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RESEARCH ARTICLE

The Importance of Non-Financial Services for the Performance of Lebanese Microfinance Institutions

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Abstract

Non-financial services, such as consultations in research and development, finance, economics, accounting, law, and others (Eurostat, 2020) are offered to companies. Providing non-financial along with financial services at microfinance institutions has been a very controversial topic over the last decade. In fact, many scholars have highlighted the advantages of non-financial services not only for customers but also for microfinance institutions, whilst others have pinpointed the massive operational expenses that come with those services and identified the negative impact of those services on micro-finance institutions' financial performance. Therefore, this paper aims at studying the effect that non-financial services really have on Lebanese microfinance institutions' financial performance through analyzing the following independent variables: financial sustainability, donors' contributions, loans' quality, and operational expenses. A quantitative method was conducted via the distribution of a questionnaire to several Lebanese microfinance institutions, and statistical results were established and assessed. The findings helped us draw a conclusion regarding the provision of non-financial services at Lebanese microfinance institutions, and recommendations were presented accordingly. Finally, this study is significant because it sheds light on the Lebanese microfinance institutions and offers a deeper understanding of the factors that enhance the effect that non-financial services have on microfinance institutions' financial performance.

Keywords: Non-financial services, Microfinance institutions, Financial performance, Loan quality, Operational expenses, Financial sustainability

1. Introduction

Whilst the Mena Region, and especially Lebanon, is still experiencing social and economic disturbances leading to high levels of poverty, radicalization of youth, and rising socio-economic discrepancies, some entrepreneurship programs are still growing with the objective of encouraging an entrepreneurial mindset and nurturing businesses' development to fight these challenging circumstances. (Al-Dajani, 2022).

In this context, microfinance institutions are companies that provide financial facilities to

enterprises or households that seek financial sustainability when commercial banks refuse to do so (Biosca, Lenton, & Mosley, 2014a, 2014b). Like banks, microfinance companies try to make profits from the financial services they offer; however, they should undergo more significant measures to seek unbanked clients and recover their social well-being (Lensink et al., 2017). Hence, since the late 90s, households and entrepreneurs have reached out to MFIs to access two kinds of services: financial and non-financial ones. The main objective behind MFIs offering those two different forms of services is their will to impart businesspersons the financial literacy

Abbreviations: NFS, Non-financial services; MFI, Microfinance institutions; ADR, Association for the development of rural capacities; UNRWA, United nations relief and works agency; AEP, Association d'entraide professionnelle.

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needed to expand their financial sustainability, which may then improve the quality of the loan as well as the reimbursement capacity of the aforementioned businesses and eventually upsurge the financial performance of MFIs (Goldmark, 2006).

Despite the potential importance of non-financial services, prior scholars have failed to agree on the positive impact of those services on MFIs' financial performance, and two different schools have emerged: the minimalist approach versus the integrated credit model approach (Kilby & D'Zmura, 1985). Whilst the integrated approach considers that giving households and enterprises the needed financial assistance will eventually benefit MFIs, the minimalist approach encourages MFIs to only offer financial services (Yunus, 2007). In fact, on one hand, minimalist scholars, such as Morduch (2007), explain that non-financial services have a negative impact not only on MFIs but also on businesses or clients as they are of low quality, which make them inefficient and counterproductive for customers. On the other hand, integrated scholars, such as Harley (2011), consider the minimalist approach as erroneous. Harley explains that financial services are not sufficient to endorse clients' social wellbeing and financial sustainability.

Furthermore, many previous studies diverged in their findings about the impact of integration on MFIs' financial performance. Studies, such as Leatherman et al. (2012) in the university of North Carolina, reviewed the results of seventeen studies on this topic and found that integrating financial and non-financial services has had a positive impact on MFIs' financial performance. This study found that the integration of both services in MFIs has resulted in the enhancement of consumers' knowledge, change in cognitive behavior, and access to infrastructure which enhanced the MFIs' financial health. Other researchers, such as Halder (2003) in Vietnam assured that the positive impact benefited women the most where women who participated in trainings had higher income. Moreover, Biosca et al. (2014a, 2014b) stated, based on their study conducted in Mexico, that non-financial services constitute a comparative advantage to MFIs. However, although the number of studies showing a positive impact was large, a significant number of studies found the integration to have no or negative impact. According to Karlan and Valdivia (2011), non-financial services do not impact the financial performance of MFIs in Peru. They found that it does not increase clients' financial knowledge nor repayment behavior and thus has no positive impact on MFIs' profits. This study supported the minimalist approach and found that non-financial

services even endanger the financial performance of MFIs. Other researchers, such as Lensink et al. (2017), who conducted a study on microfinance institutions in 77 countries, concluded that providing nonfinancial services has no real impact on MFIs' financial performance or efficiency. Their findings, however, suggest that offering those services increases clients' loan quality and the MFIs' depth of outreach.

Based on the abovementioned discussion, this paper aims at evaluating how providing non-financial services by Lebanese MFIs affects their financial performance. Positive results will show a real need to offer both services at MFIs and will be considered an opposite point of view to that of the minimalist approach, while negative results will be considered a proponent opinion to this approach.

This research's originality lies in the fact that many studies which assessed how non-financial services affect MFIs' financial performance were carried out all over the world; however, no similar paper was conducted in Lebanon. Moreover, previous studies have mostly been interested in studying the effects of NFS on MFIs' social value rather than their financial performance.

Hence, due to the lack of similar studies in Lebanon, we have decided to undertake a study on the Lebanese market to measure the impact of non-financial services on Lebanese MFIs' financial performance.

In addition, as Lebanon is facing an upsurge in its poverty level due to the frequent volatilities and insecurities, citizens are progressively requiring non-financial services along with financial ones to upgrade their welfare and manage more effectively their funds. Nevertheless, the alteration in scholars' standpoints to whether offering NFS harms or improves non-financial institutions' financial performance makes this subject of high importance in regard to those institutions. To this end, the evaluation of MFIs' performance after integrating non-financial services could be an important input for Lebanese MFIs in terms of internal decisions on whether to offer those services.

Throughout this paper, we have tried to answer the following major question: *How does providing non-financial services by Lebanese microfinancing institutions impact their financial performance?* And the below sub questions:

Does providing non-financial services affect positively Lebanese microfinancing institutions' financial sustainability and hence increases MFIs' financial performance?

Does providing non-financial services affect positively Lebanese microfinancing institutions'

contribution of donors and hence increases MFIs' financial performance?

Does providing non-financial services increase Lebanese microfinancing institutions' operational expenses and hence decrease MFIs' financial performance?

Finally, does the provision of non-financial services increase Lebanese microfinancing institutions' quality of loan portfolio and hence increase MFIs' financial performance?

The data used in this paper are both secondary and primary data. Secondary data were developed in the literature review based on previous scholar studies. As for primary data, a questionnaire was distributed to a representative sample of Lebanese MFIs based on several criteria: highest market shares, convenience to reach and geographical distribution.

Based on our findings, we were able to conclude that non-financial services had a positive impact on the financial performance of Lebanese microfinance institutions. In fact, financial sustainability and loan quality seemed to have the most positive impact. Through offering non-financial services to clients, their repayment ratio rises, which increases MFIs' total assets and consequently increases their return on assets (ROA). Those results show that our study is supportive of the integrated credit model approach and of previous studies among which are those conducted by [Leatherman et al. \(2012\)](#) in the university of North Carolina [Halder \(2003\)](#) in Vietnam and [Biosca et al. \(2014a, 2014b\)](#) in Mexico.

This article consists of five chapters. The first chapter covers the aforementioned introduction. Chapter two will include a literature review that gives more insight on the previously mentioned approaches and highlights how previous scholars assess the financial performance of MFIs. Chapter three will include a detailed description of the methodology used. The fourth chapter will present the results of our study. Finally, chapter five will consist of the discussion along with conclusions and recommendations to microfinance companies.

2. Literature review

As per Eurostat in 2020, non-financial services, such as consultations in research and development, economics, accounting, law, and others are services offered to companies. In fact, financial education is the most important non-financial service provided by MFIs to clients ([Goubert, 2018](#)). Such education aims at helping enterprises or households to have a better management of their financial resources and thus reduce their monetary losses.

In fact, the major objective behind integrating non-financial services at MFIs is to improve the well-being of clients and enhance their financial knowledge to generate bigger profits ([Lensink et al., 2017](#)). But how would these services impact the performance of MFIs? Literature Review diverged on this issue. Scholars, such as [Leatherman](#) considered that integrating non-financial services has a positive impact on MFIs' financial performance as it enhances people's knowledge in health, finance and cognitive behavior; consequently, it leads to higher profits for MFIs ([Leatherman et al., 2012](#)). Others, such as [Karlan and Valdivia](#), found that those services threatened and endangered the financial performance of MFIs ([Karlan & Valdivia, 2011](#)).

Hence, as previously stated, this paper aims at analyzing how the integration of non-financial services could affect the financial performance of micro-financial institutions in Lebanon. Based on the literature review, financial performance at MFIs is measured through different variables, such as financial sustainability, contribution of donors, quality of the loan and operational expenses.

2.1. Financial sustainability

Financial sustainability is one of the most important indicators of financial performance at an MFI. It's defined as the ability of the MFI to create profits from its operations or in other words earn high returns so it can cover its costs and stay financially healthy ([Meyer, 2002](#)). Financial sustainability's measures are primarily total financial costs, total financial revenues, return on assets, and return on equity ([Mersland & Strom, 2014](#)). According to [Khandler \(2005\)](#), delivering non-financial services is vital as low-income people requesting loans do not only seek financial but also social care and non-financial services to overcome their life problems. In this context, the more services MFIs provide to people, the higher the number of MFIs' clients is. Also, their repayment ratio increases, which enhances MFIs' total assets and consequently increases their return on assets (ROA) ([Khandler, 2005](#)). In addition, according to some scholars cited in [Meyer \(2002\)](#), such as [Christen et al. \(1995\)](#) and [Otero and Rhyne \(1994\)](#), there's a positive relationship between financial sustainability and outreach. When the number of customers grows, MFIs benefit from lower costs as they gain economies of scale, which leads to financial sustainability. Conversely, other scholars claimed that there is a negative relationship between financial sustainability and outreach. They consider that a higher expansion leads to bigger transaction costs in order to obtain data about clients'

solvency and hence reduces MFIs' financial sustainability (Hulme & Mosley, 1996).

2.2. Contribution of donors

The lack of a good financial performance at an MFI may also be due to the non-provision of funds promised by donors. In this context, non-financial services seem to be crucial to attract donors' funds to the MFIs (Meyer, 2002). In this context, the *Microfinance Consensus Guidelines (2016)* issued a paper that was specifically addressed to MFIs to help them receive a higher contribution from donors. The main factor that was stressed in these guidelines was the role that MFIs should play in offering further services other than the pecuniary ones. This paper documented the aforementioned factor as follows: deprived people in society require more than just financial help. They need different kinds of services to be more financially stable, and MFIs should assist them and provide them with the needed amenities to help them improve their assets, increase their income, and be more equipped against financial shocks and distresses. This would help MFIs be even more supported by contributors.

According to Khaled (2018), microfinancing institutions in the Arab countries are nowadays offering non-financial services along with the financial ones, and their financial performance tends to be higher as their revenues increase due to raises in donors' contributions. In another study published by Hiproweb (2018), donors are more attracted to financing MFIs that improve people's welfare and lower their poverty. Accordingly, as non-financial services help boost the capacities of MFIs' clients and are considered to positively affect the society, MFIs become more appealing to many donors. Those higher contributions aid MFIs be more financially performant.

2.3. Operational expenses

According to Lensink et al. (2017), the provision of non-financial services by MFIs intensifies the company's operational costs. It approximately augments 5–10% of the MFIs' operational expenses, which leads to higher financial burdens on the MFIs and thus a lower financial performance. Several studies have argued that MFIs' clients considered non-financial services to be of low quality and irrelevant (Berger, 1989). Other scholars, such as Goldmark (2006) stated that trainings not only increase MFIs' operational costs but also have no effect on the clients' reimbursement behavior, which in return negatively affects the MFIs' financial performance.

Similarly, Lensink et al. (2017) considered that reality does not align with the theory and that whilst the latter gives a positive overview of the nonfinancial services, the empirical studies give different results. Hence, non-financial services consist a load instead of an advantage to the MFIs' financial performance since operational costs are higher than revenues. In parallel, other scholars, such as Hulme and Mosley (1996) and Nieto et al. (2009) stated that MFIs' financial performance depends strongly on its social accomplishment. They explained that although non-financial services may upsurge operational expenses, they also enhance MFIs' attractiveness to clients and thus become more competitive compared to other MFIs. This eventually maximizes the MFIs' efficiency and promotes its financial performance.

2.4. Loan quality

Meyer (2002) declared that the disadvantaged in a society need a long-term support rather than a one-time financial assistance as short-term credits would deteriorate their wellbeing rather than help them out. He also explained that one of the main factors behind the lack of a good financial performance at an MFI is the low reimbursement rate or the low quality of the loans.

Therefore, when clients receive non-financial services, the probability that they become more successful increases since they not only have access to more liquidity but also get the needed help to develop their businesses and manage their funds more efficiently. This increases their repayment rate and makes them more lucrative clients for MFIs and hence helps the latter be more financially performant (Meyer, 2002). Moreover, as per De Mel et al. (2008), the lack of financial knowledge in clients negatively affects their repayment behavior and leads to lengthier reimbursement periods, which decreases consequently the quality of the loan portfolio at MFIs and eventually harms their financial performance. In this context, providing non-financial services leads to more financially performant customers capable of getting bigger loans and repaying sooner, which helps lower the percentage of credit defaults at MFIs and thus improves the loan portfolio's quality, enhancing accordingly the MFIs' financial performance (Khandler, 2005).

3. Research methodology

3.1. Logic of inquiry

Because our study's primary objective is to compute the effectiveness of NFS on Lebanese

microfinance institutions, we adopted a quantitative approach and opted for a multiple linear regression model where the dependent variable is the Lebanese MFI's financial performance, and the independent variables are financial sustainability, donor's contributions, operational expenses, and quality of loan portfolio.

To help us conduct our research and answer our main research question, the following hypotheses were tested:

H1 Providing non-financial services affects positively and significantly Lebanese microfinancing institutions' financial sustainability and hence increases MFIs' financial performance.

H2 Providing non-financial services affects positively and significantly Lebanese microfinancing institutions' contribution of donors and hence increases MFIs' financial performance.

H3 Providing non-financial services affects positively and significantly Lebanese microfinancing institutions' operational expenses and hence decreases MFIs' financial performance.

H4 Providing non-financial services affects positively and significantly Lebanese microfinancing institutions' quality of loan portfolio and hence increases MFIs' financial performance.

3.2. Data collection

The collection of Data was through the distribution of a questionnaire constructed on a 5-point Likert Scale, and every variable was evaluated through several questions. It was formed based on the findings of several prior articles, and it comprised two main parts. The first part covered questions related to respondents' personal information, such as their age, gender, educational and professional statuses, whilst the second part covered questions related to the research variables. In this second section, four sub-sections represented the independent variables (Financial Sustainability, Operational Expenses, Contribution of Donors, and Loan Portfolio's quality) and a fifth sub-section represented the dependent variable (the financial performance). Finally, 500 questionnaires were disseminated to MFIs' employees and administrators over a three-month period from November 2020 till January 2021 via an online application: <https://kobo.humanitarianresponse.info/>. An Arabic form was also circulated to elucidate the English terms for MFIs' employees. We received a 76% response rate equivalent to 380 returned questionnaires. The sampling technique was used to make sure that our

sample is proportionately representative of the Lebanese market.

3.3. Population and sample

As stated by Charles (2013), MFIs in Lebanon have grown significantly since 2007. In fact, before that, there were only 11 microfinancing institutions in Lebanon with an overall equity of approximately \$30 million. Yet, amid 2007 and 2015, the number has increased till 20 with an entire portfolio of about \$50million to \$60 million. In our study, we chose the following 10 MFIs “Ameen, Al Majmouaa, Vitas, Ebdaa, Wafa Association, ADR, UNRWA, AEP, Emkan, and Women Program Association” as a representative sample of Lebanese MFIs based on their market shares, convenience to reach and geographical distribution. The respondents of those MFIs originate from different Lebanese regions (Beqaa, South Lebanon, Mount Lebanon, and North Lebanon) and occupy different positions at different departments, such as at the operations department, the finance department, the training departments, etc ..

3.4. Theoretical Framework

This figure illustrates the dependent and independent variables of the research along with the four hypotheses that will be tested throughout this study. On one hand, supplying non-financial services at an MFI is intended to influence the following independent variables (Financial Sustainability, Contribution of Donors, Operational Expenses, and the Loan Quality). On another hand, these independent variables are evaluated in terms of their influence on the Financial Performance of MFIs (See Fig. 1).

4. Results

After distributing and collecting the questionnaires, the data was inserted in the SPSS software for a more accurate statistical exploration. Both correlation and regression analyses were done to evaluate the dependent and independent variables. The findings of this statistical study are shown in the following section.

4.1. Correlation analysis

Based on the correlation test, all independent variables have a significant positive correlation with the dependent variable (financial performance) and a P-value small enough to reject the null hypotheses. In

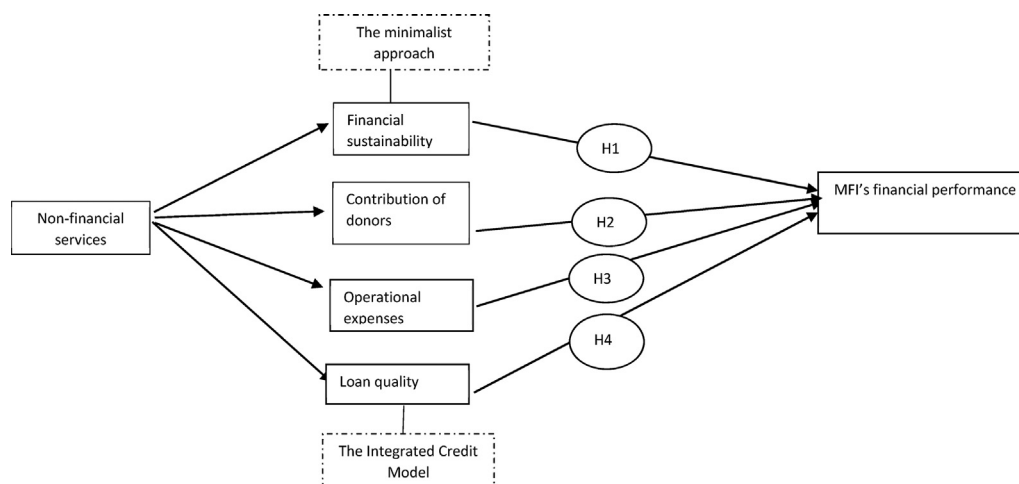


Fig. 1. Theoretical framework. Source: Author, (2021).

fact, the first one (financial sustainability) has an R value of 0.555 and a P-value of 0.000. The second independent variable (donor contributions) also shows a positive significant correlation with the dependent variable as its R value = 0.435 and its P-value = 0.007. For the third variable, the (Operational Expenses), the R value = 0.471 and the P-value = 0.003. In terms of MFIs, this result is understandable since non-financial services are believed to increase the donations which might be used as funds to cover operational expenses. Therefore, this might lead to a positive significant correlation with the financial performance. Finally, for the fourth independent variable, (Loan Quality) the R value is 0.589 and the P-value is 0.000 (Table 1).

4.2. Regression analysis

The regression analysis was conducted to better understand the relation between the dependent and all independent variables and determine the most statistically significant variables.

The outcomes of the regression analysis after evaluating the multicollinearity confirm an elevated predictive effect of the independent factors on the model with a high correlation coefficient $R = 0.841$ and R squared = 0.707. The multicollinearity was tested using the VIF method after which no multicollinearity was found between the independent variables. The Anova test was further applied to identify the significance level of the independent

Table 1. Correlation test results.

Correlation		Financial Sustainability	Donor Contributions	Operational Expenses	Loan Quality	Financial Performance
Financial Sustainability	Pearson Correlation	1	0.308*	0.250	0.533**	0.555**
	Sig. (2- tailed)		0.050	0.115	0	0
	N	380	380	380	380	380
Donor Contributions	Pearson Correlation	0.308*	1	0.27	0.287	0.435**
	Sig. (2- tailed)	0.050		0.102	0.088	0.006
	N	380	380	380	380	380
Operational Expenses	Pearson Correlation	0.250	0.27	1	0.371*	0.471**
	Sig. (2- tailed)	0.115	0.102		0.016	0.003
	N	380	380	380	380	380
Loan Quality	Pearson Correlation	0.533**	0.287	0.371*	1	0.589**
	Sig. (2- tailed)	0	0.088	0.016		0
	N	380	380	380	380	380
Financial Performance	Pearson Correlation	0.555**	0.435**	0.471**	0.589**	1
	Sig. (2- tailed)	0	0.007	0.003	0	
	N	380	380	380	380	380

Source: Author, (2021)

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

Table 2. Model summary.

Model Summary ^b		
Model	R	R square
1	0.841 ^a	0.707

Source: Author, (2021)

a: predictors (independent variables)/b: dependent variable.

factors. The results showed a 0.05 significance level, so all variables having a P-value higher than this will be rejected in our analysis. (Data-ScienceCentral, 2018).

Although the correlation test showed that all independent variables had a statistical significance on the dependent variable, the regression analysis only showed that two variables were truly statistically significant. In fact, as per the coefficient table, we can conclude that for a P-value of 0.05, only two independent variables are statistically significant (Financial sustainability) and (Loan quality) with respective p-values of 0.045 and 0.40. Furthermore, we can confirm the positive relationship between both variables and financial performance where financial sustainability's Beta coefficient is 0.30 and Loan Quality's Beta coefficient is 0.31, which indicates that for every 1 unit increase in the financial sustainability, the MFI's financial performance increases by 0.30. Similarly, for every 1 unit increase in the loans' quality, the MFI's financial performance increases by 0.31 units (Tables 2 and 3).

5. Discussion and conclusion

This paper studies the impact of providing non-financial services by Lebanese microfinancing institutions on their financial performance. The literature review identified four independent variables through which we could evaluate the effect of non-financial services on microfinance institutions' financial performance: financial sustainability, loans' quality, operational expenses, and donors' contributions.

Secondary and Primary Data were used, and a multiple linear regression model was adopted to test the variables. In fact, quantitative method was

conducted through which 500 questionnaires were distributed to several Lebanese MFIs' employees and administrators. After the data collection, both a correlation and a regression test were adopted to analyze the results.

Based on the correlation test, we found out that all dependent factors have a statistical positive correlation with the independent factor. However, after conducting the regression analysis. We found out that only two variables (1) financial sustainability and (2) loan quality were the most positively significant on MFIs' financial performance with a p-value below 0.05.

In terms of donors' contributions, the correlation test showed that they have a positive impact on financial performance. In fact, as per Meyer (2002), NFS affect positively the contribution of donors since they seem to be crucial to attract donors' funds to the MFIs, which subsequently increases the MFIs' financial performance. Similarly, we found a positive correlation between operational expenses and financial performance, which can be explained through the studies of Hulme and Mosley (1996) and Nieto et al. (2009) who explained that although non-financial services may upsurge operational expenses, they also enhance MFIs' attractiveness to clients and thus become more competitive compared to other MFIs. This eventually maximizes the MFIs' efficiency and promotes its financial performance.

Furthermore, based on the regression analysis, financial sustainability and loan quality seemed to have the most positive impact on financial performance. Actually, financial sustainability's measures are total financial costs, total financial revenues, return on assets, and return on equity (Mersland & Strom, 2014). Through the delivery of non-financial services to people, the number of MFIs' clients rises, and their repayment ratio increases, which enhances MFIs' total assets and consequently increases their return on assets (ROA) (Khandler, 2005).

Moreover, the increase in number of clients and in the repayment ratio also leads to a better loan quality and hence to higher operating revenues.

Table 3. Coefficient results.

Coefficients ^a							
Model	Unstandardized coefficients		Standardized coefficients	T	Sig.	95.0% confidence interval for B	
1	B	Standard Error	Beta			Lower bound	Upper bound
Constant	0.093	0.674		0.140	0.889	-1.166	1.55
Fin. Sust	0.260	0.11	0.30	2.222	0.045	0.012	0.511
Donors Contr.	0.168	0.105	0.17	1.552	0.11	-0.049	0.41
Op. Exp	0.278	0.161	0.231	1.840	0.080	-0.029	0.599
Loan. Qlty	0.35	0.151	0.31	2.2	0.040	0.019	0.620

In parallel, MFIs aim at maximizing their (ROA) and their operating revenues to be more financially profitable. Hence, the results of our study confirm the ones found by Goubert (2018) such that non-financial services help consumers become more financially successful and more capable of reimbursing their loans, which increases MFIs' quality of loans, operating revenues, and return on assets, eventually making MFIs more financially profitable.

Based on the above discussion, we accept hypotheses H1, H2 and H4 and reject H3 which considers that non-financial services lead to higher operational costs and hence negatively impact MFIs' financial performance. Consequently, we can state that our study is supportive of the integrated credit model approach where respondents considered non-financial services to be advantageous rather than costly to MFIs.

Finally, based on our findings, we can recommend the following implementations to Lebanese micro-financing institutions:

- 1 Offering non-financial services based on clients' needs and providing them with the required skills to achieve higher business successes
- 2 Selecting the exact provision method of non-financial services, offering them in a very cost-effective way along with financial services
- 3 Training the staff adequately for even more successful results
- 4 Defining key performance indicators to statistically evaluate the effect of non-financial services on their financial performance

References

- Al-Dajani, H. (2022). Future proofing entrepreneurship in the Arab world. *Arab Economic and Business Journal*, 14(1). Article 2.
- Berger, M. (1989). Giving women credit. *The Strengths and World Development*, 17(7), 1017–1032.
- Biosca, O., Lenton, P., & Mosley, P. (2014a). Microfinance non-financial services as a competitive advantage : The Mexican case. *Strategic Change*, 23, 503–516.
- Biosca, O., Lenton, P., & Mosley, P. (2014b). Where is the 'plus' in 'credit-plus'? The case of chiapas, Mexico. *Journal of Development Studies*, 50(12), 1700–1716.
- Charles, P. (2013). The growth of micro-finance in Lebanon [Online] Retrieved from <https://www.microworld.org/en/news-from-the-field/article/growth-micro-finance-lebanon>.
- Christen, R., Rhyne, E., Vogel, R., & McKean, C. (1995). Maximizing the outreach of microenterprise finance: An analysis of successful microfinance programs. In *USAID program and operations assessment report, No.10*. Washington, D.C.: U.S. Agency for International Development.
- MICROFINANCE Consensus Guidelines. (2006). Good practice guidelines for founders of microfinance [Online] Retrieved from https://www.aecid.es/Galerias/fonprode/descargas/Documentos_de_interes_2_Good_Practice_Guidelines.pdf.
- DataScienceCentral. (2018). Statistics how to statistics for the rest of us! [Online] Retrieved from <https://www.statisticshowto.datasciencecentral.com/probability-and-statistics/hypothesis-testing/anova/>.
- De Mel, S., McKenzie, D., & Woodruff, C. (2008). Returns to capital in micenterprises: Evidence from a field experiment. *Quarterly Journal of Economics*, 123, 1329–1372.
- Goldmark, L. (2006). Beyond finance: Microfinanced and business development services. In G. L. A. M. S. T. M. Berger (Ed.), *An inside view of Latin American microfinance*. Washington, DC: Inter-American Development Bank.
- Goubert, A. (2018). Why and how should Microfinance Institutions provide non-financial services? [Online] Retrieved from <https://www.microfinanza.com/why-and-how-should-microfinance-institutions-provide-non-financial-services/>.
- Halder, S. R. (2003). BRAC's business development services—do they pay? *Small Enterprise Development*, 14(2), 26–35.
- Harley, H. (2011). *The oxford handbook of linguistic minimalism* [Online] Retrieved from 10.1093/oxfordhb/9780199549368.013.0019 . (Accessed 10 January 2021).
- Hiproweb. (2018). Microfinance and non-financial services for very poor people: Digging deeper to find keys to success [Online] Retrieved from http://www.hiproweb.org/fileadmin/cdroms/biblio-reference-0912/documents/RRD-94-Microfinance_Non_Financial_Services.pdf.
- Hulme, D., & Mosley, P. (1996). *Finance against poverty* (Vols. 1 and 2). London: Routledge.
- Karlan, D., & Valdivia, M. (2011). Reaching entrepreneurship: Impact of business training on microfinance clients and institutions. *The Review of Economics and Statistics*, 93(2), 510–527.
- Khandler, S. (2005). Micro-finance and poverty: Evidence using panel data from Bangladesh. *World Economic Review*, 19, 263–286.
- Kilby, P., & D'Zmura, D. (1985). *Searching for benefits*. Washington, D.C: US Agency for International Development.
- Leatherman, S., Metcalfe, M., Geissler, K., & Dunford, C. (2012). Integrating microfinance and health strategies: Examining the evidence to inform policy and practice. *Health and policy planning*, 27, 85–101.
- Lensink, R., Mersland, R., Vu, N. T. H., & Zamore, S. (2017). Do microfinance institutions benefit from integrating financial and nonfinancial services? *Tandfonline*, 2386–2401.
- Mersland, R., & Strom, R. O. (2014). *Measuring microfinance performance* [Online] Retrieved from https://www.researchgate.net/publication/304862436_Measuring_Microfinance_Performance.
- Meyer, R. L. (2002). *Track record of financial institutions in assisting the poor in asia*. ADB Institute Research Paper.
- Morduch, J. (2007). Smart subsidies. In B. Balkenhol (Ed.), *Microfinance and public policy: Outreach, performance and efficiency* (pp. 72–85). London: Palgrave Macmillan.
- Nieto, B. G., Cinca, C. S., & Molinero, C. M. (2009). Social efficiency in microfinance institutions. *Journal of the Operational Research Society*, 60(1), 104–119.
- Otero, M., & Rhyne, E. (1994). *The new world of microenterprise finance: Building healthy financial institutions for the poor*. Conn Kumarian Press.
- Yunus, M. (2007). *Banker to the poor*. New Delhi, India: Penguin Books.