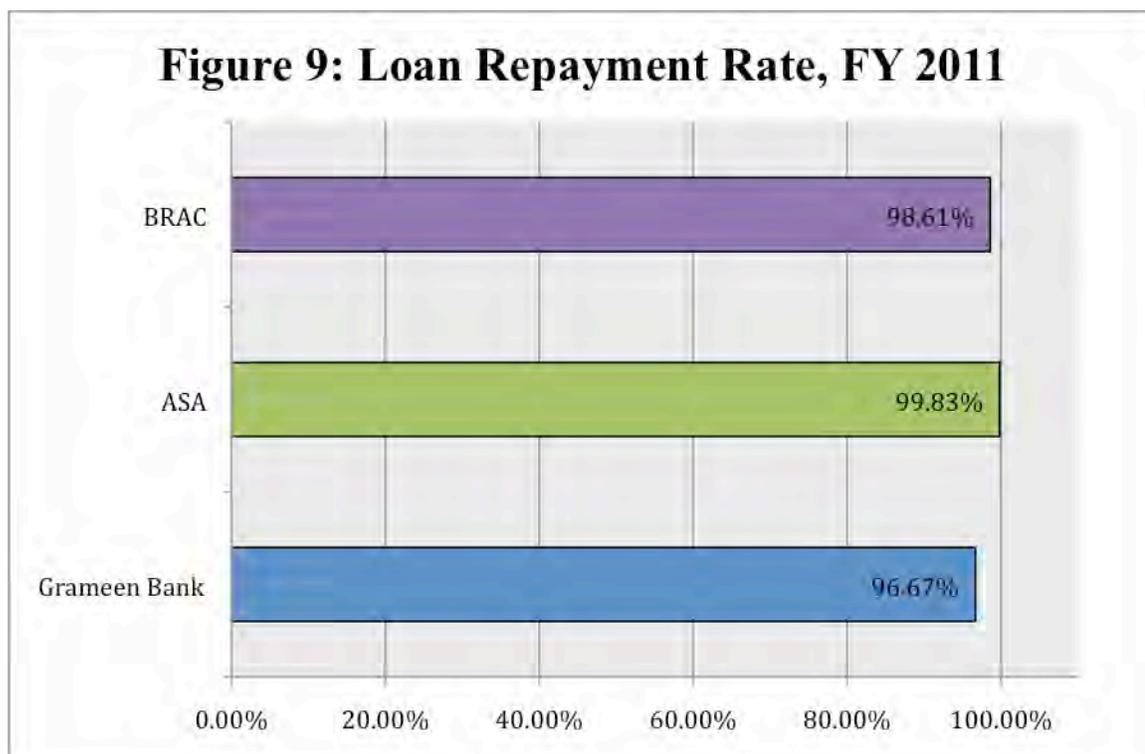
Microfinance Institution			
	Grameen Bank, 2011	ASA, 2011	BRAC, 2011
Repayment Rate	96.67% ¹	99.83% ²	98.61% ³

¹ Source: Grameen Bank: Grameen Bank at a Glance. www.grameen.com

² Source: ASA, ASA Performance (2008-2011). <http://www.asa.org.bd>

³ Source: BRAC, Bangladesh at a Glance 2011. <http://www.brac.net/content/stay-informed-brac-glance>

Figure 9 (below) summarizes the information found in Table 7.



Perhaps the strongest indicator of portfolio quality (in addition to Portfolio at Risk) in this study is the repayment rate. Each of the organizations has reported loan repayment rates that are outstanding according to any lending standards, considering they are all greater than 96%. Figure 9 shows that of the three organizations, ASA (*IL*) had the highest repayment rate in 2011 of 99.83%. BRAC (*GL*) had the second highest repayment rate at 98.61% in 2011. The repayment rate at Grameen Bank (*IL*) in 2011 was 96.67%.

By the three main indicators of portfolio quality used in this study—PAR (30 days), write-off ratio, and repayment rate—ASA (*IL*) performed better than BRAC (*GL*) and the Grameen Bank (*IL*) in recent years.

4.1.4.2 In-Person Correspondence: ASA Representatives

Conversations in Bangladesh with representatives from the Association for Social Advancement (ASA) revealed the impetus behind their employment of individual liability contracts over group liability contracts. One representative said, “Group [liability] systems are stressful because you have to take care of your group. [At ASA], individuals are accountable, not the public” (ASA, pers. comm.). They do not want members “to suffer” by covering the missed payments of fellow group members (ASA, pers. comm.).

However, ASA still has its borrowers form groups and holds group meeting times (this is “group lending”), so borrowers spend time with each other and payments are collected in group settings. Groups form committees through self-selection by members, not loan officers. “Loans are made individually, but for seating and conducting business, there is a group collection center” (ASA, pers. comm.). Group lending (not group liability

contracts) allows ASA to serve many people in a few minutes time (ASA, pers. comm.). Additionally, group lending helps spark discussion regarding repayments and social issues that benefit the borrowers. “If I call you all [borrowers] to come to a collection center or settled place, we can discuss loans that we [borrowers] can repay, and they also start discussing hygiene, cleanliness, and other things that affect the group” (ASA, pers. comm.). The group learns from each other, but “it does not mean the group depends on the group, or that the group gets loans” (ASA, pers. comm.).

Representatives from ASA emphasized the role group meetings play in ensuring repayment. Borrowers themselves form groups and committees, which may lead to greater peer monitoring activities (Stiglitz 1990) (Develtere and An Huybrechts 2005) (Yunus 2001). However, the adverse selection problem (Armendáriz de Aghion and Murdoch 2005) may not be completely mitigated in this arrangement because members are not necessarily selecting group members whom they trust to pay back. Group members may not necessarily feel greater pressure to repay their loans in these group settings when they are technically still individually liable. Though there seem to be other benefits to these group ASA meetings, like discussion of social issues (ASA, pers. comm.), it is unclear from the representative’s comments whether these benefits directly result in higher repayment rates.

4.1.4.3 In-Person Correspondence: BRAC Representatives

Conversations in Bangladesh with representatives from the Bangladesh Rural Advancement Committee (BRAC) revealed that group liability contracts are “not a problem” for borrowers. When asked about why BRAC employs group liability contracts over individual liability contracts, they said that they help to insure repayments, that the

borrowers like to help each other in times of need, and that the women have adjusted “very well” to the group liability contract requirements (BRAC, pers. comm.). One representative said, “Most of these women have been taking loans [with group liability contracts] for over 15 years. They know what to do and how to do it” (BRAC, pers. comm.).

Representatives from BRAC acknowledged how well women have adjusted to group liability contracts because of the support the women have for each other (BRAC, pers. comm.). Because the women naturally come to each other’s assistance with covering repayments (Daley-Harris 2002), group liability contracts are a natural fit for them. However, their comments still do not imply that group liability contracts through BRAC necessarily are associated to high repayment rates, or higher repayment rates that would result with use of alternative liability contracts.

4.1.4.4 In-Person Correspondence: Grameen Bank Representatives

Conversations in Bangladesh with representatives from the Grameen Bank confirmed their organization’s transition to individual liability contracts. One representative said, “Now we are not lending with group liability [contracts]. We are individual lending [with individual liability contracts]. The borrowers are not reliable for another’s payment. There is a group, but this group is not responsible to pay back for others” (Grameen Bank, pers. comm.). Additionally, individual liability allows the Grameen Bank to tailor loans to the needs of individual borrowers. “Individually people can borrow money, it’s a single borrowing. The amount of money depends on their own business plans, it’s not the same amount of money for each member” (Grameen Bank, pers. comm.). However, when individuals want to apply for loans, they must present their

business plans to their group. “They have to present their report to group members for their approval when they want loan funds” (Grameen Bank, pers. comm.).

Representatives from the Grameen Bank explained how individual liability contracts allow them to meet the individual needs of their borrowers. However all business plans and loan proposals must be presented to each borrower’s group before loan funds can be accessed. From this respect, the adverse selection problem (Armendáriz de Aghion and Murdoch 2005) is partially mitigated because group members are able to rule out risky borrowers (or borrowers whose business plans are not sound) before said risky borrowers would ever receive loan funds, and the impact of individual liability contracts on overall repayment rate is unclear.

4.1.4.5 In-Person Correspondence: Bangladesh Academy for Rural Development

In Comilla, Bangladesh, the Deputy General of the Bangladesh Academy for Rural Development (BARD), Dr. Mohammed Aatur Rahman, spoke about the special characteristics of group lending and group liability contracts used by Bangladeshi microfinance institutions that may lead to high repayment rates. He expressed that group members in the village know each other’s behaviors and capacities very well and that generally “they have equal standing on the same power structure” (BARD, pers. comm.), so group training brings borrowers close together and enables idea sharing. He believes that under group liability contracts, “group cohesion is the guarantee of repayment” (BARD, pers. comm.). Because groups are able to self-select each member, groups have “near perfect information,” enforcing both eligibility in the group (called “social collateral”) and loan contracts e.g. thru repayment (BARD, pers. comm.). The active participation of borrowers [under group liability contracts] helps the group generate

sustained incomes and meet the costs of borrowing together (BARD, pers. comm.). He emphasized that microcredit is a tool for both economic and non-economic services that poor Bangladeshis need, and group liability contracts allow microfinance operations to be “more or less decentralized” (BARD, pers. comm.).

When asked directly about whether he thought group or individual liability contracts were more effective, he described the debate about group and individual liability contracts as “one of the most important rural development aspects in Bangladesh” (BARD, pers. comm.). He continued by saying, “Individual [liability] contracts are the best. Given that it works. If it doesn’t work, the second best is the group liability system” (BARD, pers. comm.). The caveat with individual liability contracts, he added, is that they must require collateral from borrowers (BARD, pers. comm.). In the case that borrowers cannot offer collateral, he recommends group liability contracts because they come with social collateral for the reasons he explained earlier (BARD, pers. comm.).

Dr. Mohammed Aaur Rahman of the Bangladesh Academy for Rural Development associates the positive consequences of group liability contracts (Armendáriz de Aghion and Murdoch 2005) with high repayment rates of many Bangladeshi microfinance institutions. He indirectly acknowledged the unintended consequences of group liability contracts when he stated that individual liability contracts are “the best, given that it works” (BARD, pers. comm.). He continued that “it works” when borrowers are able to offer collateral to the microfinance institution or bank. Poor populations in Bangladesh overwhelmingly are not able to offer collateral to microfinance institutions because they have no financial savings or assets, so Dr.

Rahman's views reveal that in his opinion, Bangladeshi microfinance institutions are better off utilizing group liability contracts to ensure repayment.

4.1.4.6 In-Person Correspondence: ASA Borrowers

Trips were made to various villages throughout Bangladesh to meet borrowers from ASA, BRAC, and the Grameen Bank to discuss their personal experiences with either individual liability contracts (Grameen Bank and ASA) or group liability contracts (BRAC). They were asked to describe why they did or didn't like the liability contract employed by their respective microfinance institution and the impact they believe their liability contract type has had on their repayments. Their responses were in Bengali, and for use in this research, those responses were translated into English. The following are relevant excerpts and comments made during each of these meetings.

When ASA borrowers from a village in Shibalaya, Bangladesh were asked if they liked the individual liability aspect of their loans, they collectively responded, "Yes." One woman said, "[If our loans had group liability contracts], we would quarrel. Individual is good. We can pay directly" (Nurjahan, ASA borrower, pers. comm.). Nurjahan expressed that the leaders who run group meetings help the women with their loans. "We are in groups of 35 [borrowers]. Each committee has a leader. They look after members, so they [we] still work together" (Nurjahan, ASA borrower, pers. comm.). The group meeting dynamic does not interfere with borrowers' loans. "When borrowing money, individual lending is what happens" (Nurjahan, ASA borrower, pers. comm.).

ASA borrowers indicated that the group dynamic of their loan collection meetings helps them "work together" in ensuring repayment on their individual liability loans, but the women have never had group liability loans, so it is unclear whether or not they

would be making more payments with loans under an alternative liability contract. However, they did mention that if their loans had group liability contracts, they “would quarrel” (Nurjahan, ASA borrower, pers. comm.). Given their particular interpersonal group dynamics, individual liability may be the more appropriate contract type for them because they are able to handle their own payments, not the payments of others.

4.1.4.7 In-Person Correspondence: BRAC Borrowers

BRAC borrowers from a village in Gazipur, Bangladesh expressed that their loans, which have group liability contracts, work particularly well because borrowers are able to help each other cover repayments “without any difficulties” (BRAC, borrower, pers. comm.). One borrower continued, “When someone can’t give money, we all let each other know and cover the cost. Then later she gives us the money back. Always. No trouble at all” (BRAC borrower, pers. comm.). Borrowers seemed to strongly approve of the group liability aspect of their loan contracts because the women support each other—both morally and financially—and they don’t mind covering each other’s payments.

The borrowers at BRAC said that they have “no trouble at all” (BRAC borrower, pers. comm.) covering each others’ payments for their loans with group liability contracts because they genuinely want to help each other, implying that they may be assisting each other with repayments even if they weren’t contractually obligated to do so. BRAC borrowers mentioned that group liability contracts enable them to make repayments “without... difficulties,” implying that the group liability contracts may be setting the consistent standard amongst all borrowers to “help” each other with payments.

4.1.4.8 In-Person Correspondence: Grameen Bank Borrowers

When asked about her experience with individual liability contracts, one borrower at a Grameen Bank meeting from a village 65 km outside of Dhaka, Bangladesh replied, “Meetings are what help us repay. [Because of the group meetings] we never miss installments” (Grameen Bank borrower, pers. comm.). Even though their loans are individualized, the group aspect of their meetings helps to ensure their repayments. Another borrower expressed her positive experience with group meetings, saying “If we want to borrow money, before we get loans we must get training from each other and learn about business” (Grameen Bank borrower, pers. comm.). Another borrower enjoys the flexibility of Grameen’s repayment schedule, saying, “We don’t face problems, we aren’t forced to pay back ever. We pay back when we can” (Grameen Bank borrower, pers. comm.). Because the Grameen Bank does not have a fixed repayment schedule, borrowers are able to renegotiate their individual loan in a way that works best for them.

Like the borrowers from ASA, Grameen Bank borrowers attributed their high repayment rates to group meetings (Grameen Bank borrower, pers. comm.). The business training the women receive at group meetings teaches them how to maintain their businesses and make repayments on time. Even though the Grameen Bank doesn’t have fixed repayment schedules for borrowers (Grameen Bank borrower, pers. comm.), the women “never miss installments” because of their group meetings and group leaders (Grameen Bank borrower, pers. comm.).

4.1.4.9 Lessons from Correspondence with All Borrowers

All of the borrowers outwardly expressed satisfaction with their loan contracts, whether they were individual liability contracts (of ASA and Grameen Bank borrowers)

or group liability contracts (of BRAC borrowers). Not a single woman during any of the interactions expressed any disapproval of the liability contracts employed by her respective microfinance institution. This gave no clear indication of which type of liability contract led the borrowers to make more payments or contributed more greatly to the success of their businesses.

4.2 Borrower Business Quality

Because there was no survey data reported by any of the three organizations regarding borrower business quality, there can be no correlations made between microfinance institutions and borrower business success or between liability contract type and borrower business success. Because of the organizations' nonresponse, Questions 1 and 2 from the second section of the questionnaire cannot be addressed. ASA was the only organization to complete the survey, so demographic data cannot be analyzed or compared across organizations. The only demographic data described in this study pertain to gender (see Table 2, Figure 5, Table 3, and Figure 6). This data was gathered from ASA's survey and the MIX Market™ website (for BRAC and the Grameen Bank).

5 CONCLUSION

The findings in this research suggests that individual liability contracts are more effective than group liability contracts because of their correlation with higher portfolio quality, or repayment rates, in Bangladesh.

When it came to the most important indicators of portfolio quality and effectiveness—PAR (30 days), write-off ratios, and repayment rates—microfinance

institutions employing individual liability contracts (ASA and Grameen Bank) consistently performed better than BRAC (*GL*) in recent years, although BRAC (*GL*) loaned the most money (\$) in funds to individual borrowers on average. Additionally, more women are reached through organizations employing individual liability contracts, though it is unclear whether or not this is due to the liability contract type itself or other extraneous factors not considered in this study.

Next, discussions with borrowers from all three microfinance institutions—the Grameen Bank (*IL*), ASA (*IL*), and BRAC (*GL*), revealed the valuable role that group meetings play in ensuring borrower loan repayment (Grameen Bank, pers. comm.)(BRAC, pers. comm.)(Nurjahan, ASA, pers. comm.). Borrowers from the Grameen Bank (*IL*) and ASA (*IL*) both describe how group collection meetings help them to make repayments, despite having loans with “individual” liability contracts. In Bangladesh, borrowers with individual liability contracts still tend to oversee each other and “work together” (ASA, pers. comm.) within their group—pre-loan and post-loan—partially mitigating adverse selection and moral hazard problems, though it is unclear whether or not to the same extent that adverse selection and moral hazard problems are mitigated by group liability contract conditions.

According to microfinance institutions and borrowers, peer-monitoring activities (Stiglitz 1990) at group meetings, as part of the “village organization” aspect of microloan borrowing communities (Montgomery 1996), contribute to the high repayment rates of organizations employing individual liability contracts. Though group liability contracts require borrowers to assist each other, conversations with borrowers from the Grameen Bank and ASA reveal that microloan borrower tend to assist each other

anyway, so in Bangladesh, group liability contracts may not necessary be the best outfit. Finally, negative consequences that are known to arise in group liability structures (Gine and Karlan 2006) can possibly be avoided by employing individual liability contracts.

Because of limited response from organizations in completing this study's survey, it cannot be determined which type of liability contract is correlated with higher borrower business quality.

Future studies can aim to work with MFIs on a deeper level to determine the relationship between liability contract type and borrower business success. Secondly, future studies can survey more MFIs employing either individual liability contracts or group liability contracts so the relationship between liability contract type and portfolio/borrower business quality can be much more clearly determined. Because only three organizations were surveyed in this study—albeit the three largest microfinance institutions in Bangladesh—the relationship found between individual liability contracts and portfolio quality/repayment rates is simply a correlation. Future studies about group and individual liability contracts can be much more useful by analyzing the performance indicators of numerous microfinance institutions so causation between liability contract type and portfolio quality/repayment rates could be found.

6 REFERENCES

- ACCION, 2012. "Glossary of Microfinance Related Terms." Accessed March 2012. <http://www.accion.org/page.aspx?pid=257#p>.
- ACCION. 2008. "Strengthening Factors." Last modified May 2008. Accessed April 2012. <http://www.accion.org/Document.Doc?id=249>.
- Armendáriz de Aghion, Beatriz, and Jonathan Morduch. 2005. *The Economics of*

- Microfinance*. Cambridge, MA: MIT Press.
- Association for Social Advancement (ASA). 2011. ASA Performance (2008-2011). Accessed May 7, 2011. http://www.asa.org.bd/performance_indicator_08.pdf.
- Association for Social Advancement (ASA). 2008. *The Beginnings and Expansion*. Accessed February 11, 2012. <http://www.asa.org.bd/about.html>.
- Attanasio, Orazio, Britta Agusburg, Ralph De Haas, Emla Fitzsimons and Heike Harmgart. 2011. Microfinance: Is it Time to Write off Group Loans? VOX. Accessed Feb 12, 2012. <http://www.voxeu.org/index.php?q=node/7474>.
- Bangladesh Bureau of Statistics (BBS). 2007. *Statistical Year Book of Bangladesh, 2006*. Planning Division, Ministry of Planning: Government of the People's Republic of Bangladesh.
- BRAC. 2011. "Stay Informed: BRAC At a Glance, Bangladesh." Accessed April 2012. <http://www.brac.net/content/stay-informed-brac-glance>.
- BRAC. 2010. "BRAC Bangladesh Annual Report 2010." Accessed April 2012. <http://issuu.com/brac/docs/brac-annual-report-2010-full?mode=window&viewMode=singlePage>.
- CGAP. 2009. "Measuring Results of Microfinance Institutions: A Technical Guide." Accessed March 2012. http://www.cgap.org/gm/document-1.9.36551/indicators_techguide.pdf.
- Center for Global Development. 2010. "Grameen Bank at a Crossroads." Accessed April 2012. http://blogs.cgdev.org/open_book/2010/05/grameen-bank-at-a-crossroads.php.
- CoinMill. 2012. "CoinMill.com – The Currency Converter." Last modified March 2012. Accessed March 2012. http://coinmill.com/BDT_USD.html.
- Daley-Harris, Sam. 2002. *Pathways Out of Poverty*. Bloomfield: Kumarian Press Inc.
- Develtere, Patrick and An Huybrechts. 2005. "The Impact of Microcredit on the Poor in Bangladesh." Alternatives: Leuven, Belgium.
- Gine, Xavier, and Dean Karlan. 2006. "Group versus Individual Liability—A Field Experiment in the Philippines." World Bank Policy Research Working Paper 4008: Washington, D.C.
- Grameen Bank. 2011. "Grameen Bank at a Glance." Accessed May 6, 2011. http://www.grameen-info.org/index.php?option=com_content&task=view&id=26&Itemid=175
- . 2010. "Performance Indicators & Ratio Analysis." Accessed March 2012. http://www.grameen.com/index.php?option=com_content&task=view&id=632&Itemid=664.
- . 2011. "2011-01 Issue 373 USD." Accessed March 20, 2012. http://www.grameen.com/index.php?option=com_content&task=view&id=921&Itemid=664

- mid=422.
- . 2011. “2011-02 Issue 374 USD.” Accessed March 20, 2012.
http://www.grameen.com/index.php?option=com_content&task=view&id=968&Itemid=422.
- . 2011. “2011-03 Issue 375 USD.” Accessed March 20, 2012.
http://www.grameen.com/index.php?option=com_content&task=view&id=1039&Itemid=422.
- . 2011. “2011-04 Issue 376 USD.” Accessed March 20, 2012.
http://www.grameen.com/index.php?option=com_content&task=view&id=1051&Itemid=422.
- . 2011. “2011-05 Issue 377 USD.” Accessed March 20, 2012.
http://www.grameen.com/index.php?option=com_content&task=view&id=1055&Itemid=422.
- . 2011. “2011-06 Issue 378 USD.” Accessed March 20, 2012.
http://www.grameen.com/index.php?option=com_content&task=view&id=1072&Itemid=422.
- . 2011. “2011-07 Issue 379 USD.” Accessed March 20, 2012.
http://www.grameen.com/index.php?option=com_content&task=view&id=1082&Itemid=422.
- . 2011. “2011-08 Issue 380 USD.” Accessed March 20, 2012.
http://www.grameen.com/index.php?option=com_content&task=view&id=1087&Itemid=422.
- . 2011. “2011-09 Issue 381 USD.” Accessed March 20, 2012.
http://www.grameen.com/index.php?option=com_content&task=view&id=1093&Itemid=422.
- . 2011. “2011-10 Issue 382 USD.” Accessed March 20, 2012.
http://www.grameen.com/index.php?option=com_content&task=view&id=1098&Itemid=422.
- . 2011. “2011-11 Issue 383 USD.” Accessed March 20, 2012.
http://www.grameen.com/index.php?option=com_content&task=view&id=1100&Itemid=422.
- . 2012. “2011-12 Issue 384 USD.” Accessed March 20, 2012.
http://www.grameen.com/index.php?option=com_content&task=view&id=1102&Itemid=422.
- Laffont, Jean-Jacques, and Patrick Rey. 2003. “Collusion and Group Lending with Moral Hazard.” Draft, IDEI, Toulouse and University of Southern California.
- Madajewicz, Malgosia. 2004. “Joint-liability Contracts versus Individual-liability Contracts.” Working paper, Columbia University.
- Microfinance Initiative For Asia (MIFA). 2009. Bangladesh: Microfinance and Financial

- Sector Diagnostic Study. *Promoting Microfinance in Asia*.
- MIX Market. 2012. Microfinance Information Exchange, Inc., MFI Report: Grameen Bank. Accessed March 24, 2012. <http://www.mixmarket.org/mfi/grameen-bank/report>.
- . 2012. Microfinance Information Exchange, Inc., MFI Report: BRAC. Accessed March 25, 2012. <http://www.mixmarket.org/mfi/brac/report>.
- . 2012. Microfinance Information Exchange, Inc., MFI Report: ASA. Accessed March 25, 2012. <http://www.mixmarket.org/mfi/asa/report>.
- Montgomery, Richard. 1996. “Disciplining or Protecting the Poor? Avoiding the Social Costs of Peer Pressure in Micro-credit Schemes.” *Journal of International Development* 8(2), (March–April): 289–305.
- Natarajan, Kartik. 2004. Can Group Lending Overcome Adverse Selection Problems? Department of Financial and Management Studies, University of London.
- Rahman, Syedur, and Craig Baxter. 2010. *Historical Dictionary of Bangladesh*. Maryland: Scarecrow Press, Inc.
- Sengupta, Rajdeep, and Craig Aubuchon. 2008. The Microfinance Revolution: An Overview. *Federal Reserve Bank of St. Louis Review*, 90(1): 9-30.
- Stiglitz, Joseph. 1990. “Peer Monitoring and Credit Markets.” *World Bank Economic Review* 4(3): 351–366.
- Yunus, Muhammad. 2003. *Banker to the Poor: The Autobiography of Muhammad Yunus, Founder of the Grameen Bank*. New York: Oxford University Press.
- . 2011. *What is Microcredit?* Accessed Feb 10, 2012. http://www.grameeninfo.org/index.php?option=com_content&task=view&id=28&Itemid=108.
- . 2009. *Annual Report 2009* Accessed March 14, 2012. http://www.grameen.com/index.php?option=com_content&task=view&id=758&Itemid=732.
- . n.d. *Grameen Bank II: The Grameen Generalised System*. Accessed Feb 11, 2012. http://www.grameeninfo.org/index.php?option=com_content&task=view&id=30&Itemid=764&limit=1&limitstart=3.

7 APPENDICES

7.1 Appendix A: Survey in Word Document Format

TITLE OF STUDY: Comparing the Effectiveness of Group Liability Contracts and Individual Liability Contracts by Bangladeshi Microfinance Institutions

INVESTIGATOR: *Schinria Islam* *PHONE: 001-775-830-3130* *EMAIL: schinria@hotmail.com*

PURPOSE

You are being asked to participate in a research study. The purpose of this study is to measure and compare the effectiveness of group liability contracts and individual group liability contracts by Bangladeshi microfinance institutions.

PARTICIPANTS

You are being asked to participate because you are a representative of a microfinance institution in Bangladesh that employs group liability lending or individual liability lending.

PROCEDURES

If you agree (or consent) to participate in this research study:

- 1) You will be asked to please complete the attached questionnaire in its entirety. The questionnaire should take no longer than 45 minutes to complete.
- 2) If it is not possible to fill out the questionnaire in English, you may fill it out in Bengali. In the latter case, your responses will be translated into English for use in the research study.
- 3) You may opt to fill out an electronic version of the questionnaire. If you prefer this method, I will send you a copy via e-mail upon my return to the United States.
- 4) If you are sent an electronic version of the questionnaire, please try to send back the questionnaire to me at schinria@hotmail.com within one month of the sent date.
- 5) Once you complete the attached questionnaire, you will not be asked to complete any further questionnaires.
- 6) You will have the option to receive an electronic copy of the completed research study via email once it is completed in June 2012.

CONFIDENTIALITY

- 1) Your identity will be protected in this research study. You will not be personally identified in any reports or publications that may result from this study. Identification information will be collected for personal contact purposes i.e. follow-up only.
-

- 2) Your questionnaire responses will be stored with me until the completion of my research study in June 2012. After the study is complete, your completed questionnaire will be shredded/deleted.

USE OF RESULTS

- 1) Your questionnaire responses will be used to represent your affiliated microfinance institution in this research study.
- 2) The research study aims to compare the effectiveness of group lending contracts and individual lending contracts—not the effectiveness of specific Bangladeshi microfinance institutions.

BENEFITS

The results of this study will contribute to the field and practice of microfinance by comparing the effectiveness of group liability contracts and individual liability contracts by Bangladeshi microfinance institutions. There may be no direct benefits to you as a participant in this study.

COSTS/COMPENSATION

There will be no cost to you nor will you be compensated for participating in this research study.

QUESTIONS

If you have questions about this study, please contact Schinria Islam by phone at 001-775-3130 or email at schinria@hotmail.com at any time.

CLOSING STATEMENT

I have read this form and voluntarily consent to participate in this study. I have been told what the study is about and why it is being done. All my questions have been answered.

I would like to receive an electronic copy of the completed study in June 2012 ().

Please send it the following email address: _____

First and Last Name of Participant

Phone Number & Email Address

Signature of Participant (*Actual or Electronic*)

Date

Signature of Investigator (*Actual or Electronic*)

Date

PARTICIPANT/ORGANIZATION INFORMATION

1. What is your first and last name? _____
2. On behalf of which microfinance institution (MFI) are you completing this questionnaire?

3. What is your position at this MFI? _____
4. What type of lending contract is employed by this MFI? Group liability () OR Individual liability ()

PORTFOLIO QUALITY

FY = Financial Year

* = if gender and geography information are unavailable, please provide total amounts

1. During FY 2011, how many loans were issued to:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

2. During FY 2011, what was the amount loaned to (\$):

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

3. During FY 2011, what was the average amount loaned to (\$):

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

4. During FY 2011, what was the average term of loans issued to:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

5. During FY 2011, what was the average interest rate of loans issued to:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

6. What is the current outstanding principal balance of loans issued to:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

7. What is the current outstanding principal balance of loans with at least one payment past due (more than 30 days) belonging to:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

8. What is the current outstanding balance of loans that are not past due but have been renegotiated for (\$):

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

9. Of the current loans with at least one payment 30 days past due, how many belong to:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

10. Of the renegotiated loans that are not more than 30 days late, how many belong to:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

11. Of all outstanding loans, how many belong to:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

12. Does this MFI write-off loans? Yes () OR No ()

If so, what was the loan amount written off during FY 2011 for:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

If so, what was the outstanding portfolio at the beginning of FY 2011 for:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

13. In FY 2011, what was the repayment rate of loans issued to:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

Please explain the metrics used to determine these repayment rates.

BORROWER BUSINESS QUALITY

1. Of the loans issued in FY 2011, how many were used to fund microbusinesses created by:

Males? _____
 Females? _____
 Rural borrowers? _____
 Urban borrowers? _____
***TOTAL** _____

2. On a scale of 1 to 10 (1=highly unsuccessful and 10=highly successful), please rate the average success of microbusinesses created by:

Males _____
 Females _____
 Rural borrowers _____
 Urban borrowers _____
***TOTAL** _____

Please explain the factors considered in selecting these ratings.

Please share any comments about your MFI's use of group liability contracts or individual liability contracts.

Please share any additional comments that may be important to consider in this study.

Thank you for your time and participation in completing this questionnaire. Thonubad!

7.2 Appendix B: Survey in SurveyMonkey™ Format

Questionnaire

[Exit this survey](#)

1. TITLE OF STUDY: Comparing the Effectiveness of Group Liability Contracts and Individual Liability Contracts by Bangladeshi Microfinance Institutions

INVESTIGATOR: Schinria Islam

PHONE: 001-775-830-3130

EMAIL: schinria@hotmail.com

PURPOSE

You are being asked to participate in a research study. The purpose of this study is to measure and compare the effectiveness of group liability contracts and individual group liability contracts by Bangladeshi microfinance institutions.

PARTICIPANTS

You are being asked to participate because you are a representative of a microfinance institution in Bangladesh that employs group liability lending or individual liability lending.

PROCEDURES

If you agree (or consent) to participate in this research study:

- 1) You will be asked to please complete the attached questionnaire in its entirety. The questionnaire should take no longer than 45 minutes to complete.
- 2) If it is not possible to fill out the questionnaire in English, you may fill it out in Bengali. In the latter case, your responses will be translated into English for use in the research study.
- 3) You may opt to fill out an electronic version of the questionnaire. If you prefer this method, I will send you a copy via e-mail upon my return to the United States.
- 4) If you are sent an electronic version of the questionnaire, please try to complete the online questionnaire within one month of the sent date. Thank you for your consideration.
- 5) Once you complete the questionnaire, you will not be asked to complete any further questionnaires.
- 6) You will have the option to receive an electronic copy of the completed research study via email once it is completed in June 2012.

CONFIDENTIALITY

- 1) Your identity will be protected in this research study. You will not be personally identified in any reports or publications that may result from this study. Identification information will be collected for personal contact purposes i.e. follow-up only.
- 2) Your questionnaire responses will be stored with me until the completion of my research study in June 2012. After the study is complete, your completed questionnaire will be deleted.

USE OF RESULTS

- 1) Your questionnaire responses will be used to represent your affiliated microfinance institution in this research study.
- 2) The research study aims to compare the effectiveness of group lending contracts and individual lending contracts—not the effectiveness of specific Bangladeshi microfinance institutions.

BENEFITS

The results of this study will contribute to the field and practice of microfinance by comparing the effectiveness of group liability contracts and individual liability contracts by Bangladeshi microfinance institutions. There may be no direct benefits to you as a participant in this study.

COSTS/COMPENSATION

There will be no cost to you nor will you be compensated for participating in this research study.

QUESTIONS

If you have questions about this study, please contact Schinria Islam by phone at 001-775-830-3130 or email at schinria@hotmail.com at any time.

Would you like to receive an electronic copy of the completed study in June 2012?

Yes

No

*2. CLOSING STATEMENT

I have read this form and voluntarily consent to participate in this study. I have been told what the study is about and why it is being done. All my questions have been answered.

First and Last Name of Participant

Phone Number & Email Address

Signature of Participant (Electronic)

Date

Next

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Questionnaire[Exit this survey](#)**PARTICIPANT / ORGANIZATION INFORMATION**

***3. What is your first and last name?**

***4. On behalf of which microfinance institution (MFI) are you completing this questionnaire?**

***5. What is your position/role at this MFI?**

***6. What type of lending contract is employed by this MFI?**

Group Liability

Individual Liability

Other (please specify)

[Prev](#)[Next](#)

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Questionnaire

[Exit this survey](#)

PORTFOLIO QUALITY

FY = Financial Year

* = if gender and geography information are unavailable, please provide total amounts

7. During FY 2011, how many loans were issued to:

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

8. During FY 2011, what was the total amount loaned to (\$):

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

9. During FY 2011, what was the average amount loaned to (\$):

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

10. During FY 2011, what was the average term of loans issued to:

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>

Urban
borrowers?

* TOTAL

11. During FY 2011, what was the average interest rate of loans issued to:

Males?

Females?

Rural borrowers?

Urban
borrowers?

* TOTAL

12. What is the current outstanding principal balance of loans issued to:

Males?

Females?

Rural borrowers?

Urban
borrowers?

* TOTAL

13. What is the current outstanding principal balance of loans with at least one payment past due (more than 30 days) belonging to:

Males?

Females?

Rural borrowers?

Urban
borrowers?

* TOTAL

14. What is the current outstanding balance of loans that are not past due but have been renegotiated for (\$):

Males?

Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

15. Of the current loans with at least one payment 30 days past due, how many belong to:

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

16. Of the renegotiated loans that are not more than 30 days late, how many belong to:

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

17. Of all outstanding loans, how many belong to:

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

18. Does this MFI write-off loans?

Yes

No

19. If "no" please skip to the Question 21.

If "yes" what was the loan amount written off during FY 2011 for:

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

20. If "yes" what was the outstanding portfolio at the beginning of FY 2011 for:

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

21. In FY 2011, what was the repayment rate of loans issued to:

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

22. Please explain the metrics used to determine these repayment rates.



Prev

Next

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Create your own [free online survey now!](#)

Questionnaire

Exit this survey

BORROWER BUSINESS QUALITY

FY = Financial Year

* = if gender and geography information are unavailable, please provide total amounts

23. Of the loans issued in FY 2011, how many were used to fund microbusinesses created by:

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

24. On a scale of 1 to 10 (1 = highly unsuccessful and 10 = highly successful), please rate the average success of microbusinesses created by:

Males?	<input type="text"/>
Females?	<input type="text"/>
Rural borrowers?	<input type="text"/>
Urban borrowers?	<input type="text"/>
* TOTAL	<input type="text"/>

25. Please explain the factors considered in selecting these ratings.

26. Please share any comments about your MFI's use of group liability contracts or individual liability contracts.



27. Please share any additional comments that may be important to consider in this study.



Please click "Done" once you've completed the questionnaire.

Thank you so much for your time and participation. Onek thonubad.

Prev

Done

7.3 Appendix C: E-mail Correspondence with ASA Representative

Email #1: Sent

From: **Schinria Islam** (schinria@hotmail.com)
 Sent: Fri 1/20/12 2:59 PM
 To: (name of ASA representative)

Asslamualikum (name of ASA representative),

This is Schinria ("Rimmi"), I met you recently in Bangladesh with the American students who visited ASA with Delwar Hossain and Dr. Miah from Southern Illinois University Carbondale. How are you doing?

First of all, I wanted to tell you that it was so wonderful to meet you and learn about ASA. Going to Bangladesh and meeting all of you was truly the best experience of my life and confirmed for me that I want to work in microfinance someday. It also helped me realize how proud I am to be Bangali, and I am so thankful I had the opportunity to learn from you about the work ASA is doing to empower and uplift many rural Bangalis out of poverty.

As I let you know when we met, I am writing my honors thesis at the University of Nevada, and my thesis is about liability contracts in Bangladesh. One of the organizations I am writing about is ASA, and I created a questionnaire that will help me better understand the lending practices of ASA and better describe the impact it's making in Bangladesh.

I looked online and wasn't able to find the answers to the questionnaire, so I will send you this questionnaire to your email address within the next few days, if you don't mind. Please let me know if you have any questions for me regarding the questionnaire because I do not want to give you any stress or trouble with this.

I truly appreciate that you are willing to help me with this questionnaire--Thank you for all of your help, it means so much to me and will help me tremendously in my project. Onek onek thonubad!

Thank you so much sir, I will send you another email this week with the questionnaire attached.

Have a great day!

Best,

-Rimmi :)

Email #2: Received

From: (name of ASA representative)
Sent: Fri 1/27/12 10:23 PM
To: Schinria Islam (schinria@hotmail.com)

Dear Ms. Rimmi,

Yes I still remember you and your team were in ASA, Bangladesh.

I shall definitely try to assist you to prepare your project. By the way, I went through your file that which you handed over to me during the meeting at President's Conference Room. Isn't that questionnaire you want information on or as you have prepared another one and want to send the same?

I shall remain very busy from 29 January till 7 February,2012 as there will be two teams on the floor during this time.

Also say Hi! to everyone I met on the team visited us.

Thanking you,

Best wishes,

(name of ASA representative)

Email #3: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Sat 1/28/12 9:23 PM
To: (name of ASA representative)

Hi (name of ASA representative),

Yes, the questionnaire I will send you to via email soon is the exact same one I gave you during the meeting. I hope the questions looked okay! :)

Thank you so much, I will send it within a few days! Feel free to fill out the questionnaire sometime after February 7th when you will have more time on your hands. Thank you SO much!

Have a great day,

Rimmi :)

Email #4: Received

From: (name of ASA representative)
Sent: Sun 1/29/12 1:44 AM
To: Schinria Islam
(schinria@hotmail.com)

Ok Schinria, I shall try my best to send your information package soon after 7th Feb. /12. Yes, so far questions seemed to me okay and while at work I'll see how much time it takes.

By now thank you once again for your prompt reply.

Best,

(name of ASA representative)

Email #5: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Sun 1/29/12 11:13 PM
To: (name of ASA representative)

Asslamualikum (name of ASA representative),

Here is the link to the questionnaire I spoke to you about in my previous email:

<https://www.surveymonkey.com/s/62MT9L2>

Please let me know if you have any questions or difficulty accessing the questionnaire through the link above. If you like, I can send you the questionnaire in the form of a Microsoft Word document also.

Thank you so much for your help and your time. I feel so lucky for meeting you and for your help with my project! :)

Khuthafis and Allahfis,

Rimmi :)

Email #6: Received

From: (name of ASA representative)
Sent: Mon 1/30/12 12:44 AM
To: Schinria Islam
(schinria@hotmail.com)

Dear Rimmi,

Yes I had an access to the link and got the print of 2 pages questionnaire. I will get it done on time and will send it to you.

Thanking you,
Best,
(name of ASA representative)
ASA, Bangladesh

Email #7: Received

From: (name of ASA representative)
Sent: Mon 1/30/12 1:43 AM
To: Schinria Islam
(schinria@hotmail.com)

Schinria,
Please send the questionnaire in the form of MS Word as I failed to get an access to the link but got your instructions (2 pages only) printed only.

Thanks,
Best wishes,
(name of ASA representative)

ASA

Email #8: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Mon 1/30/12 11:55 AM
To: (name of ASA representative)

1 attachment (78.0 KB)
Questionnaire.doc
View online

Hi (name of ASA representative),

Thank you so much. The link I sent you is for an Online version of the questionnaire, so it can be completely filled out online (and does not require

printing). After completing the questions on each page, you click "Next" at the bottom of each page to proceed to the next pages.

However, if you prefer to print out the MS Word version and fill it out by hand and either scan it/email back to me or send to me by mail, that will be perfectly fine. Whatever is easiest for you, sir! :)

Attached to this email is the MS Word version of the questionnaire.

Thank you so much again for your time and patience. I truly appreciate you!

Allahfis,

Rimmi :)

Email #9: Received

From: (name of ASA representative)
Sent: Fri 2/10/12 8:19 PM
To: Schinria Islam
(schinria@hotmail.com)

Dear Schinria,

We had busy days indeed!

We are working on your questionnaire. Hopefully, we will be able to send you the required information by next week.

Best wishes,

(name of ASA representative)

ASA

Email #10: Sent

From: **Schinria Islam**
 (schinria@hotmail.com)
 Sent: Sun 3/04/12 11:02 PM
 To: (name of ASA representative)

1 attachment (78.0 KB)
 Questionnaire.doc
 View online

Dear (name of ASA representative),

Amee hope kore tumi konek bhalo korthesu! :)

If you are not too busy, I was wondering if you were able to fill out the questionnaire yet. It will be due for my project in 2 weeks, so I wanted to see kindly if you were completed with it yet.

I will attach the questionnaire again to this email again for you.

THANK YOU :) Let me know if I can help you at all!

Khuthafis and Allafis,

-Rimmi :)

Email #11: Received

From: (name of ASA representative)
 Sent: Mon 3/05/12 8:40 PM
 To: Schinria Islam
 (schinria@hotmail.com)

Dear Schinria,

You are right that your report is still under preparation. Soon we finish it we will send it to you for your kind perusal.

Hope you are doing fine too.
Best wishes,
(name of ASA representative)
ASA

Email #12: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Mon 3/05/12 8:46 PM
To: (name of ASA representative)

Dear (name of ASA representative),
Thank you so much! I truly appreciate your help and your time! Onek thonubad!

:) Allahfiz,

-Rimmi

Email #13: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Fri 3/16/12 11:52 AM
To: (name of ASA representative)

Dear (name of ASA representative),

Asslamualikum. I hope you're doing well! I was wondering how the questionnaire was coming along and If I can help you with it in any way. I was hoping to use the results for my research in a few days, so I was wondering if I could please ask you when you may be able to complete it and send it back to me. Will it be possible to finish it by Tuesday, March 20th? :)

Thank you so much (name of ASA representative)! Hope to speak to you very

soon.

Thonubad and Allahfiz,

Rimmi :)

Email #14: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Thu 3/22/12 8:49 AM
To: (name of ASA representative)

Hi (name of ASA representative),

I hope you and your wife are doing well! I really enjoyed speaking to both of you the other night.

I was wondering **if I may have the survey completed and sent to me by tomorrow, Friday March 23rd**? They are due tomorrow for my research, so I will give you a call tomorrow morning to make sure you are okay with submitting it to me by tomorrow.

If you have any questions, feel free to ask! Thank you SO much!

Allahfiz,

Rimmi :)

Email #15: Received

From: (name of ASA representative)
Sent: Sun 4/01/12 1:27 AM
To: Schinria Islam
(schinria@hotmail.com)

1 attachment (27.7 KB)
Rimmi.xls
View online

Dear Schinria,

We are so sorry for being late in furnishing data on your study topic. And it is due to calculation/counting numbers from different sources of year/days, etc.

However, attached please find the data sheet herewith the email and let us know if still a few areas to be repaired again.

Hope your considerations,

Best wishes,

(name of ASA representative)

ASA

Email #16: Sent

From: **Schinria Islam** (schinria@hotmail.com)

Sent: Sun 4/01/12 10:50 AM

To: (name of ASA representative)

Hi (name of ASA representative),

THANK YOU so much! I am so happy to receive this report. I really appreciate the time and effort you and your co-workers put in to compute these numbers.

Onek thonubad!!

A few questions for you, if you don't mind:

-For question 4, you indicated "During FY 2011, what was the average term of loans (special+solor) issued to:"

What does (special+solor) mean? By "term" I meant what is the average time that it takes for a borrower to pay a loan off.

-Do you know what **ASA's "PAR (30 days)" for FY 2011 is?** This is the Portfolio at Risk (30 days).

-Do you know what **ASA's "LAR (30 days)" for FY 2011 is?** This is the Loans at Risk (30 days). If you know the PAR, the LAR is not necessary

-Do you know **ASA's "Write-Off Ratio" for FY 2011? Or what was the amount written off during FY 2011?**

Thank you so much (name of ASA representative)!

Sincerely,

Rimmi :)

Email #17: Received

From: (name of ASA representative)
 Sent: Sun 4/01/12 10:09 PM
 To: Schinria Islam
 (schinria@hotmail.com)

Dear Schinria,

Here are our replies:-

- We have 1 year, 1.5 years, 2.0 years term loans. It is to inform you that 1 year term loan volume is highest in portfolio, 1.5 years term loans are less highest in portfolio and 2.0 years term loans are least highest in portfolio. Therefore, if we average the three terms here we get the result of 1.5 years term loan which is known as special loan.
- But the primary loan installment/term are both weekly and monthly.
- Special+solar meant to indicate special loan term which is Tk.50,000/- plus; but upto 500,000/- only at present.
- PAR for FY2011 is 2.28%
- Write-off ratio for FY2011 is 0.78%

Hope this information would do your need.

Thanking you,

Best wishes,

(name of ASA representative)

ASA

Email #18: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Sun 4/01/12 11:50 PM
To: (name of ASA representative)

Thank you!!!! :)

Email #19: Received

From: (name of ASA representative)
Sent: Sun 4/01/12 11:59 PM
To: Schinria Islam
(schinria@hotmail.com)

You are welcome!

(name of ASA representative)

ASA

7.4 Appendix D: E-mail Correspondence with BRAC

Email #1: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Fri 1/20/12 2:50 PM
To: (name of BRAC representative)

Asslamualikum (name of BRAC representative),

This is Schinria ("Rimmi"), I met you recently in Bangladesh with the American students who visited the BRAC elementary school and other BRAC departments with Delwar Hossain and Dr. Miah from Southern Illinois University Carbondale. How are you doing?

First of all, I wanted to tell you that it was so wonderful to meet you and learn about BRAC. Going to Bangladesh and meeting all of you was truly the best experience of my life and confirmed for me that I want to work in microfinance someday. It also helped me realize how proud I am to be Bangali, and I am so thankful I had the opportunity to learn from you about the work BRAC is doing to empower and uplift many rural Bangalis out of poverty.

As I let you know when we met, I am writing my honors thesis at the University of Nevada, and my thesis is about liability contracts in Bangladesh. One of the organizations I am writing about is BRAC, and I created a questionnaire that will help me better understand the lending practices of BRAC and better describe the impact it's making in Bangladesh.

I will send you this questionnaire to your email address within the next few days, if you don't mind. Please let me know if you have any questions for me regarding the questionnaire because I do not want to give you any stress or trouble with this.

I truly appreciate that you are willing to help me get this questionnaire to the right person at BRAC--Thank you for all of your help, it means so much to me and will help me tremendously in my project. Onek onek thonubad!

Thank you so much sir, I will send you another email this week with the questionnaire attached.

Have a great day!

Best,

-Rimmi :)

Email #2: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Sun 1/29/12 11:15 PM
To: (name of BRAC representative)

Asslamualikum (name of BRAC representative),

Here is the link to the questionnaire I spoke to you about in Bangladesh and in my previous email:

<https://www.surveymonkey.com/s/62MT9L2>

Please let me know if you have any questions or difficulty accessing the questionnaire through the link above. If you like, I can send you the questionnaire in the form of a Microsoft Word document also.

Thank you so much for your help and your time. I feel so lucky for meeting you and for your help with my project! :)

Khuthafis and Allahfis,

Rimmi :)

Email #3: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Sun 3/04/12 11:00 PM
To: (name of BRAC
representative)

1 attachment (78.0 KB)
Questionnaire.doc
[View online](#)

Asslamualikum (name of BRAC representative),

I enjoyed speaking with you on the phone. I have attached my thesis survey to this email. I hope you enjoy filling it out!

My phone number in America is 001-775-830-3130

Please let me know if you have any questions or difficulty seeing the questionnaire through the link above.

THANK YOU so much for your help and your time. I am thankful for your help with my project! :)

Khuthafis and Allahfis,

Rimmi :)

Email #4: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Fri 3/16/12 11:58 AM
To: (name of BRAC representative)

1 attachment (78.0 KB)
Questionnaire.doc

View online

Asslamualikum (name of BRAC representative),

How is the questionnaire coming along? I was hoping I could ask you when you could have it completed and sent back to me. I will need it for my research next week, so may it be possible for you to finish it and send it back to me by **Tuesday, March 20th**? Please let me know if I can help you in any way!!!

I've attached the questionnaire to this email again for you.

Please let me know if you have any questions or difficulty seeing the questionnaire through the link above.

Thank you so much for your help and your time. I really appreciate your help with this questionnaire and my research in the USA!!

Khuthafis and Allahfis,

Rimmi :)

Email #5: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Sat 3/17/12 12:04 AM
To: (name of BRAC representative)

1 attachment (78.0 KB)
Questionnaire.doc
View online

Asslamualikum (name of BRAC representative),

Apne kemun asen? :)

Onek thonubad tumar help junu!

I have attached the questionnaire to this email. Please let me know if you have any questions about it!

I was hoping to get the completed questionnaire for my research next week, so may it be possible for you to finish it this week and send it back to me by

Wednesday, March 23rd?

My phone number in the USA is 0017758303130, feel free to call me anytime!

Please let me know if you have any questions or difficulty seeing the questionnaire through the link above.

Thank you so much for your help and your time. I really enjoyed speaking to you on the phone, and I really appreciate your help with this questionnaire and my research in the USA!!

Khuthafis and Allahfis,

Rimmi :)

Email #6: Sent

From: **Schinria Islam** (schinria@hotmail.com)

Sent: Sat 3/17/12 11:13 PM

To: (name of BRAC representative)

Asslamualikum (name of BRAC representative)!

It was so nice to speak to you on the phone again. I wanted to tell you thank you again for your help with my survey. You are really doing me a huge help, and I am very thankful for how much you have worked on it today and look forward to receiving it back in 2-3 days when it is complete.

Allahfiz and khuthafiz,

Rimmi :) :)

Email #7: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Thu 3/22/12 8:50 AM
To: (name of BRAC representative)

Hi (name of BRAC representative),

I hope you are doing well!

I was wondering **if I may have the survey completed and sent to me by tomorrow, Friday March 23rd**? They are due tomorrow for my research, so I will give you a call tomorrow morning to make sure you are okay with submitting it to me by tomorrow.

If you have any questions, feel free to ask! **Thank you SO much!**

Allahfiz,

Rimmi :)

Email #8: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Sat 3/31/12 11:16 PM
To: (name of BRAC representative)

Asslamualikum (name of BRAC representative),

Here is my email address again: **schinria@hotmail.com**

If you could please send me the survey again today, that would be perfect!

Thank you so much! Onek thonubad. :)

Bhalo theku & Allahfiz,

Rimmi :)

Email #9: Sent

From: **Schinria Islam**
(schinria@hotmail.com)
Sent: Sat 4/07/12 8:41 PM
To: (name of BRAC
representative)

Hi (name of BRAC representative),

Asslamualikum. I wanted to see if you could please resend the survey. I must submit my final project in a few days, and I am so sad I haven't received your email with the survey back yet.

I would truly appreciate your help, if you could please send the survey you said you completed.

Thank you (name of BRAC representative), Allahfiz,

Rimmi

7.5 Appendix E: E-mail Correspondence with Grameen Bank

Email #1: Sent

From: **Schinria Islam** (schinria@hotmail.com)
Sent: Fri 1/20/12 2:46 PM
To: (name of Grameen Bank representative #1)

Asslamualikum (name of Grameen Bank representative #1),

This is Schinria ("Rimmi"), I met you recently in Bangladesh with the American students who visited the Grameen Bank with Delwar Hossain and Dr. Miah from Southern Illinois University Carbondale. How are you doing?

First of all, I wanted to tell you that it was so wonderful to meet you and learn about the Grameen Bank. Going to Bangladesh and meeting all of you was truly the best experience of my life and confirmed for me that I want to work in microfinance someday. It also helped me realize how proud I am to be Bangali, and I am so thankful I had the opportunity to learn from you about the work the Grameen Bank is doing to empower and uplift many rural Bangalis out of poverty.

As I let you know when we met, I am writing my honors thesis at the University of Nevada, and my thesis is about liability contracts in Bangladesh. One of the organizations I am writing about is the Grameen Bank, and I created a questionnaire that will help me better understand the lending practices of the Grameen Bank and better describe the impact it's making in Bangladesh.

I looked online and wasn't able to find the answers to the questionnaire, so I will send you this questionnaire to your email address within the next few days, if you don't mind. Please let me know if you have any questions for me regarding the questionnaire because I do not want to give you any stress or trouble with this.

I truly appreciate that you are willing to help me get this questionnaire to the right person at the Grameen Bank--Thank you for all of your help, it means so much to me and will help me tremendously in my project. Onek onek thonubad!

Thank you so much sir, I will send you another email this week with the questionnaire attached.

Have a great day!

Best,

-Rimmi :)

PS - Delwar contacted you and let you know that one of the Dr. Yunus books I gave you to have Dr. Yunus sign (Creating a World Without Poverty) was missing, but please don't worry about it. I will just buy another copy of the book! No problem at all. :)

Email #2: Sent

From: **Schinria Islam** (schinria@hotmail.com)
Sent: Sun 1/29/12 11:12 PM
To: (name of Grameen Bank representative #1)

Asslamualikum (name of Grameen Bank representative #1),

Here is the link to the questionnaire I spoke to you about in Bangladesh and in my previous email:

<https://www.surveymonkey.com/s/62MT9L2>

Please let me know if you have any questions or difficulty accessing the questionnaire through the link above. If you like, I can send you the questionnaire in the form of a Microsoft Word document also.

Thank you so much for your help and your time. I feel so lucky for meeting you and for your help with my project! :)

Khuthafis and Allahfis,

Rimmi :)

Email #3: Received

From: (name of Grameen Bank representative #1)
Sent: Mon 1/30/12 3:42 AM
To: Schinria Islam (schinria@hotmail.com)

Dear,

Thank you for you comments and questionnaire. I am requesting you to send your questionnaire to address our General Manager and cc to me then she will assigned one of our colleague or me. Thank you for you understanding.

Thank you once again

Bests,

(name of Grameen Bank representative #1)

Email #4: Sent

From: **Schinria Islam** (schinria@hotmail.com)
Sent: Mon 1/30/12 11:57 AM
To: (name of Grameen Bank representative #1)

Dear (name of Grameen Bank representative #1),

Yes I will happily do that! May I please get the email address of your General Manager? Once I know her email address, I will send her the questionnaire by email and CC you on it so we can see who would be the best person to complete the questionnaire.

Thank you so much, I really appreciate you!!

Allahfis,

Rimmi :)

Email #5: Received

From: (name of Grameen Bank representative #1)
Sent: Tue 1/31/12 12:14 AM
To: Schinria Islam (schinria@hotmail.com)

Dear Rimmi,

My General Manager is (name of Grameen Bank representative #2)<g_iprog@grameen.com>

I'm waiting for your email.

Bests,
(name of Grameen Bank representative #1)

Email #6: Sent

From: **Schinria Islam** (schinria@hotmail.com)
Sent: Sun 2/05/12 12:43 AM
To: (name of Grameen Bank representative #2)
Cc: (name of Grameen Bank representative #1)

Asslamualikum (name of Grameen Bank representative #2),

Hello my name is Schinria Islam (I go by "Rimmi"), and I met you a few weeks ago at the Grameen Bank as I came with American students and Dr. Mizanur Miah and Mr. Delwar Hossain. It was wonderful to learn more from you and Mr. Harun about Grameen Bank's operations. I spoke to you briefly about my interest and curiosity about Grameen Bank, and I wanted to write you and let you know about my thesis that I am writing about group liability contracts in Bangladesh. One of the organizations I will be writing about in my thesis is the Grameen Bank, and to help me learn more about the Grameen Bank's portfolio quality and borrowers it assists, I created a questionnaire that would help me tremendously.

I looked through Grameen Bank's information online and was not able to find the answers to my questions in my thesis, so I was wondering if I may please ask you who at the Grameen Bank might be the right person to give this questionnaire to. This thesis will help bring awareness to the United States about Grameen Bank's work, and I would appreciate any help in getting the questionnaire filled out so I can use it to describe the amazing work the Grameen Bank is doing in Bangladesh.

The questionnaire (which can be filled out completely online) is at the link here:

<https://www.surveymonkey.com/s/62MT9L2>

I would truly love your help for my questionnaire. Please let me know if there are any questions or difficulties accessing the questionnaire through the link above. If you like, I can send the questionnaire in the form of a Microsoft Word document also.

I truly appreciate your help and your time! Thank you so much for everything!

Allahfis,

Rimmi :)

Email #7: Sent

From: **Schinria Islam** (schinria@hotmail.com)
Sent: Sun 3/04/12 11:23 PM
To: (name of Grameen Bank representative #1); (name of Grameen Bank representative #2)

1 attachment (78.0 KB)

Questionnaire.doc

[View online](#)

Dear (name of Grameen Bank representative #2) and (name of Grameen Bank representative #1),

Ameem hope kore tumra konek bhalo korthesu! :)

If you are not too busy, I was wondering if anyone at the Grameen Bank was able to fill out the questionnaire yet. It will be due for my project in 2 weeks, so I wanted to see kindly if someone at the Grameen Bank was completed with it yet.

If you have questions about the questionnaire, my phone number in the United States is 001-775-830-3130.

I will attach the questionnaire again to this email again for you.

THANK YOU SO MUCH! :) Let me know if I can help you at all!

Khuthafis and Allafis,

-Rimmi :)

Email #8: Sent

From: **Schinria Islam** (schinria@hotmail.com)
Sent: Fri 3/16/12 11:55 AM
To: (name of Grameen Bank representative #1); (name of Grameen Bank representative #2)

1 attachment (78.0 KB)
Questionnaire.doc
[View online](#)

Dear (name of Grameen Bank representative #2) and (name of Grameen Bank representative #1),

Assalamualikum. I hope you're both doing well!

I was wondering how the questionnaire was coming along and If I can help you with it in any way. I was hoping to use the results for my research in a few days, so I was wondering who I can speak to you at the Grameen Bank to complete the

survey so I can speak adequately on behalf of the Grameen Bank in my research.
I've attached the questionnaire, again, for your convenience.
Thank you so much! Hope to speak to you very soon.

Thonubad and Allahfiz

Rimmi:)

Email #9: Received

From: **GB International Program** (g_iprog@grameen.com)
Sent: Wed 3/21/12 12:17 AM
To: Schinria Islam (schinria@hotmail.com); (name of Grameen Bank representative #1)

Date : March 21, 2012

To: Schinria Islam
Email: schinria@hotmail.com

From: (name of Grameen Bank representative #2)
General Manager
International Program
Grameen Bank, Head office
Mirpur-2, Dhaka-1216 **Phone: 880-2-9007596**
Email: g_iprog@grameen.com

Dear **Schinria**,

Greetings from Grameen Bank!

We have received your email dated March 4 & 16, 2012 regarding your research work. With this email we are informing you that we would be unable to accommodate you as researcher and filling out your questionnaire.
Thank you once again for your understanding.

Best regards

Sincerely
(name of Grameen Bank representative #2)