Chapter -I

Introduction and Methodology
CHAPTER PROFILE

This is the curtain raising chapter of the thesis. It provides a canvass of understanding the concept of Non-Banking Financial Companies and also the chit funds. Moreover the chapter provides a focus on the objectives of the study, database and methodology, tools of statistical analysis, the limitations and the chapter layout of the thesis.
INTRODUCTION

Financial system helps to increase the output by moving the economic system towards the existing production frontiers, by transforming the given total amount of wealth into productive forms. The ultimate goal of the financial system is to accelerate the rate of economic development\(^1\). The role of the financial system is to channelize funds from surplus units to deficit units. The supply of funds depends upon aggregate savings and credit creation by the banking system, while need of funds depends upon demand for investment, consumer durables, housing and so on. The main function of financial system is to establish a bridge between savers and investors and thereby to encourage saving and investment. Thus a financial system helps to increase the volume of investment. It becomes possible for the deficit spending units to undertake more investment because it would enable them to command more capital.

The Indian financial system comprises financial institutions, financial markets, financial instruments and services. Financial institutions act as mobilisers and depositaries of savings, and as purveyors of credit or finance. They also provide various financial services to the community\(^2\). Financial institutions are divided into the banking and non-banking ones. The non banking financial institutions act as mere purveyors of credit. The non-banking financial Intermediaries supplement the functions of the banking Institutions.

Non-Banking Financial Companies (NBFCs)

NBFCs are financial intermediaries engaged primarily in the business of accepting deposits, delivering credit. NBFCs supplement the role of banking sector in meeting the increasing financial needs of the corporate sector, delivering credit to the unorganized sectors to small local borrowers.

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The Non-Banking Financial Companies (NBFCs) have been playing a very significant role in the present day rigorous money market conditions. They are serving the nation by supporting the economic reconstruction and giving a booster to industrial production. They are engaged into the business of providing loans and advances of small amounts for a short period to small borrowers. The NBFCs play an important role in channelizing these savings into investments. NBFCs supplement the role of banking sector in meeting the increasing financial needs of the corporate sector, delivering credit to the unorganized sector and to small local borrowers. While functioning as financial intermediaries between the savers and the users, they have catered to the different segments of the society³.

NBFCs have made great strides in recent years and are meeting the diverse financial needs of the economy. They have greatly influenced the direction of savings and investments. Thus, from the macroeconomic perspective and the structure of the Indian system, the role of NBFCs has become increasingly important. Non-Banking financial companies (NBFCs) are fast emerging as an important segment of Indian financial system. It is an heterogeneous group of institution (other than commercial and co-operative banks) performing financial intermediation in a variety of ways, like accepting deposits, making loans and advances, leasing, hire purchase, etc. They raise funds from the public, directly or indirectly, and lend them to ultimate spenders. They advance loans to the various wholesale and retail traders, small-scale industries and self-employed persons. Thus, they have broadened and diversified the range of products and services offered by a financial sector⁴. Gradually, they are being recognized as complementary to the banking sector due to their customer-oriented services, simplified procedures, and attractive rates of returns on deposits, flexibility and timeliness in meeting the credit needs of specified sectors.

The working and operation of NBFCs are regulated by the Reserve Bank of India (RBI) within the framework of the Reserve Bank of India Act, 1934 (chapter III B) and the directions issued by it under the Act. Under the Act, it is mandatory for a NBFC to get itself registered with the RBI as a deposit taking company. This registration authorizes it to conduct its business as an NBFC. For the registration with the RBI, a company incorporated under the Companies Act, 1956 and desirous of commencing business of non-banking financial institution, should have a minimum net owned fund (NOF) of ₹ 25 lakh (raised to ₹ 200 lakh w.e.f. April 21, 1999). Only those NBFCs holding a valid Certificate of Registration can accept/hold public deposits. The NBFCs accepting public deposits should comply with the Non-Banking Financial Companies Acceptance of Public Deposits (RBI) Directions, 1998, as issued by the bank. The regulations relating to acceptance of deposits by the NBFCs are,

1. They are allowed to accept/renew public deposits for a minimum period of 12 months and maximum period of 60 months.
2. They cannot accept deposits repayable on demand.
3. They cannot offer interest rates higher than the ceiling rate prescribed by RBI from time to time.
4. They cannot offer gifts/incentives or any other additional benefit to the depositor.
5. They should have minimum investment grade credit rating.
6. Their deposits are not insured.
7. The repayment of deposits by NBFCs is not guaranteed by RBI.

According to the Reserve Bank (amendment Act) 1997, A NBFC is defined as,
(a) A financial institution which is a company, (b) A non-banking institution which is a company and whose principal business is to receiving of deposits under any scheme/arrangement/in any other manner or leading in any manner and (c) other non banking institutions/ class of institutions as the RBI may specify.

The types of NBFCs registered with RBI are Equipment leasing company, Hire Purchase Company, Loan Company and Investment Company. Equipment Leasing Company is any financial institution whose principal business is that of leasing
equipments or financing of such an activity. Hire-purchase Company is any financial intermediary whose principal business relates to hire purchase transactions or financing of such transactions. Loan Company means any financial institution whose principal business is that of providing finance, whether by making loans or advances or otherwise for any activity other than its own (excluding any equipment leasing or hire-purchase finance activity). Investment Company is any financial intermediary whose principal business is that of buying and selling of securities.

With the changing regulatory policy, RBI has reclassified NBFCs therein the asset creating NBFCs are given special consideration. Accordingly, in December 2006, a reclassification of NBFCs was effected. According to the new classification, the NBFCs now comprise of, Asset Finance Companies (AFCs), Loan companies (LCs) and Investment companies (ICs), instead of equipment leasing, hire purchase and loan companies and investment companies earlier. Under this classification, AFC is defined as a financial institution whose principal business is that of financing the physical assets which support various productive/ economic activities in the country. In India, the non banking financial sector comprises extremely heterogeneous intermediaries. They are generally categorized into the following types on the basis of their principal business.

- Equipment leasing company (ELC)
- Hire Purchase finance company (HPFC)
- Housing finance company (HFC)
- Investment company (IC)
- Loan company (LC)
- Mutual Benefit companies (MBFC) i.e., Nidhis
- Residual non-banking company (RNBC)
- Miscellaneous non-banking companies (MNBC) i.e., Chit fund company.
- Micro Finance Companies
- Insurance Companies
- Stock Broking Companies
- Merchant Banking Companies.
In the classification, the Equipment leasing company (ELC), Hire Purchase finance company (HPFC), Investment company (IC), Loan company (LC), Residual non-banking company (RNBC)s are under the regulatory authority of Reserve Bank of India. The regulatory authority for Mutual Benefit companies (MBFC) i.e., Nidhis is Department of Company Affairs of Government of India. For Housing finance companies (HFCs), the regulatory authority is National Housing Bank (NHB). And the regulatory authority for Miscellaneous non-banking companies (MNBC) i.e., Chit fund company is Reserve Bank of India and Registrar of Chits of the concerned States. The regulatory authorities for Microfinance companies, Insurance Companies, Stock Broking Companies, Merchant Banking Companies are Department of Company Affairs of Government of India, Insurance Regulatory and Development Authority, Securities and Exchange Board of India, and Securities and Exchange Board of India respectively.

**Miscellaneous non-banking companies (MNBC)**

The principal business of Miscellaneous non-banking companies is to managing, conducting or supervising as a promoter, foreman or agent of any transaction or arrangement by which the company enters into an agreement with a specified number of subscribers and that every one of them shall subscribe a certain sum in installments over a definite period and that every one of such subscribers shall in turn, as determined by lot or by auction or by tender or in such manner as may be provided for in the agreement, be entitled to the prize amount. Example: Conducting any form of Chit and Kuri which is similar to the type of business mentioned above. But Chit fund companies have been exempted from all the core provisions of chapter IIIB of the RBI Act 1934, including registration.

**Chit funds**

Chit Funds come under the umbrella of NBFCs but most traditional in existence. Chit funds constitute convenient instruments combining saving and borrowing. The mechanism of chit fund schemes involves (a) the pooling of resources of a group of individuals (savers), (b) the loaning out of the amounts thus collected either by drawing
of lots or by auction to one of the members (borrowers) of the group, and (c) the continuance of this process of collection and distribution till the termination of the stipulated period of the schemes\(^5\). The rationale of chit funds is that they bring the borrowing class directly in contact with the lending class. The borrowers and the investors meet to fix the rate of interest (which is represented by the amount of discount agreed to be foregone by the bidder in consideration of his receiving the prize amount) and since there could be more than one bidder at each draw, a competitive rate of interest (i.e., discount offered subject to the maximum, if any, fixed by the law or under the chit agreement) is offered. The competition is, however, confined to the members of a group and the benefits of the scheme are shared only by such members. In other words, in the case of chit funds, the savers as well as the borrowers are put together and they are allowed to save or borrow for pre-determined term, the rates of interest being fixed on the principle of demand for and supply of funds in the same group. Chit fund schemes are of a self-liquidating nature and partake the character of mutual benefit schemes.

On the question of end use of funds disbursed as prize amounts, the Banking Commission has come to the conclusion that the likelihood of the prize monies being put to productive use is small, since a prospective producer would not depend on the uncertainties involved in a chit fund. Whatever be the position, the fact remains that the savings mobilized by chit funds and disbursed by them by way of prize amounts do satisfy the felt needs of a section of the community. Since chit funds as institutions have come to stay and have shown\(^6\) increasing popularity, ways and means have to be found to regulate their working so as to ensure that they function on sound lines and the malpractices, usually observed in the conduct of chits are obviated to the extent possible.

Chit fund is a typical indigenous financial institution. As a non-banking financial intermediary, it has been serving the needs of the community for many decades now. Chit funds grew at a time when banking and credit facilities were inadequate and people

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in general had to rely to a large measure on indigenous sources for their many productive
and consumption needs. Even after the tremendous expansion of banking and credit
facilities in the country, chit funds seem to continue to be popular with certain sections of
the community. It is true that chit funds have met a part of the genuine credit needs of
the people, both in urban and rural areas. They have also served as a medium of saving
for many people. Chit funds arose primarily to meet the felt needs of small communities.
It has worked successfully among the persons of limited means for whom it was
primarily intended. It arose from two legitimate demands (i) a necessity for a lump sum
amount to meet some unusual expenditure and (ii) to provide a form of accumulated
saving when people were not strong minded enough to keep their small savings.

A chit fund is organized by a small group of people well-known to each other,
who agrees to contribute periodically a certain amount of grain or money and to distribute
the entire collection (fund), or a part of it, to one of the subscribers on some mutually
agreed basis. A chit fund primarily is a mutual benefit society (sahaya – nidhi) in which
some people join to save and others to borrow. A chit fund on one hand collects the
savings of the members by periodical subscriptions for a definite period and on the other
hand, it makes the pooled savings available to each member by turn as agreed among
them either by lot or by bidding. Thus chit fund, unlike other financial intermediary,
connects the borrowing class directly with the lending class and the pooled savings lent
out to the same group of savers. The intermediation involved in a chit fund is that the
promoter mobilizes the savings of one group of people and passes them on by turn to the
same group of people, who may utilize them either for consumption or investment
purposes. It may be said that chit funds serve to fill the credit gap left by the organized
banking system.

The chit fund is regarded more than a savings bank to the saver and more than a
lender to the debtor. In an ordinary savings institution, the depositor gets back his total
savings at any time, whereas in a chit fund a subscriber can take the future subscriptions
in advance by successfully bidding at the auction. It is this facility for immediate
realization of future savings in a lump sum that induces many people to join chit funds.
The borrower is tied up to the fund only till he liquidates the debt at the termination of the chit. Chit funds resemble co-operative credit societies in some respects. Like co-operatives, membership is voluntary and based on the principles of self-help and mutual help. Members pool their resources for mutual benefit. But co-operatives have been sponsored by the Government, and enjoy the assistance by the government in a variety of ways, including financial assistance directly and by through the Reserve Bank. Co-operatives also enjoy tax benefits and concessions in the matter of stamp duty. They are subjected to the rules and regulations of the Co-operative Societies Act. The borrowing is based on the need and there is no auction principle. The interest rates for borrowing members in a co-operative society are relatively low and fixed. Chit funds do not receive any special assistance from the Government, but are tending to be regulated in an increasing measure. The regulation of Chit funds is very important because there have been instances where the interests of the subscribers have suffered. There are many cases where unscrupulous promoters have mismanaged and misappropriated the funds of the company.

Regulation of chit funds

Legislation in Kerala: The first state to enact a legislation to regulate the working of the chit fund was Kerala. Chitties/Kuries in Kerala are today regulated by the Travancore Chitties Act, XXVI of 1120 (1945) in the area of erstwhile Travancore State and by the Cochin Kuries Regulation VII OF 1107 M.E. After the formation of Kerala state a uniform law on Chitties and Kuries was introduced in the Assembly. After the lapse of the law, a revised draft known as the Kerala Chitties Bill, 1972 for regulating Chitties and kuries in the state in now before the Kerala legislative Assembly.

Legislation in Tamil Nadu: The Tamil Nadu Chit Fund Act, 1961, has been regarded as a model Act by the Banking Commission. Andhra Pradesh, Delhi, and Pondicherry have borrowed heavily from the Tamil Nadu Act, with a few minor changes. The provisions of the Kerala and Tamil Nadu Chit fund Acts are similar and have borrowed heavily from the Travancore Chitties Act, 1120 (1945).
**Legislation in Andhra Pradesh:** Andhra Pradesh chit fund Act, 1971, is also more or less on the lines of Tamil Nadu Act. Central chit fund Act, 1982 came into force in the State with effect from 15-9-2008.

**Legislation in other States:** Delhi adopted in 1964 the Tamil Nadu Chit Fund Act, 1961 with appropriate changes. The Pondicherry Chit fund s Act was passed in 1967 based on the Tamil Nadu Act. Karnataka and some other state Governments are also contemplating legislation for regulating chit funds. In Uttar Pradesh the Manual of Government Orders regulates chit funds, besides lotteries etc. Punjab has plans to organize chit funds in the public sector. Maharashra has already passed a bill to regulate and control chit funds.

**Chit Funds in Andhra Pradesh:** The prominent registered chit fund companies in the state of Andhra Pradesh include the Margadarsi chit fund (P) Ltd, the Shriram chit fund (P) Ltd, the Kapil chit fund (P) Ltd, Usha Bala chits and investments (P) Ltd, Cherukuri finance and Chit fund (P) Ltd, etc. The unregistered chit fund entities are plenty in number and widely vary in size and volume of operations, modus operandi of auctions.

**Brief Profile of Andhra Pradesh State**

On 01st November 1956 Andhra Pradesh State was formed. Area wise it is the 4th biggest state in India with an area of 1,27,069 square kilometers and it consists of 23 districts spread across three regions ie., Coastal Andhra, Telangana and Rayalaseema. Population wise the state is occupying 5th position according to 2011 census the population of the state was 8,46,65,533 (7% of countries population) out of which 4,25,09,881 are male and 4,21,55,652 are female respectively and the sex ratio is 992 female per 1000 men. The percentage share of rural child population is 4.98 and the urban child population is 6.77. The density of population is 308 per square kilometer. The decadal growth rate (2001 to 2011) of the population is 11.10 percentage. The number of literates in the state are 5,14,38,510 it is about 67.66 percentage in total population. The male literates are 3,21,20,466 (75.56% among total male population) and the female literates are 1,93,18,044 (45.83% among total female population). There are 26,613 villages and 210 towns. The chief languages used in this state are Telugu and Urdu. The state is having
rich of minerals. It is having major rivers like Godavari and Krishna and it is having a total forest land of 63,000 square kilometers.

The Coastal Andhra region spread across 934 Kilometers coast line. It is having 9 districts and total area of this region is 92,913 square kilometers (33.77% of total area of the state) and the population is 3,41,93,868 (40.38% of total population of the state). Most of the Telangana region is on deccan plateau and it is having 10 districts with an area of 1,14,863 square kilometers (it is about 41.75% of total area of the state) and the population of this region is 3,52,86,757 (47.47% of total population of the state). The Rayalaseema region is having 4 districts and total area comes under this region is 67,293 square kilometers (24.48% of total area of the state) and the population is 1,51,84,908 (12.15 % of total population of the state).

Economy: Andhra Pradesh is called the Rice Bowl of India. Agriculture is the occupation of 62% people. Machine tools, synthetic drugs, pharmaceuticals, heavy electrical machinery fertilizers, cement, electronic equipment, watches, chemicals, asbestos, glass etc., are the main industries in Andhra Pradesh. It is one of the leading states in India in Information Technology (IT) sector.

Objectives of the Study

The main objective of the study is to enquire into the operation and intricacies and challenges of Chit funds. The other objectives are

(a) to account for the emergence and growth profile of NBFCs of which chitfunds are an integral part.

(b) to explain the operational procedure, structure and composition of chit funds.

(c) to highlight the role and significance of chitfunds as an effective instrument of finance for low income households paving the way for financial inclusion.

(d) to analyze the perceptions of stakeholders, the members and managers of chitfunds, to unleash the issues and challenges and intricacies of chitfunds.
(e) to identify the problems faced by the chitfund industry and to assess the customer expectations and requirements and the extent to which the chitfund industry could stand customer centric.

(f) to offer suggestions for policy prescriptions for a better operation and regulation and management of chitfunds.

Need for and relevance of the study

Indian financial system consists of the financial markets, financial instruments and services. The financial institutions act as, mobilize and depositaries of savings and also as purveyors of credit or finance. The financial institutions are divided into the banking and non-banking. The distinction between the two has been highlighted by characterizing the former as creators of credit and the latter as purveyors of credit.

The non-banking financial institutions encompass a heterogeneous group of intermediaries, which are both traditional and modern. The non-banking financial companies flourished in India in the decade of 1980’s against the back fall of highly regulated banking sector. The NBFCs proliferated and experienced the rapid expansion by the early 90’s. And they have been provided with an edge over the banking sector because of the simplified sanction procedures, low entry barriers, flexibility, timeliness in meeting credit needs, low operating costs, easy customer access etc. Chitfunds come under the umbrella of non-banking financial companies.

The chitfunds and Nidhis played a key role in Indian financial system and worked as bridge between the age old financial practices and the modern banking system. Chitfunds are indigenous financial institutions in India that cater to the financial needs of low income households that have been excluded from the former financial system. It is a mechanism that combines credit and savings in a single scheme. The scheme of chitfund involves a group of individuals that come together for a predetermined time period and contribute to a common goal at regular intervals to be benefited one by one through a bidding mechanism. Today chitfund in India is highly institutionalized and stand in the
status of a financial industry. No doubt the chitfund industry consists of both registered and unregistered chitfunds. The money circulated in the registered chitfund industry ranges from 10-50 per cent of the bank finance. But, the number of chitfund schemes registered has been on the trend of decline over the years ending 2010. It is as evident from the fact that the rate of decline in the number of chit fund schemes, registered between 2005 and 2010 are around 12 to15 per cent. This is indicative of the problems and crisis haunting the chitfund industry.

There is a saga of history and place of prominence for chitfunds in the Indian financial system. The Indian financial system personified from the traditional barter system to the money lenders, the Nidhis and chitfunds. In the latter stages, the concept of cooperatives was started and the same was introduced in India during 1904 by way of a cooperative societies Act. Thus traditionally chitfunds stand as innovative access to finance for low income households and act as an effective instrument for financial inclusion. In a country like India characterized the low incomes and poverty, undoubtedly chitfunds are the vehicles of inclusive finance. But, the operational and managerial scenario of chitfunds are bisect with a number of problems and challenges with customer centricism in the back drop.

The study is contemplated with this in the backdrop and it assumes indisputable significance in the contemporary times of government’s policy emphasis on financial inclusion and the explosive growth of NBFCs.

**Time line of the study**

The period of the study confined to 10 years between 1999 and 2010 for majority of analysis based on secondary data. But a flexible time line is adopted in view of the constraints of data availability. The canvassing of the questionnaire for primary data is undertaken in the months of December 2011, January, February and March of 2012.
Research Methodology

Hypothesis: The following hypothesis is framed and tested in the course of study. The hypothesis:

I. Factors influencing the Subscribers to opt for Chit Funds.

II. Chit fund Product quality variables have a positive effect on the customer satisfaction.

III. The operational procedures and structural composition of the chit funds have positive effect on the chit subscribers.

IV. Chit manager’s attitude has an impact on default of the customer.

V. The customer satisfaction has significant impact on Word-of-mouth communication and intends to continue in to invest on chits in future.

VI. There exists a direct relation between demographic and economic factors in choosing the type of chit entity.

VII. Low income households are influence by the chits more than the high income groups.

Research Design: The study is based on the descriptive research by using the primary and secondary data. The sampling procedure adopted is non probability sampling and the type of sampling followed is convenience sampling. The main research tool used is questionnaire and also interviews were conducted to record the experiences of chit managerial staff.

The study is based on primary and secondary data. The data pertaining to measure various parameters for examining the performance of Chitfund companies is collected from the published and unpublished reports. The data related to the study are collected from:
Methods of Data Collection

Primary data: Descriptive research design is been used for the study. Primary data is collected through subscriber survey method. Personal interview method is used to collect data from chit subscribers. Two sets of structured questionnaires were canvassed one set each for Chit Operators and Chit subscribers respectively.

Sample size: The sample size of the chit operators consists of 228 managerial and operating staff of the select 12 registered chit fund companies in the state of Andhra Pradesh along with branches and 6 unregistered chitfund companies under study. On the other hand the total sample of chit subscribers is 1220 of which 782 are from 12 registered chit fund company subscribers and 438 are from 6 unregistered chit fund company subscribers/members, selected through random sampling from different regions of the state according to the population density of the regions. Totally, a sample of 540 is collected from Telangana region, 615 from Coastal Andhra and 65 from Rayalaseema regions.

Secondary data: Secondary data is collected from various published books, journals, magazines, newspapers, websites and past records from various Governments, Private organizations involved in chit operations as well as regulations. And also the data collected from RBI reports, Report on Trend and Progress of Banking in India, statistics related to banking in India, RBI Bulletins also form part of the secondary data.

Tools and Techniques of Analysis

For the purpose of analysis and to facilitate interpretation simple statistical tools like percentages, averages, simple growth rate, compound annual growth rates, Garrett ranking method and Pearson coefficient of correlation are used. Tables and Banners feature in statistics 9.0 was applied to draw the tables to bring comparative tables with the select constructs and certain demographic variables.

Advanced Statistical tools such as Chi Square test, Reliability test, ANOVA, Independent sample t-test, Levine’s test for equality of variances, Friedman’s test, and Exploratory factor analysis are used for testing the hypothesis on SPSS for Windows Version 16.0 are
used for the purpose of extensive analysis. For the construct included in the study, unidimensionality was asserted using confirmatory factor analysis (CFA) using LISREL 8.80 (Student Edition). The, goodness of fit indices (GFI) and RMSEA measures were employed to examine the integrity of the construct.

(i) **Simple growth rate**: It merely gives the per cent increase over the previous year i.e.,

\[
g = \left( 1 + \frac{K_t - K_{t-1}}{K_{t-1}} \right) \times 100
\]

g = growth rate.

\(K_t, K_{t-1}\) are the values of variables, and \(K\) in years \(t\) and \(t-1\) respectively.

(ii) **Compound Growth rate**: It works out change for a given period on the basis of the base year and the end year values, i.e,

\[
g = \left( \left( \frac{K_1}{K_0} \right)^{\frac{p}{t}} - 1 \right) \times 100
\]

where, \(K_1\) and \(K_0\) represents the values of variables at the end and basic year respectively, \(t\) is the time period between the base year and end year, and \(g\) represents the compound growth rate.

(iii) **Mean (X)**: The mean value is obtained by adding together all the items and by dividing this total by the number of items.

\[
\bar{X} = \frac{\sum X}{N} = \frac{X_1 + X_2 + X_3 + \ldots X_n}{N}
\]

Where, \(\bar{X}\) = Arithmetic value
\(\sum X\) = Sum of all the Variables
\(N\) = Number of variables.
**(iv) Standard deviation:** Standard deviation measures the absolute dispersion. A low standard deviation means a high degree of uniformity of the observations as well as homogeneity of series, a high standard deviation means just the opposite. It may be calculated as follows.

\[ \sigma = \sqrt{\frac{\sum x^2}{N}} \]

\[ x = (x - \overline{x}) \]

**(v) Coefficient of correlation:** It is a statistical device, which helps us in analysing the co-variation between two or more series of variables. The coefficient of correlation is denoted by the symbol ‘\( \gamma \)’, the formula for computing ‘\( \gamma \)’ which was practiced by “Karl Pearson” is

\[ \gamma = \frac{\sum xy}{N \sigma_x \sigma_y} \]

Where \( x = (x - \overline{x}) \)

\[ y = (y - \overline{y}) \]

\( \sigma_x \) = S.D of series X

\( \sigma_y \) = S.D of series Y

\( N \) = Number of pairs or observations

\( \gamma \) = The correlation Coefficient.

The value of correlation coefficient, which is obtained by the above formula, shall always lie between ± 1, if \( \gamma = +1 \) it means there is a perfect positive correlation between the variables, when \( \gamma = -1 \), there is a perfect negative correlation between the variables when \( r=0 \) it means there is no relationship between the two variables.

**(vi) Cross Tabulation:** Cross tabulation is a technique for comparing data from two or more categorical variables such as gender and selection by one’s company for an overseas assignment. Cross tabulation is used with demographic variables and the study’s target variables. The technique uses tables having rows and columns that correspond to the levels or code values of each variables category. The combination
of the variables with their values produces cells. Each cell contains a count of the cases of the joint classification and the row, column and total percentages. The number of row cells and column cells is often used to designate the size of the table. Their row and column numbers individually identifies the cells. Row and column totals, called marginal’s, appear at the bottom and right margins of the table. They show the counts and percentages of the separate rows and columns.

Cross tabulation is a first step for identifying the relationships between variables. When the tables are constructed for statistical testing, we call them contingency tables and the test determines if the classification variables are independent of each other.

(vii) **Chi Square Test:** Chi square is a test of agreement (or conformity or consistency) between a hypothetical and a sample distribution.

\[
\chi^2 = \sum_{i=1}^{K} \left( \frac{O_i - E_i}{E_i} \right)^2
\]

- \( \chi^2 \) = Chi-square
- \( O_i \) = Observed frequency in the \( i^{th} \) category.
- \( E_i \) = Expected frequency in the \( i^{th} \) category.

(viii) **Analysis of variance (ANOVA):** It is a collection of statistical models and their associated procedures, in which the observed variance is partitioned into components due to different explanatory variables. ANOVA gives a statistical test of whether the means of several groups are all equal.

(ix) **The F-test:** It is used for comparisons of the components of the total deviation. For example, in one-way or single factor ANOVA, statistical significance is tested for by comparing the G-test statistic to the F-distribution with I-1, nT-1 degree of freedom. Using the G-distribution is a natural candidate because the test statistic is the quotient of two mean sums of squares which have a Chi-square distribution.

\[
F = \frac{\text{Variance of the group means}}{\text{Mean of the within – group Variances}}
\]
\[ F^* = \frac{\text{MSTR}}{\text{MSE}} \]

Where \( \text{MSTR} = \frac{\text{SSTR}}{I - 1} \) \( I = \text{number of treatments} \)

\[ \text{MSE} = \frac{\text{SSE}}{n_T - 1} \quad n_T = \text{Total number of cases.} \]

**Limitations of the Study**

Though the study is systematically designed, it is not without limitations. Some of the limitations of the study are listed below:-

1. The percentages and Averages calculated are rounded off to the nearest decimal point, where absolute accuracy may be absent.

2. As Chit fund companies operate in the framework of NBFCs dealing with financial assets revelation of the data from the records stand as a constraint.

3. Though, the questionnaire and canvassing of the schedule are systematically done, the bias of the respondents do exist.

4. The study is restricted to select registered and unregistered chit funds.

5. Due to the differences in the reporting formats by the data source agencies and also due to the non availability of data certain discrepancies lapses and absence of uniformity in data presentation do exit.

6. The study is confined to the state of Andhra Pradesh only, and to the few select chit fund companies. Therefore, the observations of the study may lack universality in application.
Chapter layout

For a systematic and comprehensive presentation of the study the frame work of the study is designed to consist of seven chapters:

⇒ The first chapter is christened as, Introduction and Methodology, which presents a conceptual focus on NBFCs and Chitfunds and articulates the objectives of the study, need for the study besides the scope and time line of the study. The database and Methodology, Sample design, tools of analysis, limitations and the present chapter setting also constitute the subject matter of the introductory chapter.

⇒ The second chapter is a canvass of the review of the earlier studies relevant to the area. The review of literature is presented in this chapter to highlight the research gap and niche for further research.

⇒ The third chapter provides the picture of the financial system in India, and about non-banking financial Institutions. The chapter details the concept and constitution of the financial system and gives an account of the origin and emergence of NBFCs, their growth, diversity, regulation, problems and challenges and future prospects.

⇒ The fourth chapter provides the focus of chit funds in India and explains the origin, growth, operational procedure, structure and composition and regulatory mechanism.

⇒ The fifth chapter presents a profile of the chitfund companies selected for the study.

⇒ Chapter six is the whole of the study and presents an analysis of the perceptions of chit fund members and also managerial and operational staff of the select units.

⇒ Chapter seven presents summary and suggestions for policy prescription.