Impact of microfinance on sustainable entrepreneurship development

Farhana Ferdousi*

School of Business Studies, Southeast University, Dhaka, Bangladesh

(Received 24 February 2015; accepted 2 June 2015)

The proponents of inclusive financial growth believe that giving relatively larger loans to the non-poor or near-poor entrepreneurs is the response of the microfinance institutions (MFIs) toward the demand of a existing and potential clients. But opponents are more likely to consider response such as mission drift by the MFIs. Therefore, this study attempts to measure the effectiveness of such microenterprise loans on increasing entrepreneurs’ incomes and innovation. Our findings support the proponents of giving loans to entrepreneurs. Findings suggest that larger loans increase income, but less innovative business practice might threaten such income. Therefore, we recommend that microenterprise loans associated with proper business skills, information, and technologies be provided by MFIs with careful screening and monitoring to ensure the effective utilization of loan capital.

Keywords: microenterprise loans; innovation; entrepreneurship development

Introduction

Microfinance in Bangladesh has inherited a long history of innovative financial inclusion. After a couple of decades of development, the term microfinance is still recognized as relatively new. A more popular and practical term has been microcredit, which emphasizes the main focus of the various financial institutions involved, although small savings have always been a part of microcredit operations. Gradually, in response to demand, other services such as savings, insurance (life and non-life) and remittance services have been developed or piloted and are now being bundled together under the term microfinance (Alamgir 2009). Another important feature has been the focus on the poor. Although this focus very much remains, in order to achieve greater sustainability, the MFIs also offer services to non-poor such as small farmers and microentrepreneurs. Therefore, the scope and target beneficiaries have evolved over time since the establishment of the Grameen Bank in 1983. The development trends of the term ‘microfinance’ likely include many financial products for both the poor and the near-poor and we would like to focus more on the term ‘financial inclusion’.1 However, there are two opposite schools of thought regarding the inclusion of non-poor or near-poor in the microfinancial market; first, academics identify the need for commercializing microfinance for sustainable financial development and second, they identify the microfinance mission drift (increasing loans to individuals rather than to a group, to men rather than women, to urban people rather than rural people and reaching out to wealthy clients rather than to the poor). The proponents of the first school of thought encourage loans with increasingly larger amounts given to non-poor (or near-poor) that is, microentrepreneurs and small farmers, and believe that this is a trend of more established organizations that have the opportunity to build up a ‘graduated’ client base ready for such loans. Therefore, it is not yet a sign of mission drift in the fundamental sense because the client base and the initial loan amounts are the same: only the average loan amounts are increasing (Charitonenko and Rahman 2002). The opponents of this school of thought believe that mission drift is occurring as more small NGOs are likely to engage increasingly in microenterprise lending, since most NGOs in this group are unlikely to have been established long enough to have ‘graduated’ clients and may be seeking to expand their client base by attracting high-income, lower-risk clients. Based on the first school of thought, the present study conducted a field investigation on microenterprise clients of various microfinance suppliers and measured the potential impact of such loans in developing sustainable incomes and entrepreneurship development.

Most of the earlier studies on microfinance in Bangladesh have focused on either economic impact or on the social impact of microfinance, but such studies have overlooked one important point that is the necessity of innovation to widen the economic and welfare impacts of microfinance. Similar to the term ‘Shanzhai innovation’.2

*Emails: dfferdousi@gmail.com; fferdousi@mail.seu.ac.bd

© 2015 The Author(s). Published by Routledge.
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.
in China and ‘Jugaad’ in India, microfinance in Bangladesh could also be an organized industry for innovative and creative solutions to alleviating the financial problems of poor rural and urban populations in this country. The introduction of microfinance in Bangladesh (i.e. through the *Grameen Bank*) was seen as a useful way to alleviate the financial problems of the majority of the population, as most of them are not well off economically. Therefore, this study focuses on the impact of the microenterprise loan products of MFIs on building sustainable entrepreneurship by considering the role of innovation. Innovation is generally neglected when entrepreneurship is related with poor people especially in countries like Bangladesh.

The logical sequence of the paper is: following the introduction, the first section provides a brief description of microenterprise and microfinance development perspectives, an overview of the microenterprise loan products in Bangladesh, and literature review and hypothesis development; the second section provides, methodologies for data analysis and application; the third, results of the analysis and lessons to be drawn; and finally, concluding remarks for inclusive financial growth and sustainable entrepreneurship development.

**Development of microenterprise and microfinance**

Microfinance and microenterprise development has a linear sequence. It is argued that from the late 1970s to the very late 1980s when major donors discussed Small and Medium Enterprise (SME) promotion, the operative term was ‘business’ or ‘enterprise’ and the thrust was on helping them grow and gain a greater share of the market. The developmental assumption was that small enterprises were important net generators of jobs, and that the backward and forward linkages produced by a vibrant SME sector contributed to economic growth (Dichter 1999). Thus during the 1970s and 1980s, developmental policies were dominated by the terms SSE and SME (for small-scale enterprise and small and medium enterprise). Later, it was recognized that the definition and measures of the term ‘small’ used in the 1970s and 1980s was wide ranging and did not include the concerns that provide benefits to the poorest sector of the population. Therefore, this trickle-down theory was modified to include the business opportunities pursued by the poorer entrepreneurs and came to be called, in the late 1980s, ‘microenterprises’ – a fundamentally different segment of the market which became a more popular target for intervention.

Farbman and Lessik introduced a simple way of describing the SME sector, identifying four major categories: survival activities; and micro, small, and medium-sized enterprises (MSMEs) (cited in Gosses and Molenaar 1989). Following the classification of the sector advocated in the late 1980s, Molenaar (2009) combined the microfinance sector developments into one framework linking classification with the channels that emerged over time as presented in Figure 1. According to Molenaar (2009), the emergence of microfinance activities was followed in the 1980s when the state and donors withdrew from support programs for the SME sector. People were expected to pay for the services offered (without further subsidies), and NGOs were expected to take over the tasks of the public sector. Although donors told NGOs to become financially sustainable, NGOs could only do so if they could offer a product for which people are willing to pay. Microcredit became such a product, with large numbers of poor women and men willing to pay for it. The market consisted of poor people who initiated very small economic activities, often generating some additional income next to other income generated by the household. With the introduction of microcredit as the single support instrument, attention shifted dramatically from SME development to the survival economy, but not yet to the microenterprise sector. This came later, when microcredit evolved into microfinance, and when group-based credit distribution systems evolved into individual lending, new services and products were developed and loan amounts increased slightly. The next step saw NGOs graduate into non-bank financial Institutions, which in turn graduated into (quasi-)banks attending micro and even small entrepreneurs.

**Microenterprise sectors in Bangladesh**

Microenterprise sectors in Bangladesh are very often termed as MSMEs, which consist of a heterogeneous group of agricultural and industrial sub-sectors such as – agro-processing farms, crops, poultry, fisheries, livestock, rural non-farm, handlooms and handicrafts, plastic products, textile dying and block printing (manual), footwear, cartwheels, computer software and information technology, silk weaving, small grocery stores, petty trades. The International Consulting Group comprehensive survey in 2003 reported the total number of MSMEs at 6 million enterprises. These enterprises employ 31 million people and account for roughly 25% of the GDP. About 75% of these enterprises are located in rural areas, reflecting the high proportion of the population residing in rural areas. Ninety percent of all MSMEs have fewer than 10 workers, and just 2% have between 51 and 100 (Alam and Ullah 2006). This sub-sector in Bangladesh is facing an acute financial problem, which threatens their smooth growth. About 50% of MSMEs have no access to a formal source of finance. Realizing the importance of the MSME sector, Bangladesh Bank encourages financial intermediaries to provide financial support to MSMEs. Accordingly, State Commercial Banks, Specialized Banks, Private Commercial Banks, Foreign Commercial Banks, and MFIs have been engaged in MSME lending programs (Parvin, Jinrong, and Wakilur Rahman 2012).
The microfinance market in Bangladesh is one of the largest in the world and comparatively matured. In most of Bangladesh, there is a very high density of MFIs, and now MFIs are largely in competition with each other, instead of exclusively with banks or other financial institutions, in attracting borrowers (Mahmoud, Khalily, and Wadood 2009). Traditional microcredit products are no longer enough to increase outreach. Therefore, microfinance service providers are now developing many innovative products to reach new customer segments or retaining the existing segments. Under such competitive pressures, microenterprise loans have become another distinctive market segment being served by the MFIs. This has been due to several factors: demand from better-performing (‘graduating’) borrowers for larger loans compared to loans normally given under ‘mainstream microcredit’, and demand from small enterprises throughout the country, who are not members of microcredit groups but willing to take loans for running or expanding businesses and small enterprises that do not qualify for receiving loans from commercial banks but need capital for running a larger business. MFIs are also actively seeking to expand their portfolios (and income) by serving this group (Alamgir 2009).

Microenterprises generally have a single owner-operator structure, although some are structured as partnerships (MIFA 2009). The microfinance industry applies the following working definition for microenterprise: an enterprise that has capital (i.e. total investment, including fixed assets and working capital) between Tk. 30,000 and Tk. 1 million ($430–$14,300) and less than 10 workers (Haque and Mahmud 2003).

In case of financing, the borrowers may be ‘graduates’ of microcredit programs or existing microenterprises managed by ‘near-poor’ or non-poor who are given individual loans. The loans could be given for any farm and non-farm business, including agro-processing and large-scale poultry, livestock, and fisheries. The program is also separately identified and managed within the MFIs. Table 1 provides an overview of microenterprise loan products in Bangladesh.

Microenterprise loan products in Bangladesh

The microfinance market in Bangladesh is one of the largest in the world and comparatively matured. In most of Bangladesh, there is a very high density of MFIs, and now MFIs are largely in competition with each other, instead of exclusively with banks or other financial institutions, in attracting borrowers (Mahmoud, Khalily, and Wadood 2009). Traditional microcredit products are no longer enough to increase outreach. Therefore, microfinance service providers are now developing many innovative products to reach new customer segments or retaining the existing segments. Under such competitive pressures, microenterprise loans have become another distinctive market segment being served by the MFIs. This has been due to several factors: demand from better-performing (‘graduating’) borrowers for larger loans compared to loans normally given under ‘mainstream microcredit’, and demand from small enterprises throughout the country, who are not members of microcredit groups but willing to take loans for running or expanding businesses and small enterprises that do not qualify for receiving loans from commercial banks but need capital for running a larger business. MFIs are also actively seeking to expand their portfolios (and income) by serving this group (Alamgir 2009).

Microenterprises generally have a single owner-operator structure, although some are structured as partnerships (MIFA 2009). The microfinance industry applies the following working definition for microenterprise: an enterprise that has capital (i.e. total investment, including fixed assets and working capital) between Tk. 30,000 and Tk. 1 million ($430–$14,300) and less than 10 workers (Haque and Mahmud 2003).

In case of financing, the borrowers may be ‘graduates’ of microcredit programs or existing microenterprises managed by ‘near-poor’ or non-poor who are given individual loans. The loans could be given for any farm and non-farm business, including agro-processing and large-scale poultry, livestock, and fisheries. The program is also separately identified and managed within the MFIs. Table 1 provides an overview of microenterprise loan products in Bangladesh.

Literature review and hypotheses development

Most microfinance studies in Bangladesh are limited to either one or two major MFIs or to the overall impact on clients’ poverty reduction, improvement in health and social status, enhancement of women entrepreneurship and empowerment, etc. No studies in Bangladesh, to the best of the author’s knowledge, have yet considered innovation and sustainable entrepreneurship development. For example, Ahmed et al. (2011) conducted an empirical study in Bangladesh among the Grameen Bank borrowers (with credit) and non-borrowers (without credit), and concluded that the microcredit program helps rural women to reduce their poverty most. They found that the ‘with credit’ women have a much lower percentage of poverty in terms of its incidence (80%), intensity (28%), and severity (12%) compared to the ‘without credit’ respondents 99%, 59%, and 37% respectively. Chowdhury, Mahmud, and Abed (1991) observed that the participants of the Bangladesh Rural Advancement Committee (BRAC) have more income, owned more assets, and earned more, as compared to the non-participants. Hashemi, Schuler, and Riley (1996) conducted an empirical study of 120
households from six villages in Bangladesh and presented findings from the study of the Grameen Bank and the BRAC, two programs that provide credit to poor rural women in Bangladesh. The programs were found to have significant effects on eight different dimensions of women’s empowerment. Such kinds of studies conducted on one or two particular MFIs may not be able to pay unbiased outcomes. Moreover, other studies focused on welfare impacts pay less attention to sustainable entrepreneurship development. For example, the study conducted by Nawaz (2010) in Bangladesh found a moderate reduction of poverty of the microfinance clients, as measured by a variety of socioeconomic indicators. Hamid, Roberts, and Mosley (2011) examined the impact of micro-health insurance placement on health awareness, healthcare utilization, and the health status of microcredit members in rural Bangladesh, using data from 329 households in the operating areas of the Grameen Bank. The Pitt, Khandker, and Cartwright (2006) study revealed that credit programs provide women taking a greater role in household decision-making, with greater access to financial and economic resources, having greater social networks, greater bargaining power vis-à-vis their husbands, and greater freedom of mobility. Thus following the gap in the literature, this study focuses on sustainable entrepreneurship development through innovative microfinance services.

Based on the available literature, the current study has developed the following hypothesis.

Lack of capital prevents the poor from increasing their income through entrepreneurship (Farhana, Shi Cun, and Mostak 2012). Financial resources, however, allow time for adopting new businesses to develop products/services, learning business processes, and finding a niche in the market. Bradely, McMullen, et al. (2012) argue that loan capital might enhance entrepreneurs’ income where markets are less developed and innovation might have little impact on income. Based on such assumption, hypothesis H1 was developed.

H1: Loan size has significant relation with (a) innovation and (b) income. Innovation is central to economic change. Whether these changes are ‘radical’ or ‘incremental’, they play an important role in economic growth beyond the traditional inputs of labor, capital, or scale effects (Schumpeter 1934). Differences in factor productivity associated with innovation have been shown to account for almost half the differences in incomes across countries (Hall and Jones 1999). The poor and marginalized are often experts at Jugaad, the Hindi word for ‘frugal innovation’. Piecemeal, low tech solutions often go further and are more easily scaled up than anything dreamed up by research and development centric outsiders (Davis 2013).

H2: Innovation has significant relation with income.
Due to the lack of human, financial, and social capital, entrepreneurs in developing countries are less likely to engage in a thorough search for innovative opportunities and are more likely to focus on imitative opportunities that are well-recognized (Matin, Hulme, and Rutherford 2002). These imitative opportunities are easier to identify and require less capital, less planning, and less preparation but they are also more likely to be pursued by others, and therefore more susceptible to diminishing returns (Bradely, McMullen, et al. 2012).

**H3**: Competitive intensity has negative relation with (a) innovation and (b) business income.

Social networks contribute to the range of information available to entrepreneurs and thus their ability to recognize and act on entrepreneurial opportunities (Hoang and Antoncic 2003). Although entrepreneurs have some level of knowledge and capabilities, complementary resources are often needed to produce and deliver goods or services (Teece 1987). Networks provide access to resources such as business financing, marketing advice, and distribution channels (Hansen 1995).

**H4**: Lending group network has significant impact on (a) innovation and (b) income. General education increases analytical ability to assume opportunities and pursue innovative ideas. Therefore, it is assumed that-

**H5**: General education has a significant relation with (a) innovation and (b) income. Business experience can be applied to recognize opportunities to innovate in the market. So hypothesis H6 was developed:

**H6**: Business experience has significant relation with (a) innovation and (b) income.

Data analysis, enquiry, methodology, and applications

The sample in this research is a judgment sample, a type of purposive sampling used in exploratory research in which the researcher selects a sample to meet specific criteria (Emory and Cooper 1991). Twelve villages of Tangail District, Bangladesh have been chosen and 160 microentrepreneurs who have microcredit loans from different MFIs were interviewed using a semi-structured questionnaire between June–December 2012. Among them, 102 questionnaires have been used for this study. Data were analyzed using STATA 10 software tools. Simple statistical techniques and econometric models were used to examine the data. The analytical framework (Figure 2) for this study was adopted from Bradely, Artz, and Hulett (2012) and Bradely, McMullen, et al. (2012).

A simple regression equation was fitted to estimate the impact of microfinance intervention on business income and innovation. Five regression models were adopted, among which two baseline control models assessed the impact of control variables without innovation and with innovation. To address the direct and indirect impact of innovation on enhancing business performance, two models were developed and the full model specified a mediating role of innovation on business performance. In this study, income and business performance were used interchangeably, since business performance was assessed based on income, as profit (revenue-cost) of the enterprise. The regression equation for the full model is specified as follows:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \cdots + \beta_n X_n + e \]  

(1)
innovation. Although loan capital was not a significant predictor of innovation (model 3.4), it was a positive and significant predictor of performance. Model 3.4 tested the effects of innovation as mediators on business income. Model 3.5 tested the independent covariates on performance. Model 3.4 tested the independent covariates on innovation, and model 3.5 was the fully specified model, testing the intervening effect of innovation. Although loan capital was not a significant predictor of innovation (model 3.4), it was a positive and significant predictor of income (model 3.2). When the fully specified model including innovation was tested in model 3.5, the result showed that loan capital was a significant predictor of income but was ($0.0655 \pm 0.633$) 0.022 times more likely to decrease income when innovations were taken into account. Bradely, McMullen, et al. (2012) also found a negative relationship between indebtedness and innovation, but a positive association with business income. Davis (2006) also found such decreasing marginal rates of return to microcredit in Bangladesh where increasing percentages of the employed population work in the informal sector where they compete in low-skill service industries.

Regression results

Table 2 provides descriptive statistics and correlation coefficient of the data. Table 3 presents the results of the regression models predicting performance or business income. Model 3.1 was a baseline control model. Model 3.2 tested Hypothesis 2 – the effects of innovation as mediators on business income. Model 3.3 tested the independent covariates on performance. Model 3.4 tested the independent covariates on innovation, and model 3.5 was the fully specified model, testing the intervening effect of innovation. Although loan capital was not a significant predictor of innovation (model 3.4), it was a positive and significant predictor of income (model 3.2). When the fully specified model including innovation was tested in model 3.5, the result showed that loan capital was a significant predictor of income but was ($0.0655 \pm 0.633$) 0.022 times more likely to decrease income when innovations were taken into account. Bradely, McMullen, et al. (2012) also found a negative relationship between indebtedness and innovation, but a positive association with business income. Davis (2006) also found such decreasing marginal rates of return to microcredit in Bangladesh where increasing percentages of the employed population work in the informal sector where they compete in low-skill service industries.

In India, agriculture is increasingly done on small plots of land where there is little opportunity to see gains to productivity through innovation from scale (Dichter, and Harper 2007). Greater microcredit loan size is often equated with an expanding business. Given the imitative nature of many microcredit businesses, it was expected that larger loans might indicate an attempt to match returns of prior years or of other competitors by expanding businesses that are beginning to experience decreasing marginal rates of returns. In Hypothesis 2, it was hypothesized that innovation had a significant relationship with income. The results are weakly supported (Model 3.2) ($b = 11.80167; p < .10$).

Therefore, loan products in Bangladesh are generating some income, but are not enhancing innovation which is required for the long-term sustainability of business enterprise. Similar to the findings of Bradely, Artz, and Hulett (2012), general education levels did not predict innovation ($-0.004; p > .10$) but did have a positive and significant relation with income ($b = 3.398; p < .05$). Competitive intensity was a negative and significant predictor of innovation ($b = -0.047; p < .01$), reflecting that more competitors in the same business are actually replicating each other without generating new business ideas. However, income was not significantly related to competition. Previous studies found more competition in the same business-diminished share of profit among entrepreneurs (Carroll & Hannan, 2000). Our study found a non-significant but positive indicator of income, which could mean that the products or services provided by the entrepreneurs were serving different market places. Therefore, income was not affected by the competitive intensity in the sample villages (model 3.3 and model 3.5). But findings suggest that innovative businesses can increase nearly 37% (0.695–0.325) of entrepreneurs’ incomes over the less innovative competitors. The lending group was expected to exert some influence on innovation as the microcredit group members have incentives to bring new ideas for businesses. But in my sample, no significant relationships were found between income (model 3.3 and 3.5) and innovation (model 3.4). To provide enterprise loans, group lending methodology is not followed by many MFIs (i.e. Association for Social Advancement (ASA)) in Bangladesh. Therefore, a weak information-sharing network exists, which has no significant impact on innovation as well as income. Among the control variables, significant relations were found with income but no significant relations were found with innovation. And the results were in line with the theory. Agriculture was found to be a positive and significant predictor of income and could enhance income by ($28.47 \pm 27.42$) 1.05 times more in the presence of innovation. Although innovation (model 3.4) showed a negative coefficient ($b = -0.136$), it was not significant, which indicated that businesses other than agriculture could have the possibility to be more
Table 2. Correlation coefficient.

| Variable | Obs  | Mean  | Std. Dev. | 1  | 2     | 3  | 4     | 5  | 6     | 7  | 8     | 9  | 10    | 11 | 12    |
|----------|------|-------|-----------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|
| 1        | 102  | 61.157| 56.934    | 1.000 |       |    |       |    |       |    |       |    |       |    |       |
| 2        | 102  | 1.422 | 0.969     | 0.166 | 1.000 |    |       |    |       |    |       |    |       |    |       |
| 3        | 101  | 9.861 | 7.609     | 0.216 | −0.353 | 1.000 |       |    |       |    |       |    |       |    |       |
| 4        | 102  | 53.600| 68.278    | 0.663 | 0.202 | 0.060 | 1.000 |    |       |    |       |    |       |    |       |
| 5        | 102  | 0.363 | 0.483     | −0.245 | −0.128 | 0.033 | −0.466 | 1.000 |       |    |       |    |       |    |       |
| 6        | 98   | 10.806| 7.923     | 0.005 | −0.094 | 0.265 | −0.055 | 0.126 | 1.000 |    |       |    |       |    |       |
| 7        | 102  | 7.098 | 3.597     | 0.303 | −0.043 | 0.200 | 0.262 | −0.107 | −0.254 | 1.000 |       |    |       |    |       |
| 8        | 101  | 39.158| 9.859     | 0.137 | 0.006 | 0.141 | 0.109 | −0.069 | 0.526 | −0.231 | 1.000 |       |    |       |
| 9        | 102  | 4.284 | 1.381     | −0.301 | −0.016 | −0.184 | −0.104 | 0.008 | 0.280 | −0.147 | 0.191 | 1.000 |    |       |
| 10       | 102  | 0.353 | 0.480     | 0.123 | −0.178 | 0.252 | −0.179 | 0.090 | 0.266 | −0.041 | 0.137 | −0.061 | 1.000 |       |
| 11       | 102  | 3.864 | 2.883     | 0.093 | 0.018 | 0.026 | −0.053 | −0.055 | 0.276 | −0.359 | 0.267 | −0.023 | 0.062 | 1.000 |
| 12       | 100  | 1.410 | 0.570     | 0.019 | −0.077 | −0.002 | 0.064 | −0.265 | −0.128 | 0.069 | −0.150 | 0.074 | −0.043 | −0.069 | 1.000 |

Note: 1. Income; 2. Innovation; 3. Competitive Intensity; 4. Loan/1000; 5. Lending group; 6. Business experience; 7. General education; 8. Owner age; 9. Number of dependents; 10. Agriculture; 11. Membership duration; 12. Multiple loans.
innovative. Membership duration had a significant positive relation with income (models 3.3 and 3.5), meaning that microcredit clients could benefit from microcredit in the longer term. Analysis of variance shows that except model 3.4 (\(p < .05\)), all other models are highly significant (\(p < .000\)). Full model 3.5 shows an R square value of 0.606, that is 61% of the variance accounted for the variables in the model.

The evidence actually points toward a correlation between the availability of loans and both higher capacity of innovation and income with a higher resilience against systemic risks (Figure 3).

The debate about territorial intelligence attempts a stylized description of key trends and the real ingredients of local development, and thus suggests that while the development of loans, whatever bank-credit or non-bank-credit, has occasionally been spurred by excessive reliance on perceived public guarantees, it has generally had rather beneficial economic consequences for its absence has been detrimental.

The findings can distinguish four clusters of situations (Figure 3):

- Competitive intensity and agricultural sector
- Multiple loans and business experience
- General education, owner age and membership duration
- Lending group and number of dependents

Informal sectors are associated with high poverty rates, poor jobs, and gender discrimination, and evidence for Bangladesh suggests that the productivity growth for the informal sector would not be keeping pace with the formal sector. This inquiry provides some initial steps toward understanding the informal sector’s evolution for Bangladesh. The persistence of such an unorganized sector across so many different industries is too great to afford a single, unifying explanation. Taking somewhat smaller steps, the transition from unorganized sector to organized involvement is thus important for regional planning and policy choices.

### Obstacles and challenges of the microentrepreneurs

To understand the factors that are important for facilitating sustainable entrepreneurship development, the author also asked the respondent about some obstacles relating to the financial, management, marketing, and technical aspects of managing their business enterprises. Figure 4 shows the obstacles and challenges that microentrepreneurs faced while starting their microenterprises. The standard question was asked ‘when did you start your business, what were the main obstacles/challenges you faced?’ About 20 statements related to various obstacles and challenges were given by the respondents. The collected responses are presented in Table 4 with their corresponding mean values. Among the various obstacles, lack of capital, and entrepreneurial and

---

### Table 3. Relationship among microenterprise loan, income, and innovation.

| Dependent variable | Model 3.1 Income | Model 3.2 Income | Model 3.3 Income | Model 3.4 Innovation | Model 3.5 Income |
|--------------------|------------------|------------------|------------------|----------------------|------------------|
| Individual control |                  |                  |                  |                      |                  |
| HHAge              | 1.343352*        | 1.325293*        | 0.5877771        | 0.0020898           | 0.5716775        |
| HHDepen            | 6.046408**       | −14.298232**     | −8.945235*       | −0.0521237          | −8.543676*       |
| Industry control   |                  |                  |                  |                      |                  |
| Agriculture        | 18.26772         | 22.7872†         | 27.42407**       | −0.136073           | 28.47237**       |
| Business control   |                  |                  |                  |                      |                  |
| MemDur             | 3.19957          | 3.272726         | 3.655313*        | 0.00399             | 3.624574*        |
| MultiLoan          | 4.324002         | 5.805839         | 3.729463         | −0.1541406          | 4.916956         |
| Industry covariates|                  |                  |                  |                      |                  |
| Competition        |                   |                  | 0.3255178        | −0.0479779**        | 0.6951379        |
| Business covariates|                  |                  | 0.6557857***     | 0.0028633           | 0.6337266***     |
| Loan/1000          |                   |                  | 12.43925         | −0.0948427          | 13.16991         |
| LendMethod         |                   |                  | 0.1876734        | −0.0948427          | −0.2173918       |
| Individual covariates|                |                  | 3.398486*        | −0.0045934          | 3.433873*        |
| BusExp             |                   |                  |                   |                      | 7.70396          |
| General education  |                   |                  |                   |                      |                  |
| Innovation         | 11.80167†        |                  |                   |                      |                  |
| Number of obs.     | 99               | 99               | 94               | 94                   | 94               |
| F(6, 92)           | 4.59             | 4.55             | 12.21            | 1.98                 | 11.49            |
| Prob > F           | 0.0004           | 0.0002           | 0.0000           | 0.0454               | 0.0000           |
| R-squared          | 0.2304           | 0.2591           | 0.5954           | 0.1928               | 0.6064           |
| Adj R-squared      | 0.1802           | 0.2021           | 0.5466           | 0.0956               | 0.5536           |
| Root MSE           | 60.47            | 59.654           | 43.44            | 0.93093              | 43.105           |

\(†p < .10.\)

\(*p < .05.\)

\(**p < .01.\)

\(***p < .001.\)
management skills were identified as the most challenging factors for starting microenterprises by the respondents. Besides financial- and management-related obstacles, many starting entrepreneurs were showing lack of confidence in starting business enterprises. Marketing-related challenges were also identified by the respondents. Lack of knowledge about innovation and non-availability of modern technologies should be very important concerns for some businesses, but the respondents in the sample were mainly involved in agricultural farming and trading, livestock, and poultry-rearing businesses and they have very limited formal education, knowledge, and access to modern technologies. Therefore, the need for such technology and innovations was undermined by the microentrepreneurs. Shamim’s (2008) study in Bangladesh also identified such factors as challenging for microentrepreneurship development. Findings of that study included lack of good designers, lack of skilled workers, lack of capital, lack of development institutions, lack of modern machineries, lack of raw materials, lack of proper

Figure 3. Impact of microfinance on sustainable entrepreneurship development.

Figure 4. Obstacles and challenges of microentrepreneurs.
knowledge and training, high price of materials, lack of information, etc.

Based on five-obstacle classification, the study further identified several key variables and reconfigured those variables as the ‘key factors’ and ‘accelerator’ for smooth microentrepreneurship development intervention.

Enterprises’ initiatives with six types of determinant constraints (limited working capital, lack of entrepreneurial skills, lack of collateral security, limited capacity for financial fixed assets, and lack of self-confidence) are shown in Figure 5.

Comparative advantages with four critical shortage of basic tools (greater fluctuation of raw material price, lack of access to marketing, competition from large units in production, lack of appropriate tools and technologies) are shown in Figure 5.

Competitive advantages with six large intelligence’s gaps due to more sophisticated knowledge capacity (lack of access to information, lack of infrastructure facilities, lack of modern technologies, lack of skill, lack of supply of inputs in time and lack of knowledge production differentiation) are shown in Figure 5.

Regional policies with three main identified administrative ‘boulders’ such as long and complicated procedures to avail institutional help, political influences, inadequate incentives provided by the local government, are shown in Figure 5.

Table 4. Obstacles and challenges of microentrepreneurs.

| Obstacles                        | Mean values |
|----------------------------------|-------------|
| Financial                        |             |
| Lack of fund for starting business | 0.71        |
| Limited working capital          | 0.76        |
| Limited capacity for financing fixed assets | 0.63 |
| Lack of collateral security      | 0.62        |
| Entrepreneurial                  |             |
| Lack of entrepreneurial, business management and accounting skill | 0.75 |
| Lack of self-confidence          | 0.58        |
| Lack of production skill         | 0.19        |
| Lack of knowledge about innovation in production process and product differentiation | 0.22 |
| Marketing                        |             |
| Lack of access to marketing-related skill and information | 0.45 |
| Greater fluctuations of raw material price | 0.48 |
| Lack of supply of input for timely production | 0.25 |
| Competition from large units in the production line | 0.37 |
| Technical and infrastructural    |             |
| Lack of appropriate tools and technologies | 0.36 |
| Non-availability of modern technologies, E-commerce | 0.16 |
| Lack of access to information    | 0.31        |
| Lack of infrastructure facilities| 0.25        |
| Regional                         |             |
| Inadequate incentives provided by the government | 0.06 |
| Long and complicated procedures to avail institutional help | 0.09 |
| Political influences             | 0.07        |
| Others (please specify):         | 0.04        |

In his last book, Das (2012) states that the economic liberalization reforms that India undertook in the early 1990s resulted in it becoming the world’s second-fastest growing major economy in the first decade of the twenty-first century, while today, to the extent India’s economy is growing at all, it is despite, not because of, government policy. Similarly, it is likely that ‘Regional policies’ are very poor in Bangladesh, while innovation can only come from individuals and microentrepreneurs who can obtain loans despite – not because – the local governments’ policy.

As regards the results of the enquiry, it is possible to interpret tables and graphics and draw lessons observing that after the entrepreneurship’s initiative, ‘comparative advantages’ are considered as the most important key to success, while ‘competitive advantages’ (creation of advantage by innovation and improvements) are very limited and at the very end, regional policy measures are absolutely ineffective and ‘perform dismally’. Therefore, based on the above re-configuration of obstacles and challenges of micro-entrepreneurs, MFIs and governments can use microfinance as a form of organized industry for innovative and creative solutions for alleviating the problems of sustainable microentrepreneurship development in this country. For example, the Grameen Bank’s initiative through the social business design lab is encouraging entrepreneurship and enhancing competitive and comparative advantages of the microentrepreneurs through their integrated financial and technical support. Their investments in Nobin Uddokta projects is
aimed at helping the children of Grameen members to come out of poverty through building microenterprises which will not only ensure their self-employment income but also will provide employment opportunities for the unemployed. BRAC is also initiating several projects to develop the human capital of rural entrepreneurs and build integrated markets to ensure fair prices for disadvantaged entrepreneurs. Through their initiative, microfinance is now not only going beyond financial inclusion but also moving toward building social entrepreneurship. In this way, other MFIs can also play an important role in encouraging the wider use of skills to absorb ideas for commercialization, help diffuse these ideas into a wider target group, and help create new markets or facilitate access to existing or new markets.

**Conclusion**

The demands for microenterprise loan products in Bangladesh are increasing rapidly but empirical research on the impact of such products is still lacking. Therefore, this study took initiative to empirically measure the impact of microenterprise loan on entrepreneurship development.

Major findings showed that loan products in Bangladesh are contributing toward increased income but are yet to do many things to enhance innovation. It was generally thought that MFIs applying group lending techniques are not only providing financial capital but also social capital in the form of membership, network, and social mobility among clients, and such social networks are broadening the scope for increased income and innovation. But this view was supported only in the case of income and not for innovation. Microentrepreneurs having long-term membership with MFIs were able to enhance their income. The lending group did not have any significant relations with either income or innovation. Moreover, innovation, although, not significant, showed a negative relation with the lending group. This supported that loans provided by the MFIs in Bangladesh are expanding the scope for microentrepreneurs to increase income through replicating a similar business model, which is not conducive to sustainable business growth because evidence shows that similar businesses in the same industry produce diminishing returns to income. It is also evident in model 3.4 in Table 3 that a significant negative relation has been found between competitive intensity and innovation. Findings also revealed that a competitor with a similar business model can increase income by about 33% while a competitor with an innovative business model can increase income by about 70%, which is more than double when innovation is present.

Further analysis showed that microentrepreneurs not only have financial obstacles but also they lack many business skills and knowledge regarding market, technologies, and other information required for the sustainable development of their businesses. Therefore, MFIs have to develop their capacities to either facilitate the microentrepreneurs to have some business support services or provide information to avail necessary business skills, training, and market information by the clients. This is essentially due to the fact that financial capital alone may not help the microentrepreneurs to fight against various obstacles and
challenges. Based on the findings, two major policy implications could be recommended for sustainable microfinance and microenterprise development in Bangladesh. First, entrepreneurial training including basic business skills, opportunity identification, and product positioning and product differentiation in the market should be considered either through direct providing or through facilitating. The principles of Jugaad in India and Shanzhai innovation in China can also be transmitted to these microentrepreneurs in order to organize these unorganized sectors to enhance sustainable entrepreneurship and economic growth. Second, microenterprise loans provided to individual clients need increased screening and more resources to provide for those clients that have attributes such as, business training, or business ideas so that they are more likely to generate scale and create jobs in the community (this is now practiced by Grameen Bank). Therefore, inclusive financial or pro-client-oriented strategies (access to a broad range of financial services, at a reasonable cost, provided by a diversity of well-managed and sustainable institutions) need to be designed and implemented by MFI in Bangladesh. Thus, this study has policy implications for microfinance practitioners and policy makers. Further research can be conducted by including not only existing microentrepreneurs but also non-client microentrepreneurs who have the potential to join in future microfinance.

Acknowledgements

The author would like to thank Jean-Marie ROUSSEAU, Regional Consultant, EU, for his assistance with English expression and technical editing.

Funding

The author would also like to thank Dr Md. Abdul Alim, Senior Scientific Officer and Project Director (Social Science part) for financial support.

Notes

1. Financial inclusion is a multi-dimensional, pro-client concept, encompassing increased access, better products and services, better informed and equipped consumers, and effective use of products and services. Putting this concept into practice requires more than institutional expansion and portfolio growth. Balancing clients’ interests and providers’ viability, financial inclusion incorporates effective policies, legislation, industry and consumer protection standards, and financial capability (Ledgerwood et al. 2013).

2. **Shanzhai** innovation was motivated to construct a regional advantage, by addressing markets and reinforcing the capacity of the whole local community, and then increasing “the number, size and efficiency of companies in a region.” For details see Rousseau (2012).

3. Jugaad is an Indian term widely used by poor people all around the world and related to innovative behavior in order to provide a fast and alternative solution to a technological or a technical problem as an improvised arrangement or work-around, which has to be used because of lack of resources. This Jugaad movement can gather a community of enthusiasts, which is very similar to the micro-credit concept in terms of poor targeted population, as well as a cost-effective way to solve the issues of everyday life. It is commonly used when describing a work-around to get through commercial, logistical, or legal issues. Similarly, Jugaad may refer to an idea from which a person can control his or her budget, or from which they may acquire commodities, low-cost transportation in rural areas, and free (of charge) access to public services. For details see MPI (2013).

References

Ahmed, F., C. Siwar, N. A. H. Idris, and R. A. Begum. 2011. “Microcredit’s Contribution to the Socio-economic Development amongst Rural Women: A Case Study of Panchagarh District in Bangladesh.” *African Journal of Business Management* 5 (22): 9760–7697.

Alam, M. S., and M. A. Ullah. 2006. “SMEs in Bangladesh and Their Financing: An Analysis and Some Recommendations.” *The Cost and Management* 34 (3): 57–72.

Alamgir, D. A. H. 2009. *State of Microfinance in Bangladesh*.<http://www.inm.org.bd/publication/state_of_micro/Bangladesh.pdf>.

Bradley, S. W., K. Artz, and J. Hulett. 2012. “The Innovation Necessity: Evidence from Microcredit in the Dominican Republic.” *Journal of International Development* 24: 112–121.

Bradley, S. W., J. S. McMullen, K. Artz, and E. M. Simiyu. 2012. “Capital Is Not Enough: Innovation in Developing Economies.” *Journal of Management Studies* 49 (4): 684–717.

Carroll, G. R., and M. T. Hannan. 2000. *The Demography of Corporations and Industries*. Princeton, NJ: Princeton University Press.

Charitionenko, S., and S. M. Rahman. 2002. *Commercialization of Microfinance, Bangladesh*. Manila: Asian Development Bank.

Chowdhury, A. M. R., M. Mahmud, and F. H. Abed. 1991. “Impact of Credit for the Rural Poor: The Case of BRAC.” *Small Enterprise Development*. 2. London: Intermediate Technology Publications.

Das, G. 2012. *India Grows at Night: A Liberal Case for a Strong State*. London: Penguin Books. ISBN 9780670084708.

Davies, M. 2006. “Planet of Slums.” *New Perspectives Quarterly* 23 (2): 6–11.

Davies, S. 2013. *Can Technology End Poverty?*<http://blogs.hbr.org/cs/2013/03/can_technology_end_poverty.html>.

Dichter, T. W. 1999. “NGOs in Microfinance: Past, Present and Future.” *Microfinance in Africa* 2: 12–37.

Dichter, T. W., and M. Harper, eds. 2007. *What’s Wrong with Microfinance?* Warwickshire, UK: Practical Action Publishers.

Emory, C. W., and D. R. Cooper. 1991. *Business Research Methods*. 4th ed. Homewood, IL: Irwin.

Facet, T. 2007. *Microfinance in the Netherlands: Uncharted Territory. Opportunities and Challenges*. Reguliererriegen, LB Bunnik, The Netherlands: Triodos Facet Publications.

Farhana, F., X. Shi Cun, and A. G. Mostak. 2012. “Impact of Micro-credit Loans on Income and Innovation: Evidence from Bangladesh.” Proceedings of the 9th International Conference on Innovation and Management, Eindhoven, The Netherlands, November 14–16.

Gosses, A., and N. Molenaar. 1989. “Small Enterprises, New Approaches”. DGIS, Operations Review Unit, Ministry of Foreign Affairs, The Netherlands.
Hall, R. E., and C. I. Jones. 1999. “Why Do Some Countries Produce So Much More Output per Worker than Others?” The Quarterly Journal of Economics 114 (1): 83–116.

Hamid, S. A., J. Roberts, and P. Mosley. 2011. “Evaluating the Health Effects of Micro Health Insurance Placement: Evidence from Bangladesh.” World Development 39 (3): 399–411.

Hansen, E. 1995. “Entrepreneurial Networks and New Organization Growth.” Entrepreneurship Theory and Practice 19 (4): 7–21.

Haque, A. K. E., and S. Mahmud. 2003. Economic Policy Paper on Access to Finance for SMEs: Problems and Remedies. Dhaka: The Dhaka Chamber of Commerce and Industry (DCCI) & The Center for International Private Enterprise (CIPE).

Hashemi, S. M., S. R. Schuler, and A. P. Riley. 1996. “Rural Credit Programs and Women’s Empowerment in Bangladesh.” World Development 24 (4): 635–653.

Hoang, H., and B. Antoncic. 2003. “Network-based Research in Entrepreneurship: A Critical Review.” Journal of Business Venturing 18 (2): 165–187.

Ledgerwood, J., J. Earne, and C. Nelson, eds. 2013. The New Microfinance Handbook: A Financial Market System Perspective. Washington, DC: World Bank Publications.

Mahmoud, C. S., M. A. Khailly, and S. N. Wadood. 2009. “Dynamics of Market Share in the Microfinance Industry in Bangladesh, Munich Personal RePEc Archive, Paper No. 16172.” http://www.microfinancegateway.org/gm/document-1.9.3845936.pdf

Matin, I., D. Hulme, and S. Rutherford. 2002. “Finance for the Poor: From Microcredit to Microfinancial Services.” Journal of International Development 14 (2): 273–294.

MIFA. 2009. Bangladesh Microfinance and Financial Sector Diagnostic Study Final Report, 2008. Washington, DC: MIFA-Promoting Microfinance in Asia, IFC.

Molenaar, K. 2009. “Microfinance. Its Concepts and Development, Lessons to Draw for Europe.” Paper prepared for the conference on “Implementing the EU Microcredit Initiative What can be learned from developing and transforming countries?”, European Microfinance Network. http://www.microfinancegateway.org/sites/default/files/mfg-en-paper-microfinance-its-concepts-and-development-lessons-to-draw-for-europe-jan-2009_0.pdf

MPI (Martin Prosperity Institute). 2013. Understanding the Creative Economy in India. Martin Prosperity Institute. http://martinprosperity.org/media/Creative%20India_v01_02%20May%202013_FINAL%20web.pdf.

Nawaz, S. 2010. “Microfinance and Poverty Reduction: Evidence from a Village Study in Bangladesh.” Journal of Asian and African Studies 45: 670–683.

Parvin, L., J. Jinrong, and M. Wakilur Rahman. 2012. “Women Entrepreneurship Development in Bangladesh: What Are the Challenges Ahead.” African Journal of Business Management 6 (11): 3862–3871.

Pitt, M. M., S. R. Khandker, and J. Cartwright. 2006. “Empowering Women with Micro Finance: Evidence from Bangladesh.” Economic Development and Cultural Change 54 (4): 791–831.

Rousseau, Jean-Marie. 2012. “Innovation: Why Smart Strategies Are Neither Necessarily Competitive Nor Intelligent?” International Conference on Competitive Intelligence, Peking University, China.

Schumpeter, J. A. 1934. The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle, English Translation of Schumpeter (1926) by Redvers Opie. Cambridge, MA: Harvard University Press.

Shammim, M. U. 2008. Building Women in Business: A Situation Analysis of Women Entrepreneurs in Bangladesh. Dhaka: Bangladesh Women Chamber of Commerce and Industry.

Teece, D. J. 1987. The Competitive Challenge: Strategies for Industrial Innovation and Renewal. Pensacola, FL: Ballinger Pub. Co.