

Performance Difference Between Credit User and Non-Credit User Micro and Small Enterprises (MSEs) in Amhara Region of Ethiopia

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Abstract

Microfinance services play significant role to the socio-economic development of developing countries. Studies tried to examine the impact of microfinance services on MSEs. However, most studies ignored comparing the performance of microfinance credit users with non-users. The objective of this study is, therefore, to examine the real effect of credit access on the performance of MSEs. The researcher employed mixed research approach. The study population for the survey was both credit user and non-user MSEs in the four major cities of Amhara region of Ethiopia. Purposive sampling, quota sampling and simple random sampling techniques were used sequentially to select respondents. Both closed ended and open-ended survey questionnaire, and semi-structured interview with higher officials of microfinance institutions were used as data collection tools. A two-sample mean-comparison test and Wilcoxon signed rank sum test with median value were also used to compare the performance difference between credit user and non-credit user MSEs. Thus, the result of the study indicated that the performance of credit user MSEs was significantly greater than from the performance of non-credit users. This finding leads to a suggestion that preparing infrastructure for easy credit access should be given due attention alongside its related orientations on how to use the credit.

Keywords: microfinance, credit user, non-credit user, MSEs, Amhara Region, Ethiopia

1. Introduction

The Millennium Development Goals (MDGs) that was accomplished by 2015 made a worldwide attempt that might really aid to wrestle poverty. Developing countries have also been doing accordingly by designing their strategies to achieve MDGs through empowering women (Dieckmann, 2007). In the current agenda of reducing poverty, small business development is the key intervention area for government and other development agencies (Mayoux, 2001). Businesses in developing countries make a considerable involvement to national economies through their participation in Micro and small enterprises (MSEs) (Szabo, 2006).

It is found that credit user MSEs perform well as compare with non-credit users (Langowitz & Dean, 2008). Microfinance institutions (MFIs) intervene and play vital role in providing various services. MFIs offer financial services to those who are not included by the traditional financial sectors especially the poor women who are major victims of sever poverty in developing countries. Still there is unmet demand for access to financial services in the poor people worldwide (Helms, 2006). For commercial banks, the poor were considered as un-bankable for decades because they cannot fulfill the required collateral. Thus, in developing countries, it is projected about 90% of the people have no access to formal financial services (Robinson, 2001).

However, MFIs are aggressively working and playing key role in providing credit access opportunities and promoting MSEs. To substantiate this, empirical studies also found positive relationship between small business' performance and credit access (Loice & Razia, 2013). Similarly, in Ethiopia, improving access to financial services is taken as among the important development tools because it helps in creating employment for unemployed and increasing income and consumption of the excluded population with the final goal of reducing poverty.

In most studies (Loice and Razia, 2013; Soltane & Imen, 2013), only small business that have received credit access have been investigated. However, according to Kuzilwa (2005) a survey of similar entrepreneurs that do not have access to credit should be included compared with those who have access to credit to know the real impact of credit access on MSEs' performance. Therefore, this study tried to examine the performance difference between credit user and non-credit user MSEs in the four major cities of Amhara region of Ethiopia.

2. Theoretical framework and review of empirical studies

Small enterprises act as a vital player for the economic growth, poverty alleviation and rapid industrialization especially in developing countries. They play a significant role in developing countries' economic growth, employment generation and accelerate industrialization (Rahman & Alam, 2013). However, their success is highly dependent on various factors including access to finance.

Microfinance is defined as an instrument that provides financial services to needy poor society to very poor self-employed ones (Ojo, 2009). Ojo also explains that microfinance has been launched as an economic development tool proposed to benefit low-income sections of the society. It provides financial services to low

income customers, including the self employed. This means that microfinance empowers the innovation courage especially for small-scale entrepreneurs. Its services generally include credit and savings; however, some microfinance institutions also provide insurance and fund transfer services. Besides the financial intermediation services, many microfinance institutions provide social intermediation services such as connection, building confidence, and training in financial management and general management capabilities among members of a group.

Microfinance interventions and micro and small enterprises' performance

Performance is the act of performing and doing something effectively and profitably. However, performance seems to be conceptualized, operationalised and measured in different ways (Teoh & Chong, 2007), thus making comparison difficult. The most widely used operationalizations are increase in profit, sales growth, and growth in employees. Different scholars argue that business performance is not only affected by the ability and motivation of an entrepreneur but also a function of many other factors like credit access, saving ability, training access and networks to create opportunities specially for small business.

However, microfinance institutions take parts an important role in providing important intervention services. The interventions have a profound effect on MSEs' performance since they provide skill acquiring trainings for startup entrepreneurs besides the credit and saving services (Ekpe et al., 2013; Loice & Razia, 2013; Soltane & Imen, 2013).

In these days, microfinance intervention projects have been an improvement tool and poverty reduction strategy (Onay & Ozer, 2011). This means that microfinance gives a walking light for those in poverty and lack collateral, and encourages entrepreneurship. As evidence, most studies (Loice & Razia, 2013; Onay & Ozer, 2011; Ekpe et al., 2013) found positive relationship between microfinance interventions and MSEs' performance.

Credit access and micro and small enterprises performance

According to Ekpe et al. (2010), adequate credit supports entrepreneurship performance. The effect of credit assistance on improving performance of entrepreneurs reflected in improved profit, investment and employment of the entrepreneurs (Kuzilwa, 2005). Similarly, Loice and Razia (2013) found positive association between credit access and small entrepreneurs' performance in Kenya, and they justified that loans assist entrepreneurs to invest in and expand their business and thereby they make various decisions. Moreover, Soltane and Imen (2013) found a positive and statistically significant relationship between credit access and small entrepreneurs' performance, and the study tries to confirm the claim that credit positively related to small entrepreneurs' performance in Tunisia. Other studies also found a positive impact on business performance of entrepreneurs in Nigeria (Ojo, 2009) and Tanzania (Kuzilwa, 2005).

Ojo (2009) also shows that financially constrained firms rarely invest in fixed assets and this limits their capacity, which implies that those firms have less opportunity to innovation. In other words, the speed of innovation for enterprises is highly dependent on their access to external financing. Similarly, Soltane and Imen (2013) note that inadequate access to external finance adversely influences decisions of MSEs to make investment in fixed capital and research and development; consequently this affects growth, innovativeness and then business performance. The study by Soltane and Imen also indicates that effect of financial limitation on enterprises development differs across firms of various sizes and that particularly shows that its effect is stronger for smaller firms than large ones. Moreover, Cabral & Mata (2003, p.12) find that "constraints in credit access leads to firm size skewedness towards small firms" and they conclude that "when financing constraints are eliminated, small firms grow to their optimal size giving rise to a more symmetric distribution of firm sizes in the economy". This reflects the contribution of credit access for the growth of small business. Moreover, according to Buyinza and Bbaale (2013), majority of firms within the East African Community have credit access limit, and the study found that with only 37% of firms in the top performing sector all having obtained a credit.

On the contrary, Karnani (2007) argues that microcredit does not improve MSEs' performance; instead, the government should invest and build more industries so that it creates more jobs. The study by Ekpe et al. (2013) also indicates that credit access has no significant impact on Nigerian small business' performance, and the authors concluded that without skill acquisition loan in itself could not lead to performance. In general, the arguments above lead to:

H1: There is significant performance difference between credit user and non-credit user micro and small enterprises.

In conclusion, various studies addressed the contribution of microfinance interventions on the performance of small businesses in different economic contexts and approaches. However, these studies concentrate their attention on only credit users. Therefore, unlike most previous studies, similar micro and small enterprises that do not have access to credit are equally important for performance comparison purpose in this study.

3. Methodology

The objective of the study is to test empirically the contribution of microfinance interventions for MSEs'

performance. The researcher used both qualitative and quantitative research approaches. This approach was used to triangulate findings from different sources. The cross-sectional survey research design was also used. The reason for selecting the cross sectional survey was due to its versatility and ability to collect “abstract information of all types by questioning others” (Blumberg et al., 2011, p. 207). It can help the researcher to process large amount of data in a very efficient manner with one shoot.

Target population

The target population of the study was credit user and non-credit user MSEs in the four major cities of Amhara region (Bahir Dar, Gondar, Dessie and Debremarkos). For this study, MSEs are those that had a physical existence (shop, workshop, house from where the business operates) with contact details that enabled the researcher to distribute and collect questionnaires.

Sample size and sampling techniques

The ultimate objective of sampling is to select a set of elements from a population. Godden (2004) states that to calculate the sample size for infinite population (population > 50,000), the level of precision (sampling error), the level of confidence interval, and the degree of variability in the attributes being measured should be considered. Therefore, for this study:

- Confidence level of 95% (z)
- Degree of variability (sample proportion) 50% (p)
- Maximum tolerable error (sampling error) was 5% (e).

Based on the above assumptions, the sample size (SS) for very large population (i.e. > 50,000) was calculated as follows:

$$SS = \frac{Z^2 \times p \times (1 - p)}{e^2}$$

Where: ‘Z’ is 1.96. Since the value of ‘Z’ is depend on tolerable error.

$$SS = \frac{(1.96^2) \times 0.5 \times 0.5}{0.05^2} = 384$$

The study used a three-stage sampling procedure: purposive, quota and simple random sampling techniques sequentially. In the first stage, the four major cities were selected using purposive sampling technique. Purposive sampling was used here because a significant portion of MSEs in the region has been found in these cities. Then the concept of quota sampling was also applied in the four cities to eliminate non-representativeness distortions. As far as the third sampling stage concerned, an equal opportunity was given for MSEs both credit user and non-credit users. Thus, simple random sampling was employed to select respondents in the four major cities based on the number generated using random number generator, and then they were contacted based on their address. Simple random sampling technique was used because it provides an equal chance of selection for each element of the population (Blumberg et al., 2011).

Data collection methods

Both closed ended (five point likert-scale) and opened ended survey questionnaire was distributed to the selected MSEs respondents, while discussions with the officials of MFIs were conducted. For comparing the performance of credit user and non- credit user MSEs, similar items in the questionnaire for measuring performance were distributed for both credit user and non-credit users. The survey questionnaire schedule first prepared in English and then translated into Amharic, which was a language suitable for practical fieldwork. The researcher fully participated during the entire period of data collection to correct possible errors on the spot. In addition, the required secondary data were obtained from various sources, including institution records, archives and library. Information from other published and unpublished materials, which are found to be relevant for the study, were also used.

Data analysis methods

Both quantitative and qualitative analysis methods were deployed. Data from closed survey questionnaire was analyzed using the two-sample mean-comparison test with unequal variance to compare the performance difference between credit user and non-credit users. Moreover, Wilcoxon signed-rank test using median value was also used for supporting the two-sample mean-comparison test result.

4. Results and discussion

This section tried to examine the effect of having credit access to MSEs’ performance as compared to non-credit users’ performance. The graph below depicts the mean differences.

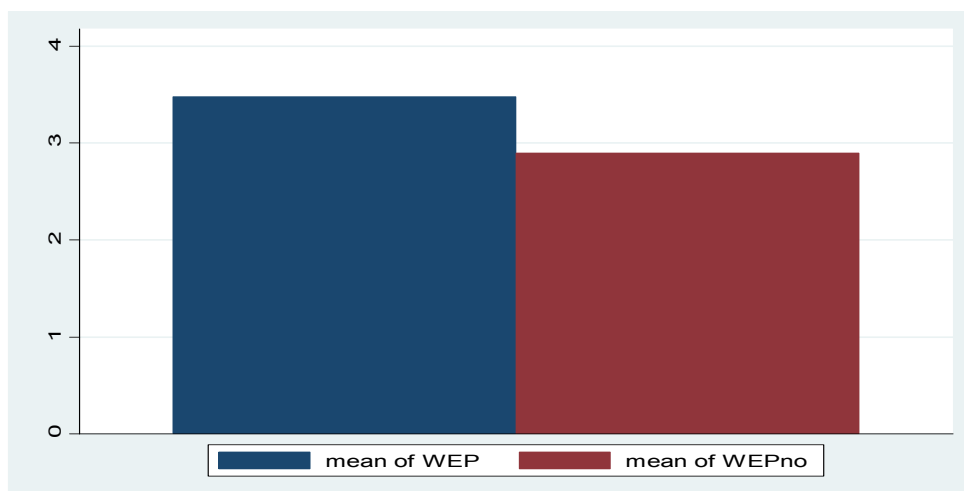


Figure 1: Credit users (WEP) and non-credit users (WEPno) mean difference (source: STATA output)

However, to examine whether the performance difference is statistically significance, a two-sample mean-comparison test was conducted as shown from the table below.

Table 1: Two-sample t-test with unequal variances

variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
MSE	210	3.477619	.0318864	.4620777	3.414759	3.540479
MSEno	50	2.898	.045758	.323558	2.806046	2.989954
combined	260	3.366154	.0306649	.4944563	3.30577	3.426538
diff		.579619	.0557722		.4690013	.6902367

diff = mean(MSE) - mean(MSEno) t = 10.3926
 Ho: diff = 0 Satterthwaite's degrees of freedom = 102.478

Ha: diff < 0 Ha: diff != 0 Ha: diff > 0
 Pr(T < t) = 1.0000 Pr(|T| > |t|) = 0.0000 Pr(T > t) = 0.0000

Source: STATA Output

From the table above the mean response of credit users (MSE) was 3.477 whereas the mean response of non-credit users (MSEno) was 2.898, with the mean difference of 0.579. The mean difference [mean (MSE) – mean (MSEno)] was highly statistically significant at 1% significant level assuming that the mean difference between credit user and non-credit user MSEs is normally distributed. This means that there is enough evidence to reject the null hypothesis (Ho: diff = 0). The positive difference of 0.579 also indicates that the performance of MSEs, which had credit access, was greater as compared to non-credit access users.

The two-sample t-test with unequal variances result indicated that there was a statistically significant performance difference between credit user and non-credit user MSEs. The statistically significant performance difference between credit users and non-users might be caused by different factors. One of which could be for the reason that the two groups had different sources of capital opportunities. Credit users had enough capital to expand their business while those who had no credit access used only their own limited capital to invest and expand their business. According to the response obtained from the microfinance officials’ personal interview, small entrepreneurs mostly got credit in the study area by using the group (3-5 members) as collateral, which is very impossible in banks; this assists the poor to perform well in their business.

Secondly, the response from open-ended questionnaire also indicated that the amount of credit is highly dependent on the amount of saving MSEs have in the microfinance institutions. This might encourage them to save more; it also gave them confidence in their business decision because they might use it for unexpected shocks and expenditures. In line with this, Gudz (1999) states that saving provides a hedge against income variability and serve as a guarantee to access credit that leads to high performance. From the aforementioned points, it could be inferred that only those that have credit access might get this opportunity.

The third reason for the performance difference between credit users and non-credit users might be that credit users had training opportunities from microfinance institutions on how to invest and utilize their capital. Moreover, training in managerial, marketing, financial reporting and customer services might help credit users to

acquire the skills required for performing well in their business activities. According to the responses obtained from interview with microfinance officials, MFIs in the study areas provides training at three levels of MSEs. First, how the borrowers find and create business opportunities including preparation of business plan. Second, after the borrowers or small owners start their business, the MFIs also gives trainings on managerial, marketing, reporting, and on customer service activities. The third one is post evaluation training. Similarly, the contribution of training is also emphasized in various empirical studies. Moreover, the Wilcoxon signed-rank test using median value also supported the performance difference with $z=5.683$; $\text{Prob} > |z| = 0.0000$ as shown below.

Table 2: Wilcoxon signed rank sum test with median value

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. signrank WEP = WEPno
wilcoxon signed-rank test

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sign	obs	sum ranks	expected
positive	38	1188	604.5
negative	1	21	604.5
zero	11	66	66
all	50	1275	1275

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unadjusted variance      10731.25
adjustment for ties      -57.13
adjustment for zeros     -126.50
adjusted variance      10547.63

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Ho: WEP = WEPno
z = 5.682
Prob > |z| = 0.0000

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Source: STATA output

In general, all the aforementioned points might be the major reasons for highly statistically significant performance difference between credit user and non-credit user MSEs in the major cities of Amhara region of Ethiopia. Thus, the hypothesis of this study that claims the existence of significant performance difference between credit user and non-credit user MSEs has been supported. Moreover, favoring the contribution of credit access, in this study, is in line with the empirical investigations of Ekpe et al. (2010), Loice and Razia (2013), Kuzilwa (2005), Kessy and Temu (2010), Brata (2004), and Lawal et al. (2009).

5. Conclusion and implication of findings

The aim of the study is to compare the performance of credit user and non-credit user micro and small enterprises. This study is undertaken within the Ethiopian context specifically in the major cities of Amhara region of Ethiopia by collecting data from 150 credit user and 110 non-credit user MSEs.

Previous studies have shown the importance of credit access on the performance of MSEs. The finding of this study has also shown highly statistically significant performance difference between credit user and non-credit user MSEs. This also signifies the substance of microfinance intervention for small enterprises to perform well in the major cities of Amhara region of Ethiopia. This leads to practical implications that microfinance institutions in the region, with the help of government, should take bold steps to develop infrastructures necessary for MSEs with entrepreneurial traits to have easy access to finance. Even the significance performance difference between credit user and non-credit user MSEs further substantiate the importance of credit access. This finding can give direction for microfinance institutions and government policy makers to concentrate their effort on reducing credit access constraints. Thus, this might be one among effective strategies for poverty reduction in the region.

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