

The Effects of Services by Microfinance Institutions on the Welfare of Urban Households in Malaysia

(Kesan Perkhidmatan daripada Institusi Pembiayaan Mikro terhadap Kebajikan Isi Rumah Kawasan Bandar di Malaysia)

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ABSTRACT

The primary aim of this paper is to investigate the impact of financial (microcredit and microinsurance) and nonfinancial services (training), services by microfinance on the welfare of their urban clients in Malaysia. We contribute to the existing literature by using income as a mediating variable in the analysis. Questionnaires were distributed to 400 respondents across three different urban areas in Malaysia in order to collect the relevant data for this study. We have adopted the quota sampling to collect the data. The results show that most of the services provided by the microfinance institutions including microcredit, micro insurance and training have assisted the urban households to earn more income and enhance their socio-economic welfare. The recommendations arising from the results of this study are: 1) an environment that promotes cooperation between microfinance institutions and households should be enhanced and 2) well-diversified and dynamic microfinance programs and specific skills-building training programs should be created.

Keywords: Microfinance; socio-economic welfare; income

ABSTRAK

Matlamat utama kertas ini adalah untuk mengkaji impak perkhidmatan kewangan (kredit mikro dan insuran mikro) dan perkhidmatan bukan kewangan (latihan) oleh pembiayaan mikro terhadap kebajikan pelanggan bandar mereka di Malaysia. Sumbangan kajian kepada literatur sedia ada adalah dengan menggunakan pendapatan sebagai pengantara dalam analisis. Soal selidik telah diedarkan kepada 400 responden yang berada di tiga kawasan bandar yang berlainan di Malaysia untuk mengumpulkan data yang relevan. Kami telah menggunakan kaedah persampilan kuota untuk mengumpul data. Hasil kajian menunjukkan bahawa kebanyakan perkhidmatan yang disediakan oleh institusi kewangan mikro termasuk kredit mikro, insuran mikro dan latihan telah membantu isi rumah di kawasan bandar untuk mendapatkan lebih banyak pendapatan dan meningkatkan kebajikan sosio-ekonomi mereka. Cadangan yang timbul daripada hasil kajian ini adalah: 1) persekitaran yang mendorong kerjasama antara institusi kewangan mikro dan isi rumah harus dipertingkatkan, 2) program pembiayaan mikro yang pelbagai jenis dan dinamik serta khusus program latihan pengembangan kemahiran harus dijalankan.

Kata kunci: Pembiayaan mikro; kebajikan sosio-ekonomi; pendapatan

INTRODUCTION

Malaysia is one of the emerging nations with two primary regions, Peninsular Malaysia and East Malaysia (which covers Sabah and Sarawak states). Malaysia has been undergoing rapid economic and social transformation for several years. The World Bank (2019) reported that the urban population had increased from 18.2 million (68.36% of the total population) in 2007 to 23.9 million (75.45% of the total population) in 2017. The people who live in urban cities may suffer from high cost of living. The percentage of poor of the total population in the cities of Malaysia has increased from 14.3% in 1985 to 29.4% in 2004 (Lehar, Anas & Choo 2014). The middle-income group is affected and the low-income group suffers the most. They are unable to have a satisfactory life in urban areas where the living cost is high (Yuen 2016). Socio-economic welfare is a key element in enhancing the standard of living among households.

Income inequality and poverty are hindrances to achieving the developmental agenda of any nation (Wasudawan & Ab-Rahim 2019). Hence, a special cluster of households coined the B40 households, which was

established in the 11th Malaysia Plan, 2016-2020. B40 households capture the bottom 40 groups with an estimated 11.7 million people (which represents almost 40% of the population) who survive with a maximum monthly income of RM 3,855 (Economic Planning Unit 2015). According to the Department of Statistics (2017), 63% of the B40 households stay in urban areas with a population of 1.7 million people where they mostly suffer from high costs of living which hinder them from saving and investing. Thus, this shows that the income of B40 households who live in the urban areas does not usually cater for their needs.

B40 households nowadays still continue to experience low income earnings. Moreover, it is reported that the issue of socio-economic crises in the urban areas in Malaysia is extremely severe compared to rural areas. Due to the depreciation of the ringgit and the increase in prices of goods and services, the income earned by the low-income group is insufficient for their daily fundamental needs (Hussin et al. 2018). Furthermore, some low-income groups who live in urban areas do not have financial capability due to house rental that accounts for more than half of their monthly salary (Kaur 2016). Kaur (2016) also stated that the urban citizens are now 40% poorer. The high cost of living in urban areas is usually caused by the fact that they need to spend on their daily consumption (welfare indicators) such as food, transportation and housing. This is because urban households need more income than rural households in order to have access to healthcare and education (Nangila 2013). Hence, they also need more income resources to access basic amenities including healthcare, childcare and their children's education.

Microfinance services can serve as another platform in assisting the low-income group. The access to credit assists the microfinance households to participate in available income generating activities. Furthermore, the programs that are provided by microfinance institutions enable microfinance households to develop their current economic activities, and subsequently to increase their income (Roslan et al. 2007). Income generation from business not only supports business activities but also contributes to household income, children's education, and the list goes on (Rahman & Ahmad 2010). Apart from that, microcredit has partly empowered microfinance households successfully by increasing their household income, which indirectly has enhanced their living conditions (Al-Mamun, Mohiuddin & Mariapun 2014). Microfinance services are considered part of the tools in alleviating poverty in Malaysia. There are three leading organisations working towards poverty alleviation, namely: (i) Amanah Ikhtiar Malaysia (AIM); (ii) Yayasan Usaha Maju (YUM); (iii) Tabung Ekonomi Kumpulan Usahawan National (TEKUN, or The Economic Fund for National Entrepreneurs Group).

AIM was established in 17th of September 1987. It is the first microfinance institution in Malaysia with the core aim of helping the poor to develop their business by providing loan facilities. AIM is the biggest microfinance institution in the country. AIM's program implements the Grameen Bank concept on microfinance where the main objectives are to provide financing, guidance and training to the poor. The implementation of this program is based on the idea of 'trust' through monitoring among members. The aim of AIM is to offer loans and other financial services to low income group who are dispossessed from conventional banking institutions as they lack collateral. For instance, AIM has lenient eligibility requirements for its recipients as they only need to have a valid business license without the need for any income requirement. The total number of members in AIM was 379,824 in June 2018 (Amanah Ikhtiar Malaysia 2018). The rate of repayment loan from customers has achieved 98.26%. These strategies have been introduced by AIM with the aim of improving the recipients' socio-economic welfare (Al-Mamun et al. 2014).

It will be good to identify if there is a connection between microfinance services and the welfare of the urban vulnerable households. This assists to investigate whether microfinance services can be used as a medium in the reduction of poverty among the urban households. The facts have revealed that the number of urban low-income group is increasing and not all urban dwellers have benefitted from the services that are provided in the cities. There are many strategies (policies and programs) that have been adopted to enhance the socio-economic welfare such as the establishments of microfinance institutions in Malaysia. AIM is the only organisation that is available throughout the entire Malaysia and helps the low-income groups to establish their own micro businesses (Al-Mamun et al. 2014). Many of the previous studies have shown that microfinance services enable households to solve their economic vulnerability issue and to have better standards of living (Al-Mamun et al. 2014). Therefore, microfinance services tend to have the capacity to uplift the socio-economic welfare among the urban vulnerable households. However, the specific impact of each microfinance service differs from one study to another. For example, some microfinance services provided by MFI can have positive impact on income and socio-economic welfare, while the others might not have any effect on income or might have negative impact on socio-economic welfare (Al-Mamun et al. 2014).

The objective of this study is to determine the effects of microfinance services on the socio-economic welfare among the urban vulnerable households in Malaysia. The microfinance institutions provide a few types of services namely microcredit, micro insurance and training. Hence, this study will identify which microfinance services that can improve the welfare of recipient households in the urban areas. Therefore, there are two academic contributions in this study. Firstly, this study is concentrating on urban households unlike most of the previous studies that have only measured the effects of microfinance services in rural areas. Lately, a majority of the MFIs have expanded their investment to urban areas and only a handful of studies have focused on low-income groups (Al-Shami et al. 2017). As such, this present study presents evidence on the impact of microfinance services on

the socio-economic welfare of urban households, which may stimulate more microfinance programs in developing nations in order to offer viable microfinance services as an alternative to improve the standard of living amongst low-income groups residing in urban areas. Secondly, income is employed as a mediating variable in this study. Income has a significant effect on socio-economic welfare through the implementation of microfinance services. However, the role of income has not been adequately treated as a mediating variable between microfinance services and socio-economic welfare in the case of Malaysia. As such, this study probed into the nexus between socio-economic welfare, income and microfinance services. Microfinance services served as the independent variable (or determinant) of the socio-economic welfare of urban households in this study, while income functioned as the mediating effect. Therefore, the outcomes of this study will add to the literature and knowledge by presenting new evidence pertaining to the impact of microfinance services that are offered by AIM on the socio-economic welfare of urban households residing at selected urban states.

Accordingly, this paper is organised as follows – conceptual background and hypotheses are detailed out next, followed by previous findings section and then by methodology. The results are discussed afterwards and the study concludes with the discussion of the implications arising from the findings.

CONCEPTUAL BACKGROUND AND HYPOTHESES

Microfinance is a vital service in developing nations as it is able to cater for the financial needs of the poor by uplifting their socio-economic welfare. In addition, most of the services that are provided by microfinance are viable in assisting both the rural and urban poor to create their own businesses (Fall, Akim & Wassongma 2018). Welfarists have argued that MFIs should concentrate more on contributing financial services in enhancing socio-economic welfare among the poorest households (Woller 2002; Emmanuel et al. 2016). Also, the government plays a vital role in developing microfinance through economic policy, financial institutions' regulation, and supervision. Market-driven cost of services to clients, institutional financial soundness, and repeating clients are some indicators that reflect the sustainability of microfinance (Kabir 2016). A number of theories explain how microfinance services enhance the socio-economic welfare among urban households. The following elaborates on the theories.

Modern Development Theory The modern development theory highlights the post war development gap between the first-world countries that are dominated by the industrial sector and the third-world countries that are dominated by the agricultural sector (Martin 1991). Thus, there is a need to amend the wealth distribution among the people in order to ensure that the poor community in a country is uplifted (Hoff & Stiglitz 2001). Microfinance can serve as a viable platform not only to change the distribution of wealth, but also to uplift the poor. The Modern Development Theory claims that the absence of access to finance can exacerbate income inequality or poverty (Claessens & Tzioumis 2006). Participation in finance programs enable households to increase their opportunities in generating more income as well as business opportunities, which eventually lead to an increase in their income and asset. Micro insurance compensates the destruction of homes that have been caught by fire or natural disaster. The fixed amount of micro insurance will be distributed among recipients accordingly based on a-case-by-case basis (AIM 2018). Past studies have stated that microfinance services (microcredit and micro insurance) can improve the socio-economic welfare (Al-Mamun & Mazumder 2015; Al-Shami et al. 2017). Thus, we hypothesise the following.

- H₁ Microcredit has a significant impact on the socio-economic welfare.
- H₂ Micro insurance has a significant impact on the socio-economic welfare.

Human Capital Theory Human capital theory is originated from Becker (1962). According to the theory, efforts to increase the human capital include training, schooling, and acquisition of information which can be useful for the well-being of the recipients. Relevant training for entrepreneurs could assist small businesses to be more productive in using products and services from microfinance institutions. Training provided by microfinance institutions has positive effects on business practice (McKenzie & Woodruff, 2013). Entrepreneurs can effectively execute their own culture (a series of moral, custom, trust, knowledge, capabilities and art that are obtained by the member of an organisation) in order to improve their business performance (Brown 1999). Numerous studies have measured the significance and effect of training programs in enhancing recipients' abilities to take advantage of opportunities in income generating activities (Karlan & Valdivia 2011; Matin, Hulme & Rutherford 2002). Robinson (2001) has stated that welfare enhancement is not only through credit but also includes corresponding services such as skills training. Past studies have recommended that microfinance services (training) can improve the socio-economic welfare (Karlan & Valdivia 2011; Al-Mamun & Mazumder 2015; Al-Shami et al. 2014). Therefore, we hypothesise the following.

- H₃ Training has a significant impact on the socio-economic welfare.

Utility Theory Utility theory or value theory is defined as a dominant tool of analysis, of decisions under risk and it is used in measuring value or worth on the basis of satisfaction (Von Nuemann & Morgenstern 1994). One of the main elements of utility is income because more income will allow the economic agents to have more capacity to have an increased satisfaction as well as welfare. This is because higher income and higher levels of consumption generate higher levels of self-reported happiness as compared to those from low-income groups (Wang, Cheng & Smyth 2019). People with more income have greater chances to have the ability to spend more on material goods and services. Individuals with higher income tend to have higher utility, while those with low income are seemed to be not as happy as compared to those with higher earnings. These relationships between income, welfare, and happiness have captured the attention of several authors (Dumludag 2015; Wang et al. 2019). Past studies have claimed that microfinance households are able to generate more self-employment opportunities by developing small businesses as well as enhancing their socio-economic welfare through positive income effects (Hossain 1988; Islam 2016). Thus, the utility theory affirms that microfinance services (microcredit and training) have positive effects on income, and income has a significant effect on socio-economic welfare. Although these relationships have not been tested in previous microfinance and socio-economic studies, on the basis of theory and some related empirical support that will be discussed in the next section, we hypothesise the following:

- H₄ Microcredit has a significant impact on income.
- H₅ Training has a significant impact on income.
- H₆ There is a significant relationship between income and socio-economic welfare.
- H₇ Income mediates the impact of microcredit on the socio-economic welfare.
- H₈ Income mediates the impact of training on the socio-economic welfare.

PREVIOUS EMPIRICAL RESEARCH ON THE DETERMINANTS OF SOCIO-ECONOMIC WELFARE

In economic theory, the term 'welfare' is more generally used to refer to utility. Welfare is defined as the well-being of individual, household or the community (Fleming 1952). Socio-economic welfare is regarded as a situation where an individual or group is doing well or somewhat emphasises on a person's wellbeing or good (Van Praag & Frijters 1999). The low-income group is likely to have low purchasing power and low standard of living. Hentschel and Lanjouw (2000) have stated that welfare is based on the ease of access to electricity, water, sewage or gases which are always considered as very important to the wellbeing of households. The parameters that are used to measure household welfare are monthly household income, empowerment of women, healthcare and education improvement, reduction of poverty, new small businesses, total consumption, and improved housing. These parameters are convenient to measure against the welfare of individuals or households. It is essential to have a series of schemes and services to ensure that income security is achieved as well as related needs of citizens who cannot afford basic material and social needs (including the poor) are met (Estes 2014). Credit from microfinance programs assists the low-income groups to overcome their problems of liquidity and fund investments in agriculture, trades and business, as well as increase income levels, construct, and employment at household level. Several studies including the work of Mahmood, Hussain and Matlay (2014) have reported that credit is able to achieve poverty alleviation among household population.

Microfinance programs provide viable mechanisms to improve the welfare of the society. Microfinance services play a vital platform at not only eradicating poverty but also creating wealth among the low-income people (Omoró & Omwange 2013). The funds that are acquired from microfinance institutions help the recipients to operate their micro-enterprises and ease their daily burden (Omoró & Omwange 2013). Thus, microfinance services contribute in filling the financing gap that is left by conventional banking intermediaries (Yunus 2001). Microfinance services have the ability to enhance the education level and health level among the participating households. Hence, low income groups are able to provide employment to unemployed people and thus enhancing their socio-economic welfare and their immediate dependants (Yunus 2001). However, some of the past studies opined that the impact of microfinance programs was insignificant especially those who live in the rural area in enhancing socio-economic welfare (Musa 2019). Mwewa (2013) provided evidence that microfinance services could help the poor in the creation of jobs because it provided the necessary capital for small-scale enterprises.

Numerous papers have focused on the effects of microfinance services on welfare, and microcredit is a microfinance service that has been a focal point in the existing papers. For example, Wahid (1994) showed that credit services increase the capital available for the poor, and consequently raised their quality of life. There are some past studies on the impacts of microcredit on household and business income. Barnes, Keogh and Nemarundwe (2001) supported the hypothesis that rural farmers from Zimbabwe were able to diversify the crops they grew which translated into greater business income after receiving microcredit. According to Gurses (2009), microcredit is one of the foremost instruments that assist in increasing the socio-economic conditions of the poor. It is a new way of facilitating poor households to diminish vulnerability during socio-economic crises.

Access to microcredit is projected to cause a drop in the level of economic vulnerability among clients' households (Matin et al. 2002; Islam 2009). Besides, Kireti and Sakwa (2014) illustrated that microcredit offered

more income opportunities for the poor and emancipated them from poverty (Kireti & Sakwa 2014; Huque 2017). However, the findings are mixed. While Teng et al. (2011) evaluated the positive effect of microcredit on welfare of low-income households, Phan et al. (2019) found an insignificant effect. A similar study has also shown that welfare does not appear to be driven by microcredit (Luan 2019). The study strongly stated that the provision of microcredit was able to enhance the financial status, health status and also education level of the low-income households. Microcredit services that are provided by microfinance institutions are crucial in maintaining the welfare of low-income households in improving their consumption, creating jobs and generating income as well as increasing their household assets (Hamdan & Hussin 2012).

Few studies have also focused on the impact of micro insurance including Beattie (2000) which shows that micro insurance is a social protection instrument, which uplift the welfare of low-income households. Some studies have revealed that the coverage that are supplied by some micro insurance plans imitates the impact these have on insurers. For example, they might ignore serious illness or pre-existing conditions (Sabageni 2002; Churchill 2007). Hence, microfinance service (micro insurance) is consistent with the ideologies of social protection. The idea is for the scheme to elude adverse selection in both microfinance and micro insurance by choosing several people who are at high risk of financial ruin or illness accordingly (Churchill, 2007). In the same vein, Collins et al. (2009) have also shown that micro insurance is as significant to low income households as microcredit. Access to insurance allows entrepreneurs to deliberate more on businesses growth while mitigating other risks affecting property, health or the ability to work (Churchill 2007). According to Hans (2009), micro insurance is not likely to be financially sustainable. Micro insurance does not really play an essential instrument in their daily living. Furthermore, Tadesse and Brans (2012) have stated that micro insurance may actually enhance the risks that negatively affect socio-economic welfare. However, there are still numerous studies that affirm the importance of micro insurance. Micro insurance is still an important instrument to improve the social security of low-income households (Churchill 2007). There is also a clear indication that microfinance and micro insurance models are fast accomplishing a good reputation in mainstream developing countries. Moreover, micro insurance also relates to insurance payments and health micro insurance (Mwewa 2013). Therefore, it has empowered people to meet their criteria of starting up a business. Correspondingly, micro insurance is regarded as a powerful tool for low income households in improving their welfare (Collins et al. 2009; Shil & Nath 2013).

The existing literature has also focused on the impact of training. For instance, Hamdan and Hussin (2012) showed that entrepreneurial training can enhance the status of micro and small enterprises in the rural section of South Africa and Malaysia. Porter and Nagarajan (2005) showed that women entrepreneurs in rural India required training to assist them in growing their businesses, supervise their finances, sales and to control their overall business. Thus, giving training to all entrepreneurs would help and push them to the top condition in their businesses. Yet, Kisaka and Mwewa (2014) have indicated that training has no effect on income. Furthermore, the training that is provided by microfinance institutions does not have direct impact towards households' enterprises and income generation as it is not based on the real needs of their businesses (Kisaka & Mwewa 2014). Nevertheless, there are still numerous studies that affirm the importance of training. Training is a very essential aspect for women entrepreneurs who participate in microfinance due to unsatisfactory results in their educational background. Black, King and Tiemoko (2003) stated that the trainings and skills improvement helped the expansion of relevant business skills in entrepreneurs from microfinance institutions in Ghana. Amanah Ikhtiar Malaysia (AIM) offers services and training to enhance the entrepreneurship skills among recipients by more than 50% (AIM 2018). Numerous trainings are provided by AIM, namely: basics of entrepreneurship, basic skills, business enhancement skill, technical skill and developing entrepreneur character. AIM also offers service for business development, where recipients get themselves in human capital development and business transformation (AIM 2011). AIM frequently promotes self-employment among the recipients as this will enable them in the creation of employment, increment of income and expenditures as well as enhancing socio-economic welfare (Misnan, Noor & Ramli 2017). AIM offers a variety of training programs among microfinance households in order for them to utilise the loan effectively, select proper income generating activities, and enhance their money management skills (Al Mamun et al. 2011). Moreover, Al-Shami et al. (2014) consented to the point that AIM provided different kinds of training or activities in improving their member's talent to discover different income-generating business, selecting appropriate income-generating activities, and enhancing their money management skills (Al-Shami et al. 2014; Al-Mamun et al. 2018). Al-Mamun et al. (2018) revealed that access to participation on microcredit and training had been found to increase income and reduce the economic vulnerability among the members (Al-Mamun et al. 2018).

The Utility Theory of Von Nuemann and Morgenstern (1994) shows that as income increases, the budget of the consumer would increase too, whereby their consumption will increase as well as their satisfaction and welfare. Microfinance services can serve as a platform to generate income. Therefore, it is expected that microcredit and training create income, which in turn impact the socio-economic welfare. Poor people in particular are likely to be in the position of a low level of purchasing capability, low expenditure, and low quality of life. Microcredit is an alternative way which could aid them to curb their low-income issue. Microcredit affords them

the chance to uplift their purchasing capability which would promote them to a higher level of expenditure (Debnath & Mahmud 2014; Ali et al. 2017).

Some studies have examined the impact of microfinance services on income. Latifee (2003) reported that the effect of microfinance programs on reducing the rate of unemployment among microfinance households was magnificent. The study revealed that nearly 90% of recipients experienced increment in their household income. Another study reported the positive impact of microfinance programs on household income (Rahman & Ahmad 2010; Panda 2009). Several studies have determined the impact of income on socio-economic welfare. Husain et al. (2015) assessed the impact of household income amongst female borrowers on their socio-economic welfare in Gazipur, Bangladesh. Also, Mahmud et al. (2017) assessed the impact of income on household income among female borrowers on their socio-economic welfare. Both of the results indicated that the amount of income received by the borrowers had significantly enhanced their socio-economic welfare.

For the foregoing, it can be established that prior studies have unravelled the positive impact of microfinance programs on low-income group. Some studies reported that income exerted a positive impact on socio-economic welfare. Hence, the positive impact of microfinance programs on income and socio-economic welfare is indeed vivid. The utility theory affirms that microfinance services (microcredit and training) have positive effect on income, while income has significant effect on socio-economic welfare. Nonetheless, not many researchers have incorporated income as a mediating variable while examining the impact of microfinance programs on the socio-economic welfare. There is a gap in the current literature. In order to bridge this literature gap, this study proposes income as a mediating variable to measure the impact of microfinance service on socio-economic welfare as mentioned earlier in previous section.

METHODOLOGY

We have extracted 400 respondents from households who are recipients of the services of AIM in Penang, Kuala Lumpur and Johor Bahru, which are among the most urbanised states in Malaysia. The determination of the number of sample size follows the sample size table and formula presented by Krejcie and Morgan (1970). Krejcie and Morgan (1970) recommended that the minimum number of sample size for a population size of 1,000,000 is almost 400. With a similar number of population, Rulindo and Pramanik (2013) and Macha, Chong and Chen (2018) applied the same method in their study. The data was collected through a thoroughly designed questionnaire. This method of collecting data has been adopted as Patten (2016) has argued that the use of questionnaire is better than interview approach as employing questionnaire allows the researcher to collect data from numerous respondents at the same time. Several past papers including Omar, Noor and Dahalan (2012) and Al Mamun et al. (2014) have adopted the survey questionnaire method for the collection of data.

This study has adopted the quota sampling method, which is similar to that being applied in the research by Hassan et al. (2012), where the samples have been selected from three geographic areas, i.e. the three states for this study - Penang, Kuala Lumpur, and Johor Bahru in Peninsular Malaysia. Malaysia was selected in this study due to the convenience of gathering data and other required information. The AIM has been chosen in this study as the objectives of its establishment are consistent with the goals of this study. The main objective of AIM matches that of Grameen Bank, which is to offer financing to support the poor. AIM offered financial services to the poor through a number of branches established across Peninsular Malaysia. In fact, numerous branches are located in urban areas. This study randomly selected six branches from each of the three states in Malaysia. The allocation of areas for data collection for each selected state was arranged and decided by the administrative management team from AIM. All the study respondents were completely managed and arranged by the management team of AIM as per agreed during discussion and meeting. The flow and process of the selection and gathering are discussed as follows: First, the state manager of AIM had a lengthy discussion with the manager of the selected branches. Next, qualified respondents from microfinance households were gathered by the branch managers at the centres. Questionnaires were distributed to each respondent. They were given sufficient time to answer the questionnaires. The respondents were diverse in terms of gender, age, race, income level, and status of employment. The survey was conducted for nearly three months to collect the full dataset. The respondents took approximately 15-30 minutes to answer all the questionnaire items. Sufficient time was given to them to answer the questionnaires. Structural equation modeling (SEM), Partial Least Squares in SmartPLS 3.0 was employed to decide the relationship in the variables. PLS-SEM is highly suitable for prediction-oriented study, which requires small sample size, and is appropriate for non-normally distributed data (Hair et al. 2016). Previous studies have also used PLS-SEM to examine the relationship between microfinance services and welfare (Hoamid et al. 2017). Figure 1 shows the research framework for this study.

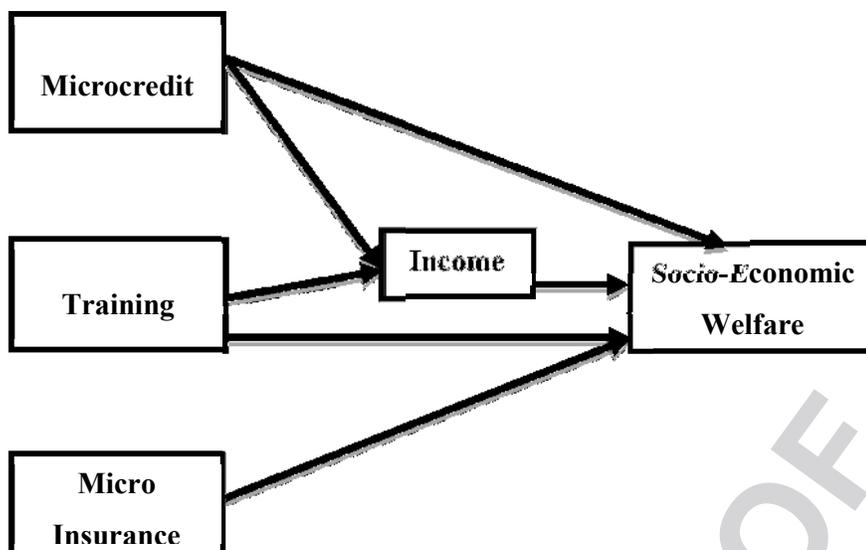


FIGURE 1. Research framework

The items of socio-economic welfare were adopted from Omoro and Omwange (2013). They consisted of five items which were measured using a 5-points Likert scale. The items covered the respondents' standards of living, education level, healthcare, start-up business, and basic needs assessment. The Cronbach's alpha reliability was 0.813. The items of microcredit were adopted from Kireti and Sakwa (2014). They consisted of five items which were measured using a 5-points Likert scale. The items covered the respondents' stock of enterprise, output of the enterprise, start-up new business, attendance at school and ability to health centres assessment. The Cronbach's alpha reliability was 0.862.

The items of training were adopted from Maru and Chemjor (2013). They consisted of five items which were measured using a 5-points Likert scale. The items covered the respondents' frequency of training provided, business performance, loan usage, cost and availability of training. The Cronbach's alpha reliability was 0.734. The items of micro insurance were adopted from Kireti and Sakwa (2014). They consisted of five items which were measured using a 5-points Likert scale. The items covered the respondents' bonds with group members, bonds with social network, participation of social activities, and better education for children and risks exposure. The Cronbach's alpha reliability was 0.799.

The items of income were adopted from Ashraf (2010). They consisted of five items which were measured using a 5-points Likert scale. The items covered the respondents' household income level, purchasing power, consumption level, inception of microfinancing, and income contribution in the household. The Cronbach's alpha reliability was 0.769. The questionnaire was examined, verified, and translated by lecturers from the Multimedia University, Malaysia prior to distribution. Face validity was also assessed in this study. The content and items of the questionnaires were verified by a panel of relevant experts from the Multimedia University. Additionally, AIM also verified the questionnaire that was employed in this study before distribution to its recipients.

RESULTS

Measurement Model Assessment The composite reliability and internal consistency assessed the reliability of construct measurement. The evaluation of reliability for each construct was determined by the values of composite reliability (cutoff value is 0.7) (Hair et al. 2016). Apart from that, the values of convergent validity were verified by the Average Variance Extracted (AVE) and the recommended cut-off value is 0.5, while each of the item loadings must be more than 0.7 (Hair et al. 2016). This indicates adequate convergent validity as all items fulfill the requirements. Table 1 shows the results for items loading, AVE, and the construct composite reliability (CR) in this study. The results reveal that all constructs' items loading, CR, and AVE are above the recommended levels.

TABLE 1. Measurement model results

| Constructs | AVE | CR |
|-----------------|-------|-------|
| Microcredit | 0.535 | 0.819 |
| Micro Insurance | 0.545 | 0.790 |

| | | |
|----------|-------|-------|
| Training | 0.554 | 0.818 |
| Welfare | 0.548 | 0.810 |
| Income | 0.524 | 0.825 |

Table 2 reveals the results for the discriminant validity analysis. The results show that the heterotrait-monotrait correlations were below the threshold value of 0.85. Thus, these results provide evidence of discriminant validity.

TABLE 2. Discriminant validity analysis

| | Income | Microcredit | Micro Insurance | Training | Welfare |
|-----------------|--------------|--------------|-----------------|--------------|--------------|
| Income | 0.789 | | | | |
| Microcredit | 0.508 | 0.806 | | | |
| Micro Insurance | 0.515 | 0.586 | 0.741 | | |
| Training | 0.463 | 0.430 | 0.456 | 0.752 | |
| Welfare | 0.439 | 0.601 | 0.581 | 0.447 | 0.748 |

Structural Model Assessment The results in Table 3 illustrate the hypothesis testing results. The structural model shows the information on the coefficients of sizes (R^2), predictive relevance (Q^2) and path coefficients of all variables. Therefore, the variables explained 55.8% of the total variance in the welfare. Also, 36.8% of the changes in income are determined by the independent variables. If Q^2 is greater than 0, this means that the model has predictive relevance (Chin 2010). The results show that both variables are 0.229 (income) and 0.285 (welfare) which are more than 0. Hence, this model has predictive relevance.

TABLE 3. Hypothesis testing results

| Hypothesis | Relationship | Std. Beta | Std. Error | t-statistics | p-values |
|----------------|-------------------------|-----------|------------|--------------|----------|
| H ₁ | MC -> Welfare | 0.248 | 0.048 | 5.223 | < 0.001 |
| H ₂ | MI -> Welfare | 0.233 | 0.055 | 4.235 | <0.001 |
| H ₃ | TR -> Welfare | 0.389 | 0.044 | 1.967 | 0.049 |
| H ₄ | MC -> Income | 0.199 | 0.056 | 3.569 | <0.001 |
| H ₅ | TR -> Income | 0.152 | 0.054 | 2.876 | 0.005 |
| H ₆ | Income -> Welfare | 0.427 | 0.043 | 7.673 | < 0.001 |
| H ₇ | MC -> Income -> Welfare | 0.089 | 0.027 | 3.271 | 0.001 |
| H ₈ | TR -> Income -> Welfare | 0.060 | 0.026 | 2.567 | 0.010 |

HYPOTHESIS TESTING RESULTS

A bootstrapping procedure with a resample of 5000, as suggested by Hair et al. (2016), was used to test the hypotheses that had been developed for this study, as shown in Figure 2. The values of relationship as shown in t-statistics reveal that the relationships are all positive relationship and higher than t-table value of 1.96 with p-value of less than 0.05. Thus, all of the direct path coefficients of this study are significant ($p < 0.001$). Specifically, the path coefficients were statistically significant for the relationship between microcredit and socio-economic welfare ($\beta = 0.248$; $p < 0.001$), micro insurance and socio-economic welfare ($\beta = 0.233$; $p < 0.001$), and training and socio-economic welfare ($\beta = 0.389$; $p = 0.049$). Hence, Hypothesis 1, hypothesis 2 and hypothesis 3 reveal that there is a direct positive relationship between variables that are supported.

Hypothesis 4 and hypothesis 5 specify the direct effects among microcredit, training and income. Results from the PLS-SEM analysis support both hypothesised relationships. There is a direct positive relationship between microcredit and income ($\beta = 0.199$; $p < 0.001$) and there is a direct positive relationship between training and income ($\beta = 0.152$; $p = 0.005$). Hypothesis 6 stated that there is a direct positive relationship between income and socio-economic welfare. The results revealed that the path coefficient between income and socio-economic welfare was statistically significant ($\beta = 0.427$; $p < 0.001$). Thus, Hypothesis 6 was supported.

Finally, Hypothesis 7 and Hypothesis 8 stated that income will mediate partially the relationship between (microcredit and socio-economic welfare) and (training and socio-economic welfare). The results of the bootstrapping procedure indicated that the specific indirect effect linking microcredit to socio-economic welfare through income was significant ($\beta=0.089$; $p=0.001$) and indirect effect linking training to socio-economic welfare through income was significant ($\beta=0.060$; $p=0.010$). We further identified the type of mediation by referring to Hair et al. (2016) mediation analysis procedure. Because both direct and indirect paths were significant and positive, complementary mediation can be inferred.

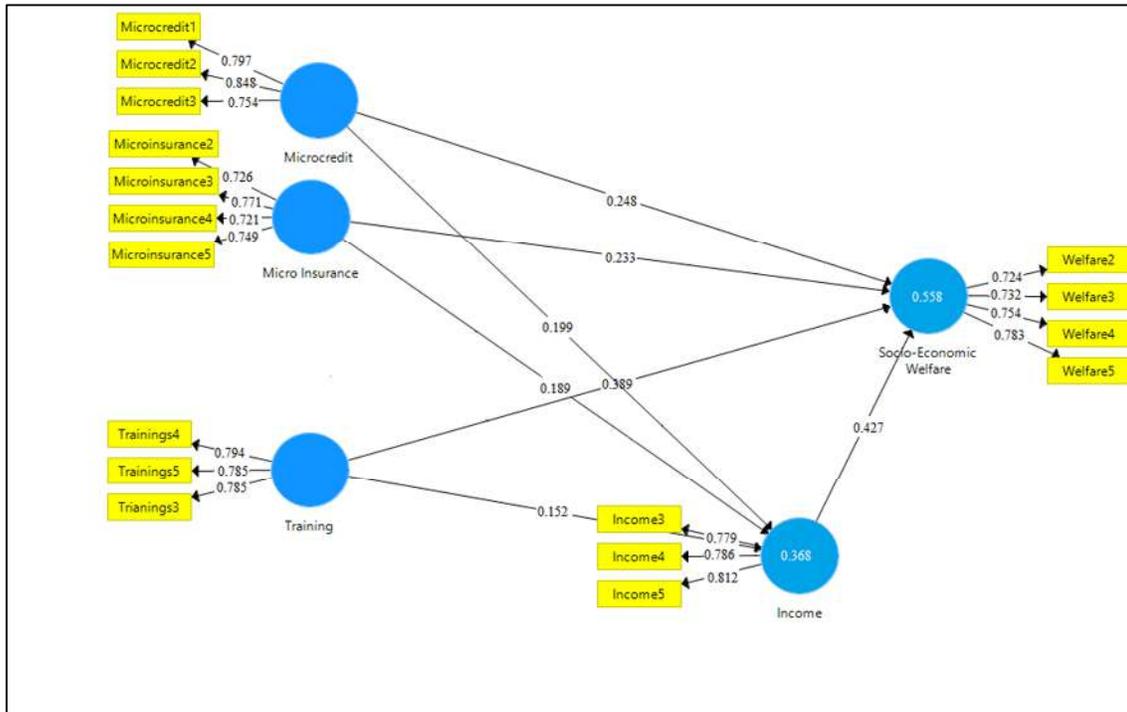


FIGURE 2. Structural model results

DISCUSSION OF FINDINGS

The findings of this study reveal that microcredit has a positive effect on socio-economic welfare. There is evidence that microcredits will enhance the socio-economic welfare among microfinance households. The result is not surprising given the fact that microcredits help to boost socio-economic welfare (Li, Gan & Hu 2011). According to Gurses (2009), microcredit is one of the foremost instruments that assist in increasing the socio-economic conditions of the poor. Thus, consistent with the modern development theory, this study revealed that microcredit provided by AIM had positive and significant impact on the socio-economic welfare of microfinance households.

Also, the research results revealed that micro insurance has a significantly positive correlation with socio-economic welfare. Micro insurance is able to mitigate the associated life and health risks as well as to smooth the daily cash flows among the microfinance households (Shil & Nath 2013). Therefore, micro insurance is regarded as a powerful tool for low income households in improving their welfare (Collins et al. 2009; Shil & Nath 2013). Consistent with the modern development theory, this study showed that micro insurance provided by AIM had a significantly positive impact on socio-economic welfare of microfinance households.

Moreover, the study outcomes showed that training was positively and significantly related to socio-economic welfare. The training provided by microfinance institutions have direct impact on households' enterprises and income generation as it is based on the direct real needs of their business (Kisaka & Mwewa 2014). Al-Shami et al. (2014) consented to the point that AIM provided different kinds of training or activities in improving their members' talent to discover different income-generating business, selecting appropriate income-generating activities and enhancing their money management skills. Therefore, consistent with the human capital theory, this study revealed that training provided by AIM displayed significantly positive impact on the socio-economic welfare of microfinance households.

The findings revealed that microcredit had a significantly positive relationship with income. Kireti and Sakwa (2014) illustrated that microcredit offered more income opportunities for the poor and emancipated them from poverty (Kireti & Sakwa 2014; Huque 2017). Hence, a positive impact of microcredit programs had been noted on borrowers with numerous income levels across many nations. Within the context of Malaysia, Salma (2004) concluded that microcredit programme provided by AIM had a direct and greater contribution in generating income than non-microcredit programmes. In line with the modern development theory, this study revealed that microcredit offered by AIM had a significantly positive effect on the income of microfinance households.

The findings showed that training had a significantly positive effect on income. The training provided by microfinance institutions to their members has direct impact on income generation (Swain & Varghese 2013). Al-Mamun et al. (2018) revealed that access to participation on microcredit and training had been found to increase income and reduce the economic vulnerability among the members (Al-Mamun et al. 2018). Consistent with the human capital theory, this study showed that the training provided by AIM had a significantly positive impact on the income of microfinance households.

The study outcomes revealed that income had a significantly positive effect on socio-economic welfare. Husain et al. (2015) assessed the impact of household income amongst female borrowers on their socio-economic welfare in Gazipur, Bangladesh. The results indicated that the amount of income received by the borrowers had significantly enhanced their socio-economic welfare. The utility theory also supports that as income is increased, the budget of the consumer is increased as well, thus higher consumption in maximising their utility. Increment in income enhances one's standard of living in terms of expenditure (Debnath & Mahmud 2014). Consistent with the utility theory, this study showed that income had a significantly positive effect on the socio-economic welfare of microfinance households.

Nevertheless, the present study did find support for the mediating role of income on the relationship between microcredit and socio-economic welfare. Md Saad (2010) and Al-Shami et al. (2014) consented that microcredit provided by AIM enabled the recipients to increase their income level, reduce poverty, and enhance their socio-economic welfare. Both modern development and utility theories affirm that microfinance services (microcredit) have significantly positive effect on income, while income has a significant effect on socio-economic welfare of microfinance households (Salma 2004; Li et al. 2011; Al-Shami et al. 2016). This study confirmed the complementary and significant mediating effects of income on microcredit offered by AIM in enhancing socio-economic welfare of urban households.

The results did find support for the mediating role of income on the relationship between training and socio-economic welfare. Md Saad (2010) and Al-Shami et al. (2014) consented that the training provided by AIM enabled recipients to increase their income level, reduce poverty, and enhance their socio-economic welfare. Both modern development and utility theories affirm that microfinance services (training) have positive effect on income, while income has a significant effect on socio-economic welfare (Al-Mamun et al. 2010; Md Saad 2010; Hamdan & Hussin 2012). Thus, this study confirmed the complementary and significant mediating effects of income on trainings offered by AIM in enhancing socio-economic welfare of urban households.

MANAGERIAL IMPLICATION

This study has made a number of theoretical implications based on the findings. Firstly, this study contributes to measuring the effects of microfinance services on the socio-economic welfare of urban households. Many of the previous studies only focus on the socio-economic welfare of rural households such as Hossain (1988) and Omar et al. (2012). There are insufficient studies regarding the effects of microfinance services on the socio-economic welfare of urban households. Therefore, the current study focuses on urban areas in Malaysia to fill the gap in the literature. Secondly, this study uses income as the mediating variable in conducting research analysis. It is found that income is not being used in previous studies. The Utility theory has validated that microfinance services can assist to generate more income and enhance socio-economic welfare among urban households. Hence, the results of this study have proven that there is a significant mediating impact of income to access microfinance services (microcredit and training) on socio-economic welfare of urban households.

The findings of this study also have some implications on management. Firstly, microfinance institutions can play a crucial role in Malaysia in accomplishing the Shared Prosperity Vision 2030. The main objectives of the Shared Prosperity Vision 2030 are to grow the economy as well as promote wealth and welfare across the various dimensions in the economy. In this case, the results of this study have proven that Amanah Ikhtiar Malaysia (AIM) has the capability to positively impact the urban households in terms of quality of life by raising the quality of life (Misnan et al. 2017). Hence, the government of Malaysia should put more effort on improving the microfinance services by microfinance institutions in Malaysia. Next, the result of this study has indicated that microfinance services play an essential role in ensuring that Malaysia becomes a high-income nation that is both inclusive and sustainable by 2030. Despite the crucial effect of microfinance services among urban households, there are numerous urban households in Malaysia that have yet receive financial assistance from microfinance institutions in order to improve their socio-economic welfare. Moreover, their small businesses still suffer from

growth and sustainability for further development as they have limited source of funds, and a lack of knowledge in handling business. Hence, the authorities of Malaysia should consider addressing these issues. AIM and policymakers, therefore, should emphasise on stimulating a compassionate environment in enhancing the cooperation among microfinance households by creating a well-diversified and dynamic microfinance programs and specific skills-building training programs (Al-Mamun & Mazumder 2015).

CONCLUSION

In conclusion, the primary aim of this paper is to investigate the services that are provided by microfinance institutions on the welfare of urban households in Malaysia. The results of this study affirmed the positive outcome of microcredit, micro insurance and training on socio-economic welfare. Thus, these outcomes validated the objectives of the study by ensuring the importance of microfinance services in raising the status of socio-economic welfare among urban households. These results supported the hypothesis of the study by affirming the importance of microfinance services in enhancing the socio-economic welfare of urban households' poverty. This aligned with the goals of the 11th Malaysia Plan (Economic Planning Unit 2015) and also complements the efforts required under the National B40 Protection Scheme, 2019.

Although the present study has some important theoretical and practical implications, there are some limitations that merit further discussion. Firstly, due to time constraint this study has only employed three urbanised states in Malaysia, which are Penang, Kuala Lumpur, and Johor Bahru. Hence, there are still 11 remaining states in Malaysia that have not been covered. For instance, future researchers can cover more regional areas or states in Malaysia, so that the findings of the study can be more solid and reliable. Secondly, this study has only investigated responses from the microfinance households of AIM. The other two available MFIs in Malaysia, namely TEKUN and YUM, were excluded from this study. Thus, a future study can also carry out a comparative study between the three available MFIs in Malaysia (AIM, TEKUN, and YUM). Lastly, questionnaires were administered on a one-time basis and it had been difficult to obtain detailed information from the respondents. Hence, there was limited interaction between the researcher and the respondents to retrieve more information about the respondents. Future studies can improve the methods of data collection, which can be improved by conducting focus group or interviewing the microfinance households or even all of the available microfinance institutions in Malaysia.

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