

Analysis of the Effect of Outreach on Cooperative Sustainability: The Mediating Role of Capital Deepening

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Abstract. Indonesia is experiencing a serious inactivity of cooperatives, initially the number of active cooperatives was 209,448 units (2014) but has decreased to 130,119 units (2023) or a decrease of 79,328 units. This research aims to defined the effect of cooperative outreach on the sustainability of sharia saving and loan cooperatives (SLC). SLCs endeavor to elevate support provision to members. Mutually beneficial will be reached if financial and non-financial services (NFS) provided in a balanced manner. Utilizing data via questionnaires from 11 provinces in Indonesia or 32.3% of the total provinces, linear regression, mediation and moderation analysis were carried out. The analysis technique uses Structural Equation Model Partial Least Square (SEM PLS). The findings show a negative relationship between outreach and sustainability. Meanwhile, capital deepening has a positive effect and has a mediating effect on sustainability. However, NFS were found to have no moderating effect on this relationship. This research concludes that SLCs have to take a look at the capitals strength to maintain outreach, and should be wise regarding non-financial services. As a recommendation, the delivery of NFS needs a carefully consideration because apart from adding costs it also does not support the sustainability of the institution.

Key words: Capital deepening, cooperative, non-financial services, outreach, sustainability.

Abstrak. Indonesia menghadapi koperasi tidak aktif secara serius, semula koperasi aktif 209,448 unit (2014) menjadi 130,119 unit (2023) atau turun 79,328 unit. Penelitian ini bertujuan untuk mengetahui pengaruh jangkauan sosial terhadap keberlangsungan Koperasi Simpan Pinjam dan Pembiayaan Syariah. Koperasi Simpan Pinjam Syariah selalu berupaya meningkatkan pemberian pelayanan kepada anggotanya. Saling menguntungkan akan tercapai apabila pelayanan finansial dan nonfinansial diberikan secara seimbang. Memanfaatkan data melalui kuesioner dari 11 provinsi di Indonesia atau 32.3% dari total provinsi, dilakukan analisis regresi linier, mediasi, dan moderasi. Teknik analisisnya menggunakan SEM PLS. Temuan ini menunjukkan hubungan negatif antara penjangkauan dan keberlanjutan. Sementara itu, capital deepening mempunyai efek positif dan mempunyai efek mediasi terhadap keberlanjutan. Namun, jasa nonkeuangan ditemukan tidak memiliki efek moderasi terhadap hubungan ini. Penelitian ini menyimpulkan bahwa Koperasi Simpan Pinjam dan Pembiayaan Syariah perlu memperhatikan kekuatan modal untuk menjaga jangkauan sosial namun perlu berhati-hati terkait layanan nonkeuangan. Pemberian jasa nonkeuangan perlu pertimbangan matang karena selain menambah biaya juga tidak mendukung keberlangsungan lembaga.

Kata Kunci: Capital deepening, jangkauan, koperasi, layanan nonkeuangan, sustainabilitas.

INTRODUCTION

Understanding relationship of knowledge management with microfinance cooperative sustainability is critical to improving a resilient and thriving future for all (Abdullah et al., 2024). If the cooperative is able to sustain in the long term, then many benefits will be given to the community including educational institutions for micro and small entrepreneurs and their role as providers of capital for business financing. The mission of the cooperative which is social in nature or outreach, and transparent governance has also provided challenges to guarantee long-term sustainability. The trade-



off between outreach and sustainability in financial cooperative has remained an interesting study in recent years.

Recent studies confirm that Micro Finance Institution sustainability comes at the cost of cooperative outreach and that there is a trade-off within the two objectives (Zainuddin et al., 2023). The concept of microfinance continues to develop and many research results have shown that the microfinance paradigm for commercial purposes and the development of social mission reach is a model that is unlikely to merge in the near future, so it must be handled separately (Toindepi, 2016). The outreach-sustainability trade-off in financial cooperative is often contributed to the advanced transaction cost of micro credit (Zainuddin et al., 2023). So, studies continue to be carried out considering that MFIs must realize social functions and not just financial performance to achieve sustainability.

To achieve the goal, this study tries to reduce impacts of decreasing sustainability while maintaining the outreach function through two research schemes at once, namely using Capital Deepening (CD) as a mediating variable and Non-Financial Services (NFS) as a moderator. With this dual scenario, it is hoped that new ways can be obtained to contribute to strengthening the sustainability of microfinance.

Studies on the effect of outreach to sustainability are still being carried out to this day because the measurement of indicators and their influential environment is constantly changing. This is in line with Gutiérrez-Nieto et al. (2009) that no accurate methodology enough to see how far a microfinance entity meets its social missions. In addition, as a business model, cooperatives are defined on the value of self-help, responsibility, democratic equality, equity, and solidarity (ICA and ILO, 2015). An important question related to the recovery of the Small Medium Enterprise (SME) business in the post-pandemic is whether with such a business model, apart from the interests of members, can the business model guarantee the sustainability of the institution? What factors can influence it so that outreach services to members can also maintain the existence of the institution in the long term.

Why capital deepening was necessary condition as mediate role for the effect of outreach and sustainability? Woller (2002) argument from the research which showed the financial cooperative has came a new stage in which competition and other market factors are compelling microfinance institutions to choose commercial knowledges. Capital deepening was the main factor influence the commercialization in microfinance. Saving and Loan Cooperatives was a part of microfinance. It summarized that the aspect of commercialization more than justify cooperative risks, but it attention restraint and suggests a continued role for poverty-focused of cooperative microfinance (Woller, 2002). Increasing capital deepening is considered as an effort to reduce the role of social cooperatives that have so far focused on poverty alleviation. The Grameen bank initiate in country of Bangladesh in 1974 by Muhammad Yunus was also concern about the originate program for the poverty alleviation of microfinance (Christen and Cook, 2001). It was a lot of social mission program than the commercialization. This research will test the extent of the actual mediation role of capital deepening on outreach and self-sustainability.

The role of Sharia Saving and Loan Cooperatives (SLC) is important to revive the SME economic sector. In Indonesia, according to Act No. 11 2020, the important function and role of cooperatives is to improve and develop the economic resources and capabilities of members and society in general to increase their income and social welfare. In its implementation, this role requires adequate capital support.

Li et al. (2019) mentions that capital deepening is the most important aspect for SLC in achieving the sustainability of financial cooperative entities so they can achieve financial and social goals. Capital deepening is the first influential factor, followed by technology and operational efficiency. These findings are in accordance with the condition of SLC as an intermediary institution that requires financial support both internally and externally. SLC services to SMEs are a specific business activity that the ILO calls it a business model. Services to SMEs as members cannot last long if SLC as an institution does not have good sustainability capabilities. The research of Davidovic (2021) shows that financial sustainability can

still be realized if it serves 20% of the poorest members. This means that the ability of SLC as an institution has limitations. Sustainability of microfinance entity can be considered at several stages—organization, members, and individual—and can relate to institutional, leadership, and financial factors.

Trade-off conditions have occurred in cooperatives and microfinance, related to commercialization (capital deepening) and outreach towards sustainability, so far there have been opposing influences. If cooperatives want to be sustainable, cooperatives must increasingly outreach as its mission. Conversely, to be sustainable, capital capacity should be increased by commercially orientation goal. If there was increasing social services only, cooperatives will find it difficult to be sustainable in the long run.

According to Pollinger et al. (2007), financial cooperative generally run in one of three different modes: survival, sustainability, or self-sufficiency. Definition of self-sufficiency refers to institutions that can survive and increase their wealth wholly based on revenues derived from their lending and related business. Sustainability has been a longstanding study.

Based on research by Gutiérrez-Nieto and Serrano-Cinca (2019), sustainability is an important topic for microfinance providers that continues to these days. Furthermore, it is said to do further research on sustainability according to the characteristics and the most suitable environment for microfinance institutions to develop. The cooperative sustainability and self-sufficiency is widely noted as a best practice in the cooperative microfinance industry (Pollinger et al., 2007). The researcher further offered five other arguments. First, sustainability improves ensure cooperative survival and the services for microbusiness entrepreneurs. Second, MFIs which offer their product to the non-bankable SMEs at market price levels could be able to attract the society that potentially feasible. Third, general lenders may be deterred from competing with institutions that observe kind of subsidies. Fourth, sustainability improves to raise equity from a variety of funds. And, last but not least, a focus on self-sufficiency could maintain MFIs to costs efficiency.

Based on Churchill (2020), the cooperative sustainability is crucial for the growth existence of the SLC as part of microfinance provider. With the main goal of the microfinance being the achieved of outreach, the bases on financial sustainability has raised attentions about potential adverse impact on cooperative outreach. In line with that, this study uses sustainability including three indicators, namely the consistency of SLC's mission in providing social services and financial motivation, providing loans that charge reasonable interest or margins that do not exceed the prevailing interest rate, and providing reasonable returns to investors or depositors. This indicator refers to the research of Gutiérrez-Nieto and Serrano-Cinca (2019), namely sustainability in the form of deep-sustainability. The study theme of sustainability has received much attention from institutionalists because of the belief that to be able to provide services to members, SLC as institution must first be sustainable. Without a sustainable SLC, services cannot be provided to those in need.

Cooperative services are called business models. As a values-based organization, cooperative enterprises provide livelihoods. In addition, cooperatives have resilience in the face of the economic crisis. To implement value, outreach is usually divided into breadth of outreach and depth of outreach (Pinz and Helmig, 2015). Research by Wasiaturrahma et al. (2020) shows that outreach size has a negative influence on outreach. What the researcher wants is to calculate the breadth, depth and overall reach score using case studies of several sharia cooperatives in East Java Indonesia. These results lead to new investigation, how are the calculation of breadth, depth and overall reach score sharia cooperatives. This study will further examine whether outreach influences sustainability by mediated capital deepening in sharia cooperatives. In addition, according to Inekwe (2019), non-financial services have a positive effect on non-performing loans, thus ultimately determining sustainability. Continuing the research results in this industry, the question to be answered in this study is whether capital deepening and also non-finance services will be having a positive effect on sustainability in Indonesian sharia cooperatives.

Non-financial services are specifically researched for their role as moderating variables in the collaboration within outreach and self-sustainability. The testing of the moderating role of non-

financial services is based on the fact that there is a strong argument for the significance of NFS for the sustainability of the institution. It is strongly believed that the availability of NFS will strengthen cooperative services for outreach and their role in sustainability (Zeller and Meyer, 2002). This study will further test and prove the moderating role of these non-financial services.

LITERATURE REVIEW

Outreach

Research on Micro Finance Institution (MFIs) linking outreach to organizational sustainability shows that sustainability is determined jointly by shareholders, employees and customers of MFIs (Sinha and Ghosh, 2022). Outreach is a basic goal of Sharia Saving and Loan Cooperatives (SLCs) and microfinance entities in giving access to proper financial services for a number of poor society (Bibi et al., 2018). Several dimensions of social performance aspects are known, namely six relevant dimensions of social performance: breadth of outreach, depth of outreach, scope of outreach, length of outreach, cost to client, and worth to client. In this study used breadth and depth of outreach. Breadth of outreach cover the number of members reached by SLCs. Depth of outreach focuses to the value added which a society associates with the net income that results from the business of loan to a borrower (Pinz and Helmig, 2015). Because of wealthier member commonly receive bigger funding, average amount of credit often indicators for depth of outreach (Cull et al., 2015).

Based on Gutiérrez-Nieto et al. (2009), social efficiency and cooperative efficiency have positive but low correlation. The result inline with the paradigm that to meet their social tasks, SLCs have to be financials sound. But Abdulai and Tewari (2017) proved the trade-off relationship within outreach and sustainability. Blanco-Oliver and Irimia-Diéguez (2021) mentioned that outreach have negative effect on financial indicators, but with mediation of productivity lead to a positive effect of outreach on sustainability.

This research postulate that outreach can also be a pushing factor in determining the self-sustainability of SLC as financial intermediary. Thus, H1 is hypothesized as:

H1: *Outreach has a direct positive effect on self-sustainability.*

Capital Deepening

Increasing capital deepening (CD) can cause a decrease in the labor market share in the economy (Glover and Short, 2020). Indeed, CD is an element of capital to encourage the continuity of an organization that is more capital intensive. However, SLC needs to continue to recruit new members as part of its mission and the impact of CD is indeed positive on the sustainability of micro finance (Li et al., 2019).

Capital deepening defines that credit officers handle a higher nominal and/or value of loan (Li et al., 2019). It was further explained that capital deepening also refers to increasing the volume of capital per unit of labor. Over the past two decades, SLC and microfinance industry have been motivated to increase capital deepening to ensure survival and better performance in an increasingly competitive and commercialized market setting.

Based on Li et al. (2019), growing capital intensity (that is, capital deepening) is the most needed source of improved for financial cooperative entities, while the operating efficiency and technological is the next factors. The aspects concur with important paradigm in financial cooperative landscape such as increased commercialization, factors of competition, and involvement of other investors. García-Pérez et al. (2020) conducted research on the sustainability of microfinance, and obtained the results that the sustainability of MFIs in a country is significantly determined by business operations that adapt to the conditions of the country where the MFI is located.

Based on previous condition, these reviewed works retrieved that capital deepening and self-sustainability are correlated, implying capital deepening is higher, the level of sustainability will also be higher. Hence, H2, H3, H4 are hypothesized as:

H2: *Capital deepening has a direct positive effect on self-sustainability.*

H3: *Outreach has a direct positive effect on capital deepening.*

H4: *Capital deepening mediates relationship between outreach and self-sustainability.*

Non-Financial Services

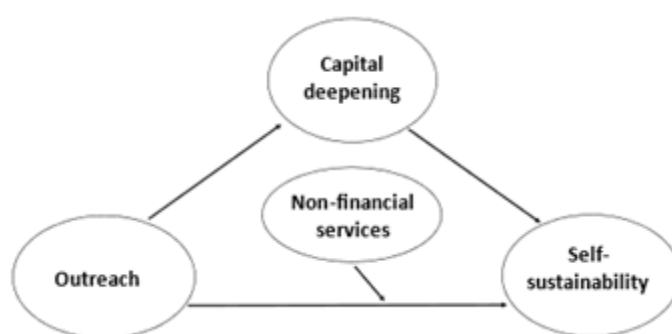
Previous study show that depth of outreach and financial sustainability of financial cooperatives are contradictionary related, and the relationship is moderated by state culture. Power distance and uncertainty avoidance positively moderate the relationship of outreach-sustainability, but individualism and masculinity negatively medium relationship (Zainuddin et al., 2020). It was found that NFS of financial cooperative such as training/skill development programs and social aspect development had positive influence to women-empower (Ul-Hameed et al., 2018).

Inekwe (2019) mentioned that NFS including the access to basic literacy education, professional training, marketing, and health. Berge et al. (2015) capture NFS such as financial training and literacy. Non-financial literacy, in the Covid-19 pandemic, is more needed than services in the form of money. This is because SLC members need knowledge and management support in carrying out business recovery.

There are many variations of NFS that must be provided by SLC to its members. The provision of this service does require costs. Provision of NFS is costly, but it enhances loan repayment. In this regard, SLC must innovate to create additional services so that the main efforts of members can be improved and ultimately have an impact on the sustainability of the cooperative organization. Wediawati et al. (2018) mentioned from their research, NFS influenced Islamic microfinance sustainability significantly. Non-financial services in the form of marketing service has been offered by Zeller and Meyer (2002) in the context of triangle of microfinance. To explore it further in this study, H5 is hypothesized as:

H5: *Non-financial services moderate relationship between outreach and self-sustainability.*

Based on the discussion above, the following model is submitted (Figure 1). The influence of outreach on self-sustainability with capital deepening as a mediating role and non-financial services as a moderating variable.



Source: Authors, 2022.

Figure 1 Conceptual framework model in the research of analysis of the effect of outreach on cooperative sustainability: the mediating role of capital deepening

METHOD

The sampling technique available selecting this study sample is purposive sampling with a judgment sampling type that uses certain considerations according to the research objectives (Ferdinand, 2014).

This quantitative study uses two-stage approach to analyze data. Firstly, the approach considers the measurement model or outer loading for data purification and the avoidance of cross loading in factor analysis. The analysis included are factor loadings, reliability test and composite reliability, to mention some. If all items meet this analysis, all of them will be retained for the second stage. In the second stage, a structural analysis displays the relationship between the variables tested and the criterion variable. This stage is useful to examine whether the null hypothesis need to be rejected or not, and later inferences can be documented accordingly.

The study was conducted from December 2020 to June 2022 of 250 certified Sharia Saving and Loan Cooperatives (SLC) manager in 11 Indonesia provinces (Jakarta, West Java, Banten, Yogyakarta, Middle Java, Bali, Lampung, Kepri Island, Babel, South Sulawesi, and East Kalimantan). Two hundred and fifty certified SLC managers from 11 provinces who were respondents were asked to answer eleven predetermined questionnaires (see Table 1). Back 230 sheets were obtained from 250 questionnaires with recovery of 92%. The survey was conducted both on-site and email delivery questionnaires with the uniform question. The data obtained analyzed using WarpPLS 5.0 to evaluate the effect of outreach on cooperative sustainability.

It is unavoidable, with the Covid-19 pandemic, most of the SLCs in 11 provinces in Indonesia are experiencing problems with poor loan quality and ultimately have the potential to be unable to achieve sustainability. As the majority element of community economic actors, SMEs are the foundation for recovery, improvement, and economic growth. Community economic transactions generally interact with micro and small entrepreneurs and savings and loan cooperatives. To evaluate the effect of outreach on cooperative sustainability, using sample data from 11 provinces which are considered quite representative regarding the condition of cooperatives and small businesses after the pandemic.

Unit of analysis in the research is a savings and loan cooperative both conventional and sharia, as well as a savings and loan business unit from a multi-purpose cooperative. Meanwhile, the profiles of respondents are directors, supervisors and managers who have the authority to make decisions. Sharia Savings and Loan Cooperatives (SLC) as samples are regulated microfinance institutions under the authorization of the Ministry of Cooperatives and SMEs. More than 17% of SLC has more than 1000 members. 42% of the sample have been operating for more than 15 years. In addition, 69% are SLC with assets of more than IDR 5 billion. However, most SLCs do not have access to funding from banks (74%) so they rely more on funding from internal members. In terms of financial performance, most of them are SLCs whose savings rates are still low, but SLC's mostly achieve ever-increasing income and profits (51%). SLC with sharia pattern is 47 SLC or 20%, the rest is SLC with non-sharia pattern. From the compliance aspect, there are 44 SLC units or 19% that have been audited by the Public Accounting Firm.

Table 1 Battery items in the research of analysis of the effect of outreach on financial cooperative sustainability: the capital deepening mediating variable

No	Measures	Source
<i>Outreach:</i>		
OT01	Breadth of outreach	(Pinz and Helmig, 2015)
OT02	Depth of outreach	(Pinz and Helmig, 2015)
<i>Capital deepening:</i>		
CD01	The value of the loan handled by each credit staff is always increasing	(Li et al., 2019)
CD02	Capital increase is carried out through profit reserve	(Li et al., 2019)
CD03	New product innovations to attract interest from Members	(Li et al., 2019)

Table 1 Battery items in the research of analysis of the effect of outreach on cooperative sustainability: the mediating role of capital deepening (continue)

No	Measures	Source
<i>Self-sustainability:</i>		
SS01	Every service pays attention to the goal of improving the welfare of members	(Gutiérrez-Nieto and Serrano-Cinca, 2019)
SS02	Each loan charges a fair interest not exceeding market interest	(Gutiérrez-Nieto and Serrano-Cinca, 2019)
SS03	Deposit products provide reasonable returns	(Gutiérrez-Nieto and Serrano-Cinca, 2019)
<i>Non-financial services:</i>		
NF01	Field visits are always carried out before and after disbursement	(Inekwe, 2019)
NF02	Marketing services are provided to members who need	(Inekwe, 2019)
NF03	Member education is carried out equally to members	(Inekwe, 2019)

RESULTS AND DISCUSSION

Many approaches are given by experts in the field of microfinance related to outreach. From the results of previous studies, in general outreach has a trade-off with sustainability. However, other studies have shown a positive relationship. With the current state of environmental change, it is necessary to re-evaluate the relationship between these two aspects so that the expected role of SLC in the increasingly important SME sector can continue to be fulfilled.

This study aims to investigate how services should be provided so that they can support the sustainability of the institution by including capital deepening as a mediator variable. In addition, this study also evaluates the availability of NFS as a moderating variable. The results obtained from this study are expected to support and provide recommendations on how Sharia Saving and Loan Cooperatives (SLC) as an intermediary financial institution for the SME sector should continue to provide services or outreach.

Table 2 Factor analysis result in the research of analysis of the influence of outreach on cooperative sustainability: capital deepening the mediating variable

Items	OT	CD	SS	NF
OT01	0.818	0.044	0.080	0.207
OT02	0.818	0.038	0.071	0.207
CD01	0.042	0.559	0.163	-
CD02	0.044	0.709	0.153	-
CD03	0.010	0.876	0.169	-
SS01	0.170	0.112	0.749	0.218
SS02	0.033	0.069	0.849	0.033
SS03	0.119	0.153	0.809	0.173
NF01	0.009	-	0.142	0.707
NF02	0.063	-	0.097	0.821
NF03	0.055	-	0.025	0.822
AVE	0.669	0.527	0.645	0.616
Composite reliability	0.802	0.764	0.845	0.827
Cronbach's alpha	0.507	0.564	0.725	0.686

Notes: OT = outreach, CD = capital deepening, SS = self-sustainability, NF= non-financial services.

Source: Authors, 2022 (processed data).

Table 2 shows the result retrieved from factor analysis. All indicators were statistically significant in serving the variables that they request to measure with. All items were loaded beyond the recommended value of 0.707 and for that, the discriminant validity is qualified.

From factor analysis, we investigate the data results using the average variance extracted (AVE), composite reliability (CR) and Cronbach's alpha. The analysis of details are provided in Table 3. As for AVE, the results obtained indicate that all factors under contemplation were more than the threshold value of 0.5, connect the convergent validity. As for CR, the results also show that the reliability for all constructs was beyond the retrieved value, immediate the convergent validity for the defined construct (Lee and Kozar, 2008). Cronbach's alpha values for the variables were higher than the defined value.

Table 3 The result of discriminant validity in the research of analysis of the influence of outreach on cooperative sustainability: capital deepening mediating variable

Variable	OT	CD	SS	NF
OT	0.818	-		
CD	0.398	0.726		
SS	0.275	0.397	0.803	
NF	0.480	-	0.471	0.785

Notes: OT = outreach, CD = capital deepening, SS = self-sustainability, NF= non-financial services.

Source: Authors, 2022 (processed data).

Moreover, a discriminant validity analysis is done to investigate whether variables are different compared with others. Table 3 represents the square root of AVE for each variable was higher than the correlation with other construct (bold values), meeting the discriminant validity (Fornell and Larcker, 1981). Each variable is different compared with other variables, causing the discriminant validity test is acceptable. This study examines the impact of outreach on self-sustainability with mediating effect of capital deepening and moderating factor of NFS.

Based on this finding on Table 4, H1 show not substantiated. Correlation test further reveals a positive relationship within outreach of the SLCs and capital deepening (path coefficient = 0.398, p value < 0.001, < 0.05) and this substantiated H3. The results present a significant relationship within capital deepening and sustainability (path coefficient = 0.342, p value < 0.001, < 0.05) which show support for our H2. But, the home work that arises with these findings is how the outreach should still be carried out by SLC because it is an activity, and its main role is in the social sector. Based on these considerations, further analysis of the mediation of capital deepening from outreach to sustainability is carried out.

Table 4 Structural analysis in the research of analysis of the effect of cooperative outreach on sustainability: capital deepening mediating variable

Pathway	Beta (β)	Hypothesis	p value	Supported
OT \rightarrow SS	0.138	H1	0.063	No
CD \rightarrow SS	0.342	H2	<0.001	Yes
OT \rightarrow CD	0.398	H3	<0.001	Yes

Notes: OT = outreach, CD = capital deepening, SS = self-sustainability.

Source: Authors, 2022 (processed data).

Outreach SLC and Self-sustainability

In 11 provinces in Indonesia, breadth and depth outreach showed good performance. SLC has endeavored to provide good service to its members. Services are provided in the form of expansion to new members and segmentation of loan recipients from small to micro scale. Despite the dual role of members as owners and customers, the progress of SLC as an entity also needs attention. This study shows that SLC cannot achieve sustainability in the long term if it only pays attention to the interests of members. As an institution, efforts are needed like an organization to be able to achieve

independence. The self-sustainability that has been achieved, in the end, is not only beneficial for SLC itself as an organizational forum, but in the end, it is also beneficial for members. This situation supports the concept of the triangle of microfinance which emphasizes the importance of sustainability, outreach, and impact of microfinance to its members. These three aspects are evaluation concepts that have been accepted and are relevant to current conditions. This is also in line with the thoughts of Li et al. (2019), financial and social sustainability were seen as complimentary.

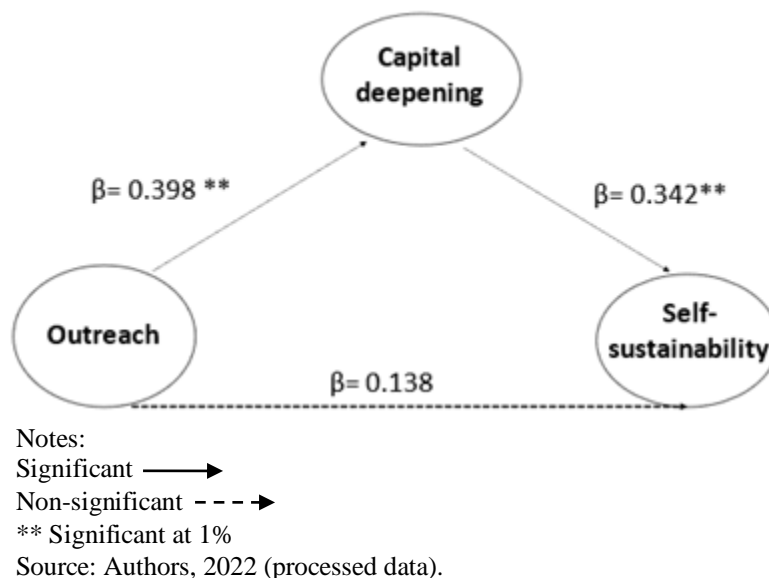


Figure 2 Analyzed capital deepening for self-sustainability in the research of analysis of the outreach effect on cooperative sustainability: capital deepening mediating variable

Capital Deepening for SLC and Member Advancement

Productivity and capital have become a trend that supports the growth of microfinance as well as SLC. Capital deepening or capital intensity is a resource that shows a requirement for ongoing SLC services to its members. It is undeniable that the main motivation for members to want to join SLC is to gain access to capital that has not been available so far. However, SLC as an institution is usually also weak in terms of capital, so efforts to strengthen funding for working capital are strategic in the discussion. SLC management must always think about how to obtain funding from both internal and external investors. With the fulfillment of sufficient capital, it will be the basic capital that determines the future of SLC and the achievement of member welfare.

Post Hoc Analysis

Following Hair et al. (2014) a mediation investigation of the capital deepening is constructed. Three steps of test should be done in sequence order. Capital deepening is hypothesized to be a mediating aspect in this present research. Result of first step (Table 5) shows direct hypothesis test of endogen variables without mediating role. An outreach has significant effects (p -value < 0.01) on sustainability. This shows us to reviewed the potentially mediating effect of capital deepening on the correspondence between outreach on sustainability. The analysis continued to second step, which is involving mediation variable for indirect effect of hypothesis.

Table 5 Mediation testing (1) in the research of analysis of outreach on cooperative sustainability: capital deepening mediating variable

Pathway	Beta	P-value	Supported	R ²
OT → SS	0.286	< 0.01	Yes	0.082

Notes: OT = outreach, SS = sustainability

Source: Authors, 2022 (processed data).

Table 6 shows the result and suggest the association of outreach of the SLC on their sustainability is significant (p -value < 0.01). The last steps calculate the variance accounted for (VAR) score. Further examination indicates that capital deepening partially mediates the effect within outreach and cooperative sustainability of SLC (VAR score between 20%-80%), but because the influence of outreach on cooperative sustainability was not significant, so capital deepening should be mentioned as full mediation. Thus, H4 is confirmed and validated, suggesting mediation effects.

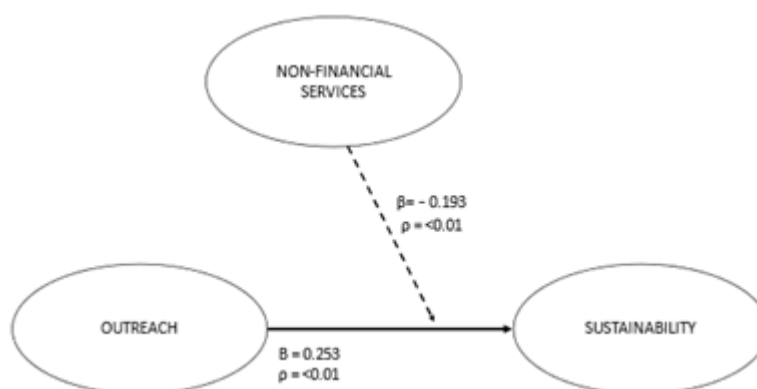
Table 6 Mediation testing (2) in the research of analysis of outreach on cooperative sustainability: capital deepening mediating variable

Pathway	Beta	P-value	Supported	VAF	Result
OT \rightarrow CD \rightarrow SS	0.398	< 0.01	Yes	49.66%	Partial mediation

Notes: OT = outreach, CD= Capital deepening, SS = sustainability

Source: Authors, 2022 (processed data).

The last, from the calculation of the path coefficient output and the p -value of the non-financial moderating factor on the relationship from outreach to sustainability, it represents that the outreach variable has a direct and significant influence on the sustainability with the P value < 0.001 with path coefficient value of 0.253 (Figure 3). Moreover, the interaction between the NFS moderator variable and outreach has no effect on the sustainability variable with a p -value obtained < 0.001 and result of a path coefficient value of -0.193. Signs on different path coefficients tend to result in a type 1 error that is not significant results are declared significant. This means that NFS cannot be a moderator of the relation within outreach and sustainability. Thus, H5 should not be accepted/rejected.



Source: Authors, 2022 (processed data).

Figure 3 Analyzed NFS moderation effect in the research of analysis of outreach on cooperative sustainability capital deepening mediating role.

Regression analysis shows that CD is a mediating variable that partially influences the correlation between outreach and cooperative sustainability. Besides, research results have also shown that NFS not a moderator that strengthens the relationship of outreach and sustainability. As for the former, outreach explain the sustainability factor about 17% (R^2). Outreach was not significantly related to sustainability (path coefficient = 0.138, p value = 0.063, > 0.05) – implying the higher outreach, the worst is sustainability. The result indicates that the SLC manager believe that an effort to only increase the number of members is not essential to accomplished SLC sustainability. This finding is because there is a belief from respondents that increasing the number of new members does not necessarily increase capital significantly to be able to support lending to obtain income and profits. This finding support research of Abdulai and Tewari (2017). The newest research revealed a trade-off relationship of outreach and sustainability of SLC also the result from Zainuddin et.al. (2023).

Updating Our Concept of SLC Outreach

The study from Zainuddin et al. (2020) show that depth of outreach and financial sustainability of SLCs are negatively effect. The reach provided by SLC is a service that members have expected since its inception. However, to achieve the availability of long-term services, it is certainly not just outreach in terms of the number of services provided in the form of recruiting new members. SLC as an institution has limitations and is burdened with operational costs because of an organization. Therefore, the recruitment of new members is recommended through clear criteria. With organizational limitations, not everyone can become his mentor. SLC has the capacity and demands to also be able to meet its own needs.

Research by Wasiaturrahma et al. (2020) shows outreach size, non-performing financing (NPF), number of branches, grants, financial leverage, and age have a significant impact on Islamic cooperatives' outreach. The outreach size has a negative effect. Also, the NPF can decrease the outreach size. Depth of outreach needs to pay attention to the security and effectiveness of the use of loans provided so that they can be repaid and can be relending to other members. SLC's internal policies need to determined to criteria and security so that the loans provided are effective and on target for members' productive activities. Breath of outreach can continue to run, and it would be better if a referral system is used. New members are expected to have a profile that has good character so that they can be directed to achieve business progress and mutual benefit with SLC.

The Strengthening SLC through Capital Deepening

Increasing capital deepening can cause a decrease in the labor market share in the economy (Glover and Short, 2020). Indeed, CD is an element of capital to encourage the continuity of an organization that is more capital intensive. Capital deepening has proven to be a driving force for SLC to be able to achieve independence. Most of the members who join the cooperative are more parties that need financing than supporting in the form of funding. In addition to being successful in providing services, SLC must also be successful in surviving. An organization can go concern if it can generate the income needed to finance its operational activities. SLC will be difficult to survive if it only tends to increase cooperative members. Increasing the members served must be supported by productivity in the financial sector. Increased financial capacity is needed to support sustainability, among others through increasing financial profitability, product innovation that members are most interested in and strengthening capital through retained earnings from the profit share of SLC.

The Role of NFS Provision for the Members

The literature generally describes the positive aspects of NFS in the discussion of empowering members of microfinance. Rizk and Khalil (2022) explained that there is a significant influence related to NFS on the financial performance of microfinance institutions. NFS are quite broad and varied in their activities, so it is necessary to continuously evaluate the knowledge and skills that are most suitable or needed by members. If it has become a program, it needs to be implemented as well as possible. If it is not effective in its implementation, then the program can become an additional burden and has the potential to reduce the credibility of the SLC. Non-financial programs that are less effective or do not meet the needs of members, have the potential to reduce the sustainability capacity of the institution. Unmeasured experimental costs and which are not effective will negatively affect the business performance of members.

Balancing the Sustainability of SLC and Business Member as Micro and Small Enterprise

Study from Ul-Hameed et al. (2018) expanding in the body of literature for cooperative as part of microfinance institutes to empower women and improving through training education, improving skill development and social capital. The concept of microfinance paradigm for commercial purposes and the development of social mission reach is a model that is unlikely to merge in the near future, so it must be handled separately (Toindepi, 2016). The double bottom line has become the principle of SLC which maintains a balance between the interests of members and the organization. Maintaining a

balance of interests is not enough to be done through motivation in its implementation, but there needs to be a measure of achievement indicators.

In addition to budget control, monitoring and evaluation of social and financial performance needs to be carried out regularly. Measuring the results of the goals does not have to be evaluated until the end of the year. Each program must be formulated in a planned manner and its impact evaluated on a regular basis. SLC will only survive in the long term, if in addition to thinking about the target of achieving service to members, it is also necessary to maintain the sustainability indicators of SLC as an organization. As an intermediary financial institution, SLC is inseparable from financial and health measures that need to be monitored and improved. The success of service to members and the achievement of institutional sustainability are targets that must be jointly maintained.

CONCLUSION

Outreach has become the main performance indicator of Sharia Saving and Loan Cooperatives (SLC), especially in the aspect of social performance. In addition to social performance, there are still demands for independence as an entity. Outreach performance is the main driver of SLC growth if it is followed by member capital contribution. Social values can still be maintained, if there is a high awareness of members to fulfill their obligations to SLC. Outreach in this study which consists of breath and depth of outreach is not significant in supporting the sustainability of the institution. The results of this study are quite similar to previous studies on microfinance. These results provide an indication of the importance of evaluating microfinance performance measurement as a special business model that is burdened with double performance targets that are different from financial institutions in general.

As a recommendation, now is the right time to think about and re-evaluate the role of savings and loan cooperatives as intermediary institutions for the SME sector that need encouragement to bounce back after the pandemic. The role of the SLC has been proven in providing services to members of the micro-entrepreneur sector, but apart from outreach achievements, it is also necessary to pay attention to the sustainability of the institution. The results of this research present that outreach has a negative influence on sustainability. However, with the mediation by capital deepening as capital productivity becomes a significant effect. However, NFS do not moderate the outreach and sustainability relationship.

From this research information will provide a valuable lesson, that in addition to costing, NFS must be provided with caution. SLC must have an empowerment program and the evaluation must be positive. If the evaluation of empowerment performance is less than optimal, a negative impact on the institution will be occurred. Non-financial services need further attention in the study of savings and loan cooperatives and microfinance in general.

SLC in 11 Indonesian provinces need to pay special attention to efforts to expand the number of members, especially in terms of providing financing services. Expansion or outreach in providing loan services needs to consider the feasibility and capabilities of sharia cooperative members. Only providing an orientation to improving services without considering the capabilities or abilities of members will have a negative impact on long-term sustainability. In addition, to strengthen the sustainability of cooperatives, increasing the amount of capital and carefully consideration in selecting financing should be done effectively. Meanwhile, the provision of non-financial services must be provided selectively. Providing training which does not take a look at the character of member capabilities and the needs of cooperative products can increase cooperative costs but does not support the sustainability of the sharia institution.

The management of sharia savings and loan cooperatives needs to prepare long-term and short-term strategies as a consequence of the results of this study. Short-term strategies are carried out by continuously re-evaluating periodic financial performance related to profitability due to the addition of new members. Long-term strategies are to be more selective in providing educational programs to be adjusted to the real needs of members for business advancement and take a look at cost efficiency.

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