



Impact of using Islamic Microfinance Products on Mauritanian Microentrepreneurs' Income

Evidence from PROCAPEC- Nouakchott

Vatimetou Mokhtar Maouloud
Anwar Hasan Abdullah Othman

Abstract: This study examines the impact of using Islamic microfinance products on the Mauritanian microentrepreneurs' income level. The study is purely quantitative, and it uses cross-sectional design data, which was gathered through a questionnaire from a sample of 381 beneficiaries of an Islamic microfinance institution (PROCAPEC). It uses Structural Equation Modeling (SEM) to determine the effectiveness of using Islamic microfinance products on the beneficiaries' income as well as to test the moderator effect of gender on the relationship in the model. The research found out that the use of Islamic microfinance products has increased the beneficiaries' income; however, gender has no moderator effect on the relationship between the usage of Islamic microfinance products and income level. These findings help the policymakers and managers of Islamic microfinance consider the factors increasing Islamic microfinance products' usage to reduce poverty in the country. This study is among the pioneer in the field of Islamic microfinance in Mauritania due to the scarcity of studies in the geographical context.

Keywords: Mauritania, financial inclusion, Islamic microfinance, Poverty alleviation, Structural Equation Modeling

JEL Classification: C83, G21, I30, N37

@ Phd Candidate, International Islamic University of Malaysia, fatismed95@yahoo.fr  0000-0001-5758-9432
Asst. Prof., International Islamic University of Malaysia, anwarhasan@iiu.edu.my  0000-0001-5759-8216



Introduction

Poverty can be defined as a lack of primary sources such as income, education, nutrition, health care (Dusuki, 2008) microfinance requires innovative approaches beyond the traditional financial intermediary role. Among others, building human capacity through social intermediation and designing group-based lending programmes are proven to be among the effective tools to reduce transaction costs and lower exposure to numerous financial risks in relation to providing credit to the rural poor. This paper also suggests the use of a special purpose vehicle (SPV. Hence, this study focuses on only one dimension of poverty the income, due to its importance and high impact on people's wellbeing. Mauritania is considered one of the poorest African countries. Therefore, the poverty rate is very high, which is nearly 32 per cent of the whole population live in poverty (ECA, 2016). The financial inclusion rate is also low, which can be around only 20 per cent of the citizens who have access to the formal financial system (Amendola, Boccia, Mele, & Sensini, 2016).

The history of microfinance in Mauritania started in the 1990s; however, there is no accurate data to precise its market share in the financial system, which was evaluated to one per cent of the total financial assets (ADF, 2007). The first Microfinance institution in Mauritania is the Credits and Saving Association (PRO-CAPEC), and it has been licensed and launched in 1997 (CBM, 2018). There are nearly 51 microfinance institutions in the country, and the total number of MFI clients were approximated 200,000 in 2014 (Amendola et al., 2016). The headquarters and most branches of MFIs are in Nouakchott, the most densely populated city. The average loan period from MFIs lasts from two months to two years, and the saving of those clients presents only two per cent of all deposits in the financial sector. Additionally, the loans given by microfinance institutions represent only five per cent of all loans in the financial system (ADF, 2007).

According to the ADF (2007) report, Mauritania has only a few large microfinance institutions. Nevertheless, the microfinance sector is undeveloped and unregulated. Most of the MFIs are small in scale and have limited outreach. Also, the sustainability of these MFIs is plausible, with some losing their businesses while others have their license withdrawn by the government due to infractions upon the law. Several challenges hamper the development of the microfinance sector, such as the lack of proper infrastructure of products, the conditions related to collateral, the Mauritanian culture in using informal sectors and the black market to get finance, and lack of report and transparency of the MFIs which decrease the subsidies from the government and public (Bouasria, Ashta, & Ratsimalahelo, 2020).

PROCAPEC is the largest Islamic microfinance institution in Mauritania. It was also the first microfinance institution established in the country in 1997. This institution has 37 branches, of which 18 are in the capital city, Nouakchott. In 2019, the number of customers had reached 260.368, which is considered a huge number compared to Mauritania's total population (approximately 4 million). The financing recovery rate is about 97 per cent, which shows that the beneficiaries are reliable and punctual in paying back the instalments. There are 211 employees, with 44 per cent of them being women. The most frequently used Islamic products are Murabaha and saving services. The former represents about two billion MRU (Mauritanian Monetary Ouguiya), and the latter is around six billion MRU. PROCAPEC also provides the saving for Hajj (pilgrimage) and remittances. It also helps some entrepreneurs in managing their business by providing financial advice.

Apart from being the first and largest Islamic microfinance institution, another main reason for choosing PROCAPEC in this study is the accessibility. The employees are approachable, and the branches are available in many places. PROCAPEC has a website that enables easy access to further administrative information. Whereas other institutions are not accessible online and in person, they are hostile and unwilling to interact with new faces. The majority of the institutions do not possess a website. Even those who have websites provide outdated and incomplete information.

Based on the literature review, the researcher has observed a lack of empirical studies on Islamic microfinance's role in poverty reduction. Several research works presented only theoretical and conceptual studies on the trends of microfinance's effectiveness on poverty alleviation, especially in Africa. Although few researchers have used empirical approaches, there is still a need to explore the practical effect of microfinance on poverty, especially in African countries. Therefore, this study is filling this gap by providing new empirical evidence to enrich the literature.

Numerous studies found divergent results of the effectiveness of microfinance on poverty alleviation. Some studies revealed significant impacts, while others did not find any impact of microfinance on poverty alleviation. Thus, this research will fill this gap by providing new findings to resolve or provide supplement arguments that contribute to the controversy. Also, it will participate in the worldwide debate on the effectiveness of Islamic microfinance on microenterprises development. The latter has not been widely discussed in the literature despite its crucial role in the country's economy. Hence, this study uses microenterprises as a mediator variable in the relationship between Islamic microfinance products and poverty alleviation. Enormous studies in this field have only focused on the role of conventional mi-

crofinance in poverty. Therefore, this research will fill this gap by enriching the empirical studies using Islamic microfinance on poverty reduction.

In Mauritania, there is a scarcity of studies on microfinance and its role in reducing poverty. There is barely any research about the role of Islamic microfinance in alleviating poverty in Mauritania. Although Mauritania is a Muslim country and OIC member, research in Islamic finance is still rare. Only a few studies and reports from the IMF and World Bank have discussed the issues related to access to credit in Mauritania and the general financial system. They will be the references for this research due to the lack of studies and reports from Mauritania's central bank.

Therefore, this study aims to fill up this gap by providing new insights on the topic of Islamic microfinance and poverty alleviation by using only one dimension of financial inclusion which is the usage of financial products, and one dimension of poverty which income level. This study has used the saving and credits association (PROCAPEC) institutions of Nouakchott, as a case study due to several reasons, among which it is the first and largest microfinance institution in Mauritania. Nouakchott is the capital city and the most populated city in Mauritania. There are around 31 microfinance institutions in the country however few of them are Islamic.

The main objective of this paper is to determine the impact of using Islamic microfinance products on the beneficiaries of PROCAPEC institutions as well as to investigate the moderator effect of gender in the model. The following research questions are elaborated:

RQ1. Does the usage of Islamic microfinance products impact the income of Islamic microfinance beneficiaries?

RQ2. Does gender moderate the relationship between the income and usage of Islamic microfinance products in PROCAPEC-Nouakchott?

This paper is organised as below: the first part was the introduction which included the background of the topic, problem, gap, and objective as well as research questions. The second part is about the theoretical framework, literature review of the previous studies, and the model's hypotheses. Then, the third part presents the data and methodology used in the article. The fourth part shows the results and analysis of the findings. Finally, the last part discusses the conclusions and recommendations for managers, policymakers, and future studies.

Literature review

The theoretical framework

Even though poverty has existed even before humankind, it does not have a theoretical framework that explains the reasons for its persistence (Hidayah, Abdul, & Hazlina, 2012). The large and growing body of literature has discussed poverty but did not reach the target to identify the unique theory that can clarify poverty. However, different theories describe the sources of poverty.

This study is underpinned by a combination of theories, mainly inequality theory and financial intermediation theory. The inequality theories are the extensive and intensive margin theory. The financial intermediation theory used in this study is the financial market imperfections theory. In this theory, financial intermediaries tend to overcome the financial market's deficiencies (Al-Jarhi, 2014). The financial market imperfections theory shows a necessity for a perfect and developed financial system to maintain the poor' lives and uplift their economic situation. This theory explains that individuals should have access to finance to increase their income, children's schooling, expenses, and independence from their parents' heritage (Becker & Tomes, 1979). To improve the economic situation of low-income people, financial inclusion should be enhanced. The reason for giving importance to financial inclusion lies in its effectiveness to boost and faster the country's economy and individuals' wellbeing. Financial development reduces the inequality between rich and poor, improves vulnerable lives, and enhances human development (Beck, Demirgüç-Kunt, & Levine, 2004).

According to Beck, Demirgüç-Kunt, and Levine (2004), there is no consensus in theory about finance's fundamental role on poverty alleviation; however, some studies have shown a positive relationship between finance and poverty alleviation. Financial development can boost the economy and alleviate poverty by funding small businesses and microenterprises (Beck, Demirgüç-Kunt, & Honohan, 2009; Demirguc-kunt, Klapper, & Singer, 2017). Providing financial access to microenterprises significantly impacts economic growth and poverty alleviation (Dupas & Robinson, 2013). Financial development and financial intermediaries are the critical factors that increase economic growth and alleviate poverty by mitigating asymmetry of information and transaction costs (Levine, 2005). The financial market imperfections theory relates to poverty alleviation to enhance economic growth (microenterprises) and financial development (through financial inclusion). Hence, this theory is considered as an umbrella of the entire model in this research.

The extensive margin theory emphasises the importance of increasing awareness about financial services among individuals and small and microenterprises financially excluded from getting benefitted from the financial system to reduce their hardship and poverty (Tchamyou, Erreygers & Cassimon, 2019). It also stipulates that financial products' prices should be reduced to be affordable for low-income people and firms (Greenwood & Jovanovic, 1990). This theory considers the cost of financial services and the other determinants as significant factors leading to financial exclusion. This theory relates the involuntary barriers (exogenous variables) to the usage of microfinance products. Thus, this theory underpins the first objective of this study that investigates the impact of involuntary barriers and the usage of microfinance products.

On the other hand, the intensive margin theory significantly impacts poverty and inequality by enhancing the quality of financial services for those already included in the financial system (Tchamyou, 2019). This theory focuses on the quality of financial products offered and their impact on the reduction of poverty. This theory underpins the third and fourth objectives of this study which determine the effect of using microfinance products on the microenterprises and the impact of the later on poverty alleviation.

In the Islamic financial theory, it has been mentioned in numerous books and articles that easing financial access and providing a wide range of Islamic financial services can be useful in uplifting the country's economic situation and thereby reducing individuals vulnerability (Iqbal & Mirakhor, 2013; Mohieldin, Iqbal, Rostom, & Fu, 2011). The relationship between financial development (financial inclusion), economic growth (microenterprises), and poverty alleviation have been widely discussed together in various empirical and theoretical studies (Beck et al., 2004; Beck, Demirgüç-Kunt, & Levine, 2007; Greenwood & Jovanovic, 1990; Levine, 2005; Adeyeye et al., 2015; Wajdi Dusuki, 2008). According to Chapra (1979), the primary goal of sending the Prophet Muhammad (PBUH) is for blessing for all humankind. Some of the blessings were stated explicitly in the Quran, for instance, alleviation of hardship (Hayat tayiba) and welfare (Falah). Islam dislikes the difficulty of poverty-stricken life. Besides, it has been narrated in Sunan Abu Dawood that the Prophet Muhammad (PBUH) asked Allah to protect him from poverty (Fakr) as well as from disbelief (Kufr). From this prayer (Duaa), prophet Muhammad (PBUH) considered poverty as grievous as disbelief and sought refuge from both. The Quran shows several ways to deal with poor, vulnerable, and weak people to preserve their rights and avoid injustice and inequality. Islam preserves social equality between the high-ranking people and those who do not have any eminent political or social positions according to modern society norms (Farooq, 2008).

The Previous Studies

Poverty is a serious problem that is mainly affecting third world countries; Mauritania is no exception. Poverty has different dimensions that can be used to measure its extent of threatening. Those dimensions are income level, education of children, nutrition, healthcare, level of consumption, assets owned (Kaka, Abidin, & Islamic, 2013).

Mahmood et al. (2015) studied the impact of financing obtained from Islamic microfinance institutions on household income, expenditure, development in assets, and respondent's poverty level. The results of the study showed positive impacts on income, expenditure, and asset acquisition. Numerous studies have also proved that microfinance increases women's empowerment and reduces poverty (Mahmood, Hussain, & Matlay, 2014; Murshid, 2018; Obaidullah, 2008).

Access to microfinance services can reduce poverty by enhancing household's income, expenditure, business networks, health care, nutrition, women empowerment, and children's education only if the loans taken are small or in average range; otherwise, it will increase poverty (Mahmood et al., 2014). On the other hand, access to microfinance has a positive impact on children's education and household expenditure but has a negative effect on housing conditions, consumption, and household assets (Noreen, Imran, Zaheer, Saif, & Iqbal, 2011).

Islamic microfinance has a significant impact on women's empowerment since women have an essential role in society. Through access to Islamic microfinance, women can gain shared prosperity and be more economically active than men in their society (Othman, 2015). The study of Hassan and Saleem (2017) has shown that Islamic microfinance improves women's wellbeing and increases their financial freedom and sense of self-possession. The variables used in the research are women's income, assets possession, awareness of health care, family harmony, and children's education. The findings reveal that Islamic microfinance loans positively impact income, assets ownership, and children's education; however, no effects have been seen on health care and family harmony. Similar findings have been deducted by Rokhman (2013), who demonstrated that Islamic finance positively affects the household's income, children's education, and business progress, yet no effect on health care.

A study conducted in Indonesia has shown that Baitul Qiradh (Islamic financial institutions) has significantly increased these Islamic financial products due to their positive impact on the client's poverty level (Asmawati & Ahmad, 2015). The primary data was collected from 208 participants about their perceptions of

the change after the financial inclusion in Baitul Qiradh. The study measured the role of education, age, amount of loan, and entrepreneurship participation in the household's income. The results showed a positive and significant impact of education, amount of loan, and entrepreneurial training on rising income; nevertheless, age is significantly related to income. Apart from that, Islamic microfinance has been an alternative way to tackle poverty, and it also brings unbanked people to be financially included. Alaro and Alalubosa (2018) confirmed an essential role of some Islamic products such as Musharaka, Mudharaba, Zakat, and Waqf to alleviate poverty and increase financial inclusion.

Microfinance is an effective tool to enhance well-being and decrease poverty and enhance financial independence (Lal, 2018). The products offered by microfinance institutions are suitable for low-income people; hence, it might attract them through the opportunity of increasing their income (Afandi & A'yun, 2018). Access to financial institutions might not be the real issue because some people have convenient access, but they do not use the products available in the institutions (Beck & De La Torre, 2006; Maulana, Razak, & Adeyemi, 2018; Okello, Bongomin, Ntayi, Munene & Akol, 2017) Therefore, usage of financial products is crucial and very effective on the financial level of individuals.

Islamic microfinance is considered an alternative to Islamic banks for vulnerable people who can not afford banks' fees. Also, it can be a better choice rather than dealing with the informal market, which is an unsecured and very risky domain. The effective use of financial products can reduce poverty and enhance income, especially through mudharaba and musharaka (Shaikh, 2017). The main products offered by microfinance institutions are micro-Murabaha, micro-saving, micro-takaful, Qard Hassan, and remittances (Nafar & Amini, 2017). Islamic microfinance can increase financial inclusion through the products they offer which also can reduce poverty enormously (Mohieldin, 2012). The products available in Islamic microfinance can be used by Muslims as well as non-Muslims. Only when those products are used effectively in economic activities, then the income level of beneficiaries will increase.

Islamic microfinance reduces poverty and empowers the poor by providing Islamic services and funding their microenterprises (Adnan & Ajija, 2015; Mahmood et al., 2015). Islamic microfinance services increase household' income and expenditure (Fianto et al., 2017). Researchers on poverty alleviation concluded that the best way to exit poverty is to own sustainable assets to satisfy the poor's basic needs (Savath, Fletschner, Peterman & Santos, 2014).

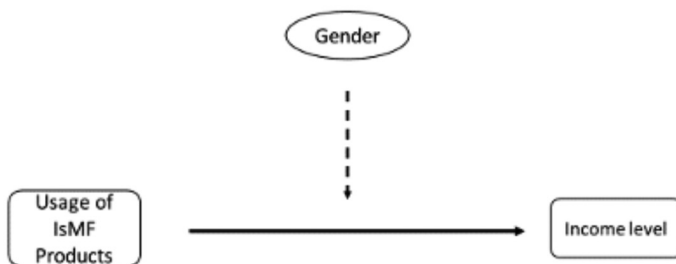
Microfinance is suitable for the poor microenterpreneurs more than other financial institutions such as banks (Abbas & Shirazi, 2015), even the quality of services in microfinance institutions is better (Cull, Demirgu & Morduch, 2009). Islamic microfinance is more suitable to attract the poor to save and include them in the formal financial system. Islamic microfinance can enhance financial inclusion through different tools and alleviate poverty (Mohieldin, 2012). Meanwhile, Islamic microfinance is more moral-based than profit-based (Ahmed, 2002; Khaleequzzaman, 2007); thus, these institutions are not only for Muslims but also for non-Muslim. In contrast, conventional microfinance makes the poor overwhelmed with debt and high interest rates (Cull et al., 2009).

Furthermore, in some African countries, such as Ethiopia and Ghana, microfinance has a significant impact on reducing poverty by empowering women (Dzisi & Obeng, 2013; Tafese, 2014). In Kenya, however, some obstacles slow the microfinance sector's development and impede access to finance, such as the low level of education, low network telecommunication, and inadequate necessary infrastructure, like roads (Ali, 2017). Several studies have shown the impact of using Islamic microfinance on poverty alleviation, especially the augmentation of income (Farooqi, Qamar & Chachi, 2017; Kaka et al., 2013; Tafese, 2014; Toindepi, 2016). Therefore, the following hypothesis is elaborated as shown in Figure 1.

H1. The usage of Islamic microfinance has a positive impact on the income of PROCAPEC beneficiaries

H2. Gender has a moderator effect on the relationship between usage and income

Figure 1.
Conceptual Framework



Data and Methodology

Methodology

This study is based on a deductive approach because it is quantitative research. This research's sampling technique is purposive sampling, which is among the non-probability sampling methods. This sampling technique is suitable for this study because it can select respondents based on specific criteria. In this study, there are two main criteria; upon them, the respondents are chosen. Firstly, respondents should possess microenterprises or businesses. Secondly, the respondents should be clients of the Islamic microfinance institution (PROCAPEC) in Nouakchott. The EFA (Exploratory factor analysis) and CFA (Confirmatory Factor Analysis) were performed to ensure that all the items load properly on the appropriate factors. The validity and reliability of constructs were verified and even above the cut-score. The descriptive statistics were presented through SPSS 23, and the SEM model was analysed through Amos 23. The research items are adopted with slight modification from various studies mainly (Adewale, 2010; Issed, 2017; Riwayatanti, 2013) therefore, was based on the concern for appraising the appropriateness of microfinance as the latest poverty alleviation strategy. This is in terms of global practices and local realities peculiar to Nigeria. It is quite likely that poverty in Nigeria may be linked to the financial exclusion of the poor. This frustrates their entrepreneurial activities in the sense of being able to acquire the sustainable livelihood assets they need to exit from the poverty trap they are immersed in. The main objective of this study, therefore, is to investigate the relationships that exist between financial exclusion or lack of access to microfinance services and possibility of intergenerational transmission of poverty in Nigeria as mediated by microenterprise underdevelopment and inadequate livelihood assets. The variables used in the study as well as both the conceptual and theoretical frameworks were influenced by a combination of various theories of inequality, especially the theory of imperfect credit and the sustainable livelihood model. A mixed methods approach via the quantitative and qualitative research designs and based on the pragmatism philosophical view was used at all stages of data collection, analysis and results. Relevant information was collected from some poor households in the Ilorin metropolis of Kwara State, Nigeria using both the survey questionnaire and interview methods. Data so obtained were subjected to mixed data analysis. The Structural Equation Modeling (SEM).

Data

The data for this article was collected through a questionnaire using the cross-sectional design. The respondents are the beneficiaries of an Islamic microfinance institution (PROCAPEC) in Nouakchott. The number of questionnaires distributed was 700, but only 493 were returned. Using a purposive sampling method through a cross-sectional design, 650 copies of the surveys were distributed to the beneficiaries of the Islamic microfinance PROCAPEC-Nouakchott. There were 493 questionnaires returned, which indicates a response rate of 71 per cent. The number of outliers was 100 cases. There were some cases that have more than 25 per cent of missing data and were deleted. After doing data screening and deleting the outliers, the remaining usable data is 381. After verifying SEM analysis assumptions such as normality and collinearity, there were no major issues, and the data is ready for further analysis. This response rate is acceptable because it is above the cut score of 50 per cent (Yun & Trumbo, 2000). This response rate is also due to the nature of the Mauritians who are not familiar with surveys, and most of the respondents were unwilling to answer the questionnaire. After several visits from the researcher to the institutions, enough sample size was achieved.

Measurement of the Endogenous Variable

The dependent variable in the study is the Income level as one of the dimensions of poverty. The items are adapted and developed based on a five-point Linkert scale ranging from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). The items are reliable; however, two of them were deleted to ensure the model's validity. These two items are (income 2) and (incom3) and were deleted due to their high factor loadings. The Cronbach alpha of this variable is $0.970 > 0.7$, which shows a strong value of reliability which is in line with the rule of thumb of being above 0.7 (Babikir, Ali & Abed el Wahab, 2009; Tabachnick, Fidell & Ullman, 2007).

Table 1.

The Items of the Variable Income

	No.	Items	SDA	D	N	A	SA
Income	1	I believe that IsMF has helped me to engage in a business that generates income					
	2	The Capital invested in the business has been increasing due to IsMF					
	3	My income has been augmented due to IsMF					
	4	I generate more than 2 \$ per day due to IsMF					
	5	I put a portion of income for saving due to IsMF					
	6	I can lend money easily to my friends due to IsMF					

Measurement of the Exogenous Variable

The independent variable in this study is the use of Islamic microfinance products. The products used in this study are Murabaha, Qard-Hassan, saving, and remittances. The scale used for the items is four Linkert scale points ranging from 1 (never used), 2 (rarely used), 3 (sometimes used), and 4 (frequently used). The four items are self-developed. Content validity is excellent. All items are reliable and have a Cronbach alpha value of .970, which above the cut-score of 0.7 (Hair, Black, Babin, Anderson, & Tatham, 2006). Overall, the construct is reliable and valid.

Table 2.

The Items of the Usage Variable

Products	Never used	Rarely used	Sometimes used	Frequently used
Micro-Murabaha				
Micro-saving				
Micro-remittances				
Qard Hassan				

Table 3

Reliability of Constructs

Variable	Number of items	Cronbach's Alpha
Usage	4	.790
Income level	4	.970

Results and Analysis

Measurement Model

The measurement model has been developed with all items of each variable. However, the model is not fit; therefore, some modifications need to be done to make the model valid and fit. The original measurement model is presented in Figure 2; subsequently, the modified measurement model is also presented in figure 3. There were two items deleted from the income level construct.

Figure 2.

Measurement Model

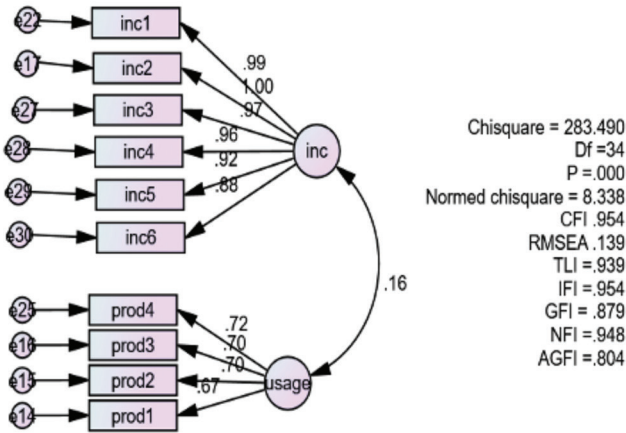


Figure3.

Modified Measurement Model

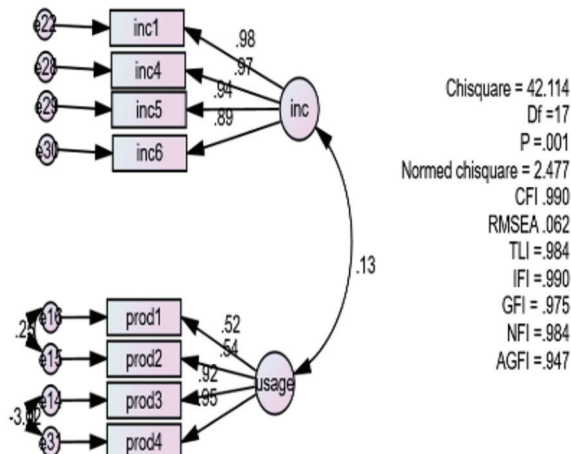


Table 4

Summary of the Measurement Model Indices

Indices	Rule of thumb	Value in the model
Normed chi-square	<5	2.477
P-value	>0.005	.001
CFI	>.90	.990
RMSEA	<.08	.062
IFI	>.90	.990
TLI	>.90	.981
GFI	>.90	.975
NFI	>.90	.984
AGFI	>.90	.947

Table 4 shows that the model is a fitness model, and it has excellent indices based on the rule of thumb of SEM. Thus, the SEM can be applied to this model after checking the validity and composite reliability. Table 5 shows that the model has no validity issue because the AVE is greater than 0.5, and the C.R. is greater than 0.7 which is in line with the rule of thumb.

Table 5

Convergent and Discriminant Validity

	CR	AVE	MSV	MaxR(H)	Usage	Income
Usage	0.834	0.574	0.018	0.937	0.758	
Income	0.970	0.890	0.018	0.980	0.133	0.943

Structural Equation Modelling

Since there is no validity or reliability issue, the model can be tested through the SEM method. Figure 4 presents the hypothesised model. It is clear from the indices showed in the full-fledged SEM model presented in figure 4 that the model is fit, and it has excellent values. All indices follow the rule of thumb, and there is no violation of it at all.

Figure 4.

Hypothesised Model

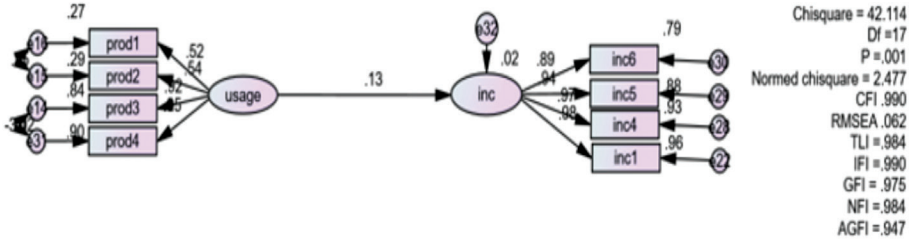


Table 6 presents the validity of the results. The relationship between the usage of Islamic microfinance products and the income level is positive and statistically significant. The p-value is $.006 < .05$, which indicates the relationship is statistically significant. The C.R is $2.736 > 1.96$, which indicates that the relationship is strong and positive. Therefore, the first hypothesis (H1) is supported. Consequently, the more the beneficiaries use the financial products offered, the better income they generate.

Table 6

Regression Weights and Hypothesis decision

	Estimate	S.E	C.R	P	DECISION
Usage income	.360	.132	2.736	.006	Accepted (H1)

The finding presented in Table 6 is in line with several studies because providing suitable Islamic microfinance products to the poor raise their financial inclusion and lead to a successful business (Hassan, 2015). An increase in microfinance products' usage has a significant impact on women's income, expenditure, health care, and nutrition (Mahmood et al., 2014). Microfinance's financing modes help women gain shared prosperity (Othman, 2015) and reduce poverty, primarily by increasing their income (Al-Shami, Majid, Rashid & Hamid, 2013; Kasali, Ahmad, Lim, Ean & Lim, 2015; Mazumder & Lu, 2015). Microfinance empowers women (Tafese, 2014; Weber & Ahmad, 2014), reduce their vulnerability (Khaki & Sangmi, 2017), and increase their financial independence and sense of self-possession (Hassan & Saleem, 2017).

Table 7

Gender Moderation Effect

		Male		Female		Z-score
		Estimate	P	Estimate	P	
Usage	income	0.713	0.087	0.29	0.034	-0.967

Based on the results indicated in Table7, gender has no moderator effect on the relationship between the usage of Islamic microfinance products and income level because the absolute value of the z-score is $0.967 > 0.05$. Therefore, the second hypothesis (H2) is not supported. Despite the fact that most Mauritanian females are empowered and owe more microenterprises than their counterparts males, there is no difference between men and women in using and benefiting from Islamic microfinance products. However, this result contradicts the study of (Obaidullah, 2008) who mentioned that women are considered the main target of Islamic microfinance institutions, and their percentages among customers are higher than the percentage of men inside the same institutions. This finding can be due to the sample size, and the nature of respondents was the percentage of men and women are almost the same.

Conclusions

This study has tested the relationship between the usage of Islamic microfinance products and the beneficiaries' income level. The hypothesised model showed that the relationship is positive and statistically significant. Therefore, the effective usage of Islamic microfinance products has increased the Mauritanians microentrepreneurs' income. However, gender has no moderator effect on the relationship in the model. Therefore, the hypothesis (H1) is accepted; the hypothesis (H2) is not supported and then rejected. Therefore, there is no difference in gender in terms of using Islamic microfinance products and income level.

The practitioners, policymakers, and managers of Islamic microfinance should adopt strategies that increase financial inclusion, especially the usage of financial products to improve beneficiaries' wellbeing and reduce poverty in the country. It is also indispensable for microfinance managers to arrange training on how to use the products and services available by the microfinance institutions' customers effectively to impact their lives. Increasing financial education will lead to the decrease of poverty in the country. Therefore, the government should take initiatives to enhance awareness among people about Islamic microfinance products' role in

their welfare. Lowering products prices and reducing documentation required can increase the usage of financial products and enhance the income.

This study has used only a quantitative method; future studies can include qualitative methods to enhance the results' interpretations. Among the limitation of this study is the focus on only one Islamic Microfinance Institutions. Other studies can use several Islamic microfinance institutions together to better generalize the findings.

References

- Adewale, A. A. (2010). *Glocalization of Microfinance as a Strategy to Alleviate Intergenerational Transmission of Poverty in Nigeria*.
- Adeyeye, P. O., Fapetu, O., Aluko, O. A., & Migiro, S. O. (2015). Does Supply-Leading Hypothesis hold in a Developing Economy? A Nigerian Focus. *Procedia Economics and Finance*, 30, 30–37.
- ADF. (2007). *Islamic Republic of Mauritania Appraisal Report*. Retrieved from https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Mauritania_Project_to_Build_the_Capacities_of_Microfinance_Operators__PRECAMF_-_Appraisal_Report.pdf
- Adnan, M. A., & Ajija, S. R. (2015). The effectiveness of baitul maal wat tamwil in reducing poverty the case of Indonesian Islamic microfinance institution. *Humanomics*, 31(2), 160–182. <https://doi.org/10.1108/H-03-2012-0003>
- Afandi, M. A., & A'yun, I. Q. (2018). The forecasting of financial inclusion in east java through Islamic microfinance institution: an autoregressive integrated moving average approach. *Journal of Developing Economies*, 3(2), 38–52.
- Al-Jarhi, M. (2014). Towards an economic theory of Islamic finance regulation. *Journal of Islamic Banking and Finance*, 2(1), 345–366.
- Al-Shami, S. S. A., Majid, I. B. A., Rashid, N. A., & Hamid, M. S. R. B. A. (2013). Conceptual framework: The role of microfinance on the wellbeing of poor people cases studies from Malaysia and Yemen. *Asian Social Science*, 10(1), 230.
- Alaro, A. A.-M., & Alalubosa, A. H. (2018). Potential of Shari'ah compliant microfinance in alleviating poverty in Nigeria: A lesson from Bangladesh. *International Journal of Islamic and Middle Eastern Finance and Management*.
- Ali, A. elrhman E. S. (2017). The challenges facing poverty alleviation and financial inclusion in North-East Kenya Province (NEKP). *International Journal of Social Economics*, 44(12), 2208–2223. <https://doi.org/10.1108/IJSE-05-2016-0133>
- Amendola, A., Boccia, M., Mele, G., & Sensini, L. (2016). *Financial Access and Household Welfare Evidence from Mauritania*. The World Bank.
- Asmawati, & Ahmad, S. (2015). Impact of Islamic Microfinance on Improving the Income and Poverty Reduction on Microenterprises in Province Aceh : Case Study in Baitul Qiradh. *Kontekstualita*, 30(2), 154–165.
- Babikir, H. E., Ali, A. B., & Abed elWahab, M. M. (2009). Research methodology step by step: guide for graduate students. *Sudanese Journal of Paediatricians*, 9, 9–22.
- Beck, T., & De La Torre, A. (2006). *The basic analytics of access to financial services*. The World Bank.
- Beck, T., Demirgüç-Kunt, A., & Honohan, P. (2009). Access to financial services: Measurement, impact, and policies. *The World Bank Research Observer*, 24(1), 119–145.

- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2004). *Finance, inequality, and poverty: Cross-country evidence*. The World Bank.
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007). Finance, inequality and the poor. *Journal of Economic Growth*, 12(1), 27–49.
- Becker, G. S., & Tomes, N. (1979). An equilibrium theory of the distribution of income and intergenerational mobility. *Journal of Political Economy*, 87(6), 1153–1189.
- Bouasria, M., Ashta, A., & Ratsimalahelo, Z. (2020). Bottlenecks to Financial Development, Financial Inclusion, and Microfinance: A Case Study of Mauritania. *Journal of Risk and Financial Management*, 13(10), 239.
- CBM. (2018). CENTRAL BANK OF MAURITANIA. Retrieved November 10, 2018, from <http://www.bcm.mr/apercu-sur-le-secteur-de-la-microfinance-en-mauritanie>
- Chapra M. U. (1979). *The Islamic Welfare State and its Role in the Economy*. The Islamic Foundation. <https://doi.org/10.1017/CBO9781107415324.004>
- Demirguc-kunt, A., Klapper, L., & Singer, D. (2017). *Financial Inclusion and Inclusive Growth: A Review of Recent Empirical Evidence*. <https://doi.org/10.1596/1813-9450-8040>
- Dupas, P., & Robinson, J. (2013). Savings constraints and microenterprise development: Evidence from a field experiment in Kenya. *American Economic Journal: Applied Economics*, 5(1), 163–192.
- Dusuki, A. W. (2008). Banking for the poor: The role of Islamic banking in microfinance initiatives. *Humanomics*, 24(1), 49–66. <https://doi.org/10.1108/08288660810851469>
- Dzisi, S., & Obeng, F. (2013). Microfinance and the socio-economic wellbeing of women entrepreneurs in Ghana. *International Journal of Business and Social Research*, 3(11), 45-62.
- ECA. (2016). *Country Profile: Mauritania*. Addis Ababa.
- Farooq, M. O. (2008). *The challenge of poverty and the poverty of Islamic economics*.
- Farooqi, A. H., Qamar, M. U. R., & Chachi, A. (2017). Role of Islamic Microfinance Scheme in Poverty Alleviation and Well-Being of Women Implemented by Islami Bank Bangladesh Limited. *Islam Ekonomisi ve Finansı Dergisi (İEFĐ)*, 3(1), 1–32.
- Fianto, B. A., Gan, C., Hu, B., & Roudaki, J. (2017). Equity financing and debt-based financing: Evidence from Islamic microfinance institutions in Indonesia. *Pacific Basin Finance Journal*, (July). <https://doi.org/10.1016/j.pacfin.2017.09.010>
- Greenwood, J., & Jovanovic, B. (1990). Financial development, growth, and the distribution of income. *Journal of Political Economy*, 98(5, Part 1), 1076–1107.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis 6th Edition*. Pearson Prentice Hall. New Jersey. *humans: Critique and reformulation*. *Journal of Abnormal Psychology* (Vol. 87).
- Hassan, A. (2015). Financial inclusion of the poor: from microcredit to Islamic microfinancial services. *Humanomics*, 31(3), 354–371. <https://doi.org/10.1108/H-07-2014-0051>
- Hassan, A., & Saleem, S. (2017). An Islamic microfinance business model in Bangladesh: Its role in alleviation of poverty and socio-economic well-being of women. *Humanomics*, 33(1), 15–37. <https://doi.org/10.1108/H-08-2016-0066>
- Hidayah, C. N., Abdul, K. H., & Hazlina, H. (2012). Conceptual Framework of Urban Poverty Reduction: A review of literature. *Social and Behavioral Sciences*, 68, 804–814. Retrieved from https://ac.els-cdn.com/S1877042812057515/1-s2.0-S1877042812057515-main.pdf?_tid=dc438165-c8a2-4f5f-81f926148cc7aa37&acdnat=1540434753_fb9743599c0c3d8a8a70ae7ee944bea8
- Iqbal, Z., & Mirakhor, A. (2013). *Economic development and Islamic finance*. The World Bank.
- Issed, R. (2017). *Unpublished thesis :The Impact of Microfinance on Poverty Alleviation: A Case Study of Borrowers in Ramallah*. *Unpublished thesis, Birzeit University*. <https://doi.org/10.1111/j.1469-7610.2010.02280.x>

- Kaka, E. J., Abidin, F. Z., & Islamic. (2013). Poverty Alleviation in the Northeast Nigeria Mediation of Performance and Moderating Effect of Microfinance Training: A Proposed Framework Emmanuel. *Mediterranean Journal of Social Sciences*, 5(2), 21–30.
- Kasali, T. A., Ahmad, S. A., Lim, H. E., Ean, L. H., & Lim, H. E. (2015). The role of microfinance in poverty alleviation: Empirical evidence from South-West Nigeria. *Asian Social Science*, 11(21), 183–192. <https://doi.org/10.5539/ass.v11n21p183>
- Khaki, A. R., & Sangmi, M.-D. U. D. (2017). Does access to finance alleviate poverty? A case study of SGSY beneficiaries in Kashmir Valley. *International Journal of Social Economics*, 44(8), 1032–1045. <https://doi.org/10.1108/IJSE-10-2015-0277>
- Lal, T. (2018). Impact of financial inclusion on poverty alleviation through cooperative banks. *International Journal of Social Economics*, 45(5), 808–828.
- Levine, R. (2005). Finance and growth: theory and evidence. *Handbook of Economic Growth*, 1, 865–934.
- Mahmood, H. Z., Fatima, M., Khan, M., & Qamar, M. A. (2015). Islamic Microfinance and Poverty Alleviation : An Empirical Ascertainment from Pakistan. *Journal of Islamic Economics, Banking and Finance*, 11(2), 85–105.
- Mahmood, S., Hussain, J., & Matlay, H. Z. (2014). Optimal microfinance loan size and poverty reduction amongst female entrepreneurs in Pakistan. *Journal of Small Business and Enterprise Development*, 21(2), 231–249. <https://doi.org/10.1108/JSBED-03-2014-0043>
- Maulana, H., Razak, D. A., & Adeyemi, A. A. (2018). Factors influencing behaviour to participate in Islamic microfinance. *International Journal of Islamic and Middle Eastern Finance and Management*, 11(1), 109–130. <https://doi.org/10.1108/IMEFM-05-2017-0134>
- Mazumder, M. S. U., & Lu, W. (2015). What impact does microfinance have on rural livelihood? A comparison of governmental and non-governmental microfinance programs in Bangladesh. *World Development*, 68, 336–354.
- Mohieldin, M. (2012). Realising the potential of Islamic finance.
- Mohieldin, M., Iqbal, Z., Rostom, A., & Fu, X. (2011). *The role of Islamic finance in enhancing financial inclusion in Organization of Islamic Cooperation (OIC) countries. Policy Research Working Paper WPS5920*. The World Bank.
- Murshid, N. S. (2018). Microfinance Participation and Women's Decision-Making Power in the Household in Bangladesh. *Journal of Social Service Research*, 1–11.
- Nafar, N., & Amini, A. (2017). Islamic Microfinance and Financial Inclusion: Murabaha Instrument and Micro-Trade Finance.
- Noreen, U., Imran, R., Zaheer, A., Saif, M. I., & Iqbal, M. S. (2011). Impact of microfinance on poverty: A case of Pakistan. *World Applied Sciences Journal*, 12(6), 877–883. Retrieved from [http://idosi.org/wasj/wasj12\(6\)/21.pdf](http://idosi.org/wasj/wasj12(6)/21.pdf)
- Obaidullah, M. (2008). Introduction to Islamic microfinance. *Mohammed Obaidullah, INTRODUCTION TO ISLAMIC MICROFINANCE, IBF Net Limited*, (August 2008).
- Okello, G., Bongomin, C., Ntayi, J. M., Munene, J. C., & Akol, C. M. (2017). Financial intermediation and financial inclusion of poor households : Mediating role of social networks in rural Uganda. *Cogent Economics & Finance*, 117(1), 1–16. <https://doi.org/10.1080/23322039.2017.1362184>
- Olufemi, P., Fapetu, O., Adewale, O., Adeyeye, P. O., Fapetu, O., Aluko, O. A., & Migiro, S. O. (2015). Does Supply-Leading Hypothesis hold in a Developing Economy? A Nigerian Focus. *Procedia Economics and Finance*, 30(15), 30–37. [https://doi.org/10.1016/S2212-5671\(15\)01252-6](https://doi.org/10.1016/S2212-5671(15)01252-6)
- Othman, M. B. (2015). Role of women in achieving shared prosperity : An impact study of Islamic microfinance in Malaysia. *Social and Behavioral Sciences*, 211(September), 1043–1048. <https://doi.org/10.1016/j.sbspro.2015.11.139>

- Riwajanti, N. I. (2013). Islamic Microfinance as an Alternative for Poverty Alleviation: A Survey. *Afro Eurasian Studies Spring & Fall*, 2(1), 254–271.
- Rokhman, W. (2013). The effect of Islamic microfinance on poverty alleviation : Study in Indonesia. *Journal of Economics and Business*, 11(2), 21–30. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=94624663&site=ehost-live>
- Savath, V., Fletschner, D., Peterman, A., & Santos, F. (2014). *Land, assets, and livelihoods: Gendered analysis of evidence from Odisha state in India. WORLD BANK CONFERENCE ON LAND AND POVERTY " The World Bank - Washington DC , March 24-27 , 2014* (Vol. 1323). Intl Food Policy Res Inst.
- Shaikh, S. A. (2017). Poverty alleviation through financing microenterprises with equity finance. *International Journal of Islamic and Middle Eastern Finance and Management*, 8(1), 87–99. <https://doi.org/10.1108/JIABR-07-2013-0022>
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5). Pearson Boston, MA.
- Tafese, G. S. (2014). The Role of Microfinance Institutions in Poverty Reduction and Women ' s Empowerment in Ethiopia : The Case of Dedibit Credit and Saving Institution. *Research on Humanities and Social Sciences*, 4(16), 38–47.
- Tchamyou, V. S. (2019). The role of information sharing in modulating the effect of financial access on inequality. *Journal of African Business*, 1–22.
- Tchamyou, V. S., Erreygers, G., & Cassimon, D. (2019). *Inequality, ICT and financial access in Africa. Technological Forecasting and Social Change* (Vol. 139). Elsevier.
- Toindepi, J. (2016). Investigating a best practice model of microfinance for poverty alleviation Conceptual note. *International Journal of Social Economics*, 43(4), 346–362. <https://doi.org/10.1108/IJSE-05-2014-0091>
- Weber, O., & Ahmad, A. (2014). Empowerment through microfinance: The relation between loan cycle and level of empowerment. *World Development*, 62, 75–87. <https://doi.org/10.1016/j.worlddev.2014.05.012>
- Yun, G. W., & Trumbo, C. W. (2000). Comparative response to a survey executed by post, e-mail, & web form. *Journal of Computer-Mediated Communication*, 6(1), JCMC613.