The Key Factors in Determining the Successful of Female Enterprise Receiving KUR Product: Case Study of BRI Unit, Medan, Indonesia

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Abstract
Microfinance plays a crucial role in alleviating poverty, and also in enhancing the business performance. Grameen Bank in Bangladesh, BancoSol in Bolivia, and Bank Rakyat Indonesia (BRI/ Indonesia People Bank) are the successful microfinance institutions (MFIs) in the world. These MFIs are not only successful in eradicating poverty, but also in motivating the business performance of enterprise, particularly the micro and small enterprises in their own country. This study focuses on the determinants of the success of female microenterprise in receiving KUR (Kredit Usaha Rakyat/ Credit loan for Small People) from one of the successful microfinance institutions, namely, BRI Unit in Medan City, North Sumatra, Indonesia. This study applies the methodology of the before and after approach for measuring the success. It utilizes some financial indicators to measure the success of the microenterprises, namely income, fixed assets, and household expenditure. The findings show that financing in terms of the amount of loan accessed has a positive relationship with success indicators in terms of changes in income and fixed assets. It is expected that policy makers of microfinance institutions (MFIs), including the BRI Unit and Indonesian government could solve the common problems faced by micro, small and medium enterprises (MSMEs), such as financing, raw materials, marketing, advanced technology, and others, as MSMEs play a crucial role in increasing economic growth in terms of reducing poverty and unemployment; and increasing GDP. In this respect, the policy makers of MFIs including the BRI Unit are also expected to provide the facilities besides credit services, such as training, health programmes, education, family planning, and other programmes to make greater effectiveness of the microfinance on the performance of microenterprises.

1. Overview
Countries from around the world are paying attention to microfinance institutions
(MFIs) because of their role in generating employment and economic growth (Bhasin and Akpalu, 2001; Santos, 2003). MFIs such as Grameen Bank in Bangladesh, BancoSol in Bolivia, and Bank Rakyat Indonesia (BRI) in Indonesia have spread throughout the world indicating their success in alleviating poverty and improving microenterprise performance. Various studies in the past have successfully proven that MFIs are not only crucial in alleviating poverty but also play an important role in supporting the performance of microenterprises in various countries. Mosley (1997), for example, deliberated on how microfinance has helped to improve the income and employment of borrowers of the BancoSol lending programme. And in another study where the Subsidy Dependence Index (SDI) was used, Mosley and Hulme (1998) showed how BancoSol has had a positive impact on income in Bolivia. Similarly for Bangladesh, Khandker, Samad and Khan (1998) demonstrated how MFIs in the country, such as Grameen Bank, Bangladesh Rural Advancement Committee (BRAC) and Rural Development Project (RD 12), have positively influenced income, production, and employment in Bangladesh; while Bhasin et al. (2001) and Vogelgesang (2001) showed that microfinance has helped improve technical efficiency, productivity, and growth of microenterprises in Cape Coast and Bolivia respectively.

A case study by Yamauchi (2005) demonstrated how microcredit can generate more employment for Indonesia. This is supported by Retno and Adwin (2011), who illustrated how microcredit can bring significant improvement on female entrepreneurs’ standard of living. Furthermore, according to Agricultural Finance Corporation Limited (2008), many clients use microcredit to develop their existing activities or diversifying into new activities with a view of increasing their sources of income. Microfinance has also brought positive effect on performance of microenterprise in terms of income, savings, and loan repayment (Simeyo, Martin, Nyamao, Patrick, and Odondo, 2011). Microfinance indicates a positive impact on education in Philippines (Karlan and Zinman, 2009). And in a case study of Amanah Ikhtiar Malaysia (AIM), Saad and Duasa (2011) explained how microfinance has brought positive effect on the business performance of microenterprises. AIM is also said to have positive impact on assets owned by older clients compared to new clients (Al-Mamun, Adaikalam, and Mazumder, 2012). Given these studies, it can be concluded that microfinance helps to alleviate poverty and improve the performance of microenterprises.

This study focuses on the determinants of the success of female microenterprise in receiving KUR (Kredit Usaha Rakyat/ Credit loan for Small People) from one of the successful
microfinance institutions, namely, BRI Unit in Medan City, North Sumatra, Indonesia. This study applies the methodology of the before and after approach for measuring the success. It utilizes some financial indicators to measure the success of the microenterprises, namely income, fixed assets, and household expenditure. BRI is known as a world leader in commercial microfinance (Robinson, 2005). The Development of microenterprises plays an important role in supporting economic growth in Indonesia by generating employment (job opportunities) and increasing productivity. This view is supported by Sandiaga Uno (2010), Vice Chairman of the Board of Industry and Trade of Indonesia (KADIN), who stated that Indonesia needed around 4.4 million enterprises including microenterprises to achieve economic growth. For this reason, KADIN motivates Indonesian enterprises, including microenterprises, to keep expanding their business activities.

This study states two questions related to the factors determine the success of female microenterprises received microloans from BRI Unit.

1. What are the determinants of the success of female microenterprises in terms of their performance measured by income, fixed assets, and household expenditure?

2. Are there other factors besides the KUR microloan product of the BRI Unit; such as type of business and household characteristics, contributes significantly to the success achieved by female microenterprise in terms of their income, fixed assets, and household expenditure?

This study is required to promote the crucial inputs for the policymakers of microfinance institutions, including BRI Unit. The results of this study provides the input the policymakers of microfinance to enlarge non-credit services, including health, education, pension programs, and others with the aim to enhance the effectiveness of KUR microloan on the performance of female microenterprise. This study uses microenterprise performance in terms of income, fixed assets, and household expenditures as the measurement of successful. Additionally, we employ before and after method to measure the success of microenterprise receiving KUR micro-product.

1.1 Performance of PT. Bank Rakyat Indonesia

PT. Bank Rakyat Indonesia (BRI) is one of the most successful government-funded banks in serving the micro, small, and medium enterprises (MSMEs) in Indonesia. BRI increased the credit allocation for the MSMEs from Rp12.01 trillion (US$1.349 billion) in
December 2002 to Rp.27.28 trillion (US$3.041 billion) in December 2006 in view of the encouraging growth of the market segment of about 22.77 per cent per annum. Additionally, the government of Indonesia sold its shares of about 30 per cent to the public in November 2003, leading to the value of BRI shares to increase dramatically following the exercise.

BRI appoints BRI Unit to distribute its micro-credit product. The net income of the BRI Unit reached around of Rp403 billion (US$26 million) during the pre-financial crisis in 1995, and kept on increasing to around Rp 1,161 billion (US$73 million) during post-three years of financial disaster in 2000. Though, the net income obtained by BRI Unit decreased based on dollar value to the level of US$121 million due to the depreciation of rupiah currency vis-à-vis the US dollar in 2000, the BRI Unit had well performed financially by recording a profit of about Rp 2,168 billion (US$234,530), with a return on assets (ROA) of around 6.2 per cent in 2004.

The total assets of BRI Unit increased significantly to Rp 626.2 trillion (US$52 billion) in 2013. Total credit also grew substantially to Rp 448.34 trillion (US$37 billion) in 2013. BRI also achieved incremental net profit around of 14.27 per cent from 18.41 per cent in 2012 to 23.72 per cent in 2013. The total microcredit distributed is about of 132.1 trillion or US$11 billion in 2013 (BRI Annual Report, 2013). During the year, BRI also expanded in terms of opening new branches. In 2013, BRI added together seven branch offices, 20 sub branch offices, 36 cash offices, 144 BRI Unit offices, 549 teras BRI, and around 45,329 e-channel networking. BRI noted as well that the BRI microcredit account increased from 5.5 million in 2012 to 6.5 million in 2013, and followed by saving account which increased from 24 million in 2012 to 28 million in 2013. BRI was reported to have the biggest assets portfolio of MSMEs with the market share increased from 28.08 per cent in 2012 to 29.50 per cent in 2013. Further, the growth rate of MSMEs rose by around 14.89 percent from Rp458.16 trillion (US$51 billion) in 2011 to Rp608.82 trillion (US$63.27 billion) in 2012.

These BRI Units offer two types of microcredit products, namely: (i) KUPEDES (Kredit Umum Pedesaan/General Rural Credit) and (ii) KUR (Kredit Usaha Rakyat/People Business Credit). KUPEDES is a microcredit product provided entirely by the BRI Unit, while, KUR is a microcredit product that is subsidised by the Indonesian Government, and is also offered by other banks, such as Bank Mandiri, Bank BNI, Bank Bukopin and others. This study concentrates on KUR micro-product delivered by BRI Unit specifically. According to Mr.
AAGN Puspayoga (Ministry of Cooperative and Small and Medium Enterprises) the Government of Indonesia would distribute Rp30 trillion (US$2.31 billion) for KUR micro-product in 2015. Further, he pointed that BRI Unit has been chosen as the only bank in delivering KUR micro-product at that time because it has shown its willingness from liquidity and system sides to distribute KUR micro-scheme for microenterprise. Previously, KUR was composed into two types, namely KUR micro and retail. KUR retail offered the amount of loan from Rp20 million (US$1,540) to Rp500 million (US$38,462). However, the Indonesian government opt to run only KUR micro with the supreme amount of loan Rp25 million (US$1,923).

2. Literature Review

Several studies have been conducted in Nigeria to determine the factors that affect the success of microenterprises measured in terms of their performance. These studies show that an entrepreneur’s personal background and characteristics such as age, educational background, marital status, business experience, proficiency in the local language, formal business training, motivation, and foresight; and the business firm’s characteristics in terms of its age and size of firms, are important determinants affecting the success of microenterprises (Ekpe, 2011; Mohd. Sobri and Igwe-Lucky, 2011; Olusola O, Morufo O, Abimbola O, 2011; Yusuf, Olgberni, Atere, 2011). However, these studies also indicate that socio-cultural environment dimensions are not significant variables in moderating the connection between individual determinants, external factors, and the firm’s characteristics with the performance of a firm as a measurement of success (Mohd, Olusegun, and Igwe-Lucky, 2011).

Meanwhile, case studies conducted in Bangladesh, Eastern Finland, Cape Coast, Thailand, Jordan, Bangladesh, and Africa found that entrepreneur characteristics, human capital, household characteristics, village characteristics, firm characteristics or organisational factors, financing in terms of microcredit accessed, motive and goals, history and constraints, customer and markets, resources, the procedure for doing business and cooperation, and other external factors are crucial factors that influence the success of microenterprises (Faridi, 2011; Reijonen, 2008; Bhasin and Akpalu, 2001; Chittithaworn, Md. Aminul, Keawachana, and Dayang, 2011; Springuel, 2011).

Entrepreneur’s characteristics refer to informal skills, age of operator of business, and
marital status. On the other hand, human capital refers to educational background, experience in business, training, and communications with lender. Household characteristics refer to the number of household members and education level of head of the household. Village characteristics include the presence of rural health centre, presence of family planning centre, and the availability of clean water and electricity. The firm’s characteristics or organisational factors refer to product innovation, cost, quality, services, strategy, and reliability of the organisation. Finally, external factors refer to government support, social networks and legitimacy.

Case studies in Malaysia illustrate that factors such as informality; institutional environment; entrepreneurial characteristics in terms of the person’s ability to build business network with institutions, association with local organisations in their community internally or externally, need for achievement and locus of control; socio-cultural environment; financing; infrastructure; and external environmental factors such as government support, extrinsic motivation, funding machine, technical assistance, and marketing; and, finally, tools with lower price; a firm’s characteristics in terms of its innovative and creative approach, were identified as determinants that influences the success of microenterprises in Malaysia (Norhafizah, Ratna, Salfarina, and Zainal, 2011; Muhammad, Shaladin, Wan Abdul, and Ahmad, 2011).

Several studies that attempted to review the literature systematically concentrate on factors involving the success of microenterprises. Factors are grouped in terms of entrepreneurs determinants, human resources determinants, institutional characteristics, organisational determinants, environmental determinants or external factors, and loan characteristics (Daou and Karuranga, 2012; Norhaziah and Mohd, 2010).

Entrepreneur determinants refer to family ties, education level, age of manager, gender, working experience, willingness to increase one’s income, public recognition, relationship with family, previous success, job security, successful business plan, personal satisfaction, employment opportunities for family members, leadership, risk-taking tendencies, communication, commitment, motivation, technical skills, formal business training, ICT literacy, willingness to innovate, monthly income and financial knowledge. Meanwhile, human resources determinants refer to employee commitment, job flexibility, tendency to leave job, personal job satisfaction, conformity with behaviour and attitude, system of honour, dedication for continuation, solid communication within organisation, tractability of management on
employees, system of paternalistic relationships, practising the works, and agency of employment.

Further institutional characteristics refer to threats imposed by the lenders and regular monitoring or supervision. Organisational determinants refer to technology, internet, quality management, strategic planning policies, and professional management practices. Finally, environmental determinants or external factors refer to support from public institutions, cooperation within firm, and cluster formation; and loan characteristics includes the amount of loan accessed or loan size, procedures of repayment and period of loan.

3. The Importance of Micro, Small, and Medium Enterprises for Employment and Economic Growth in Indonesia

The number of MSMEs reached 99.99 percent and large enterprises (LEs) only hold around 1 percent of the total number of enterprises in Indonesia; which stands at around 55,211,396 for the period between 2006 and 2011. Microenterprises reached a large number compared to small and medium enterprises. This indicates that MSMEs contribute immensely to job opportunities compared to LEs since microenterprises contributed the most to the labour force. In terms of contribution to economic growth based on real GDP, data again indicate that MSMEs contribute more to economic growth than LEs, and microenterprises are the biggest contributor compared to small and medium enterprises.

Indonesia is acknowledged to be a country with a huge number of MSMEs compared to other ASEAN countries as Indonesia has a huge area size and population (Tambunan, 2007). In addition, the private sector in Indonesia is larger than its counterparts in socialist countries such as Cambodia, Vietnam, Myanmar, and Laos. Secondly, Indonesia is still struggling with poverty alleviation, and, most MSMEs, particularly microenterprises, are taken on by poor households as their main or second source of income. Many MSMEs give attention to agricultural-based businesses, with 54 percent of MSMEs focusing on agricultural business activities, followed by trade, hotels and restaurants at 27 percent; and manufacturing at 7 percent (Central Bureau Statistics, 2006).

Meanwhile, the development of microenterprises in North Sumatra, particularly in Medan, is very significant. The Central Bank of Indonesia indicates that there is an increasing demand for microcredit or microloans from microenterprises in North Sumatra from 15.26
percent in 2006 to 44.70 percent in 2007. In addition, the demand for credit from small enterprises also increased from 21.49 percent in 2006 to 33.40 percent in 2007. Furthermore, the development of microenterprises, and small and medium enterprises are encouraged by the Central Bank of Indonesia (BI) by targeting three goals to support the development of such enterprises in North Sumatra, with Medan as its capital. The three goals are, “the distribution of credit to small and medium enterprises, the establishment of a support system and institutions, and, finally, a mutual understanding between banks and the government on credit programmes” (Romeo Rissal, Bank of Indonesia, Medan City, 2007). The credit for small and medium enterprises also increased to 20 percent in December 2007. In the last four years, the financing for small and medium enterprises increased significantly but its share is still less than 20 percent. The development of small and medium enterprises in North Sumatra is supported by the Central Bank of Indonesia by providing the Centre of Data and Information for Small and Medium Enterprises (SMEs) with the following aims: “to develop the Centre of Data and Information of SMEs through the website, which is linked to the entire community of SMEs, to build the Centre of Information for the agent of SMEs for the activities of marketing and financing, and, finally, to build the centre for the development of applied information technology for the operation of SMEs” (Central Bank of Indonesia, 2007).

There are around 56 traditional markets with many small vendors in Medan City, in North Sumatra, Indonesia. These are 20,917 Indonesian small vendors called *pribumi*, and 2,178 non-Indonesian small vendors called *non-pribumi*. These non-Indonesian small vendors are ethnic-Chinese small vendors who are Indonesian citizens. The 56 traditional markets comprise of 17,540 formal stores as well as 4,345 informal stores. From these figures, it can be concluded that microenterprises play a vital role in supporting the economic growth of Medan City, Indonesia. Thus, the BRI Units should improve their strategies in delivering microloans for microenterprises to assist them in creating new businesses or expanding existing businesses in the city.

**4. Empirical Model and Variables**

This study has three models to examine the determinants of the success of microenterprises, whose owners received microloans from the BRI Units. Success is measured by the performance of the microenterprise in terms of its income, fixed assets, and household
expenditure. This present study focuses on four factors that influence the success of microenterprise: households’ characteristics, firm’s characteristics, financing, and entrepreneurs’ characteristics.

The first model is presented as Equation 1:

\[
(1) \quad \text{Change Income}_i = \alpha_0 + \sum_{i=1}^{8} \beta_2 \text{Age}_i + \sum_{i=1}^{2} \beta_3 \text{Gender}_i + \sum_{i=1}^{3} \beta_4 \text{Status}_i + \sum_{i=1}^{5} \beta_5 \text{Educ}_i \\
+ \sum_{i=1}^{2} \beta_6 \text{Tyofloan}_i + \beta_7 \text{Lgamtloan}_i + \sum_{i=1}^{9} \beta_8 \text{TOB}_i + \mu_i
\]

The second model is presented as Equation 2:

\[
(2) \quad \text{Change Fixed Asset}_i = \alpha_0 + \sum_{i=1}^{8} \beta_2 \text{Age}_i + \sum_{i=1}^{2} \beta_3 \text{Gender}_i + \sum_{i=1}^{3} \beta_4 \text{Status}_i + \sum_{i=1}^{5} \beta_5 \text{Educ}_i \\
+ \sum_{i=1}^{2} \beta_6 \text{Tyofloan}_i + \beta_7 \text{Lgamtloan}_i + \sum_{i=1}^{9} \beta_8 \text{TOB}_i + \mu_i
\]

The third model is presented as Equation 3:

\[
(3) \quad \text{Change Houexp}_i = \alpha_0 + \sum_{i=1}^{8} \beta_2 \text{Age}_i + \sum_{i=1}^{2} \beta_3 \text{Gender}_i + \sum_{i=1}^{3} \beta_4 \text{Status}_i + \sum_{i=1}^{5} \beta_5 \text{Educ}_i \\
+ \sum_{i=1}^{2} \beta_6 \text{Tyofloan}_i + \beta_7 \text{Lgamtloan}_i + \beta_8 \text{Growthincome}_i + \beta_9 \text{Lghouincome}_i \\
+ \mu_i
\]

Table 1: The Description of the Determinants of Success of Microenterprise

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>Change Income</td>
<td>Income of microenterprise per month in Rupiah before and after accessing loan from BRI Unit</td>
</tr>
<tr>
<td>Change Fixed Assets</td>
<td>The total amount of fixed assets in Rupiah before and after</td>
</tr>
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</table>
This study uses the performance of microenterprises as the measurement of success; an approach used previously in various business studies (Chittithaworn, Md. Aminul, Keawchana, and Dayang, 2011). This study focuses on three financial indicators generated from the performance of microenterprises in terms of their income, fixed assets, and household expenditure, based on the Indonesian context. Based on findings of previous studies, this study focuses specifically on three factors that determine the success of microenterprises, namely, financing, enterprise characteristics, and firm’s characteristics. Financing is assumed to play a crucial role in achieving or expanding business productivity. Adequate financing would allow an entrepreneur to buy raw materials, employ more workers, promote existing workers, and offer more products and services, and others. All these would enhance the enterprise’s chances to achieve greater success in terms of its business performance.

This study also focuses on entrepreneur characteristics selected from a review of previous literature. These characteristics include age, gender, marital status, and educational background. They are assumed to influence the success of microenterprises in terms of their
performance. Household characteristics and a firm’s characteristics in terms of household income and types of business, respectively, are also considered factors that would affect the success of microenterprises.

In this section, this study discusses the nature of the variables employed that are assumed to influence the success of microenterprises that receive loans from the BRI Units. The dependent variables employed as a measurement of success comprises of the following:

i. Income of microenterprise

This study uses microenterprise income as the dependent variable in measuring the success of microenterprises. Microenterprise income is used because income is a good indicator for tracking changes in enterprise welfare and the measurement of success (Faridi, 2011). It is assumed that if the income of a microenterprise increases, the microenterprise has been successful in improving its performance.

The second dependent variable is changes in enterprises’ fixed assets. This study uses fixed assets as its dependent variable since, besides income, fixed assets are one of the best indicators for tracking changes in enterprise welfare and could be considered as a measurement of success (McPherson, Molina, and Jewell, 2010; Faridi, 2011).

ii. Change of household expenditure

This study uses change of household expenditure as one of its measurements of success. This variable is chosen because it is categorised as a welfare indicator and as a measurement of success (Ngaosi and Navarro, 2007; Faridi, 2011). It is assumed that if the household’s expenditure increases, the performance of the microenterprise increases too because the microenterprise can spend more on expenditure.

This study selects four factors that may influence the success of the microenterprise, namely, financing, entrepreneur characteristics, firm’s characteristics, and household characteristics. These four factors represent the independent or explanatory variables in this study.

Financing is selected based on findings of previous studies (Faridi, 2011; Nor Hafizah, Ratna, Salfarina, and Zainal, 2011; Bhasin and Akpalu, 2001; Norhaziah and Mohd, 2010; Morris, 2003). Financing consists of type of loan and amount of loan accessed.

iii. Type of loan (Tyofloan)

The BRI Units offer two types of microcredit product: KUPEDES and KUR.
KUPEDES is commonly known as General Rural Credit. KUPEDES was created by the BRI itself, while KUR or People’s Small Credit is subsidised by the Indonesian Government. This study uses type of loan as categorical variable where KUPEDES is 1, and KUR is 2. This study includes type of loan with the aim of examining whether the type of loan, either KUPEDES or KUR, could affect the success of microenterprises. Furthermore, this variable is used with the aim of examining whether these two micro products produce different results in influencing the success of microenterprises. The variable is expected to have a positive effect in determining the success of microenterprises that access KUPEDES and KUR loans.

iv. Amount of loan (Lgamtloan)
This reflects the amount of loan borrowed from the BRI Units. It is expected that the amount of loan could be used as one of the determinants of the success of microenterprise owners in terms of their microenterprise income, fixed assets, and household expenditure (Norhaziah and Mohd, 2010). It means that the bigger the amounts of loan accessed by BRI Unit customers, the higher the chances that the microenterprise can expand their business productivity and improve its business performance. Thus, this study expects that the amount of loan will have a positive influence on the success of microenterprises.

Most previous literature uses entrepreneur characteristics in examining the success of enterprise (Ekpe, 2011; Faridi, 2011; Reijonen, 2008; Nor Hafizah, Ratna, Salfarina, and Zainal, 2011; Bhasin and Akpalu, 2001; Chittithaworn, Md. Aminul, Keawachana, and Dayang, 2011; Muhammad, Wan Abd Aziz, and Ahmad, 2011; Daou and Karuranga, 2012; Toivstiga, 2007; St-Pierre and Audet, 2011; Masakur, Henson, and Cranfield, 2009; Yusuff, Olagberni, and Atere, 2011; Norhaziah and Mohd, 2010; Springuel, 2011). This study selects four variables of entrepreneur characteristics and assumes that these variables will have a positive influence on the success of microenterprises. The variables selected from previous literature consist of the following:

Age of member (Age): Age is an example of entrepreneur characteristics that is widely used in determining the success of microenterprises (Ekpe, 2011; Bhasin and Akpalu, 2001; Muhammad Abi, Shaladain, Wan Abd Aziz, and Ahmad, 2011; Daou and Karuranga, 2012; Norhaziah and Mohd, 2010). Based on findings of previous studies, age is expected to positively influence the success of a microenterprise in terms of its income, fixed assets and household expenditure. It is assumed that if a BRI member is older, he or she will be successful in
managing the enterprise due to his or her experience. This will, as a result, increase his or her microenterprise’s income, fixed assets, and household expenditure. This study uses age as a categorical variable. The categories are as follows: 1: 15 to 20 years old; 2: 21 to 25 years old; 3: 26 to 30 years old; 4: 31 to 35 years old; 5: 36 to 40 years old; 6: 41 to 45 years old; 7: 46 to 50 years old; and 8: 50 years old and above.

Gender (Gender): Gender is also a characteristic widely examined in previous literature (Muhammad, Shaladin, Wan Abd, and Ahmad, 2011; Daou and Karuranga, 2012; Norhaziah and Mohd, 2010). This study uses gender with the aim of observing whether an entrepreneur’s gender influences the success of microenterprises that received a microloan from a BRI Unit. Gender is categorical variable with the following categories: 1: male; and 2: female.

Marital Status (Status): Marital status has also been used as an example of entrepreneurs’ characteristics that influence the success of an enterprise (Ekpe, 2011; Faridi, 2011). The categories of marital status used in this study are married, single and widow/widower. An entrepreneur’s marital status is assumed to have some effect on the success of a microenterprise. For example, an entrepreneur who is married with children is assumed to be very determined and willing to work hard to ensure the success of his/her microenterprise with respect to its income, fixed assets, and household expenditure. This study uses marital status as a categorical variable with the following categories: 1: married couple; 2: single; and 3: widow/widower.

Education (Educ): Numerous previous studies have identified educational background as an important entrepreneur characteristics that affect the success of an enterprise (Ekpe, 2011; Bhasin and Akpalu, 2001; Muhammad, Shaladn, Wan Abd Aziz, and Ahmad, 2011; Daou and Karuranga, 2012; Tovstiga, 2007; Yusuff, Olagberni, and Atere, 2011; Norhaziah and Mohd, 2010). The education level of an entrepreneur is expected to positively influence the success of a microenterprise. In the context of this study, it is assumed that a BRI member who has high education is able to manage their enterprise successfully. Education is a categorical variable with the following categories: 1: uneducated; 2: primary school; 3: junior high school; 4: senior high school; and 5: diploma/bachelor.

Various literature also include a firm’s characteristics as factors determining the success of a microenterprise (Ngaosi and Navarro, 2007; Nor Hafizah, Ratna, Salfarina, and Zainal, 2011; Chittithaworn, Md. Aminul, Keawchana, and Dayang, 2011; Daou and Karuranga,
Type of Business (TOB): This is a dummy variable that consists of eight categories: 1: salon and massage and 0: otherwise; 1: food and 0: otherwise; 1: garment and 0: otherwise; 1: building material and 0: otherwise; 1: technician for vehicles and watches and 0: otherwise; 1: rental and 0: otherwise; 1: printing and photocopying and 0: otherwise; and 1: household facilities and 0: otherwise. This study utilizes this variable with the purpose of investigating whether the different types of businesses managed by microenterprises could determine their success and performance. This dummy variable is expected to have a positive relationship on the indicators of success.

Finally, this study uses household characteristics as one of the factors determining the success of a microenterprise; based on a review of previous literature (Faridi, 2011; Ngaosi and Navarro, 2007).

Household income: Household income is used as the household characteristic variable in determining the success of a microenterprise in terms of household expenditure. This study anticipates household income to have a positive influence on the success of a microenterprise. It is assumed that if the household income of a microenterprise increases, its household expenditure would increase as well.

5. Data and Research Methodology
5.1 Survey Design and Data Collection

The survey design executed from 9th November 2009 to 12th December 2009 in Medan city, North Sumatra, Indonesia. This study concentrates specifically on micro entrepreneur receiving KUPEDES obtained from BRI Units which supervised by BRI Putri Hijau. Eleven BRI Units are chosen randomly in Medan city as the BRI Units controlled by BRI Putri Hijau have similarities in terms of performance including microcredit distribution, saving mobilization, and finally well repayment. These BRI Units chosen are BRI Unit Tembung, BRI Unit Padang Bulan, BRI Unit Juanda Baru, BRI Unit Mandala, BRI Unit Krakatau, BRI Unit Pasar Sukaramai, BRI Unit Pasar Pringgan, BRI Unit Sei Sikambing, BRI Unit M.Yamin, BRI Unit Menteng, and finally BRI Unit Simpang Limun.
There were about 67 female respondents selected who received KUR loan, and this survey was done by ten surveyors. Further, these surveyors are degree students of Islamic Economic studies from IAIN (Institut Agama Islam Negeri) in Medan city, Indonesia. Majority of them sit in final semester. They were instructed to deliver the questionnaires and interview the respondents directly in the office of eleven BRI Units chosen.

The calculation for the sample size originated from the study of Cohran (1963). He formulated the equation for large populations. However, this study used the formula by Israel (1992) to calculate the sample size. Israel’s (1992) formula was developed to yield a representative sample for proportions. The formula used to calculate the sample size is as follows:

\[ n_0 = \frac{Z^2 pq}{e^2} \]

where:

\( n_0 \) = the sample size

\( Z^2 \) = the abscissa of the normal curve that cuts off an area at the tails \((1 - \text{equals the desired confidence level, e.g. 95%}), \) the value found in the statistical tables, which contains the area under the normal curve

\( e \) = the desired level of precision

\( p \) = the estimated proportion of an attribute that is present in the population

\( q = 1 - p \)

This study assumes that there is a large population of BRI Unit clients under the supervision of BRI Putri Hijau. The variability in the proportion of micro entrepreneurs who received a microloan from the BRI Units, however, is not known. This study assumes \( p = 0.5 \) (maximum variability). The resulting sample size is demonstrated below:

\[ n_0 = \frac{Z^2 pq}{e^2} = \frac{(1.96)^2(0.5)(0.5)}{(0.5)^2} = 385 \text{ respondents} \]

In accordance with the calculation result, more than 400 respondents were selected for this study from among micro entrepreneurs who received microloans from the BRI Units under the supervision of BRI Putri Hijau.
However, as we focus on KUR female borrowers. The respondents are selected is around of 67 respondents.

5.2 Descriptions of Respondents

Most of these female microenterprises are mainly from the small vendors. Majority of them are working poor who operate the business activity and have repayment capacities. Most of these small vendors run their business activities in expanded area economically. These areas mainly have conventional markets where you can see many small vendors. These areas also characterized as areas have well infrastructures in terms of electricity, police office, paved roads, clean water, and others. Additionally, this study also obtained the data from the Biro Pusat Statistik or Central Bureau of Statistics (BPS) located in Medan city, Indonesia.

5.3 Method: The Before and After Approach

This study used the before and after method in examining the effectiveness of KUR in giving the big contribution on microenterprise performance through income, fixed assets, and household expenses before and after receiving microloan from BRI Unit. Before and after method is applied when data obtained from every state is $T = 2$ period of times, and it is workable to contrast the value of the dependent variable in the second period time to its values in the first period of time. Concentrating on changes in the dependent variable or known as “before and after” or “differences” caused the unobserved factors constant which is varied from one state to other states but do not alter over time inside the state. EVIEWS 7 is employed to measure the effectiveness of KUR on female microenterprise performance.

6. Results and Discussions

Table 2 below presents the findings of the key factors in determining the successful of female enterprise receiving KUR product. Regression (1) focuses on factors that determine the success of microenterprises in terms of income of microenterprise, regression (2) concentrates on the factors that determine the success of microenterprise in terms of fixed assets, and, finally, regression (3) focuses on the factors that determine the success of microenterprises measured by household expenditure.

Table 2: Key Factors In Determining the Successful of Female Enterprise Receiving KUR Product
<table>
<thead>
<tr>
<th>Regressor</th>
<th>Change in Income (Regression 1)</th>
<th>Change in Fixed Assets (Regression 2)</th>
<th>Change in Household Expenditures (Regression 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.26* (0.64)</td>
<td>9.68** (4.59)</td>
<td>-0.34 (0.22)</td>
</tr>
<tr>
<td>Status</td>
<td>0.28 (2.59)</td>
<td>6.93 (9.59)</td>
<td>-0.51 (0.38)</td>
</tr>
<tr>
<td>Educ</td>
<td>1.07 (1.71)</td>
<td>50.15 (34.04)</td>
<td>-0.22 (0.44)</td>
</tr>
<tr>
<td>Lgamtloan</td>
<td>6.22*** (1.94)</td>
<td>-24.36 (45.94)</td>
<td>-1.04 (1.00)</td>
</tr>
<tr>
<td>Garment</td>
<td>-4.07 (3.62)</td>
<td>24.21 (25.33)</td>
<td></td>
</tr>
<tr>
<td>Houfacandnecess</td>
<td>2.16 (4.85)</td>
<td>31.68 (33.48)</td>
<td></td>
</tr>
<tr>
<td>Repwatch</td>
<td>3.83 (3.66)</td>
<td>2.93 (17.68)</td>
<td></td>
</tr>
<tr>
<td>Loghouincome</td>
<td></td>
<td></td>
<td>0.01 (0.40)</td>
</tr>
<tr>
<td>Salon and massage</td>
<td>-5.35*** (1.87)</td>
<td>6.24 (16.24)</td>
<td></td>
</tr>
<tr>
<td>Rental</td>
<td>4.54 (2.89)</td>
<td>-34.21 (35.62)</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-58.81*** (20.39)</td>
<td>-42.28 (293.93)</td>
<td>12.29 (9.15)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.15</td>
<td>0.16</td>
<td>0.09</td>
</tr>
<tr>
<td>Observations</td>
<td>67</td>
<td>67</td>
<td>67</td>
</tr>
<tr>
<td>D-W</td>
<td>2.04</td>
<td>2.66</td>
<td>1.98</td>
</tr>
<tr>
<td>BPG</td>
<td>4.3846.52</td>
<td>4.83</td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1. Standard errors are given in parentheses under coefficients, and p-values are given in parentheses under F-statistics. Individual coefficients are statistically significant at the * 10%, ** 5%, and *** 1% significance level (based on p-value). As regression (1) and (3) indicate having heteroscedasticity and are free from autocorrelation, all of the coefficients in regression (1), and (3) have been transformed into heteroscedasticity-robust standard error, meanwhile (2) indicate having autocorrelation and free from heteroscedasticity, all of the coefficients in regression (2) has been transformed into heteroscedasticity-robust standard error.

Regression (1) focuses on the key factors in determining the success of female microenterprises receive KUR micro-product measured by change in income; regression (2) concentrates on the key factors that determine the success of female microenterprises that receive KUR measured by fixed assets, and, finally, regression (3) focuses on the key factors
that determine the success of microenterprises measured by household expenditure.

In regression (1) indicates that only age as one of entrepreneur’s characteristics has positive relationship with change in income. It suggests that the female microenterprises, with the age of 50 years old and above, have the highest of change of income of 10.08 per cent. It is followed by the female microenterprises with the age 46 to 50 years old with change in income 8.82 per cent, 41 to 45 years old with change in income 7.56 per cent, 36 to 40 years old with change in income 6.3 per cent, 31 to 35 years old with change in income 5.04 per cent, 26 to 30 years old with change in income 3.78 per cent, 21 to 25 years old with change in income 2.52 per cent, and 15 to 20 years old with change in income 1.26 per cent. The findings is appropriate with the previous studies and expectations that age is expected to positively influence the success of microenterprises in terms of their income (Ekpe, 2011; Bhasin and Akplau, 2001; Muhammad Abi, Shaladin, Wan Abd Aziz, and Ahmad, 2011; Daou and Karuranga, 2012; Norhaziah and Mohd, 2010). It could be concluded that if a female microenterprise is older, she will be successful in managing the enterprise due to her experience. However, another characteristics of female microenterprises in terms of education and status indicate play no important role in determining the success of female microenterprises. On the other hand, the log amount of loan indicates a positive significant relationship with change in income at 1 per cent level. In this respect, it suggests that if the amount of loans of KUR accessed increased by one per cent, it increases the change in income by roughly 0.06 percent per month. This proves that financing is one of the crucial factors in determining the success of microenterprises, which supports other studies (Kantor, 2005; Faridi, 2011; Nor Hafizah, Ratna, Salfarina, and Zainal, 2011; Bhasin and Akpalu, 2001; Norhaziah and Mohd, 2010; Morris, 2003). However, some studies indicated that financing is not considered a vital factor in determining the success of microenterprises (Ngaosi et al., 2007; Nor Hafizah et al., 2011; Mohd Abi et al., 2012; McPherson, 2010; Olusola, 2011). The firm’s characteristic in terms of dummy variable of saloon and massage indicate negative significant relationship with change in income. This study suggests that this kind of businesses have a 5.35 percent lower change in income than others. However, other dummy variables of types of business indicate an insignificant relationship with change in income.

In the meantime, regression (2) illustrates that only the entrepreneur characteristics, in terms of age, has an influence on the success of microenterprises in terms of change in fixed
assets. It suggests that the female microenterprises, with the age of 50 years old and above, have the highest of change in fixed assets of 77.44 per cent. It is followed by the female microenterprises with the age 46 to 50 years old with change in fixed assets 67.76 per cent, 41 to 45 years old with change in fixed assets 58.08 per cent, 36 to 40 years old with change in fixed assets 48.4 per cent, 31 to 35 years old with change in fixed assets 38.72 per cent, 26 to 30 years old with change in fixed assets 29.04 per cent, 21 to 25 years old with change in fixed assets 19.36 per cent, and 15 to 20 years old with change in fixed assets 9.68 per cent. The findings is appropriate with the previous studies and expectations that age is expected to positively influence the success of microenterprises in terms of their income (Ekpe, 2011; Bhasin and Akplau, 2001; Muhammad Abi, Shaladin, Wan Abd Aziz, and Ahmad, 2011; Daou and Karuranga, 2012; Norhaziah and Mohd, 2010). It could be concluded that if a female microenterprise is older, she will be successful in managing the enterprise due to her experience. However, other entrepreneur’s characteristics in terms of education and status show insignificant relationship with change in fixed assets. Financing in terms of amount of loan illustrates insignificant relationship with change in fixed assets. The result is similar to previous studies that indicate that financing does not play a crucial role in determining the success of microenterprises (Ngaosi et al., 2007; Nor Hafizah et al., 2011; Mohd Abi et al., 2012; McPherson, 2010; Olusola, 2011). This is followed by firm characteristics in terms of dummy variable for type of business. All of the dummy variables for the type of business indicate an insignificant relationship with change in fixed assets.

In this respect, regression (3) highlights that none of the entrepreneur characteristics in terms of age, status, and education indicate positive significant relationship with change in household expenditure. This is followed by financing in terms of amount of loan accessed, which illustrates insignificant relationship with change in household expenditures. The result is similar to previous studies that indicate that financing does not play a crucial role in determining the success of microenterprises (Ngaosi et al., 2007; Nor Hafizah et al., 2011; Mohd Abi et al., 2012; McPherson, 2010; Olusola, 2011). This is followed by firm characteristics in terms of dummy variable for type of business. All of the dummy variables for the type of business indicate an insignificant relationship with change in household expenditures.

In this respect, $R^2$ in regression (1), (2), and (3) were considered low, namely 0.15, 0.16, and 0.09 respectively. However, the low $R^2$ values are not crucial to the analysis because...
the data from cross section have adequate variety for its cross-sectional units (Gujarati, 2003, 2009). The variety of the data comes from size of loan. Some of clients accessed big loan and some of them accessed small loan. Some of the borrowers are old clients while some are new clients. Some borrowers have established enterprises before accessing microloan, while some borrowers became more financially stable after accessing microloan. Some borrowers, however, did not achieve any improvements in their business performances after accessing microloan.

7. Conclusion

Microenterprise is known as the backbone of Indonesian economy by providing job opportunities and contributing positively to the economy. Further, MSMEs contributed around of 99.99 per cent in absorbing labour force than LEs which is only around of 0.01 per cent. However, several micro entrepreneurs are still short of receiving loans from formal financial organizations in Indonesia. In this regard, BRI has proved itself as the successful commercial microfinance in giving big donation for microenterprise performance in each province in Indonesia.

Robinson (2005) argued that BRI is a head of commercial microfinance in the world. Seibel (2005) also augmented that BRI had showed it is successful by executing the conversion from microfinance institutions owned by Indonesian government turned into a highly income, self-financed reliance, and popular microfinance institution by giving products of micro-saving and microcredit to people with low income at interest rate in the market level.

8. Implication of the Findings and Recommendation for Further Research

The results of this study show that KUR has positive effect on performance of microenterprise through income, but not for fixed assets, and household expenses. Further, only age as one of the entrepreneur’s characteristics has positive relationship with change in income and fixed assets respectively. Kind of business operated such as saloon and massage indicate negative significant relationship with change in income. This research study requires BRI Unit to concentrate on the variables that give contribution significantly on the microenterprise successful such as kind of business operated. Further, BRI Unit is also demanded to advise the micro entrepreneurs to embark into other sort of businesses in generating more profit.

Future researchers are recommended to focus on two mainly unobserved characteristics
(Coleman, 1999, 2006). The first is self-selecting participants to investigate the role of women and men in the household, entrepreneurship, ability to manage enterprises than others borrowers, risk preferences, and trustworthiness, in order to address the issue of endogeneity. The second relates to programme placement. Some microfinance programmes are located in economically developed areas. These areas were economically stable even before the presence of microfinance programme. Thus, the villagers or the people who live in these areas are mostly enjoying a relatively high standard of living compared to those in other areas. Future studies therefore, should be done in areas that are more economically disadvantaged to examine the success and impact of microfinance.

Reference


