

Loan Repayment Behavior Among Pag-IBIG Fund Borrowers in General Santos City

Sheena Mae V. Dela Serna*

Master of Business Management Graduate, Mindanao State University, General Santos City, Philippines

Abstract: This study analyzed the loan repayment behavior of 600 Pag-IBIG Fund short-term loan borrowers in General Santos City, using a structured questionnaire and descriptive statistics, correlation analysis, and chi-square tests. The findings indicate that most borrowers exhibit exceptional repayment behavior, with a positive and significant relationship observed between gender, income, education, and loan repayment. A significant relationship was also found between loan size and repayment behavior. Borrowers generally hold a positive attitude towards loan repayment. Key challenges identified include queuing and waiting times, missed due dates, inability to pay due to unemployment or loss of income, and unexpected expenses from calamities.

Keywords: Loan Repayment Behavior, Borrowers' Attitude, Short-term Loan, Loan Size, Pag-IBIG Fund Borrowers.

1. Introduction

Financial institutions play an integral part of the national development which enables people to engage in economic activities that improve self-reliance. Through deposits, savings mobilizations, credit schemes, loans, money transfers, insurances, and the like, are made available to increase productive potential (Conroy, 2002). The credit market has been established to provide loans and other services so as to extend financial as well as social intermediation to improve the quality of life of the individuals, families, and communities (Robinson, 2002). It creates a room for citizens to participate in the economic growth of a nation (Hermes, 2014).

However, there is an increasing concern with regards to the borrowers' ability to repay their loans (Ismail, 2011). Financial institutions around the world especially in most developing countries such as the Philippines are struggling with the growing problem of repayment and default. Despite efforts made to collect loans, financial institutions still face problems on increased outstanding balance from defaulters. With this borrowers' failure to repay loans, financial institutions are rendered unable to provide loans to new loan applicants (Chijoriga, 1997). Additionally, delinquencies and defaults hinder financial institutions to exhibit viable access for long term sustenance.

In order for financial institutions to reduce risks, the institutions should ascertain appropriate and effective loan repayment milieu. Sustainability and continuity of the financial institutions to increase the volume of credit to stimulate

financial activities depends on the repayment rates. Therefore, there is a need to understand the drivers and factors affecting loan repayment behavior of borrowers for financial institutions to effectively realize and carry out their purpose (Ismail, 2010). According to Howard et al, (2006), high repayment rates allow the institutions to lower the interest rates and processing costs and consequently increase patronage of loans while low repayment performance discourages the lender to promote and extend credit to large and fragmented poor individuals (Howard, 2006).

Loans are extended to the borrowers based on financial discipline in that borrowers are expected to display the required effort not only from the loans but also to repay their loans on time. Therefore, an in-depth understanding of repayment issues would be of great value to both academic knowledge as well as useful to policy makers (Haile, 2015).

Researchers in the sphere have identified several factors contributing to repayments and defaults. These include individual characteristics such as gender, income, education, and marital status as well as loan characteristic such as loan size. Relatively, only a few studies have so far explored the relationship between these factors and the borrower's attitude towards loan repayment (Ismail, 2010). A study relating to the borrowers' attitude is important in order to identify why borrowers fail to repay their loans. As cited in the previous study by Abu Bakar et. Al (2006), attitude related to loan repayment and default remains a major area for further investigation as to "willingness to pay" is more important than the ability to repay (Volkwein & Szelest, 1995). Furthermore, attitude has been found to affect repayment behavior and literature concerning borrower's repayment behavior exist across many years ago (Christman, 2000). Moreover, studies about attitude although a few did have significant impact on loan literature particularly in terms of default and repayments. Therefore, it is essential to examine the relationship of the factors and the borrowers' behavior towards actual loan repayment. It is in this context that this study is conceived to know the loan repayment behavior among Pag-BIG Fund borrowers in General Santos City.

2. Research Problem

This study was conducted to identify and analyze the loan

*Corresponding author: smvdelaserna@gmail.com

repayment behavior of Pag-IBIG Fund short-term loan borrowers in General Santos City. Specifically, it seeks to answer the following questions:

1. What was the profile of Pag-IBIG Fund short-term loan borrowers in terms of:
 - a. Gender
 - b. Income
 - c. Education
 - d. Marital Status
2. What was the relationship of gender, income, education, and marital status towards borrowers' loan repayment behavior?
3. To what extent did attitude affect borrowers' loan repayment behavior?
4. Was there a significant relationship between loan size and loan repayment behavior?
5. What were the issues and challenges faced by the borrowers with respect to loan repayment?

3. Theoretical Framework

A. Background Theories

Exploring loan repayment will not prosper without understanding the underlying role of the theories that contribute to the borrower's repayment behavior.

Learning, as traditionally defined, is a change in behavior. As cited by Neeley (1973), Engel, Kollat, and Blackwell defined it as the "changes in response tendencies due to the effects of experience". Moreover, psychologists defined learning as "any modification of behavior as a consequence of experience with the environment, particularly those modifications that are shaped by contingent consequences of the behavior: reward or punishment" (McDavid and Harari, 1968). These theories have been the foundation for developing new approaches to behavioral change.

Recurrently, behavior is defined as the transmission of intention or perceived behavioral control into action and is the consequence of an antecedent driven by a particular behavioral intention. According to the theory of Planned Behavior and Theory of Reasoned Action, the most important determinant of a person's behavior is behavioral intent which is an indication of how people are willing to try and of how much an effort they are planning to exert in order to perform a particular behavior (Allport, 1935).

Fishbein and Ajzen posited that an individual's intention to perform a behavior is a combination of attitude toward performing a behavior and subjective norm. If a person perceives that the outcome from performing a behavior is positive; he/she will have a positive attitude toward performing a behavior. The opposite can also be stated if the behavior is thought to be negative. Influenced by a person's attitude, perceived social pressures, and perceived behavioral control, behavior is considered an outcome variable.

In various investigations conducted all over the world, attitude has been found as a critical factor in inducing many behavioral outcomes (Ajzen, 1995; Ajzen & Fishbein, 1975). It was hailed as the most distinctive and indispensable concept in

social psychology (Allport, 1935) and has gained an increased understanding of the way attitudes are formed, of the ways they change through persuasions, and of their relations to behavior (Breckler, 1984).

Research efforts reconfirmed the importance of attitude as the prime theoretical construct in social psychology and have verified the relevance of attitude measurement as a requisite for our understanding of social behavior. Contextually, attitude refers to the borrower's approach towards the loan which could affect his or her loan repayment tendencies (Volkwein & Szelest, 1995). Previous studies have also established that attitude can predict loan repayment (Baum, S. & Saunders, D., 1998; Volkwein, J.F., Szelest, B.P., Cabrera, A.F., and Napierski-Prancl, M.R., 1998).

Accordingly, this study is anchored to the theory of Reasoned Action that was developed by Fishbein and Ajzen (1975). The core premise of this theory is it being a causal model with two main paths. The first path proposed that there are beliefs which are perceptions of facts, cause attitudes, which are evaluations based upon beliefs, and cause intention to act which causes behavior. In this study, borrowers are believed to know about the loan agreement and are aware that loan repayment is essential. Therefore, borrowers create an intention to pay on the specified schedule of the term and are expected to terminate the loan eventually.

In the second path, there is input from significant others. For instance, family members or friends that think he/she knows repayment. This input causes perceptions of social acceptability, like most borrowers are aware that loan repayment is important. Consequently, this perception causes the intention to act which causes the behavior.

The theory of reasoned action is successful when applied to behaviors that are under a person's volitional control (Ajzen, 1991). The theory recognizes that some situations or factors limit the influence of attitude on behavior because it separates behavioral intention from behavior. It also discusses the factors that limit the impact of attitudes or behavioral intention in behavior. Therefore, this theory predicts behavioral intention, a compromise between stopping at attitude predictions and predicting behavior. In this case, if the attitude of a borrower leads him/her to pay the loan, but other factors such as having to commit this money to the family due to low-income family background, it will prevent the borrower's attitude causing him/her to repay the loan. Subjective norms or the expectations of other people contribute to predicting behavioral intention, whenever attitudes lead to do one thing; still the pertinent norms suggest something else, and both factors influence behavioral intent.

For example, a borrower's attitude may encourage him/her to pay the loan, but his/her significant other may think this is not important, so does the borrower do what his/her attitude suggests (pay the loan) or what the norms of his/her family suggest (not pay the loan). This theory predicts that behavioral intent is created or caused by two factors which are attitudes and subjective norms. Attitude is formed of belief and evaluation. While subjective norms are composed of normative beliefs and motivation to comply (Fishbein and Ajzen, 1975).

Another widely used theory deliberated in this study that explains the relationship of the factors influencing loan repayment is Ajzen's (1991) theory of planned behavior. The theory suggests that human action is guided by three main kinds of considerations: these are behavioral beliefs, normative beliefs and control beliefs.

Behavioral beliefs create a favorable or unfavorable attitude towards the behavior: normative beliefs give rise to subjective norms which denotes the perceived social pressure coming from important persons in an individual's life that influenced him to perform the behavior, while perceived behavioral control is always a result of control belief, which refers to the individual's belief that they have control over certain factors that allow them to perform the behavior (Ajzen, 2006). The attitude towards the behavior, subjective norms and perceived behavioral control leads to the formation of behavioral intention. The uttermost significant contribution of the planned behavior model is that despite there is no absolute relationship between behavioral intention and actual behavior, still, intention can be employed to measure the behavior of a person in the theory of planned behavior relatively (Francis, 2004).

In this study, the context of attitude refers to the borrowers' positive and negative attitude towards loan repayment while perceived behavioral controls to attitude towards repayment are affected by the borrowers' belief or perceived difficulty of paying his/her loan obligation.

In the same way, this study is also anchored on Bandura's social cognitive theory. The theory proposes that interaction amongst observation of others, the environment, one's behavior, and one's cognitive ability influences behavior (Bandura 1977, 1986, 1997). However, individuals are not automatically controlled by their environment, nor driven by inner forces. Instead, these factors contribute to motivation, behaviors, and development within a network of reciprocal influences (Bandura, 1989).

The theory suggests that persons with high and strong levels of self-efficacy are more likely to accept rather than avoid a challenge and thus more likely to succeed. Self-efficacy refers to a sense of personal agency, which points out to the belief that one can succeed and achieve at a certain task and is not only linked to self-confidence but also motivation. Perceived self-efficacy signifies an optimistic sense of personal competence that seems to be a prevalent occurrence, accounting for motivation and accomplishment in human beings (Scholz, 2002).

The theory also suggests that self-efficacy affects how people think, feel, and act; and that an individual makes decisions based on their perception of their ability in a particular area (Bandura, 1997). Similarly, borrowers make decisions on their perceived capability. Bandura further emphasized that a person's misjudgment of capability can lead to adverse outcomes and avoidance of a particular task. Borrowers may avoid facing financial management decisions if they have not experienced positive outcomes possibly due to a lack of confidence on their part.

Therefore, social cognitive theory, the basis for understanding self-efficacy is a promising basis to enhance our

understanding of the borrowers' repayment behavior as it may indicate or reveal a lack of confidence. It is also important to consider that an individual's perception of their capabilities is shaped by age, gender, experiences, background, socio-economic status, and educational level. The inclusion of self-efficacy allows for the examination of the effect of these factors on the borrowers' perception. This study indicates that middle to high levels of self-efficacy can help motivate repayment and avoid delinquencies and default.

Numerous researches have illustrated the overall usefulness of the above-mentioned behavioral models in predicting a wide range of intentions and behaviors. These theories have become influential and popular for conceptual frameworks for the study of human action. Moreover, the theories highlighted a shared belief that attitudes have a notable impact on human behavior.

The theories have also been used in many different studies investigating the influence of attitudes towards a range of social and personal behaviors. However, there are limited studies exploring the implication of attitude in the context of loan repayment. Therefore, this study attempts to investigate attitude as one of the focal constructs influencing loan repayment behavior together with all other factors discussed in the latter parts of this chapter.

B. Empirical Studies

The literature and related studies is composed of studies developed and conducted in different continents particularly on various parts of Africa, Asia, Europe, and the Americas and were reviewed and examined for their contributions to the development of the conceptual framework.

C. Research Gap

Notwithstanding the importance of understanding loan repayment behavior, literature on this research area is nonetheless limited in the local context. As a result, relatively little is known regarding the relationship of the independent variables and loan repayment behavior. Furthermore, there were no studies conducted investigating factors affecting loan repayment behavior among borrowers specifically in General Santos City.

4. Conceptual Framework

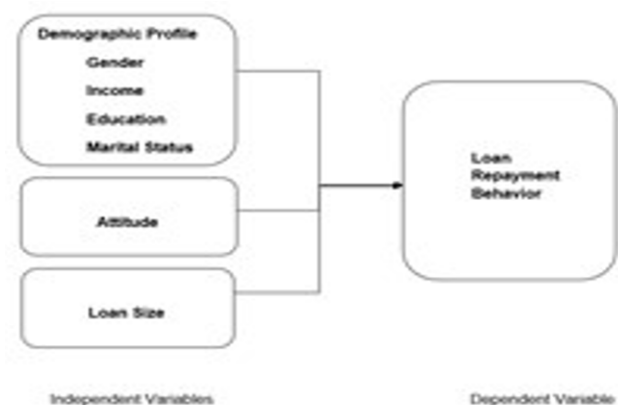


Fig. 1. Conceptual framework

Figure 1 shows the conceptual framework of the study. This focuses on Pag-IBIG Fund short-term loan borrowers' loan repayment behavior. Demographic profile such as gender, income level, education, and marital status are the independent variables in this study. Loan characteristic such as loan size and borrowers' attitude towards loan repayment are also considered as independent variables. The dependent variable in this study is the loan repayment behavior.

5. Research Design and Methodology

A. Research Design

The study utilized a survey research method with a descriptive cross-sectional design, employing self-administered questionnaires. This quantitative approach was chosen to describe existing situations and explore phenomena, specifically to understand the connection between borrower demographics, loan characteristics, and repayment behavior among Pag-IBIG Fund borrowers in General Santos City, with the aim of developing insight rather than generalizing findings.

B. Research Locale

The study was conducted in Pag-IBIG Fund General Santos. Pag-IBIG Fund is a government-owned and controlled corporation whose primary services are Provident Savings and Shelter Financing. Both are established for the purpose of establishing a provident saving system suitable to the needs of the employed and other earning groups. Moreover, it motivates to better plan and provide for its members housing needs by membership with mandatory contributory support in the spirit of social justice and pursuit of national development. Apart from membership savings, short-term loan and housing loan are the primary programs offered by the Fund.

C. Respondents of the Study

The study surveyed Pag-IBIG Fund Short-term loan borrowers in General Santos City who had an active loan account and a loan availment period between January and December 2018. The total population comprised 9,016 borrowers. Employing the Raosoft sample size calculator, a sample size of 563 was determined with a 95% confidence level and a 4% margin of error, resulting in a final sample of 600 respondents. Probability random sampling was utilized, with participants randomly selected via a computer program from the sampling frame to ensure equal representation.

D. Research Instrument

A structured, self-administered questionnaire was employed as the research instrument for collecting primary data. This questionnaire was designed to gather information on factors influencing loan repayment behavior among short-term loan borrowers. It consisted of two parts: Part I captured socio-economic data (gender, income, education) and loan characteristics (loan size), while Part II contained 22 Likert-type statements to assess borrowers' repayment attitudes. Questions regarding attitudes were adapted from previous studies by Ismail (2010) and Agyeman Manu (2016). Borrower attitudes were analyzed using a 5-degree Likert scale.

E. Data Gathering Procedure

The study on Pag-IBIG Fund short-term loan borrowers in General Santos City involved obtaining management approval and validating survey questionnaires. A pre-test was conducted with non-study participants, followed by the distribution and personal retrieval of questionnaires from 600 respondents, with assurances of confidentiality and academic purpose. Data from questionnaires and Pag-IBIG Fund records were analyzed, classifying loan repayment behavior into "paid on time," "delinquent," and "default," further defined as unacceptable, acceptable, and exceptional based on repayment adherence. Conclusions and recommendations were formulated from the findings.

F. Data Analysis

The study utilized frequency counts and percentage distributions to present demographic and loan characteristics. The mean was employed to describe borrower attitudes. Pearson Correlation Coefficient was used to examine the relationship between demographic/loan characteristics and repayment behavior, while the Chi-square test of independence explored non-parametric associations. Statistical analysis was performed using SPSS, with Star Software and Intellectus for validation, at a significance level of .05.

6. Results and Discussion

A. Demographic Profile

The majority of Pag-IBIG Fund short-term loan borrowers are male. Most respondents have a net monthly income ranging from P5,000 to less than P15,000, with some earning P50,000 or more. A substantial portion are college graduates (60.7%), and the majority are married.

B. Loan Characteristic

For Pag-IBIG Fund Short-term loan borrowers in General Santos City, the majority (43%) received loans ranging from P5,000 to less than P15,000. Approximately 20.2% obtained loans between P15,000 and P25,000, while 10.7% received P50,000 or more, and 9.5% were granted P25,000 to less than P35,000. Smaller proportions received loans less than P5,000 (8.7%) or between P35,000 and P50,000 (8%).

C. Borrowers' Attitude Towards Loan Repayment

Borrowers exhibit a strongly positive attitude towards loan repayment, indicated by a mean score of 4.11. Specific items related to maintaining good credit history and avoiding future problems received the highest agreement (mean of 4.52). While a mean of 3.42 suggests a moderate feeling of burden from loan repayment, the overall sentiment reflects a willingness to meet obligations, aligning with research that highlights values, experiences, and attitudes as key influences on repayment behavior. This positive outlook suggests borrowers perceive loans as beneficial, thus encouraging adherence to repayment terms.

D. Test of Relationship between the Independent Variables and Loan Repayment Behavior

Pearson correlation analysis indicated significant positive relationships, though with low effect sizes, between loan repayment behavior and gender ($r=0.186$), income ($r=0.196$), education ($r=0.243$), and loan size ($r=0.227$). Higher levels of income, education, and loan size correlated with higher repayment rates. Marital status showed a non-significant positive correlation ($r=0.047$). Cross-tabulation and Chi-square tests, supplemented by Fisher's exact test, revealed a dependent relationship between the tested independent variables (gender, income, education, marital status, loan size) and loan repayment behavior.

E. Analysis of Pag-IBIG Short-Term Loan Borrowers' Repayment Behavior by Demographic Factors

Gender: Female borrowers exhibited significantly better repayment behavior, with higher exceptional rates and lower unacceptable rates compared to males ($p<0.001$).

Income: A strong positive correlation exists between income and repayment behavior; borrowers earning over P50,000 demonstrated 100% exceptional repayment, while those earning less than P5,000 had the highest unacceptable rates ($p=0.002$).

Education: Higher educational attainment was significantly associated with improved repayment, with college graduates and those with advanced degrees showing superior repayment compared to borrowers with lower education levels ($p < .001$).

Marital Status: Statistical tests found no significant relationship between marital status and loan repayment behavior ($p=0.471$, $p=0.658$), despite some studies suggesting potential indirect influences or minor variations.

Loan Size: Borrowers with larger loan amounts (\geq P50,000) were more likely to demonstrate exceptional repayment, while those with smaller loan amounts ($<$ P5,000) were more prone to unacceptable repayment, with loan size being a significant factor ($p < .001$).

F. Issues and Challenges Faced by the Borrowers with Respect to Loan Repayment

Based on the survey conducted among short-term loan borrowers who participated in the study, 35.8% or 215 of the borrowers said that they do not have any issues and challenges in repaying their loans while 64.2% of the respondents have identified problems that hinder their loan repayment process. As summarized, the most frequently mentioned challenges are the following:

Of the 600 respondents, 29.0% said that the queuing and waiting time is one of the primary reasons that hamper them to repay their loan. Even if they are very much willing to pay their loans, the waiting time and waiting lines discourage them to settle their accounts because they consume too much of their time and cause delay on their other personal transactions.

Furthermore, 11% said that they often overlook their due dates which caused them to delay repayment. Also, 9.7% or 58 of the total respondents said that they no longer have any capacity to repay their loan because of sudden unemployment

or loss of livelihood or source of income.

On the other hand, the remaining 14.5% said that they cannot repay their loans on time due to unexpected events or emergencies such as medical issues such as sickness or disability, loss of family member, calamities such as fire and earthquakes, along with other unanticipated expenses which deprive them to repay their loan correspondingly.

7. Conclusions and Recommendations

The study concludes that the majority of Pag-IBIG Fund borrowers demonstrate exceptional loan repayment behavior, with demographic factors like gender, income, and education (excluding marital status) showing a significant positive relationship with repayment. Borrowers generally hold positive attitudes towards repayment, and loan size is a significant factor. Key challenges faced include long waiting times, missed due dates, loss of income, and unexpected expenses. Recommendations for the Pag-IBIG Fund include implementing mandatory borrower supervision with regular follow-ups, providing pre and post-loan training on credit management, bookkeeping, and savings, and employing effective credit risk management. Financial incentives for timely payments, utilizing co-makers to bolster credit portfolios, and expanding payment facilities through partnerships with banks and digital platforms are also advised. The study encourages further research into factors such as occupation, additional income sources, and loan utilization to further analyze repayment behavior.

References

- [1] Ajzen, I., *Attitudes, Personality and Behaviour*, Chicago, IL: Dorsey Press, (1988).
- [2] Ali, A. Y., *The Socio-Economic Determinants of Students' Loan Repayment in Somalia*, Lambert Academic Publishing, (2016).
- [3] Britha, M., *Social Research: An Evolving Process*, 2nd ed., New Delhi: Rawat Publications, (2002).
- [4] Cohen, L., Manion, L., and Morrison, K., *Research Methods in Education*, 7th ed., London: Routledge, (2011).
- [5] Huber, P. J., *Robust Statistics*, Hoboken, NJ: John Wiley and Sons, (1981).
- [6] Kothari, C. R., *Research Methodology: Methods and Techniques*, 2nd ed., New Delhi: New Age International Publishers, (2004).
- [7] Michael, S., *Theory of Planned Behaviour*, England: The Open University Press, (2007).
- [8] Nachmias, C. F., and Nachmias, D., *Research Methods in the Social Sciences*, 7th ed., New York: Worth Publishers, (2008).
- [9] Orodho, J. A., *Techniques of Writing Research Proposals and Reports in Education and Social Sciences*, Nairobi: Kanezja HP Enterprises, (2005).
- [10] Wooldridge, J. M., *Introductory Econometrics: A Modern Approach*, 5th ed., Mason, OH: South-Western Cengage Learning, (2012).
- [11] Abu Bakar, E., MasudZuroni, J., and Md Jusoh, "Knowledge, Attitude and Perceptions of University Students towards Educational Loans in Malaysia", *Journal of Family and Economic Issues*, Vol. 27, No. 4, (2006), pp. 692–701. doi:10.1007/s10834-006-9035-6
- [12] Al-Sharafat, A., Qtaishat, T., and Majdalawi, M. I., "Loan Repayment Performance of Public Agricultural Credit Agencies: Evidence from Jordan", *Journal of Agricultural Science*, Vol. 5, No. 6, (2013).
- [13] Bandura, A., "Self-Efficacy: Toward a Unifying Theory of Behavioral Change", *Psychological Review*, Vol. 84, No. 2, (1977), pp. 191–215.
- [14] Breckler, S. J., "Empirical Validation of Affect, Behaviour, and Cognition as Distinct Components of Attitude", *Journal of Personality and Social Psychology*, Vol. 47, (1984), pp. 1191–1205.
- [15] Derban, W. K., Binner, J. M., and Mullineux, A., "Loan Repayment Performance in Community Development Finance Institutions in the

- UK", *Entrepreneurship & Regional Development*, Vol. 25, No. 4, (2005), pp. 319–332.
- [16] Eze, C. C., and Ibekwe, U. C., "Determinants of Loan Repayment under the Indigenous Financial System in Southeast Nigeria", *Social Science Journal*, Vol. 2, (2007), pp. 116–120.
- [17] Firafis, H., "Determinants of Loan Repayment Performance: Case Study of Harari Microfinance Institutions", *Journal of Agricultural Extension and Rural Development*, Vol. 7, (2015), pp. 56–64.
- [18] Godquin, M., "Microfinance Repayment Performance in Bangladesh: How to Improve the Allocation of Loans by MFIs", *World Development*, Vol. 32, No. 11, (2004), pp. 1909–1926.
- [19] Li, W., "Family Background, Financial Constraints and Higher Education Attendance in China", *Economics of Education Review*, Vol. 26, No. 6, (2007), pp. 726–740.
- [20] Mersland, R., "The Cost of Ownership in Microfinance Organizations", *World Development*, Vol. 37, No. 2, (2009), pp. 469–478.
- [21] Mersland, R., and Strøm, R. O., "Performance and Governance in Microfinance Institutions", *Journal of Banking and Finance*, Vol. 33, No. 4, (2009), pp. 662–669.
- [22] Nawai, N., and Shariff, M. N. M., "Determinants of Repayment Performance in Microcredit Programs: A Review of Literature", *International Journal of Business and Social Science*, Vol. 1, No. 2, (2010), pp. 152–161.
- [23] Roslan, A. H., and Mohd Zaini, A., "Determinants of Microcredit Repayment in Malaysia: The Case of Agrobank", *Humanomics*, Vol. 25, No. 1, (2009), pp. 38–52.
- [24] Swain, R. B., and Varghese, A., "Does Self Help Group Participation Lead to Asset Creation and Women's Empowerment? Microfinance and Rural Development in India", *World Development*, Vol. 37, No. 11, (2009), pp. 1997–2010.
- [25] Abafita, J., Microfinance and Loan Repayment Performance: A Case Study of the Oromia Credit and Savings Share Company (OCSSCO) in Kuyu, (1970).
- [26] Agyeman Manu, A., Student's Indebtedness and Their Repayments: The Case of Ghana Technology Institute College, (2016).
- [27] Ajzen, I., and Fishbein, M., *Understanding Attitudes and Predicting Social Behaviour*, (1980).
- [28] Ajzen, I., *From Intentions to Actions: A Theory of Planned Behaviour*, (1985).
- [29] Ajzen, I., "The Theory of Planned Behaviour, Organizational Behaviour and Human Decision Processes", (1991).
- [30] Ajzen, I., "The Theory of Planned Behaviour: Reactions and Reflections", (2011).
- [31] Ali, M. R., Factors Influencing Borrower's Behavior and Decision Making Patterns in the Success of a Microfinance Model—A Case Study on the Remote Areas of Karachi, Pakistan, Cambridge Business & Economics Conference, (2012).
- [32] Allport, G. W., "Attitudes", in Murchinson, C. (Ed.), *A Handbook of Social Psychology*, Worcester, MA: Clark University Press, (1935), pp. 798–844.
- [33] Altay, A., "The Challenge for Global Women Poverty: Microfinance (or Microcredit) as a Solution for Women Poverty in Turkey", (2007). Retrieved from <https://core.ac.uk/download/pdf/6989930.pdf>
- [34] Anthony, D., and Horne, C., "Gender and Cooperation: Explaining Loan Repayment in Micro-Credit Groups", (2003).
- [35] Anjichi, S. N., "Commercial Banks Lending Techniques", Paper presented at the 10th East Central Banking Course, Kampala, (1994).
- [36] Arene, C. J., and Hills, C. A., "Loan Repayment and Technical Assistance among Smallholder Maize Farmers in Nigeria", *African Review of Money Finance and Banking*, Suppl. of Savings and Development Journal, Vol. 1, (1992), pp. 64–72.
- [37] Bandura, A., *Social Foundations of Thought and Action: A Social Cognitive Theory*, (1986).
- [38] Bandura, A., Self-Efficacy: The Exercise of Control, (1997). Retrieved from <https://psycnet.apa.org/record/1997-08589-000>
- [39] Banerjee, A., Duflo, E., Glennerster, R., and Kinnan, C., "The Miracle of Microfinance? Evidence from a Randomized Evaluation", (2015).
- [40] Baum, S., and Saunders, D., *Life after Debt: Results of the National Student Loan Survey*, (1998).
- [41] Baum, S., and Schwartz, S., *The Impact of Student Loans on Borrowers: Consumption Patterns and Attitudes toward Repayment*, (1988).
- [42] CGAP, *Measuring Microcredit Delinquency: Occasional Paper No. 3*, Washington, D.C.: CGAP Secretariat, (1999).
- [43] Chijoriga, M., *Application of Credit Scoring and Financial Distress Prediction Models to Commercial Banks Lending: The Case of Tanzania*, Ph.D. thesis, Wirtschaftsuniversität Wien, Vienna, (1997).
- [44] Cohen, J., *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed., St. Paul, MN: West Publishing Company, (1988).
- [45] Conroy, J. D., *Microfinance in Malaysia: Time to Rebuild*, Brisbane: The Foundation for Development Corporation, (2002).
- [46] Converse, J. M., and Presser, S., *Survey Questions: Handcrafting the Standardized Questionnaire*, Beverly Hills, CA: Sage, (1986).
- [47] Cooper, D. R., and Schindler, P. S., *Business Research Methods*, 9th ed., New York: McGraw-Hill, (2006).
- [48] Creswell, J. W., *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th ed., Thousand Oaks, CA: Sage, (2014).
- [49] Creswell, J. W., *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, 4th ed., Boston, MA: Pearson Education, (2012).
- [50] Creswell, J. W., and Plano Clark, V. L., *Designing and Conducting Mixed Methods Research*, 2nd ed., Thousand Oaks, CA: Sage, (2011).
- [51] Crotty, M., *The Foundations of Social Research: Meaning and Perspective in the Research Process*, London: Sage, (1998).
- [52] De Vaus, D. A., *Surveys in Social Research*, 5th ed., Sydney: Allen and Unwin, (2002).
- [53] Dejene, A., "Attitudes of Small-Scale Farmers Towards Agricultural Credit: The Case of Two Districts in Ethiopia", *Ethiopian Journal of Agricultural Economics*, Vol. 5, No. 1, (1991), pp. 55–93.
- [54] Devereux, S., and Guenther, B., *Social Protection and Agriculture in Ethiopia*, London: Future Agricultures Consortium, (2009).
- [55] Diagne, A., and Zeller, M., "Access to Credit and Its Impact on Welfare in Malawi", *IFPRI Research Report*, Vol. 116, Washington, D.C.: International Food Policy Research Institute, (2001).
- [56] Ditcher, T. W., "Despite Good Intentions: Why Development Assistance to the Third World Has Failed", Amherst, MA: University of Massachusetts Press, (2003).
- [57] Donaldson, L., *The Contingency Theory of Organizations*, Thousand Oaks, CA: Sage, (2001).
- [58] Donaldson, L., *American Anti-Management Theories of Organization: A Critique of Paradigm Proliferation*, Cambridge: Cambridge University Press, (1995).
- [59] Dunn, E., and Arbuckle, J., *The Impacts of Microcredit: A Case Study from Peru*, Washington, D.C.: Assessing the Impact of Microenterprise Services, USAID, (2001).
- [60] Easterby-Smith, M., Thorpe, R., and Lowe, A., *Management Research: An Introduction*, 2nd ed., London: Sage, (2002).
- [61] Fiala, N., "Measuring the Impact of Microfinance in Uganda: Randomized Control Trial of Village Savings and Loans Associations", *IZA Discussion Paper Series*, No. 6366, (2012).
- [62] Field, A., *Discovering Statistics Using SPSS*, 3rd ed., London: Sage, (2009).
- [63] Fisher, T., and Sriram, M. S., *Beyond Micro-Credit: Putting Development Back into Micro-Finance*, New Delhi: Vistaar Publications, (2002).
- [64] Ghatak, M., and Guinnane, T. W., "The Economics of Lending with Joint Liability: Theory and Practice", *Journal of Development Economics*, Vol. 60, No. 1, (1999), pp. 195–228.
- [65] Ghosh, P., Mookherjee, D., and Ray, D., "Credit Rationing in Developing Countries: An Overview of the Theory", in Mookherjee, D., and Ray, D. (Eds.), *Readings in the Theory of Economic Development*, Oxford: Blackwell, (2001), pp. 283–301.
- [66] Gomm, R., Hammersley, M., and Foster, P., *Case Study Method: Key Issues, Key Texts*, London: Sage, (2000).
- [67] Greene, W. H., *Econometric Analysis*, 5th ed., Upper Saddle River, NJ: Prentice Hall, (2003).
- [68] Gujarati, D. N., *Basic Econometrics*, 4th ed., New York: McGraw-Hill, (2003).
- [69] Hair, J. F., Anderson, R. E., Tatham, R. L., and Black, W. C., *Multivariate Data Analysis with Readings*, 5th ed., Upper Saddle River, NJ: Prentice Hall, (1998).
- [70] Hammersley, M., and Atkinson, P., *Ethnography: Principles in Practice*, 2nd ed., London: Routledge, (1995).
- [71] Hanushek, E. A., "Conceptual and Empirical Issues in the Estimation of Educational Production Functions", *Journal of Human Resources*, Vol. 14, No. 3, (1979), pp. 351–388.
- [72] Harris, M., *Research Paradigms in Organizational Studies*, Aldershot: Ashgate Publishing, (2001).

- [73] Hartarska, V., "Governance and Performance of Microfinance Institutions in Central and Eastern Europe and the Newly Independent States", *World Development*, Vol. 33, No. 10, (2005), pp. 1627–1643.
- [74] Hartarska, V., and Nadolnyak, D., "Do Regulated Microfinance Institutions Achieve Better Sustainability and Outreach? Cross-Country Evidence", *Applied Economics*, Vol. 39, No. 10, (2007), pp. 1207–1222.
- [75] Heckman, J. J., "Sample Selection Bias as a Specification Error", *Econometrica*, Vol. 47, No. 1, (1979), pp. 153–161.
- [76] Hermes, N., and Lensink, R., "The Empirics of Microfinance: What Do We Know?", *Economic Journal*, Vol. 117, No. 517, (2007), pp. 1–10.
- [77] Hulme, D., and Mosley, P., *Finance Against Poverty*, Vol. 1, London: Routledge, (1996).
- [78] Hulme, D., and Mosley, P., "Finance for the Poor or the Poorest? Financial Innovation, Poverty and Vulnerability", in Hulme, D., and Mosley, P. (Eds.), *Finance Against Poverty*, Vol. 2, London: Routledge, (1996), pp. 1–24.
- [79] ILO, *Microfinance in Industrialized Countries*, Geneva: International Labour Organization, (2002).
- [80] Johnson, S., and Rogaly, B., *Microfinance and Poverty Reduction*, London: Oxfam, (1997).
- [81] Karlan, D., and Zinman, J., "Expanding Credit Access: Using Randomized Supply Decisions to Estimate the Impacts", *Review of Financial Studies*, Vol. 23, No. 1, (2010), pp. 433–464.
- [82] Khandker, S. R., *Fighting Poverty with Microcredit: Experience in Bangladesh*, New York: Oxford University Press, (1998).
- [83] Khandker, S. R., "Microfinance and Poverty: Evidence Using Panel Data from Bangladesh", *World Bank Economic Review*, Vol. 19, No. 2, (2005), pp. 263–286.
- [84] Khandker, S. R., and Faruquee, R. R., *The Impact of Farm Credit in Pakistan*, World Bank Discussion Papers, Washington, D.C.: World Bank, (2001).
- [85] Khandker, S. R., Koolwal, G. B., and Samad, H. A., *Handbook on Impact Evaluation: Quantitative Methods and Practices*, Washington, D.C.: World Bank, (2010).
- [86] Kinde, B. A., "Financial Sustainability of Microfinance Institutions in Ethiopia", *European Journal of Business and Management*, Vol. 4, No. 15, (2012), pp. 1–11.
- [87] Kline, R. B., *Principles and Practice of Structural Equation Modeling*, 2nd ed., New York: Guilford Press, (2005).
- [88] Krueger, N. F., and Brazeal, D. V., "Entrepreneurial Potential and Potential Entrepreneurs", *Entrepreneurship Theory and Practice*, Vol. 18, No. 3, (1994), pp. 91–104.
- [89] Ledgerwood, J., *Microfinance Handbook: An Institutional and Financial Perspective*, Washington, D.C.: World Bank, (1999).
- [90] Lewis, W. A., *The Theory of Economic Growth*, London: Allen & Unwin, (1955).
- [91] Littlefield, E., Morduch, J., and Hashemi, S., "Is Microfinance an Effective Strategy to Reach the Millennium Development Goals?", *CGAP Focus Note*, No. 24, (2003).
- [92] Maddala, G. S., *Limited-Dependent and Qualitative Variables in Econometrics*, Cambridge: Cambridge University Press, (1983).
- [93] Malhotra, N. K., *Marketing Research: An Applied Orientation*, 4th ed., Upper Saddle River, NJ: Prentice Hall, (2004).
- [94] Mayoux, L., "Questioning Virtuous Spirals: Microfinance and Women's Empowerment in Africa", *Journal of International Development*, Vol. 11, No. 7, (1999), pp. 957–984.
- [95] Mbugua, J. K., *Loan Repayment and Sustainability of Government Funded Micro-Credit Initiatives in Murang'a County, Kenya*, M.Sc. thesis, Kenyatta University, Nairobi, Kenya, (2014).
- [96] McKernan, S. M., "The Impact of Microcredit Programs on Self-Employment Profits: Do Non-Credit Program Aspects Matter?", *Review of Economics and Statistics*, Vol. 84, No. 1, (2002), pp. 93–115.
- [97] Meyer, R. L., "Microfinance Services for Agriculture: Risks, Regulation and Rural Financial Institutions", *Asian Journal of Agriculture and Development*, Vol. 3, No. 1, (2006), pp. 17–38.
- [98] Morduch, J., "The Microfinance Promise", *Journal of Economic Literature*, Vol. 37, No. 4, (1999), pp. 1569–1614.
- [99] Morduch, J., and Haley, B., *Analysis of the Effects of Microfinance on Poverty Reduction*, New York: NYU Wagner Working Paper No. 1014, (2002).
- [100] Mugenda, O. M., and Mugenda, A. G., *Research Methods: Quantitative and Qualitative Approaches*, Nairobi: Acts Press, (2003).
- [101] Murdock, J., "Does Microfinance Really Help the Poor? New Evidence from Flagship Programs in Bangladesh", *World Development*, Vol. 26, No. 4, (1998), pp. 653–665.
- [102] Myers, M. D., *Qualitative Research in Business and Management*, London: Sage, (2009).
- [103] NBE (National Bank of Ethiopia), *Annual Report 2009/10*, Addis Ababa: NBE, (2010).
- [104] Otero, M., and Rhyne, E., *The New World of Microenterprise Finance: Building Healthy Financial Institutions for the Poor*, West Hartford, CT: Kumarian Press, (1994).
- [105] Patton, M. Q., *Qualitative Research and Evaluation Methods*, 3rd ed., Thousand Oaks, CA: Sage, (2002).
- [106] Pawlak, K., and Matul, M., *Analysis of Credit and Microcredit Demand in Bosnia and Herzegovina Households*, Warsaw: UNDP, (2004).
- [107] Polit, D. F., and Beck, C. T., *Nursing Research: Principles and Methods*, 7th ed., Philadelphia, PA: Lippincott Williams & Wilkins, (2004).
- [108] Punch, K. F., *Introduction to Social Research: Quantitative and Qualitative Approaches*, London: Sage, (1998).
- [109] Punch, K. F., *Developing Effective Research Proposals*, 2nd ed., London: Sage, (2006).
- [110] Rhyne, E., *The Yin and Yang of Microfinance: Reaching the Poor and Sustainability*, Washington, D.C.: MicroBanking Bulletin, (1998).
- [111] Robinson, M. S., *The Microfinance Revolution: Sustainable Finance for the Poor*, Washington, D.C.: World Bank, (2001).
- [112] Saunders, M., Lewis, P., and Thornhill, A., *Research Methods for Business Students*, 5th ed., Harlow: Prentice Hall, (2009).
- [113] Sekaran, U., *Research Methods for Business: A Skill Building Approach*, 4th ed., New York: Wiley, (2003).
- [114] Sen, A., *Development as Freedom*, New York: Alfred A. Knopf, (1999).
- [115] Shane, S., and Venkataraman, S., "The Promise of Entrepreneurship as a Field of Research", *Academy of Management Review*, Vol. 25, No. 1, (2000), pp. 217–226.
- [116] Shrestha, P. M., and Pant, B. D., "Effect of Microcredit on Poverty Reduction: A Case Study of Nepal", *Economic Review: Occasional Paper*, Nepal Rastra Bank, (2006).
- [117] Silverman, D., *Interpreting Qualitative Data: Methods for Analyzing Talk, Text and Interaction*, 3rd ed., London: Sage, (2006).
- [118] Simtowe, F., "Determinants of Rural Household Participation in Formal Credit Markets in Malawi", *Agricultural Economics*, Vol. 33, No. 2, (2005), pp. 131–140.
- [119] Stiglitz, J. E., "Peer Monitoring and Credit Markets", *World Bank Economic Review*, Vol. 4, No. 3, (1990), pp. 351–366.
- [120] Stiglitz, J. E., and Weiss, A., "Credit Rationing in Markets with Imperfect Information", *American Economic Review*, Vol. 71, No. 3, (1981), pp. 393–410.
- [121] Strauss, A., and Corbin, J., *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, 2nd ed., Thousand Oaks, CA: Sage, (1998).
- [122] Tadesse, M., "Determinants of Sustainable Rural Credit Services: The Case of Amhara Credit and Savings Institution (ACSI) in Ethiopia", M.Sc. thesis, Alemaya University, Ethiopia, (2002).
- [123] Tashakkori, A., and Teddlie, C., *Mixed Methodology: Combining Qualitative and Quantitative Approaches*, Thousand Oaks, CA: Sage, (1998).
- [124] Teddlie, C., and Tashakkori, A., *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences*, Thousand Oaks, CA: Sage, (2009).
- [125] Todd, H., *Women at the Center: Grameen Bank Borrowers After One Decade*, Boulder, CO: Westview Press, (1996).
- [126] Trochim, W. M., *Research Methods: The Concise Knowledge Base*, Cincinnati, OH: Atomic Dog Publishing, (2001).
- [127] UNDP, *Microfinance and Poverty Reduction*, New York: UNDP, (1997).
- [128] Van Rooyen, C., Stewart, R., and De Wet, T., "The Impact of Microfinance in Sub-Saharan Africa: A Systematic Review of the Evidence", *World Development*, Vol. 40, No. 11, (2012), pp. 2249–2262.
- [129] Woller, G. M., Dunford, C., and Woodworth, W., "Where to Microfinance?", *International Journal of Economic Development*, Vol. 1, No. 1, (1999), pp. 29–64.
- [130] Woolcock, M., "Learning from Failures in Microfinance: What Unsuccessful Cases Tell Us about How Group-Based Programs Work", *American Journal of Economics and Sociology*, Vol. 58, No. 1, (1999), pp. 17–42.
- [131] World Bank, *World Development Report 2000/2001: Attacking Poverty*, Washington, D.C.: World Bank, (2001).