



Local Wisdom, Dignity, Trust, and the Construction of Social Collateral for Micro Financing

Munrokhim Misanam^{a,*}

^aDepartment of Economics, Faculty of Business and Economics, Universitas Islam Indonesia

Keywords:

Local Wisdom, Dignity, Trust, Social Collateral, and Islamic Microfinance.

JEL Classification:

G20, G23, and G41.

Article History:

Received: 8 December 2023

Revised: 12 December 2023

Accepted: 13 December 2023

Published: 20 December 2023



Citation:

Misanan, M. (2023). Local wisdom, dignity, trust, and the construction of social collateral for micro financing. *Global Review of Islamic Economics and Business*, 11(1), 105-121.
<https://doi.org/10.14421/grieb.2023.111-07>

Abstract: Micro business plays an important role in poverty alleviation. Yet, its development is constrained by the absence of access to banking at a reasonable cost. This is simply due to the unavailability of collateral to back up the loan/financing. Actually, the lack of physical collateral may be substituted by social collateral that informally exists in society and the micro-business community. Therefore, there has to be an effort to officialize and construct the social collateral in order for the banking industry to admit and accept it as collateral. This work begins with research on the effect of social capital on repayment performance. This is to the extent that the effect of social capital has long been recognized by many economists, even though not formally theorized. Yet, there are ample notions stating that there is a close relationship between those variables. This research was carried out to see in more detail the role of local wisdom, approached from religiosity. This research was accomplished using a survey method, which got primary data directly from the respondents. The ground of research was the Southern Region of Kedu, Central Java, Indonesia. The results suggest that religiosity shares the effect with social dignity as well as trust and they all show to be dominant variables affecting repayment. The implication is it seems better for both the government and banking industry to consider this arrangement a substitute for physical collateral. Moreover, the construction of social collateral is, indeed, in accord with the uncovered fact.

Originality/Value: This paper addresses the issue of loan repayment in Islamic micro financing. Because of the unavailability of collateral in small and micro firms to support loans or financing, this study examines the importance of social capital to substitute physical collateral in dealing with repayment performance.

Introduction

Microfinance institution is the only place where the poor can hope to get loans/financing to improve their life quality. This is so because regular banking does not provide any credit/financing scheme for this segment. This situation creates a question as to how regular banking does not accept micro businesses as their customer. The answer rests on two things. First, they are not yet bankable in the sense that the size of the business is too small, which makes the overhead cost for handling them big. Second is the prudential reason, which demands that every loan/financing has to be supported by adequate (physical) collateral; this is actually a standard procedure in banking practice. Dealing with such a requirement, micro businessmen are simply unable to provide the required collateral.

*Corresponding author.

munrokhim.misanam@uii.ac.id (M. Misanam).

<https://doi.org/10.14421/grieb.2023.111-07>



This is an open access article under the CC-BY-SA license

Fortunately, microfinance institutions are helping them to deal with the shortage of funds to run their business (Fakhrunnas et al., 2022). The fact answers many questions, such as how microfinance institutions handle credit risk and who is participating in the business. By and large, microfinance institutions are of several types. First are banks that target micro businesses as the segment. There are two types of banks that claim to serve micro businesses: *Bank Rakyat Indonesia/BRI* unit, the division of BRI that operates in rural areas, and *People Rural Bank (Bank Perkreditan Rakyat/BPR)*. BRI unit serves their micro customer ranging from Rp 50 - Rp 100 million or so. While BPR serves their customer with credit ranging from Rp 2 – Rp 20 million. From the latter range, one could infer that the bank that really serves micro businessmen is BPR.

The current development shows that micro business has such potential that many banks want to enter the market; some of them are NISP and Danamon (Kompas, 2010) and Danamon (Kontan, 2012), respectively, which serve this segment that channel their credit as much amount and convenience as BPR do. The entrance creates tension in the business. This may be seen from the recent development in the segment where the share of thrifty banks (BPR) drops after the entrance (Detik Finance, 2011). This, of course, makes the association of thrifty banks (BPR) feel unhappy with this situation.

The other microfinance institutions are *Baitul Maal wa Tamwil (BMT)* and cooperatives, which have the nature of a non-bank institution but operate in a similar way as banking institutions. Of course, these institutions are beyond the control of the banking authority, Bank Indonesia (BI). The size of financing/credit is very small ranging from Rp 0.5 million to Rp 10 million (Dyah, 2020; Priyadi, 2021). They are also offering the same convenience to their customer such as to free them from an obligation to provide collateral and other administrative procedure.

Another form of microfinance institution is basically those which are not included in the aforementioned institution. These kinds vary according to the main institutions that back them up, such as the Village Credit Institution (*Lembaga Kredit Desa*) and Municipality Credit Council (*Badan Kredit Kecamatan*), which are backed up by the rural and municipal administrative government. While there are some institutions that are backed up by non-government organizations (NGOs) and private foundations. However, among those institutions that are experiencing fast growth is BMT.

The government program was designated to assist lower-income people to lift up their welfare. The distinguishing characteristics of government-programmed credit, among others, are lower interest rates. The government provides subsidies for them through the Central Bank in two forms: providing cheap liquidity (lower interest rate) and assuring the credit risk. It began in 1972 when the government provided a credit scheme later called mass nursing (*Bimbingan Massal/BIMAS*) credit. This scheme aimed to provide farmers with the liquidity needed to finance their agriculturalist expenditures like buying seeds, fertilizer, pesticides, and paying workers (Hurip, 1979). Next, is Small investment credit (*Kredit investasi kecil/KIK*) and permanent working capital credit scheme (*Kredit modal kerja permanen/KMKP*). These two schemes are intended to facilitate small and micro businessmen to run their businesses (Bank Indonesia, 1979). Later, in 1985, agriculture business credit was designated for pursuing small-scale agribusiness in the country. The last is special (agriculture) intensification (*intensifikasi khusus/INSUS*), which was launched in 1998 and was planned to keep up domestic food production (Mulyawan, 2009).

At the end of 1998, however, the credit market was no longer allowed to get subsidies in any form. This actually is the implementation of the agreement between the International Monetary Fund (IMF) that required such a condition in return for a loan to tame the monetary crisis the country was experiencing (IMF, 1999). The condition is expressed in the form of a law, i.e.: law number 23/1999. As a consequence, all the credit schemes were terminated starting in the year 2000.

Of course, in the subsequent periods, there were new credit schemes like horticulture development, veterinary development, sugar cane development, fishery development, and palm oil tree development. The most recent one is the people business credit (*kredit usaha rakyat/KUR*), which was launched in November 2007 with the aim of availing small-scale and micro businesses with credit. But the latter mentioned cannot run well, which is indicated by the absorption rate of this credit, which is only Rp 16.256 trillion, which is far below the targeted amount of Rp 20 Trillion. This is so because the charged interest rate is a common market rate, and the schemes required strict prudence in terms of tougher collateral requirements to prevent credit crises that happened once in the country.

It is noteworthy to discuss some points concerning the practice of government-programmed credit, which is (1) a low repayment rate, (2) Low morality of banking officers' practice, and (3) a Low fund

mobilization rate (Martowijoyo, 1999). The low repayment rate is caused by people/debtor perception of government-programmed credit. They think that government must be the one and only one that responsible for anything happens in the state. Poverty alleviation is a public good that the government should provide. According to this perception, they think that the credit is a scheme for giving them a “prize” by which they can get out of the poverty trap. Many of them also think that the government has taken their money through tax. So, that’s the time for them to get their money back.

In contrast, many microcredit/financings are not supported by adequate (physical) collateral, but customer repayment is, on average, quite good. The nonperforming financing (NPF) is relatively low, 4.2%, even though it is still higher than that of conventional banks (2.96%) (Hidayah & Tabrani., 2019; Widarjono et al., 2022). The question is how such a situation may happen in a non-collateral loan/financing setting. Speculation arises carrying the notion of the power of social capital that commonly is formed and is massive in rural areas. Based on this fact, it is reasonable to speculate that the social relationship, which is the main part of social capital, lies behind customer repayment performance.

According to the above information, the concern of the research may be expressed in the following questions. First, does social dignity have an effect on financing repayment performance? Second, does trust have an effect on financing repayment performance? (3) Does religiosity, have an effect on financing repayment performance? Third, to what extent does every element of social capital and religiosity affect repayment performance? Fourth, which of those elements shows a dominant effect on repayment performance?

The trust in this research is aimed to be a trust from the customer side. Especially it is a customer trust referring to the belief that the corresponding microfinance institution (BMT) does really help and does not exploit or take advantage of them. In this situation, the debtor may perceive that the BMT is their partner in availing the fund for their business purpose. Hence, they need to maintain the BMT to keep running by behaving well in the repayment.

The research is especially aiming to analyze the extent to which social capital affects repayment performance. In addition, the research has some benefits. First, to help decision-makers in thrifty banking to understand that social capital is important in the micro-credit area. Second, it opens the way for admitting that social capital plays an important role in substituting physical collateral. Third, giving support to micro businesses to get easier access to banking services.

Literature Review

Previous Studies

In searching the effect of the introduction of People Credit Thrifty Bank (BPR) on the performance of rural institutions, Martowijoyo (1999) uncovers several findings, among others, that the extent of the social relationship between the existing microfinance institution and its customers being determining exogenous variable for service effectiveness. Grootaert (1999) investigated the relationship between social capital and welfare in rural areas of selected provinces in Indonesia, which are Jambi, Central Java, and East Nusa Tenggara. He was concerned with the local dimension of social capital, that is, local institution membership, the activeness in the institutions proxied by the frequency of attendance in meetings, participation in decision-making in the institution, and privileged position in the community. He found that every indicator of social capital does have a positive significant effect on accessing banks to get credit.

Bastelaer (2000), in research asking whether Social Capital Facilitates the Poor’s Access to Credit, concludes that social networks are an important element for every formal and non-formal program intended to open access to credit for the poor. More specifically, if there is a close personal relationship between the creditor and the debtor, it will be an important thing for ensuring repayment. Also, Bastelaer (2006) found an expected result where customers who are within the seed group show a better repayment performance. Dowla (2006) carried out a research entitled "*In Credit, We Trust: Building Social Capital by Grameen Bank in Bangladesh.*" He aimed to know how social capital is encouraging high growth in microfinance (Grameen Bank) in Bangladesh. The result shows that trust, norms, and networks have fundamentally changed the lives of the majority of women through bank credit channeled to them.

Pranadji (2006) found that trust is the main developing element for social capital in rural areas. While the other elements, cooperation, and network, will not come into being if it's not built over mutual trust among individuals in a society. In a society with a relatively high social contradiction, the social network is extensive. While in a society with a high tendency to be progressive, they will be able to develop wider mutual trust. Kurnia (2007) has arranged a research entitled *An Analysis of the Effect of Social Capital on Repayment in Syari'ah Microfinance*, " which found that social capital supports syari'ah microfinance in continuing their effort to channel the credit to small and medium-scale businesses. He determined to use several variables to proxy the social capital in his research, which is the relationship among customers, the distance of the office place of the bank to customers' houses, trust, membership status, meeting frequency between customers and the bank, and the distance among customers' houses.

Olomola (2008), in research on Social Capital, Microfinance Group Performance, and Poverty Implications in Nigeria, found that in the case of the Farmers Development Union, which is a mobilized group, social capital has an insignificant effect on repayment performance. In the case of savings and Credit Associations, meeting regularity does have a significant negative effect on social capital. Subaki et.al. (2011) found that vertical networks, norms, and vertical trust have an important role in shaping the performance of microfinance institutions.

Sudibia et al. (2016) investigated the rural credit institution (*Lembaga Perkreditasi Desa/LPD*) in Bali and Padang (West Sumatra). The microfinance institutions they surveyed are organized in a socialistic way. The head of the tribe is always in charge as the manager of the microfinance institution. He appoints his assistant to organize the institution with quite strict requirements: entrusted, have high standards of moral integrity, and do not have any record of misconduct in their life, even though sometimes they are less educated. This system has been shown to have a very significant effect on the institution's performance. The institutions are running well with a very low rate of non-performing loans. This is because there is a tough social penalty for those who are deliberately being delinquent.

Following the development of studies in this area, one may see that there is still a loophole. Rarely is the research exploring repayment performance in the dependent variable. Moreover, there are seemingly significant variables that have not been explored in any single research yet. Those variables are local wisdom and self-dignity. Therefore, this research explores the role of those variables in shaping performance repayment.

Social Capital Theory

In economics, capital is defined as everything by which one can use it for producing output. In the former concept, one used a tangibility approach, which implied that the physical unit of capital can be considered to have contributed to the process of generating output. This is about the number: the number of machines, equipment, land, and funds, which is later called physical capital.

Later, economists realized that not only physical capital may contribute to producing output, but also nonphysical units may also do it. The nonphysical unit is human capital embedded in each worker. This is so because not only the contribution of their muscles is considered a contribution to production, but also the fact that each worker has characteristics that are not muscle-related, i.e., talent, skill, and working ethos, or so. These things can differentiate the performance, and hence the contribution, of a worker from the other in production. More recently, in collective work, one may see that the closeness of personal relationships among members also contributes to the success of the team.

The latter is considered social capital. Bourdieu (1986) stated that capital can appear to be an economic capital where it is expressed in ownership of production equipment in physical units like money, land buildings, and other machinery. Capital can also appear to be a social capital where it is extracted in the form of empathy and social obligation, which is institutionalized as collective living, social role and responsibility, and another form of empathy creating a collective act. As a matter of fact, it can also materialize as cultural capital in the form of values and the wisdom of local culture.

Social capital is a resource that can be considered an investment for acquiring new resources. Moreover, social capital is a neutral resource facilitating every activity by which people could be better, and hence, depends on the utilization of social capital by individuals. Furthermore, social capital facilitates individual and group activities based on network, reciprocity, trust, and social norms (Coleman, 1988).

The above definition shows that social capital refers to networks, norms, and trust enabling one to do a collective action resulting in an increase in society's productivity. It follows that the interpretation given in this way focuses more on the sources of social capital, while other elements that signify social capital, like trust and reciprocity, are developed in a continuous process. Even though this definition considers community the main basis of analysis, individuals and households as members of the community are, of course, the actors of social capital. This view is in accord with the one of [Dowla \(2006\)](#), stating that social capital can be measured from the extent of trust and reciprocal social action in a society or among individuals. Therefore, the social capital concept developed in this way, approaching the subject with an emphasis on the individual element, which acts as the actor. Investment that may be generated from the social relation process may be related to the yield that follows from the market.

[Cox \(1995\)](#) defines social capital as a series of processes of relation-building among humans supported by networks, norms, and social trust that causes efficiency and effectiveness of coordination as well as cooperation to get the collective benefit.

The significance of social capital also appears in the Social Development Conference held in Copenhagen, which pursues social capital in three main agendas: poverty alleviation, productive workforce creation, and social integration improvement. At the conference, World Bank social economy experts had done a series of research in the area before and shared a similar notion of giving a positive response for the application of social capital as a development approach, which has a significant effect on the improvement of a community's economic productivity.

Social capital may be created from hundreds or thousands of interpersonal interactions grounded in human daily life and environment. Social capital is a phenomenon that is nurtured from the bottom and originates from people who interact with each other, outlining social relationships as well as trust-based networks, mutual reciprocity, and norms of action ([Syahyuti, 2008](#)).

From the above discussion, it follows that trust, network, and civil society are things generated by, but not part of, social capital. From this perspective, one may see that social capital is anything that facilitates individual or group activities caused by a network of relationships, reciprocity, trust, and social norms. This concept embraces both horizontal and vertical relationships as well as the behavior of people among everybody in the social system.

Now, we need to enter the discussion about the very core of the subject, that is, trust. Trust can be defined simply as the confident interaction in the sense that the counterpart will respond in the expected way, give support, and will not hurt. Therefore, the performer has a feeling of safety when interacting with the counterpart. The span of trust is defined as the circle of people among whom cooperative norms are operative. As far as trust is concerned, economic life highly depends on the morally binding social belief that eases transactions, empowers individual creativity, and is a reason for collective action ([Syahyuti, 2008](#)).

Relation of Social Capital and Economic Cost

From an economic perspective, institution, and social capital may both reduce transaction costs, resulting in efficiency. [Cersosimo \(2007\)](#) stated that an institution affects the economy through its effect on the costs of exchange and production. Together with existing technology, they will reduce the transaction and production costs, which are elements of the total cost. Moreover, social capital may reduce transaction costs through the mutual-entrusting property. Institutions can affect and set up rules via member people, while social capital may affect the transaction through the existence of mutual entrusting behavior among economic agents.

Furthermore, social relationships in the form of religion-induced (*silaturrahiim*) relationships, that is applied by some account officers of a few rural banks (BPR) in Yogyakarta, Indonesia, can reduce the extent of agency problems between banks and their debtors. The close relationship between the account officers and their customers enables them to explore as much important information needed for accomplishing credit analysis as possible so that the credit decision is accurate. In this situation, the bank that used to channel their fund in a small amount now, they are willing to finance a bigger amount of funds since the information is much closer to perfect.

[Cersosimo \(2007\)](#) investigated the strategic interaction between social and economic in a situation where there is a standard cooperative behavior. He stated that the absence of society's norm in the form

of cooperative behavior in economic concepts may result in the dissolution of benefits. This is so because of the inexistence of social capital. In Figure 1, the horizontal axis represents effort, e , showing the attempt of every producer to produce output, while the vertical axis denotes cost, $C_i(e)$. For the time being, for simplicity, it is assumed that the functional form representing the relationship between effort and cost is linear, which means that the higher the quality of production, the higher the effort needed to make, and hence, the cost.

The horizontal line d_i represents a cost to the producer when producing goods deviating from consumers' quality expectations. This line also shows producer loss resulted from not communicating truly, being uncooperative, with the consumer about the condition of the goods produced. This means that producers produce it in isolation. Moreover, the producer also bears another loss resulting from the termination of social capital benefit it gets as much as z if the producer does not cooperate with others when the production otherwise needs so. Therefore, $d_i + z$ is the total loss for being not cooperative. It shows that the magnitude of the total loss for a standard effort of e_2 is even greater than the cost of cooperation, $C_i(e_2)$.

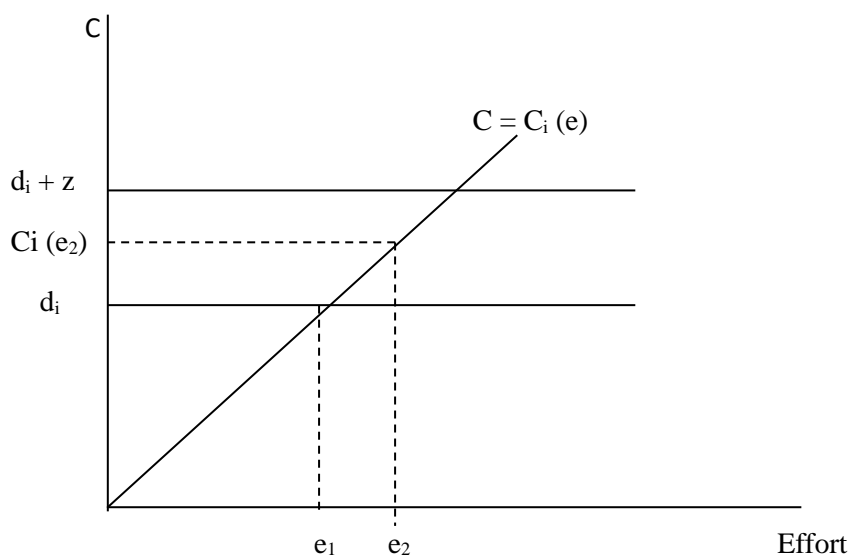


Figure 1. Social Capital and Cooperation in Economic

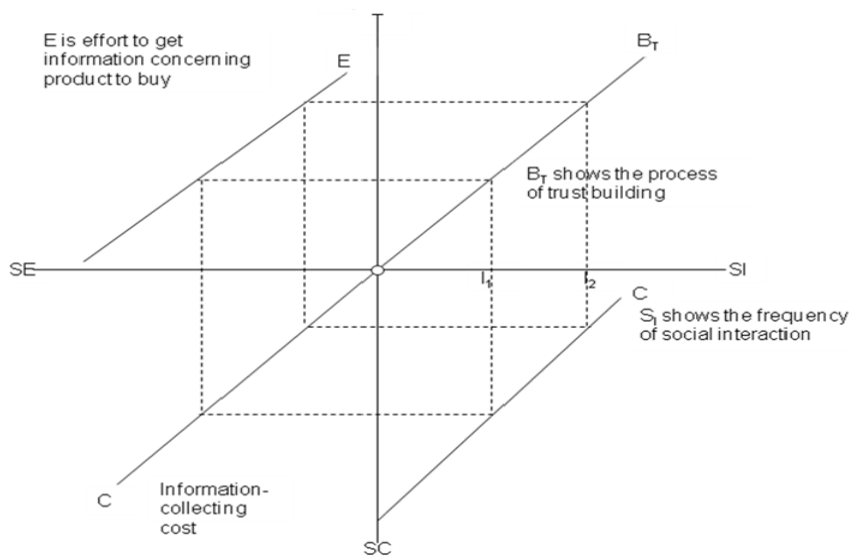


Figure 2. Social Cost, Social Interaction, Social Effort, and Trust Building

This concept shows the importance of cooperation, as an element of social capital, in determining production total cost. Aside from this, social capital can reduce search costs. This is represented in Figure 2. From the right panel, one may see the process of building trust: the higher the social interaction, the higher the trust. This corresponds to the up-left panel showing the relation between trust and searching efforts to get information concerning targeted products that will be purchased or to whom to buy the products. In the case of some products, the would-be buyer should collect information relating to the quality, compatibility, price, and other attributes of the product or the qualification of sellers. This activity has cost implications for the consumer. The situation will be different when the consumer has entrusted a colleague from whom the customer could get complete information. The customer does not need to search a lot, rather just to refer the colleagues. Of course, in recent times, people can find the information from Google. However, Google cannot give a guarantee that the information it provides is truly right. The lack of warranty makes customers need to find other source information that attaches to the warranty. This also relates to the bottom left panel, indicating the relationship between searching for information and its implied cost. Finally, it corresponds to the down-right panel representing the association of social interaction with information searching cost.

In Figure 2 above, the cost of doing social interaction does not show up. This is due to some reasons. First, in many cases, social interaction is intended for social life itself and does not relate to transactions. So, in this view, the economic implication is fully a by-product of the social objective. Second, assume if it's intended for an economic objective, the activity has multi-implication in that the cost cannot be attributed to only one result. Now, if one is concerned only with the final result and takes the down-right panel off of Figure 2, It will be shown like Figure 3.

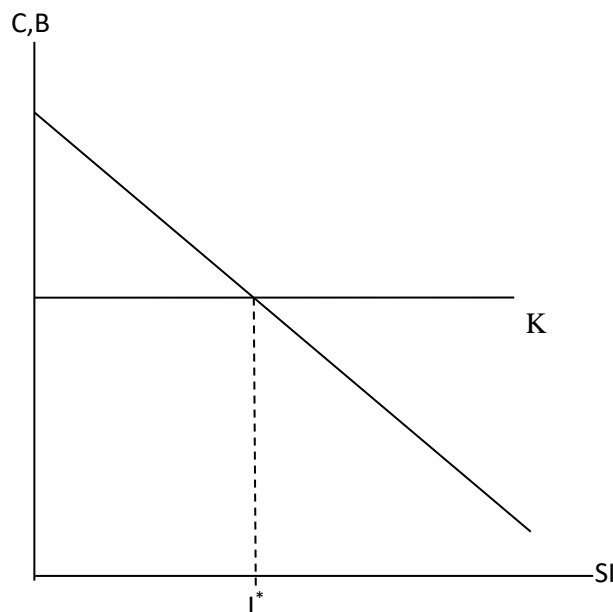


Figure 3. Social Interaction and Benefit

Assume that one could separate the benefit of this activity; this may be acquired by the amount of money saved due to the social interaction and networking. Assume further that the magnitude of the benefit is K. From this figure, one may be able to determine the minimum frequency of social interaction (SI) advantageous to them. This can be done by locating a point in the graph beyond which the amount of benefit outnumbers the cost. From Figure 3, one can see that the point is located over the point I* to the right.

Social Capital, Goodwill, Opportunity Cost and Revenue

The relationship between social capital and revenue can be traced from the social mechanism by which people are building goodwill as a special purpose vehicle for acquiring revenue. This, of course,

represents the other situation the one expressed in Figure 2. When an individual keeps doing something good, people in the community recognize it. After some time, people in the community can then judge the individual as a good man. With community judgment, the individual can acquire goodwill by which he/she may get a better deal from outside society, which generates revenue as the reward for good deeds. This happens because the members of outer society who want to make the deal need to search for information regarding the characteristics of the would-be partner, i.e., whether the latter has goodwill or not. This information will be acquired from the inner community where the would-be partners are or from the society with close relationships with them. Since the individual keeps doing a good deed, he/she will find it easier to get a deal with others, which means bigger revenue. The longer the time, the bigger the revenue would be.

On the other hand, when a person keeps doing bad things, people memorize it and will make a judgment that categorizes him/her as a bad person. In this situation, he will find it difficult to get a good deal with anyone. Only with a hard effort, the person may get a deal/revenue. But again, since his/her behavior is not good, this will hold the society's judgment over his/her characteristic of deviant. This makes the situation the person is facing getting tougher, and therefore, the yield the person could get is decreasing. This can be described in Figure 4.

Let R be reward/revenue, and Q be the quantity of action taken by the person, which is a positive function of time (t), meaning that the bigger the Q , the longer the time (t) it takes, T_U is shown the benefit the person would get from committing bad things. Point A shows an initial yield where the person starts his/her career as a crime man/woman. The magnitude represented by point A is high since nobody knows his/her characteristics yet. As people recognize his/her mentality, they are trying to avoid having to deal with him/her and spread the information about him/her to all who need which makes the person have increasingly difficult times, which makes the reward/revenue the person could decrease.

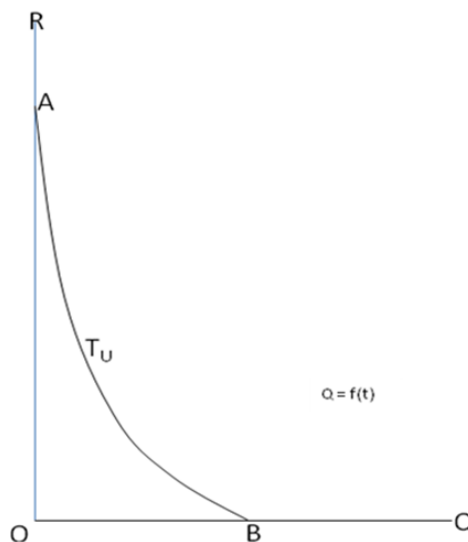


Figure 4. The Relationship between Reward and Quantity

Moreover, this will sacrifice the future deal/revenue as the opportunity cost to the person increases. This opportunity cost comes into existence due to the foregone deal/revenue if, otherwise, he/she tracks the good deeds. This is described in Figure 5. This figure shows the process by which an individual is trying to build goodwill. At the very beginning, he/she cannot yet get a reward/revenue from it since people don't know yet about his/her personality. At times, people have a chance to make an adequate observation of the person and start to make a deal with him/her and spread information concerning his/her good personality. From this time on, he/she gets an increasingly higher deal as a reward for his/her good deed; This tells why the curve, T_A , is upward sloping.

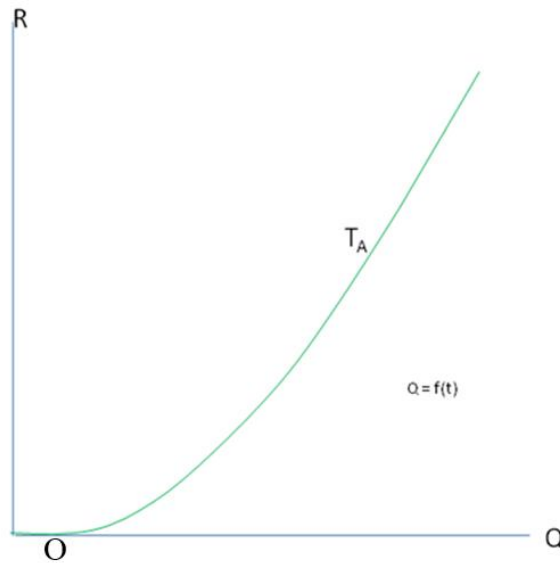


Figure 5. Building Goodwill

If suppose, however, the person takes a perceived good strategy, i.e., as long as he/she can do bad things and get deal/revenue from it, he/she will keep doing it, instead. When the deed can no longer generate a deal/revenue, then he/she starts to change his/her behavior. However, this approach does not necessarily work in this way. It is noteworthy to point out that the perception of the public/community toward him/her, by that time, has been materialized and cannot be wiped out instantly. This means that he/she needs to clear up "the sin" first, which actually takes time before getting a reward from the new approach.

The full description of this situation can be represented by combining Figure 4 and Figure 5 altogether as it is in Figure 6, from which one can make a comparison between both approaches. The process of redemption is shown by range B-C in the horizontal axis which is equivalent to some amount of time. Point C to the right represents the domain of reward/revenue the person could get from doing socially good deeds late. The path of reward/revenue is represented by curve MT_A .

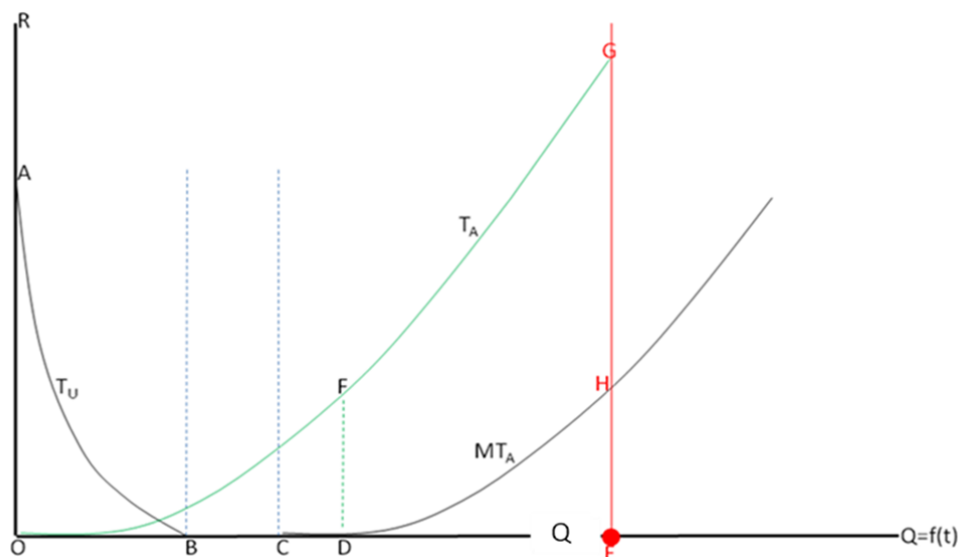


Figure 6. Reward Doing a Socially Good Deed

To see the comparison, it is important to see the magnitude of reward/revenue the person gets from adopting this strategy, first. The computation can be done by summing up the reward/revenue the person could get from committing a socially bad deed and from doing a good deed later on. For the first part, it can be found in [Figure 4](#), which is now brought in the very left panel of [Figure 6](#). This can be mathematically computed as the following:

$$\int_0^B f(t, T_U) = OAB \quad (1)$$

While the second part cannot be determined directly since it takes the person's life. It binds tightly with the boundary over which this process is taking place. It follows that the key to knowing the magnitude is to identify the time to which the person can do the good deed. For sure, it starts from point C, but, no one knows when it will last. Assume that it lasts at point E, representing some time in the future. The triple question marks represent the condition of no information about the time it ends. Having defined the boundary of the action in this way, one may be able to identify the amount of reward/revenue one could get from doing socially acceptable deeds late. From [Figure 6](#) the magnitude can be determined as:

$$\int_C^E f(t, MT_A) = CHE \quad (2)$$

The total amount of reward/revenue the person could get from committing a socially bad deed and from doing a good deed later on is:

$$\int_0^B f(t, T_U) + \int_C^E f(t, MT_A) = OAB + CHE \quad (3)$$

The comparison will be completed when one finds the magnitude of reward/revenue the person gets from doing a good deed all the way from the very beginning. The magnitude can be found in [Figure 5](#) or [Figure 6](#), which is:

$$\int_0^E f(t, T_A) = OGE$$

Thus, the difference between both processes can be defined in this way:

$$\begin{aligned} & \int_0^E f(t, T_A) - \left(\int_0^B f(t, T_U) + \int_C^E f(t, MT_A) \right) \\ & = OGE - (OAB + CHE) \end{aligned} \quad (4)$$

The difference presented in the last expression above cannot yet catch the intuitive meaning since the magnitude between both processes is expressed in different terms: the first is using T_A while the second is utilizing T_U and MT_A . So, one will have a difficult time determining which one is bigger. To overcome this obstacle, one is encouraged to convert the magnitude of T_U in terms of T_A . To do this, one should follow the following procedure:

$$\begin{aligned} \int_0^B f(t, T_A) &= \int_0^B (t, T_U) = OAB \\ \int_0^D f(t, T_A) &= OFD = OAB \end{aligned}$$

Having converted the magnitude of OAB in this way, one may easily find the difference between the both as in the following expression:

$$\begin{aligned} & \int_0^E f(t, T_A) - \left(\int_0^D f(t, T_A) + \int_C^E f(t, MT_A) \right) \\ & \left(\int_0^E f(t, T_A) - \int_0^D f(t, T_A) \right) - \int_C^E f(t, MT_A) \\ & \int_D^E f(t, T_A) - \int_C^E f(t, MT_A) \\ & = DFGE - CHE \end{aligned} \quad (5)$$

Now, let's refer to [Figure 6](#). From this figure, it can be practically said that:

$$\int_C^D f(t, MT_A) \rightarrow 0$$

This implies that the domain of the reward/revenue-generating function of MT_A starts from point D_{\leftarrow} to the right, implying that the difference of magnitude of the first process and of the second one can be found from the following:

$$\int_D^E f(t, T_A) - \int_{D_{\leftarrow}}^E f(t, MT_A) = \rightarrow DFGH \quad (6)$$

The difference expressed above can be considered the opportunity cost of adopting the second approach: keep doing bad deeds and change to doing good deeds later on. Any rational person prefers to avoid bearing this. Otherwise, he/she should forgo the revenue which is very big in size.

Theory of Local Wisdom

Local wisdom is an expression and behavior that has supreme-value content and is full of wisdom existing in the local community that's used for dealing with life problems in the community. In this view, local wisdom may be considered a concept of behavior dictated by a group of wisdom values. The values may be referred to religion, local philosophy, or the practice of society's life organizing that has been institutionalized in the local culture. In this research, religion is selected to be the reference of their behavior. This is because the ground area of the research has people with a solid understanding toward and practice of religion. Thus, local wisdom will be proxied by using the degree of religiosity.

Religiosity is a mental model that gets input from religious teaching; we call it a religious mental model. As a religious mental model, it is also an input to a decision machine for humans by which one decides to act. So, religiosity is a structure existing in the human mind that always refers to religious value as the fundamental benchmark. It follows that religious people will be behaving in accordance with religious teachings/values. The higher the degree of religiosity, the more compatible with religious values and the behavior will be. Religiosity consists of religious knowledge, religious belief, religious experience, ritual experience, and social-religious attitude.

Sasmita (2006) mentioned five dimensions of religious commitment. First, the belief dimension is a belief in principles of religious teaching. This dimension describes the extent to which a person accepts dogmatic teachings of religion such as belief in God, angle, and hereafter life. Second is religious practice, which consists of ritual and devotional. A ritual is a regular, repeated religious action. While devotional is suggested action recommended or obligated by religion, such as spreading the message and seeking the teachings. Third, religious knowledge. It is knowledge about the fundamental elements of the belief. It describes to what extent one knows one's religious teaching. It is, of course, directly related to one's effort to see one's religious teaching. Fourth, religious experience. It consists of feelings and experiences related to religious activity one is doing, such as a feeling that the prayer is getting listened to or approved. Five, religious effect. It describes how one practices the religious faith in daily life. It is also called the ethical dimension since it produces ethical conduct. It consists of behavior, attitude, and life orientation, such as the commitment to be honest, helpful, generous, loving (others) just the way he/she loves his/herself, nature-preserving, peace-promoting, and many others. All these conduct measure the extent to which one is motivated by religion's guidance.

Since the last expression of religiosity best fits local wisdom, the measurement of religiosity as the proxy of local wisdom is using this element. The consequence of this element of religiosity will be the actualization of religious doctrine into attitude, speech, life principles, opinions toward life, and actions, which, in turn, build local wisdom. Local wisdom is opinion toward life, ability, and life strategy expressed in activities of local people to deal with problems of physical and spiritual needs, through which it creates toughness and ability to grow in the boundary where those people are. This local wisdom may be expressed in social religiosity like mutual helpfulness (*ta'awun*), mutual guaranteeing (*takaful*), and mutual consideration or tolerance.

There are concepts in Islamic teaching about the structure of social life with the one of local wisdom. First, *ta'awun*, which is mutually helpfulness among members of the community. Second, *takaful*, is the feeling of responsibility toward others in the community. Third, *tadhomun*, is a feeling of considering others. Islamic teaching, which is coherent with the concept of local wisdom, has long been

practiced in a community in Madinah since they were educated to organize an ideal model of civil society, which is a community that gives high respect to civilization's virtues and values. This kind of community has a good social structure, which refers to morality principles that balance the rights and obligations of both individuals and society.

In fact, Islam teaches the followers to care for others in the neighborhood area. Even non-Moslems in the neighborhood area have a right to Moslem: Moslems should respect them, together build a harmonious life among them, and give them assistance in any difficulty they have. Prophet Muhammad (p.b.u.h.) said once, "*Whoever does not love others, Allah will not love him/her.*" Again, He said, "*Whoever eases the difficulty of worldly life of a Moslem, Allah will ease him/her in dealing with hereafter life difficulty. And whoever eases the poverty of the poor, Allah will ease him/her in this world and hereafter*".

Those teachings are operated in a series of tactical concepts serving as general guidance of actions. First, it is *at-takaful adapt*, in growing the feeling of sincerely loving others in the form of universal brotherhood among humans. Second, it is *at-takaful ilmi*, sharing and exchanging knowledge. Third, it builds a social life based on the principle of encouraging goodness and removing bad. Fourth, it is *at-takaful defeat*, maintaining security and serenity. Fifth, it maintains the morals of society. Lastly, it is *at-takaafil i'tishaadi*, which is responsible for pursuing common economic activities to reach common prosperity. To frame the discussion results, one may think that social capital, which consists of trust, social dignity, and religiosity, affects economic decisions in the form of repayment performance.

Hypothesis Development

According to our discussion presented before, it can be derived a set of hypotheses as the following:

H₁ : Religiosity positively affects the repayment performance

H₂ : Social dignity positively affects the repayment performance

H₃ : Social trust positively affects the repayment performance

Research Method

Sample

This research is designed as a survey research where each respondent is expected to answer a series of preset questions that serve as the instrument for data collection. The series of questions together explores the characteristics of variables under study: Religiosity, Social dignity, Trust, and Repayment performance. The object of the research is an Islamic microfinance institution in the form of BMT. The research is accomplished in the south region (Ex-residence) of Kedu, which are Kebumen and Purworejo.

The population is all the BMT residents in the areas. While the sampling technique follows a two-stage approach. The first stage is to select which BMT will be a sample. In this stage, the selection of the BMT follows a purposive sampling technique. This selection follows a series of criteria: Financial healthiness, pursuing social capital as a substitute for physical capital, and pursuing regular meetings with their customers. Among those BMTs, only 5 fulfill this criterion. The second stage is to withdraw the sample from those already selected BMTs. The technique is simple random sampling. This is done by getting the customer list from the institution and doing the lottery-like withdrawal. The total number of respondents from the above samples is 159 customers.

Variable Measurement

Four variables need to be operationalized, namely Religiosity, Social dignity, trust, and repayment performance. Religiosity is defined as having five aspects: (1) religious Practice, (2) Religious Belief, (3) Religious Knowledge, (4) Religious Feeling, and (5) Religious Effect. Social Dignity is approached through the following aspects: (1) Feeling of shamefulness for doing a socially unacceptable thing; (2) Awareness of the social status; (3) Socially balanced behavior. Trust that the BMT does not exploit is defined as (1) Feeling of being helped; (2) Perception that BMT is Cooperative; (3) Perception that BMT is Considerate; (4) Perception that BMT's fee (charged to the customer) is normal or fair. Those variables are measured by breaking down all the items showing concept-making elements, shown under

each variable, into questionnaires. The questionnaire list is then measured by the semantic scale. Repayment Performance is the criteria that are used by the BMTs. The banks already have categories of customers' performance status: good, normal, and not good.

Since the measurement instrument is not a standard one, there is a need to check the validity and reliability of it. From the validity test, it is found that all items of the questionnaire are valid, the correlation being significant at 5%, except one item in religiosity; the consequence is to drop it. Since the remaining items in the questionnaire are twenty-one items, which is quite a lot, the effect of dropping this question is insignificant. So the instrument can still be used. In the reliability test, it is found that the remaining items have the measure of Cronbach alpha of .67, which means that the instrument is reliable.

Model Estimation

Our study employs a quantitative method using a multinomial logit. The multinomial logit can be expressed by the following model:

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_i \quad (7)$$

Where Y is repayment performance, X is religiosity, X₂ is social dignity, and X₃ is trust. Since the dependent variable, Y, is measured in a multinomial scale, it implies that the estimation procedure is using a multinomial *logit* model as follows:

$$P(Y_i = j) = \frac{e^{\beta_j' X_j}}{\sum_{k=0}^C e^{\beta_k' X_k}}$$

The marginal effect can be found by differentiating P with respect to X_i:

$$\frac{\partial P_j}{\partial X_i} = P_j [\beta_j - \sum_k P_k \beta_k] \quad (8)$$

The goodness-of-fit test may be found directly from log of the likelihood function in equation (9) below:

$$\ln L = \sum_i \sum_{j=0}^J d_{ij} \ln Prob(Y_i = j) \quad (9)$$

While the restricted log of the likelihood function is:

$$\ln L_0 = \sum_{j=0}^J n_j \ln P_j \quad (10)$$

Results and Discussion

Table 1 presents the distribution of repayment performance. Of 159, 70 customers (44%) paid on time (normal repayment performance). Customers who paid before the due date (good repayment performance) were 67 customers (42.16%). Customers who paid late (not good repayment performance) were 22 customers (13.84%). However, overall, customers of Islamic micro-financing (BMT) pay well.

Table 1. Distribution of Repayment performance

Repayment Performance	Frequency	Percentage
Not good	22	13.84%
Normal	70	44%
Good	67	42.16%
Total	159	100%

Table 2 presents multinomial logit. Based on the result presented in **Table 2**, we may make a discussion like in the following sections. We begin with results from respondents having not-good performance. Religiosity affects repayment performance in this category. More specifically, if the category of religiosity one-step increases, there will be a drop in the chance of committing not-good

performance by 0.006 (.6%) with a significant level of .3%. Social Dignity does affect repayment performance. When the category of social dignity one-step increases, there will be a drop in the chance of committing not-good performance by 0.026 (2.6%) with a significant level of 1.1%. Trust does affect repayment performance. The chance of committing not-good performance decreases by 0.016 (2.6%), with a significant level of 1.6%, following a one-step up-grade in trust

We next turn to results from respondents having normal performance. In this category, religiosity also has a significant impact on repayment performance. Specifically, when religiosity may be one step up-graded, it lowers the chance of making normal repayment, from good one, drops by 9.8% with a 1.6% level of significance. The chance of committing normal repayment, from a good one, drops by 8.2%, with a 2.6% level of significance, following the one-step increase in social dignity. Therefore, one could say that social dignity does affect repayment performance. Trust in the BMTs has a serious impact on repayment performance. Supposedly, a one-step increase in it results in a drop in the probability of doing the normal payment, which means lower performance since it counts from good performance by 2.3%, with a 2.5% level of significant

Table 2. Results of Parameter Estimation

Dependent Variable, Y, is Financing Repayment Performance							
Category	Variable	Coef.	Std. Error	Wald Test	Df	Sig. Level	Exp(B)
Not good	Intercept	42.83	10.67	16.89	1	0.000	
	Religiosity	-5.061	1.68	9.05	1	0.003	0.006
	Social Dignity	-3.634	1.43	6.46	1	0.011	0.026
	Trust	-6.379	2.08	9.40	1	0.002	0.002
Normal	Intercept	28.547	8.77	10.59	1	0.001	
	Religiosity	-2.323	0.97	5.78	1	0.016	0.098
	Social Dignity	-2.498	1.12	4.95	1	0.026	0.082
	Trust	-3.753	1.67	5.03	1	0.025	0.023

The benchmark is the "good" category.

Discussion

The religiosity variable in both categories has serious implications for repayment performance. Recall that religiosity is measured not only from rituality but also from its effect on daily life behavior. This fits the common axiom that Islam is working to improve morality. As morality improves, one sees that the dimension of life is not only this worldly life. According to Islamic teaching, Muslims are not supposed to be concerned with worldly life only since it is just temporary in nature. While the never-ending life is the one in the hereafter, implying that one should make a balanced life between the worldly and the hereafter. Financial delinquency implicates a drop in *maslahah*, which furthers the performer away from *falah*, the ultimate goal of every Moslem that sacrificing the hereafter life for the worldly one (Misanam et al., 2008). Moslems do not want this to happen. The consequence is to do righteously even in economic areas, including repayment of the financing.

Social dignity also has a significant impact on repayment performance. If one needs a high social status, he/she has to be concerned about his reputation in society; that is, he/she must build a good record by doing only good things. Since BMT has a very close relationship with people in society, any bad news will be easily leaked to people in the community and will spread through the social mechanism of word of mouth, making the performers of bad repayment feel uncomfortable and shameful. This is the social mechanism that forces anybody to avoid doing socially unacceptable things.

Sometimes, a person commits to doing socially unacceptable things for instant reward. But this creates future costs in the form of foregone benefits one would otherwise get in the future as social rewards. In fact, the size of the present value of the future reward will be quite big and continue flowing into one's account. It's irrational to get something small at the expense of something much bigger.

Trust has a significant impact on repayment performance. As it is expected before, trust is able to lift up the repayment performance. In this case, the customers feel that BMT is really financially helping them. Accordingly, they perceive that BMT is their partner when they're in need. Therefore, they think

that they need to preserve BMT from being ruined. This is expressed in the positive cooperation in the repayment of financing.

Another thing to point out is that the magnitude of the effect of religiosity is quite big. It is the biggest in the normal performance category, while in the not-good category, it ranks second. This shows that religiosity is a very important thing that drives one to perform in a good manner. In Islam, whoever dies leaving an unpaid loan, the loan will still count even in the hereafter.

Seeing the behavior of socially religious people like it is presented by the respondents of this research, one may be able to propose a new financing scheme. As mentioned in section A above, the primary cause for micro businessmen having no access to financial institutions is the absence of physical collateral. It seems that there is asymmetric information between businessmen of this kind and the banks. On one hand, the businessmen have perfect information about his/her commitment to repay the financing/loan. On the other hand, banks do not see it. A good strategy to deal with this kind of asymmetrical information is to make a rigorous assessment as to what extent one has religiosity.

As far as religiosity is concerned, there are typical groups of social and religious gatherings in the Javanese rural areas called *majlis ta'lim*, led by religious figures (*kyai*), which could be a source of information concerning members' credibility. There are at least two reasons why this group is considered a reference group, first, there is a regular meeting in a week that fertilizes the formation of social capital among the members. Second, people are very respectful to the religious leader, so their behavior is highly influenced by him. In this situation, of course, the leader knows almost completely the attitude of every member of the *majlis ta'lim* he is leading. This knowledge is very important to supply the bank with additional information about the member who wants to get financing/loan from the bank. This information can, therefore, reduce the extent of asymmetric information between banks and loan proposers regarding whether the loan proposers are good people or not.

From the discussion made in several segments above, it can be safely said that social capital in the form of social dignity, religiosity/local wisdom, and trust in BMT do affect repayment performance. This evidence may compare to the former practice that was once applied by Bank Indonesia: mutual guaranteeing among group members (*tanggung renteng*). This system worked on a group of micro businessmen who got loans from commercial banks supported by Bank Indonesia. The loan scheme is a group loan aiming that every member of the group should be responsible for the repayment of not only one's loan but also the group loan. If there is a member, at a given time, cannot pay the balance, the remaining members are willing to take over the balance.

The scheme cannot work properly since the existing groups are those that are formed instantly. The results of this research point to the importance of social capital in the form of local wisdom, dignity, and trust to influence the performance of financing repayment. This implies that the existence of the group does not have any role in determining the repayment performance. Rather, the social capital formed during interaction in the group does matter. Thus, it should be emphasized the difference between the group with social capital, which is formed naturally, and the one with no social capital, which is usually formed instantly.

The latter is formed to fulfill the requirement of a loan scheme in which the existence of a group is substituted for physical capital. In this kind of group, there is no solid personal relationship among members. The relationship is formal and is convinced for transactional purposes only, implying that there are no emotional bindings among members. This further implies that no empathy was found during the interaction. As a consequence, when there is a member of the group that cannot pay the balance, the others just leave it unpaid even until the end of the loan period.

As far as social capital is concerned, there are ample groups in the country that carry social capital in it, among others are a group of *majlis* tales that have been discussed before and *artisan* arrangement. By and large, the latter is carried out regularly, usually monthly, by a group of people. In this arrangement, every member brings an agreed amount of money while the manager collects and arranges it. Upon collecting the money, the manager randomly withdraws one of the member's names, who has the right to bring the collected money home.

This mechanism has been a means that is usually used to accumulate money or to get money to buy something unaffordable. This could be carried out by a community in a neighborhood area, or by workers in a company in a division or unit of it or any kind of group. If the group can survive and succeed, it can grab a social capital formed during the interaction among members. The later

development of the arrangement is to use it as a way for micro businessmen in rural areas to support their liquidity.

Since this arrangement has been a common practice in rural areas and, therefore, contains social capital, it is important that it be formed into a formal or official social capital by which group members can get loans from a bank. The mechanism, of course, needs to change from pay-and-get-later to get-and-pay-later. In the new mechanism, every member gets financing from the bank and pays on a monthly basis like what he/she is doing in a usual artisan arrangement.

Considering this, it is important that the government set up an institution or appoint one that already exists to certify the *arisan* arrangements. The grading of certification should be based on the content of social capital. To what extent does the social relationship bind all members of the group and nurture the growing empathy among them? The certification should also consider the extent to which the *arisan* arrangement is adopting the prudential measures. With this certification, the existing social capital that was used to be informal will then be a formal and authorized one by which the members can use it for the substitution of physical collateral.

Conclusion

Customers of microfinancing, including Islamic microfinancing, are small and micro businesses. These customers face the main obstacle of not being able to provide physical collateral. Accordingly, this paper tries to develop an alternative method for loan repayment. One pivotal method is social capital.

The aforementioned result, discussion, and extension provide a new sight of banking practice, especially in the obligation of providing physical collateral. This has long been a barrier for micro businessmen/women to get financing/loans from the institution. This research uncovered strong evidence of social capital, implying the emergence of the possibility to substitute physical collateral with social one. It is recommended that the government take any action to make the social capital materialized, which opens access for micro businessmen/women to get loans from banks.

References

- Bank Indonesia. (1979). *Kredit investasi kecil (KIK) kredit modal kerja permanen (KMKP) apa siapa, bagaimana*, Jakarta, Bank Indonesia.
- Bastelaer, T. V. (2000). Does social capital facilitate the poor's access to credit? A review of the microeconomic literature. *Social Capital Initiative, Working Paper No. 8, The World Bank*.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Eds.), *Handbook of theory and research for the sociology of education* (pp. 241-258). Greenwood.
- Cersosimo, D. N. R. (2007). Social Capital in Economics. In D. Castiglione, J. W. V. Deth, & G. Wolleb (Eds.), *The handbook of social capital*. Oxford University Press
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94(5), 95-121.
- Cox, E. (1995). A truly civil society. *The Boyer Lectures, UNSW School of Public Health and Community Medicine, The WWW Virtual Library*.
- Dowla, A. (2006). *In credit we trust: Building social capital by Grameen Bank in Bangladesh*.
- Dyah, E. S. (2020). Keputusan memilih pembiayaan murabahah, *Wadiah Jurnal Perbankan Syariah*, 4(1), 21-40.
- Fakhrunnas, F., Astuti, R. D., & Hendrieanto., M. B. (2022). Determinants of nonperforming financing in Indonesian Islamic banks: A regional and sectoral analysis. *Banks and Bank Systems*, 17(4), 72-86.
- Grootaert, C. (1999). Social capital, household welfare and poverty in Indonesia. *Policy Research Working Paper, Research Policy No. 2148, Social Development Department, The World Bank*.
- Hidayah., N & Tabrani., (2019), Non-performing finance in sharia financial institutions in Indonesia. *Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah*, 11(1), 117-134.
- Santoso, H. (1979). Masalah dan kebijakan kredit BIMAS. *Laporan Hasil Penelitian, Darussalam*.
- IMF. (1999). Indonesia: Supplementary memorandum of economic and financial policies, fourth review under the extended arrangement. <https://www.imf.org/external/np/loi/1999/031699.htm>

- Kurnia, W. (2007). Analisis pengaruh social capital terhadap repayment rate lembaga keuangan mikro syariah (Studi kasus KBMT Wihdatul Ummah, Bogor). *Skripsi Fakultas Ekonomi dan manajemen IPB*.
- Martowijoyo, S. (1999). Kinerja lembaga keuangan mikro dan perilaku masyarakat pedesaan. *Bulletin of Monetary Economics and Banking*, 2(1), 45-53.
- Misanam, M., Suseno, P., & Hendrieanto, M. B. (2008). *Ekonomi Islam*. PT Rajagrafindo Persada.
- Mulyawan, H. (2009). Perkembangan kebijakan program kredit usaha tani 1985-1999. *Laporan Penelitian, Universitas Diponegoro, Semarang*.
- Olomola, A. S. (2008). *Social capital, microfinance group performance and poverty implications in Nigeria*.
- Pranadji, T. (2006). Penguatan modal sosial untuk pemberdayaan masyarakat pedesaan dalam pengelolaan agroekosistem lahan kering. *Jurnal Agroekonomi*, 24(2), 178-206. <https://doi.org/10.21082/jae.v24n2.2006.178-206>
- Priyadi, U., Utami, K. D. S., Muhammad, R., & Nugraheni, P. (2021). Determinants of credit risk of Indonesian Shari'ah rural banks. *ISRA International Journal of Islamic Finance*, 13(3), 284-301. <https://doi.org/10.1108/IJIF-09-2019-0134>
- Sasmita, M. A. (2006). *Dimensi-dimensi spiritual*.
- Subaki, A., Baehaqie, I., & Zamzany, F. R. (2011). Pengaruh modal sosial terhadap kinerja lembaga keuangan mikro syari'ah (LKMS) dan kesejahteraan masyarakat pada LKMS di Pondok Pesantren Al-Islah, Kabupaten Cirebon, Jawa Barat. *Prosiding Seminar Internasional dan Call For Papers Towards Excellent Small Business, Yogyakarta*.
- Sudibia, I. K., Yuliarmi, N. Y., & Sintaasih, D. K. (2016). Pemberdayaan masyarakat desa adat dalam mendukung eksistensi lembaga perkreditan desa di Provinsi Bali. *Laporan Penelitian Unggulan Perguruan Tinggi, Universitas Udayana*.
- Syahyuti. (2008). Peranan modal sosial (*social capital*) dalam perdagangan hasil pertanian. *Forum Penelitian Agro Ekonomi*, 26(1), 32-43.
- Pranadji, T. (2006). *Penguatan modal sosial untuk pemberdayaan masyarakat pedesaan dalam pengelolaan agroekosistem lahan kering*. *Jurnal Agro Ekonomi*, 24(2), 178-206.
- Widarjono, A., Wijayanti, D., & Suharto, S. (2022). Funding liquidity risk and asset risk of Indonesian Islamic rural banks. *Cogent Economics & Finance*, 10(1). <https://doi.org/10.1080/23322039.2022.2059911>