

**“A STUDY ON IDENTIFICATION OF VARIABLES ON  
CREDIT MONITORING OF SAKTHI FINANCE LTD.,  
COIMBATORE”**

P-2154

By

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Of

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**Kumaraguru College of Technology**

Coimbatore

A PROJECT REPORT

Submitted to the

**FACULTY OF MANAGEMENT STUDIES**

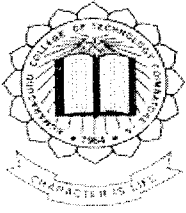
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for the award of the degree

of

**MASTER OF BUSINESS ADMINISTRATION**

June, 2007



Department of Management Studies  
Kumaraguru College of Technology  
Coimbatore – 641006

## BONAFIDE CERTIFICATE

This is certified that this project report titled “A Study on identification of variables on credit monitoring of Sakthi Finance Ltd., Coimbatore” is the bonafide work of Mr.S.VIGNESWARAN (Reg No. 71206631060) who carried this research under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Prof. N.Jothilingam

**PROJECT GUIDE**

**DIRECTOR**

Evaluated and Viva Voce conducted on Oct 29, 07

**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

## DECLARATION

I, hereby declare that this project report entitled as “**A Study on identification of variables on credit monitoring of Sakthi Finance Ltd., Coimbatore**” has been undertaken for academic purpose submitted to Anna University in partial fulfillment of the requirements for the award of the degree of Master of Business Administration. The project report is the record of the work done by me under the guidance of **Prof. N.JOTHILINGAM** during the academic year 2007 – 2008.

I, also declare hereby, that the information given in this report is correct to best of my knowledge and belief.

Date:

Place: Coimbatore



S.VIGNESWARAN

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14.09.2007

**PROJECT COMPLETION CERTIFICATE**

This is to certify that Mr.VIGNESWARAN.S,(Reg No:71206631060) Student of Kumaraguru College Of Technology, Coimbatore has undergone a Summer Project Titled “A STUDY ON IDENTIFICATION OF VARIABLES ON CREDIT MONITORING” in our Company during the period from 23<sup>rd</sup> June, 2007 to 31<sup>st</sup> July, 2007.

We wish him all success in his future endeavors.

**For Sakthi Finance Ltd.,**



**P. Maragatham**  
**OFFICER - HRD**

## EXECUTIVE SUMMARY

The company is a Non-banking Financial Company (NBFC) engaged in providing Finance to commercial vehicles, trucks and equipments. It accepts time deposits/ non cumulative deposits from the public and also avail loans from banks. The money rose from various sources is lent to the customers. As a financial intermediation business, the ability of any company to select a right borrower is the critical success factor. If money is lend to sticky customer, the company may end up with higher non performing asset

(NPAs)

As the company is engaged in retail loans, it cannot totally avoid bad debts. The bad debit has to restrict to optimum tolerable level. Hence selecting a credit worthy customer or avoiding sticky advances is an important factor for successful running of a finance company.

The research entitled “**A Study on identification of variables on credit monitoring of Sakthi Finance Ltd., Coimbatore**”. With primary objective to analyze the various factors involved in appraising the credit proposals of the customers. The credit proposals are given by many type of customers with various background and capabilities.

The quality of a customer has to be assessed based on his intentions to pay and “capacity to pay”. Various factors will have to be assessed and finally a decision has been taken. The study based on the secondary data obtained from customers files from the operations department. It is might be that overall lending functions of the company is in satisfactory level. The weightage that will be obtained through the statistical analysis could be used for taking lending decision.

The study focuses on 700 customers belonging to commercial vehicles segment that were found regular and not regular in their payment of their equated monthly installments. The 25 major factors under consideration to assess the credit worthiness of

the customer are listed in page number. These factors differ from one customer to another customer. Even though various factors are being analyzed for each and every proposal, the relevance of each of these factors and the degree of weightage to be given to each factor has not been studied and used by the company. Hence an attempt will be made to understand the influence of various factors on the quality of the accounts and also given weightage to factors which are closely related to repayment behavior of the customers. Primarily chi-square test was used to find the significance of relationship between number of dues and other factors, from which about 9 insignificant factors were eliminated in regular customer analysis and remaining 16 factors were considered for correlation analysis. From the correlation analysis among 16 highly significant factors, 6 factors which are highly and moderately correlated which were considered for regression analysis to find their weightage. The weightage of these 6 factors shows the proportion of contribution of those factors over the repayment behavior. Similarly the analysis is done for default customers and weightage is found.

## ACKNOWLEDGEMENT

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## **CHAPTER-1**

### **INTRODUCTION**

# INTRODUCTION

## 1.1 BACKGROUND

The Indian Economy is growing through a period of rapid "Financialisation". Today a wide range of financial institutions, through plethora of customer with friendly financial products, is conducting the "intermediation". Repeated evaluation of the role of NBFCs by study group set up periodically but the Government has confirmed, "That NBFCs usefully supplement the activities of banks in the fields of both deposit mobilization and lending. NBFCs are capable of playing a dynamic role in the economy.

Finance is regarded as the life blood of the business enterprise. This is because in the modern money oriented economy, finance is one of the basic foundations of any kind of economic activity. It is the master key, which provides access to all sources for being employed in manufacturing and merchandising activities. It has been rightly said that business needs money to make more money. Hence, efficient management of every business enterprise is closely linked with efficient management of its finance.

In the present scenario, the Non-Banking Finance Companies (NBFCs) have a quite significant role to play with RBI has already placed substantial importance to further development of the NBFC sector along with the prudent lines. Sakthi Finance Limited is one among the leading Non-Banking Finance Companies.

A credit transaction is a contract between two parties: the borrower and the lender subject to a mutual agreement on the terms of credit. The terms of credit is defined based on five critical financial parameters: amount of credit, interest rate, maturity of loans, frequency of loan servicing and collateral. Optimizing decision pertaining to the terms of credit could differ from the borrower to that of lender. As such, the mutual agreement between the borrower and the lender may not necessarily imply an optimal configuration for both. At this juncture, distinction between a defaulter and a non-performing loan account is in order. A default entails violation of the loan contract or the agreed terms of the contract, while non-performing loan entails that the borrower does not renege from the loan contract but fails to comply the repayment schedule due to evolving unfavorable conditions. However, from the perspective of corporate finance, a common perspective is that both the cases of 'defaulter' and 'non-performer' imply similar financial implications, i.e., financial loss to institutions. Moreover, in the Indian context regulatory and supervisory process does no focus on such a distinction between default and non-performer as far as prudential norms are concerned. The NPL is defined as past due concept, taking into account either non-payment of interest due principal or both. For simplicity, this common perspective prevails in the rest of the theoretical analysis. The most important reason for default could be mismatch between borrower's terms of credit and creditor's terms of credit.

Mohan (2003) observed that lending rates of have not come down as much as deposit rates and interest rates on Government bonds. While some institutions have reduced their prime lending rates (PLRs) to some extent and are also extending sub PLR loans, effective lending rates continue to remain high. This development has adverse systemic implications especially in a country like India where interest cost as a proportion of sales or corporate are much higher as compared to many emerging economies.

The problem of NPAs is related to several internal and external factors confronting the borrowers (Muniappan, 2002). The initial factors are division of funds for expansion / diversification / modernization, taking up new projects, helping/ promoting associate concerns, time / cost overruns during the project implementation stage, business (product, marketing, etc.,) failure, inefficient management, strained labor relations,

factors are recession, non payment in other countries, inputs/ power shortage price escalation, accidents and natural calamities.

In the Indian context Rajaraman and Vasishtha (2002) in an empirical study provided an evidence of significant bivariate relationship between an operating inefficiency indicator and the problem loans of financial institutions. In a similar manner largely from lenders perspective, Das and Ghosh (2003) empirically examined non performing loans of in terms of various indicators such as asset size, credit growth and macroeconomic condition and operating efficiency indicators such as asset size, credit growth and macroeconomic condition and operating efficiency indicators.

Sergio (1996) in a study of non performing loans in Italy found evidence that an increase in the risk ness of loan assets is rooted in a lending policy adducing to relatively unselective and inadequate assessment of sectoral prospects. Interestingly this study refuted that business cycle could be a primary reason for NPLs. The study emphasized that increase in bad debts as a consequence of recession alone is not empirically demonstrated. It was viewed that the lending firm customer relationship will thus prove effective not so much because it overcomes informational asymmetry but because it recoups certain canons of appraisal.

In a study of loan losses of US banks, McGovern (1993) argued that character has historically been a paramount factor of credit and a major determinant in the decision to lend money. Banks have suffered loan losses through relaxed lending standards, unguaranteed credits the influence of the 1980s culture and the borrower's perceptions. It was suggested that institutions should make a fairly accurate personality morale profile assessment of prospective and current borrowers and guarantors. Besides considering personal interaction they should i) try to draw some conclusions about staff morale and loyalty, ii) study the person's personal credit report, iii) do trade credit reference checking, iv) check referenced from present and former bankers and v) determine how the borrower handles stress. In addition they can minimize risks by securing the borrowers guarantee; using Government guaranteed loan programs and requiring conservative loan to value ratios.

Bloom and Carter (2001) suggested that the volatility of non-performing loans, though it may vary slightly from year to year is caused by an inevitable number of wrong economic decisions by individuals and plain bad luck (inclement weather, unexpected price changes for certain products, etc.). Under such circumstances, the holders of loans can make an allowance for a normal share of non-performance. Enterprises may well be able to pass a large portion of these costs to customers in the form of higher prices. For instance, the interest margin applied by financial institutions will include a premium for the risk of non performance on granted loans.

Bercoff, Giovanniz and Grimardx (2002) using accelerated failure time (AFT) model in their study of Argentina's banking sectors weakness measured by the ratio of non performing loans to total loans found that specific indicators such as asset growth, the ratio of net worth to net assets, the ratio of operating cost to assets exposure to peso loans, and institutional characteristics relating to private bank and foreign bank and macroeconomic variables including credit growth, foreign interest rate, reserve adequacy (imports / reserves) and monetary expansion (M2/ reserves) besides the tequila effect were reasons behind the banking fragility. Their empirical results suggested that the institution's size measured by log of assets had a positive effect but asset growth had a negative effect on NPLs. The variables such as operating cost, exposure to peso loans, credit growth and foreign interest rate had negative effect on NPLs. The macroeconomic variables such as money multiplier and reserve adequacy, institutional characteristics and tequila effect had positive influence on NPLs.

Fuentes and Maquieria (1998) Undertook an in depth analysis of loan losses due to composition of lending by type of contract, volume of lending cost of credit and default rates in the Chilean credit market. Their empirical analysis examined different variables which may affect loan repayment. a) Limitations on the access to credit; b) macroeconomic stability; c) collection technology; d) bankruptcy code; e) information sharing; f) the judicial system, g) prescreening techniques and h) major changes in financial market regulation. They concluded that a satisfactory performance of the

Chilean credit market in terms of loan repayments hinges on a good information sharing system, an advanced collection technology, macro economic performance and major changes in the financial market regulation. In another study of Chile, Fuentes and Maquieria (2003) analyzed the effect of legal reforms and institutional changes on credit

Using time series data on yearly basis (1960-1977) they concluded that both information sharing and deep financial market liberalization were positively of unpaid loans with respect to the business cycle compared to interest rate of the Chilean economy.

Altman Resti and Sironi (2001) analysed corporate bond recovery rate adducing to bond default rate, macroeconomic variables such as GDP and growth rate, amount of bonds outstanding, amount of default, return on default bonds, and stock return. It was suggested that default rate, amount of bonds, default bonds and economic recession had negative effect while the GDP growth rate, and stock return had positive effect on corporate recovery rate.

Lis et.al. (2000) used a simultaneous equation model in which they explained bank loan losses in Spain using a host of indicators, which included GDP growth rate, debt equity ratios of firms, regulation regime, loan growth, bank branch growth rates, bank size (assets over total size) collateral loans, net interest margin, capital asset ratio (CAR) and market power of default companies. They found that GDP growth (contemporaneous as well as one period lag term) bank size and CAR had negative effect while loan growth, collateral, net interest margin, debt equity, market power, regulation regime and lagged dependent variable had positive effect on problem loans. The effect of branch growth could vary with different lags.

Kent and D'Arcy (200) while examining the relationship between cyclical lending behavior of banks and financial institutions in Australia argued that, the potential for banks to experience substantial losses on their loan portfolios increases towards the peak of the expansionary phase of the cycle. However towards the tope of the cycle they appear to be relatively health-that is non performing loans are low and profits are high reflecting the fact that even the riskiest of borrowers tend to benefit from buoyant economic conditions. While the risk inherent in lending portfolios peaks at the top of the cycle, this risk tends to be realized during the concretionary phase of the business cycle. At this time non performing loans increases profits decline and substantial losses to capital may become apparent. Eventually the economy reaches a trough and turns towards a new expansionary phase as a result the risk of future losses reaches a low point even though banks may still appear relatively unhealthy at this stage in the cycle.



Jimenez and Saurina (2003) used logit model for analyzing the determinants of the probability of default (PD) of loans in terms of variables such as collateral, type of lender and lender borrower relationship while controlling for the other explanatory variables such as size of loan, size of borrower, maturity structure of loans and currency composition of loans. Their empirical results suggested that collateralized loans had a higher PD, loans granted by savings banks were riskier and a close lender borrower relationship had a positive effect on the willingness to take more risk. At the same time size of loan had a negative effect on default while maturity term of loans, i.e. short term loans of less than 1 year maturity had a significant positive effect on default.

## 1.3 OBJECTIVES OF THE STUDY

### 1.3.1 Primary Objective

The primary objective of the study is to identify the factors which influence in the repayment behavior of customer of the Sakthi Finance Ltd and the closely related factors involved in default and non default payments of commercial vehicle loans. On identification of major factors of credit worthiness of a borrower, assess the weight for each of the factors.

### 1.3.2 Secondary Objective

1. To identify zero default customers among default payments.
2. To suggest any additional relevant factors to strengthen the credit appraisal process of the company.
3. To provide inputs to build software for automatic generation of credit appraisal decisions.

There are different type of factors are involved in the credit appraisal process of commercial vehicle loans .The company want to identify the important factors in this process. The factors are being analyzed for their influence. An attempt is made to understand the degree of influence of various factors on the quality of the borrower accounts.

701 customers include both arrear and nil arrear in payments were selected for the study. They are grouped into 2 categories as under:

1. Default and no default customers
2. Default customers alone which were categorized as
  - a) 1 and 2 arrear set
  - b) 3 to 6 arrear set
  - c) Greater than 6 arrear set

Through application of statistical tools the relationship between the number of arrears and the factors considered for the sanction of the loan analyzed. Based on such analysis, appropriate weightage will be suggested for each factor that are considered for sanction of the proposal

The study throws light on various aspects including the company's system of credit appraisal. The objectives of the study include the study of the management of credit proposals firm with the help of statistical tools to find the correlation between various factors of credit process. It also identifies the weightage for each factor of credit processes. In the study based on the analysis the researcher has made useful suggestion to improve the credit appraisal process of the organization.

## 1.6 RESEARCH METHODOLOGY

Research in common parlance refers to a search for knowledge. One can also define research as scientific and systematic search for pertinent information on a specific topic. In fact research is an art of science investigation.

The advanced Learner's Dictionary of current English lays down the meaning of research as "A careful investigation or enquiry specifically through search for new facts in any branch of knowledge"

Red man and money define research as a "Systematized effort to gain new knowledge".

A research cannot be conducted abruptly. Researcher has to proceed systematically in an already planned direction with the help of a number of steps in sequences. To make the research systemized the researcher has to adopt certain methods. The method adopted by researcher for completing the project is called Research Methodology.

In other words, Research Methodology is simply the plan of action for a research which explains in detail how data is to be collected, analyzed and interpreted. Data become information only when a proper methodology is adopted. Thus we can say Methodology is a tool which processes the data to reliable information. This chapter attempt to highlight the research methodology adopted in this project.

The study is based on descriptive analysis of data furnished in the proposal records that were submitted to the company for sanction of loan. The research design used in the study is descriptive research design. A descriptive study is undertaken in order to ascertain and able to describe the characteristics of the variables of interest in the situation. Descriptive studies that present data in a meaningful form thus help to

1. To understand the characteristics of a group in a given situation,
2. To think systematically about aspects in a given situation,
3. To offer idea for further probe and research and
4. To help to make certain simple decisions.

### **1.6.2 SAMPLING DESIGN**

Stratified sampling is commonly used probability method that is superior to simple random sampling because it reduces sampling error. A stratum is a subset of the population that shares at least one common characteristic. Examples of stratums might be males and females, or managers and non managers. The researcher first identifies the relevant stratums and their actual representation in the population. Random sampling is then used to select a sufficient number of subjects from each stratum. "Sufficient" refers to a sample size large enough for us to be reasonably confident that the stratum represents the population. Stratified sampling is often used when one or more of the stratums in the population have high inter-stratum variance and low intra-stratum variance.

## **Type of Data**

### **Primary Data**

Primary data are that which are collected afresh and for the first time and thus happens to be original in character. They are collected for the first time for analyzing the study. In this study the primary data were collected through “Questionnaire” method.

### **Secondary Data**

Secondary data is the data already available. For this study such data were collected from books and websites and customer files and records.

### **Data collection instruments**

The instrument used to collect data for this study was structured questionnaire. The data required for the study has been collected from the secondary source. The relevant data are taken from the records of various customer proposals.

The data is to be collected through a suitable questionnaire and then to be converted into conventional way for the purpose of the research. The data collection tool is “Questionnaire”

### **Sampling unit**

The sampling unit is one credit proposal submitted to Sakthi Finance Limited for sanctioning loan and records in paying the due on dates.

### **Population**

Population refers to the entire group of people, events or things of interest that the researcher wishes investigate. The population is used in this study by the researcher is defaulted and no defaulted customers of Sakthi Finance Limited.

A sample is a portion of people drawn from a larger population. In this study size of defaulted customers are on the basis of following formula

$$n = \frac{N}{1 + N(e)^2}$$

N = Total population

e = Confidence interval

n = Sample size

### **Tools of analysis**

1. Percentage analysis
2. Chi-square analysis
3. Correlation analysis
4. Multiple regressions

### **1.7 Limitations**

Though the study is descriptive and analytical it involved the following limitations:

1. Analysis and interpretation are made based on the figures given in the annual reports only
2. The reliability and accuracy of calculation depends on the accuracy of information found in customer files.

This project work is arranged to present in the following five chapters:

**Chapter – I : Introduction and design of the study**

This chapter present in brief introduction to the study, statement of the problem, objective of the study, scope of the study, limitation of the study and methodology and tools used.

**Chapter – II : Organization Profile**

This chapter presents brief history, management, organization structure, product profile, market potential, competitive strength, future plans and description of various functional areas of the organization.

**Chapter – III : Macro and Micro analysis**

The prevailing scenario with respect to the industry and the company selected for the study to be briefly discussed

**Chapter – IV : Data Analysis and Interpretation**

This chapter presents the analysis and the interpretation relating to the data collected from the Sakthi Finance Limited.

**Chapter – V : Summary, Findings and Suggestions**

This chapter presents the summary of findings and suggestion made on the basis of results of the study.



## **CHAPTER – 2**

### **ORGANIZATION PROFILE**

# **ORGANIZATION PROFILE**

## **2.1 AN OVERVIEW OF NON – BANKING FINANCE COMPANIES**

The role of NBFCs is not different from that of Bank mobilizing money from people with the promise of repaying with interest. No wonder that nearly 40000 NBFCs set up establishments to mobilized money with a promise of high interest, unfortunately, many of them fly – by night operators.

The Indian Economy is growing through a period of rapid "Financialiation". Today a wide range of financial institutions, through plethora customer friendly financial products, is conducting the "intermediation". Repeated evaluation of the role of NBFCs by study group set up periodically the Government has confirmed, "That NBFCs usefully supplement the activities of banks in the fields of both deposit mobilization and leading. NBFCs are capable of playing a dynamic role in the economy.

### **2.1.1 MEANING OF AN NON BANKING FINANCE COMPANY**

An Non-Banking Finance Company (NBFC) is a company under the Companies Act, 1956 and is engaged in the business of loans and advances, acquisition of shares / stock / debentures / securities issued by Government or local authority or other securities of like marketable nature, leasing, hire – purchase, insurance business, and chit business.

But it does not include any instruction whose principal business is that of agriculture activity, sale / purchase / construction of immovable property. A non-banking institution which is a company and which has its principal business of receiving deposits under any scheme or arrangement or any other manner, or lending in any manner is also a non – banking financial company (Residuary non – banking company).

### **2.1.2 THE DIFFERENT TYPES OF NBFCs REGISTERED WITH RBI**

The NBFCs that are registered with RBI are:

1. Equipment Leasing Company;
2. Hire – purchase Company;
3. Loan Company;

### **2.1.3 REGULATORY MEASURES OF NBFCs**

The Reserve Bank of India is entrusted with the responsibility of regulating and supervising the Non-Banking Financial Companies by virtue of powers vested in Chapter III B of the Reserve Bank of India Act, 1934.

The regulatory and supervisory objective is to:

- 1) Ensures healthy growth of the financial companies;
- 2) Ensures that these companies function as a part of the financial system within the policy framework, in such a manner that their existence and functioning do not lead to systemic aberrations and that
- 3) The quality of surveillance and supervision exercised by the Bank over the NBFCs is sustained by keeping pace with the developments that take place in this sector of the financial system.

### **2.1.4 THE SALIENT FEATURES OF NBFCs REGULATIONS**

The important regulations relating to acceptance of deposits by NBFCs are under:

- 1) The NBFCs are allowed to accept/renew public deposits for a minimum period of 12 months and maximum period of 60 months. They cannot accept deposits repayable on demand.
- 2) NBFCs cannot offer interest rates higher than the ceiling rate prescribed by RBI from time to time. The present ceiling is 11 per cent per annum. The interest may be paid or compounded at rests not shorter than monthly rests.
- 3) NBFCs cannot offer gifts/incentives or any other additional benefit to the depositors.
- 4) NBFCs (except certain equipment leasing/hire – purchase finance companies) should have minimum investment grade credit rating.
- 5) The deposits with NBFCs are not insured.

from issued by the company soliciting deposits

7) In case an NBFC fails to repay the deposits or the interest, the depositor can complain to:

- a) Consumer Dispute Redress forum at the district level
- b) Company Law Board at Chennai / Delhi / Kolkata / Mumbai or
- c) Nearest RBI office.

### **2.1.5 CEILING ON ACCEPTANCE OF PUBLIC DEPOSITS**

Presently, the maximum rate of interest a NBFC can offer is 11%. The interest may be paid or compounded at rests not shorter than monthly rests.

The NBFCs are allowed to accept / renew public deposits for a minimum period of 12 months and maximum period of 60 months. They cannot accept deposits repayable on demand.

There is ceiling on acceptance of Public Deposits. A NBFC maintaining required NOF/CRAR and complying with the prudential norms could accept public deposits shown in the Table

#### **CEILING ON PUBLIC DEPOSITS**

<b>CATEGORY OF NBFC</b>	<b>CEILING ON PUBLIC DEPOSITS</b>
EL/HP Companies maintaining CRAR of 15% without credit rating	1.5 times of NOF or Rs. 10 cores whichever is less
EL/HP Companies with CRAR of 12% and having minimum investment grade credit rating	4 times of NOF
LC/IC with CRAR of 12% and having minimum investment grade credit rating	1.5 times of NOF

**Source:** Sakthi Finance Journal - 2006

## 2.1.0 RATING OF NBFCs

An unrated NBFC, except certain equipments leasing / hire – purchase (EL/HP) companies, cannot accept public deposits. An exception is made in case of unrated EL/HP companies with CRAR of 15% which can accept public deposit up to 1.5 times of the NOF or Rs.10 crores whichever is lower without having a credit rating.

### THE SYMBOL OF MINIMUM INVESTMENT GRADE RATING OF DIFFERENT COMPANIES

NAME OF RATING AGENCIES	LEVEL OF MINIMUM INVESTMENT GRADE CREDIT RATING (MIGR)
CRISIL	FA – (FA MINUS)
ICRA	MA – (MA MINUS)
CARE	CARE BBB (FD)

**Source:** Sakthi Finance Journal 2005

A NBFC may get itself rated by any of the four rating agencies namely, CRISIL, CARE ICRA and FITCH Ratings Indian Pvt. Ltd.

Sakthi Finance Limited was incorporated on 30th March 1955 under the Company's Act in the name of "Pollachi Credit Society" as Private limited company for in-house financing arm for TELCO dealership. The company made its first public issue in 1984. With successive rights issue on premium the company paid up the capital raised from Rs.25 lakhs to 17.5 crores as on 31st March 2002.

The company's authorized capital comprises 4,00,000 equity shares of Rs.10 each and 5,00,000 redeemable cumulative preference share of Rs.100 each. The issued subscribed and paid up capital are 2,00,71,321 equity shares of Rs.10 each fully paid up.

Presently the company operates through a network of 21 branches located in Tamilnadu, Kerala, Andrapradhesh and Maharashtra, with specific focus on Tamilnadu and Kerala.

The company has trained and experienced manpower at all branches. In addition 12 savings centers have been established at various deposit potential areas at taluks of different districts in Tamilnadu and Kerala for mobilizing public deposits. The Deposits of the company was Rs.8320.54 lakhs in 1990, increased to Rs.115.38 crores in 31/03/2001. The company is also having safety locker facility to the deposit holders.

The company made its first maiden public issue of share in 1984 and mobilized Rs.75 lakhs. The availability of large resources has been responsible for the growth in stock – on – hire to Rs.154.91 crores in 2005. During the period from 1990 to 1993, the company had stable volume of business at an average disbursement of Rs.37 crores per year from 1994; further thrust was given to commercial vehicle finance segment. The booming economy is lead to increase volumes in Hire Purchase business. The average disbursals per year worked out to Rs.107 crores per year during 1994-96. To facilitate further growth, equity has enhanced in 1995.

By the end of 1996-97, the company initiated a thought process towards change management, M/s KPMG Peat Mar wick (India) Ltd., was identified as the agency for

Process Orientation Exercise was also undertaken.

In 1997-98, the growth rate started declining in all industries. The road transport industry has the one that was worst affected. Coupled with this, RBI also introduced regulations to limit the deposit level to 4 times of Net Owned Fund. Sakthi Finance Limited had a deposit base of Rs.220 crores in January 1988 had to reduce the base to Rs.137 crores in 3 years time. As the result of BPR exercise was ready, the company could immediately adopt a change strategy to fit into the new regulation era. Therefore, plans were drawn and implemented to reduce the deposit base within 18 months by closing down low volume branches, at the same time retaining the base in other centers.

In this process, the company had to reduce the deployment. The deployment in 1998-99 reduced to around Rs.43 crores. The level of public deposits however has been brought down to Rs.110 crores as at 31-3-2000.

With the grips of recession slowly getting released, Sakthi Finance Limited has drawn up plans to step up the development in hire purchase business. As planned, the company was able to transact hire purchase business of Rs.55.62 crores in 2001-02, which is at present Rs.154.91 crores in 2005. The company has planed for the growth rate of 30% to 35% in the years to come. The company is working towards stable volumes in future.

To better utilize the dealership strengths and to retain a specific segment of customers, Sakthi Finance Limited proposes to channel's funds from others also through securitization route.

1. Automobile & Transport (ABT).
2. Sakthi Sugars.
3. Sakthi Auto Components Ltd.
4. Sakthi Finance Ltd.
5. Sakthi textiles.
6. Sakthi Associations.
7. Educational Institutions.

## Sakthi Finance Limited is

- 1) One of India's oldest NBFCs, Founded in the year 1965.
- 2) Part of the Rs 1200 crore Sakthi Conglomerate which was founded in the year 1935.
- 3) The Sakthi Group has a leading presence in Finance Agro foods, Dairy, and Transport.
- 4) A deep understanding of the transport industry has made Sakthi one of the most trusted names in financing for commercial vehicles.
- 5) A wide variety of loans for cars, commercial vehicles, plant machinery and equipment are available.
- 6) One of the first companies to introduce used vehicle financing.
- 7) Sakthi Finance Ltd., has 20 branches spread all over India.
- 8) Over 1,00,000 happy customers and still growing.

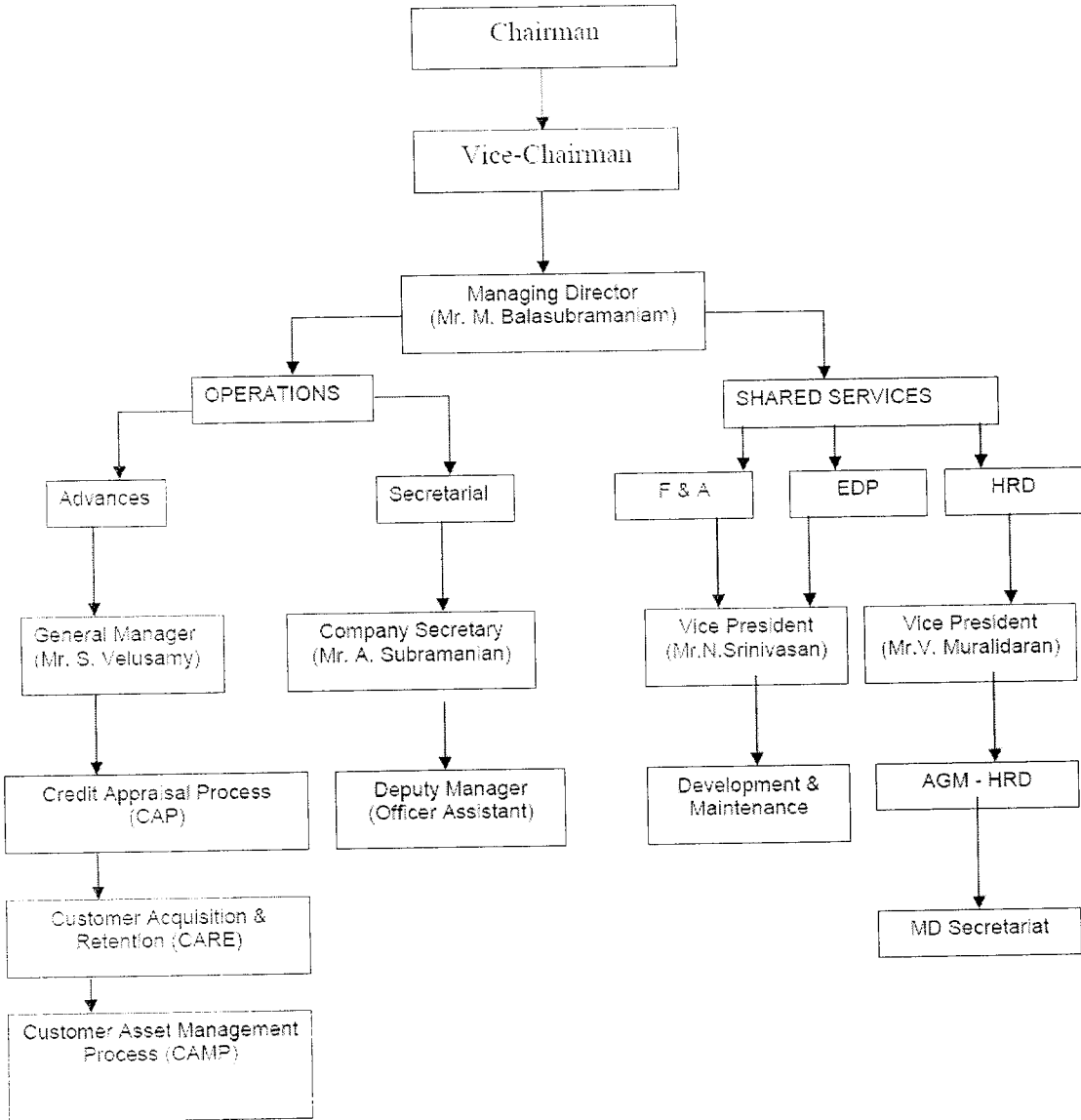
## **2.2 THE MANAGEMENT**

The group is governed by chairman supported by a vice chairman and managing directors in the top level of the management .In this management team there exist five board of directors who take care of operations in advances and secretarial department, advances and over the shared services like finance and accounts, electronic data processing and human resources department.



- 1) **Tamilnadu** : Chennai, Coimbatore, Mylapore, Madurai, Pollachi, Trichy, Salem, Erode, Namakkal and Tirunelveli.
- 2) **Kerala** : Calicut, Eranakulam, Kottayam and Kannur.
- 3) **Karnataka** : Bangalore.
- 4) **Andhra Pradesh** : Vishakapatnam, Vijayawada.
- 5) **New Delhi.**

# LIMITED



## 2.4.1 INVESTMENT PRODUCTS

1. Fixed Deposits
2. Cumulative Deposit
3. Non Convertible Debentures

## 2.4.2 CREDIT PRODUCTS

Finance for purchase of new and used commercial vehicles, infrastructure machineries, consumer durable items and for two wheelers.

## 2.4.3 LOCKERS

Safety lockers, which meet safety and security standards in a special designed and constructed building with appropriate environment and are available a various locations.

The services offered by the company are depicted and the services include safety vaults, loan for two wheelers, loan for four wheelers, deposit schemes and loan for customer durables.

### 2.4.1.1 DEPOSIT SCHEMES

Fixed deposit, cumulative deposit is the two deposit schemes that are available in Sakthi Finance Limited. For cumulative deposit minimum amount is Rs 10,000 and for fixed deposit if it is monthly interest the minimum amount is Rs 15,000, for quarterly and half yearly Rs 10,000.

Cumulative Deposit			Scheme 1
Term (Months)	Interest rate p.a at Quarterly rests	Annual Yield	Maturity Amount Rs.10,000/-
12	8.50%	8.77%	10,877
24	9.00%	9.74%	11,948
36	9.50%	10.84%	13,253
Minimum Deposit: Rs.10,000/-			

Fixed Deposit		Scheme II		
Term (Months)	Interest rate based on Quarterly rests	Interest Frequency - Annual Yield		
		Monthly	Quarterly	Half Yearly
12	8.50%		8.50%	8.59%
24	9.00%	9.00%	9.00%	9.10%
36	9.50%	9.50%	9.50%	9.61%
Minimum Deposit (Rs.)		Rs.25,000	Rs.10,000	Rs.10,000

## 2.4.2.1 LOCKER SCHEMES

### 1) Regular scheme

Under this scheme, 12 types of lockers are available. Their categories are small size locker, medium size locker and large size locker. The rent varies according to their size. The initial security deposit amount is less and this amount is repaid without interest when the hirer surrenders the locker. If a customer wishes to hire a locker, he has to pay annual rent and initial deposit of three year rent.

### 2) Own your locker

It is comparatively from regular scheme. The difference lies on the payment side. In regular income the hirer has to pay the annual rent and (3 years annual rent) initial security deposit amount while he opens a new locker. In this scheme the hirer has to pay only the initial security deposit amount and he can use the safety locker without paying any annual rent. While surrendering the locker, the hirer will be refunded by the deposit amount that he paid without any interest. The scheme also enjoys the same size of locker with a difference in its payment.

### 3) Deposit linked

Under this scheme the hirer has to pay security added with a nominal rent while he opens a new locker. This scheme gives a 7% interest on the deposit amount. The interest will be paid annually after deducting rentals. While surrendering the locker the security deposit amount will be refunded to the hirer, the locker size and the type is all the same with a difference in terms of payment. Currently regular scheme is only operated. Own your locker and deposit linked schemes are not operated.

## **2.5 VISION OF SAKTHI FINANCE LIMITED**

- 1) Be amongst the top three re – financiers of commercial vehicles in the country
- 2) Become total solution provided through channel seven – value chain management.
- 3) Become the most preferred supplier of the customer choice.

## **2.6 MISSION OF SAKTHI FINANCE LIMITED**

- 1) To partner the progress of "the small and medium transport operators" (SRTO & MRTO).
- 2) To provide "End to End Service" leading to "Total Customer Solution" with Speed, Flexibility and Integrity.

### **2.6.1 TRAINING AND PROBATION**

- 1) Every employee who joins the company shall be on probation.
- 2) Probation is a period of one year.
- 3) Incase, induction of trainee level, the training period shall be one – year probation commences on completion of training in success case.

### **2.6.2 COMPETITIVE STRENGTH OF THE SAKTHI FINANCE LIMITED**

- 1) First in the industry to issue post dated interest warrants in advance every year.
- 2) First in the industry to allow encashment of interest warrants at par in the branches of the canara bank and also in the branches and head office of the company.
- 3) Fastest service in processing the application for deposits, loan and refunds and branches and head office. The company services both on advances and deposits are marked by high order of courtesy. Efficiency and promptness is notable at all levels of its operation.

### **2.6.3 DISTINCTIVE FEATURES OF ADVANCE PORTFOLIO**

- 1) Effective appraisal system and fast disbursement of advances within the shortest period.
- 2) Captive hire purchase business through dealership outlets for commercial vehicles held by group of companies/firms.

Sakthi Finance Limited is a part of Sakthi group, which has interested in diverse fields such as Finance, Sugar, Foundry, Dairying, Textiles, Automobile dealerships, Synthetic germs etc., and is among fastest growing industrial groups in the south. Sakthi Group has set up many education and charitable institutions, hospitals and religious centers.

#### **2.6.4 THE STRENGTHS OF SAKTHI FINANCE**

- 1) Part of the Sakthi Group – one of the reputed groups of Southern India headed by Dr.N.Mahalingam.
- 2) Customer base of more than 5 million.
- 3) Experience in Hire Purchase Financing of more than 45 years.
- 4) Business focused executives at all levels.
- 5) Availability of Infrastructure to place funds through its wide network of branches.
- 6) Valuable dealership network for Maruthi, TELCO, and Bajaj vehicles.

#### **RATING**

The company is rated by ICRA as MA – that means adequate safety.

#### **THE COMPANY AT PRESENT IS INTERESTED IN THE FOLLOWING ACTIVITIES**

- 1) Acceptance of deposits
- 2) Hire purchase financing of vehicles, machineries etc.,

#### **THREATS**

With the entry of banks and NBFCS floated by Banks and MNCs into retail finance segment and in particular into commercial vehicle refinance business , the competition is likely to increase further. The fuel price hike and upward trend in interest rates may affect the growth rate in commercial vehicle sales

## **2.7. DESCRIPTION OF VARIOUS FUNCTIONAL AREAS**

### **2.7.1 ADVANCE DEPARTMENT**

- 1) Credit appraisal process
- 2) Customer acquisition and retention
- 3) Customer asset management process

### **2.7.2 SECRETORIAL DEPARTMENT**

- 1) Coordinating the share transactions in the public company with rules and regulations (code of conduct) of the public limited company
- 2) To maintain the rules and regulations of RBI and SEBI.
- 3) As it is RBI registered company, comply with THE COMPANIES ACT 1956 for the NBFCs – listed company, conducting the meeting of Board of Directors, Annual general meeting and committee meeting with in prescribed time.
- 4) Coordinating with share transfer, registrars (SKDC CONSULTANTS LTD) Coimbatore.

### **2.7.3 FINANCE AND ACCOUNTS DEPARTMENT**

Entire accounting process of the company is carried out by the F&A department as per the accounting standard prevailing

- 1) Transactions of the public deposits and advances
- 2) To account administrative expenses and staff overhead.
- 3) IT work, sales tax work, service tax work

### **2.7.4 EDP DEPARTMENT**

- 1) Take care of the dematerialization of the records
- 2) To organize the confidential electronic data of the company with high security
- 3) To arrange for access of electronic data by every department as per their requirements

### **2.7.5 HUMAN RESOURCE MANAGEMENT**

To maintain the personnel relationship

- 1) To recruit new candidates on demand
- 2) To coordinate relationship between various department

## **CHAPTER – 3**

### **MACRO AND MICRO ANALYSIS**



# MACRO AND MICRO ANALYSIS

## 3.1 MACRO ANALYSIS

The institute of hire purchase organization involved installment credit is quite well organized in countries like U.K. and U.S. In India, hire purchase credit first made its appearance after World War I.

The NBFC system grew steadily in thirties and forties. It was only after Second World War the growth picked up the momentum. Hire purchase credit in India is given by commercial banks, hire purchase finance companies and state finance corporations as well as by large number of firms and individuals.

NPA is the most important factor which indicates the performance of the NBFCs in different angle. If the company has lesser value of NPA, it indicate the company maintains good position in business other wise is in sick position. NPA is one of the most important factors for credit appraisal process.

In globally the level of non performing loans US \$1.3 trillion during 2003, of which the Asian region accounts for about US \$1 trillion or about 77 percent of global NPLs. Within Asia, Japan and China have NPs at about US\$ 330 billion and US \$ 307 billion thus together accounting for 49 percent of global NPLs. Other hot spots of NPLs in the Asian region are Taiwan (US \$ 19 billion), Thailand (US\$ 18.8 billion), Indonesia (US \$ 16.9billion) Philippines (US\$ 9 billion). India's NPLs of the financial sector as a whole is reported at about US\$ 30 billion which works out to a little over 2 percent of global NPLs. On the basis of information provided in the Report on trend and Progress of banking in India, 2002-03 the level of gross NAPs of public sector is estimated at Rs.68,714 crores which is equivalent to about US \$15 billion i.e. about 1 percent of global NPAs.

Countries	NPLS ( US \$ billion)	Share in Global (Percentage)
Japan	330	25.4
China	307	23.6
Taiwan	19.1	1.5
Thailand	18.8	1.5
Philippines	9.0	0.7
Indonesia	16.9	1.3
India	30	2.3
Korea	15.0	1.2
Total	746	57.4
Asia	1000	76.9
Germany	283	21.8
Turkey	8	0.6
Global	1300	100
*NPLs of all financial institutions		
<b>Source:</b> Global NPL report 2004,Ernst and young		

In terms of the ratio of NPLs to total assets of banking sector, there is evidence that the performance of the Asian region is far lower than Europe and US. The trend in the NP: ratios of select countries, particularly the emerging countries of East Asia, during the last five-six years provides an interesting insight about the impact of structural reform on the accumulations of non-performing loans by banks. In emerging countries impact of removing the accumulated reform after the Asian crisis had an immediate impact of removing the accumulated excesses from the financial sector and consequently induced a sharp reduction in NPAs ratio.

In Thailand, the NPLs ratio declined by about 25 percentage points from about 43 per cent in 1998 to about 18 per cent in 2003. in a similar manner, the NPAs ratio in Indonesia declined by about 30 percentage points from about 49 per cent in 1998 to 19 per cent in 2003.

## GROWTH FACTORS

Several factors have contributed to the rapid growth of NBFCs in India. Comprehensive regulation of the banking system and the absence or relatively lower degree of regulation of NBFCs on the other hand has a significant contribution to this development.

Recognizing the importance of the NBFCs sector and the need to integrate it with the main stream financial system, the RBI has taken steps from time to time for the regulation of NBFCs. Experience over the last three decades has shown that earlier regulations covered only the deposit taking activities of NBFCs without adequately covering aspects of functional diversity of these companies and expanding intermediation by them. Various committees which went in to these aspects, strongly recommended that there should be an appropriate regulatory frame work for NBFCs and that more powers should be vested with RBI to regulate them in an effective manner.

Further a high level of customer orientation, fewer pre-sanction and post-sanction requirements, faster sanctions and simple and speedy tailor made services assures them a loyal clientele not withstanding higher costs. Besides the higher returns offered by NBFCs drew a large number of small depositors to them. They work like quasi banks and provide funds to sectors where a credit gap exists. NBFCs have become an accepted and integral part of the Indian financial system which did experiment with direct finance to the transport to this sector, withdrew and settled for indirect finance to this sector through NBFCs which had a better recovery machinery or experience.

Finance companies offer a broad range of services to meet the needs of corporate and individuals. Some of them have, through subsidiaries, taken up stock broking and mutual fund business. The government has permitted external commercial borrowing and foreign investments in activities of NBFCs not only to explore opportunities but even to survive. While bank credit to NBFCs has been rising, the pace of increase in the banks total exposure to this sector has been slow as compared to credit expansion to other sectors of economy. This can be attributed to certain adverse developments in the industry in the recent past. This can be attributed to certain adverse developments in the

deposits in the portfolio of NBFCs.

## TREND IN NPAs IN INDIA

In absolute terms, the volume of gross NPAs of financial institutions had increased continuously, except for the year 1995. During the entire period. Gross non-performing assets (GNPA) have increased at a trend since 2000. In terms of various NPA ratios, such as GNPA to gross advances, GNPA to total assets, and net NPAs to total assets and net NPAs to net advances, the financial institutions have achieved remarkable improvement.

### Gross NPAs in India

Year	Rs (Billion)	US \$ Billion
1993	392.5	12.81
1994	410.4	13.08
1995	383.8	12.22
1996	416.6	12.45
1997	435.8	12.28
1998	456.8	12.28
1999	517.1	12.29
2000	530.3	12.24
2001	546.7	11.97
2002	564.7	11.84
2003	540.9	11.18

Source : report on trend progress of banking in India, RBI, various issues

The ratio of gross NPAs to advances has declined at a trend rate of about 9.6 per cent from the level of about 23-25 per cent during 1993-94 to about 9 per cent by end-March 2003. On the other hand, the net NPAs to assets ratio has declined by 50 per cent from the level of 4 per cent in 1995 to about 2 per cent in 2003. The GNPA to assets ratio declined by 5 percentage points in the year 1994-95, and another 1.5 percentage point in the subsequent year 1995-96. Thus, in two-year span, the ratio of GNPA to assets was reduced by 6.5 percentage points, reflecting the immediate effect of structural reforms. Since 1996,

forces determining the level of NPAs.

### NPA ratios of financial institutions in India

Year	Gross NPAs to advance ratio	Gross NPAs Asset ratio	Net NPAs Advances ratio	Net NPAs Asset ratio
1993	23.2	11.8	-	-
1994	24.8	10.8	-	-
1995	19.5	8.7	10.7	4.0
1996	18.0	8.2	8.9	3.6
1997	17.8	7.8	9.2	3.6
1998	16.0	7.0	8.2	3.3
1999	15.9	6.7	8.1	3.1
2000	14.0	6.0	7.4	2.9
2001	12.4	5.3	6.7	2.7
2002	11.1	4.9	5.8	2.4
2003	9.4	4.2	4.5	1.9

### in Sakthi Finance Limited

#### Loans granted by the company

Year	Advance (Amount in Rs in Crores)
2004	11
2005	9
2006	8.5

The loan sanctioned by the company is in a decreasing trend. In 2004 the loan granted was Rs . 11 cr , but in the year 2006 it has reduced to Rs 8.5 cr which is only 75% of the base year 2004 .

### Assets repossessed by the company

Year	Value of Repossessed asset (Amount in Rs in Lakhs)
2004	13.8
2005	24.7
2006	23.2

The asset repossessed by the company is in an increasing trend. In the year 2004 the amount of assets repossessed by the company is only Rs 13 lakhs but it has increased to Rs 23 lakhs in the year 2006.

### Earnings of the company through loans

Year	Earnings of the company(Amount in Rs in Crores)
2004	21
2005	23.1
2006	25.1

There is a slow growth in the earnings to the company through loans. In the year 2005 and 2006, the company's earnings through loans have increased by only 10% when compared to base year 2004.

### Bad debts incurred by the company

Year	Amount in rupees (Amount in Rs in Crores)
2004	1.6
2005	1.58
2006	3

The above table shows the bad debts incurred by the company from defaulted customers. It shows an increasing trend year by year. Though there was a decrease in the amount of bad debts in the year 2005 but it is just 1% decrease when compared to base year 2004. But in the year 2006 it has increased to Rs 3 crores which is nearly double the time of the base year.

## **CHAPTER-4**

# **DATA ANALYSIS AND INTERPRETATION**

## DATA ANALYSIS AND INTERPRETATION

### 4.1 PERCENTAGE ANALYSIS

#### 4.1.1 MARKETING OFFICER RATINGS

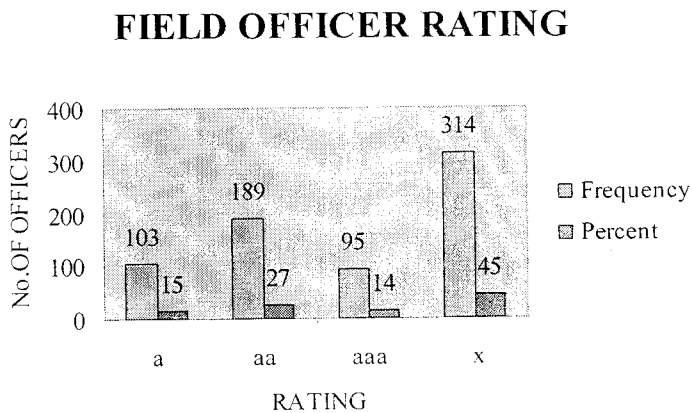
A frequency table was prepared based on the marketing officer ratings of the borrowers, which is illustrated as in Table. This table shows the marketing officers ratings that influence the repayment capacity of loan.

**TABLE 4.1**

Rating	Frequency	Percent
a	103	15
aa	189	27
aaa	95	14
x	314	45

Chart showing the branch officers ratings that influence the repayment capacity of loan

**CHART 4.1**



### INTERPRETATION:

From the above table it can be observed that x rated group of branch officers were found to have appraised loan to more number of customers (45%) followed by aa (27%), a (15%) and aaa (14%)



A frequency table was prepared based on the branch officer ratings of the borrowers, which is illustrated as in Table. This table shows the branch officers ratings that influence the repayment capacity of loan.

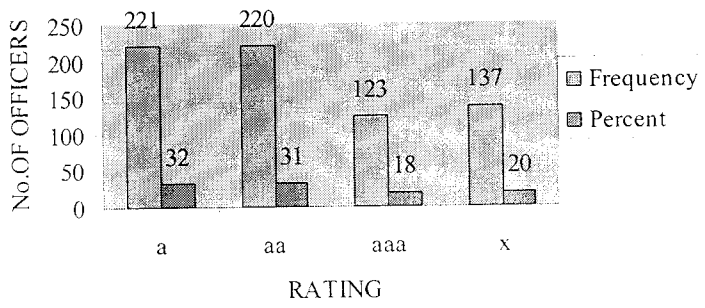
**TABLE 4.2**

Rating	Frequency	Percent
a	221	32
aa	220	31
aaa	123	18
x	137	20

Chart showing the branch officers ratings that influences the repayment capacity of loan

**CHART 4.2**

**BRANCH OFFICER RATING**



**INTERPRETATION:**

From the above table it can be observed that the a rated group of Branch officers were found to have appraised loan to more number of customers (32%) followed by aa (31%) rated group and (20%) x rated group.

## 4.1.5 CUSTOMER RATINGS

A frequency table was prepared based on the new customer ratings of the borrowers, which is illustrated as in Table. This table shows the customer ratings that influence the repayment capacity of loan.

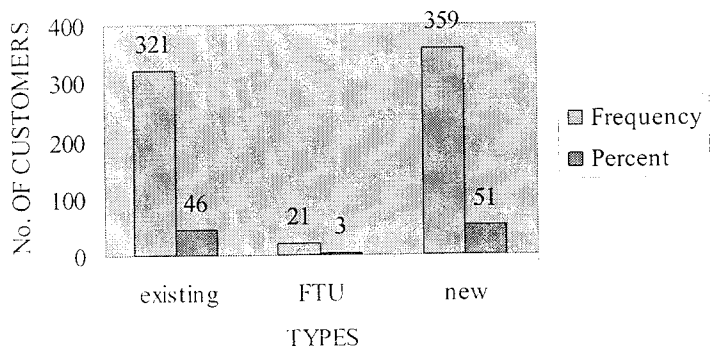
**TABLE 4.3**

Types	Frequency	Percent
existing	321	46
FTU	21	3
new	359	51

Chart showing the customer ratings that influences the repayment capacity of loan

**CHART 4.3**

### CUSTOMER RATING



### INTERPRETATION:

From the above table it can be observed that the new groups of customers were interested in availing more number of loans (51%) followed by existing group customers (46%) and first time user rated group (3%).

#### 4.1.4 TRACK RECORD COMPANY

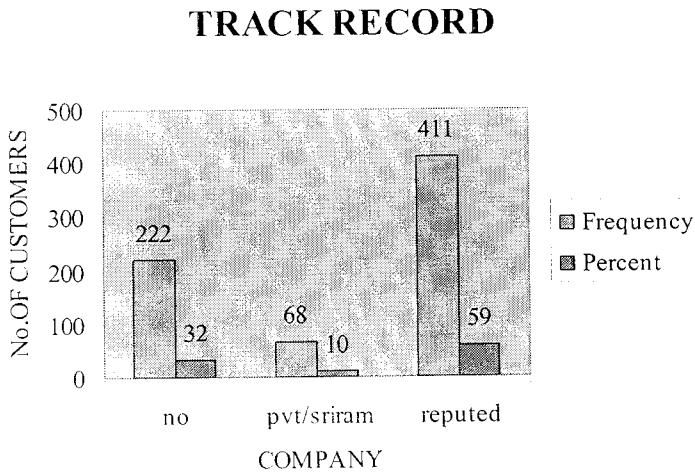
A frequency table was prepared based on the track record company of the borrowers, which is illustrated as in Table. This table shows the track record company that influences the repayment capacity of loan.

**TABLE 4.4**

Company	Frequency	Percent
no	222	32
pvt/sriram	68	10
reputed	411	59

Chart showing the track record company that influences the repayment capacity of loan.

**CHART 4.4**



#### **INTERPRETATION:**

From the above table it can be observed that the group of people with a track record from a reputed company were interested to get more number of loans (59%) followed by no track (32%). The people with private / limited companies track record get minimum amount of loans (10%).

#### 4.1.3 TRACK RECORD OF THE BORROWERS

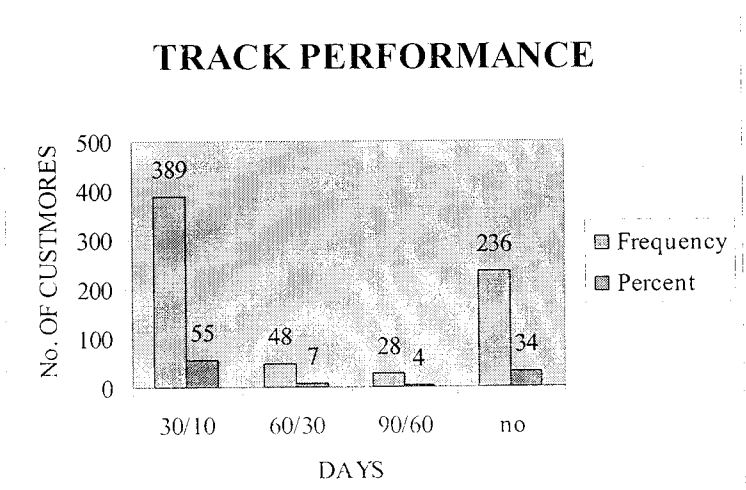
A frequency table was prepared based on the track record of the borrowers, which is illustrated as in Table. This table shows the track record of the borrowers that influence the repayment capacity of loan.

**TABLE 4.5**

Days	Frequency	Percent
30/10	389	55
60/30	48	7
90/60	28	4
no	236	34

Chart showing the track record of the borrowers that influences the repayment capacity of loan

**CHART 4.5**



#### **INTERPRETATION:**

From the above table it can be observed that the groups of people with track record (30/10) were interested to get more number of loans (55%) followed by people with no track record 34%. The group of people with track record (60/30) and people with (90/60) track record get less number of loans (7%) and (4%) respectively.

## 4.1.6 GUARANTOR OPERATES

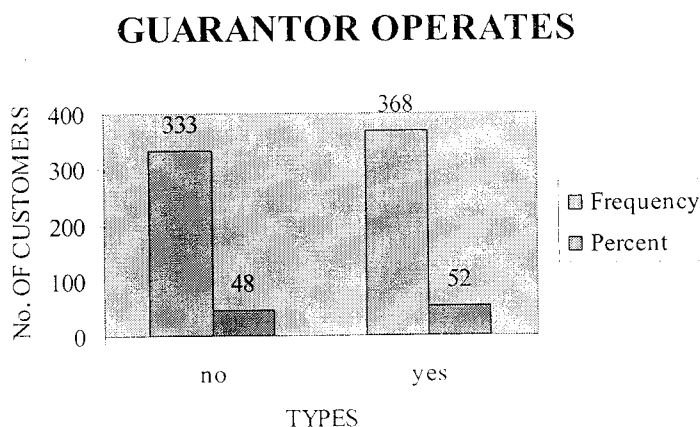
A frequency table was prepared based on the guarantor operates, which is illustrated as in Table. This table shows the track record of the borrowers that influence the repayment capacity of loan.

**TABLE 4.6**

Types	Frequency	Percent
no	333	48
yes	368	52

Chart showing the guarantor operates that influences the repayment capacity of loan.

**CHART 4.6**



### **INTERPRETATION:**

From the above table it can be observed that the similar line guarantors give more guarantees (52%) to the lending people compare to unrelated guarantors.

#### 4.1.7 OTHER SOURCE OF INCOME

A frequency table was prepared based on other source of income, which is illustrated as in Table. This table shows the clearing period of past loan that influence the repayment capacity of loan.

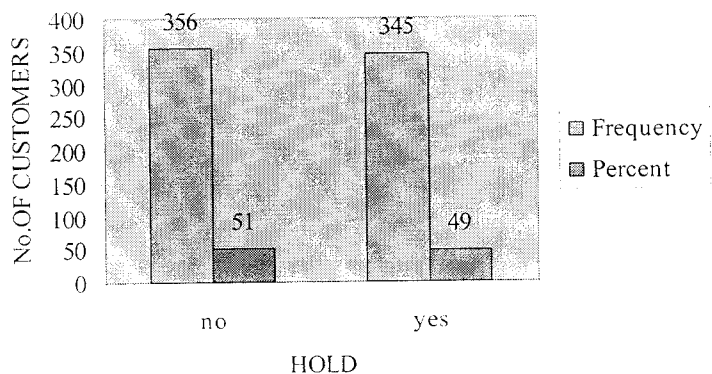
**TABLE 4.7**

Hold	Frequency	Percent
no	356	51
yes	345	49

Chart showing other source of income that influences the repayment capacity of loan.

**CHART 4.7**

#### OTHER SOURCE OF INCOME



#### INTERPRETATION:

From the above table it can be observed that the groups of people who did not have other source of income were interested to get more number of loans (51%).

#### 4.1.3 PURPOSE OF THE LOAN

A frequency table was prepared based on the purpose of the loan, which is illustrated as in Table. This table shows the purpose of the loan that influences the repayment capacity of loan.

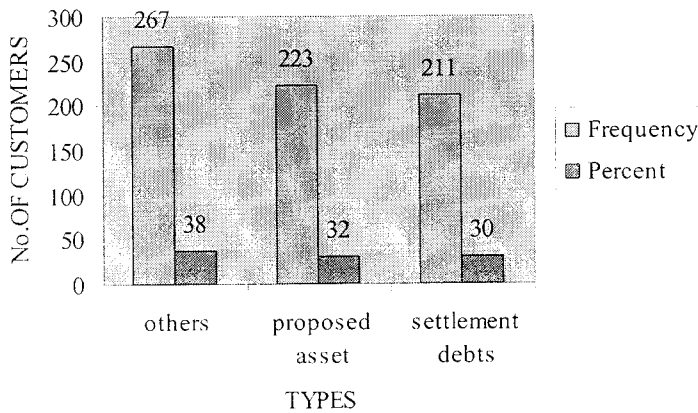
**TABLE 4.8**

Types	Frequency	Percent
others	267	38
proposed asset	223	32
settlement debts	211	30

Chart showing the purpose of the loan that influences the repayment capacity of loan

**CHART 4.8**

#### PURPOSE OF LOAN



#### INTERPRETATION:

From the above table it can be observed that the customers have taken loan for other use was high (38%) while compared to customers who have taken for proposed asset and settlement of debts.

#### 4.1.9 BANK ACCOUNTS

A frequency table was prepared based on the clearing period of past loan, which is illustrated as in Table. This table shows the clearing period of past loan that influence the repayment capacity of loan.

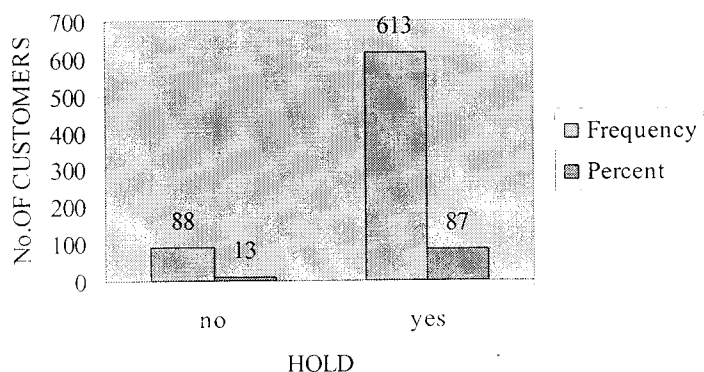
**TABLE 4.9**

<b>Hold</b>	<b>Frequency</b>	<b>Percent</b>
No	88	13
Yes	613	87

Chart showing bank accounts that influences the repayment capacity of loan

**CHART 4.9**

#### **BANK ACCOUNT**



#### **INTERPRETATION:**

From the above table it can be observed that the people who have submitted bank statements have taken more number of loans of 87%.



#### 4.1.10 CHEQUE DISHONOURS

A frequency table was prepared based on the cheque dishonours, which is illustrated as in Table. This table shows the clearing period of past loan that influence the repayment capacity of loan.

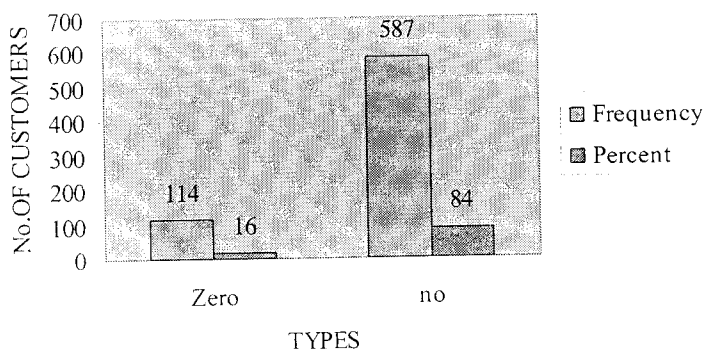
**TABLE 4.10**

Types	Frequency	Percent
Zero	114	16
No	587	84

Chart showing cheque dishonours that influences the repayment capacity of loan

**CHART 4.10**

#### CHEQUE DISHONOURS



#### INTERPRETATION:

From the above table it can be observed that the groups of people who have No bank statements were taking more number of loans of 84%.

#### 4.1.11 SECOND LINE SUPPORTERS

A frequency table was prepared based on the purpose of the loan, which is illustrated as in Table. This table shows the second line supporters that influence the repayment capacity of loan.

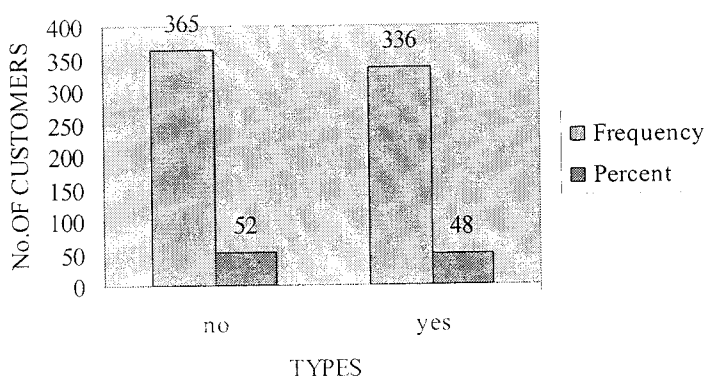
**TABLE 4.11**

<b>Types</b>	<b>Frequency</b>	<b>Percent</b>
No	365	52
Yes	336	48

Chart showing the second line supporters that influences the repayment capacity of loan

**CHART 4.11**

#### SECOND LINE



#### INTERPRETATION:

From the above table it can be observed that the borrowers without second line supporters were interested to get more number of loans (52%) followed by customers with second line customers (48%).

#### 4.2 CHI-SQUARE ANALYSIS

Chi – square analysis was carried out to find whether number of arrears that is caused by the customers is influenced by the following factors

1. Field officer rating
2. Branch officer rating
3. Customer rating
4. Customer profile
5. Model profile
6. Age of borrowers
7. Track record from
8. Track performance
9. Guarantor rating
10. Guarantor operates
11. Guarantor immovable
12. Guarantor - Track record from
13. Track performance
14. Free vehicle ratio
15. Loan vehicle ratio
16. Proposed asset
17. Funding quantum
18. Net Income: EMI
19. Other sources of income
20. Asset: Liability
21. Purpose of loan
22. Insurance cover
23. Bank - Acc
24. Bank - Average flow
25. No of Cheque dishonours
26. Second line availability

#### 4.2.1 TYPES OF CUSTOMERS VS FIELD OFFICER RATING

A chi-square analysis was carried to find whether types of customers influenced by field officer rating

##### Null Hypothesis

$H_0$ : There is no relationship between types of customers and field officer rating

##### Alternative Hypothesis

$H_1$ : There is relationship between types of customers and field officer rating

**CONTINGENCY TABLE 4.12**

Customers	Field officer Rating				Total
	x	a	aa	aaa	
No default	165	50	92	44	351
default	149	53	97	51	350
<b>Total</b>	314	103	189	95	701

The chi – square test was applied to validate the null-hypothesis  $H_0$ . The test is made at 5 % level of significance.

The theoretical chi-square value is given by

$$\chi^2 = \frac{[(O - E)^2 / E]}{\text{with } (n-1)(m-1) \text{ degrees of freedom}}$$

Where n is number of rows and m is number of columns. 'O' the observed frequency and 'E' expected frequency which is calculated as.

$$E = \frac{(\text{column total} * \text{row total})}{(\text{grand total})}$$

OBSERVED	EXPECTED
165	157.5
50	51.5
92	94.5
44	47.5
149	156.5
53	51.5
97	94.5
51	47.5

$$\chi^2 = [(165-157.5)^2/157.5] + \dots + [(51-47.5)^2/47.5]$$

$$\chi^2 = 1.402$$

$$\chi^2 = 7.815 \text{ [The chi-square value from statistical table for 2 d.f. at 5 \% level].}$$

### **INTERPRETATION:**

The calculated chi-square value is 1.402 against the table value 7.815. So the hypothesis  $H_0$  is accepted at 5% level of significance. It is inferred from the above chi-square analysis that field officer rating do not influences types of customers.

# CHI-SQUARE ANALYSIS FOR DEFAULT AND NON DEFAULT CUSTOMERS

**TABLE 4.13**

S.No	Factors	Chi-square value	Degrees of freedom	Table value	Null hypothesis
1	Field officer Rating	1.402	3	7.815	ACCEPTED
2	Branch officer Rating	1.919	3	7.815	ACCEPTED
3	Customer Rating	1.443	2	5.991	ACCEPTED
4	Customer Profile	0	0	0	0
5	Model Profile	0	0	0	0
6	Age of borrowers	5.52	2	5.991	ACCEPTED
7	Track record from	15.091	2	5.991	REJECTED
8	Track performance	21.038	3	7.815	REJECTED
9	Guarantor Rating	1.37	1	3.841	ACCEPTED
10	Guarantor operates	9.826	1	3.841	REJECTED
11	Guarantor Immovable	13.581	1	3.841	REJECTED
12	Gr's - Track record from	20.288	1	3.841	REJECTED
13	Track performance	58.53	3	7.815	REJECTED
14	Free vehicle ratio	14.488	4	9.488	REJECTED
15	Loan vehicle ratio	43.73	3	7.815	REJECTED
16	Proposed asset	0	0	0	0
17	Funding Quantum	12.459	3	7.815	REJECTED
18	Net Income :EMI	14.26	6	12.592	REJECTED
19	Other sources of income	13.961	1	3.841	REJECTED
20	Asset :Liability	0	0	0	0
21	Purpose of Loan	0.32	2	5.991	ACCEPTED

Contd..

22	Insurance cover	66.451	5	11.87	REJECTED
23	Bank - Acc	3.374	1	3.841	ACCEPTED
24	Bank - Average flow	85.925	1	3.841	REJECTED
25	No of Cheque dishonours	96.732	1	3.841	REJECTED
26	Second line availability	28.352	1	3.841	REJECTED

## **INFERENCE FROM CHI-SQUARE ANALYSIS FOR NON DEFAULT CUSTOMERS**

From the above chi-square analysis it can be inferred that among the 26 factors considered the following 15 factors were found to be influencing the repayment behavior of the borrower.

1. Track record from
2. Track performance
3. Guarantor operates
4. Guarantor Immovable
5. Gr's - Track record from
6. Track performance
7. Free vehicle ratio
8. Loan vehicle ratio
9. Funding Quantum
10. Net Income: EMI
11. Other sources of income
12. Insurance cover
13. Bank - Average flow
14. No of Cheque dishonours
15. Second line availability

Of the above 15 factors, it is derived to measure degree of influence on the repayment behavior by borrower. Correlation coefficient analysis is used for this purpose.

## CUSTOMERS

Correlation is the relationship between the two or more interrelated series of variables. It is an inter-relationship between series of two variables. Two variables are said to be correlated if the change in one variable results in a corresponding change in another variables.

### Degree of correlation:

On the basis of magnitude of correlation coefficient the degree of association between the two variables are determined and the sign indicate the direction of relationship.

#### 1. Perfect Correlation

If the variations in two variables are in a constant ratio the correlation is said to be perfect. If the variations in two variables are in constant ratio in same direction then the correlation is perfect positive. On the other hand if correlation co-efficient in two variables are in constant ratio but in opposite direction, the correlation is perfect negative

#### 2. Absence of Correlation

If variations in two groups of variables are not corresponding to each other, it is a case of absence of correlation. The correlation may be zero in such a case.

#### 3. Limited Degree of Correlation

When there is neither perfect correlation nor absence of correlation between two series of variables, then the correlation is said to be of limited degree.

**The following table gives the degree of correlation**

**TABLE 4.14**

Degree of correlation	Interval	Correlation
High	0.75 to 0.99	Positive
	-0.75 to -0.99	Negative
Moderate	0.25 to 0.75	Positive
	-0.25 to -0.75	Negative
Low	>0.25	Positive
	>-0.25	Negative



regression analysis. The correlation analysis was used to find the correlation coefficient to test the strength of relationship between advance amount and number of arrears.

Let  $x$  be the track record of customers.

$y$  be the non default customers.

$$\begin{aligned}
 \text{Correlation coefficient } \gamma &= \text{Cov}(x, y) / \sigma_x \sigma_y \\
 \text{Cov}(x, y) &= 1/n \sum (x_i - \bar{x})(y_i - \bar{y}) \\
 &= 1/701 [(25-48)(4-5.9) + (35-48)(5-5.9) + \dots] \\
 &= 14.28 \\
 \sigma_x &= \sqrt{1/n \sum (x_i - \bar{x})^2} \\
 &= \sqrt{1/701 [(25-48)^2 + (35-48)^2 + \dots]} \\
 &= 3.56 \\
 \sigma_y &= \sqrt{1/n \sum (y_i - \bar{y})^2} \\
 &= \sqrt{1/701 [(4-5.9)^2 + (5-5.9)^2 + \dots]} \\
 &= 14.02 \\
 \gamma &= \text{Cov}(x, y) / \sigma_x \sigma_y \\
 &= 14.28 / (3.56 * 14.02) \\
 &= 0.282
 \end{aligned}$$

## INFERENCE:

The correlation coefficients between the track record of customers and non default customers is found to be low which shows there is low degree of interrelationship between track record of customers and types of customers.

TABLE 4.15

Non default customers	Vs	Field officer Rating	0.012
		Branch officer Rating	-0.046
		Customer Rating	0.18
		Customer Profile	0
		Model Profile	0
		Age of borrowers	-0.02
		Track record from	0.28
		Track performance	0.19
		Guarantor Rating	-0.06
		Guarantor operates	0.013
		Guarantor Immovable	0.076
		Gr's - Track record from	-0.082
		Track performance	0.32
		Free vehicle ratio	0.61
		Loan vehicle ratio	0.42
		Proposed asset	0
		Funding Quantum	0.14
		Net Income :EMI	-0.26
		Other sources of income	-0.03
		Purpose of Loan	-0.026
		Insurance cover	-0.010
		Bank - Acc	0.03
		Bank - Average flow	0.32
		No of Cheque dishonours	0.14
Second line availability	-0.042		

From the correlation coefficient analysis, the below mentioned factors with degree of correlation coefficient 0.25 and above (positive or negative) are considered for multiple regression analysis to find their strength of relationship with non default customers.

**TABLE 4.16**

S.No	Factors	Value
1	Track record from	0.28
2	Guarantor Track performance	0.32
3	Free vehicle ratio	0.61
4	Loan vehicle ratio	0.42
5	Net Income: EMI	-0.26
6	Bank - Average flow	0.32

The regression analysis was carried out to find the nature of relationship between two variables. A regression analysis was conducted by taking number of arrears as dependent variable and Track record of customer as independent variable.

Let Y = Number of arrears (Dependent Variable); X = Track record of customer;

$$R^2 = \frac{\Sigma(Y-\bar{Y})^2}{\Sigma(Y-\bar{Y})^2}$$

Where  $Y = a + bX$

$$\Sigma Y = a + b\Sigma X$$

$$\Sigma XY = a\Sigma X + b\Sigma X^2$$

Similar to the above calculation further regression values are calculated by using SPSS statistical package and tabulated as under.

**REGRESSION TABLE 4.17**

S.No	Factor	R <sup>2</sup> value	Cumulative	Percent	Rank
1	Track record from	0.027	0.027	2.7	6
2	Guarantor Track performance	0.105	0.132	10.5	4
3	Free vehicle ratio	0.214	0.346	21	1
4	Loan vehicle ratio	0.080	0.426	8	5
5	Net Income: EMI	0.195	0.621	19.5	2
6	Bank - Average flow	0.140	0.761	14	3

### INFERENCE:

From the above table it can be concluded that 76.1 % of the non default customers are influenced by 6 factors and their corresponding weightages are mentioned in the above table. The ranks of weightages are also given in the last column of above table.

Default customers alone which were categorized as

- a) 1 and 2 arrear set
- b) 3 to 6 arrear set
- c) Greater than 6 arrear set

### CHI-SQUARE ANALYSIS FOR DEFAULT CUSTOMERS

**TABLE 4.18**

S.No	Factors	Chi-square value	Degrees of freedom	Table value	Null hypothesis
1	Field officer Rating	3.885	6	12.952	ACCEPTED
2	Branch officer Rating	15.388	6	12.952	REJECTED
3	Customer Rating	4.262	4	9.488	ACCEPTED
4	Customer Profile	0	0	0	0
5	Model Profile	0	0	0	0
6	Age of borrowers	14.399	4	9.488	REJECTED
7	Track record from	10.973	4	9.488	REJECTED
8	Track performance	23.294	6	12.592	REJECTED
9	Guarantor Rating	2.23	2	5.991	ACCEPTED
10	Guarantor operates	11.701	2	5.991	REJECTED
11	Guarantor Immovable	26.09	2	5.991	REJECTED
12	Gr's - Track record from	7.605	2	5.991	REJECTED
13	Track performance	24.62	6	12.592	REJECTED
14	Free vehicle ratio	57.07	8	15.507	REJECTED
15	Loan vehicle ratio	44.104	6	12.592	REJECTED
16	Proposed asset	0	0	0	0
17	Funding Quantum	12.905	6	12.592	REJECTED
18	Net Income :EMI	30.16	12	22.362	REJECTED

Contd...

19	Other sources of income	0	0	0	0
20	Asset :Liability	0	0	0	0
21	Purpose of Loan	59.07	4	9.488	REJECTED
22	Insurance cover	10.630	10	19.37	ACCEPTED
23	Bank - Acc	15.70	2	5.991	REJECTED
24	Bank - Average flow	39.59	2	5.991	REJECTED
25	No of Cheque dishonours	39.592	2	5.991	REJECTED
26	Second line availability	.240	2	5.991	REJECTED

## INFERENCE FROM CHI-SQUARE ANALYSIS FOR DEFAULT CUSTOMERS

From the above chi-square analysis it can be inferred that among the 26 factors considered the following 18 factors were found to be influencing the repayment behavior of the borrower.

1. Branch officer Rating
2. Age of borrowers
3. Track record from
4. Track performance
5. Guarantor operates
6. Guarantor Immovable
7. Gr's - Track record from
8. Track performance
9. Free vehicle ratio
10. Loan vehicle ratio
11. Funding Quantum
12. Net Income: EMI
13. Other sources of income
14. Purpose of Loan
15. Bank - Acc
16. Bank - Average flow
17. No of Cheque dishonours

Of the above 18 factors, it is derived to measure degree of influence on the repayment behavior by borrower. Correlation coefficient analysis is used for this purpose

## 4.5 CORRELATION ANALYSIS FOR DEFAULT CUSTOMERS

**CORRELATION MATRIX 4.19**

Default customers	Vs	Field officer Rating	0.02
		Branch officer Rating	0.01
		Customer Rating	-0.06
		Customer Profile	0
		Model Profile	0
		Age of borrowers	-0.614
		Track record from	0.022
		Track performance	-0.01
		Guarantor Rating	-0.03
		Guarantor operates	0.307
		Guarantor Immovable	0.081
		Gr's - Track record from	-0.091
		Track performance	0.604
		Free vehicle ratio	0.026
		Loan vehicle ratio	0.32
		Proposed asset	0
		Funding Quantum	0.819
		Net Income :EMI	0.326
		Other sources of income	-0.042
		Purpose of Loan	0.041
		Insurance cover	-0.021
		Bank - Acc	-0.03
		Bank - Average flow	-0.013
No of Cheque dishonours	0.11		
Second line availability	-0.0423		

## FOR DEFAULT CUSTOMERS

From the correlation coefficient analysis, the under mentioned factors with degree of correlation coefficient 0.25 and above (positive or negative) are considered for multiple regression analysis to find their strength of relationship with default customers.

**TABLE 4.20**

S.No	Factors	Value
1	Age of borrowers	-0.614
2	Guarantor operates	0.307
3	Guarantor Track performance	0.604
4	Loan vehicle ratio	0.32
5	Funding Quantum	0.819
6	Net Income :EMI	0.326



**REGRESSION TABLE 4.21**

S.No	Factor	R <sup>2</sup> value	Cumulative	Percent	Rank
1	Age of borrowers	0.066	0.066	6.6	5
2	Guarantor operates	0.061	0.127	6.1	6
3	Guarantor Track performance	0.187	0.314	18.7	3
4	Loan vehicle ratio	0.176	0.49	17.6	4
5	Funding Quantum	0.207	0.697	20.7	1
6	Net Income :EMI	0.190	0.887	19	2

**INFERENCE:**

From the above table it can be concluded that 88.7 % of the default customers are influenced by 6 factors and their corresponding weightages are mentioned in the above table. The ranks of weightages are also given in the last column of above table.

**CHAPTER-5**

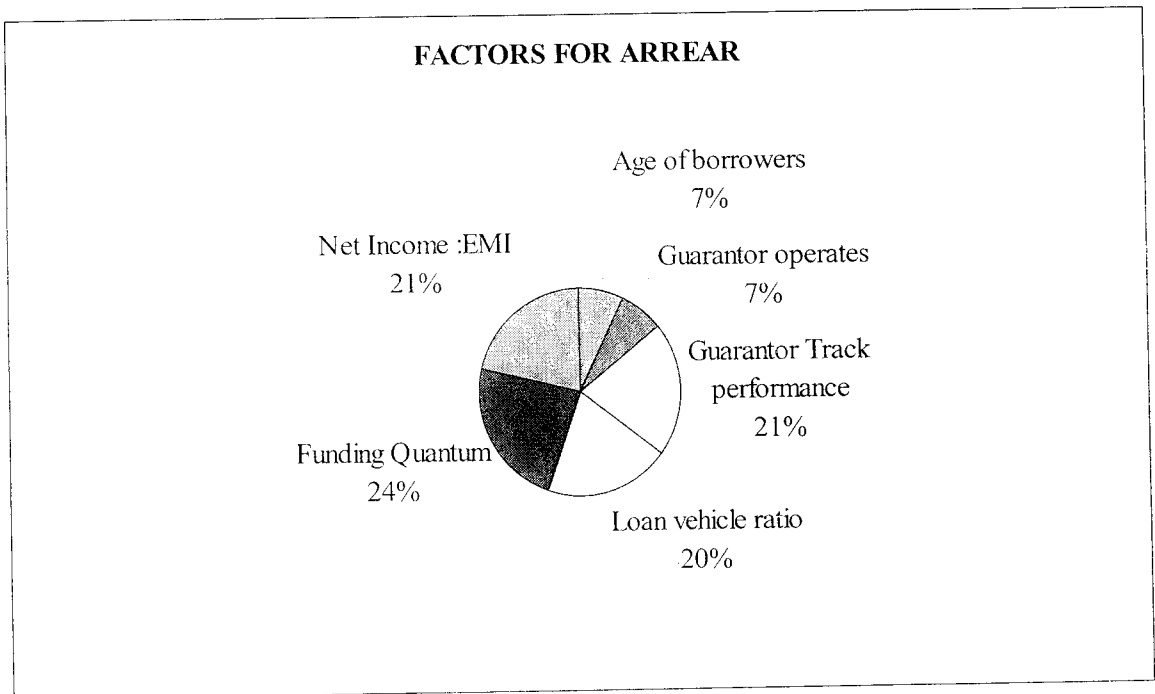
**CONCLUSION**

## FINDINGS AND SUGGESTIONS

There were 26 factors which were considered as the most important factor for credit appraisal. In these 26 factors some statistical analysis was made to find out which influence the most for the repayment of loan. Initially chi-square analysis was made and the factors which had less influence were neglected. Then correlation matrix was created to find out the most influencing factor. The analysis was conducted in two stages such as nil arrear and arrear group customers. Finally the regression analysis was made to found which factor contributes high. From the final regression analysis for default and non default customers six various factors influence the repayment behavior. When considering the default customers, the major six factors were

1. Age of borrowers
2. Guarantor operates
3. Guarantor Track performance
4. Loan vehicle ratio
5. Funding Quantum
6. Net Income: EMI.

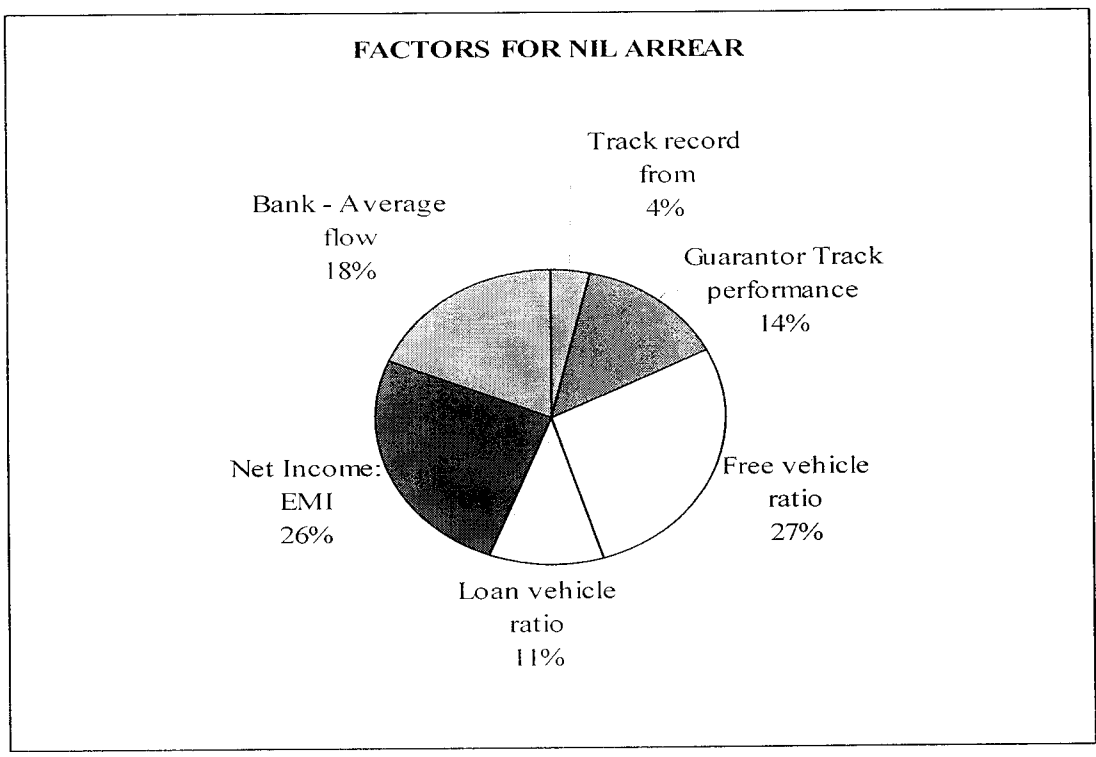
**CHART 4.12**



factors which influence in the regular payments were

1. Track record from
2. Guarantor Track performance
3. Free vehicle ratio
4. Loan vehicle ratio
5. Net Income: EMI
6. Bank - Average flow

**CHART 4.13**



## SUGGESTION

- After the final analysis a two group of six factors influence the repayment behavior of customers.
- Of the 25 factors only six factors influence separately for zero arrear and arrear payments.
- Before the appraisal of a loan to a customer, these two groups of six factors were given close monitoring.
- By this way, the company can reduce the customers were going default and increase nil arrear customers.
- Of these two groups some of the factors were common such as Guarantor Track performance, Loan vehicle ratio and Net Income: EMI.
- These three factors which have major influence in both arrear and nil arrear payments.
- So credit appraisal is done according to the weightage obtained in regression analysis.

**ANNEXURE**

**A STUDY ON IDENTIFICATION OF VARIABLES ON CREDIT  
MONITORING OF SAKTHI FINANCE LTD., COIMBATORE  
QUESTIONNAIRE**

- 1) Field /marketing officer rating
  - 1) AAA [ ]
  - 2) AA [ ]
  - 3) A [ ]
- 2) Branch manager rating
  - 1) AAA [ ]
  - 2) AA [ ]
  - 3) A [ ]
- 3) Customer Rating
  - 1) Existing [ ]
  - 2) New [ ]
  - 3) First time user [ ]
- 4) Customer profile (profession)
  - 1) Positive [ ]
  - 2) Low [ ]
  - 3) Negative [ ]
- 5) Model Profile (based on the condition)
  - 1) Positive [ ]
  - 2) Low [ ]
  - 3) Negative [ ]
- 6) Age of borrowers
  - 1) Less than 25 years
  - 2) 25 to 45 years
  - 3) Greater than 45 years

- 1) Reputed Co [ ]
  - 2) Pvt / Shriram [ ]
  - 3) No track [ ]
- 8) Track performance (maximum delay/avg delay)
- 1) With in 30/10 [ ]
  - 2) With in 60/30 [ ]
  - 3) With in 90/60 [ ]
- 9) Guarantor`s rating
- 1) Existing [ ]
  - 2) New [ ]
- 10) Guarantor operates Is in the similar business
- 1) Yes [ ]
  - 2) No [ ]
- 11) Guarantor`s Value of immovable asset
- 1) >advance amount [ ]
  - 2) =advance amount [ ]
  - 3) <advance amount [ ]
- 12) Track Record of guarantor
- 1) Reputed Co [ ]
  - 2) Pvt / Shriram [ ]
  - 3) No track [ ]
- 13) Track performance of guarantor (maximum delay/avg delay)
- 1) With in 30/10 [ ]
  - 2) With in 60/30 [ ]
  - 3) With in 90/60 [ ]
- 14) Movable assets owned by customer

Number of movable assets	Free vehicle	Loan vehicle



1) General purpose [ ]

2) specific purpose [ ]

16) Loan details

Advance amount	Emi	Market value	Funding quantum%

17) Purpose of loan

1) Proposed asset

2) Settlement of debts

3) others

18) Funding quantum (offered loan amt)

1) <=eligible funding (loan as) [ ]

2) Up to 25% above eligible funding [ ]

3) >26% above eligible funding [ ]

19) Net income from the utility of the acquired asset through loan (Net Income: EMI)

1) =EMI [ ]

2) Thrice the EMI [ ]

3) Twice the EMI [ ]

4) >4 EMI [ ]

20) Other sources of income (from other business)

1) Yes [ ]

2) No [ ]

21) Insurance cover

1) IDV ==> 100% of adv. amt [ ]

2) IDV 81% to 99% of adv a [ ]

3) IDV 61% to 80% of adv [ ]

4) Under insurance & liability [ ]

22) Bank accounts

1) Yes [ ]

2) No [ ]

23) Bank accounts Avg inflow EMI

1) Greater than emi [ ]

2) Less than emi [ ]

24) No of Cheques returns

1) Yes [ ]

2) No [ ]

25) Second line from within the family

1) Available [ ]

2) Not available [ ]

## **BIBLIOGRAPHY**

# BIBLIOGRAPHY

## Books:

1. Statistics for Management by Richard I. Levin, David S. Rubin
2. Research Methodology by Kothari
3. Research Methodology in Management by P.P. Arya and Yesh Pal
4. Research Methods for Business by Uma Sekaran (2003)
5. An Introduction To Multivariate Statistical Analysis By T.W. Anderson

## Websites:

1. [www.wikipedia.com](http://www.wikipedia.com)
2. [www.rbi.in](http://www.rbi.in)
3. [www.sakthifinance.com](http://www.sakthifinance.com)
4. [www.moneycontrol.com](http://www.moneycontrol.com)
5. [www.indiabudget.nia.in](http://www.indiabudget.nia.in)