

## To What Extent Do Borrower's Factors, Lender's Factors and Loan Factors Affect Loan Repayment?

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### Abstract

*The main objective of this research is the study the importance of credit risk management in every financial institution especially those who are loan grantors, that are suffering especially in poor and developing countries from high-rates of defaults, and all that is due to several factors that affect the customer commitment to repay the loan. The main objective of our research is to show the effect of credit risk management in minimizing credit risk and studying factors affecting customer's commitment in financial institutions.*

*Here was our problematic research: To what extent do borrower's factors, lender's factors and loan factors affect loan repayment? And by that many questions are related like: How dealing with these factors can be? And what is the role of credit risk management in studying and controlling these factors?.The method used to analyze and collect the data is quantitative descriptive analytical method using statistical tools. The result that are shown by the data collected at the end of the research show that a very high percentages of responds confirms that loan factors, borrower's factors and lender's factors affect clearly loan repayment and that credit risk management is absolute necessity. These results justify our main point and answer our problematic research about the importance of credit risk management in any financial institution.*

**Keywords:** *credit risk, credit risk management, loan factors, lender's factors, borrower's factors and loan repayment.*

### Introduction

One of the most important problems facing financial institutions is the potential loss that may occur when a borrower fails to meet his obligation to repay the borrowed funds. What is mentioned now represents credit risk, which is one of the most famous types of risk that a financial institution faces. From here, credit risk management has been approved to assess, monitor and mitigate these potential losses. Credit risk management studies the factors affecting customer's commitment to repay the borrowed funds.

Our main objective is to spot the light on the crucial role of credit risk management in the financial industry. There are many factors that we will discuss in this research that increase the possibility of defaults, and by that increase the credit risk. Here is the role of credit risk management in studying, measuring and controlling these factors.

The importance of our research appears in focusing on the factors that prevent the borrower from fulfilling his obligations. We will focus on their importance and the extent of their impact by highlighting each type and explaining it in detail. We will also stress the extreme importance of credit risk management in reducing non-payment rates and putting both the borrower and the loan grantor in front of a clear picture and sound steps.

The practical case of our research is in Lebanon. We collected information and statistics from Lebanese borrowers and lenders, and administrators in Lebanese banks, and we analyzed those statistics and answers to arrive at clear answers to the problem posed in this research.

The existence of the practical case for our research in Lebanon is mainly related to the financial crisis that this country is suffering from. One of the results of the crisis was the increase in the rate of non-payment of loans, and the suffering experienced by the lender and borrower.

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## Methodology of the Study

The methodology used in our research is quantitative descriptive analytical method. The statistical software used is IBM SPSS. Descriptive analytics is the most basic and common type of analytics that companies use. It summarizes and highlights patterns in current and historical data. We use an online survey with our target population: management staff and employees at some commercial banks in Lebanon.

### *Previous studies*

There is a lot of research similar to the content of this research. As we mentioned, we will notice that all of this research is located in poor and developing countries. Among these studies are: "**Factors affecting loan repayment performances: a case study of development bank in Ethiopia, JIMMA district**" published by Naol Shiferaw.

Results: Many factors affect the loan repayment among customers.

The second research entitled: "Microfinance and loan repayment performance: A case study of the Oromia Credit And Saving Share Company(OCSSCO) in Kuyu" by Jemal Abafita.

Objective: Studying the performance of repaying the loans in a small company in Kuyu.

Results: Customers are affected by many factors when repaying the loans.

3. Title: Factors affecting loan repayment performance among Yam farmers in the Sene district, Ghana. Published by Dadson Awunyo-Vitor and Camillus Abawiera wongaa.

Objective: Studying the effects of some factors on loan repayment in Ghana.

Results: Many factors affect the loan repayment among customers.

### *Research Problem*

From here, the problematic research of our paper is: To what extent do borrower's factors, lender's factors and loan factors affect loan repayment?

And from here we can ask many questions: How dealing with these factors can be? And what is the role of credit risk management in studying and controlling these factors?

### *Hypothesis of the study*

The hypotheses are:

H0: No sig difference.

H1: Many factors affect the borrower's ability to fulfill the commitment.

H0: No sig difference.

H1: Credit risk management study well the factors affecting borrower's commitment.

H0: No sig difference.

H1: Financial institutions applying correct and accurate credit risk management have low percentages of defaults.

H0: No sig difference.

H1: There is a significant relationship between borrower's factors, lender's factors and loan factors with the loan repayment among customers in commercial banks.

## Literature Review

According to Thomas Brock in his article at investopedia, when lenders offer mortgages, credit cards, or other types of loans, there is a risk that the borrower may not repay the loan. Similarly, if a company offers credit to a customer, there is a risk that the customer may not pay their invoices.

In his book finance strategies, True Tamplin mentioned several types of credit risk that financial institutions need to monitor and manage: . **Default risk**, Spread risk: Spread risk, Downgrade risk and Recovery risk.

According to Dheeraj Vaidiya in his article, credit risk management refers to measuring and mitigating the risks associated with the lent amount and being aware of the bank's reserves to be used at any given time. Credit risk management refers to managing the probability of a company's losses if its borrower's default in repayment.

Since exposure to credit risk continues to be the leading source of problems in banks world-wide, banks and their supervisors should be able to draw useful lessons from past experiences. Banks should now have a keen awareness of the need to identify, measure, monitor and control credit risk as well as to determine that they hold adequate capital against these risks and that they are adequately compensated for risks incurred. The principles contained in this thesis are most Credit risk management clearly applicable to the business of lending, they should be applied to all activities where credit risk is present.

### *Factors affecting borrower's commitment to repay the loan*

We will use two types of classification of the factors affecting borrower's commitment:

#### *First classification*

According to Troy Segal in her book 5C's of credit, there are five top factors or more popularly known as the 5C's of credit risk that are measured.

**Capacity:** The borrower's capacity to repay the loan is the most important of the 5 factors. For personal lending, the customer's employment history, current job stability and income amount are all key indicators of the borrower's ability to repay the outstanding debt. A well-balanced income and expenditure relationship not only reflects the borrower's financial capacity but also his ability and prudence in the management of affairs.

**Capital:** This factor is all about assessing the net worth of the individual who has applied for a loan. It represents the number of assets that belong to the borrower and it could range from savings and investments to even assets like jewelry.

A good capital rating would indicate that the borrower is adequately capitalized to bear any unexpected losses.

**Conditions:** When it comes to ascertaining the risk, the lender will have to bear, considering external factors — such as economy, market and industry conditions are also important as they will have an indirect bearing on the borrower's capacity to repay the loan.

**Collateral:** Collaterals refer to the assets of the borrower that may be pledged under their name, as a security for the credit that is extended. This could include fixed assets like the title of land that belongs to the borrower and even financial assets like bonds.

What we need to understand here is that collaterals will not be used to determine the capacity of a borrower. This is because collaterals are only liquidated in worst-case scenarios when the borrower fails to repay the loan.

**Character:** Character is all about the borrower’s moral integrity — it all comes down to the borrower’s willingness to repay the loan. It assesses whether or not the borrower will honor the credit obligation.

*Second Classification*

Here the factors are classified into three categories: Firm Factors, Individual/Borrower Factors and Loan Factors.

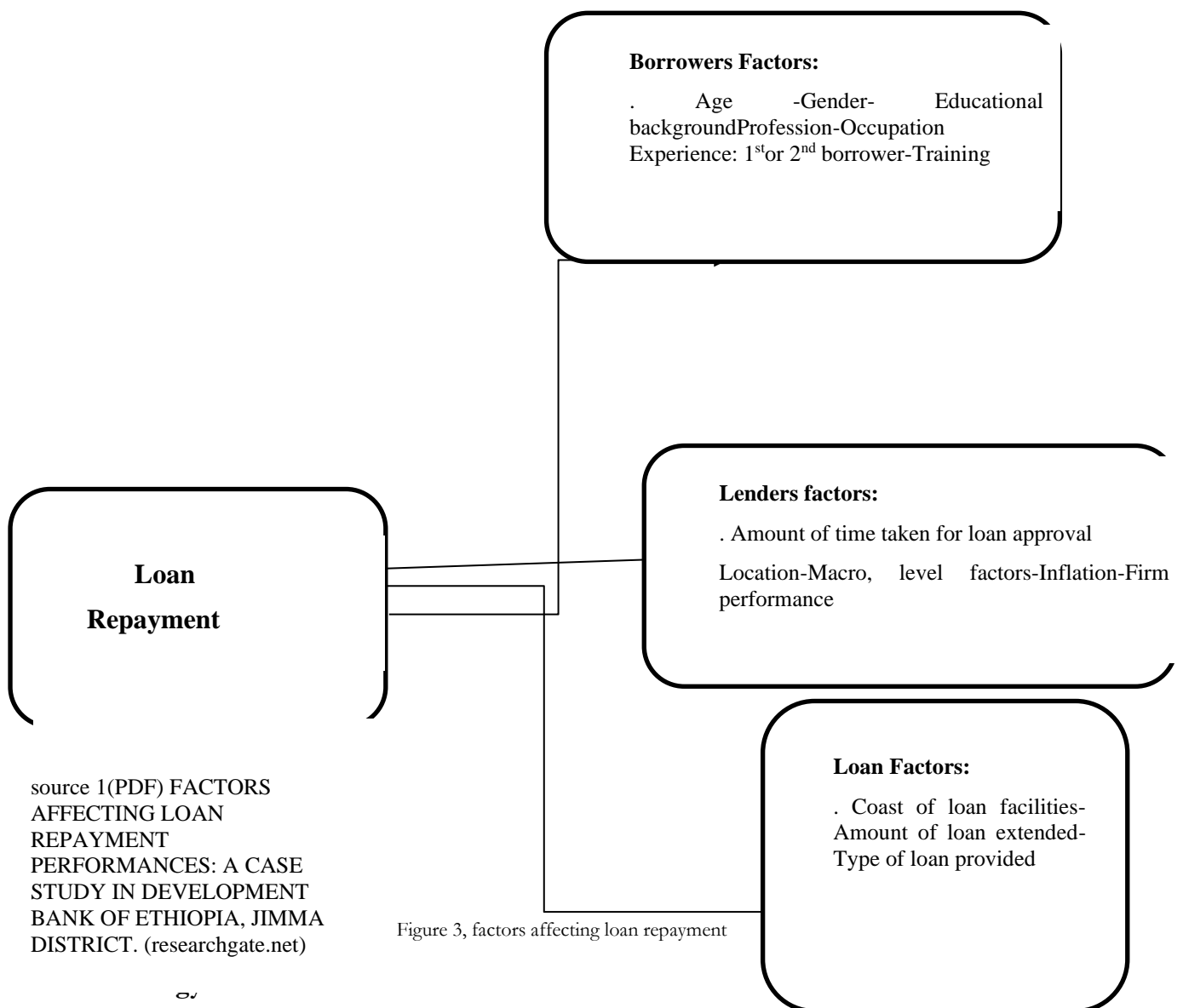


Figure 3, factors affecting loan repayment

source 1(PDF) FACTORS AFFECTING LOAN REPAYMENT PERFORMANCES: A CASE STUDY IN DEVELOPMENT BANK OF ETHIOPIA, JIMMA DISTRICT. (researchgate.net)

or

Our research follows the quantitative descriptive analytical method. The research adopted descriptive research design in order to analyze the topic thoroughly. This method of research is preferred because a researcher is able to collect data, describe the state of affairs and answer questions concerning the subject

of study. Descriptive survey is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals. The researcher administered questionnaires to a sample of microcredit groups of customers in commercial banks in Lebanon, and the collected data will be analyzed using SPSS.

A population is also known as a “universe” refers to all the items in the field of inquiry. The population of this study consisted of management staff and employees at some commercial banks in Lebanon, and a microcredit group of customers to collect the data necessary for our paper.

The study selected 78 participants between managers, employees and customers from the target population by a convenience sampling technique that is employed to collect and analyze the data.

This research used both primary and secondary data as sources of information; primary data is obtained from the respondents – the population, while secondary data as stipulated is sourced from published works like records at the Bank. Secondary data is information collected from already published works such as books, articles, newspapers, and the internet.

An online survey questionnaire was designed to measure the effect of borrower’s factors, lender’s factors and loan factors on the commitment of the customer to repay the loan. Demographic questions are also included.

#### *Reliability Test*

A pilot study was carried out to determine reliability of the questionnaires. Reliability analysis was subsequently done using Cronbach’s Alpha which measures the internal consistency by establishing if certain item within a scale measures the same construct.

Table 1, Reliability Test

<b>Scale</b>	<b>Cronbach's Alpha</b>	<b>Number of Items</b>
Firm/Group Factors	0.723	4
Individual Borrowers Factors	0.701	4
Loan Factors	0.856	4
<b>Average (All Scales)</b>	<b>0.760</b>	<b>4</b>

Klien1999 notes that the accepted alpha value is 0.7, thus forming the study’s benchmark. Cronbach Alpha was established for every objective which formed a scale. The table shows that loan factors had the highest reliability ( $\alpha= 0.856$ ), followed by Firm/Group Factors ( $\alpha=0.723$ ) and Individual Borrowers Factors ( $\alpha=0.701$ ). This illustrates that all the three variables were reliable as their reliability values exceeded the prescribed threshold of 0.7.

#### *Data Analysis*

To analyze quantitative data frequency tables and statistical software packages were used (Wilson, 2010). The quantitative data in this research was analyzed by descriptive statistics using statistical package for social sciences SPSS (V. 17.0). The Statistical Package for Social Sciences (SPSS V. 17.0) was used in the analysis of the data collected in this research as the researcher deems it the most appropriate given its versatility and considering the nature of the data collected. The qualitative data took an exploratory/conceptual content analysis process, this was more ideal as the information gathered from the open-ended questions which was

large and could be time consuming if not well planned (Wilson, 2010). The data was then presented using frequency tables and figures. In addition, the study used Karl Pearson's product moment correlation analysis to assess the relationship between the variables. This was because correlation analysis illustrates both the direction and strength of the relationship between two variables (Walsh and Wiggins, 2003).

In addition to the above analysis, the study conducted a multiple regression analysis to establish the effect of all the three factors on the level of loan repayment among customers of commercial banks. The following regression model was applied:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where: Y = loan repayment as measured by the level of nonperforming loans

X<sub>1</sub> = borrower factors                      X<sub>2</sub> = firm factors

X<sub>3</sub> = loan factors                       $\epsilon$  = error term  $\beta_0$  = constant

### *Operationalization of Variables*

The below table showed the objectives, both independent and dependent variables and how they are connected in the study. Also, indicators are clearly shown, the level of measurement and the type of data analysis that was used and that is descriptive statistics.

Table 2 Operationalization of Variables

Objectives	Variables		Indicators	Measurement / Level of scale	Type of Analysis
	Independent	dependent			
To determine the effect of lenders' factors on loan repayment among customers of commercial banks	Lender factors	Loan Repayment	Amount of time taken for loan approval Location Macro-level factors Inflation Firm performance	Nominal	Descriptive
To find out the extent to which borrowers factors affect loan repayment among customers of commercial banks	Borrower factors	Loan Repayment	Age, Gender, Educational Background Profession Occupation Experience: 1 <sup>st</sup> , 2 <sup>nd</sup> borrower Training	Nominal	Descriptive
To establish the effect of loan factors on loan repayment among customers of commercial banks	Loan factors	Loan Repayment	Coast of loan facilities Type of loan/security provided Amount of loan extended Month/period when loan	Ordinal	Descriptive

## Results and Discussion

The study targeted a sample size of 78 respondents from which 74 (43 customers and 31 management staff) filled in and returned the questionnaires making a response rate of 94.9%.

This section presents demographic information of the staff including gender, position held in the Bank and duration of service. The findings revealed that 80.6% of respondents were male while 19.4% were females.

This implies that there are more male than females. It is evident that out of the number of staff respondents there were more males than females as shown by the percentages in the above table. It is related that in Lebanon males work as management staff in banks more than females.

#### *Position held*

It was important to establish the position held by the respondents. The findings were as shown in the table below:

Table 3, position held

	<b>Frequency</b>	<b>Percent</b>
Credit Administration Manager	22	71.0
Account Relationship managers	9	29.0
<b>Total</b>	<b>31</b>	<b>100.0</b>

#### **Source 2** SPSS output

From the findings, 71.0% of the respondents indicated that they were credit administration managers while 29.0% of the respondents indicated that they were account relationship managers. The number of relationship managers are less as compared to credit administrators at Lebanese banks and this is due to the fact that Relationship managers are in charge of a wide portfolio of customers whereas credit administrators are many so as to speed loan assessment and approvals and to help improve turnaround time to meet the customers' expectations at the Bank and by their large number it helps to improve customer service.

With regard to the respondent's duration of service, 48.3% of the respondents indicated that they had worked for between 11-15 years ,32.3% of the respondents indicated that they had worked for between 6-10 years ,13.0 % of the respondents indicated that they had worked for above 16 Years while 6.4% of the respondents indicated that they had worked for below 5 years. This implies that the respondents had a good understanding and vast experience on the subject being researched on.

#### *Firm/Group Factors*

This section presents data findings on the amount of time taken for a loan to be approved, firm features, several statements on bank factors and extent that the Bank factors affect loan repayment.

#### *of time taken for the Loan to be approved*

The researcher sought to find out whether the amount of time taken for the loan to be approved affected loan repayment possibility. The findings are shown in the table below:

Table 4, Amount of time taken for the Loan to be approved

	<b>Frequency</b>	<b>Percent</b>
Yes	72	97.3
No	2	2.7
<b>Total</b>	<b>74</b>	<b>100.0</b>

Source 3 SPSS output

From the findings, 97.3% of the respondents indicated that the amount of time taken for the loan to be approved affected loan repayment possibility while 2.7% of the respondents indicated that the amount of time taken for the loan to be approved didn't affect loan repayment possibility. It is clearly evident from the respondents that amount of time taken for loan approval affected loan repayment at Lebanese banks since only negligible number of 2.7 percent did not think of otherwise whereas the rest of the respondents were in agreement that indeed time taken for loan approval affected loan repayment.

#### *Firm Features*

With regard to the firm features that affected the possibility of loan repayment among commercial banks, the respondents indicated that Location of business operations, amount of loan taken, the interest rates charged, firm performance, inflation levels in the economy and investment opportunities affected the possibility of loan repayment among commercial banks.

#### *Statements on Bank Factors*

The study sought to establish the level of agreement to which bank characteristics affected the loan repayment of customers. The findings were as shown in the table below:

Table 5, Statements on Bank Factors

	<b>Mean</b>	<b>Std. Deviation</b>
The information requested by the Bank from the loan applicant is readily available	3.6923	0.0543
The information requested by the Bank accurately predicts the repayment ability of the loan applicant	3.6889	1.0507
The performance of the Bank in form of performing loans affects the amount of loans to customers	3.8754	0.1043
The amount of information provided by the applicant affects loan repayment	4.0370	0.1060
The speed of loan approvals in the bank affects customers loan repayment	4.0741	0.2081
The amount of loan advanced	4.5642	0.6756
The loan repayment period	4.7634	0.6234

Source 4 SPSS output

According to the findings, the respondents strongly agreed that the amount of loan advanced and the loan repayment period affected the loan repayment of customers as shown by a mean score of 4.7634 and 4.5642 respectively. The respondents agreed that the speed of loan approvals in the bank, the amount of



information provided by the applicant, the performance of the Bank in form of performing loans, the information requested by the Bank and the availability of the information requested the loan applicant affected the loan repayment of customers as shown by a mean score of 4.0741, 4.0370, 3.8754, 3.6889 and 3.6923 respectively.

#### *Extent Does the Bank Factors Affect Loan Repayment*

In determining the extent to which Bank factors affected loan repayment, the findings were as shown in the table below:

Table 6, Extent Does the Bank Factors Affect Loan Repayment

	<b>Frequency</b>	<b>Percent</b>
Very Great Extent	67	90.5
Great Extent	4	5.4
Moderately Extent	2	2.7
Less Extent	1	1.4
<b>Total</b>	<b>74</b>	<b>100.0</b>

Source 5 SPSS output

From the findings, 90.5% of the respondents reported that Bank factors affected loan repayment limited to a very great extent, 5.4% of the respondents said that Bank factors affected loan repayment limited to a great extent, 2.7% of the respondents said that Bank factors affected loan repayment limited to a moderate extent while 1.4% of the respondents reported that Bank factors affected loan repayment limited to a less extent.

#### *Individual Borrowers' Factors*

This section presents data findings on the effects of the age of the borrower, individual borrower factors, and the extent to which borrower factors affect loan repayment.

##### *Age of the borrower*

On whether the age the borrower affected the possibility of loan repayment, The findings were as shown in the table below:

Table 7, Age of the borrower

	<b>Frequency</b>	<b>Percent</b>
Yes	67	90.5
No	7	9.5
<b>Total</b>	<b>74</b>	<b>100.0</b>

Source 6 SPSS output

The findings revealed that 90.5% of the respondents reported that the age the borrower affected the possibility of loan repayment while 9.5% of the respondents said that the age the borrower didn't affect the possibility of loan repayment.

#### *Individual Borrowers Factors*

With regard to the major individual borrower's factors affecting loan repayment behavior and ability, the respondents indicated that: age, gender, profession of the borrower, education background, income level, nature of business operated, borrower's experience (1st/2nd etc. borrower), location of business operations and amount of loan taken affected loan repayment behavior and ability.

#### *Statements on the Borrowers' Factors*

The study further sought to establish the respondents' levels of agreement on various statements regarding borrower factors. These are presented in the table below:

Table 8, Statements on the Borrowers' Factors

	<b>Mean</b>	<b>Std. Deviation</b>
The kind of collateral pledged as security for the loan	4.5983	0.1593
The number of years the customer has banked	4.6789	1.7565
The type of account a customer maintains	3.8754	0.2344

Source 7 SPSS output

According to the findings, the respondents strongly agreed that the number of years the customer has banked and the kind of collateral pledged as security for the loan affected the rate of loan repayment as shown by a mean score of 4.6789 and 4.5983 respectively. The respondents agreed that the type of account a customer maintains affected the rate of loan repayment as shown by a mean score of 3.8754.

#### *Extent that the Borrower's Factors Affected the Level of Loan Repayment*

Data findings with regard to the extent to which the borrowers' factors affected the level of loan repayment was as presented in the table below:

Table 9, Extent that the Borrower's Factors Affected the Level of Loan Repayment

	<b>Frequency</b>	<b>Percent</b>
<b>Very Great Extent</b>	<b>70</b>	<b>94.6</b>
<b>Great Extent</b>	<b>2</b>	<b>2.6</b>
<b>Moderately Extent</b>	<b>1</b>	<b>1.4</b>
<b>Less Extent</b>	<b>1</b>	<b>1.4</b>
<b>Total</b>	<b>74</b>	<b>100.0</b>

Source 8 SPSS output

From the findings, 94.6% of the respondents reported that which the borrower's factors affected the level of loan repayment to a very large extent, 2.6% of the respondents reported that which the borrower's factors affected the level of loan repayment to a large extent while 1.4% of the respondents reported that which the borrower's factors affected the level of loan repayment to a moderate and less extent respectively.

#### *Loan Factors*

This section presents data findings on the loan factors and their effects on loan repayment.

#### *Loan Factors*

With regard to the loan factors affecting the level of loan repayment, the respondents indicated that Interest rates charged on the loan, proportion of negotiation fees, maturity period of the loan, grace period before repayment starts, type of loan (Fixed/ variable interest) and amount of credit advanced affected the level of loan repayment.

#### *Loan Factors Have an Effect on Loan Repayment*

The findings on the extent to which loan factors had an effect on loan repayment is shown in the table below:

Table 10, Loan Factors Have an Effect on Loan Repayment

	<b>Frequency</b>	<b>Percent</b>
<b>Very Great Extent</b>	<b>73</b>	<b>98.6</b>
<b>Great Extent</b>	<b>1</b>	<b>1.6</b>
<b>Total</b>	<b>74</b>	<b>100.0</b>

Source 9 SPSS output

The study revealed that 98.6% of the respondents reported that loan factors had an effect on loan repayment among customers of commercial banks in Lebanon to a very great extent while 1.6% of the respondents reported that loan factors had an effect on loan repayment among customers of commercial banks in Lebanon to a great extent.

#### *Regression analysis*

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences (SPSS V 17.0) to code, enter and compute the measurements of the multiple regressions.

Table 11. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.763	.746	.578	.1076

a. Predictors: (Constant), Firm/Group Factors, Individual Borrowers Factors and Loan Factors

Source 10 SPSS output

R-Square= 0.746, So 74.6% of the changes in loan repayment could be attributed to the combined effect of the predictor variables.

Table 12, ANOVA (Analysis of Variance)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	821.593	4	205.398	44.27	.000 <sup>a</sup>
Residual	324.723	70	4.6389		
Total	1146.316	74			

Source 11 SPSS output

a. Predictors: (Constant), Firm/Group Factors, Individual borrowers Factors and Loan factors.

b. Dependent Variable: Loan Repayment.

The ANOVA table shows that the residual sum of squares (the sum of squared deviations from the least squares line) is 324.723, while the total sum of squares (the sum of squared deviations from the mean) is 1146.316. The probability value of 0.001 indicates that the regression relationship was highly significant in predicting how Firm/Group Factors, Individual Borrowers Factors and Loan Factors influenced Loan Repayment. The F critical at 5% level of significance was 3.671 since F calculated is greater than the F critical (value = 44.27), this shows that the overall model was significant.

Table 13, Estimated Coefficients

Model	Unstandardized coefficients(B)	p-Value
Const.	1.879	3.25e-09 ***
Firm/Group Factors	0.708	0.0154 ***
Individual Borrowers Factors	0.642	0.0395 ***
Loan Factors	0.710	0.0133 ***

\*\*\* Significant at 10%

$$LR = 1.879 + 0.708 F/GF + 0.642IBF + 0.710LF + e$$

Where LR is Loan Repayment, F/GF is Firm/Group Factors, IBF is Individual Borrowers Factors and LF is Loan Factors.

A unit change in Firm/Group Factors will lead to a 0.708 change in loan repayment. A unit change in Individual Borrowers Factors will lead to a 0.642 change in the loan repayment. While a unit change in the Loan Factors will lead to a 0.710 change in loan repayment.

The table shows that Firm/Group Factors, Individual Borrowers Factors and Loan Factors at 1%, 5% and 10% level of significance, they are significant in explaining the variations in loan repayment.

The responds shown in this chapter and all data collected and shown by the tables, frequencies and rates show that loan factors, borrower's factors and lender's factors affect the loan repayment among customers in Lebanon banks.

## Conclusion and Recommendation

The conclusion and recommendation appeal to the problem, the Research Questions, the Hypotheses, the results and the interpretation of the results.

This section presents a summary of the findings as per the research objectives and the data presented in chapter four. The summary is arranged according to research objectives and questions:

### *Firm/Group Factors*

This study found that there is a significant relationship between firm/group factors and the loan repayment among customers of commercial banks in Lebanon. The study revealed that the amount of time taken for the loan to be approved, Location of business operations, amount of loan taken, the interest rates charged, firm performance, inflation levels in the economy and investment opportunities affected the possibility of loan repayment among commercial banks.

### *Individual Borrowers' Factors*

The study established that there is a significant relationship between individual borrowers' factors and the loan repayment among customers of commercial banks in Lebanon. The study also established that the age the borrower, the number of years the customer has banked, the kind of collateral pledged as security for the loan and the type of account a customer maintains affected the rate of loan repayment.

### *Loan Factors*

The study revealed that there is a significant relationship between loan factors and the loan repayment among customers of commercial banks in Lebanon. The study established that Interest rates charged on the loan, Proportion of negotiation fees, maturity period of the loan, grace period before repayment starts, type of loan (Fixed/ variable interest) and amount of credit advanced affected the level of loan repayment.

## Discussions of Key Findings

This section focuses on a detailed discussion of the major findings of the study which also entails comparing the study findings to the literature.

### *Firm/Group Factors*

According authors, when evaluating a small business for a loan, lenders ideally like to see a two-year operating history, a stable management group, a desirable niche in the industry, a growth in market share,

a strong cash flow, and an ability to obtain short-term financing from other sources as a supplement to the loan. Most lenders will require a small business owner to prepare a loan proposal or complete a loan application. According to authors, awarding credit is a journey, the success of which depends on the methodology applied to evaluate and award the credit. This journey starts from the application for credit through acquisition of credit sales and ends at the time the loan is fully paid.

#### *Individual Borrowers' Factors*

Stiglitz and Weiss (1981) recommend that the banks should screen the borrowers and select the “good” borrowers from the “bad” borrowers and monitor the borrowers to make sure that they use the loans for the intended purpose. This is important to make sure the borrowers can pay back their loans.

#### *Loan Factors*

According to authors, the causes of non-repayment could be grouped into three main areas: the inherent characteristics of borrowers and their businesses that make it unlikely that the loan would be repaid. Second, are the characteristics of lending institution and suitability of the loan product to the borrower, which make it unlikely that the loan would be repaid. Third, is systematic risk from the external factors such as the economic, political and business environment in which the borrower operates.

#### *Importance of credit risk management*

All what we have discussed show how credit risk management is essential to reduce credit risk and study the factors (lender's factors, individual borrower's factors, and loan factors) to provide a comprehensive environment to deal with credit risk and decrease the rates of defaults among commercial banks. This study concludes that there is a significant relationship between firm/group factors, individual borrowers' factors, and loan factors and the loan repayment among customers of commercial banks in Lebanon.

#### *Recommendations*

1. Credit risk management is essential for the success of financial institutions.
2. From the findings and conclusion, the study recommends that commercial banks need to have mandatory supervision borrowers on loan utilization and repayment. Such supervision will enable the commercial banks monitor the performance of borrowers closely done. Also training of borrowers before and after receiving loans should be done focusing on areas such as business management, book keeping and savings. Such measures will bring down the rate of defaulters.
3. The study also recommends that banks should apply efficient and effective credit risk management that will ensure that loans are matched with ability to repay, no or minimal insider lending, loan defaults are projected accordingly and relevant measures taken to minimize the same.
4. The study further recommends that commercial banks should pool together and establish a credit information bureau to which reference can be made before a loan is disbursement.
5. Moreover, the study recommends that to mitigate the repayments problems, a close relationship between lender and borrower can be applied through monitoring, business adviser and regular meeting. Besides that, the lender can introduce reward system to those that paid on time such as rebate or discount.
6. Finally, the study recommends that commercial banks should also apply rigorous policies on loan advances so as loans are awarded to those with ability to repay and mitigate moral hazards such as insider lending and information asymmetry.

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