UNTAPPED RESOURCES: HOW UNDERDEVELOPED GENDER EMPOWERMENT CONSTRAINS THE DEVELOPMENT POTENTIAL IN BANGLADESH

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UNTAPPED RESOURCES

HOW UNDERDEVELOPED GENDER EMPOWERMENT CONSTRAINS THE
DEVELOPMENT POTENTIAL IN BANGLADESH

By

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Gender empowerment is an oft-cited result of microfinance participation. However, research to verify this outcome continues to produce ambivalent results implying that microfinance programs are not maximizing their potential impact. While gender empowerment may be a desirable end to development, it is less often used as a means to achieve development goals. This paper tests the hypothesis that gender empowerment improves microfinance program performance using data from the Bangladesh Rural Advancement Committee (BRAC) and a theoretical framework based on prevalent institutional ideologies. The results show that empowered clients have a higher likelihood of attaining desirable program outcomes. These results can be taken as evidence that microfinance organizations should consider investments in support programs to directly address social impediments to gender empowerment as a way to increase their overall effectiveness.
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CHAPTER 1: THE EMPOWERMENT MYTH

Microfinance programs in Bangladesh have been celebrated in the development community for almost two decades. The programs, operated by internationally renowned non-governmental organizations like the Nobel Prize winning Grameen Bank, provide small loans to borrowers who have traditionally been excluded from the formal banking sector. This bottom-up approach to poverty alleviation disciplined by market forces appeals to a broad range of ideologies. In addition, the focus on female borrowers has promoted the idea that microfinance is a tool for gender empowerment.

In reality there is scarcely explored terrain between microfinance and gender empowerment. What lies between the two is an assumption that increasing female income-generation translates into elevated status within households and communities. In their book, *The Economics of Microfinance*, Beatriz Armendariz de Aghion and Jonathan Morduch describe the gender empowerment record as a myth which is increasingly taken for granted as fact (de Aghion and Morduch 2005). As microfinance programs expand and multiply around the world, gender empowerment is an assumption merits closer examination.

In Bangladesh, it is believed that targeting women for microfinance participation makes sense for a number of reasons (de Aghion and Morduch 2005). First, women are better household stewards; they use their income to increase family nutrition and educate their children. Second, they are more responsible clients; loans dispersed to women have higher repayment rates than loans dispersed to men. Finally, microfinance
institutions claim that providing women with access to credit increases their capabilities and options; participation by definition is empowering.

However, none of these rationales maintain their superficial virtue after a critique. Women are better household stewards than men because they are economically, socially, and physically confined to the household. High repayment rates among women are often attributed to advent of group lending. A women’s primary duty outside of the home is to maintain a family’s honor and status in the community. In this context, group lending can be a mechanism of group support, but it can also be powerfully coercive. Accounts of public torment and suicide of defaulting female borrowers are not uncommon (Cheston and Fraioli, 2002).

Finally, the claim that the act of participation in microfinance programs is itself empowering produces contradictory evidence. Empowerment is a complex interaction of factors, economic being just one. It is unclear if access to credit has any impact on the enormous social empowerment constraints that also limit women’s choices. The chance that these social constraints are affected diminishes when one stops assuming that loans dispersed to women are always and necessarily used or controlled by those women. Naila Kabeer (Kabeer 2001) found that on average only 40% of women who received loans were the primary decision-maker in how the loan was used.¹ More often than not, a woman’s participation is limited to that of a financial intermediary between the microfinance institutions and male relatives. Some researchers have alleged that

¹ In the data used for this paper I found that only 38% of female borrowers have any say (sole or joint control) in how loans are utilized (NWMF Data, 2007).
under these circumstances microfinance is actually disempowering. Women who act as intermediaries are held accountable for loans even if they lack control over them. Some studies have shown increased domestic violence, polygamy, and even decreased female consumption associated with microfinance participation.

It remains inconclusive whether or not microfinance is empowering, and it is also unknown how or to what extent empowerment contributes to the success of a microfinance program. Some authors have hypothesized a positive feedback loop between client empowerment and the performance of microfinance programs. In what she calls virtuous spirals, Linda Mayoux (2005) describes microfinance programs as both benefiting from and contributing to gender empowerment. It is important to better understand this two-way relationship because, while few in Bangladesh openly dispute the value of gender equality and empowerment, the fact that progress through microfinance has been ambivalent implies that the issue still lacks the focus it deserves.

In other contexts, particularly management studies, the contribution of empowerment in attaining organizational goals has been studied at length. Such research in the microfinance sector may shift organizational and donor attitudes in favor of support programs and strategies to directly enhance the gender empowerment of their clients as a means to achieve the larger goals of microfinance.

This paper will explore the contributions that client empowerment has on the success of microfinance programs. However, before the issue can be handled other questions need to be addressed, namely “what is empowerment?” and “how is success defined by microfinance organizations?”
As a catch-phrase, empowerment has been around for several decades. Rather than codifying a single definition, empowerment advocates have emerged from every theoretical persuasion and capitalized on its intangible quality. In short, empowerment is broadly used to describe a range of desirable outcomes and assumes different meanings depending on who is using it. In development, its most devout promoters can be divided into two very different and often conflicting groups, the new neo-liberals and the promoters of well-being centered development. New neo-liberals see empowerment as a valuable input for capital accumulation and economic growth. This interpretation has been adopted by many international institutions in response to criticisms of structural reform policies. Such reforms were widely condemned for producing growth and increasing market stability at the expense of the poor. By incorporating empowerment into their programs, some institutions hope to assume a “pro-poor” approach to growth and development.

Many of those who criticized structural reform did so while advocating a more holistic approach to development. These critics view individual and community well-being as the ultimate focus of development—health, education, and improved living standards and capabilities. In this mode of thinking, empowerment is a chief desirable outcome which creates positive feedback for all other well-being measurements. In short, from the well-being perspective empowerment is development.

These ideological standpoints, new neoliberal and well-being, account for differences in defining success and goals of microfinance programs. Based on the

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2 An outcome which contributes to virtuous spirals (Mayoux 2006).
perpetuated notion that development can be equated with economic growth, new neo-
liberals support a best practices approach to microfinance. The goal of institutions that
reflect this view is to create financially sustainable programs that link clients to
traditional banking and financial services. Microfinance programs that are driven by the
well-being approach exist to improve the quality of life of their participants. The goals
these programs may emphasize include improving living standards and helping the poor
develop the skills and abilities to effectively represent and attain their needs.

Gender Disempowerment in Bangladesh
It should be noted that most microfinance programs reflect a combination of
these two perspectives and that the expectations of donors are an important factor in
shaping a program’s publically espoused goals and mission.

The underlying idea that has promoted the importance of empowerment is that
groups and individuals should have equal opportunities to compete and participate in an
aspiring capitalistic/democratic society. Mainstream development embraces these
economic and political systems and policies and programs attempt to create favorable
conditions for liberal institutions. Most contemporary Western thought would not
believe that it is possible for an illiberal society to prosper—rights and freedom are
essential to functioning democratic and capitalistic institutions.

From this prospective, gender empowerment in Bangladesh would help reshape
a paralytic illiberal society into one that is more capable of development. A second,
more pragmatic (and less politically thorny) rationale for empowerment is that the
productivity of microfinance programs are constrained proportionally to the extent that
women are disempowered. While millions are being spent in microfinance programs, the poverty alleviation possibilities are far from being realized because female bowers are limited by discrimination.

In Bangladesh, women are traditionally subordinate to men. The country has a patriarchal, patrilineal, and patrilocal social system that governs women’s economic activity, mobility, and responsibilities (Pal 2001, 4). Male children are valued as potential providers and perpetrators of family names and daughters are seen as temporary members in their households. Thus, resource allocations favor sons while women are viewed in a reproductive capacity and as dependants.

Social and cultural conditions in Bangladesh result in enormous economic disparities for women. This disparity is readily apparent in the labor market where women are concentrated in a few sectors: agriculture, manufacturing, and self-employment. Agriculture primarily takes place at home in the form of small animal rearing and tending fruit trees and gardens. During harvest and planting poor rural women may also work as day laborers. The garment industry is the largest part Bangladesh’s manufacturing sector. It drives most of the country’s economic growth and primarily employs young women in urban areas. Manufacturing also includes handicrafts, another large employer of women. Self-employed women are primarily domestic service workers.

All of these sectors have one thing in common: they are low skill and offer equally low wages. Domestic servants and day laborers are often paid with subsistence food rations (Labour Market & Trade Union Fact Sheet 2006). Small scale animal rearing
and handicrafts are traditional areas of female employment which are highly competitive and offer very small profit margins. The garment industry attracts thousands of girls and young women to urban areas every year. This gives them a measure of independence, but with very little compensation. The minimum wage in the garment industry is currently set by the Bangladesh Wage Board at 1662.5 BDT a month, about 332 USD annually (Yan 2008). Almost no women work in sectors that offer reasonable wages and a way out of poverty.

The cultural and religious norms of purdah, physical female seclusion, limit women’s engagement in the public sphere in various ways throughout the country. The observance of purdah imposes restrictions on dress, mobility, and interactions with men outside of one’s household. This makes it difficult or impossible for a woman to safely act in the market place which, consequently, severely limits economic opportunities for women. Women who fail proper observance of purdah, risk lowering the social status of their households and can be subjected to public assault and harassment. Researchers have noted that increasing wealth and status can create a perverse incentive by enabling poor women to increase their observance of purdah as their income allows them to do so. Naila Kabeer notes that purdah is often simultaneously expressive of class hierarchy and social standing but that the relationship is not entirely straightforward due to complex highly localized traditions which determine what constitutes acceptable and unacceptable behaviors for women (Kabeer 2001, 69).

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3 For more information on minimum wage negotiations in Bangladesh see www.cleanclothes.org and www.labourbehindthelabel.org.
4 Common in Muslim and Hindu households.
Women in Bangladesh are poor and it is not because they lack access to credit. Women are poor and will continue to be poor until they have equal access to markets and economic opportunities. Women do not have equal access because of the pervasive gender attitudes that restrict their opportunities and choices. Simply providing clients with credit without simultaneously expanding their opportunity to make productive use of their financial capital is not an empowering poverty eradication strategy, which is evident in the ambivalent outcomes microfinance has for empowering female clients.

In summary, a simple syllogism can demonstrate that microfinance programs in Bangladesh are not using their resources optimally:

- Most microfinance programs in Bangladesh are market-based solutions that target women.
- Markets do not work optimally when choices are limited.
- Women acting in markets in Bangladesh face severely limited choices.
- Therefore, most microfinance is not operating optimally.

**Hypothesis**

I hypothesize that regardless of ideological persuasions, gender empowerment improves microfinance performance. Microfinance programs are not operating optimally unless women are being empowered to participate directly in markets. To improve the returns of microfinance programs, organizations should prioritize empowerment and actively strive to improve their female clients’ social standing while simultaneously expanding and encouraging their economic activity. This is verifiable through deductive reasoning, supported by the theoretical work of numerous scholars, and verifiable through qualitative observation and empirical research.
This paper will start by describing the framework I use to test this hypothesis. I will discuss the two prevailing ideologies in development and describe how they shape our understanding of empowerment. This discussion will conclude with a description of gender empowerment as it is commonly applied in Bangladesh’s microfinance programs.

I will then survey the previous literature on empowerment in microfinance. The framework that was used to describe different conceptions of development and empowerment will be extended to analyze the often conflicting goals of microfinance.

Finally, I will use the framework to test the conclusion from the two prevailing ideological standpoints. To do this I used data from the Bangladesh Rural Advancement Committee’s (BRAC) Northwest Microfinance Expansion Project (NWMF). The NWMF data tracked participants from 2002 to 2006 in seven of the poorest and most underserved districts (zila) of Bangladesh: Ponchagar, Thakurgaon, Dinajpur, Nilphamari, Lalmonirhat, Rangpur and Gaibandha.

With this data, it is possible to determine what impact empowerment, or disempowerment, has on program performance from either of the prevailing ideological standpoints. The results show that empowerment should be widely recognized as both an important end and means to development, that confronting traditional gender norms could increase development returns, and that programs, regardless of ideological bias, would benefit from higher levels of gender empowerment.
CHAPTER 2: FRAMEWORK

The Two Faces of Empowerment

As discussed in the introduction, the idea that Bangladeshi microfinance programs empower their female participants is a presumption based on conflicting evidence and unproven theory. The literature on empowerment, while abundant, fails to generate a consistent definition or indicators. These definitions and usages can be divided into two broad ideological categories, new neoliberal and well-being, ideologies that also reflect two fundamentally different concepts of development.

Empowerment is an interdisciplinary concept with roots in psychology and political science where theories of power and power relations are examined from the individual to the macro levels. The term was popularized in contemporary vocabulary through management practices of the 1980s and 1990s (Wilkinson 1998). In the 1970s, so called “industrial democracy” emphasized workers’ rights to participate in traditional management decisions as a means of making the workplace more meaningful, and thus increasing worker productivity. The political and ideological shifts in the 1980s in America and Europe popularized aspects of this management philosophy and gave birth to the existing understanding of empowerment. Individuals within an organization were to be seen as entrepreneurs unhindered by bureaucracy and free to unleash their talents. Management buzzwords of the time such as “productivity through people” and “autonomy and entrepreneurship,” would fit comfortably in the promotional jargon of most microfinance enterprises (Peters and Waterman 1982).
Prior to the popularization of “empowerment,” economic development policy was dominated by a theoretical school that emphasized liberalized trade and stable macroeconomic growth. Out of appreciation for the attempt to fit developing economies into classical liberal paradigms, these theories are referred to as neoliberal and are credited with producing structural reform policies, also known, more pejoratively, as the Washington Consensus. The Washington Consensus is a phrase coined by John Williamson to “refer to the lowest common denominator of policy advice being addressed by the Washington-based institutions to Latin American countries” (Williamson 2000, 251). This denominator consisted of ten parts: 1) Fiscal discipline; 2) Changing public expenditure; 3) Tax reform; 4) Interest rate liberalization; 5) Instituting a competitive exchange rate; 6) Trade liberalization; 7) Lower barriers to foreign direct investment; 8) Privatization; 9) Deregulation; and 10) Property rights.

Structural reform equated development with macroeconomic growth, and prescribed policies that were believed to have transformed the European and American economies over the eighteenth and nineteenth centuries. Its opponents, however, saw that policies often lacked important components, could generate a host of disastrous side effects, and many did not agree that stable growth should be at the heart of development.

Among the issues the Washington Consensus neglected were financial regulation, the facilitation of technology transfer, and efforts to encourage and improve transparency (Stiglitz 1998). Emphasizing market liberalization often left governments with insufficient tools to address serious market failures. Joseph Stiglitz argues that rigid
adherence to free-market dogma is in part to blame for the Asian economic crisis of the late 1990s (Stiglitz 1998).

Many of the countries that subscribed to structural reform did not attain the expected outcomes—some even fared worse. The Washington Consensus’ preoccupation with lowering inflation constrained growth and employment in some countries. The Consensus also promoted free trade which was as controversial in the developing world as it has become in developed nations. Free trade policies can lead to a loss of jobs and decreasing benefits and compensation as firms struggle to compete, and rising prices as governments eliminate subsidies. All of these effects disproportionately affect the poor. The most damning evidence against the Washington Consensus is that in its heyday, poor countries became relatively poorer. Between 1960 and 1990, the ratio of GDP per capita of the highest to lowest income countries widened from 38.5 to 45.2 (Pritchett 1997, 11). It appeared to many onlookers that World Bank and International Monetary Fund policy had failed to stimulate development.

Finally, many prominent critics of the Washington Consensus disagreed about the goal of development that structural reform works toward. Joseph Stiglitz, who served as the Senior World Bank Vice President from 1997 to 1998, called to “broaden the objectives of development to include… sustainable development, egalitarian development, and democratic development” (Stiglitz 1998, 1). Others had been calling for an even more drastic shift in thinking for years. 1998 Nobel laureate Amartya Sen, argued that rather than being conducive to development, “substantive freedoms (that
is, the liberty of political participation or the opportunity to receive basic education or health care) are among the *constituent components* of development” (Sen 1999, 5).

With rising unpopularity of the Washington Consensus and structural reform policies the World Bank and IMF looked for new ways to improve their programs and their image. This lead to what Dani Rodrik dubbed the “augmented Washington Consensus” (Rodrik 2001, 16), which includes:

- Corporate governance
- Anti-corruption
- Flexible labor markets
- World Trade Organization agreements
- Financial codes and standards
- “Prudent” capital-account opening
- Non-intermediate exchange rate regimes
- Independent central banks/inflation targeting
- Social safety nets
- Targeted poverty reduction

I would argue that empowerment should be added to this list. The World Bank’s 2000/2001 World Development Report officially works it into a poverty reducing framework by suggesting that the 1980s was a time that focused on economic management and building reliance on market forces. This was followed by the 1990s when governance and institutions became the logical focus of reform. Now, the report states that the next ten year plan is to build on the previous two decades of progress and proposes a “strategy for attacking poverty in three ways: promoting opportunity, facilitating empowerment, and enhancing security” (World Bank 2000/2001, 6). The Report states that political empowerment of the poor is one way to strengthen the institutional environment of democratic regimes and make them more effective at
reducing poverty (World Bank 2000/2001, 114), but the only definition of empowerment that is suggested by the document is that it is something that makes state and social institutions more responsive to the poor (World Bank 2000/2001, 3).

The chronological framework described in the 2000/2001 report evolved further under the scholarship of Lord Nicholas Stern, the Bank’s Chief Economist and Senior Vice President from 2000 to 2003. In a series of lectures he describes two pillars in a development strategy: creating an investment climate and advancing empowerment (Stern, Dethier and Rogers 2005, 129). This approach, described in the tellingly titled book *Growth and Empowerment* (Stern, Dethier and Rogers 2005), views empowerment as a previously unobserved pillar that, along with macroeconomic reform, lifts up the pediment of development by helping support a positive investment environment. This framework appears to be in keeping with the ideas of Stern’s predecessor, Joseph Stiglitz, but does not endorse redefining development as Amartya Sen suggests. This framework and Stern’s coined definition of empowerment, a process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes, has become deeply integrated into the World Bank’s operations.⁵

The competing perspective on empowerment is championed by Amartya Sen and others who seek to redefine the process and goals of development. In response to the dominant perspective which still concentrates on creating stability and growth, the

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alternative theory seeks to redefine development as a process that creates the things that lead to a good life — health, education, and freedoms. Sen does not deny the importance of economic stability and income (Anand and Sen 2000, Sen, “A Decade of Human Development” 2000), but does seek to move away from them as a primary objective.

This approach, though widely appealing, is more difficult to quantify and monitor than that of the new neoliberals, which may explain why it has not been fully embraced by international institutions in an era of accountability and transparency. Proponents of empowerment on the well-being side tend to favor this conception for the same reason. Amartya Sen himself, when writing on the Human Development Index, claimed that the “lack of a general theory allows for an openness that is important for this kind of work” (Sen, A Decade of Human Development 2000, 22). While it is difficult to precisely define empowerment from this perspective it is clear that the well-being approach is characterized by its role in the development framework: to new neoliberals it is a tool to support development, but to well-being proponents it is development and the things that empower — health, education, and income — are the supports.

Today there exist two fundamentally different and often competing ideas of what development is, yet both sides embrace “empowerment.” The World Bank invests millions of dollars in empowerment programs, from establishing farmers’ collectives in Sub-Saharan Africa to incorporating technology into everyday lives in rural Japan. In this new neoliberal framework empowerment is a vital input that when added to the existing formula produces the consistent desired output, stable growth. For proponents
of well-being, empowerment is both an important input and the desired output. These
same ideological groups nicely parallel two perspectives on microfinance, which will be
discussed at greater length in the next section.

Competing Perspectives on the Purpose of Microfinance
Empowerment is an oft-cited product of microfinance. The advent of these
programs coincided with the rise of Amartya Sen’s theories and the rethinking of the
Washington Consensus, so it is not surprising that microfinance was initially acclaimed
as a mechanism for empowerment. What is surprising is that the relationship is still so
widely assumed to exist when there is still so little evidence for it.

The primary body of literature on empowerment and microfinance begins in the
used a five point index of managerial control as an indicator of empowerment. They
found that the majority of women, particularly married women, exercised little or no
control over their loans, which suggests three scenarios for repayment— all of which
have negative implications for women. First, male family members who use the loan
might take responsibility for repayment, which, although not a negative outcome for the
female borrowers, negates the objective of lending to women. Second, men may be
unable to contribute to repayments and the female borrowers have to substitute funds
from their own sources—they have all the responsibility without any of the control.
Finally, there are men who are unwilling to repay the loans. This leads to increased
tension within the household and contributes to an increase in violence (Vonderlack and
Schreiner 2002). The authors recommended developing programs and strategies to give
female borrowers access (Vonderlack and Schreiner 2002) to markets as a way to support borrowers and build gender empowerment. In 1996, Gotez and Gupta found that lost bargaining power may force female borrowers to surrender a fraction of their loans to their husbands in exchange for his services as her informal contract enforcer (Gotez and Gupta, 1996). Ackerly (1995) uses accounting knowledge as an indicator that other transformative outcomes are occurring. She found that where women did not have control of their loans and were ill-aware of their rights, they did not demonstrate increased empowerment as a result of microfinance participation. She also found that access to markets is the most important determinant of empowerment. She warned that the likelihood of overwork, fatigue, and malnutrition would increase where loans were used to promote women’s labor involvement without also promoting market access. Finally, among the early myth detractors, Montgomery, Bhattacharya, and Hulme (1996) found that only 9% of first-time female borrowers were the primary users of their loans and that access to loans did little to change management within the household for either female or male borrowers. They found that loans had done little to empower women; they succeeded in increasing the social status of the loan-receiving women compared to less well-off women, but did nothing to elevate their status in their household or the wider community vis-à-vis men.

In the 1990s microfinance programs still left the vast majority of the so-called “ultra poor” underserved (Matin 2005). As a result, these early studies concentrated on the relatively affluent moderate poor. Product diversification and better targeting means that more and more of the most impoverished Bangladeshis are now served by
microfinance programs. However, the changing demographics of the target population have had no impact on researchers who would question the empowerment assumption. Naila Kabeer finds that patriarchal practices put women at a comparative disadvantage for accessing certain lucrative markets. This causes them to face tradeoffs, which leads them to make decisions that are arguably disempowering, such as clustering in low-productivity activities and/or relying on male family members as contract enforcers (Kabeer 2001). While access to credit succeeded in increasing the rate at which women participated in economic activities, it failed to increase the range of economic activities to which they have access. The vast gender disparities in market access and earning potential are confirmed by Sukti Dasgupta and Smita Barbattini who find that self-employed Bangladeshi men earn more than three times the income earned by self-employed women and small scale male entrepreneurs earn about four times more than their female counterparts (Dasgupta and Barbattini 2003).

At the same time, there are those who find evidence that supports the idea that microfinance empowers women. In 1986, Rushidan Rahman did an impact evaluation for Grameen Bank. He found that “active” female borrowers (women who personally utilize the loans) were more likely to have a role in household decision making than “passive” female borrowers (those who act as intermediaries for male relatives). However, both active and passive female borrowers had higher rates of consumption and were more likely to participate in household decision making than women in households that were not participating in microfinance (Rahman 1986). Hashemi, Schuler, and Riley explored the impact of credit on a number of indicators of
empowerment, including women’s economic contribution, female mobility, control over purchasing decisions, asset control, and political and legal awareness. They found that access to credit was significant in increasing the likelihood of greater asset control, purchasing decisions, and political and legal awareness. They also found that access to credit was associated with reduced levels of violence against women (Schuler, Hashemi and Riley 1997). More recently, it has been demonstrated that female microfinance participation reduces fertility and has a positive impact on child health (Pitt, Khandker, and Cartwright, 1999; Pitt, Khandker, Choudhury, and Millimet 2003). 6

While the possibility exists that microfinance can be a vehicle for female empowerment, the studies that make positive findings do not address concerns raised by detractors in such a way that erases all doubt. Schuler, Hashemi, and Riley (1996) come closest to exploring a comprehensive definition of empowerment, but their study precedes the extensive outreach to the ultra poor and omits income and status differentials between rural microfinance clients and their non-participating neighbors as a possible explanatory variable. Serious doubts regarding the empowerment claim have yet to be satisfied so it cannot be determined what impact microfinance really has. That said, even the most skeptical observers do not claim that microfinance programs lack the potential to be major vehicles for improving the status of their female clients. Fulfilling this potential largely depends on espoused values and goals of microfinance programs.

While Pitt, Khandker and Cartwright initially suggested that this was a sign of empowerment, in 2006 Pitt et al. conceded that choosing to care for a sick child was not necessarily an implication that women have gained power in the household (Pitt, Khandker and Cartwright 2006).
As I suggested earlier, the founding ideologies of empowerment neatly correspond with two different perspectives on the goals of microfinance programs. These are the best practices perspective and the well-being perspective. They impact what goals a program aspires to and how they are managed.

In 1995 a group of donor agencies lead by the World Bank launched the Consultative Group to Assist the Poor (CGAP) to improve the quality of microfinance programming. This quickly became a push to move donors and programs toward identified best practice performance standards. CGAP is currently housed in the World Bank, and the best practices perspective of microfinance parallels that institution’s characteristic approach to development by emphasizing the need for self-sufficient and financially sustainable microfinance programs. The best practices perspective does not believe that microfinance institutions should be comprehensive development organizations or “social protection systems and safety net programs” (Consultative Group to Assist the Poor 2006, 10). Rather, they provide the poor who need it with access to a wide range of quality financial services that are integrated into the overall national or international financial systems. The best practices approach attempts to build microfinance institutions in the same model as traditional financial institutions, market oriented and weaned from donors, which suggests that they are not appropriate everywhere for everyone.

The best practice framework is a three tiered “inclusive” system. At the micro-level are retail financial institutions characterized by good governance, optimal interest rates, incentivized employees, and diverse products that reward the most loyal and
responsible clients. The ideal clients for micro-level retailers can be characterized as successful if she or he makes payments on time, steadily increases his or her involvement with the MFI, and purchases multiple products. The meso-level enables micro-level retailers by facilitating linkages with mainstream institutions with networks and associations, auditors, rating agencies, credit bureaus, and information technology providers. Finally, on the macro-level the best practice vision relies on a stable macroeconomic policy environment that supports “interest rate liberalization, inflation control and prudent regulation and supervision of deposit taking institutions” (Consultative Group to Assist the Poor 2006, 13).

CGAP and the World Bank see the best practices approach as the only responsible way to organize a microfinance program. They seek an underlying commitment by microfinance organizations to do no harm, that is, not to distort markets or displace local commercial initiatives with cheap or free money (Consultative Group to Assist the Poor 2006, 17). Most microfinance organizations could be, in one way or another, accused of violating this commitment. After all, no such organization expressly envisages a world littered with self-sustaining fully integrated banking institutions; rather they seek to eliminate extreme poverty. Researchers have also noted their concern that increasing commercialization of microfinance detracts from poverty reduction (Mosley and Hulme 1996, Otero 1999, Consultative Group to Assist the Poorest 2001, Drake and Rhyne 2002, Copestake 2006). However, to maintain access to
the most lucrative funding sources⁷ they must balance the best practices perspective with their own poverty eradicating (well-being inducing) missions.⁸

Not surprisingly, the well-being perspective in microfinance parallels the well-being approach to development. It is embodied in the mission statements of most institutions. Quoting from the three largest microfinance institutions in Bangladesh, Grameen Bank’s mission is to “enable the poor to create a world without poverty,” BRAC “strives to bring about positive changes in the quality of life of the poor people of Bangladesh,” and Proshika seeks to “move the poor out of poverty.” Their websites abound with success stories in improved health, education, and livelihoods, while information on self-generated funding, sustainability, and “inclusiveness” is left to annual reports.⁹

Like the well-being approach to development, the well-being perspective to microfinance success is less formalized than its counterpart. It emphasizes eradicating poverty and creating development. A successful client in this perspective is characterized by increased access to services, reduced vulnerability and poverty, and an increased sense of well-being relative to his or her peers. There are even some microfinance advocates who would characterize a successful program as one that

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⁷ According to CGAP’s 2007 Annual Report, they advise 80 private funds with outstanding commitments worth over 2 billion USD. It can also be assumed that they are instrumental in advising World Bank microfinance lending projects (264 million USD) and many governmental projects (USAID: 216 million USD) around the world.

⁸ A number of in-house reports and papers at BRAC attempt to bridge poverty alleviation with “inclusiveness” (Chowdhury and Bhuiya 2004, Matin 2005).

⁹ The Association for Social Advancement’s (ASA) mission is an exception to the three quoted above. Their philosophy emphasizes leadership, decentralized management, and financial responsibility in keeping with the best practice philosophy. While it is considerably smaller than any of Bangladesh’s “big three” it claims to be the fast growing microfinance organization in the world (www.asabd.org).
empowers its participants, especially its female clients. Susan Johnson’s paper “Gender and Microfinance: Guidelines for Good Practice,” directly confronts CGAP’s model and advocates support programs to empower women and benefit program performance (Johnson 1999). She believes that engendering microfinance through the services that are offered, the community structures through which they are delivered, and the support services that accompany them will lead to more efficient and effective programs. Likewise, Linda Mayoux has consistently advocated for microfinance to deliberately and consistently work for women’s empowerment (Mayoux 2006). She also hypothesizes that gender equality and women's empowerment can significantly contribute to financial sustainability.
CHAPTER 3: NORTHWEST CASE STUDIES

Another influential work in forming the models and framework for this paper was a case study I conducted with BRAC in 2007. BRAC offers a variety of microfinance products to clients based primarily on their income levels and vulnerability to poverty. The study was intended to assess, anecdotally, if differences in empowerment can be correlated with program participation. The case studies illustrate the lives and circumstances of microfinance clients and some of the complications that arise when using commonly preferred empowerment indicators. Below are excerpts concerning two such indicators, asset control and social capital.

Excerpts from Forming a Clearer Picture of Gender Empowerment through BRAC Programs

Asset Control:

The first household interviewed in the Rangpur District was that of Saera and her husband Babul Mia. They have two daughters and three sons. A year ago, Saera dropped out of a BRAC microfinance program after participating for four years because she was having trouble making payments. She has since joined Grameen Bank.

Saera was only able to list a few assets of value that belonged to the household. This included 2.5 decimal of land\textsuperscript{10} and their home both of which are in the sole control of Babul Mia. Saera and her sons jointly own a cow. The only sellable assets which belonged exclusively to her were three goats.

\textsuperscript{10} One decimal equals ten Kath, and ten Kath are equivalent to one acre.
This asset control arrangement fits with the literature which describes control based on time-honored gender roles. Women are traditionally sovereign over only those income generating things that can be managed and cared for in the home, such as small livestock. It is suggested that only in the most desperate households, those suffering the most extreme poverty and typically female-headed, will break these norms. Doing so comes at the detriment of their perceived social standing.

A household in the Rangpur district that exemplified the importance of cultural norms belonged to Monjla. Monjla, 42, has been a TUP\textsuperscript{11} member in the village of Chatra Hat for five years. Her family consists of herself, her daughter-in-law, a granddaughter, daughter, and son-in-law. Her son migrated to work in Dhaka several years ago and left his wife and young daughter to reside in his mother’s household. He has not been able to return home or provided much income support. Compounding these hardships are Monjla’s marital circumstances. Many years ago her husband took a second wife who owned some property. He has since died, but the second wife continues to lease Monjla a home and some land.

Circumstances with her son and husband contributed to Monjla’s decision to have her daughter married off at 14, well before the legal age. This provided the household with a male head, who now, according to Monjla, controls all the household assets. The family’s poverty forced Monjla to work as a domestic servant in town where she receives three meals a day and 150TK (about $2.50) a month for her service. She

\textsuperscript{11} Targeting the Ultra Poor, BRAC’s microfinance product aimed at the poorest and most vulnerable clients.
did not want her daughter or daughter-in-law to have to work as well. She sold two cows she had received as part of the TUP program to afford her daughter’s dowry.

Microfinance participation assisted Monjla in acquiring assets, which she ultimately exchanged for a male head of household. She hopes that he will be able to earn enough money to purchase their home and land. The value of a male provider in the household outweighed the illegality of her daughter’s marriage and her daughter’s continued education. It also bought the younger women of the household the ability to more closely observe purdah, and thereby improve their standing in the community.

We also interviewed Tulshi Rani. She is married with two children, both sons. She is not involved in a microfinance program or any other NGO. For her interview we questioned her based on an asset list and were able to fill in a Venn diagram based on her responses. It showed that of the assets listed, only her ornaments and goat, which she bought with money given to her by her mother, were completely under her control. Jointly she owned the household savings and four pigeons with her husband. Aside from that, the other household belongings, land, and livestock are controlled by her husband.

Comparing Tulshi’s household to Saera’s, the microfinance participant, Tulshi’s household was visibly better off. However, had it not been for the asset transfer from mother to daughter Tulshi would be without any assets of her own. Comparing these two cases, it would appear that, controlling for their relative wealth, the microfinance participant is more empowered than the non-participant. Another potentially critical difference between the two households is that Saera is Muslim and Tulshi is Hindu. From observation, though religious practices may be different, the social norms
concerning gender roles and expectations are strikingly similar. The women in Hindu and Muslim villages both prefer to work in and around the home while their male relatives handle economic matters. In this context, female asset control has little value as an indicator of empowerment since it exists mostly as a necessary byproduct of undesirable circumstances. The ability to surrender control is a lifestyle that Monjla aspires to for her children.

The final interviewee was an obvious exception to the usual microfinance participant. Afroza Begum, a widow with two sons and a daughter, lived in a comparatively affluent household. She was a BRAC member for 10 years, served as her VO leader, was a legal aid educator and a union representative. She owned eight decimals of homestead land and 70 cultivatable decimals. The assets she disclosed in our initial interview were her bamboo bush, a few fruit trees, and two goats. She had owned a cow which she sold recently to build a house for her son and provide capital for him to invest in an ornament business. Privately, she confessed to having 40,000 TK savings as well. A quick observation of her home revealed an abundance of marketable assets. It also became clear from the interview and observing the way household members responded to her that she was undoubtedly the head of household and either directly or indirectly controlled the majority of assets and decisions.

This arrangement may have been out of necessity due to her being a widow, but from our conversation it appeared that throughout her marriage she had maintained joint control in decisions, such as the decision to join BRAC, and joint control regarding assets, like what investments to make with her microfinance loans. She voiced her belief
that with or without BRAC she would still be in a very good economic and social position. It is clear Afroza is a woman who feels empowered to work for the improvement of her household and her community. She is relatively more educated and wealthier than many of her neighbors. She takes pride in using her abilities to work in her community and enjoys the status that it affords her.

Comparing her perception of working in the public sphere and the perception of the TUP member Saera, one could find evidence that wealth, education, and self-perceived status make a big difference in how a participant exercises empowerment to improve their lives and what they perceive to be an improvement. Saera used her resources to secure a male head of household and enable her daughters to observe restrictive social norms. Afroza, on the other hand, did not feel that her social status was jeopardized by participating in the public sphere in the ways afforded to her by BRAC. The opportunity to work as a VO leader was a direct result of Afroza’s literacy. Saera loses status by working as a domestic servant, and Afroza gains status through community organization and leadership.

Microfinance clients at different places on the socio-economic scale have different perceptions about what actions they need to take to advance themselves and their families. The way Afroza, at the upper end, uses her resources and BRAC in a way that is compatible with empowerment theory. She acquired and utilized economic assets, educated all of her children, and sought leadership positions in her community. At the other end of the spectrum, Monjla used the resources she acquired through BRAC to invest in a husband for her daughter, which may very well be economically
beneficial for the household, but is not a story that indicates empowerment in the way it is most commonly understood.

Since asset control is so mixed up in culture, education, relative wealth, and perceived social status on its own, it is probably not the best single indicator of empowerment. Where asset control for one household may symbolize stability and prosperity, for another it may be closely associated with acute poverty and vulnerability. For the majority of households somewhere in the middle it may be a largely irrelevant concept. The relationship between asset control and program participation does not appear to be linear, which makes it difficult to compare programs that target different groups based on socio-economic indicators. As a sole indicator, asset control omits the possible positive empowering impact that BRAC programs may have in other areas like social and human capital accumulations.

Social Capital:

A critical but less frequently cited contributor to empowerment is social capital. It is more difficult to quantify than physical asset control, which means it is not routinely done. However, it is potentially more significant. Social capital is believed to be the glue that binds microfinance recipients to their debt obligations. However, whether this social capital increases the empowerment of microfinance participants is less frequently explored.

We interviewed several participants and non-participants on a few aspects of social capital including mutual support, exclusion, and collective action. We found some intriguing variations among the women we interviewed.
Saera, Monjla, Tulshi, and Afroza all acknowledged forms of mutual support that exist in their communities. All of them could recall a time when money had been collected to assist a family with a funeral or wedding. Afroza, a leader and a relatively well-off member of her community, claimed to often make donations for such causes. Three months ago when a VO member’s daughter got married, Afroza donated cucumbers, electricity, and lights. She also helped raise money for the event and approached the local mosque for additional assistance. When a VO member’s son died in an accident, she again helped raise money as did the mosque. Tulshi also claims to donate for weddings and funerals to poorer households.

The lowest levels of mutual assistance were expressed by Saera and Monjla. Neither one expected much help in case of a community-wide or household-level disasters. Monjla, whose home is in a flood-prone area, said that they could stay for a few days with households that are on higher ground while they waited for the floods to retreat. They both believed that money could be raised from richer households, but they both mentioned that giving or receiving assistance from other villagers would be difficult because most are too poor to give and would likely find themselves in the same situation.

Tulshi and Saera both expected the majority of assistance to come from the government. Saera expressed very low expectations for assistance from the village chairperson saying that to get help from him one would have to be a relative or close friend. On the other hand, Saera mentioned the chairperson as one of the people she would go to for assistance. Saera is experienced with microfinance programs and Tulshi
is not. It is possible that contact with microfinance administrators and experience with
formal institutions has made Saera more likely to personally approach authority figures
for assistance. If so, this could represent a meaningful increase in social capital for NGO
participants.

Afroza expressed the highest degree of mutual support, but this is probably
closely related to her position which makes her a resource in the community. She is
often approached for assistance and would expect assistance if it were ever needed. It
should also be mentioned that her community is best described as suburban; only a few
kilometers from the center of Rangpur. This community is probably afforded a higher
degree of access to social infrastructure than more rural communities. Such
infrastructure includes mosques. They were frequently mentioned by Afroza as a source
of donations, but Monjla only mentioned mosques to say that the nearest one was too
far to be of much assistance. Monjla, it would appear, is isolated both physically and
socially from most support networks.

Inquiries about exclusion produced nearly homogenous results. Everyone said
that education and wealth are the most significant factors that divide the community.
The hypothetical question was posed: Suppose there was a rich and educated man, who
would he be most likely to associate with, a rich, illiterate man or a poor, educated man.
All four women interviewed identified the poor but educated man as the more likely
associate of the rich educated man, implying that education is perceived as more
cohesive factor than wealth. However, cohesion is not the opposite of exclusion. The
women seemed to believe that wealth was a more divisive distinction and that political differences are the most likely to lead to conflict in the community.

The discussions on collective action focused primarily on past political participation. The level of political participation ranged from Afroza, a union representative, to Tulshi, who had never voted. Saera, who expressed dissatisfaction with her local chairman, votes but her participation does not go beyond this. Before she was married, Monjla said she voted once because everyone else was doing it and she wanted to see what it was like. Illiterate, she admitted that she did not fully understand who or what she was voting for, but she was disappointed that the person she chose did not win. For this reason she believes that voting is a waste of time. This belief did not prevent her from participating in a campaign to have a chairman from her village elected. She went door to door with a group to garner support for their candidate. He lost the election as well, and Monjla has since given up political participation.

Despite the varying levels of participation, and interesting stories, there did not seem to be a pattern or connection between NGO and political participation. It could be theorized that experience with institutions and administration in addition to increased information from participation in microfinance programs would increase the likelihood of political activity. However, it appears to be more closely connected to attitudes about effective governance and weighting the odds that time spent participating will contribute to a desired outcome. For Afroza, political participation has been a source of empowerment, but she associated its benefits most with increased status in her community and not the opportunity to dictate outcomes for herself and her neighbors.
For none of the women did political participation appear to be connected to ideas of empowerment or gender differences.

Inquiring about social capital provided support for the theory that program participation is connected with increasing social networks, particularly when it comes to approaching authority figures and seeking support.
CHAPTER 4: MODEL AND DATA

I am interested in determining what impact empowerment, or disempowerment, has on desired program outcomes from the best practices and well-being perspectives. Theoretically, mobility, domestic violence, legal knowledge, and household asset control contribute to gender empowerment. I expect that restrictions on mobility and incidence of domestic violence will negatively impact the desired outcomes from both perspectives. I also anticipate that knowledge about legal rights will be positively correlated with the desired output in both models. I expect to find, regardless the perspective, that higher levels of client empowerment produce better outcomes.

Dependant Variables

Using data from BRAC’s North West Microfinance Expansion Project (NWMF)\textsuperscript{12}, this hypothesis is tested in models that reflect these differing perspectives. The well-being model uses microfinance members’ relative well-being within their community to estimate the effect empowerment has on participants’ well-being—the desirable development outcome from the well-being perspective. The same effects can be measured from the best practices perspective by using a member’s tendency to default as the dependant variable.

Enumerators asked respondents to compare their economic status to others on a scale from one to four. Of the respondents questioned in 2007, almost 70% considered themselves to be poor or very poor relative to others in their community.

\textsuperscript{12} The data surveyed 1,100 microfinance participants in 2003 and 2007, and a control group of 600 members with less than a year of participation in 2007. More information on the NWMF data is in the following section.
Self-assessed relative economic status is just one possible measure of a member’s well-being. Some studies (Barun and Sulaiman, 2007) use total household asset accumulation as a measure of well-being. This paper uses the self-assessed economic well-being measure for two reasons. First, psychological dimensions of empowerment are difficult to assess using standard survey methods, but self-assessments incorporate this important dimension to some degree (Alsop, Bertelsen and Holland 2006). Second, relative well-being is less likely to be correlated with wealth related independent variables.

The best practices approach to microfinance reflects the belief that in order for programs to serve the long-run interests of the poor they must become linked to mainstream financial institutions. This requires that MFIs adopt financial practices that will lead to sustainability and self-reliance including adjusting interest rates upwards to cover operational expenses, providing a range of specialized products, and holding clients to high standards of accountability.
The best practices counterpart to relative economic well-being is members’ tendency to default. These responses came from program organizers who were asked to assess the default behavior of each participant. The available sample size falls from the whole survey (1,610 individuals) to 733 individuals since the control cohort, women who are not involved in BRAC programs, has to be excluded and some program organizers were not available for survey.¹³

**Figure 2: Tendency to Default**

<table>
<thead>
<tr>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

**Independent Variables**

The two dependant variables, relative well-being and tendency to default, are tested in a model to measure the effects of various aspects of empowerment on these desirable development outcomes.

¹³ The program encourages members to take out loans even after an incidence of default to improve the member’s credit and to refinance the defaulted loan. This helps keep overall defaults for the microfinance program very low. The average participant in this survey had received three loans so far.
Members were asked to identify the person from whom they seek permission to leave the house (mobility). Only 12% of the members who responded to this question did not require permission to leave the home. Of these women, 72% were either unmarried or widowed.

Table 1: Who Gives Permission to Leave Home?

<table>
<thead>
<tr>
<th></th>
<th>Freq.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No permission required</td>
<td>156</td>
<td>12.51</td>
</tr>
<tr>
<td>Husband</td>
<td>1,038</td>
<td>83.24</td>
</tr>
<tr>
<td>Son</td>
<td>12</td>
<td>0.96</td>
</tr>
<tr>
<td>Father-in-law</td>
<td>23</td>
<td>1.84</td>
</tr>
<tr>
<td>Mother-in-law</td>
<td>16</td>
<td>1.28</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0.16</td>
</tr>
<tr>
<td>Total</td>
<td>1,247</td>
<td>100</td>
</tr>
</tbody>
</table>

Several different questions were asked to assess violence and coercive control of members in their household (domvio) such as:

In the last year has your husband or a member of your household:

- Taken money against your will
- Taken a personal asset against your will
- Prevented you from going to your parents’ home
- Prevented you from working outside the house
- Physically abused you
- Threatened you with a divorce
- Threatened you with the possibility of a second marriage

These responses were added into an index, where 0 indicated that all forms of abuse occurred in the last year and 7 is the absence of any form of abuse. Of the women questioned, 15% had experienced some sort of domestic violence in the last year. The
most common form of violence was physical abuse and being prevented from working outside the home.\textsuperscript{14}

![Figure 3: Incidence of Violence](image)

One support program available to BRAC members is legal aid. Legal disputes involving land and taxes are common in rural Bangladesh as poverty and illiteracy make the poor land owners particularly vulnerable to fraud. In an attempt to curb this problem, BRAC members receive basic legal information. In addition to training on property rights members receive information in the following areas:

- Minimum age of marriage for girls
- Rights in the event of divorce
- Legal methods of divorce
- Minimum voting age

\textsuperscript{14} I suspected a high amount of under reporting for this variable, an assumption that was born out after examining the data. For more information on the data for this variable and my attempt at imputing the missing data see appendix 2.
As part of the survey members were quizzed in these areas of legal knowledge (legal). 69% knew the right age of marriage for girls, 48% knew they were entitled to a portion of assets in the event of divorce; 37% knew the legal method of divorce, and 51% knew the minimum legal age to vote. Their responses were compiled into an index where 0 indicates low understanding of legal rights and 4 indicates a high level of understanding.

The final empowerment correlated explanatory variable is asset control (asset control). Members were asked to provide monetary values for all household possessions and were asked who in the household could sell that possession. From this data, a ratio was generated of assets the member had sole control over to total household assets. The ratio's ranged from 0 to 100, and the median ratio was .7.
In addition to the empowerment variables, education (educ), the log of household income (linc), duration of participation (years), and age (agey) are included. Years of education is used to report the members’ education level. Half of the respondents received no formal education and fewer than 20% attended school for more than six years.
Respondents were asked to report their household earnings and losses. The difference in these figures is the total household income. Income in this sample ranged from 3,000 to 246,000 BDT (44 to 3,617 USD) and the median income is 30,000 BDT (441 USD).

![Figure 7: Household Income](image)

The duration of participation in BRAC programs is measured in years and the median participation is just over one year. The age of participants ranges from 13 to 65 and the average age is 32 years.

![Figure 8: Years of Participation](image)
The final independent variables consider the degree to which a member controls her loan. This is represented in two dummy variables, one for loans controlled solely by the member and one for loans solely controlled by another person. I expect that in cases where the female clients have sole control over the use of the loan (floancont) well-being and best practices outcomes will be higher. Similarly, when other individuals, typically a male relative, use the loan (mloancont) I expect that outcomes will suffer.

As is the case throughout Bangladesh, the minority of women in this study use the loans they borrow. It is far more common for women to give the funds to a male relative. In this sample, only 20% of all the loans taken out by members in this sample were used by the member herself.

Table 2: Who Uses the Majority of the Loan?

<table>
<thead>
<tr>
<th></th>
<th>Freq.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member Controls Loan</td>
<td>212</td>
<td>20%</td>
</tr>
<tr>
<td>Other Controls Loan</td>
<td>648</td>
<td>61%</td>
</tr>
<tr>
<td>Joint Member and Other Control</td>
<td>200</td>
<td>19%</td>
</tr>
</tbody>
</table>
The members who did have sole control used the loans in a multitude of ways, but very few engaged them in a lucrative activity. Only 25% of women used the loans for investment purposes compared to 42% of men. Women are more likely to apply loans directly to consumption and medical treatment than their male counterparts. This might indicate that poverty, not expanded opportunity, is the driving force behind female utilization of loans.

The independent and dependent variables are described in table 5 and summary statistics are presented in table 6.
Table 4: Description of Independent and Dependent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variable Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best Practices</td>
<td>BP</td>
<td>Likelihood of default assessed by program manager. 0=at risk of default; 1=no risk.</td>
</tr>
<tr>
<td>Well-being</td>
<td>WB</td>
<td>Self-assessed participant well-being. 0= poor or very poor; 1= middle or rich.</td>
</tr>
<tr>
<td>Mobility (M)</td>
<td>mobility</td>
<td>0= permission required from husband/father/son; 1=no permission required</td>
</tr>
<tr>
<td>Components of Legal Knowledge Index (K)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Marriage Age</td>
<td>rmrw</td>
<td>0= does not know legal age of marriage for females; 1= does know</td>
</tr>
<tr>
<td>Denmohor (alimony)</td>
<td>dnmr</td>
<td>0= no or does not know; 1= yes</td>
</tr>
<tr>
<td>Legal Divorce</td>
<td>divo</td>
<td>0= does not know legal method of divorce; 1= does know</td>
</tr>
<tr>
<td>Legal Voting Age</td>
<td>vot</td>
<td>0= does not know minimum voting age; 0= does know</td>
</tr>
<tr>
<td>Components of Violence Index (V)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has household member taken money against your will?</td>
<td>evna</td>
<td>0=yes, event has occurred in last year; 1= no or no response</td>
</tr>
<tr>
<td>Has household member taken assets against your will?</td>
<td>evnb</td>
<td>0=yes, event has occurred in last year; 1= no or no response</td>
</tr>
<tr>
<td>Has household member restricted visits to your parent’s house?</td>
<td>evnc</td>
<td>0=yes, event has occurred in last year; 1= no or no response</td>
</tr>
<tr>
<td>Has household member restricted your ability to work outside the home?</td>
<td>evnd</td>
<td>0=yes, event has occurred in last year; 1= no or no response</td>
</tr>
<tr>
<td>Has household member physically abused you?</td>
<td>evne</td>
<td>0=yes, event has occurred in last year; 1= no or no response</td>
</tr>
<tr>
<td>Has husband threatened you with a divorce?</td>
<td>evnf</td>
<td>0=yes, event has occurred in last year; 1= no or no response</td>
</tr>
<tr>
<td>Has husband threatened you with a second marriage?</td>
<td>evng</td>
<td>0=yes, event has occurred in last year; 1= no or no response</td>
</tr>
<tr>
<td>Asset Control (A)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control of Household Assets</td>
<td>asset control</td>
<td>% of total household assets that are solely controlled by member</td>
</tr>
<tr>
<td>Demographic (D)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member’s Education</td>
<td>education</td>
<td>years of education</td>
</tr>
<tr>
<td>Member’s Age</td>
<td>age</td>
<td>age in years</td>
</tr>
<tr>
<td>Total Household Income</td>
<td>log income</td>
<td>log of total household income in 2006</td>
</tr>
<tr>
<td>Loan Control (C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female participant uses loan</td>
<td>floancont</td>
<td>1= member uses loan; 0= joint or other control</td>
</tr>
<tr>
<td>Person other than member uses loan</td>
<td>mloancont</td>
<td>1= another person uses the loan; 0= joint or member control</td>
</tr>
</tbody>
</table>
Table 5: Summary Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>0.12</td>
<td>0.33</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Membership Years</td>
<td>3.55</td>
<td>5.21</td>
<td>0</td>
<td>13.24</td>
</tr>
<tr>
<td>Legal Knowledge</td>
<td>2.07</td>
<td>1.26</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>6.76</td>
<td>0.69</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Asset Control</td>
<td>20.25</td>
<td>36.78</td>
<td>0</td>
<td>100.00</td>
</tr>
<tr>
<td>Member Loan Control</td>
<td>0.20</td>
<td>0.40</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other Loan Control</td>
<td>0.61</td>
<td>0.49</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Education</td>
<td>2.52</td>
<td>3.22</td>
<td>0</td>
<td>12.00</td>
</tr>
<tr>
<td>Age</td>
<td>33.64</td>
<td>9.51</td>
<td>13.00</td>
<td>68.00</td>
</tr>
<tr>
<td>Log Income</td>
<td>10.31</td>
<td>0.64</td>
<td>6.91</td>
<td>12.41</td>
</tr>
<tr>
<td>Income</td>
<td>36,695</td>
<td>27,125</td>
<td>1,000</td>
<td>246,000</td>
</tr>
</tbody>
</table>

The basic model to be tested can be represented by:

\[ P = f(M, V, K, A, D, C), \]

where \( P \) is the dependent variable representing program orientation, \( M \) is mobility, \( V \) is domestic violence, \( K \) is legal knowledge, \( A \) is asset control, \( D \) is the potentially significant demographic and socioeconomic indicators, and \( C \) is control over the loan.

The models will be estimated as bivariate logits. In the bivariate logit, the probability of an individual's relative well-being or tendency to default is recoded to meet the necessary logit assumptions. In the case of the well-being model, clients who responded that they were “very poor” or “poor” are categorized together and those who responded that they were “middle” income or “rich” are grouped together. For the best practice model the clients are divided into two groups, those who do not have a tendency to default and those who do.

Table 6: Bivariate Dependent Variables

<table>
<thead>
<tr>
<th>Well-being</th>
<th>Best Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
</tr>
<tr>
<td>Poor</td>
<td>736</td>
</tr>
<tr>
<td>Well Off</td>
<td>324</td>
</tr>
</tbody>
</table>
The simple bivariate logit model can be expressed as:

\[ y^* = \beta' x + \epsilon \]

Where \( y^* \) is an unobserved value, and:

\[ y = 1 \text{ if } y^* > 0, \]
\[ y = 0 \text{ if } y^* \leq 0. \]

I expect all of the independent variables to be significant, but for some variables there are reasons to believe that the impact could be positive or negative. While many of the variables may in theory be positively correlated with participant well-being or a successful microfinance program in the best practices model, underlying cultural assumptions could have weighed heavily in the responses of those interviewed. For example, *purdah* would limit a woman’s mobility but is also a luxury that the extreme poor are less able to afford. It is possible that as self-perceived well-being increases this measure of empowerment decreases. The relationship could be similar for control of assets and control of loans. As well-being and economic integration increases families may consider traditionally preferable household arrangements that exclude female participation in wage earning activity and financial decisions. Finally, the domestic violence index is composed of elements that could also respond in an unintended way to microfinance, including being prevented from working outside the home or traveling to one’s natal home. I predict that the desirable outcomes should be positively correlated with increased mobility, asset control, control of loans, and decreasing levels
of domestic violence. However, perceptions related to these variables are a potentially significant unobserved variable.

Predicting the sign of the remaining variables is more straightforward. I expect that in both models income, education, legal knowledge, and age will have a $\beta > 0$. Income should be positively associated with a client’s repayments and her self-assessed relative well-being. Increasing knowledge through formal or legal education should have a positive impact on a client’s management capabilities and decrease her chance of default and increase her relative well-being. Finally, as a client ages her capabilities and asset stock should increase which will also correlate positively with both dependent variables.

**Table 7: Predicted Values**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>WB</th>
<th>BP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Membership years</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Legal Knowledge</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Asset Control</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Member Loan Control</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Other Loan Control</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Log Income</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>
Data

BRAC’s North West Microfinance Expansion (NWMF) project was taken up in 2002 to deliver services to the underserved communities in that region.\textsuperscript{15} To investigate the project’s effectiveness, BRAC initiated a study in 2003 and a follow-up in 2007.

A two-stage sampling strategy was followed. All of the eight branch offices that were created under the project were covered by the survey. From each branch, 12 village organizations were randomly selected. Finally, 11 to 12 member households were selected from each village. Thus, 1,100 households were surveyed in the baseline. The follow-up survey added 600 households whose enrollment was no more than one year as of February 2007. From 2003 to 2007 the attrition rate was 8%.

About 42.9\% of the population of Bangladesh lives below the poverty line,\textsuperscript{16} and in the Northwest the figure rises to over 60\% (Barun and Sulaiman May 2007, 7).\textsuperscript{17} The region is plagued by seasonal flooding which leads many residents to avoid investments in physical capital and in turn creates a disincentive for microfinance institutions to operate in the region.\textsuperscript{18} The Northwest Microfinance Expansion project was funded by the Australian Agency for International Development to contribute to the millennium

\textsuperscript{15} See appendix 1 for a map of Bangladesh and the districts of Ponchagar, Thakurgaon, Dinajpur, Nilphamari, Lalmonirhat, Rangpur and Gaibandha.
\textsuperscript{16} According to the Bangladesh Bureau of Statistics’ most recent “Key Findings of Poverty Monitoring Survey.” The survey uses the FEI (Food Energy Intake) which is derived through regression of the relationship between calorie intake and expenditure.
\textsuperscript{17} Poverty level is one dollar a day.
\textsuperscript{18} Severe flooding occurred in the summer of 2007 when thousands of people in the Rangpur district, which is included in this data, were forced to flee their homes. Families often lose not only their homes and belongings but also permanently lose possession of their land when it erodes into the rivers (IRIN, the humanitarian news and analysis service of the UN Office for the Coordination of Humanitarian Affairs 2007).
development goal of halving poverty by 2015. The project primarily funded loans and established BRAC offices in the region.

Poverty in rural Bangladesh manifests itself in several ways. Rural life expectancy is lower than urban life expectancy and rural areas have higher under-five and maternal mortality rates. Rural women receive fewer years of schooling, marry younger, and have more children than their urban counterparts. BRAC members surveyed in the NWMF data are relatively worse off than the average Bangladeshi.

<table>
<thead>
<tr>
<th>Table 8: Bangladesh Poverty Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>National</td>
</tr>
<tr>
<td>--------------------------------------</td>
</tr>
<tr>
<td>under 5 mortality per 1000</td>
</tr>
<tr>
<td>maternal mortality</td>
</tr>
<tr>
<td>fertility rate</td>
</tr>
<tr>
<td>Life Expectancy (male and female)</td>
</tr>
<tr>
<td>female literacy rate</td>
</tr>
<tr>
<td>% of married females</td>
</tr>
<tr>
<td>food as % of income</td>
</tr>
<tr>
<td>clothing as a % of income</td>
</tr>
<tr>
<td>asset purchases as % of income</td>
</tr>
<tr>
<td>% with sanitary toilet</td>
</tr>
<tr>
<td>% with access to clean water</td>
</tr>
</tbody>
</table>
CHAPTER 5: LOGIT ASSUMPTIONS
Logit models have to satisfy the assumptions of logistic regression, including: 1) no misspecification, and 2) no severe multicollinearity. When the assumptions of logistic regression are not met there may be problems such as a biased coefficient estimates or large standard errors, both of which can lead to invalid inferences. Before discussing the results from my models, I will show that these conditions have been met.

**Assumption 1**
There are two aspects to consider when evaluating for a specification error: the dependent and the independent variables. In the ordered estimations the dependent variables have to be ordered in nature, which has been met. Concerning the independent variables, we assume that all the relevant variables have been included, that extraneous variables have been excluded, and that the logit function is a linear combination of independent variables.

If a model is properly specified there should not be any additional significant predictors. *Linktest* uses predicted values after a regression and predicted values squared to retest a model (StataCorp 2007). The *linktest* was significant in the well-being model (z=-3.36 and z=4.36) but not in the best practices model, indicating that there is a specification error in the well-being model. However, experimenting with variables that may be theoretically significant in both the models did not decrease the
linktest’s significance. If an omitted variable is responsible for the error, then it may be one that was unobserved in the NWMF data.

**Assumption 2**

Multicollinearity occurs when one independent variable is determined by another independent variable. Many statistical programs automatically correct for perfect multicollinearity by dropping one of the responsible variables, but lesser degrees of collinearity may exist which, if severe enough, can lead to high standard errors and potentially lead to large confidence intervals to the coefficients.

Reviewing the standard errors and coefficients produced in both models does not give any strong indication that multicollinearity is present. To confirm the observation that multicollinearity is not present, a correlation matrix or variance inflation factor (VIF) can be estimated. The VIF is an indicator of how much the inflation of the standard error can be caused by multicollinearity (UCLA, 2008). Table 10 provides the variance inflation factors for the well-being and best practices models. The relatively low VIF’s (all <2) for all variables confirms the assumption of no multicollinearity.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Well-being</th>
<th></th>
<th>Best Practices</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VIF</td>
<td>I/VIF</td>
<td>VIF</td>
<td>I/VIF</td>
</tr>
<tr>
<td>Education</td>
<td>1.29</td>
<td>.7749</td>
<td>1.31</td>
<td>.7625</td>
</tr>
<tr>
<td>Age</td>
<td>1.24</td>
<td>.8065</td>
<td>1.22</td>
<td>.8183</td>
</tr>
<tr>
<td>Log Income</td>
<td>1.14</td>
<td>.8738</td>
<td>1.15</td>
<td>.8690</td>
</tr>
<tr>
<td>Legal Knowledge</td>
<td>1.11</td>
<td>.9007</td>
<td>1.14</td>
<td>.8746</td>
</tr>
<tr>
<td>Asset Control</td>
<td>1.14</td>
<td>.8775</td>
<td>1.15</td>
<td>.8711</td>
</tr>
<tr>
<td>Membership Years</td>
<td>1.04</td>
<td>.9602</td>
<td>1.03</td>
<td>.9698</td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>1.02</td>
<td>.9767</td>
<td>1.02</td>
<td>.9820</td>
</tr>
<tr>
<td>Member Loan Control</td>
<td>1.81</td>
<td>.5527</td>
<td>1.82</td>
<td>.5503</td>
</tr>
<tr>
<td>Other Loan Control</td>
<td>1.72</td>
<td>.5823</td>
<td>1.74</td>
<td>.5759</td>
</tr>
<tr>
<td>Mobility</td>
<td>1.03</td>
<td>.9732</td>
<td>1.04</td>
<td>.9592</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.25</td>
<td></td>
<td>1.26</td>
<td></td>
</tr>
</tbody>
</table>
Table 11 displays the correlation matrix for all the independent variables, several of which are significantly correlated at a 95% confidence interval, but none are high enough to indicate severe collinearity.

<table>
<thead>
<tr>
<th></th>
<th>Mobility</th>
<th>Member Years</th>
<th>Legal Knowledge</th>
<th>Domestic Violence</th>
<th>Asset Control</th>
<th>Education</th>
<th>Age</th>
<th>Income</th>
<th>Member Control</th>
<th>Other Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member Years</td>
<td>0.0122</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Knowledge</td>
<td>-0.0486</td>
<td>-0.0347</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>0.0183</td>
<td>-0.0311</td>
<td>-0.0440</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asset Control</td>
<td>0.0102</td>
<td>0.1494</td>
<td>-0.0912</td>
<td>0.0153</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>-0.0359</td>
<td>-0.0907</td>
<td>0.2578</td>
<td>0.0300</td>
<td>0.0800</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.0967</td>
<td>0.1018</td>
<td>-0.1555</td>
<td>0.0781</td>
<td>-0.0052</td>
<td>-0.3380</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>0.0910</td>
<td>-0.0242</td>
<td>0.0313</td>
<td>0.0479</td>
<td>-0.1577</td>
<td>0.1508</td>
<td>0.1844</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member Control</td>
<td>0.0936</td>
<td>0.0476</td>
<td>0.0795</td>
<td>-0.0568</td>
<td>0.1828</td>
<td>-0.0076</td>
<td>0.0454</td>
<td>0.0274</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Other Control</td>
<td>-0.0241</td>
<td>-0.0166</td>
<td>-0.0777</td>
<td>-0.0143</td>
<td>-0.0353</td>
<td>0.0242</td>
<td>-0.0062</td>
<td>0.0084</td>
<td>-0.6356</td>
<td>1</td>
</tr>
</tbody>
</table>

Overall, with the exception of the first assumption in the well-being model, the diagnostic testing suggests that the logit will be an efficient estimator for these models.
CHAPTER 6: RESULTS

This section will present the results for the regressions and an interpretation of the bivariate results. Both of the models show evidence supporting the hypothesis that empowerment impacts participants’ performance in microfinance programs given either objective, and that there were significant variables in all estimations.

In the well-being model, legal knowledge and the demographic factors age, education, and income were positively correlated with well-being, as hypothesized. Mobility, however, did not demonstrate the expected sign. Mobility was significant, but negatively correlated with a member’s self-assessed relative well-being.

The best practices model did not fit the data as well as the well-being model. Of the empowerment variables, asset control was significant and was once again negatively correlated with incidence of delinquency. Age and education were both positively correlated at a 90% confidence interval. Surprisingly income was not significant at a 90% confidence interval.

Table 12 shows coefficients and z statistics in the wellbeing and best practices models.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Well-being</th>
<th>Best Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-statistic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobility</td>
<td>-0.9539*</td>
<td>-0.2733</td>
</tr>
<tr>
<td></td>
<td>-2.46</td>
<td>-0.73</td>
</tr>
<tr>
<td>Membership Years</td>
<td>0.0245</td>
<td>0.0026</td>
</tr>
<tr>
<td></td>
<td>1.41</td>
<td>0.21</td>
</tr>
<tr>
<td>Legal Knowledge</td>
<td>0.3150*</td>
<td>0.1176</td>
</tr>
<tr>
<td></td>
<td>4.01</td>
<td>1.30</td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>0.0150</td>
<td>0.0762</td>
</tr>
<tr>
<td></td>
<td>0.10</td>
<td>0.58</td>
</tr>
</tbody>
</table>
Comparing Marginal Effects between Models
The marginal effects for the best practice and well-being models are shown in Table 13. These are the marginal effects taken at the mean.

Table 12: Marginal Effects for Bivariate Logistic Models

<table>
<thead>
<tr>
<th>Variable</th>
<th>Well-Being</th>
<th>Best Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>dy/dx</td>
<td>dy/dx</td>
<td></td>
</tr>
<tr>
<td>z</td>
<td>z</td>
<td></td>
</tr>
<tr>
<td>Mobility</td>
<td>-0.1438</td>
<td>-0.0681</td>
</tr>
<tr>
<td>Membership Years</td>
<td>0.0047</td>
<td>0.0006</td>
</tr>
<tr>
<td>Legal Knowledge</td>
<td>0.0599</td>
<td>0.0291</td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>0.0028</td>
<td>0.0188</td>
</tr>
<tr>
<td>Member Loan Control</td>
<td>-0.0412</td>
<td>-0.1687</td>
</tr>
<tr>
<td>Other Loan Control</td>
<td>-0.3571</td>
<td>-0.0714</td>
</tr>
<tr>
<td>Asset Control</td>
<td>-0.0003</td>
<td>-0.0025</td>
</tr>
<tr>
<td>Education</td>
<td>0.0323</td>
<td>0.0135</td>
</tr>
<tr>
<td>Age</td>
<td>0.0071</td>
<td>0.0055</td>
</tr>
<tr>
<td>Log Income</td>
<td>0.3905</td>
<td>0.0460</td>
</tr>
</tbody>
</table>

Pseudo R²: 0.2496, 0.0486
Prob > Chi²: 0.0000, 0.0002
Log likelihood: -416.1640, -446.6720
Mobility has a negative marginal effect in both models, but is only a significant to self-assessed well-being. If a woman does not have to seek permission to leave her home, it decreases her probability of high self-assessed well-being by 14 percentage points.

Increasing the legal knowledge index is also significantly correlated with an increase in well-being outcome. Increasing the index by one, or learning one of the measured components of legal knowledge, increases the probability of high well-being by 6 percentage points.

Asset control is significant in the best practices model and like mobility it did not behave consistently with theory. A ten percentage point increase in the female asset control within the household decreases the probability of a favorable best practice outcome by 2.5 percentage points.

Education was associated with significant and positive outcomes in both models. Increasing education by one year increased the probability of a favorable best practices outcome by 1 percentage point and increased the probability of a high well-being outcome by 3 percentage points.

Age was significant and increased the probability of a favorable outcome in both models. A one year increase in age increased the probability of favorable best practices outcome by .55 percentage points, and increases the probability of high well-being by .7 percentage points.

Finally, increasing income has the greatest impact on self-assessed well-being. Raising income by ten percent increased the probability of high well-being by 4 percent.
Surprisingly, the same change was insignificant in the best practices model. For the poor, a ten percent increase in income is quite small and so while it increases perceived well-being, it may not have any effect on the probability of default.

These results provide evidence that empowerment can play an important role in the success of microfinance programs. When women are educated and well informed of their rights they will have statistically significant increases in relative well-being and be better clients to their microfinance programs. However, two of the variables did not demonstrate the characteristics anticipated. In the case of mobility, theory would indicate that less-constrained mobility will increase economic and social opportunities and therefore improve well-being and reduce default, but the opposite seems to be the case. The same is true for asset control, a common proxy for empowerment. Increasing female control of household assets should improve her perceived well-being and give her the opportunity to be a better microfinance client, but this is not the relationship the variable had in this data.

I believe, as mentioned in previous sections, that these unexpected results are attributable to traditional perceptions about the role of a prosperous woman. In both models the independent variables, well-being and incidence of default, were based on the opinion of the respondent and not objective measurements. A woman with unconstrained mobility and high levels of control over assets in the household may see these conditions as a necessary consequence of poverty or another undesirable factor, and therefore may assess her well-being at a lower level. This situation was illustrated in the case studies by Monjla. After her husband’s second marriage there was no one in
her household to constrain her mobility and as the sole potential wage earner it became
necessary for her to travel and work outside the home to support herself and her
children. It would also follow that as the sole head of household Monjla would have a
high asset control ratio. The village organization manager may see a woman in this
situation as a high risk client and attribute them with a higher risk of default.

In these estimations, the only variable where the manager and the client
disagree on the meaning of an indicator is in who controls the loan. A woman who uses
a loan on her own may see her economic participation in a traditional undesirable way,
but the village manager perceives it differently. When the woman has control over the
application of her loan she is more likely to be a better steward of that loan and have
more means available to her to make payments than if she were acting like an
intermediary.
CHAPTER 7: CONCLUSION
The results of this analysis have shown that gender empowerment improves desirable program outcomes in every perspective. It also provides evidence that changing perceptions about empowerment could improve outcomes. From the best practices perspective it is clear that women who have control over their loans make better clients, but women may seek to forfeit this responsibility to maintain traditional gender norms. Similarly, women do not perceive unrestrained mobility as a privilege or a tool to increasing their well-being, and may actively seek to relinquish this power when possible. By working to disassociate female economic participation with socially undesirable circumstances, Bangladeshi microfinance organizations will be able to achieve better outcomes.

Such programs currently exist, but are underfunded and not widely implemented. BRAC’s Gender Quality Action Learning (GQAL) program aims to reduce discrimination and violence against women—a necessary start to real empowerment. Despite strong evidence that the programs effectively improve the capabilities of women it has only been implemented in two districts for a few hundred of BRAC’s estimated 110 million participants (Rao and Kelleher 1998). Continuing to study the positive impact that empowerment has on program outcomes might provide the evidence that organizations need to make meaningful investments in empowerment.

Understanding the role that traditional gender attitudes play in the way clients participate in microfinance should be the focus of further study. It is likely that support programs that educate the community on gender issues and work to change the environment for female economic participation will yield large and sustainable long-run
benefits. The question should also be revisited whether or not women are always the most appropriate clients. In most cases female loan recipients act as intermediaries, but the more closely the user of a loan is associated with the lender the more successful and sustainable that lending institution is likely to be.

Finally, the concept of empowerment needs to be better understood if it is going to be a useful tool in “pro-poor” development. The approach the World Bank is currently promoting to study empowerment focuses on asset control (Alsop, Bertelsen and Holland 2006; Stern, Dethier and Rogers 2005). However, it would appear that there is a spurious correlation between asset control and empowerment. If World Bank programs that target Bangladeshi women persist in using this indicator as a measure of empowerment they may not be acting in the best interest of programs or their target audience. Programs and development institutions should explore the use of more dynamic indicators to inform their activities and produce better gender outcomes.

Bangladeshi microfinance programs provide individuals and households with low-cost financial capital—an opportunity and a resource which was previously unavailable to the poor. However, this one poverty alleviating tool is now commonly seen as a panacea for other problems that plague Bangladeshi society. By questioning the long held belief that microfinance benefits women merely by existing, programs and donors can begin to find ways to make this assumed relationship a reality. Rather than undermine microfinance organizations, reexamining the supposed benefits of participation will lead to improved theory, better models, and more effective programs.
REFERENCES


IRIN, the humanitarian news and analysis service of the UN Office for the Coordination of Humanitarian Affairs. BANGLADESH: River bank erosion affects economy. September 23, 2007.


StataCorp. *Stata Statistical Software.* College Station, TX: StataCorp LP, 2007.


District Map of Bangladesh
Appendix 1: District Map of Bangladesh

From http://www.dclalmonirhat.gov.bd/images/bangladesh_map.jpg
Imputing Domestic Violence Data

In the Northwest Expansion Project data most of the respondents did not answer questions on domestic violence. Out of the 1,610 observations where the question should have been asked, 571 of the individuals questioned failed to respond. What stuck out about this missing data was not that these are 571 missing data points, they were coded specifically as “no response” rather than “missing data,” another frequently used option.

In the United States it is difficult to get accurate statistics on abuse, rape, and domestic violence because of underreporting by victims. I suspect that the same holds true for Bangladesh. Respondents may be reluctant to answer questions on the subject, and enumerators may be equally reluctant to ask. For these reasons, I wanted to try to impute this data for better results.

Using imputation with chained equations I was able to infer some of the missing data points. Appendix table 1 shows the imputed data against the given data.

Appendix 2: Domestic Violence Index

<table>
<thead>
<tr>
<th>Domestic Violence Index</th>
<th>W/O Imputation</th>
<th>With Imputation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0.11</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>0.56</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>0.22</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>0.9</td>
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<tr>
<td>5</td>
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<td>2.91</td>
</tr>
<tr>
<td>6</td>
<td>94</td>
<td>10.53</td>
</tr>
<tr>
<td>7</td>
<td>757</td>
<td>84.77</td>
</tr>
<tr>
<td>Total</td>
<td>893</td>
<td></td>
</tr>
</tbody>
</table>
It is evident from a cursory observation of the imputation that not enough of the data points were able to be reliably predicted to improve the regressions. I decided to use the data as it appears in the data set rather than use the imputed data, but I strongly suspect that underreporting incidence of domestic violence impacted the significance of domestic violence in the regression.