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**MEASURING THE IMPACT OF MICROCREDIT
ON MICROENTERPRISE ASSETS IN URBAN MALAYSIA**

This study was undertaken to assess the impact of Amanah Ikhtiar Malaysia's (AIM) micro-credit program on microenterprise assets possessed by poor women in urban Peninsular Malaysia. In order to fulfill the above mentioned objective, in an attempt to increase understanding on the subject matter and contribute to the existing knowledge, this study employed a cross-sectional design with a stratified random sampling method. The results of this study reveal that the current market value of enterprise assets and vehicles owned by old respondents was relatively higher than that of new respondents. The findings also show that the mean market value of microenterprise assets owned by old respondents was significantly higher than that of new respondents. This study suggests that AIM should, therefore, focus on providing adequate training, flexible and diversified loan programs, and increase outreach. The government of Malaysia also needs to review policies to provide a favorable environment in order to promote self-sustainable competitive microenterprises.

Keywords: microcredit, poverty, microenterprise, assets, Malaysia.

JEL Codes: P42, O12, O16, G21, D60.

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**ВИЗНАЧЕННЯ ВПЛИВУ МІКРОКРЕДИТУВАННЯ НА АКТИВИ
МІКРОПІДПРИЄМСТВ У МІСТАХ МАЛАЙЗІЇ**

У статті оцінено вплив програми мікрокредитування «Аман Іхтіар Малайзія» (АІМ) на активи мікропідприємств, власники яких — жінки з малозабезпечених верств населення в міській півострівній Малайзії. Для дослідження використано методику опитування різних груп за стратифікованим методом випадкової вибірки. Результати показали, що поточна ринкова вартість активів підприємства і транспортних засобів, що належать старим учасникам ринку, була відносно вища, ніж у нових учасників ринку. Середня ринкова вартість активів мікропідприємств, що належать старим учасникам ринку, також була значно вища. Програма АІМ повинна бути зосереджена на тренінгах для одержувачів мікрокредитів, гнучких і різноманітних кредитних програмах і розширенні кола учасників. Уряду Малайзії також необхідно переглянути свою політику і забезпечити сприятливі умови для розвитку стійких конкурентних мікропідприємств.

Ключові слова: мікрокредит, бідність, мікропідприємства, активи, Малайзія.

Таб. 3. Літ. 26.

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**ОПРЕДЕЛЕНИЕ ВОЗДЕЙСТВИЯ МИКРОКРЕДИТОВАНИЯ НА
АКТИВЫ МИКРОПРЕДПРИЯТИЙ В ГОРОДАХ МАЛАЙЗИИ**

В статье оценено влияние программы микрокредитования «Аманах Ихтиар Малайзия» (АИМ) на активы микропредприятий, владельцы которых — женщины из малообеспеченных слоев населения в городской полуостровной Малайзии. Для исследования использована методика опроса различных групп по стратифицированному методу случайной выборки. Результаты показали, что текущая рыночная стоимость активов предприятия и транспортных средств, принадлежащих старым участникам рынка, была относительно выше, чем у новых участников рынка. Средняя рыночная стоимость активов микропредприятий, принадлежащих старым участникам рынка, также была значительно выше. Программа АИМ должна быть сосредоточена на тренингах для

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получателей микрокредитов, гибких и разнообразных кредитных программах и расширении круга участников. Правительству Малайзии также необходимо пересмотреть свою политику и обеспечить благоприятные условия для развития устойчивых конкурентных микропредприятий.

Ключевые слова: микрокредит, бедность, микропредприятие, активы, Малайзия.

1. Introduction. This is the era of globalization where development organizations and agencies all over the world have been putting emphasis on microenterprise development in order to generate economic growth and reduce poverty. The role of microenterprise development and its effect on economic growth, employment, stability and poverty are well documented in the development literature. As mentioned by ADB (1997), microenterprises provide income and employment for significant proportions of workers. ADB (1997) also reported that microenterprises account for more than 60% of all the enterprises and up to 50% of paid employment. It was also noted that strategic support such as access to finance, business development training and supportive environment are the key elements in the development of sustainable microenterprises (USAID, 2011). Due to the holistic nature of microenterprise development and its impact on poverty, employment, human and economic development, a wide range of development organizations and agencies are involved in the microenterprise development process. Microfinance organizations in developing countries are playing a crucial role in this by providing small scale, collateral free working capital and business development training to the underprivileged low income women.

Microenterprises are commonly highly heterogeneous given the nature, characteristics, structure, needs, and constraints faced by different types of enterprises. The definitions of microenterprises differ between authentic and respective organizations. For example, microenterprises are defined as "non-crop enterprises employing less than 10 workers, including the owner-operator and family workers" by ADB (1997). ADB's (1997) microenterprise definition also implies an implicit income and asset limit because as they reported "it is widely understood that microenterprises are enterprises of the poor". The concept of "implicit income and asset limit" is not commonly used to identify microenterprises. Alam and Miyagi (2004) asserted that microenterprises in Bangladesh are commonly engaged in poultry, livestock, dairy, rice/oil mills, agricultural equipment making, and trading in inputs such as seeds and fertilizers, to non firm enterprises such as petty trading, small business in transport, timber, bakery, medicine/pharmacy, and enterprise manufacturing bricks and ring slabs. Due to the difficulties in defining microenterprises by sectors, the government commonly sets the label based on the value of the total microenterprise assets. In Malaysia, the National SME Development Council defines microenterprises as "companies with sales turnover of less than RM250000 (approximately USD85000) or full-time employee of less than 5 for manufacturing/agro-based industry or sales turnover of less than RM200000 (approximately USD66600) or full-time employees of less than 5 for others" (Bank Negara Malaysia, 2004).

Microcredit was originally established to bridge the capital gap that is apparently unfilled by rural cooperatives and commercial banks. It is a collection of banking practices built to provide small loans and accept small saving deposits. According to Otero (1999), microcredit provides access to capital. This enables the poor self-

employed to create productive capital, to protect the capital they have, to deal with risk and to avoid the loss of capital. It attempts to build assets and create wealth among poor and hardcore poor people. The role that microcredit plays in the development of microenterprises has been extensively acknowledged in microcredit literature. Microcredit, commonly, generates the scope in the form of development initiative to the poor and hardcore poor women in order to enable them initiate or improve the income generating activities or microenterprises. It is, therefore, expected that the small amount of collateral free credit provided by Amanah Ikhtiar Malaysia in urban Malaysia will lead to an increase in microenterprise assets owned by low-income clients and their households.

1.1. Study Context: Amanah Ikhtiar Malaysia. AIM was established to provide small scale financial services and training to poor households in improving their socioeconomic condition in 1987. AIM uses a group based Grameen Bank (a Bangladeshi microfinance organization) model which has been replicated by many MFOs all over the world. AIM selects their clients based on average monthly household income. Households with average monthly household income of below the poverty line income (Poverty Line Income or PLI has been calculated by the Malaysian government since 1976 would be considered as absolute poor while households with average monthly household income of below half of the PLI would be categorized as hardcore poor. AIM only selects the households whose average monthly household income falls below the PLI including both poor and hardcore poor households.

"Urban Micro Finance Program" of AIM was launched in 2008. The group formation process is the same as the conventional microcredit model practiced by AIM, mostly in rural areas. However, the Urban Micro Finance Program does not select their clients based on PLI; rather, they select clients with the household income below RM2000, or have a per capita of below RM400 a month — a different approach from the rural microcredit program. Moreover, applicant's asset ownership also must not exceed RM50000 and applicant's residential status in residential locality must be more than 2 years. The objectives of urban micro finance program are (1) to harness the potential of self-employment among poor households and low-income groups and (2) to expand AIM's microfinancing approach to the poor and lower income group in urban areas. As of 2009, AIM has extended their outreach to 17 branches in urban Malaysia, currently serving the total of 4402 clients (AIM, 2010).

AIM is the only microfinance organization in Malaysia operating at the national level with the outreach of more than 82% of poor and hardcore poor households. Since there is a lack of study to measure the impact of AIM's "Urban Micro Finance Program", this study, therefore, aims to investigate the impact of AIM's "Urban Micro Finance Program" on microenterprise assets in urban Malaysia.

2. Review of Literature. Assets tend to be more stable over time and a better indicator of economic well-being than income. Assets represent the long-term results of income flows and expenditures. As a stock of wealth, assets are considered as an important category in assessing the impact of microcredit. Microenterprise assets are measured as the net worth of livestock, agricultural/production equipments and stocks, enterprise assets, vehicles and orchard minus liabilities. Liability includes all formal and informal debts.

Extensive literatures are available on microcredit showing that microfinance programs and institutions have become increasingly important components of strategies to reduce poverty or promote micro and small enterprise development. Alam and Miyagi (2004) narrated that MFOs (microfinance organizations) provided microcredit to 44.49% of small businesses, 17.73% in livestock rearing, 12.74% in agriculture and 4.84% in fishing sector in Bangladesh. The studies conducted to measure the effects of microcredit on microenterprise developments indicate the positive effects of microcredit on microenterprises. The study conducted by Hossain (1988) noted that the amount of working capital invested in client's microenterprise increased by average three times within the period of 27 months. The investment in fixed assets is about 2.5 times higher for the clients with more than 3 years' membership than for those who joined during the year of the survey. About 1/3 of the members were unemployed before joining the microfinance program (Hossain, 1988). The study conducted by Sutoro (1990) showed that respondents' enterprise income increased by 93%, 26% increase in the ownership of productive machineries, about 16% increase in the ownership of business vehicle and 76% increase in household income. Sebstad and Walsh (1991) also noted a positive impact of microcredit on microenterprise sales. Mosley (1996) noted that respondents' enterprise income increased by 91%, 39% of the borrowers became employed after participation and 26% used the loan for new technology — mostly sewing machines, in Bolivia. Kamal (1999) examined the impact of ASA's (Association for Social Advancement) microcredit programs in Bangladesh where the author noted that 90.42% of the respondents reported an increase in business capital after participation. Islam (2007) stressed that borrowing working capital by poor clients, increases investment in working capital and assets. A study conducted by Rahman, Rafiq and Momen (2009) mentioned that age, education and number of gainfully employed members had a significant positive effect on household income and asset. Panda (2009) in his study in India noted a significant increase in borrower's household income (11.41%) and asset position (9.75%) as well as savings increased by 42.53% which were higher than non participants. This study also found an increase in annual employment days among the clients.

The studies that measured the impact of AIM's microcredit schemes showed a similar positive effect. Gibbons and Kasim (1990) showed a significant increase of client's monthly household income from RM142 per month to RM220. The Second Internal Impact Study (1990) of AIM's research and development unit showed further overall improvement among participating households. The government of Malaysia initiated an impact assessment study on AIM's microcredit schemes by a team of Social Science and Economic Research Unit (SERU) of the Prime Ministers Department in 1990. SERU (1990) noted that the overall household income was more than double for those households who participated in AIM's microcredit schemes. The SERU study also found a significant impact on household's quality of life considering the following indicators — ownership and quality of housing, type and quality of household assets, agricultural land and savings. The increase in household income also facilitated an increase in expenditure on food, nutrition, education and reinvestment. The Third Internal Impact Study (1994) reconfirmed the earlier findings in terms of non-monetary impact of microcredit on poor households. This study showed an improvement in the percentage of owner occupied house to 85% com-

pared to 80% prior to participation. The use of electric household products also showed improvement. When consideration is given to perception of nutritional quality, 58% felt there was an improvement, 34% felt no change and the remaining 8% responded as "not sure". This study also showed the 13% increase in household income. The study conducted by Salma (2004) noted that the household income, expenditure, savings and assets have increased and were higher for both AIM and PPRT (Projek Perumahan Rakyat Termiskin) participants compared to non-participants. It is important to note that these increases were higher for AIM clients than for PPRT clients. A recent study conducted by Saad (2010) indicated a positive effect in human development in rural Malaysia, including improved health conditions of the clients as well as improved education level of their children. Saad (2011) reported that economic activity in trading was more beneficial for the clients than other activities. Activities that generated high income includes rubber trading, sales of cooking gas, hawking at night markets, sales of cosmetics, paint products, used cars, health products and food.

3. Research Methods.

3.1. Research Hypothesis. The available literatures prove that microcredit has the ability to transform lives. According to Hulme (1997), "behind all microfinance programs is the assumption that intervention will change human behaviors and practices in ways that will lead to the achievement (or raise the probability of achievement) of desired outcomes". The conceptual model of impact chain presents a complex set of links as each effect becomes a cause in its own right generating further effects. Chen and Dunn (1996) developed the Household Economic Portfolio Model (HHEP) which is one of the most complex conceptual models for impact assessment. The researchers confirmed the usefulness of HHEP model in addressing the fungibility and attribution issues. The key advantages of HHEP model are that it helps in the formation of research design and hypothesis. The HHEP model developed by Chen and Dunn (1996) has many implications for microfinance impact analysis and the model of this study is based on those implications.

The objective of this study was to measure the effect of AIM's microcredit program on microenterprise assets in urban Malaysia. In this research, hypotheses were used to test only a portion of the implications given by the HHEP model. To support the research objective, the following specific alternative hypothesis was investigated:

Hypothesis 1 (H_1): Participation in AIM's microcredit program leads to an increase in current market value of microenterprise assets owned by low-income urban households in Peninsular Malaysia.

3.2. Research Design. According to Montgomery and Weiss (2011), the impact assessment methodology addresses how participation in microcredit program affects the selected variables with how those same selected variables would be in the absence of microcredit program. The most appropriate method to address the issue would be the employment of an experimental design. Since it is almost impossible to control all the factors while measuring the impact of microcredit (Hulme, 2000), therefore, a completely experimental approach is unreasonable in evaluating the impact of microcredit programs (see also Khandker and Pitt, 1998; Swain and Varghese, 2009; Montgomery and Weiss, 2011). Hence, this study uses a quasi-experimental approach to measure the impact of microcredit. To measure the impact of AIM's microcredit

programs in a quasi-experimental approach, this study utilizes control and treatment groups. This study selected control and treatment groups from AIM's client base. The control groups are those who have been participating for less than or equal to 18 months and the treatment groups are those who have been participating for more than 18 months.

A cross-sectional design was employed to measure the impact of AIM's micro-credit schemes in urban Peninsular Malaysia. This study adopted the group statistics generally known as "average effect of treatment of treated" — which measures the impact of the outcome of one group compared to others. The average program impact is estimated by comparing the average outcome of the members of the treatment group (old respondents) with the same average outcome of the members of the control group (new respondents).

3.3. Sample Selection and Data Collection. The stratified random sampling method was used to collect data via face-to-face structured interviews. AIM currently offers financial services through 18 branches in 11 states in Peninsular Malaysia under the "Urban Micro Finance Program". Among the 18 branches, 8 are located in Selangor. 8 branches were randomly selected, of which 3 were from Selangor (Cawangan Puchong, Cawangan Ampang and Cawangan Shah Alam) and one branch each from 5 other selected states, which are Cawangan Seremban in Negeri Sembilan, Cawangan Melaka in Melaka, Cawangan Johor Bahru in Johor Bahru, Cawangan Kuantan in Pahang and Cawangan Alor Star in Alor Star. A team of 9 research assistants assisted the project manager when visiting each of the branches from 18th April, 2011 to 9th May, 2011. The respondents were chosen randomly during the centre meetings. The total of 249 respondents agreed to be interviewed when the purpose of the data collection was explained to them. However, the completed data was collected from the total of 242 urban low-income clients, of whom 136 were new clients and 106 were old clients.

4. Summary of Findings. Participation in AIM's microcredit program is conceptualized using two indicators: number of months as client and total amount of credit received. The mean number of months among selected old clients was estimated to be 27.82 months with the standard deviation of 2.78, which is significantly higher (p-value of Mann-Whitney test is 0.00, which is less than the chosen 5% level of significance) than the mean number of months new clients have been participating in AIM's microcredit program — 10.59 months with the standard deviation of 6.00. The mean amount of credit received by old respondents was RM5935.85 with the standard deviation of RM3848.34. The mean amount of credit received by new respondents was RM3304.41 with the standard deviation of RM2221.30.

It is imperative to note that the deviation in the distribution of the total amount of credit received by all clients was very high due to the level of need for credit and opportunity to invest credit in economic activities. The p-value for Mann-Whitney test was 0.000, which is less than the chosen 5% level of significance. This indicates that the total amount of credit received by old respondents was also significantly higher than that by new respondents.

In order to investigate the effect of microcredit on microenterprise assets, it is important to explore how respondents utilized the received credit. As presented in Table 1, 76% of the total respondents reported they used the entire amount of

received credit in economic activities. For new and old respondents, these rates are 84.9% and 69.1% respectively. This clearly indicates that among the sample, a higher proportion of old respondents used credits for economic activities. This information may serve as a threat for AIM's urban microfinance program. AIM, therefore, needs to identify whether or not more and more new clients are using the credit for non-economic activities. If this is the case, the risk associated with the trend needs to be identified and measures should be developed to deal with this threat. However, the data was also collected on the proportion of loan respondents using it in economic activities. It is noted that on average, about 90% of the total loan received by respondents were used in economic activities.

Table 1. Participation and Uses of Loan, %

		New Clients (≤ 18 Months)	Old Clients (> 18 Months)	Total Clients
N		136	106	242
Number of months as client	Mean	10.59	27.82	18.14
	SD	6.00	2.78	9.85
	Shapiro-Wilk Test of Normality, p -value = 0.000			
	Mann-Whitney Test, p -value = 0.000 < 0.05			
Total amount of credit received	Mean	3304.41	5935.85	4457.02
	SD	2221.30	3848.34	3305.74
	Shapiro-Wilk Test of Normality, p -value = 0.000			
	Mann-Whitney Test, p -value = 0.000 < 0.05			
Respondents Used Entire Amount of Loan in Economic Activities				
Yes	N	94	90	184
	%	69.1	84.9%	76.0
No	N	38	15	53
	%	27.9	14.2%	21.9
Don't Know	N	4	1	5
	%	2.9	0.9%	2.1
Total	N	136	106	242
	%	100	100	100
Pearson's Chi-Square Test, p -value = 0.016 < 0.05				
Proportion of loan invested in economic activities, %	Mean	86.38	93.77	89.62
	SD	25.25	17.79	22.53
Types of economic activities in which respondents used the loan				
Manufacturing	N	38	30	68
	%	27.9	28.3	28.1
Trade or retail	N	55	40	95
	%	40.4	37.7	39.3
Service	N	27	25	52
	%	19.9	23.6	21.5
Agriculture / Fishing	N	4	4	8
	%	2.9	3.8	3.3
Other	N	12	7	19
	%	8.8	6.6	7.9
Pearson's Chi-Square Test, p -value = 0.910 > 0.05.				

This study also investigated the type of economic activities respondents conducted to use the received credit from AIM's urban microfinance program. As shown in Table 1, 68 out of 242 respondents (or 28.1%) reported they invested credit in manufacturing. For new and old respondents, these numbers were 38 out of 136 and 30 out of 106, respectively. It is worth noting that 95 out of 242 respondents (39.3% of

them), the highest proportion of the respondents, invested the loan in trade or retail activities. Surprisingly, 49.4% of new respondents reported they invested the loan in trade or retail, which was higher than the proportion of old respondents (37.7%) using the loan for the same. The proportion of the respondents who used credit for service, agriculture/fishing and other activities were 21.5%, 3.3% and 7.9% respectively. The p-value for Pearson's Chi-Square test was 0.910, which was higher than the chosen 5% level of significance, indicating no association between types of economic activities for which respondents use the loan and respondent's participation status — new and old.

As shown in Table 2, out of total 242 respondents, only 14 reported to have livestock assets. A relatively higher mean market value of livestock owned by new respondents appears because of their recent investment of the loan they received from AIM in livestock activities. Only 23 out of 242 respondents (or 9.5%) reported to have agricultural/production equipments. It is crucial to mention here that the mean market value of agricultural/production equipments and proportion of new and old respondents own agricultural/production equipments were not much different. In regard to agricultural stock or raw materials, 6.6% of the total respondents reported owning them. However, a relatively higher proportion of new respondents owned agricultural stock or raw materials and the mean market value of agricultural stock or raw materials owned by new respondents was much higher than that of old respondents.

187 out of 242 respondents (or 77.3%) reported to have enterprise assets. The highest proportion of the respondents owning such assets indicated that a huge proportion of clients were involved in small-scale enterprise activities. The mean market value of enterprise assets owned by new respondents was RM3721.19 with the standard deviation of RM4700.68. It was also noted that the mean market value of enterprise asset owned by old respondents, which is RM7563.18 with the standard deviation of RM6001.19, was relatively higher than that of new respondents.

In regard to motor vehicles, 159 out of 242 urban clients (or 65.7%) reported their households owned motor vehicles. The proportion of new and old respondents' households that owned motor vehicles were 69.1% and 61.3% respectively. The mean market value of motor vehicles owned by new respondents was RM4273.78 which was lower than RM4904.90, the mean market value of motor vehicles owned by old respondents. It was noted that the deviation in the distribution of approximate market value of motor vehicles owned by new respondents' households were much higher than that of old respondents. The mean market value of orchard owned by 6 new respondents' households was RM2583.33 with the standard deviation of RM1463.44. The mean market value of orchard owned by 5 old respondents' households was RM2245.45 with the standard deviation of RM1582.63.

In terms of savings, the mean amount saved by new respondents was found to be RM762.09 with the standard deviation of RM994.91. The mean amount of savings by old respondents' households appeared to be RM1109.99 with the standard deviation of RM1337.28. Regarding unpaid loans, as shown in Table 2, 189 out of 242 respondents (or 78.1%) reported to have unpaid loans. The mean amount of unpaid loan among new respondents was RM1995.77 with the standard deviation of RM1808.54. The mean amount of unpaid loan for old respondents was RM1772.96 with the standard deviation of RM1737.51.

Table 2. Microenterprise Assets, Savings and Unpaid loan

		New Clients (≤ 18 Months)	Old Clients (> 18 Months)	Total Clients
N		136	106	242
<i>Current market value of livestock's</i>	N	11	3	14
	%	8.1	2.8	5.8
	Mean	4045.45	1833.33	3971.43
	SD	4494.07	1258.30	4082.50
<i>Current market value of agricultural / production equipment</i>	N	13	10	23
	%	9.6	9.4	9.5
	Mean	4558.46	4530.00	4546.09
	SD	5049.30	3726.33	4425.72
<i>Current market value of agricultural stock / raw materials</i>	N	11	5	16
	%	8.1	4.7	6.6
	Mean	5209.09	980.00	3887.50
	SD	6464.27	1130.04	5683.06
<i>Current market value of enterprise assets</i>	N	103	84	187
	%	75.1	79.2	77.3
	Mean	3721.19	7563.18	5404.05
	SD	4700.68	6001.19	5631.80
<i>Current market value of vehicles</i>	N	94	65	159
	%	69.1	61.3	65.7
	Mean	4273.78	4904.90	4531.79
	SD	9259.61	3741.31	7498.95
<i>Current market value of orchard</i>	N	6	5	11
	%	4.4	4.7	4.5
	Mean	2583.33	1840.00	2245.45
	SD	1463.44	1791.08	1582.63
<i>Total savings in group fund</i>	Mean	762.09	1109.99	914.48
	SD	994.91	1337.28	1167.48
<i>Unpaid loan received from AIM</i>	N	109	80	189
	%	80.1	75.5	78.1
	Mean	1995.77	1773.96	1901.88
	SD	1808.54	1737.51	1776.95

4.1. *Testing Research Hypothesis.* The market value of microenterprise assets owned by respondents was calculated by adding the current market value of livestock assets, agricultural and/or production equipments, agricultural stock/raw materials, enterprise assets, vehicles and orchard owned by respondent's households, savings and unpaid loan is subtracted from the total. The mean and standard deviation of the market value of microenterprise assets owned by respondents are presented in Table 3. It was found that the mean market value of microenterprise assets possessed by old respondents' households was higher than that of new respondents. The p-value of Shapiro-Wilk test of normality was 0.000, which was less than the chosen 5% level of significance, indicating the violation of normality assumption. Thus, a non-parametric Mann-Whitney test was performed. The p-value for Mann-Whitney test was 0.000, which is less than the chosen 5% level of significance, indicating that the mean market value of microenterprise assets owned by old respondents were significantly higher in contrast to new respondents. The result showed that participation in AIM's microcredit program led to an increase in microenterprise assets owned by clients' households in urban Peninsular Malaysia.

Table 3. Mean Difference in Microenterprise Assets

	New Clients (≤ 18 Months)	Old Clients (> 18 Months)	Total Clients
N	136	106	242
Mean	13173.14	15257.92	14086.31
Standard Deviation	14915.81	12019.80	13734.87
Shapiro-Wilk Test of Normality, p -value = 0.000 < 0.05			
<i>Mann-Whitney Test</i>			
Mean Rank	106.46	140.79	
Z-value	-3.785		
p -value	0.000 < 0.05		

6. Conclusion and Recommendations. Malaysian women are active participants in economic relations at the household and national levels. The low-income urban women, who commonly have the responsibility to do common household works as well as raising babies, can greatly benefit from the self-employed income generating opportunity. These allow them work when ever they can. AIM's urban microfinance program was launched in 2008 to assist these urban low-income women with collateral free credit, training and opportunities to share ideas and meet other microentrepreneurs at weekly group meetings. The findings of this study revealed that the respondents invested about 90% of the loan on income generating activities, mostly in manufacturing, trade and service activities. The findings of this study also showed that the respondents who participated early owned microenterprise assets worth significantly higher than that of new respondents. This is reflective of the indication of the positive effect of AIM's urban microcredit program on microenterprise assets.

The government, policy makers and AIM have to keep working in order to increase outreach in urban areas. In addition, AIM has to review the current policy and microcredit offering methodology and offer more diversified products and services. There is a considerable scope to expand financial products and services. A broader, need-based microcredit service will improve the impact. Credit services can be diversified by expanding group loan size, provide working capital loan, fixed asset loan, seasonal agricultural loan, car loan, consumer loan, emergency loan and parallel loan.

References:

1. ADB (1997). Microenterprise Development: Not by Credit Alone. Asian Development Bank, Pakistan. 157 p.
2. AIM (2010). Amanah Ikhtiar Malaysia: Achievement as of 31 August 2010 (Accessed 9 December 2010): <http://www.aim.gov.my>.
3. Alam, C.M., Miyagi, K. (2004). An approachable analysis of Micro Enterprises in Bangladesh. Working Paper no 8, Department of International Studies, Hagi International University, Japan.
4. Bank Negara Malaysia (2004). Conclusion of the second national SME development council meeting. Bank Negara Malaysia, Central Bank of Malaysia. <http://www.bnm.gov.my/index.php?ch=8&pg=14&ac=943&print=1>.
5. Chen, M.A., Dunn, E. (1996). Household Economic Portfolios. AIMS Project. Management Systems International, Washington, DC.
6. Gibbons, D., Kasim. S. (1990). Banking on the Rural Poor, Center for Policy Research, University Science Malaysia, Malaysia.
7. Hossain, M. (1988). Credit for the Alleviation of Rural Poverty: The Grameen Bank in Bangladesh. Research Report No. 55, IFPRI, Washington, DC.
8. Hulme, D. (1997). Impact Assessment Methodologies for Microfinance: A Review. CGAP Working Group on Impact Assessment, CGAP, Washington, DC.

9. *Hulme, D.* (2000). Impact assessment methodologies for microfinance: Theory, experience and better practice. *World Dev.*, 28(1): 79-98.
10. *Islam, T.* (2007). *Microcredit and Poverty Alleviation*. Burlington, Ashgate Publishing.
11. *Kamal, M.M.* (1999). Measuring transformation: Assessing and improving the impact of micro-credit part III. Discussion Paper, Impact Evaluation Mechanism, Association for Social Advancement (ASA), Dhaka, Bangladesh.
12. *Pitt, M., Khandker, S.* (1998). The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter? *J. Polit. Econ.*, 106: 958-996.
13. *Montgomery, H., Weiss, J.* (2011). Can commercially-oriented microfinance help meet the millennium development goals? Evidence from Pakistan. *World Dev.*, 39(1): 87-109.
14. *Mosley, P.* (1996). Metamorphosis from NGO to Commercial Bank: The Case of Bancosol in Bolivia. In: *Hulme D. and P. Mosley (eds.). Finance Against Poverty: Country Case Studies. Vol. 2. Pp. 1-45.* London: Routledge.
15. *Otero, M.* (1999). Bringing development back into microfinance. *J. Microfinance*, 1: 8-19.
16. *Panda, D.K.* (2009). Participation in the Group Based Microfinance and its Impact on Rural Households: A Quasi-experimental Evidence from an Indian State, *Global J. Financ. Manage.*, 1(2): 171-183.
17. *Rahman, S., Rafiq, R.B., Momen, M.A.* (2009). Impact of Microcredit Programs on Higher Income Borrowers: Evidence from Bangladesh. *Int. Bus. & Econ. Res. J.*, 8(2):119-124.
18. *Saad, M.N.* (2010). Achieving human development objectives through microfinance institution: The case of Amanah Ikhtiar Malaysia. *J. Islamic Econ., Bank. Financ.*, (2): 65-78.
19. *Saad, M.N.* (2011). Selecting high-income generating activities for micro-entrepreneurs: The case study of Amanah Ikhtiar Malaysia. *Int. J. Humanities and Soc. Sci.*, 1(5): 258-264.
20. *Salma, M.* (2006). A comparative case study on outreach and impact of Ikhtiar loan scheme and special program for hardcore poor in Seberang Perai Pulau Pinang. Center of Policy Research, University Sains Malaysia.
21. *Sebstad, J., Walsh, M.* (1991). Microenterprise credit and its effects in Kenya: An exploratory study. Report prepared for USAID AFR/MDI and S&T/WID. Coopers and Lybrand, Washington, DC.
22. *Research and Development Unit* (1990). Second impact study. Amanah Ikhtiar Malaysia, Selangor, Malaysia.
23. *SERU* (1990). Impact study. Social Science and Economic Research Unit, Prime Ministers Department, Malaysia.
24. *Swain, R.B., Varghese, A.* (2009). Does self help group participation lead to asset creation? *World Dev.*, 37(10): 1674-1682.
25. *Third Internal Impact Study* (1994). Research and development unit. Amanah Ikhtiar Malaysia, Selangor, Malaysia.
26. *USAID* (2011). USAID and microenterprise development. Available (Accessed 12 January, 2011) from: http://www.usaid.gov/our_work/economic_growth_and_trade/micro/index.html.

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