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## **Analysis of Non-Performing Loans (NPL) among Microfinance Institutions (MFIs) in Ghana: Evidence from the Kasoa Municipality**

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### **Authors' contributions**

*This work was carried out in collaboration between all authors. All authors read and approved the final manuscript.*

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### **ABSTRACT**

The contributions of Micro-Finance Institutions (MFIs) to the Ghanaian economy can never be overemphasised. However, most of these institutions are faced with various challenges including non-payment of loans which constantly affect their operations and subsequently survival. As such, the study hinged on determining the non-performing loan (NPL) situations of Micro-Finance Institutions (MFIs) in Ghana focusing on four firms within the Kasoa metropolis, Central Region. The principal objective of the study was to determine the non-performing loan situations of 4 MFIs. The study adopted the both quantitative and qualitative approach and obtained a sample from 10 MFIs using the convenient (haphazard) sampling technique. The respondents comprised a branch manager, an executive director and two credit managers from each MFI. The data gathered were analysed using descriptive tools such as frequency table, bar charts and pie chart. The data was also analysed using narrations. Primary data collection instruments, specifically questionnaires were employed to gather data from the respondents. The study revealed the categories of loans existing in MFIs as well as those usually applied for, the factors accounting for non-performing loans,

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management of non-performing loans, sources of incomes and profits, impact of NPL on firms' operations. The study concluded that NPLs is a challenge for MFIs especially those in Kasoa metropolis. Recommendations made were that, The MFIs should make conscious efforts to pursue the implementation of the existing safeguards as it will help address the NPL situation, Clients granted loans should be monitored to ensure that loans are used for intended purposes, Training programs should be organised to adequately equip staff that engage in granting and recovery of loans, There should be good client profiling to identify the economic conditions of clients, this will aid the charging of appropriate interest rate that will enhance loan repayment.

*Keywords: Micro-finance institutions; non-performing loans.*

## 1. INTRODUCTION

The emergence of microfinance as a support to mainstream financial services provision has become indeed a sigh of great relief for most people and institutions that are often unable to partake in the formal financial sector even though its (microfinance) advent has also instigated some challenges. It is important that such a great contributor to socio-economic development be considered at global, African and national or local levels. According to the World Bank Group of the International Finance Corporation (IFC) 2018, globally, microfinance has built a solid track record as a critical tool in the fight against poverty and has entered the financial mainstream. The World Bank Group further stated that rapid growth of the industry over the past 15 years has reached approximately 130 million clients according to recent estimates. Yet, microfinance still reaches less than 20 percent of its potential market among the world's three billion or more poor. The evolution of the industry has been driven by many factors which include the transformation of microfinance providers, the sizable supply gap for basic financial services, the expansion of funding sources supporting the industry and the use of technology. As the industry has developed, there has been a shift from specialised Non-Governmental Organisations (NGOs) to an increasing number of regulated and licensed MFIs which stress that sustainability and impact go hand in hand. Furthermore, The World Bank Group is working with private microfinance institutions and stakeholders to incorporate responsible finance practices into all aspects of business operations. When done responsibly, private microfinance can have significant development impact and improve people's lives.

Microfinance simply has to do with the extension of financial services such as microcredit, micro savings, money transfer and other financial products to poor or low-income and unsalaried

individuals or micro enterprises, who but for such services would have been excluded from the formal banking system, Sarpong [1]. Institutions that engage in these are called Microfinance Institutions (MFIs). According to the Bank of Ghana, there are currently about 385 registered MFIs in the country and Ghana continues to periodically experience a proliferation of these institutions. Boateng et al. [2] and Belnye [3], observed that in response to rampant collapse and disappearance of MFIs or Susu companies and financial service providers (as they were then called). The Bank of Ghana closed down a number of such financial institutions country wide in 2008. However, the problem still persisted after the actions taken by the bank of Ghana. For instance, in the first quarter of 2013, about thirty MFIs collapsed in Ghana due to an alleged inability to "sustain their operations." Later in the year, additional twenty also became insolvent. The number keeps on adding up. Recently, one MFI became bankrupt and swindled over 5000 clients. Many of the customers had saved up colossal sums with the MFI. There is no deposit insurance in Ghana, therefore, when MFIs collapse, customers irretrievably lose their working capital, savings and their sources of livelihood—their businesses are likely to collapse, which further predisposes them to indebtedness and consequentially impoverishment. Boateng et al. [2] further hinted that the public needs to have confidence in financial institutions to patronise their services; the collapse of MFIs is therefore a bad press for Ghana's finance sector. In a country whose microfinance penetration to the low-income population is as low as 9 percent, it is also detrimental for existing MFIs. Typical of this situation is the collapse of MFIs such as DKM and God Is Love. Some depositors were said to have committed suicide in the Brong Ahafo Region after several months of failed efforts to get back their investments. This situation compelled the revocation of the licenses of seventy MFIs Sarpong [1]. The result of the collapse of these MFIs causes the investors who

have very little capital base and seek for an improvement in their capitals to lose their investments and eventually affects the entire economy.

The problem, therefore, is "Do MFIs make profits? If they do, why then do they fail at the detriment of depositors and the economy as a whole?" Also, research has shown how non-performing loan situations adversely affect the operations of MFIs, KPMG [4] and Amoako [5]. The question, how does the situation of non-performing loans in MFIs in Ghana (Kasoa)? adds to the problem at hand.

In view of this, the purpose of this study was to analysis non-performing loan situations of 4 MFIs in Kasoa. The specific objectives were developed to:

1. Discover what accounts for NPL in MFIs in Kasoa.
2. Find out the source of incomes and profits of MFIs in Kasoa.
3. Ascertain how managers of MFIs address and manage non-performing loans situations.

The study's findings will be of great advantage to the Bank of Ghana and other regulators within the financial sector in bringing to their knowledge and attention some inherent issues pertaining to NPL to aid in a more effective regulation of the activities of MFIs. For depositors, this study will enable them better understand the operations of MFIs to enhance their dealings with MFIs. Researchers will gain immense insight into the activities of MFIs for their studies and researches. Finally, the study will assist individuals and institutions who wish to invest in MFIs or set up MFIs to adequately comprehend their operations and equip them in making informed decisions.

## 1.1 Literature Review

The study was underpinned by the two theories namely, the Agency and the Asymmetry theory. According to the Agency theory, the principal agency problem can be reduced by better monitoring, such as establishing more appropriate incentives for managers. In the field of corporate risk management agency issue have been shown to influence managerial attitudes towards risk taking and hedging Smith and Stulz [6]. The theory also explains a possible mismatch of interest between shareholder management

and debt holders due to asymmetries in earning distribution, which can result in the firm taking too much risk or not engaging in positive net value project Smith and Stulz [6]. Consequently, agency theory implies that defined hedging policies can have important influence on firm value Fite and fleiderer [7]. The agency theory is basically about an effective supervision and monitoring by way of establishing an effective relationship with managers to ensure they put measures in place to reduce NPLs situation affecting the various Micro-Finance firms.

With regards to the asymmetry theory, it tells us that it may be difficult to distinguish good from bad borrowers Auronen [8] and Richard [9], MFIs may find it difficult to determines the credit worthiness of a person who approaches the firm for a loan, this may lead to an adverse selection and moral hazards problems. The theory explains that in the market, the party that possesses more information on a specific item to be transacted is in a position to negotiate optimal term for the transaction than the other party Auronen [8]. The party that knows less about the same specific item to be transacted is therefore in a position of making either right or wrong decision concerning the transaction. Adverse selection and moral hazards have led to significant accumulation of Non-Performing loan in banks Elsas and Krahnem [10].

Microfinance, according to Otero [11], is "the provision of financial services to low- income, and very poor self-employed people". These financial services according to Ledgerwood [12], generally include savings and credit but can also include other financial services such as insurance and payment services. Schreiner and Colombet [13] define microfinance as "the attempt to improve access to small deposits and small loans for poor households neglected by banks." Probably, the most holistic definition for micro finance is the one by Wrenn [14]. According to Wrenn [14], microfinance involves the provision of financial services such as savings, loans and insurance to poor people living in both urban and rural settings who are unable to obtain such services from the formal financial sector. Wrenn [14] further noted that though the terms microfinance and microcredit are often used interchangeably, there exist a difference between them. Sinha [15] states that, "microcredit refers to small loans, whereas microfinance is appropriate where NGOs and MFI supplement the loans with other financial services (savings, insurance, etc)". Therefore,

microcredit is a component of microfinance in that it involves providing credit to the poor, but microfinance also involves additional non-credit financial services such as savings, insurance, pensions and payment services. According to the International Monetary Fund report 2016, "A loan is nonperforming when payments of interest and principal are past due by 90 days or more, or at least 90 days of interest payments have been capitalised, refinanced or delayed by agreement, or payments are less than 90 days overdue". A non-performing loan, or NPL, is a loan that is in default or close to being in default. Many loans become non-performing after being in default for 90 days, but this can depend on the contract terms.

The various findings obtained after the examination of a number of literatures on some selected areas of consideration relevant to the objectives of the study are as follows;

According to Mazzotti [16], on studying how to manage Non-performing loan, it was found that businesses can extract value from NPL through such initiatives as client profiling, defining a retail strategy library, redesigning the operating model, optimising legal services and launching a collateral recovery data quality program.

In a related work, Zeb and sattar [17], examined profit efficiency and financial stability of commercial banks of Pakistan. Data Envelopment Analysis (DEA) was employed to measure efficiency. In their work, they indicated that "tackling the NPL issue requires both a clean-up program and the implementation of a distinct and advanced operating model ensuring to address problematic loans effectively at an early stage—the sooner, the better!" Zeb [17] further noted that the characteristics of the portfolio will influence the scale and substance of the clean-up program. Additionally, Zeb [17] hinted that the distinct operating model will focus on four key areas: value-based management strategy—how to maximise the portfolio value; governance and organisational design; efficient and IT-supported processes; and monitoring and reporting. According to John Kay Associates Ltd [18], non-performing loans in microfinance institutions can be managed through the adoption of a policy that ensures loan facility are given to good outstanding clients who have the ability to honour their obligations to the end. Also, application for credit by the potential applicant should be subjected to vigorous loan analysis so as to determine credit risk of the borrower in

order to reach a firm decision before the facility is granted as well as implementation of proper monitoring schemes. Microfinance institutions should avoid granting loans to risky customers or for speculative ventures, monitor loan repayment and renegotiate loans whenever borrower gets into difficulties John Kay Associates Ltd. [18].

Rouse [19] studied Bankers' lending techniques, they find out that, ensuring that the loan acquired is used for the intended purpose will aid in NPL management.

Akter and Roy [20] Examined The Impacts of Non-Performing Loan on Profitability. With a sample of 30 listed commercial banks. It was observed that NPL is one of the major factors of influencing banks' profitability and it has statistically significant negative impact on net profit margin of listed banks.

Azeem and Amara [21] studied the Impact of Profitability on Quantum of Non- Loans. The study was conducted on sixteen major banks of Pakistan irrespective of performing status, for a period of 6 years from 2006 to 2012 by using panel fixed effect model. The sample comprised of both public and private banks with different sizes. It was revealed that NPL disturbs the profitability of banks and other financial institutions that are involved in lending activity. Performance measures of return on assets and return on equity are negatively affected with increase in non-performing loans while stock return is not affected.

Amoako [5] studied on the effect of bad loans on the profitability and lending potential of rural banks. A sample of selected rural banks in the Ashanti region of Ghana. The result found that the selected banks are witnessing steady rise in their Non-Performing Loan Ratios (NPL), which raises concern about their effectiveness in managing credit risk. The study further found that NPL (bad loans) has significant negative effect on the lending potential of the selected banks. Also, it was discovered that though NPL has a negative effect on the banks profitability, the effect is not significant. The study further discovered that the main causes of bad loans within the selected banks include laxity in credit monitoring, poor appraisal system and lack of effective credit management policy to govern the disbursement of funds to borrowers.

Amuakwa-Mensah and Boakye-Adjei [22] determined the non-performing loans in Ghana

banking industry. Using panel regression model, they found that NPL had adverse effect on interest incomes and operating profits.

Arko [23] examined the causes and impact of non-performing loans on the operations of microfinance institutions. The study focused on Sinapi Aba Trust (SAT), the study found out that NPL adversely affected the financial performance of the organisation by way of reducing its profit, loanable funds and undermining liquidity positions, among others.

Kirui [24] studied the effect of non-performing loans on profitability of commercial banks in Kenya. The study used commercial banks registered and operational in Kenya as at CBK (2013). Profitability measured by return on assets was used as dependent variable and non-performing loans measured by non-performing loans ratio is used as independent variable. The study showed that, there is a negative effect of NPL ratio on return on asset confirming that NPL negatively affect profitability of commercial banks in Kenya. He also noted that NPL erodes banks' profitability in that banks' could incur heavy disposal expenses.

## **2. METHODOLOGY**

### **2.1 Research Design**

Even though research can take on different designs such as being experimental or diagnostic, our study employed the survey design. Data collected through survey approach could be used to determine possible relationships between variables so as to be able to produce models out of these relationships Saunders et al. [25]. This research design was appropriate with the purpose of the study which was to determine the profitability and non-performing loan situations of 4 MFIs in Kasoa. Again, the survey design was adopted because of the nature of the research which was exploratory. The exploratory nature of the study was due to the fact that the study aimed at knowing more about the non-performing loan situations among MFIs in the study area.

### **2.2 The Study Area**

The study was conducted in Kasoa in the Central Region of Ghana. The choice of the study area was due to the fact that very little study has been done in this region, and specifically Kasoa

because 10 out of the 22 MFIs in Central Region Bank of Ghana 2016 were located in that area. Moreover, Kasoa, among the cities in the Region, has seen the best of industrialisation yet most of these MFIs located in that area are collapsing, which therefore requires a study to ascertain the causes as well as recommendations to address the issue.

### **2.3 Sampling Procedures**

Convenience sampling technique, which is a non-probability sampling technique, was employed in selecting the microfinance institutions. According to Saunders et al. [25] convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher. It is basically where samples are drawn from that part of the population that is close to hand. The choice of the convenience sampling technique was as a result of ease in data collection exercise which is appropriate for this type of a study.

#### **2.3.1 Data collection procedures**

Data was collected through questionnaires given to the respondents. The units of analysis were 4 sampled MFIs in Kasoa. The statistical and analytical tools used were tables, pie chart and bar chart and the data were processed using Microsoft Excel. The study used this tool for the quantitative part because it was helpful in providing needed result.

### **2.4 Ethical Considerations**

The study also considered the ethical challenges it was likely to face and as such provided necessary measures to address them. Assurances were given to the respondents that their responses would remain highly confidential and as such, no part of their information would be leaked. This was done to avoid a breach of respondents' secrecy. Also, the purpose of the study was thoroughly explained to the respondents in order to avoid deception. Moreover, consents were sought from the appropriate authorities before the exercise and respondents were allowed to voluntarily involve in the exercise. The goal of ethics in research is to ensure that no one is harmed or suffer any negative consequences from participating in research activities. With this in mind, all ethical issues were addressed appropriately.

### 3. RESULTS AND DISCUSSION

possessed some appreciable knowledge concerning work life.

#### 3.1 Age Profile of Respondents

Table 2 explained the findings obtained in an attempt to solicit the age of respondents. It can be seen in Table 2 that while the age category 20-25 had only 2 respondent representing (12.5%) making it the least, the categories 26-30 and above 35 years recorded the same outcome of 4 respondent each representing (25%) making them the 2<sup>nd</sup> in ranking. The category 31-35 recorded 6 (37.5%), making it the highest category. These findings clearly demonstrate that the respondents were quite aged and therefore

#### 3.2 Categories of Loans Offered by the Selected MFIs

According to the respondents contacted from the MFIs, clients were offered a variety of loans. The loans offered include those for business, school fees payment, Small and Medium-Scaled Enterprises (SMEs), project financing, contract or clearing loans, fast-track, quick loans, “micro” loans “normal” loans, susu loans, susu with overdraft and group loans. This is shown in Table 3.

**Table 1. Actual calibre and number of respondents**

Firm	Position of respondent	Number of respondent
Firm1	Executive Director, Branch manager, Loan manager, credit manager/financial controller	4
Firm2	Executive Director, Branch manager, Loan manager, credit manager/financial controller	4
Firm3	Executive Director, Branch manager, Loan manager, credit manager/financial controller	4
Firm4	Executive Director, Branch manager, Loan manager, credit manager/financial controller	4

Source: Field survey (2018)

**Table 2. Age profile of respondents**

	20-25 yrs*	26-30 yrs*	31-35 yrs*	Above 35 yrs*	Total
Number of respondents	2	4	6	4	16
Percentage (%)	12.5	25	37.5	25	100

Source: Field survey (2018)\*years

**Table 3. Categories of loans offered by the selected MFIs**

	Types of loans available
Firm 1	Fast-track loans and normal loans
Firm 2	Susu loans, business loans, group loans, quick loans, susu with overdraft
Firm 3	SME loans, school fees payment loans, project financing, contract loans, clearing loans
Firm 4	Micro loans, business loans, port clearing loans, school fees payment

Source: Field survey (2018) \*microfinance

To obtain a fair idea of the categories of loans offered by the selected MFIs, primary data from the MFIs was solicited. It is important to indicate that the names for some categories of loans existing varied from firm to firm, though they had the same meaning. For instance, “normal” loans in one firm is the same as “micro” loans in another; quick loans in one firm equates fast track loans in another. Additionally, the findings showed some similarity with earlier works such as that of Amoako [5]. In his work, he found out that selected banks have loans like commercial loans which is the same as business loans as per this research. Again, Amoako’s work and the findings of this research showed that two common loans existing in some rural banks and some MFIs are susu and overdraft loans. A difference identified between the findings as per this research and that of Amoako was that the most applied for loan in Amoako [5] was salary loan but that of this research was micro loan (see Fig. 1).

### 3.3 Category of Loan Normally Applied For

The study further enquired about the type of loan normally applied for. A total of sixteen responses from all the four firms was received concerning the most applied for loan. Micro loans had 3 responses, business loans had 2, SME loans had 1 and school fees payment loan also had 1,

totaling 7. These have been expressed in percentages as seen in Fig. 1.

From Fig. 1, it can be seen clearly that across the MFIs, micro loans are usually applied for. It is followed by business loans and then by SME loans and school fees payment loans which recorded the same result.

The frequent application for micro and business loans gives insight into the collapse of some MFIs in recent times. This is because micro and business loans are loans to low income workers like “market women” and these people sometimes are unable to pay.

### 3.4 Factors Accounting for Non-Performing Loans

The factors that were discovered to have accounted for and still causing bad loans among MFIs included clients facing health challenges, death of clients, deliberate refusal to pay, charging of high interest rate, diversion of purpose of loan, collapse of business of client, poor project assessment, inadequate training for staff that engage in loan recovery. Among these factors, it was realised that, the ones that mostly contribute to the situation were death of clients, diversion of purpose of loan, collapse of business of client and poor project assessment. This is seen in Fig. 2:

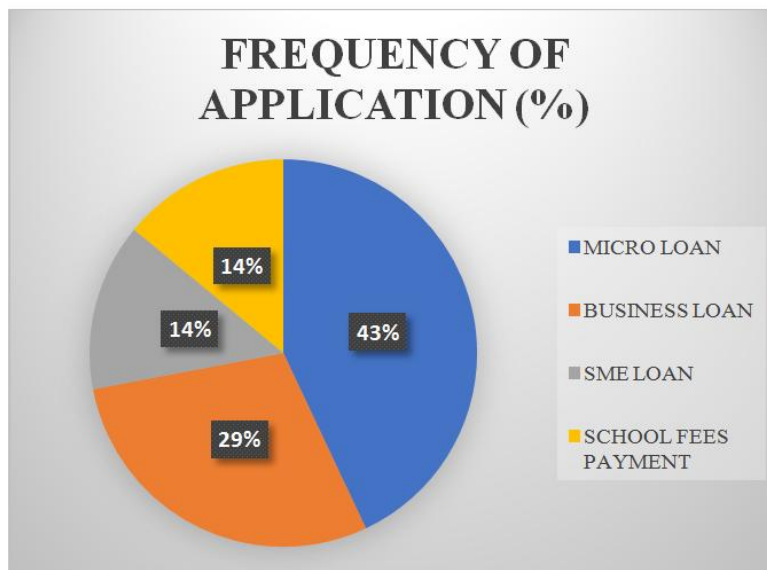
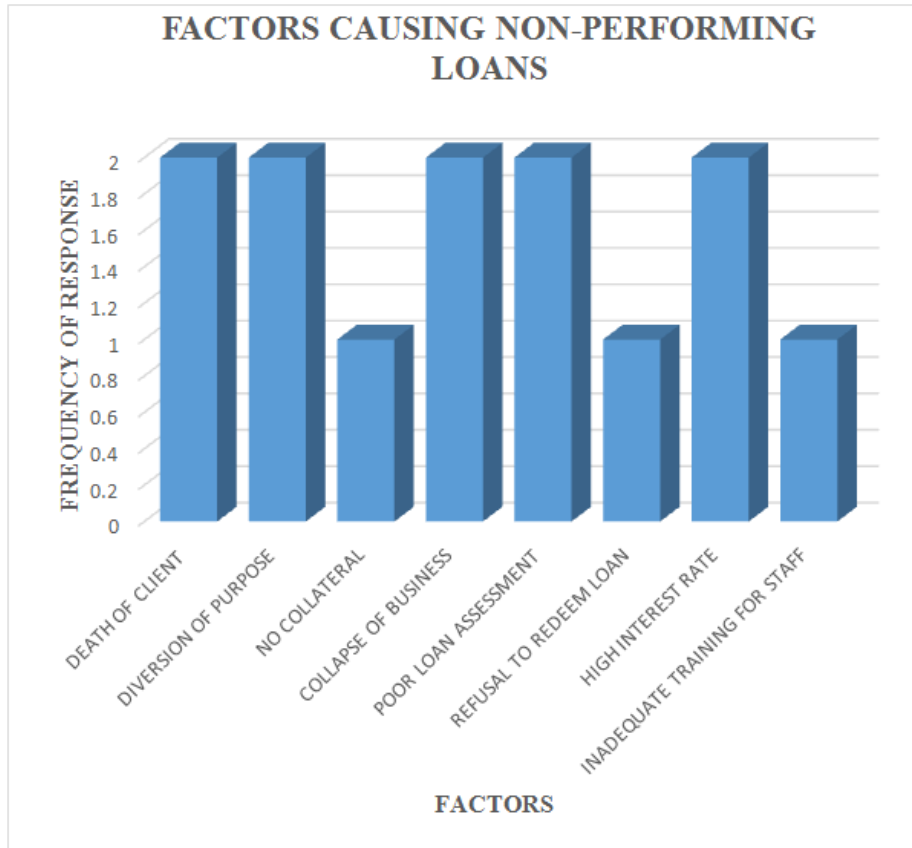


Fig. 1. Frequency of application for loan  
Source: Field survey (2018)



**Fig. 2. Factors causing non-performing loans**  
 Source: Field survey (2018)

This finding was similar to some extent with some earlier researches. For instance, Messai and Jouini [26] found out that NPL increase when interest rate rises and the findings of this research also show that NPL increase when interest rate is high.

### 3.5 Sources of Incomes and Profits

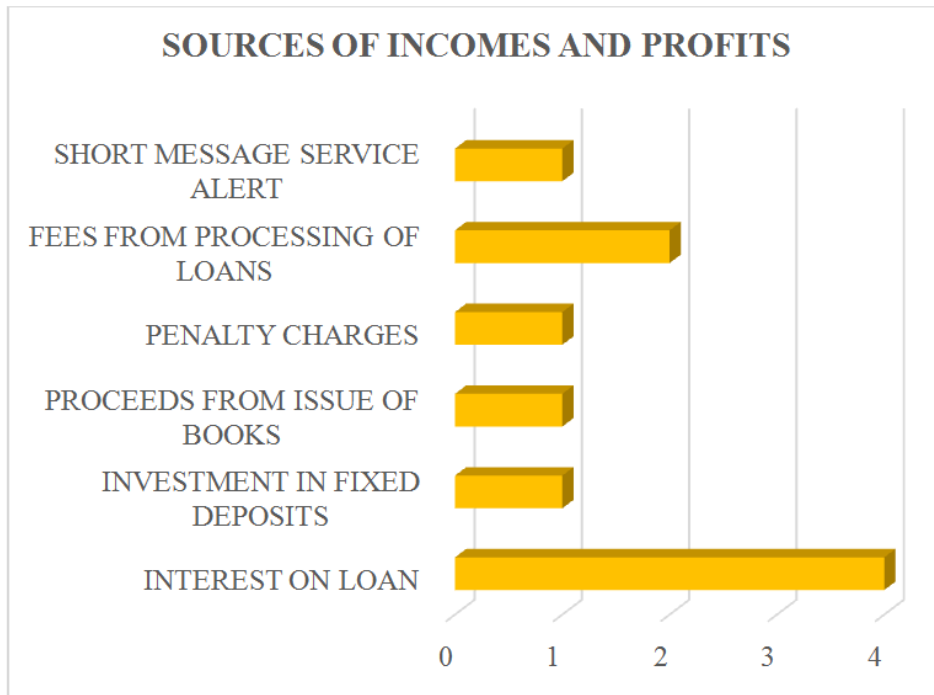
The primary intent for enquiring about the source of income and profits of the firms was to aid the understanding of why such firms have been collapsing in recent times. In the bid of the study to ascertain the various avenues through which the firms make their profits, the following were identified as the income and profit generating sources: interest on loans granted, earnings from investment, proceeds from sale of passbooks and withdrawal books, charges from processing of loans, proceeds from short message service (SMS) alerts and proceeds from penalty charges.

From Fig. 3, it was realised that the main income and profit source was interest on loans. While the study was not furnished with financial statements of the MFIs, some respondents indicated explicitly and others impliedly that they do make some profits.

### 3.6 Management of NPL

Owing to the debilitating effect of NPL, there is the need for the institution and operation of sound measures of managing the situation. Information was therefore solicited on how they (the firms) manage their NPL, especially as all firms indicated that they do not abandon NPL. From the study it was disclosed that management of MFIs fall on the following strategies regarding management of NPLs: falling on guarantors, family members and personal property for repayment, restructure of terms and conditions of payment (taking of principal only), applying for encumbrance at the law court. It was understood that the technique mostly adopted is loan restructure.





**Fig. 3. Sources of incomes and profits**

Source: Field survey (2018)

#### 4. CONCLUSIONS AND RECOMMENDATIONS

The purpose of the study was to determine the non-performing loan situations of 4 MFIs in Kasoa. A response rate of 80% was obtained. A three-month period was used for the study. Among the limitations of the study were difficulty in getting information, financial restrictions and time constraints. A survey design was adopted. The study area was chosen because it has the highest number of firms and also the area that has seen the greatest level of industrialisation. The sampling technique used was the personal judgment and convenient type. Questionnaires were employed for the data collection and data was processed using Microsoft Excel 2013 and analysed was done using descriptive tools such as tables, pie chart and bar charts. It can be concluded based on the results obtained that, NPLs are major problems for MFIs and have implications on their operations and survival.

From the discussion made and the foregoing, the authors urged that the following should be considered with immediate effect; The MFIs should make conscious efforts to pursue the implementation of the existing safeguards as it will help address the NPL situation, Clients

granted loans should be monitored to ensure that loans are used for intended purposes, Training programs should be organised to adequately equip staff that engage in granting and recovery of loans, There should be good client profiling to identify the economic conditions of clients, this will aid the charging of appropriate interest rate that will enhance loan repayment

#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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