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EXPLORING RUDIMENTS OF BEHAVIORAL FINANCE: GROUP DYNAMICS AND MICROFINANCING

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INTRODUCTION

Microfinance facilities have evolved since its introduction in the 1980s. It has acquired a universal consensus as an efficient tool for socioeconomic growth and alleviation of poverty. The microfinance agenda spans from investment to growth in household's economic wellbeing i.e. client' health, nutrition, life standard and education of children (Robinson, 2001, Littlefield, et al., 2003). These microfinance activities have led to the accomplishment of a vast number of growth objectives involving women entrepreneur, their satisfaction of self-employment, formation of new firms, and distribution of income and well-being. According to Otero (1998), micro finance provides financial services to the low income and poor self-employed people while Schreiner and Colombet (2001, p. 339) state that micro finance focus on offering deposits and small loans for deprived households neglected by banks. Littlefield et al (2003) further claimed that micro finance is a crucial approach to strengthen particularly poor women as it enhances their capability to make decisions independently, develop their life self-efficacy, self-esteem and dignity. Bakar et al (2012) commented that by providing financial services, low income and poor people could participate in the economic market by running their own micro SMEs, hence improving their households' income and making decisions independently. The objective of this paper is to explore the factors that related to micro financing success and to get insight into the issues pertaining to micro financing process in effective bank repayment. In general to arrive at a conceptual framework. The study followed secondary data, with the support of triangulated data sources from different regions to arrive at a conceptual framework providing insight into the issues related to loan non repayment in banking sector. The findings may be applicable to those micro financing institutions which practice loan lending to their customers, whom to be aware of the factors correlated to loan non repayment.

REVIEW OF LITERATURE

To arrive at the conceptual framework on the issue cited. This paper has incorporated several factors. These factors are closely knit with the loan repayment issue in the banking sector. Such factors can be elaborated as;

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Need of Studying Group Dynamics in Microfinance

In recent years micro finance institutions (MFIs) have become one of the most important instruments of development policy. The idea of micro finance arose in the mid-70s when Mohammad Yunus started a pilot scheme lending small amounts of money to villagers in Bangladesh who, due to a lack of collateral, had no access to conventional loans. Encouraged by high repayment rates, he founded the Grameen Bank to run such schemes on a larger scale. Today the Grameen Bank lends to about 2.4 million people. Since Grameen's early successes, the concept of microcredits has spread throughout the world and a plethora of organizations providing small loans to the poor have come into being. 1 Microfinance institutions are most widespread in less developed countries, although they are by no means confined to them. Micro lending programs have recently been introduced in transition economies like Bosnia and Russia and even in western economies like Canada and the United States. 2 There are more than 5 million households served by microcredit schemes in the world today (Ghatak 1999).

Microfinance is often defined as financial services for poor and low-income clients offered by different types of service providers. In practice, the term is often used more narrowly to refer to loans and other services from providers that identify themselves as "micro finance institutions" (MFIs). Microfinance institutions are primarily expected to provide various a permanent access to appropriate financial services such as credit, savings, micro-insurance, remittances, leasing to low-income clients including consumers and the self-employed, who traditionally lack access to banking and related services. It is rather an important tool for the eradication of poverty (Jegatheesan, Ganesh, & Kumar, 2011).

Micro-Finance Program intends to arrest the most burning issues i.e. poverty and unemployment, which are the main hurdles in the process of development. Micro-Finance can be defined as the provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi-urban or urban areas for enabling them to raise their income levels and improve living standards (Ghatak 1999).

The existing literature is abundant of theoretical models on various micro-lending mechanisms but is scarce of empirical studies. Still there is less evidence what factors induce the loan repayment. This dissertation studies the multi-stage process between the borrowers and verifies what components of the joint-liability approach are most important in driving high repayment rates, and what components show have no impact on the repayment behavior. Furthermore, it analyzes to what extent the institutional and cultural settings affect the group dynamics and what are the factors whose impact stays stable (Von, 2004).

The dynamics of the repayment mechanisms are taken into consideration. At the end of a lending period, when the returns of all projects are realized, the

borrowers decide whether to contribute their shares of the total amount due. If all group members choose the same strategy, contribute or defect. The outcome is straightforward. The group repays or defaults. If the group members chose different strategies, they have to go through the second stage of the repayment sub-game. Those borrowers ready to contribute their shares need to compare the discounted benefits of having access to further loans with the cost of repaying the outstanding loan(s). Accordingly, they have to decide whether to pressure the delinquent partner(s) and force him (them) to repay. Alternatively, they have to decide whether to make up for the difference and exclude the defaulters (Von, 2004).

Understanding groups and group dynamics are an important factor in managerial decision making. According to Barton and Martin (1994), to understand the factors that affect work group behavior, groups should be seen as "systems that use inputs, engage in various processes, or transformations, and produce outcomes" (p. 473). Those inputs include the factors of group composition, member roles and group size, in the processes, group norms, group cohesiveness and group development are relevant and in the outcomes, group performance, member need satisfaction and future work group compatibility play an important role (Barton and Martin (1994).

Theoretical models (Ghatak 1999) argue that the key factor of the group-lending scheme is that types similar with respect to their repayment risk will group together. Since it is difficult to measure each person's risk attitude. An individual's risk quality is approximated by the characteristics of the borrower's business project. Group Dynamics has been largely neglected when the impacts of micro finance on poverty reduction are assessed. It is hoped that micro finance groups using group dynamics can perform efficiently in credit administration. Group approach to micro finance administration is believed to possess some potential in reducing credit leakages.

Group Dynamics in Money Lending and Loan Repayment

Group-based lending, as the term already indicates, requires individuals to organize themselves into groups in order to gain access to financial services from a program. Normally, group-based lending works as follows. Loans are made to individuals, but all members of the group are held responsible for the loan repayment (joint liability principle). In some programs of loans are given strictly for a certain period of time (usually a year), while in other programs the members are allowed to decide the loan terms themselves. Repayments are made on a weekly or monthly basis; this is done at group meetings or directly to the branches of the micro finance institution. Nowadays, worldwide many programs use group-based lending to forward loans to the poor. Most existing literature tries to explain the success of group-based lending. Economists have developed theoretical models that explain this success by showing that group-based lending mitigates the asymmetry of information problems of financial markets, such as adverse selection problems, moral hazard, and enforcement problems (Stiglitz, 1990; Besley and Coate, 1995; Ghatak, 1999).

Firstly, groups are formed on the basis of a self-selection process of members. There is the problem of adverse selection, i.e. the risk of a borrower is ascertained as members are self and co-selected (Besley, 1994; Yaron, 1994). To this end group members screen the behavioral integrity and creditworthiness of each other before they form a group. Thus, screening by group members may help to mitigate the adverse selection problem of financial institutions. Ghatak and Guinnane, (1999) review the key mechanisms proposed by various theories through which joint liability could improve repayment performance rates and the welfare of credit constrained borrowers. They suggest that to alleviate the problems facing borrowers, mechanisms such as screening, monitoring, auditing and enforcement can effectively increase repayment.

Secondly, once groups have been formed, members agree to monitor each other's economic activities. There is problem of moral hazards, i.e. it makes sure of proper utilization of loan so that a borrower is in a position to repay within the due date, and through the peer monitoring process, they may be able to mitigate the moral hazard problem (Verhelle and Berlage, 2003). In an effort to fully explain the success of JLL in mitigating moral hazard and enhancing repayment, theorists have proposed models that attempt to explain how this is possible. Stiglitz (1990) shows how peer monitoring under joint liability lending can be used to mitigate moral hazard. Through JLL, it is assumed that group members, who are jointly liable for the loan, will be induced to monitor each other's investment decisions and effort, thereby, reducing the cost of monitoring by the lending institution and consequently mitigating moral hazard. Thus, borrowers are given tasks of both managing their loan, and monitoring peers to ensure that they take safe decisions that would protect them from falling into repayment problems. Fischer and Ghatak propose utilizing the local information social capital that exists among borrowers to reduce prevalence of default (Fischer and Ghatak, 2010).

Finally, once individual members' output has been realized, group members may enforce repayment against defaulting members for which they may use social sanctions and pressure mechanisms. There is the problem of enforcement, i.e. pressure mechanism is operative on willful defaulters (Verhelle and Berlage, 2003). Joint liability groups can handle these three problems in a better and cost-effective manner due to high informational flow (on each other' assets, capabilities and character traits) between the group members as they belong to the same community or locality and have potential to exert pressure on group members (Ghatak and Guinnane, 1999).

Group-based lending contracts effectively make a borrower's neighbors' co-signers to loans, mitigating problems created by informational asymmetries such as adverse selection, moral hazard and enforcement. Thus, in group-lending programs the functions of screening, monitoring and enforcing repayments is to a large extent transferred from the bank agent to group members.

Mitigation of Adverse Selection Problems

One of the advantages of group-based lending is the mitigation of the adverse selection problem, which in turn reduces the problem of credit rationing and brings the safe borrowers back to the credit market. As in the process of group formation group members are expected to screen each other. Theoretical and empirical studies show that people try to investigate each other's behavioral integrity and creditworthiness with the help of existing social networks before they allow others to join their group. Through peer screening they try to prevent irresponsible and credit risky individuals from joining their group.

The roles of peer selection in mitigating adverse selection and hence moral hazard is discussed by Ghatak (1999b). Ghatak argues that despite information asymmetry, joint liability lending allows for pare to superior equilibrium in the credit markets if group formation is conducted appropriately. Ghatak shows how groups formed through self-selection will result into members with homogenous quality. Ghatak shows that through the associative matching process, groups end up with less risk borrowers, directly reducing moral hazard, which leads to a lower equilibrium interest rate leading to a pare to superior outcome relative to individual lending. The significance of peers monitoring in improving repayments in group credit is highlighted by a number of authors. Stiglitz (1990), for example, observes that the major problem facing MFIs is ensuring that borrowers exercise prudence in the use of the funds so that the likelihood of repayments is enhanced. Stiglitz notes that a partial solution to this problem is peer monitoring: giving neighbors or group members the responsibility to monitor each other. The incentives for peer monitoring comes from the fact that peers are supposed to pay loans for any defaulting group members. Studying the incentive rationale for the use of group lending as a method of financing liquidity-constrained entrepreneurs, Che (2002) observes that the joint liability lowers the liquidity risk of default but create a free-riding problem. Che points out that in the static setting, the free-riding problem dominates the liquidity risk effect. Thus making group lending unattractive. However, when the projects are repeated over time, the joint liability feature provides the group members with a credible means of exercising peer monitoring and sanctioning, which can make the group lending attractive, relative to individual lending.

Mitigation of Moral Hazard Problems

Another advantage of group based lending is the mitigation of the moral hazard problem. This is an incentive rather than a selection problem. After members have received a loan they have to monitor each other to make sure that every member has invested the loan in a safe project, which will guarantee repayment. Members make use of their social ties to acquire the necessary information and create social sanctions and pressure on non-performing members. This is a costly activity for the

members, as they have to spend time and energy monitoring each other. However, the creditor can now afford to lower the interest rate, which will offset to some extent the burden of these costs for the borrowers. Also, the micro finance institute is able to lower the interest rate as its monitoring costs have been shifted to members and the probability of repayment of its loans has increased.

Mitigation of Costly State Verification

The group-based lending contract also provides appropriate incentives to avoid the problem of costly state verification. This is sometimes called ex-post moral hazard. It occurs once actions or efforts have been undertaken and returns of the product activity have been realized. Yet, the lender cannot observe the yield from the project. The borrower might find it optimal to divert funds for repayment of the loan to other purposes and default. In group-based lending schemes group members live close to each other and they are well informed of each other's economic activities. Therefore, they face a lower cost of verifying each other's output as compared to a distant lender. Moreover, each member has the incentive to audit his partner.

Peer Pressure

Peer pressure is a mechanism group members can use in the process of mitigating moral hazard and enforcing punctual repayment. In order to secure future access, members are obliged to monitor each other. Once output is realized and a member proves unwilling to repay, other members can use peer pressure and social sanctions to make him repay.

The roles of peer pressure is discussed by Diagne (1998). Diagne proposes a peer pressure model in which borrowers are incompletely informed about their partner's willingness to apply or tolerate social sanctions and shows how peer pressure can be used to mitigate default in situations where potential defaulters are intolerant of sanctions. An 6 extension of the model by Diagne (1998) and Paxton (1996) further proposes the importance of dynamic incentives and incentive match in inducing safe behavior among borrowers. The role of sanctions in enhancing the willingness of individuals to repay their loans is also discussed in Besley and Coate (1995). They show how moderately successful group members may willfully decide not to repay their loans because of the burden of having to repay the unsuccessful members loan. They note however, that in the presence of strong social ties among group members, wilful default is minimized because potential defaulters are afraid of facing sanctions from both the bank and the community.

Group lending mechanism has several inherent implicit economies. The cost of screening and monitoring for creditors can be low as a result of close familiarity with borrowers. In this case, information is easy to get because of living near the borrower or being part of the same group. Members know each other's" actions,

types, and states than outsiders. Furthermore, social pressure among members of the same group may be high and more efficient means of motivating loan repayment. Consequently many financial institutions apply group lending principles to achieve the advantages of peer groups when extending and recovering credit from clients.

Social ties and connections among members play a role in facilitating the screening, monitoring and enforcement process. Thus, according to the theoretical literature the three problems related to asymmetry of information of formal financial institutions – i.e. adverse selection, moral hazard and enforcement problems – can be alleviated by group-based lending mechanisms. Yet, there are very few empirical studies to verify the claims of these theoretical models. Hence, micro finance through small groups have evolved as an accepted institutional framework to provide financial services to the poor in the absence of any security.

Challenges Over Group Dynamics in Loan Repayment

The groups use all possible means to ensure on time repayment. A better repayment performance is expected from groups which form their own SHG (Sharma and Zeller, 1997), but contrary to a-priori expectation, in some cases it is found that self-selection raises the probability of arrears or does not affect the repayment rate of the groups (Zeller, 1998; Verhelle and Berlage, 2003; Von, 2004). Many researchers have validated the success of peer monitoring in relation to better repayment performance (Hossain, 1988; Siamwalla et al., 1990; Goetz and Sen Gupta, 1996; Manimekalai, 2004).

But, the high frequency of meetings does not necessarily always lead to high level of mutual control (Von, 2004). Diverse findings have surfaced in relation to dynamic incentive of promised access to increasingly larger outside credit to (Data and Raman, 2001; Verhelle and Berlage, 2003; Von, 2004).

Domino Effect

In group-based lending programs the possibility of collusion of all members not to repay cannot be ruled out. The very assumption of joint liability might make the decision for or against loan repayment a strategic one that is taken by all borrowers. Apparently, a group member will not be prepared to repay his loan if he expects other members to default, because if this happens he will be denied access to additional credit or his share in making payments for others increases. This is also called the domino effect, which may take place when defaulting borrowers inflict negative externalities on good borrowers, inducing others not to repay whereas they might have repaid in case of individual lending (Bratton 1986; Paxton and Graham 2000).

Joint Liability is Not Optimal

In group-based lending the joint liability contract is seen as the main driving force for members to actively monitor and reinforce repayment. Yet, denying future loans as a punishment is a deadweight loss to a borrower, when this borrower has enough output to pay for himself but not for his defaulting members. Rai and Sjöström (2000) therefore argues that the joint liability mechanism is not optimal and has to be augmented by cross-reporting. Through cross-reporting the successful borrower may be induced to help to repay the loans of unsuccessful borrowers when he can minimize this loss.

Matching Problems Between Demand and Supply

Another negative influence on repayment occurs when the credit terms and conditions are no longer appropriate for each member, creating an inherent "matching problem" as group-based lending is repeated over time (Paxton et al., 39 2000). At the beginning of a lending program, borrowers may be able to find group members with the same demand for loans and a similar supply, but the probability of the same group desiring consecutive loans with similar loan amounts diminishes over time. Thus, harmonizing supply and demand for credit among group members becomes more and more challenging over time and may result in defaulting if one or more members are no longer satisfied. This matching problem may occur when different members have received different amounts of loans and those who wished to get a smaller amount of loans may lose the incentive to cover for their defaulting co-members, especially when the defaulting members have obtained larger amounts of money. Therefore, in some lending programs the loan terms are restricted by what the group feels it can guarantee jointly, so clients with growing businesses as compared to their peers may find that the group contract impedes their activities (Madajewicz, 1999).

Limitations of Social Collateral

Similar considerations apply to social collateral composed of social sanctions – the borrower may find it terrible if his neighbors stop talking to him, or he may not be bothered about such a prospect. It is then important to investigate whether it is possible for the lender to know the value of sanctions to borrowers. Yet, in practice it is only insiders who can impose such sanctions – not outsiders. Therefore, in order to enforce repayment, MFIs are forced to rely on other members to actually compel defaulting members, but this involves the risk of a possible collusion between defaulters, other group members, and sometimes between defaulters and credit officers. This, in turn, may undermine the chance for the institution to get their money back. Bond and Rai (2000) provides detailed examples of this form of collusion taking place in certain MFIs.

Group Characteristics and Loan Repayment Performance

Microfinance institutions (MFIs) typically require clients to meet in groups on a weekly basis to make loan repayments. These group meetings are thought to generate greater social capital through repeated social interaction. Furthermore, while naturally forming groups tend to be disproportionately composed of individuals with preexisting social ties or more social personalities, many MFIs assign clients to groups. As a result, these groups allow researchers to address a question that has not yet been rigorously investigated: can induce individuals to interact with one another during repayment meetings generate social capital and facilitate economic cooperation? Little is understood about how group dynamics are generated in poor communities and whether it can empower women.

The group characteristics such as group formation criteria, freedom of participation, decision-making, face-to-face communication, group homogeneity, conflict management and empathy have been found to play an important role in indicating the effectiveness that brings about group cohesion and better performance of SHGs (Kerr and Kaufman, 1994; Bharamappanavara and Jose : Group Dynamics and Collective Performance of Self-help Groups 129 Purnima and Narayanareddy, 2007; Hare, 1976; Nixton II, 1979; Cole, 1987). Hence, conducting research with few important potential variables, which have been posited to have a strong causal relationship, is recommended by several researchers (Agarwal, 2002; Gibson et al., 2005; Hayes and Ostrom, 2005.

Team Characteristics and Team Effectiveness Past researchers found that the lack of training or the wrong team composition will produce critical skill gaps that will inevitably lead to a decrease in overall team performance (Castka, Bamber, Sharp &Belohoubek, 2001; Church, 1998). As cited by Potter et al. (2000), a study by Watson and Michaelsen (1988) showed that a team's interaction style could affect performance. Group interaction styles are theorized to affect performance because they can impede or enhance team members' ability to bring their unique knowledge and skills to bear on the task, and the extent to which they develop and consider alternative strategies for approaching the task (Hackman & Morris, 1975, as cited by Potter et al.).

In general, group interaction styles affect communication and thus team performance by facilitating or hindering the exchange of information among team members. Harris and Harris (1996) found that team performance is highest when the dynamics of group process can occur; and this is more likely to happen when the number of participants is limited to maximum interchange.

Group Size

The group size variable (which was measured by the number of people that form a particular group) was found to have a negative and significant effect (at 5%

significance level) on loan repayment performance, consistent with work done in Zambia by Van 11 Bastelaer and Leathers (2006). The intuition for the result is that with bigger groups, monitoring and evaluation within groups becomes increasingly costly and difficult. By implication, smaller groups hold an advantage in harnessing information, collective action and mitigate enforcement challenges which result into higher repayment rates.

Free-riding incentives may depend crucially on the size of the borrowing groups. In practice, it is unclear how far group size affects repayment rates. FINCA, the organisation which pioneered the village banking concept, lends to large borrower groups of between 10 and 50 members, and boasts repayment rates of 96%.7 On the other hand, Grameen prefers smaller groups with typically only five members, in order to keep free-riding and in-group coordination problems under control. In the academic literature, both positions have their advocates. Ghatak and Guinnane (1999) argue that despite the insurance effect of larger groups, smaller groups are to be preferred for their better in-group co-ordination and reduced level of free-riding. 8 On the other hand; Buckley (1996) empirically finds that groups with ten or more members still can work effectively.

The effect of group size has been studied first by Isaac, Walker, and Williams (1994) in a public good experiment with 4, 10, 40, and 100 participants. They find that contrary to the common conjecture contributions even increase with very large groups. A similar result is obtained by Carpenter (2002), who compares groups of 5 and 10 subjects. However, in both studies marginal social benefits increase hugely as the group size increases, which may account for this effect. Unless there are strong synergies between the individual projects within a MFI borrowing group this is typically not a characteristic of micro finance institutions.

Theoretical Underpinning: Theory of Group Cohesion

SHGs like any other type of groups have distinct phases through which they pass over a period of time. Johnson & Johnson (1994) stated that there have been all over 100 theories to describe the development stages of a group. Hill and Gruner (1973) has opined that most of these theories are based on Sequential Theory while others are best described as in the Recurring Phase Theory. Theories based on sequential stage of group development are based on the identification of definite phases in the life cycle of the group. The most famous of these theories has been proposed by Tuckman (1965) and Tuckman & Jensen (1977).

Tuckman (1965) studied a number of groups of varying nature and objectives such as therapy, training and focus group and identified four distinct developmental stages, viz. Forming, Storming, Norming and Performing.

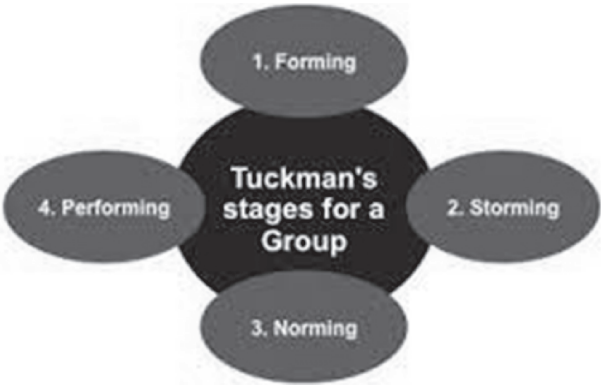

Figure 1: Theory of Group Cohesion: Tuckman (1965).

Bruce Tuckman (1965) proposed his very influential forming storming-norming-performing model of how groups develop. This study came out of a Naval Research think-tank where Irwin Altman had collected 50 studies on small group psychology which he turned over to Tuckman for analysis. This theory holds that groups can be more than the sum of their parts and that people can change when put into groups. This was premised on the argument that there exist dispositional and situational explanations. It is stated that if people have complementary character traits, then when they are put together, synergy is created. However, if the people in a group have conflicting traits, then they will never function as a team. Situationsal explanations examine how groups have a life of their own, separate from individuals forming them. This implies that groups develop through certain stages, regardless of the personalities of objectives of the people involved.

Tuckman looked for a pattern that would explain the behavior in all the groups and hit on this model:

- *Forming*: team members get to know each other, work out their roles and where they stand in relationship to one another. Crucially, Tuckman points out how people at this stage test their relationships (rivalries begin, etc.). In the forming stage, members of a group get to know each other, work out their roles and where they stand relative to each other. Potential rivalries begin at this phase.
- *Storming*: conflict and polarization brews and there may be a rebellion against the leader; members jockey to establish their own roles and status. The storming stage is characterized by conflicts and polarizations. There may be rebellion against the leader and members strive to establish their status and roles. This is usually an unhappy time for the group, but it is a vital stage in the group's development.

- *Norming*: cooperation replaces conflict as members work towards common goals: this is where Group Cohesion occurs, increasing mutual respect. The norming stage is characterized by replacement of conflict by cooperation as members strive to work towards a common goal. At this stage is where group cohesion occurs which increases mutual respect. Personal opinions are freely expressed at this stage. People feel comfortable expressing intimate personal opinions in his stage.
- *Performing*: roles become flexible and functional. Relationships have stabilized and the main goal now is group success. At performing stage, roles become flexible and functional. Relationships have stabilized and the main goal at this phase is group success.

Ideally, table banking involves self-help groups whose membership varies in numbers and backgrounds. However, the success of each group largely depends on cohesive the group members are. Indeed, more cohesive members are more likely to guarantee each other in the even members seek credit from table bankers. The reverse is true. Tuckman's model of the developmental sequence in small groups has rightly been adopted as a helpful starting point about possible stages or phases within different small groups.

Problem Formulation

Microfinance group is a social design in which people participate by making themselves socially and economically accountable to each other. These group-based credit systems address the problems of screening, incentives, and enforcement by incorporating joint liability principle and peer monitoring. A group-based lending contract effectively makes the borrower's group member co-obligator to loans, hence mitigating problems created by informational asymmetries such as adverse selection, moral hazard and enforcement (Morduch, 1999). The group based micro financing system functioned under the principles of group dynamics. Peer understanding, peer evaluation, peer support and peer mentoring etc are part of this group dynamics process which support the borrowers to repay the loan taken from the micro finance institutions. Consequently, in group lending contracts, the functions of screening, monitoring, and enforcement of repayments are, to a large extent, transferred from the financial institution to the group members. Varian (1990), Stiglitz (1990) and Besley and Coate (1995) viewed that several credit market failures that group-based lending has overcome are through the micro finance programs. Group-based lending mitigates the problem of adverse selection that in turn reduces the problem of credit rationing and brings the safe borrowers back to the credit market.

The theoretical and empirical studies show that people try to investigate each other's behavioral integrity and creditworthiness with the help of existing social networks before they try to prevent irresponsible and credit risky borrowers from

joining the group. Despite the recent growth in the micro-finance sector, the sector in general is faced with challenges of loan repayment defaults by clients. Contextualizing the topic to the Malaysian banking sector and micro finance institutions, there is less empirical evidence on the mechanisms of group dynamic as an incentive in micro finance group lending and group repayment. Individual groups have tried using groups of equity for collaterals which is expected to ensure the revolving of money for the benefits of other individual members of the group. However, loan delinquency has continued to plague micro finance institutions.

Conceptual Frame work

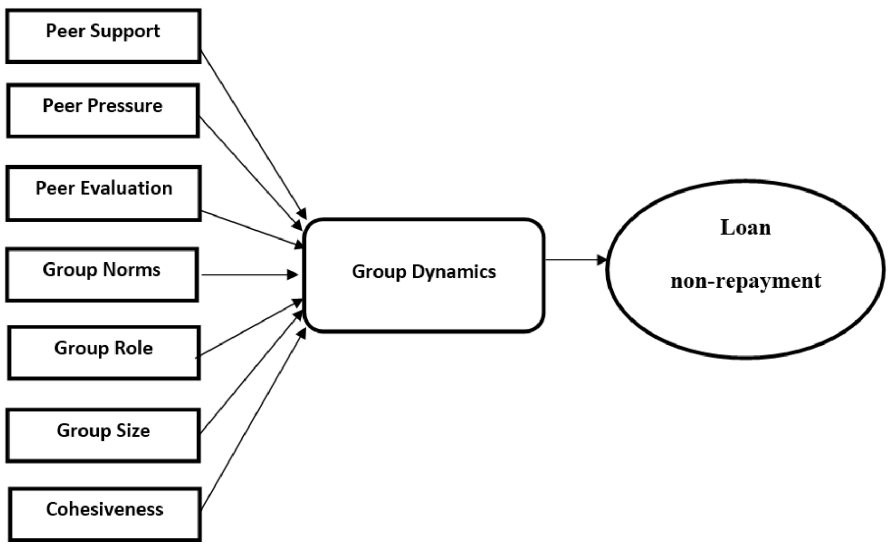

Figure 2: Conceptual frame work in relation to Loan Repayment and group dynamics

IMPLICATIONS

Practical Implications

The purpose of the theoretical paper will be to determine the factors correlated to micro financing loan non repayment, in the banking sector especially relating to the group dynamics factors which are part of behavioural finance fundamentals. Most research was focused on the individual borrowing pattern and correlating those factors with the loan repayment among the members. However, very fewer studies have come out among micro financial institutions and the banking sector in relation to group dynamics role and providing better insight into behavioural finance factors. It is indicated in several banking reports that in the area of micro

financing the banks are facing more issues in loan repayment. Similar observations have come out in Malaysia, Bangladesh, India, Indonesia etc. The current conceptual frame thus extend better opportunity to the banks look into the behavioural finance and group dynamic variable that need to be better evaluated into in association with loan repayment or non-repayment. The loan repayment is closely knit with the decentralized team structure with the team resources, which will be giving a better understanding to the banks, in effective intervention if necessary. Such studies will offer significant implications. Banks can look into the present interest rates whether is supportive of building Micro Financing Institution (MFI) communities and social infrastructure. How far group dynamics factors affect the debtors in their loan repayment is less established into, in the banking sector context, which would be providing better practical considerations for the success of micro financing. The current paper has high practical and managerial significance in the context of behavioural finance perspective among micro financing institutions, especially understanding group behaviour among the borrowers and their effect in and alleviation of non-repayment issues.

Theoretical Implications

This particular study has high relevance in its contribution to advancement of the literature as a theoretical contribution. The bank staff needs to look at the issues related to the loan repayment with the support of a sound theory. Bruce Tuckman (1965) proposed his very influential forming storming-norming-performing model of how groups develop. How far the staff members of the bank or the leaders in the micro financing borrowers group observe the fundamental application of this theory in its steps is less evaluated into. Human behaviour is highly influenced by the presence and suggestions of the other members especially in the micro financing borrowers groups. The group dynamics within the group thus influence the decision making with the elements of persuasion and compulsion. Each stage of group development with its dynamics thus influences the micro financing borrower's group member's decision or cooperation in, in-time loan repayment. The pressure or influence exerted by the group leaders or members thus has positive implications. The study highlights the theoretical evidences in explaining issues pertaining to loan repayment in micro financing institutions. This paper is first of its kind undertaken in financial institutions, with the support of sound theories.

CONCLUSION

This particular paper includes the conceptual understanding on the challenges faced by the micro financial institutions in relation to group dynamics integrating the fundamentals of behavioural finance and organizational behaviour theories. The concepts in relation to micro financing as well as group dynamics elements are

well described in relation to micro financing in this conceptual paper are described initially in detail, which are followed by the theoretical fundamentals are presented with the establishment of relationship between group dynamics determinants of loan non repayment. The paper integrated the general literature related to the concepts and theories undertaken for the study and further integrated with the micro financing sector, especially into the banking sector, in specific. Several researches have come out in the field without integrating the fundamental theories of behavioural finance and organizational behaviour, linking the issues with borrower's characteristics and the institutional characteristics. Nevertheless, this paper gathered suitable literature in order to elucidate the association between independent variable group dynamics and the dependent variable loan repayment that may lead to empirical observations in the future. This theoretical paper thus developed a combined model of loan non repayment factors in the banking sector, especially those banks engaged in micro financing.

Referencing

Agarwal, A. (2002). Common resources and institutional sustainability. In: *The Drama of the Commons*. Eds: .Ostrom, E., Dietz, T., Dolsak, N., Stern, P.C. Stonich, S., & Weber, E. National Research Council, Committee on the Human Dimensions of Global Change. National Academy Press, Washington, DC. pp. 41-85.

Bakar, S.A., Sulaiman, M. & Osman, I. (2012).Surviving market turbulence: Evidence from Malaysian biotechnology SMEs.*Asian Business & Management 11*(5), 563-589.

Bartol, K.M., & Martin, D.C. (1994).Management, 2ed, McGraw Hill, Inc.

Bastelaer, V.T., & Leathers, H., (2006). Trust in Lending: Social Capital and Joint Liability Seed Loans in Southern Zambia, *World Development, 34*(10), 1788–1807.

Besley, T. (1994). How do Market Failures Justify Intervention in Rural Credit Markets? *The World Bank Research Observer 91*(1), 27-48.

Besley, T., & Coate, S. (1995). Group lending, repayment incentives and social collateral, *Journal of Development Economics*, *46*(1), 1-18.

Bharamappanavara, & Jose. (2015). Group Dynamics and Collective Performance of Self-help Groups under Different Microcredit Delivery Models in Karnataka. *Agricultural Economics Research Review, 28*(1), 127-138.

Bond, P., & Rai, A. (2000).*Why is Microfinance Hard?,* Center for International Development, Harvard University, working paper.

Bratton, M., (1986). Financial Smallholder Production: a Comparison of Individual and Group Credit Schemes in Zimbabwe, *Public Administration and Development 6*(2), 115-132.

Carpenter & Jeffrey, P. (2002): *Punishing Free-Riders: how group size affects mutual monitoring and the provision of public goods*, Middlebury College Working Paper Series No. 0206.

Castka, P., Bamber, C. J., Sharp, J. M. &Belohoubek, P. (2001).Factors affecting successful implementation of high performance teams. *Team Performance Management, 7*(7/8), 123-134.

Che, P. L. (2002). The Challenges of Microfinance in Highland Areas, *Vietnam Microfinance Bulletin*, 1.

Cole, S. N. (1987) *Task Role Communication and Ecology of Mind*. Chandler Publication Co., San Francisco.

Datta, S. K., & Raman, M. (2001). Can Heterogeneity and Social Cohesion Coexist in Self Help Groups? An Evidence from Group Lending in Andhra Pradesh. *Indian Journal of Agricultural Economics, 56*(3), 387-400.

Diagne, A. (1998). *Default Incentives, Peer Pressure, and Equilibrium Outcomes in Group Based Lending Programs*, IFPRI FCND Working Paper.

Fischer, G., & Ghatak, M. (2010) *Repayment frequency in microfinance contracts with present-biased borrowers*. London School of Economics mimeo.

Ghatak, M. (1999).Group lending, local information and peer selection, *Journal of Development Economics*, *60*(1), 27-50.

Ghatak, M. (2000). Screening by the company you keep: Joint liability lending and the peer selection effect, *Economic Journal*, *110*(465), 601-31.

Ghatak, M., & Guinnane T. W. (1999). The Economics of Lending with Joint Liability: Theory and Practice, *Journal of Development Economics, 60*, 195-228.

Gibson, C., Williams, J., & Ostrom, E. (2005) Local enforcement and better forests. World Development, 33(2), 273-284.

Goetz, A. M., & Rina S.G. (1996). Who Takes The Credit? Gender, Power and Control over Loan Use in Rural Credit Programmes in Bangladesh, World Development, 24, 45-63.

Hackman, J. R., & Morris, C. G. 1975. Group tasks, group interaction processes, and group performance effectiveness: A review and proposed integration. *Advances in experimental social psychology, 8*, 45-99. New York: Academic Press

Hare, T. (1976) *Leadership Style and People*. McGraw Hill, Washington, USA.

Hayes, T.M. and Ostrom, E. (2005) Conserving the world‘s forests: Are protected areas the only way? *Indiana Law Review, 37*(3), 595-617

Hill, W. F., &Gruner, L. (1973).A study of development in open and closed groups. Small Group Behavior, 4(3), 355-381. Hossain M. 1988. Credit for alleviation of rural poverty: the Grameen Bank in Bangladesh. IFPRI Research Report 65. Washington, DC: International Food Policy Research Institute.

Jegatheesan, S., Ganesh, S., & Kumar, P. (2011).Research study about the role of microfinance institutions in the development of entrepreneurs. Retrieved on March 22, 2014, from http://www.hks.harvard.edu/centers/cid/publications/faculty-working-papers/cid-working-paper-no.-38

Johnson, D.W., & Johnson, R.T. (1994) *Learning together and alone* (4th ed.), Needham Heights, MA: Allyn and Bacon.

Littlefield, E., Murduch, J., &Hashemi, S. (2003). *Is Microfinance an Effective Strategy to Reach the Millennium Development Goals?* CGAP Focus Note 24 (pp. 11). Washington, D.C: Consultative Group to Assist the Poor.

Maata, D. (2004). *Examining determinants of group loan repayment in the Dominican Republic*. Unpublished Master Dissertation. The Ohio State University. United States.

Madajewicz, M. (1999). Capital for the Poor: *The Effect of Wealth on the Optimal Credit Contract*, Stockholm School of Economics, draft, June.

Manimekalai, K. (2004). *Economic Empowerment of Women through Self-Help Groups*, Third Concept.

Morduch, J. (1999). The microfinance promise. *Journal of Economic Literature, 37*(4).

Morduch, J. (2000). Microfinance Schism.*Word development, 28*(4), 617-629

Nixton-II (Ed.) (1979). *The Small Group*. Prentice Hall Inc., Englewool New Jersey: diffs. 4: 108–156.

Otero, M. (1999).Bringing Development Back into Microfinance. *Journal of Microfinance, 1*(1), 8-19.18

Paxton, J., Graham, D. & Thraen, C. (2000), Modeling group loan repayment behaviour: new insights from Burkina Faso, *Economic Development & Cultural Change, 48*(3), 639–55.

Paxton, J., Graham, D., & Thraen, C. (2000), Modeling group loan repayment behaviour: new insights from Burkina Faso, *Economic Development & Cultural Change, 48*(3), 639–55.

Potter, et al. (2000).Cited in Watson, W. E., & Michaelsen, L. K. (1988).Group interaction behaviors that affect group performance on an intellective task. *Group & Organization Studies, 13*(4), 495-516.

Purnima, K.S., & Narayanareddy, G.V. (2007) Indicators of effectiveness of women self-help groups in Andhra Pradesh. *Journal of Research (ANGRAU), 35*(2), 93– 96.

Rai, A., & Tomas S. (2000). *Efficient Lending in Village Economies*, Kennedy School of Government, Harvard University and Department of Economics, Pennsylvania State University, working paper.

Robinson, M. (2001).*The Microfinance Revolution: Sustainable Banking for the Poor*, Washington, DC: The World Bank.

Schreiner, M., & Colombet, H.H. (2001) From Urban to Rural: Lessons for Microfinance from Argentina. *Development Policy Review, 19*(3), 339-354.

Sharma, M., & Zeller, M. (1997). Repayment performance in group-based credit programs in Bangladesh: an empirical analysis, *World Development, 25*(10), 1731–42.

Siamwalla, A., Chirmak P., Nipon P., Ploenpit S., Prayong N., Wanrak M., & Yuavares T. (1990). The Thai Rural Credit System: Public Subsidies, Private Information, and Segmented Markets. *World Bank Economic Review 4*(3), 271–295.

Stiglitz, J. (1990). Peer monitoring and credit markets, *World Bank Economic Review, 4*(3), 351–66.

Tuckman (1965). Developmental Sequence in Small Groups, *Psychological Bulletin,* 63.

Tuckman., & Jensen, M.A.C. (1977). Stages of small group development revisited, Group and Organization Studies, 2(4), 419-27.

Varian, H. (1990).Monitoring agents with other agents, *Journal of Institutional and Theoretical Economics, 146*(2), 153–74.

Verhelle, C., & Berlage, L. (2003) *Determinants of Microfinance Group Performance: An Empirical Analysis of Self-help Groups in India*, Department of Economics, Katholic University Leuven, Belgium.

Von, V. (2004) *Analysis of the Incentive Mechanisms of Individual and Group-microlending Contracts*. Ph.D. Thesis, submitted to University of Frankfurt, Frankfurt, Germany.

Watson, W. E., & Michaelsen, L. K. (1988).Group interaction behaviors that affect group performance on an intellective task. *Group and Organization Studies, 13*, 495–516.

Yaron, J. (1994). What makes rural financial markets successful? *World Bank Research Observer, 9*(1), 49-70.

Yaron, J., M., Benjamin &. Church, S.O. (1998) A (Rural) Microfinance in Developing Countries: Lessons from Other Countries. *Proceedings of the 20 years Anniversary of the Agricultural Credit Guarantee Scheme* in Nigeria (1978 – 1998).

Zeller, M. (1998). Determinants of repayment performance in credit groups: the role of program design, intra-group risk pooling and social cohesion, *Economic Development and Cultural Change, 46*(1), 599–620.