CHAPTER 5
RESEARCH METHODOLOGY

This chapter deals with methodology adopted for the present research study. It describes the design, sample, tools used, procedure for data collection and statistical techniques used for data analysis.

5.1 Statement of the Problem
Governance in financial sector or banks is more complicated than any other business sector. On the other hand, unlike any other business sector firms, governance problems in a bank can influence the entire financial system of the country. The collapse of one bank can cause a series of failures in the entire economy. The importance and need of implementing corporate governance is extremely necessary from the point of view of growing the financial system of the country. Today is the challenging time for Co-operative banks in India. Never before has the need for restoring depositor’s confidence in the cooperative sector been felt so much. Never before has the matter of good governance in the co-operative banks assumed such criticality. Thus, it becomes necessary for the researcher to study the role of corporate governance in co-operative banks. Corporate Governance in the co-operative area has come into sharp focus because more and more co-operative banks in India have experienced serious problems in recent times, which has in a way threatened the identity and profile of the entire co-operative system. These problems include poor investment decisions, financial impropriety, mismanagement and the growing distance between members and their co-operative society. Co-operatives provide the structure for co-operative corporate governance.

5.2 Scope of the study
The purpose of this research is to study the relationship between corporate governance and performance of the urban co-operative banks in Pune. Corporate governance parameters are ethics, leadership, accountability, fairness, creativity, have been identified by the researcher and considered for the said study. Similarly, the financial performance parameters i.e. profit,
deposits, loans, credit deposit ratio, per employee business NPA of urban co-operative banks in Pune, have been considered. The study aims to observe trend of financial performance over the study period (i.e. 2007-2013) for relation of corporate governance with urban co-operative banks in Pune.

- The geographical scope of the present study covers the Pune District.
- The topical scope covers the evaluation of the corporate governance practices followed by the urban co-operative banks in Pune.
- The analytical scope covers the fulfillment of the objectives set out for the study.
- The functional scope is confined to offering certain meaningful recommendations for improving corporate governance practices in UCBs in Pune.

5.3 Limitation of the study

There would be many constraints during the span of the study, which may affect the outcome & thus have to be taken into consideration. The present study has included urban areas in its geographical scope. The findings returned on analyzing the empirical data in the study may therefore have to be read against this backdrop, wherever necessary.

- The study is restricted to Pune district & hence findings are based on district data.
- The study is carried out by opinion survey and hence some variation in reporting & actual facts.
- Only parameters of financial performance i.e. deposits, loans, NPA, credit deposit ratio, per employee business, CRAR, are being considered in the analysis. The profit per employee, earning per shares, overdue interest reserves (OIR), are not considered.
- During the course of personal interview, the subjective nature of interviewers might also have influence upon the response received for the present study. Certain issues in the study concentrate on both perceptions and attitude of respondents.
The major tool which is used for evolution is 5 point scale known as Likert scale and nominal scale they have their own limitations.

Consistent data from secondary sources was available for last six years only from the year 2008-2013. Secondary data for the year 2014-2015 was not available for the research.

5.4 Research Design:

The study is aimed at identifying the most important factors which are responsible for the fluctuations in the performance of the urban co-operative banks. The present study is unique in various aspects; so far, not much work has been carried out on corporate governance practices in urban co-operative banks in Pune.

Descriptive research is a study designed to represent the participants in an accurate way. More simply put, descriptive research is all about describing people who take part in the study. Descriptive research involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection (Glass & Hopkins, 1984). It often uses visual aids such as charts and graphs to support the reader in understanding the data distribution.  

The type of the study was descriptive study since information related to corporate governance practices followed by UCBs such as fairness, ethics, leadership, transparency, accountability, creativity studied and an attempt was made to established relationship between corporate governance practices and bank performance. Parameters of bank performance included profitability, staff motivation, customer satisfaction, image, increase in customer base, financial performance. Parameters of financial performance of banks included deposits, loans, credit deposit ratio, CRAR, NPA, profit.

Nature of the study was quantitative study. Data was analyzed by using statistical techniques, such as bivariate correlation, graphs and charts, frequency distribution and percentages, chi-square test. Time dimension was

cross sectional since data was gathered at a single point of time from the respondents.

5.5 **Research Objectives**

In review of the introductory remarks and the discussions about the research topic, the study area and the study universe, the following have been set out as the objectives of the study. These objectives have helped to streamline the course of research process and emphasis on certain ideas related with issues of corporate governance practices.

In order to comply with present research endeavor entitled above, the following objectives have been considered. To study and understand the importance of Corporate Governance in Banks in general and Cooperative banks in particular.

1. To explore the status of corporate governance practices in selected urban co-operative banks in Pune.
2. To identify the parameters of corporate governance and their impact on bank performance with respect to selected UCBs.
3. To identify the parameters of corporate governance and their impact on financial performance with respect to selected UCBs.
4. To suggest ways and means to improve Corporate Governance practices for better efficiency of Cooperative Banks in Pune.

5.6 **Research Hypotheses**

Considering the nature of the study the researcher has laid down following statement of hypotheses to start with research inquiry:

**Hypothesis –A**

**H0** = There is no relationship between corporate governance and bank performance

**H1** = There is significant relationship between corporate governance and bank performance
Hypothesis –B

Ho = There is no relationship between corporate governance and financial performance

H1 = There is significant relationship between corporate governance and financial performance

Hypothesis –C

Ho: There is no difference in the relative importance given by directors to the bank performance indicators

H1: There is significant difference in the relative importance given by the directors to the bank performance indicators.

5.7 Population
Population comprises of all urban co-operative banks in Pune. Population included chairperson, directors, CEO of 56 urban co-operative banks in Pune. 30 banks were selected randomly for collecting the data. Hence, sample size was 30 urban co-operative banks in Pune which covered about 50% of population size. Banks were chosen randomly in order to ensure population representation.

5.8 Sample design
Sample design deals with the method of selection of banks for the study from universe. Sampling methods
Sample element: Information was collected from Chairmen or directors or Chief Executive officers of the Urban Co-operative Banks in Pune.
Sample units: Urban Co-operative Banks in Pune.
Sample size: 30 urban co-operative banks in Pune.
Sample frame: Pune District Urban Co-operative Banks Association, Pune.
Sample extent: Pune
Sample duration: 1st June 2014 to 31st Dec. 2014
Sampling procedure: Random sampling, a simple random sample is a division of a sample chosen from a population. Each individual is chosen randomly and entirely by chance, such that each individual has the same probability of being chosen at any stage during the sampling process, and each subset of \( k \) individuals has the same probability of being chosen for the sample as any other subset of \( k \) individuals. This process and technique is known as simple random sampling, and should not be confused with systematic random sampling. A simple random sample is an unbiased surveying technique.\(^{119}\)

5.9 Data collection

Data collected and analyzed in study was both primary and secondary nature. **Primary data** was collected through survey method. A structure questionnaire was used to collect the data from respondents. **Secondary Data:** The researcher reviewed existing literature on banking industry and corporate governance. The review of literature is handled by referring to relevant published sources in academic libraries, seeking information on internet and by corresponding with people. Secondary data was collected from the magazines, government publications and annual reports of UCBs.

5.9.1 Tools/Method of primary data collection:

5.9.1.1 Research technique: Survey research is a commonly used method of collecting information about a population of interest. There are many different types of surveys, several ways to administer them, and many methods of sampling. Survey is defined as a brief interview or discussion with an individual about a specific topic. Survey research gathering data by asking questions about their knowledge, attitudes, preferences.\(^{120}\)

5.9.1.2 Contact method: information was collected by personal survey; interviewer meets a single person and interviews him. Interviewer guides the interview and explains the difficult questions to respondents.

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\(^{119}\) https://en.wikipedia.org/wiki/Simple_random_sample

\(^{120}\) www.researchconnections.org/childcare/datamethods/survey
5.9.1.3 Research Instrument: questionnaire survey method was accepted to build up data for the current study, the respondents were given a list of predetermined responses from which to choose their answer, the list of responses include every possible response and the meaning of the responses was not overlapping. A Likert scale, which is used in the example above, is a commonly used set of responses for closed ended questions. Closed ended questions are usually preferred in survey research because of the ease of counting the frequency of each response. Chief Executive officer or chairmen or directors of urban cooperative banks in Pune were interviewed personally using structural questionnaire. Respondents were interview at bank premises; each interview was conducted around 30 to 40 minutes. Questions were explained to the respondents for better understanding of questions and easy answering. To study the relation between Corporate governance and bank performance various parameters were considered such as fairness, ethics, leadership, transparency, accountability, creativity studied and an attempt was made to established relationship between corporate governance practices and bank performance. Fairness was measured using four item scale (produced desired result to all customers without a bias, consistency in services to across the customers, staff are polite, staff gives thorough explanation, staff are courteous), ethics was measured by four item scale (behavior of staff are considered to be ethical, staff never compromised on ethics, unethical behavior would not be tolerated, staff are reprimanded if unethical behavior results in primarily personal gain rather than corporate gain). Leadership was measured using six item scale (employee motivation, spending time to coaching and mentoring of staff, attainment of strategic goal of organization, delegation of work, easily available to staff for discussion and solving queries, fair human resource practice). Accountability was measured using item scale (staff are answerable for action, compensation when duties and commitment are not made, staff are accountable for the services delivered, lay down standards for employees, differentiate between what the boards, and manager and employees can do. Creativity was measured using one item i.e. research and development efforts of bank. Bank performance measured based on profitability, staff motivation,
customer satisfaction, image, increase in customer base, financial performance.
Each item was converted in single item scale using ’transform – compute’ command in IBM SPSS 20.

5.9.2 Statistical techniques

Data was analyzed using statistical techniques such as bivariate correlation, chi-square test of contingency, graphs and charts, frequency distribution and percentages. Bivariate correlation evaluates the degree of relationship between two quantitative variables. Pearson Correlation ($r$), the most commonly used bivariate correlation technique, measures the association between two quantitative variables without distinction between the independent and dependent variables. Bivariate correlation measures the strength of their relationship, which can range from absolute value 1 to 0. The stronger the relationship, the closer the value is to 1. The relationship can be negative or positive; in positive relationship, as one value increases; another value increases with it and in the negative relationship, as one value increases, the other one decrease.

In the current research, bivariate correlation was used to study relationship between the following pair variables.
Table No.5.1 Relationship between the following pair variables
(Parameters of Corporate Governance and Bank Performance)

<table>
<thead>
<tr>
<th>Pair</th>
<th>Fairness ↔ Profitability</th>
<th>Ethics ↔ Profitability</th>
<th>Leadership ↔ Profitability</th>
<th>Accountability ↔ Profitability</th>
<th>Creativity ↔ Profitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Fairness ↔ Profitability</td>
<td>Ethics ↔ Profitability</td>
<td>Leadership ↔ Profitability</td>
<td>Accountability ↔ Profitability</td>
<td>Creativity ↔ Profitability</td>
</tr>
<tr>
<td>B</td>
<td>Fairness ↔ Staff Motivation</td>
<td>Ethics ↔ Staff Motivation</td>
<td>Leadership ↔ Staff Motivation</td>
<td>Accountability ↔ Staff Motivation</td>
<td>Creativity ↔ Staff Motivation</td>
</tr>
<tr>
<td>C</td>
<td>Fairness ↔ Customer Satisfaction</td>
<td>Ethics ↔ Customer Satisfaction</td>
<td>Leadership ↔ Customer Satisfaction</td>
<td>Accountability ↔ Customer Satisfaction</td>
<td>Creativity ↔ Customer Satisfaction</td>
</tr>
<tr>
<td>D</td>
<td>Fairness ↔ Image</td>
<td>Ethics ↔ Image</td>
<td>Leadership ↔ Image</td>
<td>Accountability ↔ Image</td>
<td>Creativity ↔ Image</td>
</tr>
<tr>
<td>E</td>
<td>Fairness ↔ Increase In Customer Base</td>
<td>Ethics ↔ Increase In Customer Base</td>
<td>Leadership ↔ Increase In Customer Base</td>
<td>Accountability ↔ Increase In Customer Base</td>
<td>Creativity ↔ Increase In Customer Base</td>
</tr>
</tbody>
</table>

Table No.5.2 Relationship between the following pair variables
(Parameters of Corporate Governance and Financial Performance)

<table>
<thead>
<tr>
<th>Pair</th>
<th>Fairness ↔ Deposit</th>
<th>Ethics ↔ Deposit</th>
<th>Leadership ↔ Deposit</th>
<th>Accountability ↔ Deposit</th>
<th>Creativity ↔ Deposit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Fairness ↔ Deposit</td>
<td>Ethics ↔ Deposit</td>
<td>Leadership ↔ Deposit</td>
<td>Accountability ↔ Deposit</td>
<td>Creativity ↔ Deposit</td>
</tr>
<tr>
<td>B</td>
<td>Fairness ↔ Loan</td>
<td>Ethics ↔ Loan</td>
<td>Leadership ↔ Loan</td>
<td>Accountability ↔ Loan</td>
<td>Creativity ↔ Loan</td>
</tr>
<tr>
<td>C</td>
<td>Fairness ↔ Credit Deposit Ratio</td>
<td>Ethics ↔ Credit Deposit Ratio</td>
<td>Leadership ↔ Credit Deposit Ratio</td>
<td>Accountability ↔ Credit Deposit Ratio</td>
<td>Creativity ↔ Credit Deposit Ratio</td>
</tr>
<tr>
<td>D</td>
<td>Fairness ↔ NPA</td>
<td>Ethics ↔ NPA</td>
<td>Leadership ↔ NPA</td>
<td>Accountability ↔ NPA</td>
<td>Creativity ↔ NPA</td>
</tr>
<tr>
<td>E</td>
<td>Fairness ↔ CRAR</td>
<td>Ethics ↔ CRAR</td>
<td>Leadership ↔ CRAR</td>
<td>Accountability ↔ CRAR</td>
<td>Creativity ↔ CRAR</td>
</tr>
<tr>
<td>F</td>
<td>Fairness ↔ Profit</td>
<td>Ethics ↔ Profit</td>
<td>Leadership ↔ Profit</td>
<td>Accountability ↔ Profit</td>
<td>Creativity ↔ Profit</td>
</tr>
</tbody>
</table>

Friedman Chi-square test is used to examine whether more than two groups differ based on mean ranks. These mean ranks offers natural rank order to
assess degree of importance. In the current study Friedman Chi-square test was performed to answer the following research question:
If there is difference in the importance given by the directors to the various bank performance indicators?
The Friedman test is developed by the U.S. economist Milton Friedman and which is a non parametric statistical test. The process involves ranking every row (or block) jointly, afterward considering the values of ranks in columns. A Friedman Chisquare test was applied to study if there is difference in the importance given by directors to the banks performance indicators.\textsuperscript{121}

\textsuperscript{121}https://en.wikipedia.org/wiki/Friedman_test