The Role of Entrepreneurial Competencies as a mediator in the relationship between Microfinance and Small Business Growth

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Abstract - This paper aims to advance the knowledge about the relationship between microfinance, entrepreneurial competencies, and small business growth. In contrast to previous works in the field of small businesses, this paper aims to provide empirical evidence that entrepreneurial competencies mediate the relationship between microfinance and small business growth. The paper formulates three hypotheses from previous literature review. These hypotheses are tested using the Structural Equation Modeling with data collected from 243 microfinance participants. The findings indicate that microfinance has a strong association with small business growth. However, the results provide evidence that entrepreneurial competencies play a partial mediating role between microfinance and small business growth. The small sample size, which was dominated by small businesses, was the major limitation of the study. The sample size and distribution also inhibited the comparison of the results between industry sectors. This result can be used in the study on the impact of microfinance toward small business growth in the future. By testing the interaction effect of microfinance and entrepreneurial competencies in small business growth, this paper advances previous works on this area, by looking at the relationship between microfinance and entrepreneurial competencies on small business growth simultaneously.

Keywords: Microfinance; Small Business, Growth, Entrepreneurial Competencies

1. Introduction

Generally, most of the literature assumes all enterprises that are not included in large enterprises fall into the SME category (Rosman and Mohd Rosli, 2011), because most of the enterprises worldwide are small and micro sized (Chris Hall, 2010). This tendency also occurs in the Malaysian environment. Specifically, small businesses in the Malaysian environment are defined as being from the manufacturing sector with sales turnover of less than RM5 million or full-time employees of less than 50 (SME Annual Report, 2012).

The role of entrepreneurs in promoting the economic growth of nations has been widely recognized. Hence, small business is also one of the crucial parts of economic development aside from medium and large enterprises. In fact, there are almost 28 million small businesses in the US and over 22 million are self-employed with no additional payroll or employees (US Small Business Administration, 2013). Equally important, this sector provides income for small entrepreneurs who normally come from low income and underprivileged groups (Rahman and Ahmad, 2010). Moreover, UNCTAD (2010) affirmed that having a high rate of small industrial enterprises has succeeded in generating income contribution.
Acknowledging the importance of various contributions of small business performance to an economy, various support programs in terms of financial (such as loans and credit) as well as non-financial support such as grants, fiscal incentives, advisory services, marketing and training, has been provided by governments all over the world (Jones and Parry, 2011). Unfortunately, although small business gets substantial support from governments, access to finance is still a major barrier faced by the sector. As found by many previous researchers (Aldaba, 2012), a lack of capital is a common problem for entrepreneurs. Therefore, access to finance is a crucial source needed by SMEs in particular, as well as small businesses. Finance is important to help them set up and expand their operations, develop new products, and invest in new staff or production facilities. Many small businesses start out as an idea from one or two people who invest their own money and probably turn to family and friends for financial help in return for a share in the business (OECD, 2011). Empirical evidence such as a study by Aghion, Fally and Scarpetta (2007) affirmed that higher finance development increases new firm entry in sectors, which are heavily dependent upon external finance.

Recognizing the importance of financial access towards small businesses, a microfinance program was introduced in 1976 by Professor Dr. Muhammad Yunus to combat this problem (AIM, 2013). Microfinance started with banking services that offered small loans and accepted small deposits from its customers. Research on microfinance in developing countries has grown over the past 20 years (Ngehe and Nembo, 2010). This is because many countries realize the need for microfinance research since it is also one of the tools for poverty alleviation (Rahman and Ahmad, 2010). Since microfinance has already existed for a long time, a lot of study about microfinance has been conducted by previous researchers. Therefore, many studies have shown that microfinance has a positive impact on borrowers (see Banerjee et al., 2010). This current investigation, however, is different from these studies in the aspect of the effects of micro financing on small business growth. Initially, this study aimed to unearth the significant role of microfinance on small business growth. However, Okpara and Wynn (2007) suggested several factors that are responsible for small business failure and one of the factors include the lack of training. This statement proved that training is also important for small business success. In fact, microfinance also offers non-financial services in terms of training such as advisory services and development programs (Okiocredit, 2013) to improve entrepreneurial competencies.

Nowadays, microfinance institution provides lots of entrepreneurial development programs for example, in Malaysia, the Amanah Ikhtiar Malaysia (AIM) is a major microfinance institution that provides development programs such as training, business development activities, and human capital development besides providing loans to entrepreneurs (AIM, 2013). Naturally, training programs can directly improve entrepreneurial competencies. As found by Carter and Auken (2010), there are growing numbers of self-employed entrepreneurs in developed economies such as the UK and the USA who are highly dependent on their skills. In short, entrepreneurial competencies are important for small business, as well. Although entrepreneurial competencies are seen as important for business growth and success, according to Brinckmann (2012), the discussion of competencies in the entrepreneurial literature is at its early stages. Therefore, for the sake of knowledge development, this paper intends to provide empirical evidence regarding the context of significant roles of microfinance and entrepreneurial competencies on small business growth and at the same time, to test the possibility of entrepreneurial competencies as the mediator.

2. Literature Review

2.1. The Definition of Microfinance, Entrepreneurial Competencies and Small Business Growth

Adkins (2013) proposed a common definition for microcredit as the extension of a small loan (microloans) to those in poverty, designed to spur entrepreneurship. The Microcredit Summit Campaign (2013) defined microcredit as programs that extend small loans to the poor group for self-employment that generate income and improve the quality of life for themselves and their
family. According to the Malaysian Economics Development Report (2007), the microfinance programme provides a small loan to the unemployed, poor entrepreneurs, and those living in poverty. They lack collateral and cannot meet the minimum requirement for credit access from formal financial institutions. Currently, the Consultative Group to Assist the Poor (CGAP, 2013) defines microcredit as a credit delivery system that substitutes collateral requirement and recovers short-term working capital loan to micro entrepreneurs.

The concept of entrepreneurial competency has its foundation not only in the competency and competence literature, but also in the literature of entrepreneurship (Mitchelmore and Rowley, 2010). In accordance with Rudmann (2008), the term entrepreneurial skills can be interpreted as entrepreneurial qualities, competencies and/or values. Furthermore, the terms “skills”, “expertise”, “acumen” and “competency” are all interrelated and are sometimes used interchangeably in the literature. Thus, this study has used the term entrepreneurial competencies as a reference point. In a prior study, Bird (1995) suggests that entrepreneurial competencies are defined as underlying characteristics such as specific knowledge, motives, traits, self-images, social roles and skills that result in venture birth, survival and/or growth. Man et al. (2002) defined entrepreneurial competencies as the total ability of the entrepreneur to perform a job role successfully. Guzman-Cuevas et al. (2009) added that entrepreneurial competencies are also derived from certain entrepreneurial characteristics for examples, education, work experience and motivation (Santos and Bode, 2012).

Outsiders normally evaluate a firm’s ability based on its growth and performance (Bonn, 2010). This implies why growth is like a mirror to a firm. The level of goal accomplishment generally defines a firm’s growth and performance (Achrol and Etzel, 2011). To Lin, Peng and Kao (2008), business performance is the outcome of operations, including the achievement of the firm’s internal or external objectives. Business growth and performance are normally related to the resource-based view (RBV) theory. The RBV of the firm has been frequently utilized in management literature over the past 20 years to understand the relationship between a business unit’s resources/capabilities and its performance or profitability (Hansen and McAndrews, 2005). RBV states that business performance is achieved when the firm has valuable resources and capabilities available as a source of sustainable competitive advantages (Mahoney, 1995). Its emergence as a model of business unit performance traces back to the economic theory of firm growth developed by Penrose in 1959, who argued that firms who possessed competencies (productive resources) and capabilities to best exploit those competencies (managerial resources) would be rewarded with the highest levels of growth and profitability. Though its acceptance has been somewhat controversial (Priem and Butler, 2001), the RBV has been described as the dominant model by which managerial researchers have explained differences among firms.

2.2. Microfinance and Business Growth

The successful story of microcredit through empirical research has been revealed by many previous researchers, which shows that microcredit has a positive effect on the socio-economic conditions of the clients, their households, and their microenterprise (Abed, 2010). George (2008) found that the impact of microfinance programs on women entrepreneurs revealed that most beneficiaries in the study had expanded their businesses and increased their household income. Banerjee et al. (2009) proved that the microcredit approach has an important impact on business outcomes in terms of profits, revenue, business inputs, and the number of workers employed by the business. Similarly, Ngelnemu and Nembo (2010) found that microfinance has given a positive impact on the development of their members’ businesses. AIM’s microcredit program has been proven to increase the microenterprise income of their clients in Peninsular Malaysia (Al Mamun et al., 2012). Thus, this study expects that microfinance will be positively related to the growth of small business. The first hypothesis is stated below.

**H1. Microfinance is positively related to small business growth.**
2.2. Entrepreneurial Competencies and Business Growth

As discussed in the previous section, the microfinance program also offers non-financial services such as technical assistance and support services for livelihood promotion, which may directly help entrepreneurs to improve their entrepreneurial competencies (Sen, 2008). According to Durrani et al. (2011), the roles of microfinance encompass social and economic aspects including the improvement of life style, accommodation standard, income generation, life standard, purchasing power, expansion of business facility, self-employment and the adoption of better technology. Naturally, this kind of training and development program does not only improve entrepreneurial competencies but it may also contribute to growth of the business. Ahmad et al. (2011) reiterate that the firm’s survival or growth results from basic characteristics such as generic, knowledge, motives, and skills. Prior to that, numerous studies in developing countries (see Chu et al., 2007) have found that skills and environmental conditions are the most critical factors for entrepreneurs’ success. Moreover, Nuthall (2009) affirmed that entrepreneurial competencies have been identified as a specific group of competencies relevant to the exercise of successful entrepreneurship. Such entrepreneurship is often associated with the survival and development of small and new businesses. In the context of entrepreneurship, competencies are particularly related to the birth, survival and/or growth of a venture (Colombo and Grilli, 2011). In summary, there is a consensus that entrepreneurial competencies are possessed by individuals, who begin and transform their businesses, and a widespread recognition that the range of skills and competencies required to run a small firm are qualitatively as well as quantitatively different from those needed in larger organizations (Walker and Webster, 2007). In this argument, this study assumes that entrepreneurial competencies can improve business growth. Thus, the next hypothesis is formulated as:

H2. Entrepreneurial competencies are significantly related to small business growth.

2.3. Microfinance, Entrepreneurial Competencies, and Business Growth

In this context, the study tries to find out the direct link among these three constructs, and the mediating effect of entrepreneurial competencies among them. To date, there has been no direct study that explains these relationships. However, this study found previous statements that show the possibility of entrepreneurial competencies existing as a mediator. For example, according to Mawa (2008), the facilities offered by microfinance have helped entrepreneurs to use and develop their skills and have enabled them to directly earn money through business. Petridou and Glaveli’s (2008) study found that rural women entrepreneurs training under microfinance programs gain benefits in terms of their entrepreneurial skills and attitudes, growth prospects, and work family balance. In addition, the results also showed that training provided significant development and growth prospects to the respondents. Moreover, Al Mamun et al. (2012) found that the wide range of training provided by AIM had improved its clients’ ability and skills such as finding new income generating activities, selecting appropriate income generating activities, using the loan suitably, and improving their money management skills, and this had a direct positive effect on their business performance. Besides, Duranni et al. (2011) revealed that access and efficient provision of microcredit could enable the poor to ease their consumption, better manage their risks, gradually build their assets, develop their micro enterprises, enhance their income earning capacity, and enjoy an improved quality of life. Therefore, this study assumed that entrepreneurial competencies are a mediator in the relationship of microfinance programs that can finally lead to an enterprise growth. Thus, the mediating effect of entrepreneurial competencies on the association between microfinance and small business growth is still a litigious matter that calls for redress in the literature. This leads to the following hypothesis:

H3. Entrepreneurial competencies mediate the relationship between microfinance and small business growth.
3. Methods

3.1. Measurement

To test the stated hypotheses and to ensure validity and reliability of the measurements, this study employed the scales adopted in literatures and revised them according to the study’s purposes. The dependent variable for this study is small business growth. The eight items used are market share, sales, customer satisfaction, profitability, growth, productivity, quality, and number of employees adapted from previous studies (see Ar and Baki, 2011; Voola and O’Cass, 2010). All items were anchored on a seven-point Likert-type scale ranging from 1 (significantly lower) to 7 (significantly higher).

The independent variable for this study is microfinance. The microfinance construct consists of 14 items covering the satisfaction level of the implementation of microfinance program adapted from previous studies (see Mahmood, 2011; Ngehnevu and Nembo, 2010). The items used are costs/charges/interest charged, the length of time for loan approval, terms/conditions imposed, loans granted, repayment methods, the repayment terms, supervision of loan used, self-development program provided by the microfinance, cooperation from staff, monitoring and evaluation of the project by the microfinance, training provided by the microfinance, and the overall role of the microfinance program. All items are measured by a seven-point Likert scale starting from 1 for “strongly disagree” to 7 for “strongly agree”.

The mediating variable (or intervening variable) for this study is entrepreneurial competencies. The 10 items used are leadership, problem solving, time management, ability to multitask and ability to criticize, human resource, finance, marketing, accounting, and operation, which were adapted from Rahman et al. (2011) and Botha et al. (2010). All items are measured by a seven-point Likert scale starting from 1 for “strongly disagree” to 7 for “strongly agree”.

In order to prevent distortion of the data analysis and problems in interpretation of the results, the two control variables according to the literature, that could present higher effects on the firm’s performance namely size and age, were included (Rahman et al., 2011). Firm size was measured by the number of employees and age was represented by the number of years since the establishment of the enterprise.

3.1. Sample Description

The empirical analysis in this study is based on primary data. Primary data for this study was collected through printed questionnaires, distributed directly by the researcher and an enumerator. The questionnaire design was developed in accordance with previous researches as discussed. The questionnaires were translated into Malay in order to be used in the Malaysian environment. Of the 300 printed questionnaires, 255 useable questionnaires were returned, but only 243 were deemed completed enough for their applicability in the structural analysis. The response rate of 81 per cent (243 of 300) for this study is quite high since the survey was conducted during the respondents’ weekly meeting. The actual survey period was about four months. Simple random sampling was applied for sample selection. The selection procedure for unit analysis involved picking respondents who are: 1) Microfinance participants; 2) owners or managers; 3) have operated businesses for 3 years and above; and 4) have less than 50 full-time employees.

Summaries of samples in this study are shown in Table 1. It shows that a majority of the respondents are female (88.1%). Almost half of participants are aged between 41 to 50 years old (44.4%) and most of them are married (90.9 %). In terms of their educational level, over half of the respondents have completed secondary school, at 76.9%.
Table 1. Respondents Characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>243</td>
<td>100.0</td>
</tr>
<tr>
<td>Male</td>
<td>29</td>
<td>11.9</td>
</tr>
<tr>
<td>Female</td>
<td>214</td>
<td>88.1</td>
</tr>
<tr>
<td>Age</td>
<td>243</td>
<td>100.0</td>
</tr>
<tr>
<td>21 – 30 years old</td>
<td>25</td>
<td>10.2</td>
</tr>
<tr>
<td>31–40 years old</td>
<td>49</td>
<td>20.2</td>
</tr>
<tr>
<td>41-50 years old</td>
<td>108</td>
<td>44.4</td>
</tr>
<tr>
<td>51-60 years old</td>
<td>59</td>
<td>24.3</td>
</tr>
<tr>
<td>Above 60 years old</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Status</td>
<td>243</td>
<td>100.0</td>
</tr>
<tr>
<td>Married</td>
<td>221</td>
<td>90.9</td>
</tr>
<tr>
<td>Single father/ mother</td>
<td>21</td>
<td>8.7</td>
</tr>
<tr>
<td>Unmarried</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Education</td>
<td>243</td>
<td>100.0</td>
</tr>
<tr>
<td>Primary School</td>
<td>30</td>
<td>12.3</td>
</tr>
<tr>
<td>Secondary School</td>
<td>187</td>
<td>76.9</td>
</tr>
<tr>
<td>Tertiary education</td>
<td>18</td>
<td>7.4</td>
</tr>
<tr>
<td>Others</td>
<td>8</td>
<td>3.4</td>
</tr>
</tbody>
</table>

3.2. Measurement Validity

The questionnaire was validated through a pilot study. A pilot study was conducted on 20 non-respondent samples. Based on the result of a preliminary reliability test, all the variables registered content validity index of greater than 0.70 (small business growth, 0.95; microfinance, 0.961; entrepreneurial competencies, 0.58). The questionnaire was further revised and made ready for a large-scale data collection phase.

This study used the Structural Equation Modeling (SEM) with AMOS 16.0 and the Statistical Program for Social Sciences (SPSS) 14.0 for Windows software packages to analyze the data. SEM is a family of statistical models that seeks to explain the relationships among multiple variables. Thus, the measurement model was first tested to ensure the validity and reliability of the scales.

The establishment of scale unidimensionality starts by checking the factorial structure of each of the concept that needs to be measured. This study followed the suggestion by Hair et al. (2007) in which the goodness-of-fit is used by including at least one index from each category namely: (1) Absolute fit - Chi-square ($X^2$), Root Mean Square Error of Approximation (RMSEA), and Goodness of Fit Index (GFI); (2) Incremental fit- Adjusted Goodness of Fit Index (AGFI), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), and Normed Fit Index (NFI); and (3) parsimonious fit- Chisq/df ($X^2$/df).

After dropping 13 items from the model, all the results of the selected fitness indices were achieved. The results were: $X^2=1286.731$, df= 283, $X^2$/df=4.547, NFI= 0.913, TLI=0.925, CFI= 0.944 and RMSEA= 0.082, which met the model fitness requirement ($X^2/>0.05$, $X^2$/df= < 5.0, NFI= > 0.90, TLI= >0.90, CFI= > 0.90 and RMSEA= 0.05 to 0.10). Finally, only 19 items were retained from the model, specifically four items in the small business growth construct, eight items in the microfinance construct, and seven items in the entrepreneurial competencies construct. This was the last model accepted for further analysis.

According to Hair et al. (2007), after a measurement model fit is achieved and before proceeding with a structural model, it is necessary to determine the construct validity and reliability of the model. Based on the result of the study, all constructs met the validity and reliability test. Validity
was tested using the convergent validity test in which Average Variance Extracted (AVE) for all constructs showed values higher than 0.50 (AVE for constructs range from 0.752 to 0.891) and the discriminant validity AVE was higher than the squared correlation estimate (AVE ≥ r²). Meanwhile, the reliability test was done by testing the construct reliability (CR), which should be higher than or equivalent to 0.60 (CR value for all constructs ranged from 0.938 to 0.955).

4. Results and Discussion

After conducting the CFA and fit of the selected indices, all of these variables in the measurement model were transformed to the structural model where all the covariance arrows are now replaced by one-way arrows, indicating the causal relationship among variables. Hypothesis 1 is fully supported where microfinance is positively related to small business growth (r = 0.741, p = 0.001). As expected, microfinance was found to be significantly related to small business growth. In line with Suraya (2011), microcredit loans not only significantly increased the household’s income, but they also increase the borrower’s microenterprise revenue. Previous studies affirmed that finance was classified as one of the firm’s important resources (Puente and Rabbino, 2003). This is supported by Abed (2010) who said that microcredit has a positive effect on microenterprise.

Banerjee et al. (2009) found that the microcredit approach has an important impact on business outcomes such as profits, revenue, business inputs, and the number of workers employed. Similarly, Ngehnevu and Nembo (2010) found microfinance to provide its members with financial and social intermediation services to help them improve their businesses. Hypothesis 2 is also supported where entrepreneurial competencies are significantly related to small business growth (r = 0.349, p = 0.01). This finding is fully supported by Tompson’s (2001) study, which explained that the external factors related to skills affect the overall firm’s performance. This highlights the fact that the skills of the entrepreneur are important in contributing to business growth in line with numerous studies specifically those carried out in developing countries (Chu, et al., 2007). Managerial skills of entrepreneurs are definitely needed to grow the business (Man et al., 2002). In addition, this study supports the study by Rahman et al. (2011), who explained that generic skills could help individuals to perform effectively and to directly contribute growth to the firm.

The mediating effects of entrepreneurial competencies in Hypothesis 3 adapted the procedures outlined by Baron and Kenny (1986) and Hair et al. (2007). Firstly, the direct effect of microfinance and small business growth were tested. It was found that microfinance is significantly related to small business growth (r = 0.890, p < 0.001). After entrepreneurial competencies (mediator) were included in the model, the relationship between microfinance and small business growth remained significant (p < 0.001), but the effect of the relationship between these two variables was reduced (r = 0.428). It can be concluded that partial mediation is supported. Hence, Hypothesis 3 is partially supported where the effect of microfinance on small business growth is partially mediated by entrepreneurial competencies.

It has been found that the role of entrepreneurial competencies as a mediator does not significantly affect the relationship between microfinance and business growth. On the contrary, Petrídou and Glaveli (2008) affirmed that the training offered under a microfinance program for rural women entrepreneurs could have a positive contribution to the respondents’ development and growth prospects. Similarly, Botha et al. (2010) also supported that the training provided by microfinance programs can develop new skills and knowledge relevant to running a business by increasing one’s confidence in terms of entrepreneurial abilities and using these skills for business growth. This is aligned with a study by Al Mamun et al. (2012) that revealed an increase in microenterprise income with adequate training, and flexible and diversified microfinance programs. However, Adeyemo (2009) suggested that skill is regarded as a quality of performance, which does not solely depend on a person’s fundamental, innate capacities, and that it must be developed through training, practice and experience. In this view, skill is not only derived from training programs, but must also be combined with practice and experience of the entrepreneurs themselves. It will be
significantly positive if the skill gained by an entrepreneur is similar and suited to the present business. This explains why entrepreneurial competencies only have a partial effect on the relationship between microfinance and business growth.

Meanwhile, all the control variables were significantly related to small business growth in line with numerous previous researches (Reid, 2010). The results show that age (r= 0.381, p=0.05) and size (r= 0.275, p=0.05) of the enterprise influenced business growth. It makes sense, as a large firm is believed to show more growth compared to a small business. Likewise, according to the BIS report (2013), plans to grow correlated with the age of the business and those with fewer employees were more likely to have a lesser growth.

5. Conclusion

The main purpose of this study is to provide empirical evidence for the relationship between microfinance, entrepreneurial competencies and small business growth and the mediating role of entrepreneurial competencies in the association between microfinance and small business growth. The key findings of the study found that microfinance was significantly related to small business growth. The study also found that entrepreneurial competencies completely affected small business growth. Indeed, entrepreneurial competencies’ role as a mediator was found to have a partial impact on the relationship between microfinance and business growth. Overall, based on these findings, all primary research problems were clearly answered and the objectives have been achieved.

Nevertheless, this study also had several limitations. The research was limited to several cities. A broader geographic sampling that included larger urban and rural areas would better reflect the national profile. The replication of this study in different regions of Malaysia would enable better generalization of the findings and have better results in improving the findings. Future research may be strengthened by using a sample comprising of more diversified businesses. This sample is a very small proportion of the entire population of microfinance participants in the country. The sample size and distribution also inhibited the comparison of the results between industry sectors. Therefore, research studies with much larger sample size would be required to ensure appropriate generalization of the findings in the study. The present study has relied largely on quantitative methodology of data collection (though qualitative methodology was used to a limited extent) and is therefore restrictive. Hence, a more qualitative methodology of data collection should be undertaken in future researches to provide wider perspectives to the present study.

References

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