CONCEPTUAL PAPER OF THE IMPACT OF MICROFINANCING ON MICRO AND SMALL ENTERPRISES IN PENINSULAR MALAYSIA: SURVIVAL ANALYSIS APPROACH

Maisyarah Mohamad Nor¹ & Hasmadi Hassan²

¹ Centre for Human Sciences, Universiti Malaysia Pahang Al-Sultan Abdullah, Kuantan, Pahang. Email: maisyarahyusuf@gmail.com.
² Centre for Human Sciences, Universiti Malaysia Pahang Al-Sultan Abdullah, Kuantan, Pahang.

ABSTRACT

This study aims to examine the impacts of microfinance criteria in providing financial and non-financial services for micro and small enterprise (MSE) survival and growth expansion capacity using a survival analysis approach. There are two dependent variables involved in the study, which are survival and growth. A mixedmethods strategy will be adopted in the data collection by using longitudinal data and field studies. A multiple-method strategy will be used in the study to reduce the possibility of personal bias. Qualitative data are semi-structured with a bank officer. Meanwhile, quantitative data are collected using questionnaires for MSE. Besides that, panel data are useful for longitudinal data. The study will use both primary and secondary data. Structured questionnaires (closed-ended questions) and interview sessions are primary data, while the financial institution's record will be used for secondary data. Method of Analysis: For Survival analysis, a Cox regression hazard model will be adopted for semiparametric, and for non-parametric, the study will adopt Kaplan-Meier to perform descriptive analysis. Moreover, to measure the impact of growth, the study will use a Multiple Regression Model to obtain the result of growth. Thus, this study aims to contribute both theoretically and practically to the financial field, providing a framework and expanding existing theories. It aims to integrate knowledge from various sources, enhancing understanding of microfinance and MSEs' survival and growth. Practical applications based on the theoretical framework and findings may offer new insights into microfinance practice.

Keywords: Microfinance, micro and small enterprise, survival, growth

INTRODUCTION

Microfinance (MF) has emerged as an economic development instrument to assist low-income people with their financial requirements (Ledgerwood, 1999). It primarily targets lowincome groups in developing nations, where financial penetration rates are lower than in developed countries (Nor, 2019; Chiu, 2015). These disadvantaged populations are frequently barred from majority banks because they are unable to fulfil current interest rates and collateral requirements, and perhaps the expenses of monitoring activities are too expensive for this group. As a result, Professor Muhammad Yunus launched the Grameen Bank in Bangladesh in the 1970s to integrate poor groups of people into finance, allowing them to grow in micro business through the provision of microloans (Yunus, 2003). MF has been widely recognised as a potent tool to alleviate poverty and promote entrepreneurial activities among the world's poorest people, notably women, throughout the last 3 decades, particularly since its inception in Bangladesh 30 years ago (Gyapong et al., 2021).

MF models have proliferated all over the world, many are women-focused and employ group-lending approaches to reduce risk, and generate and leverage social capital among borrowers. Micro and Small Enterprises (MSE) are suitable group to be matched with M.F. The scenario of MSE has been discussed in many studies, as a result, MSE has a big impact on national growth

and are significantly linked to job creation (Fred and Timothy, 2013). Tambunan (2007) discovered in his research that businesses are important for job creation and are one of the primary sources of economic growth. Chin et al. (2012) found that microenterprises serve as the backbone of the economy in many regions and have a bigger impact on employment than large companies. In their previous study, Koh et al. (2007) discovered that enterprises effectively contribute to the economic wellbeing.

Despite their significant importance in the economies of the country, MSEs are denied official support, particularly credit, from institutionalised financial service organisations that lend to enterprises (Cull and Moduch, 2018). In many countries, individuals have relied on the mutually supporting and benefit-sharing character of the informal sector's social networking to meet economic, social and cultural requirements, and improve their quality of life (Datta and Sahu, 2021). Social capital networks exist in developed and developing countries, including Malaysia. The failure of MSE to fulfil the requirement set by formal financial institutions for loan consideration created a platform for informal institutions to try to fill the gap, which was mainly based on informal social networks; MF originated from this particular catalyst.

A lot of studies on the impact of MF on entrepreneurial development have been conducted. Some scholars focused on the mechanism by which poverty is reduced. Aslam et al. (2019), in their study, were concerned that MF is only serving people slightly below or above the poverty line, and that the poor and destitute are being systematically excluded. Duho (2022) studied risk management on profitability institutions (MFIS) and MF performance. Meanwhile, Babajide (2011), in her study of MSE survival in Nigeria, found that microfinancing has an impact on the MSEs' survival, but most enterprises remain at the survival level of the business life cycle. Similarly, Kim and Hwang (2019) studied Longitudinal Small and Medium Enterprise (SME) data on survival, research and development (R&D) investment, and patent application in Korea's innovation clusters from 2008 to 2014. The cross-sectional data set of 588 firms in Korea. The

Sustainable Development through Spiritual Empowerment: Ethical and Civilizational Issues

study observed that the size of firms (positive impact) and industry concentration (negative impact) are the most important for SME survival among the four variables.

In Malaysia, a previous study that has been conducted by Nordin et al. (2019) examined the microfinancing influence on microenterprise (MIC) growth, and they found that MF provision affects MIC growth. Similarly, Nor et al. (2022) focused their study on the ability of the MF criteria on M.E.s growth. The study was concerned that MF criteria meet the significant level and contribute to MIC growth.

The above studies show increase participation in research and practice of MF, particularly the impact assessment. Despite increased sector activity, research trends could not give a sufficient rationale for the link between MF and entrepreneurial development in developing countries. Furthermore, empirical evidence from various studies on the effect of MF on overall business development has generated varied results that are equivocal and contradictory. Furthermore, none examine the influence of MF on small business survival, except Bekele and Zeleke (2008), and Babajide (2011), which carried out micro and small business survival. Moreover, the impact of MF on MIC development has not received adequate research attention in Malaysia. This means that there is a major gap in the relevant literature in developing countries, particularly in Malaysia. The studies of MSEs in Malaysia have been introduced and are familiar, but there is still a lack of evidence on the study of MSE survival and growth expansion in Malaysia.

Thus, there are few studies about MF and MSEs' survival and growth expansion, and the total productive output of MSEs is still uncertain. There is a gap in current studies looking at an in-depth analysis of the MSE's survival and growth expansion. Therefore, the study is required to examine the extent to which MF affects MSE's survival in Malaysia. The specific objectives of the study are (i) to assess the contributions of microfinancing to the survival of MSEs in Peninsular Malaysia, (ii) to analyse the effects of microfinancing on MSE growth and expansion capacity in Peninsular Malaysia and (iii) to create awareness that entrepreneurial activities require different method of financing at different stage of business development. Finally, this study expects to establish a better understanding of the predictors of MF criteria and characteristics of business on MIC' growth and survival in Malaysia. This paper is a conceptual paper, and no analysis and decisions have been conducted so far.

LITERATURE REVIEW

The overview of MF in Malaysia is also unable to deny the role of MF in supporting MIC. Since the introduction of NEP and NDP in Malaysia's development plan, the objective of both plans has been to eliminate poverty among people. This effort has succeeded, as the incidence of poverty has decreased over the years. In 2002, after the development of NEP, Bumiputera still represented the major ethnic group among those living in poverty, and rural areas were still at a high level. Malaysia has introduced a MF program as one of its poverty reduction programs that was inspired by the MF scheme in Bangladesh started by Muhammad Yunus. Roslan (2006) argued that despite the country's need to eradicate poverty, the MF scheme can reduce the level of dependency of the poor on the government by encouraging the concept of self-reliance (Mokhtar, 2011). Through this scheme, clients are given initial capital in the form of a loan to start up an activity, such as a business and so on.

From a Malaysian perspective, MF is a small business loan ranging from RM 1,000 up to RM 50,000 for MIC. Microfinancing is not a personal loan, and it is only for business purposes such as working capital requirements and capital expenditures. Besides Amanah Ikhtiar Malaysia (AIM) and The Economic Fund for National Entrepreneurs Group (TEKUN), there are various financial institutions in Malaysia that provide loan facilities to MSEs, such as Perbadanan Usahawan Nasional Berhad (PUNB), Rural Capital Berhad, Majlis Amanah Rakyat (MARA) and commercial banks as well as cooperative banks. Nowadays, they offer microloan to those eligible to obtain the facility. All of these financial institutions and banks merged to overcome the problem of initial capital instability. The financial intuitions and banks were set up to enhance the provision of finance to the agricultural and rural sectors. The government also gives special attention and provides more incentives to facilitate and guarantee finance injection for SMEs. Special incentives after the COVID-19 pandemic have been allocated up to RM 196 billion to assist SMEs in weathering the impact of the COVID-19 pandemic.

Even though various incentives and grants have been allocated and provided to SMEs and MSEs, to what extent do MSEs utilise the loan for business purposes and eventually meet the business development stage? The objective is to provide financial services to a large segment of the potentially productive micro and small enterprises (MSEs) in rural areas that currently lack access to such services. This will empower these enterprises, enabling them to contribute to rural economic development and transformation. In other words, the goal is to increase access to financial resources for MSEs, which will help them grow, become more productive, and play a role in improving the overall economy of rural areas.

Microfinance and conceptual issues

Since the last three decades, MF has grown, designed to meet the financing needs of those who lack access to financial services. MF can be considered a primary tool to eradicate poverty, reduce unemployment among the poor and ultimately increase social wellbeing (Ledgerwood, 1999). Ledgerwood (1999) has mentioned in his study the definition of MF, which is the provision of a wide range of financial services such as insurance, credit savings deposits and payment services designed for low-income individuals who are unable to obtain common financial services. Littlefield et al. (2003) conducted a study regarding the definition of MF, which is the kind of service that includes loans, insurance, saving transfer payments and even micropensioning. Rijawanti (2013) and Salman (2017) said that MF is a suitable scheme to help low-income clients, by providing them with affordable financial services. MF clients are typically self-employed, and low-income entrepreneurs both in urban and rural areas. However, MF has come to include a broader range of services.

MSE is a suitable group to be matched with MF. The scenario of MSE has been discussed in many studies, and as a result, MSE has a big impact on national growth and is significantly linked to job creation (Nor & Chin, 2016; Ülev et al., 2022). Nor et al. (2021) discovered in their research that businesses are important for job creation and are one of the primary sources of economic growth. According to a subsequent study conducted in Iraq by Emad et al. (2014), enterprise contributes 99% of economic development. This shows that enterprises play an important role in the nation's wellbeing. Furthermore, Harash et al. (2013) revealed that the largest contribution to economic development is made by small enterprises, especially in the textile and apparel sectors, followed by food and beverages, and wood products. To strengthen this study, Akula and Singh (2021) found that MIC serves as the backbone of the economy in many regions and has a bigger impact on employment than large companies.

According to Bank Negara Malaysia (2020), the definition of a MIC is a sales turnover of less than RM 300, 000 OR full-time employees of less than 5. In comparison, small enterprises can be divided into manufacturing and services, and other sectors. Meanwhile, the definition of manufacturing is sales turnover from RM 300, 000 to less than RM15 million or full-time employees from 5 to less than 75. Meanwhile, for services and other sectors is when sales turnover from RM 300, 000 to less than RM3 million or full-time employees from 5 to less than 30. As mentioned by Nor (2019), the main challenges faced by MSE are lack of financial capital and access to credit. Therefore, it will lead to problems in business expansion and survival.

Impact of MF on business growth

Some previous studies discussed the impact of MF on business growth. For the owner characteristics, the study will focus on three aspects, which are the owner's age, gender and education. According to Omasa (2023), gender and education are the significant elements for MIC welfare after receiving MF and the result supports the findings by Santoso et al., (2020), which argued that education as well as gender give a significant result on MIC growth. In the consideration of MF characteristics, the previous study that has been conducted by Nor (2019), concerned with predictors of loan size and contact with the lender, are the two predictors that have a significant impact on MEs' growth. Wolde and Geta (2015), supported by Nor (2021) agreed that there was a positive relationship, and it has a significant impact on loan size and firm growth.

In the aspect of loan utilisation on MSEs growth, Wan et al. (2016) suggested that loan utilisation should be monitored regularly, by visiting the borrowers and groups to evaluate their business activities, and at the same time help them to be careful in managing the fund received (Nor and Chin, 2016). The loan duration is referring to the engagement period of borrowers with the lender, and yet, borrowers have to commit in terms of repayment of the loan over the period of time. It was also agreed by Mokhtar (2011) that loan duration is highly related to loan repayment, and she agreed that a longer period of repayment allows borrowers to perform better in their business. The previous study conducted by Wen et al. (2016) found that loan tenure or loan duration is positively related to and significantly impacts MIC success. The authors stated that longer loan tenure given to borrowers would increase business income and lead to better business performance. Therefore, it can be concluded that loan duration has a positive relationship with MIC growth and significantly gives a contribution to MIC's growth.

Impact studies of MF

The impact studies of MF on income have been analysed at the individual, household and enterprise level. Miled et al. (2022) conducted a study of MF on income inequality reduction for a sample of 57 developing countries. As a result, the study confirmed the beneficial outcome of MF in reducing inequality at the macro level. Similarly, Lassoued (2021) showed that MF with higher levels of microcredit and lower corruption is associated with lesser income inequality, which will result in income stability and MF is the solution to balance the well-being between the poor and rich groups. These programs also investigated household conditions. Banu et al. (2021) aimed to the microfinance affects

household incomes by using the household size and size of credit as predictors of household income. The result found that both predictors have a negative impact on household income. Besides that, the study also detected that interest rate, delay of credit and short recovery time were the problems of the participants of microfinance.

On the other hand, expenditure is another indicator used to measure the impact of MF. The previous study that has been conducted by Vikas et al. (2020) discussed the impact of microcredit on expenditure, health and food in India. The findings of the study present that income and expenditure are two things that contributed to the level of significance of microfinance. Mahmud et al. (2022) agreed that MF increases the capacity food expenditure of poor fish farmers in Bangladesh.

Moreover, the impact studies of MF on wealth are also points that need to be considered. The study by Chhatoi (2022) indicated that MF is a tool to enhance the wellbeing and wealth creation of microcredit clients and this is also agreed by (2020), who found that MF improves their living conditions.

Microfinance and MSE Survival (MSME)

Despite an abundance of research on the effect assessment of MF, most empirical studies on MF focus on entrepreneur welfare and income. Only a few studies relate financing methods to enterprise survival. Using the survival technique, Shin et al. (2017) identified internal factors, which are the characteristics of origins from other firms and platform-based firms, as a key determinant of the survival rate of biotechnology firms. They employed a Cox hazard model to perform robust estimation in survival analysis. Based on the result, the study found that internal factors affect the hazard rate of biotechnology firms in South Korea.

A previous study by Bekele and Zeleke (2008), and Babajide (2011) divulged that there are four factors affecting the long-term survival and capability of MSME. These are (i) macro-economic factors, (ii) factors that affect micro-credit, (iii) factors that affect the internal efficiency of small businesses and enterprises, and (vi)

Sustainable Development through Spiritual Empowerment: Ethical and Civilizational Issues

factors that affect access to social capital. The macroeconomic factors include variables related to economic policy that is critical to encourage private investment in MSME, such as legal and regulatory issues, tax assessment, backwards and forward linkages with large enterprises, access to credit, the degree of competition in the local market, and local demand for goods and services produced by MSME. Factors influencing access to microcredit include credit availability, access to credit finance, the source and quantity of initial start-up capital, loan repayment terms and conditions, and the extent to which credit is effectively utilised. Internal efficiency factors include business-related decisions made by owners/managers, trends in net income, profit conversion back into investment, demographic conditions, level of education, prior business experience, managerial ability, motivation for working in the sector, number of working hours, level of technical skill and business training received.

Finally, social capital considerations include involvement in a MF scheme, access to free family labour at work, and networking with other businesses and enterprises as a result of participation in a MF scheme. Kauffman and Wang (2003), on the hand, chose industry-specific characteristics, firm-specific characteristics and e-commerce characteristics as predictors of Internet business survival. Survival Analysis techniques were adopted in the study, which are Kaplan-Meier and Cox Hazard methods. The conclusion of the study was useful, which is businesses targeting both commercial and consumer groups are less likely to fail.

Thus, after reviewing several studies, this study is intended to adapt Bekele's (2008) and Babajide (2011) determinants for the survival analysis because they are more suitable and related to this study.

THEORETICAL FRAMEWORK

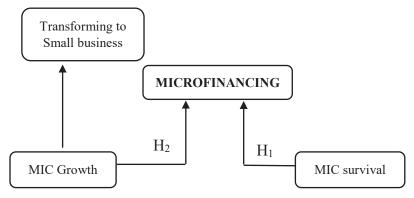


Figure 11.1: Theoretical framework of MSE's survival

THE CONCEPTUAL FRAMEWORK FOR MSE'S GROWTH

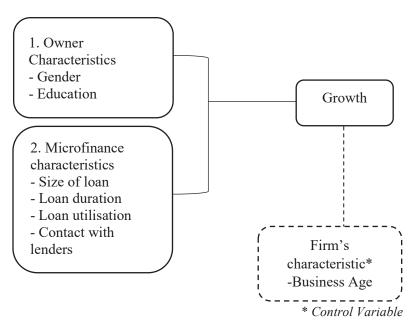


Figure 11.2: Conceptual framework for MSE's growth

RESEARCH METHODOLOGY

This study will employ the multiple-method strategy, which combines a primary survey of based data and secondary data, where information is extracted from customer's record with financial institutions over five years. The scope of the study will be clients from AIM, TEKUN and PUNB. Once a client obtains a new credit or loan, the officer will keep track of the changes in sales, profit and assets to monitor the client. The data will be extracted in the study to obtain cross-referencing data, some independent data and a range of opinions. A longitudinal study will be done based on the data collection from data records and survey methods. Advance statistical techniques like Kaplan Meier, Cox Regression Analysis and Ordinary Least Square to the different aspects of the study in relation to the survival and growth of MSEs.

For the data collection instrument, closed and open-ended questions will be used in the study to allow respondents to provide detailed answers. The questionnaire will be divided into three sections, which are (i) Demographic, (ii) impact of MF on MSEs MSE survival and (iii) impact of MF on MSE growth. For the research design, the study will use a multiple-method strategy to reduce the possibility of personal bias. A pilot study will be conducted to test-run the possibility of the study and detect flaws in the data collection process. It will also help to detect errors on the issues raised, such as confusing instruction and inadequate time limit (Abiola, 2011).

The survival analysis integrated Cox Regression Analysis (Semiparametric) and Kaplan Meier Survival Analysis technique (Nonparametric) to perform the descriptive analysis, and using the ordinary least square (OLS) for multiple regression. The duration of survival for each of the MSEs in the study will be determined using the previous five years' records and the finance method as treatment control. The model proposed by Kauffman and Wang (2003), Bekele and Zeleke (2008), and Babajide (2011) will be adapted in this study. The reason to use survival analysis is because it is the only well-known technique that has a longitudinal nature of business failure prediction.

Model specification for survival can be written as follows:

 $\begin{array}{c} Log \ h0(t) \\ = \alpha(t) + \beta 1Xi1 + \beta 2Xi2 + \beta 3Xi3 + \beta 4Xi4 + \beta 5Xi5 + \beta 6Xi6 + \beta 7Xi7 + \beta 8Xi8 + u1 \end{array}$

Where:

i is a subscript for observation Xs 'are the covariates α is a constant that represents the log baseline, and Log h0(t) takes a binary form, 1 if death occurs and 0 if death does not occur. Meanwhile, β = is the vector of parameters to be estimated, where X1 = regular participation in MF, X2 = ability to convert profits into investment, X3 = ability to make profit, X4 = entrepreneur level of education, X5 = technical capacity, X6 = contact with loan officer, X7 = access to microcredit, X8 = mandatory microsavings and U1 = error term.

The evaluation of the relationship between the dependent variable and determinants will be performed using multiple regression techniques. Small business growth will be proxied by the annual sales growth rate over the five years (Niskanen and Niskanen, 2007). The predictors or independent variables can be categorised into two different categories, consisting of owners' characteristics (O.X.) and microfinance characteristics (MFX), and the control variable represents firms' characteristics (F.X.). The equation of small business growth can be written as SBG = f(O.X., MFX, F.X.).

CONTRIBUTION AND CONCLUSION

This study is expected to contribute both theoretically and practically. In terms of theoretical contribution, it may provide the theory development. This study may present a new framework or expand existing theories in the financial field, and enrich the understanding of related concepts and relationships. Existing knowledge from various sources is integrated to build a more holistic understanding regarding MF, MSE's survival and growth expansion. In the aspect of practical contribution, several points can be highlighted; the study may propose practical applications based on the theoretical framework and findings, and it might offer new insight into the practice of MF.

The study aims to determine the impact of MSE's survival and growth in Malaysia. The findings of this study can be used by financial institutions and policymakers for the development of effective policies and strategies.

REFERENCES

- Ascarya. (2021). Baitul Maal wat Tamwil as Integrated Islamic Microfinance Institution to Support SDGs. In M.M. Billah (Ed.), Islamic Wealth and the SDGs. Palgrave Macmillan.
- Aslam, M., Kumar, S. and Sorooshian, S. (2019), "Social versus financial performance of microfinance: Bangladesh perspective", *Research in World Economy*, Vol. 10 No. 3, pp. 263-272.)
- Banu, B., Hossain, M. M., Haque M. S., & Ahmad, B. (2021)" Effect of microfinance adoption on rural household income in selected Upazila of Kushtia District Of Bangladesh", *Bangladesh Journal of Multidisciplinary Scientific Research*, 3(1), 24-32.
- Bekele, E and W. Zeleke, (2008). Factors that affect the long-term survival of micro,small and medium enterprises in Ethiopia. *South African Journal of Economics*, Vol 76 No.3, pp.1-33.
- Chhatoi, B.P. (2022). "Sustainable micro-enterprise: matching and analyzing the success of microfinance", *International Journal of Indian Culture and Business Management*, Vol 26 No. 1, pp. 122-144.
- Cull, R. and Morduch, J. (2018), "Microfinance and economic development", in *Handbook of Finance and Development*, pp. 550-571.
- Datta, S. and Sahu, T.N. (2021), "Impact of microcredit on employment generation and empowerment of rural women in India", *International Journal of Rural Management*, Vol. 17 No. 1, pp. 140-157.

- Gyapong, E., Gyimah, D. and Ahmed, A. (2021), "Religiosity, borrower gender and loan losses in microfinance institutions: a global evidence", *Review of Quantitative Finance and Accounting*, Vol. 57 No. 2, pp. 657-692.
- Kauffman, R. and Wang, B. (2003).Duration in the digital economy: Empirical bases for the survival of internet firms, In 36th *Hawaii International Conference on System Sciences (HICSS)*, Hawaii.
- Lassoued, M. (2021)," Control of corruption, microfinance, and income inequality in MENA countries: evidence from panel data", *Journal of Business Economics*, Vol. 8 No.1, pp.25-29.
- Miled, K.B.H., Younsi, M. & Landolsi, M. (2022). "Does microfinance program innovation reduce income inequality? Cross-country and panel data analysis", *Journal of Innovation Entrepreneurship*, 11, 7.
- Mahmud, K.T., Parves, A., Ahmed, S.S., Rafiq, F. (2022).
- "Microcredit and the household food security of the fish farmers: Evidence from rural Bangladesh", *Journal of development practice*, Vol. 11 No. 9, pp. 111-119.
- Mokhtar, S. H., Nartea, G., & Gan, C. (2012). "The Malaysian microfinance system and a comparison with the Grameen Bank (Bangladesh) and Bank Perkreditan Rakyat (BPR-Indonesia)". *Journal of Arts and Humanities*, 1(3), 60-71
- Niskanen, M and Niskanen, J. (2007). The determinants of firm growth in small and micro firms –evidence on relationship lending effects. *Small Enterprise Development*, 24, 45-63
- Nor, M.M. (2019). The Relationship and Impact of Microfinance on Growth and Productivity of Microenterprises (MEs) In Malaysia, University Tenaga Nasional, Pahang, Malaysia
- Nordin, N., Siti- nabiha, AK., & Kamalia Z. (2019). Microfinancing Influence on Micro- Entrepreneurs Business Growth: Mediating Role of Psychological and Social Capital, *Journal of Entrepreneurship, Business, and Economics*, 7(2), 130-161.
- Omosa, L.Z. (2023), "Exploring the Financial Literacy of a Chama Women's Group in Rural Western Kenya", Adeola, O. (Ed.) Casebook of Indigenous Business Practices in Africa, Emerald Publishing Limited, Bingley, pp. 161-181. https://doi.org/10.1108/978-1-80455-762-420231016

- Rahman A. N., Yaacob Z. and Radzi M.R (2014). "Determinants of Successful Financial Management among Micro-Entrepreneurs in Malaysia", *Journal of Asian Scientific Research*, Vol 4 pp. 631-639.
- Salman, AS. (2017). "Poverty alleviation through financing microenterprises with equity finance", *Journal of Islamic Accounting and Business Research* Vol. 8 No. 1, pp. 87-99.
- Santoso, D.B., Gan, C., Revindo M.D and Messei N.W.G (2020).
 "Impact of microfinance on rural households", *Journal of Agriculture and Finance*, Vol. 80 No. 4, pp, 491-506
- Shin, K., Park, G., Choi, J., & Choy, M. (2017). Factors Affecting the Survival of SMEs: A Study of Biotechnology Firms in South Korea. *Sustainability*, 9(1), 108. MDPI AG. Retrieved from http://dx.doi.org/10.3390/su9010108.
- Ülev, S., Savaşan, F. and Özdemir, M. (2023), "Do Islamic microfinance institutions affect the socio-economic development of the beneficiaries? The evidence from Turkey", *International Journal of Ethics and Systems*, Vol. 39 No. 2, pp. 286-311.
- Vikas, B., Pooja, Y., Ashish K. (2020), "Impact of microfinance on household expenditure pattern of rural women borrowers: An empirical analysis". *International Journal of Social Sciences*, Vol. 9 No.2., pp. 57-63.