
EFFECT OF INTEREST RATE ON CUSTOMERS' DEMAND FOR LOANS IN ATIWA RURAL BANK PLC, GHANA

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Abstract

This study sought to determine the influence of interest rate on demand for loans among Rural Banks in Ghana. The study adopts an explanatory design of the quantitative approach. Secondary data from the Atiwa Rural Bank PLC database was used. The data were analysed using frequencies and percentages. Also, binary logistic and linear regression were used in analysing the relationship among the key variables of this research. The study found that interest rate of Atiwa Rural Bank PLC was rated as moderate while repayment status was high. There were differences between the category of the respondents and the repayment status. More males repay their loans as compared to females and groups. Also, differences existed between the employment status of the respondents and the repayment status. Moreover, insignificant differences were identified between the employment status of the respondents and the repayment status. Interest rate affects loan period positively. Also, a strong positive correlation between interest rate and loan period was determined. Interest rate affects amount of facility negatively. Moreover, credit facility with high interest rate is 1.020 times more likely to default in paying back the credit facility as compared to respondents who obtained their credit facility as a moderate or low interest rate. Increasing interest rate was associated with low or default in repayment of credit facility. The study therefore, recommend that management of the Atiwa Rural Bank PLC put up measures to able to track and retrieve all small amount of facility or loans given to clients. Also, the management of the Atiwa Rural Bank PLC should target more salaried workers and loans used for emergency services such as medical bills, school fees among others in order to reduce Non-Performing Loans (NPL). Moreover, the management of the Atiwa rural bank should improve upon the mechanisms implemented regarding giving of group loans and repayment issues.

Keywords: Interest Rate, Loans, Atiwa Rural Bank PLC, Credit Risk, Non-Performing Loans

INTRODUCTION

Bill Ganzel (1992), of the Ganzel Group, researched the history of rural banking and identified the primary objective that led to its development. It was discovered that in order for farmers to start businesses, make progress, and make it through the agricultural sector, they required credit in the form of advances with a predetermined purpose. Great times were had on the farm as a result of a convoluted network of credit organizations that was established in the late 1940s. The people who lived in rural areas required two different kinds of credit. To begin, they needed cash advances with long repayment period of time to purchase land and machines. Second, they required short-term advances in order to purchase the "inputs" that are necessary for agricultural production on an annual basis. They need money to acquire items like seed, manure, herbicides, and insecticides as well as other things related to generation. Prior to the establishment of banks, farmers and people living in rural areas in general obtained their credit from private parties and from enterprises located in their immediate area (Odoom, Opoku, & Ntiakoh-Ayipah, 2016).

Approximately 32 years ago, the Bank of Ghana with the help of Ministry of Finance first broached the idea of rural banking. At the time, rural banking was referred to as the junior league of banking institutions, and its purpose was to cater to the particular requirements of individuals living in Ghana's rural communities. The traditional and approved financial institutions of the time were all structured, equipped, and operated as urban-focused businesses. The majority of their customers were involved in the mining industry or the business of importing and exporting goods. After that, it became essential to incorporate the rural population into the financial system using principles that were tailored to the specifics of their socioeconomic environments (Bawuah, 2012). Recently, Ghana's rural banks have begun offering these services to everyone, including the country's metropolitan population.

It is widely held that providing locals with access to financial resources makes it possible for them to raise their levels of output and income by subscribing financial offers, products and services, hence increasing the likelihood of a fall in abject poverty and growth in their wellbeing (Henry & Schimmel, 2011). The poor stay poor not because they are lazy but because they have no access to capital is a proverb (Thurman, 2007). Financial institutions such as rural banks contribute to the development and sustainability of economic and financial systems by providing access to loans for customers typically exempted from commercial banks operations (Lopatta, Tchikov, Jaeschke, & Lodhia, 2017). This is one way to increase productivity and reduce poverty in Ghana (Lopatta et al., 2017; Million, 2012; Zerai & Rani, 2012).

People are able to raise their family incomes, levels of savings, consumption, and education, as well as their levels of education, and acquire assets so that they can begin engaging in self-employment activities because of the atmosphere that is created by rural banks (Banerjee et al., 2014). Credit from rural banks is seen as a method for alleviating poverty since it increases access to various forms of financing offers (GAROMSA, 2017; Kinde, 2012; Werema & Opanga, 2016). In rural finance, the ideal goals include providing credit services that are productive, efficient, cheap in cost, and recover a great percentage of the loans disbursed (Wenner, 1995).

The primary goals of rural banks are the development of employment possibilities, the alleviation of poverty, the promotion of economic autonomy for the underprivileged, and the promotion infant businesses (Kinde, 2012; Pasha & Negese, 2014). As a result, microfinance institutions (MFIs) came into existence in order to bridge the gap created by a lack of available financial resources. These institutions give money to people with low incomes and the needy in order to help them escape financial challenges and improve economic activities (AfDB & UNECA, 2012). Their services include providing microloans, micro savings, micro insurance service, money transfer, leasing, and other relevant finance programs to the target rural individuals excluded by the industrial commercial banks as a result of a lack of collateral demands, asymmetric information, and high processing costs. They are able to do this because of the fact that the conventional commercial banks do not require collateral, they have incomplete information, and they have high service fees (Melese & Asfaw, 2020; Pasha & Negese, 2014; Woldeyes, 2012).

According to Ramkumar, Bekele, & Sivasankaran, (2015) users of rural banks have been given the opportunity to create income, acquire better services, which may result in an improvement in the clients' level of living. When opposed to informal sources of funding, formal financial institutions provide smallholder farmers with more adequate loans at lower interest rates. This makes formal financial institutions the backbone of the smallholder farming community. Even more essential, smallholder farmers need access to capital in order to complete a total change from an orientation toward subsistence farming to one focused on market agriculture. This is due to the fact that credit is the determining factor in whether or not farmers have access to appropriate materials, tools and equipment (Mgbebu & Achike, 2017).

There is little room for debate on the significant roles that credit plays in the expansion of the economy.

Lending has been and continues to be the most significant aspect of a bank's operations, and especially in developing economies such as Ghana, which have not yet established fully functional capital markets. Lending operations, on the other hand, have been a contentious and problematic issue for the vast majority of economies that are through transformation, and Ghana in particular (Afriyie & Akotey, 2012). Customers of commercial finance firms are moaning about a shortage of credit and high requirements because banks have experienced enormous losses as a result of poor loans.

In spite of the fact that the rising NPLs rate is one of the most significant issues facing finance companies like rural banks Kohansal & Mansoori, (2009), the difficulty of making loan repayments discourages financial firms from giving more loans (Melese & Asfaw, 2020). If the loan funds in an economy are not repaid, it limits the retrieving of the funds, and it is lowered by the amount of classified loans, which may lead to economic stagnation if the funds are not recovered. The large percentage of borrowers who do not follow through with their obligations to repay loans is the primary factor contributing to the subpar performance of finance firms in developing nations, including Ghana (Reta, 2011). It is necessary to state that the borrowers are not solely responsible for the failure to repay the loan.

However, it is imperative to inspect the level of risk borrowers and lenders bear by the loan agreement, as well as the nature of the responsibilities, duties, and duties of both parties as revealed in the plan of the credit program. It is important to state that the borrowers cannot be held solely responsible for the failure to repay the loan (Afolabi, 2010). When it comes to the status of a loan and the repayment of that loan, however, other macroeconomic elements, like the interest rate, cannot be ignored. When calculating the interest rate, the amount of money that is charged for borrowing money is considered the cost of capital.

According to UHUNMWANGHO & IGBINOSA, (2022), interest rate is defined as the percentage of principal the lender charges the borrower in exchange for the usage of their money. According to Onyeagocha, (2012) and other researchers, interest rates are a significant factor that influences the amount of money that is repaid to rural banks for loans. As a result, the purpose of this research work is to investigate the effect that interest rates have on the demand of loans by customers of rural and community banks in Ghana.

Whilst financial institutions in developing nations try to broaden the scope of their offerings and increase the number of customers they serve, one of the most significant challenges they confront is the persistent problem of borrowers failing to repay the money they have borrowed. Despite the fact that rural banks contribute to the alleviation of poverty, the creation of jobs, and the sustained development of the economy of both developed and developing nations, there are a great number of obstacles that rural banks must overcome in order to carry out their operations. The government and other financial institutions collaborate more closely with the goal of reducing the financial obstacles that impoverished people face while also innovating and extending the many different options that are available to them (Tarekegn & Molla, 2018).

The risk that a financial institution, particularly a rural bank, will not recover its money back from borrowers is the most widespread and frequently the most serious weakness that the organization faces. In the event of loan default, new applicants may be denied access to loan facilities. This is because the management of rural banks may experience an increase in challenges in direct proportion to the growing NPLs. Later on, a low payback rate inhibits financial institutions from refinancing defaulting members, and as a result, those members are unable to remain viable due to the problem of default. Borrowers will also be unable to gain access to loans and will be forced to live in poverty, all of which hinders overall growth of the nation (Gebeyehu, Beshire, & Haji, 2013; Sileshi, 2014).

According to Sileshi, (2014), the demand of a credit facility is influenced both directly and indirectly by a variety of circumstances including policies enacted by the government, demographics, and institutional, cultural, and environmental factors. Some researchers have discussed the benefits, drawbacks, accessibility, and function of loan facilities for better production efficiency; nonetheless, prompt repayment of loan is vital for maintaining creditworthiness. Therefore, inability of borrowers to return the total loan amount acquired is essential to the continued existence of finance institutions over the long term. As a direct consequence of this, a wide variety of studies have attempted to investigate the various socio-economic groups' levels of success in acquiring loan facilities.

Garomsa (2017), factors affecting a credit facility and repayment revealed that variables such as gender, income from other sources, monitoring utilization of other members in a group, credit timeliness, repayment time suitability, repayment trend monthly, and training adequacy are found to be significant factors that affect loan facility and repay rate of the borrowers. These factors include gender, income from other sources, monitoring utilization of other members in a group, monitoring utilization of other members in a group, and training adequacy.

Other studies (Sunday and Anthonia, 2017; Jote, 2018; Sileshi, 2014; Abera and Asfaw, 2019; Yibrie and Ramakrishna, 2017; Gebeyehu et al., 2013; Alemayehu and Lemma, 2014; Abu et al., 2017; Garomsa, 2017; Ume et al., 2018; Yimer, 2019) focused on the effect of socio-economic characteristics of the borrower, poor management procedures, loans diversion, financial knowledge and among others on repayment of loans. In Ghana, studies including Yao (2012), Kwasi (2016), Musah (2013), Afroze, Rahman and Yousuf (2014), and Amonoo, Acquah and Asmah (2003) considered access to loans, determinants of loan default, factors that influence loan repayment, and multiple borrowing on ability to repay loans.

On the other hand, macroeconomic considerations, particularly interest rate and how it affects demand for loans, receive a very small amount of attention. Both Amonoo, Acquah, and Asmah (2003) and Oteng and Ntim (2014) investigated the influence that high interest rates have on borrowers' ability to repay loans, as well as the reaction that interest rate has on demand for credit and loan repayments. In light of this, the goal of this research is to investigate the effect that interest rates have on the demand of loans, loan repayment period, and repayment status by customers of rural and community banks located in Ghana, the case of Atiwa Rural Bank PLC.

RESEARCH METHOD

Research approach is essential aspect of any research work because it provides the roadmap, procedures, plans and strategies for conducting the research. In pursuance of this, quantitative approach was used for the study (Creswell & Creswell, 2017). The quantitative approach as suggested by Creswell and Plano Clark (2011) employs statistical methods to verify what is understood and needs to be learned through analysis. In essence, it helps to understand cause-and-effect relationship among the variables guiding the study. Also, the quantitative approach provides more objective responses because it is appropriate for predicting the influence of one variable on the other (Creswell & Creswell, 2017). Therefore, the study adopted the quantitative approach because it responds to relational questions of variables within the study on the effect of interest rate on loan product, repayment status, and repayment period and loan amount.

The study employed explanatory research design. With this design, aside describing the various variables, the research was able to determine the relationship between interest rate on loan product, repayment status, and repayment period and loan amount. Loan application forms of various loan products of Atiwa Rural Bank PLC for 2019 to 2021 accounting year are used as the data collection instrument for the study. The data are analyse using Pearson r correlation. Moreover, linear regression is used to analyse the effect of interest rate on various variables

such as loan amount, loan amount, repayment period and status. The t-test and ANOVA analysis are used to determine the difference between demographic characteristics of the customers and their loan repayments period. Furthermore, chi-square is used to differentiate difference between interest rate and loan product subscribed by the customers of the rural bank.

RESULT AND DISCUSSION

This section focuses on the presentation of results, interpretation and discussions. The study sought to examine the influence of interest rate on demand for loans among rural banks. The presentation of results is organized in two main themes; characteristics of the respondents and the specific objectives (examine the effect of interest rate on loan amount; examine the effect of interest rate on loan repayment period; analyse the effect of amount facility on loan repayment; compare the characteristics of the loan applicants and their repayment status) of the study.

Characteristics of the Respondents

Background characteristics of the respondents are assessed. This is crucial since many people perceived things differently and opinions may differ based on the background characteristics of the respondents. In view of this, the study gathers data on the background characteristics of the respondents including sex, occupation, and type of facility. These characteristics are discussed subsequently respectively.

On the category of respondents involved in the study. It shows that out of the 203 respondents, 150 was males and 40 was female. On the other hand, 13 of the respondents are in a form of a group. This group includes religious bodies, market women or sellers. Almost all of the respondents who accessed credit facility from the rural bank were employed. Aside 12.8 percent who were pensioners, 75 percent was salaried workers, followed by about 5 percent that were traders while about 7 percent was in a form of groups. It can be seen that more of the respondents were salaried workers. These respondents have at least stable income and therefore, can be deducted every month with ease as compared to unemployed or market women who do not have consistent or stable income. About 70 percent had either GH¢ 1000 or less as their average monthly income, followed by 21 percent who earned between GH¢ 1001-2000 and 8 percent of the respondents earned within GH¢ 2001-3000. This means that most of the respondents earned below GH¢ 2000 and this affect the amount of facility that respondents can accessed.

Table 1: Purpose of facility

	Frequency	Percent
Business	50	24.6
Building	35	17.2
Financial Problem	4	2.0
Medical bills	16	7.9
Education	69	34.0
Personal	13	6.4
Funeral	16	7.9
Total	203	100.0

Loan facilities are accessed for a purpose. Therefore, data were gathered from the database of Atiwa Rural Bank PLC on the reasons for why respondents sought for credit facility and the outcome in Table 1. It depicts that about one-third of the respondents accessed loan for educational purposes, about quarter of the respondents sought for credit for business purposes, followed by 17.5 percent of the respondents had loan facility for building or renting of house purposes while others were meant for funerals or medical bills. This shows that more of the

respondents sought for loan facility due to education, business and buildings while only few respondents accessed loans due to financial problem, personal, medicals bills and funeral.

Table 2: Interest Rate of Atiwa Rural Bank PLC

	Frequency	Percent
LOW	16	7.9
MODERATE	153	75.4
HIGH	34	16.7
Total	203	100.0

Table 2 shows that interest rate is regrouped into three main mutually exclusive groups: low, moderate and high interest rate. Interest rate at 20 percent and below were classified as low, interest rate between 20 and 40 is rated as moderate while more than 40 percent of the interest rate is rated as high. Table shows that 7.9 percent of the interest rate was rated as low, followed by 75.4 percent of the interest rate rated as moderate while about 16 percent of the interest rate is rated as high. Thus, majority of the interest rate was rated as moderate. The theory of credit market proposed that lenders give money to proposals that are risky and possibly cannot be banked, and credits are given out at charges that are equal to the opportunity cost of funds. It is conceivable that financial institutions would utilize the interest rates that a person is willing to pay as a screening method to identify borrowers who have a high possibility of repaying the money they borrow. However, when interest rates go up, the average level of riskiness of borrowers goes up, which could potentially result in a reduction in earnings for the bank.

Table 3: Repayment Status

Status	Frequency	Percent
Yes	161	79.3
No	42	20.7
Total	203	100.0

Table 3 shows the repayment status of the respondents. The repayment status is categorized into two main groups: Yes or No. Loans or credit facility that was paid off was categorized as “Yes” while those that have expired or still current is classified as “No”. Table five (5) indicates that about 79 percent of the respondents have paid off their loans while about 21 percent of the respondents have not paid for their loans or credit facility. Though most of the respondents have repaid their loan or credit facility, a significant number of the respondents (20.7%) have not paid off their loan or credit facility obtained from Atiwa Rural Bank PLC.

Comparison between the characteristics of respondents and the repayment status

As it is argued that there is difference between perceptions of respondents based on their gender, age, income, religious affiliations among others. Therefore, it was expected that there were differences between the characteristics of the respondents and the repayment status. Therefore, data are gathered from the database of Atiwa Rural Bank PLC and the outcomes are shown in Table 4.

Table 4: Sex and Repayment Status

	No	Yes	Total	x-test
Male	112	38	150	7.55
Female	37	3	40	P=0.023
Group	12	1	13	
Total	161	42	203	

Table 4 depicts that there are variations between the category of the respondents and the repayment status. More males repay their loans as compared to females and groups. There is the need to test whether this difference was significant or not. Chi-square test was used and the

result shows there was a significant difference ($X=7.55$, $p<0.05$) between the category of respondents and repayment status.

Table 5: Facility code and repayment status

	No	Yes	Total	x-test
Pensioner	12	14	26	21.65
Salaried	127	26	153	P=0.023
Trader	10	0	10	
Group	12	2	14	
Total	161	42	203	

Table 5 shows that there are differences between the employment status of the respondents and the repayment status. More males repay their loans as compared to females and groups. There is the need to test whether this difference was significant or not. Chi-square test was used and the result shows a significant difference ($X=21.65$, $p<0.05$) between the employment status of respondents and repayment status.

Table 6: Purpose and Repayment Status

	No	Yes	Total	x-test
Business	42	8	50	1.846
Building	26	9	35	P=0.933
Financial Problem	3	1	4	
Medical Bills	12	4	16	
Education	55	14	69	
Personal	11	2	13	
Funeral	12	4	16	
Total	161	42	203	

Table 6 shows that there are differences between the employment status of the respondents and the repayment status. More males repay their loans as compared to females and groups. There is the need to test whether this difference was significant or not. Chi-square test is used and there is no statistical significant difference ($X=1.85$, $p>0.05$) between the purpose of the facility and repayment status of respondents.

Effect of Interest Rate on Repayment Status

Intention of the study sought to examine the effect of interest rate on loan period. It is expected that interest rate affect loan period. Thus, interest may influence the number of months or loan period that respondents may like to access credit facility. Therefore, data are gathered from the loan database of the Atiwa Rural Bank PLC and the end result is presented in Table 7.

Table 7: Effect of Interest Rate on Repayment Status

	B	S.E.	Wald	Df	Sig.	Exp(B)
rate_code			.042	2	.979	
rate_code(1)	-.116	.768	.023	1	.008	.890
rate_code(2)	.020	.468	7.821	1	.002	1.020
Constant	-1.350	.424	10.130	1	.001	.259

a. Variable(s) entered on step 1: rate_code.

A logistic regression is performed to ascertain the effects of interest rate on the likelihood that respondents have positive repayment status or pay back the credit facility obtained from the Atiwa rural bank and the result is shown in Table 7. The logistic regression model is statistically significant, $\chi^2(4) = 60.15$, $p < .0005$. The model explained 32.0% (Nagelkerke R^2) of the variance in repayment status and correctly classified 79.3% of cases. Credit facility with high interest rate is 1.020 times more likely to default in paying back the credit facility as

compared to respondents who obtained their credit facility as a moderate or low interest rate. Increasing interest rate is associated with low or default in repayment of credit facility.

Table 8: Effect of Amount of facility on Repayment Status

	B	S.E.	Wald	Df	Sig.	Exp(B)
Amount_facility	.041	.487	.007	1	.932	1.042
Constant	-1.492	1.758	.721	1	.396	.225

a. Variable(s) entered on step 1: amount_facility

A logistic regression is performed to ascertain the effects of amount of credit or loan facility on the likelihood that respondents have positive repayment status or pay back the credit facility obtained from the Atiwa rural bank and the result is shown in Table 8. The logistic regression model is statistically significant, $\chi^2(4) = 60.15, p < .0005$. The model is explain by 12.0% (Nagelkerke R^2) of the variance in repayment status and correctly classified 79.3% of cases. Higher amount of facility is 1.042 times more likely to pay back the credit facility as compared to respondents who obtained lower amount of facility. However, this relationship is statistically not significant (wald, 0721, $p=0.932$).

Effect of Interest Rate on Loan Period

Objective of the study seeks to examine the effect of interest rate on loan period. It is expected that interest rate affect loan period. Thus, interest may influence the number of months or loan period that respondents may like to access credit facility. Therefore, data are gathered from the loan database of the Atiwa Rural Bank PLC and the outcome is presented in Table 9.

Table 9: Effect of Interest Rate on Loan Period

Predictor	Std Error		Standardized		Prob.
	Unstad. Coefficient		Beta	t-statistics	
Constant	-.249	.326		-.766	.445
Rate	.372	.009	.949	42.679	.000

a. Dependent Variable: loan period

From Table 9, the standardized coefficient shows that interest rate affects loan period positively. Moreover, this effect is statistically significant ($\beta=0.949, t=42.68, p<0.05$). In addition, it is deduced that when there is a percent increase in loan period, interest rate is expected to be increased by 0.372.

Effect of Interest Rate on Amount of Facility

Objective of the study seeks to examine the effect of interest rate on amount of facility. It is expected that interest rate affects amount of facility. Thus, interest may influence the amount of facility or credit assess by the respondents. Therefore, data are gathered from the loan database of the Atiwa Rural Bank PLC and the outcome is presented in Table 10.

Table 10: Effect of Interest Rate on Amount of Facility

Predictor	Std Error		Standardized		t-statistics	Prob
	Unstad. Coefficient	Erro	Coefficients Beta			
Constant	2.736	.161			16.949	.000
Rate	-.019	.004	-.295		-4.370	.000

a. Dependent Variable: amount of facility or credit

From Table 10, the standardized coefficient shows that interest rate affects amount of facility negatively. Moreover, this effect is statistically significant ($\beta=-.295, t=-4.37, p<0.05$). In addition, it is deduced that when there is a percent increase in amount of facility, interest rate is expected to be decreased by 0.19.

Comparison between the characteristics of respondents and the repayment status

As it is argued that there is difference between perceptions of respondents based on their gender, age, income, religious affiliations among others. According to Garomsa (2017), “elements affecting loan repayment revealed that variables including gender, income from other sources, monitoring utilization of other members in a group, credit timeliness, repayment time suitability, repayment trend monthly, and training adequacy are found to be significant factors that affect loan repayment rate of the borrowers.” In addition, the borrowers' proceeds, the amount of agricultural experience they had, loan application cost, the interest rate, the size of the loan, the security, and the number of instalments were found to be significant factors in the loan payback rate (Sunday and Anthonia, 2017). Therefore, it was expected that there were differences between the characteristics of the respondents and the repayment status. There were differences between the category of the respondents and the repayment status. More males repay their loans as compared to females and groups. There was the need to test whether this difference was significant or not. Chi-square test was used and the result shows a significant difference ($X=7.55$, $p<0.05$) between the category of respondents and repayment status.

A study on the factors that determine how well a borrower pays back their loan was conducted by Fikirte (2011) for the credit and savings institutions in Addis Ababa, Ethiopia. According to the findings of the binary logit model, factors such as the respondents' ages, the sorts of businesses they own, their genders, and their levels of business experience all have a significant function in determining loan repayment. In a study of a similar nature, Mokhtar, Nartea, and Gan (2012) investigated the challenges that microfinance borrowers in Malaysia had while trying to repay their loans to Tekum and Yum organizations. According to the findings of the logit regression model, characteristics that contributed to microcredit loan repayment included the borrower's age and gender as well as the type of business, manner of payment, and quantity of repayment.

Employment status and Repayment status

There are differences between the employment status of the respondents and the repayment status. More males repay their loans as compared to females and groups. Chi-square test is used and the result shows a significant difference ($X=21.65$, $p<0.05$) between the employment status of respondents and repayment status. A study was conducted by Nguta and Huka (2013) on the factors that influence loan repayment default in microfinance institutions in the Imenti North district of Kenya. Employed a descriptive survey design with a sample size of four hundred participants. According to the data, there was a substantial association between the default on loan repayment and the kind of business, the age of the business, the number of employees, and the amount of profit the business made. The results of the study are consistent with this observation.

Effect of Amount of facility on Repayment Status

A logistic regression was performed to ascertain the effects of amount of credit or loan facility on the likelihood that respondents have positive repayment status or pay back the credit facility obtained from the Atiwa rural bank. It is found that higher amount of facility is 1.042 times more likely to pay back the credit facility as compared to respondents who obtained lower amount of facility. However, this relationship is statistically not significant. This may be due to the fact that financial institutions normally monitor respondents who obtained higher loan facility due to high Non-Performing Loan issues in Ghana. Therefore, respondents with higher amount of loan facility are more likely to pay back or greater portion of the loan as compared to respondents with lower amount of facility.

This finding is comparable to those that were discovered by Derban et al. (2005) as well as Roslan and Karim (2009). There is a negative (positive) correlation between small loans and repayment performance, as found by Derban et al. (2005), who found that lending small amounts to businesses causes higher loan losses in the setting of MFIs. This indicates that there is a bad relationship between small loans and repayment performance. According to the findings of the study that Roslan and Karim (2009) conducted on Malaysia, there is a correlation between the size of a loan and how well it is repaid, and this correlation is a positive one. This suggests that the greater the loan amount, the better the performance of the repayment, and vice versa.

Purpose and Repayment Status

There are differences between the employment status of the respondents and the repayment status. More males repay their loans as compared to females and groups. Chi-square test was used and the result shows that there was no statistical significant difference ($X=1.85$, $p>0.05$) between the purpose of the facility and repayment status of the respondents. Mokhtar, Nartea, and Gan (2012) investigated the difficulties that microfinance borrowers in Malaysia had when it was time to repay their loans to Tekum and Yum organizations. According to the findings of the logit regression model, characteristics that contributed to the repayment of microcredit loans included the borrower's age, gender, kind of business, manner of payment, purpose of facility, and total amount repaid.

Effect of interest rate on repayment status

Objective of the study seeks to examine the effect of interest rate on loan period. It is expected that interest rate affect loan period. Thus, interest may influence the number of months or loan period that respondents may like to access credit facility. Credit facility with high interest rate is 1.020 times more likely to default in paying back the credit facility as compared to respondents who obtained their credit facility as a moderate or low interest rate. Increasing interest rate was associated with low or default in repayment of credit facility. The interest rate that a bank charges for its loans may, in and of itself, have an effect on how risky the pool of loans is due to either adverse selection or moral hazard.

According to Cassar, Crowley, and Wydick (2007), "loanable funds have a cost (interest), and this cost is just as significant in determining whether or not a loan will be repaid. In the future, lenders are likely to offer preference to borrowers who can return their loans in full, including interest (Cassar et al., 2007). However, a higher interest rate raises the cost of borrowing, which worsens loan repayment performance (Afolabi, 2010). This is contrarily to the findings of this study. This study found that respondents with high interest rate loan facility were more willing to repay as compared to respondents with moderate or low interest rate.

Effect of interest rate on loan period

Interest may influence the number of months or loan period that respondents may like to access credit facility. The standardized coefficient shows that interest rate affects loan period positively. Moreover, this effect is statistically significant ($\beta=0.949$, $t=42.68$, $p<0.05$). In addition, it is deduced that when there is a percent increase in loan period, interest rate is expected to be increased by 0.372. Thus, respondents perceived the interest rate as high, but due to the emergency of the situation, they will go in for such loan and therefore were willing to pay back due to high interest rate. This may also be so due to the fact that more of the respondents were salaried workers and their monthly deductions are made at the source.

This finding lends credence to the conclusions drawn by Kaplin et al. (2009), who conducted research using data collected from large non-financial companies in the United States between the years 1982 and 2008 and found that interest rates and the number of

defaulted loans have an inverse relationship. After conditioning the expected default frequency credit measure, they came to the conclusion of no positive link between interest rates and loan defaults. This was their finding. Nevertheless, Hoque and Hossain (2008) undertook out research in Egypt that investigated the relationship between higher interest rates and loan defaults. They used three distinct regression models in their investigation. They called for the reduction of interest rates in order to boost the repayment capacity of borrowers, which would ultimately result in a reduction in the percentage of borrowers who default on their loans. According to their findings, loan defaulting and higher interest rates showed a strong positive link. This adds up to the borrower's financial obligations, which will eventually convert into loan defaults, resulting in the erosion of the banks' capital. Asari, et al. (2011) in Ethiopia carried out research that was quite similar to this one, and they came to the conclusion that NPL and interest rates have a positive link. According to the findings of his study, a rise in non-performing loans (NPL) leads to a decrease in a bank's assets, which, in turn, reduces the bank's capital. The level of interest rates, as well as the volatility associated with them, is one of the most vulnerable and meticulously tracked variables in the economy. It was hypothesized by Dash and Kabra (2010) in India that commercial banks that issue loan facilities at aggressively higher interest rates also incur increased NPL. This was the case for some MFIs in developing nations, and Zimbabwe was not an exception.

Effect of interest rate on amount of facility

It is expected that interest rate affects amount of facility. Thus, interest may influence the amount of facility or credit assess by the respondents. At a high interest rates, people do not want to borrow money from the bank because it is harder to pay back the loans, and fewer real estate purchases are made. However, people may borrow despite higher interest rate for emergency situation such as medical bills, funerals, school fees among others. It was found that interest rate affects amount of facility negatively. Moreover, this effect is statistically significant ($\beta = -.295$, $t = -4.37$, $p < 0.05$). In addition, it is deduced that when there is a percent increase in amount of facility, interest rate is expected to be decreased by 0.19. Therefore, it is expected that respondents borrow high when interest rate is low and vice versa.

CONCLUSION

Interest rate of Atiwa Rural Bank PLC is rated as moderate while repayment status is high. There were differences between the category of the respondents and the repayment status. More males repay their loans as compared to females and groups. Also, there are differences between the employment status of the respondents and the repayment status. More males repay their loans as compared to females and groups. Moreover, there were insignificant differences between the employment status of the respondents and the repayment status. More males repay their loans as compared to females and groups. Moreover, credit facility with high interest rate is 1.020 times more likely to default in paying back the credit facility as compared to respondents who obtained their credit facility as a moderate or low interest rate. Increasing interest rate was associated with low or default in repayment of credit facility. In addition, higher amount of facility is 1.042 times more likely to pay back the credit facility as compared to respondents who obtained lower amount of facility. However, this relationship was statistically not significant. Interest rate affects loan period positively. Also, a strong positive correlation between interest rate and loan period. Lastly, interest rate affects amount of facility negatively.

Based on the outcome of the study, the following suggestions are put forward for consideration; the management of the Atiwa rural bank should put up measures to able to track and retrieve all small amount of facility or loans given to clients. The management of the Atiwa Rural Bank PLC should target more salaried workers and loans used for emergency services

such as medical bills, school fees among others in order to reduce NPL. Lastly, the management of the Atiwa Rural Bank PLC should improve upon the mechanisms implemented regarding giving of group loans and repayment issues.

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