CUSTOMER'S PERCEPTION AND FINANCIAL ACHIEVEMENTS OF PUBLIC AND PRIVATE SECTOR BANKS IN ERNAKULAM DISTRICT

A Qualitative and Quantitative Evaluation

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Abstract: Indian Banking has gone tremendous changes over time and the entry of private sector banks has transformed the Indian banking both structurally and functionally. In this competitive banking environment, customer perception has been considered as most imperative factor for the success of banks. To attain the high level of customer perception and to retain the customer base, it is important for the banks to deliver quality services to its customers. Customer perception is a measure of how products and services provided by any organization meet the expectation of a customer. The efficiency of the banking sector depends on how it delivers the services to its existing customers. In this fast changing scenario, it is important that banks should go for customer segmentation and provide reliable, independent, impartial opinion and tailored treatment that customers now expect. To survive in this competitive environment, it is important for banks to provide fast and efficient services to its customers.

1. INTRODUCTION

In India the Banking is very old like its civilization. The existence of banking system in India can be traced in Vedic period. The year 1786 marked the beginning of the establishment of formal banks in India. In this era, two banks, namely, general bank of India and bank of Hindustan came into existence. Both the banks, however, had to be declared defunct soon.

The banking sector in India was regulated to a certain extent in 1935 with reserve bank of India (RBI) being bestowed with the responsibility to act as a regulator. After the independence of the country in 1947, the government of India realized that 'laissez faire' policy cannot be continued for an important sector like banking. Hence, reserve bank of India was nationalized in 1948 and was empowered to 'regulate, control and inspect the banks in India'.

However, in spite of empowerment of RBI, banks in India, except the state bank of India in 1806) continued to be owned and operated by private persons till their nationalization in 1969 and further in 1980. nationalize of bank was a historic step and the same work wonder for India as nationalized banks took banking to all parts of the country, including remote villages. Nationalization of banks, thus, can be described as a stepping stone for the development of banking in India. If nationalization of banks motivated people to restart

to banking, liberalization, privatization and globalization policy adopted by India in 1991 gave them wider choices to satisfy their financial needs. Hence, banking industry of India is one of the most dynamic, vibrant and deep rooted one.

Today every business organizations are facing tough competition here no exemption for financial services or Banking industries. Customer service is an integral part of any organization it is necessary to identify the key success factors in terms of customer satisfaction. To develop and to sustain business any of the banks must have quality of customer service that can link up cordial relation with the customer and result in to the satisfaction level of the customer.

2. STATEMENT OF THE PROBLEM

A prudent financial system is acknowledged as an indispensable and sufficient condition for rapid growth and development for every modern economy. Banking sector which is an important component of financial system is considered as the lifeline of an economy and its people. Banking has facilitated in developing the crucial sectors of the economy and usher in a new dawn of progress on the Indian horizon.

The Banks (Public and Private) have been facing fierce competition due to the entry of foreign banks. The application or use of technology for the qualitative transformation in the process of banking service is necessary and quite natural, since the market is competitive and the customers are receptive. Consumerism has taken a new shape. The needs and requirements of the customers are developing and expanding very fast. In this complex and fast changing environment, the only sustainable competitive advantage for banks (Both public and private sector) is to give the customer an optimum blend of technology and traditional services.

Hence meeting the competition and the customer requirements are the priorities of both public and private sector banks. As a result, need to study the financial achievements and the level of perception of customers towards both public and private sector banks. So that it becomes inevitable as these factors affect the working of the industry in rendering fruitful and quality services and also for the up-liftment of the industry in general. Based on the above, the following questions were raised.

- Whether the perception level of customers may influence the performance of the industry?
- Whether the sector's financial conditions are basically sound?
- What are the key financial parameters for ascertaining the financial achievements of public and private sector banks?
- What are the strong, moderate and weak variables to improve the financial achievements of public and private sector banks?

3. OBJECTIVES OF THE STUDY

1. To enlighten the profile, growth and development of public and private sector banks in India.
2. To study the influencing factors for measuring the level of perception towards public and private sector banks.

3. To examine the customer's level of perception towards public and private sector banks in Ernakulam District with the influencing factors.

4. To ascertain the significant relationship between demographic factors and level of satisfaction towards the performance of public and private sector banks in Ernakulam District.

5. To identify the key financial parameters for ascertaining the financial achievements of public and private sector banks in Ernakulam District.

6. To analyse the strong, moderate and weak variables to improve the financial achievements of public and private sector banks in Ernakulam District.

7. To suggest better ways and means for the improvement and successful functioning of public and private sector banks in the competitive environment.

4. RESEARCH HYPOTHESIS

- "There is a positive impact between the customer's perception and the performance of public and private sector banks"
- "There is no significant relationship between the demographic factors and the level of satisfaction towards public and private sector banks"

5. RESEARCH METHODOLOGY AND TOOLS

Research methodology is the way to systematically solve the research activities. This study aims to examine the customer's perception and financial achievements of public and private sector banks in Ernakulam district. In this context, both Qualitative and Quantitative Evaluation have been made by the researcher in efficient manner.

I. Selection of Sample

The study takes into account of five banks in each public and private sector banks on the basis of high performance rating in the year 2017 with reference from moneycontrol.com. The selection of top five banks in each sector is presented as under.

TABLE No.1

SELECTION OF SAMPLE

S.No	SELECTION OF SAMPLE	
	PUBLIC SECTOR BANKS	**PRIVATE SECTOR BANKS**
1	State Bank of India	HDFC Bank
2	Punjab National Bank	ICICI Bank
3	Bank of Baroda	AXIS Bank
4	Canara Bank	KOTAK MAHINDRA
5	Bank of India	YES Bank

II. Sampling technique

The present study is based on stratified sampling method. There are 15 Blocks in Ernakulam District. The total samples of 600 respondents were chosen representing 40 from each block. The geographical distribution of sample respondents is exhibited as under.

TABLE No.2
GEOGRAPHICAL DISTRIBUTION OF RESPONDENTS IN ERNAKULAM DISTRICT

Sl. No	NAME OF THE BLOCK	TOTAL	REGION
1	ALANGAD	40	**I**
2	ANGAMALY	40	**II**
3	EDAPPALLY	40	**III**
4	KOOVAPPADY	40	**IV**
5	KOTHAMANGALAM	40	**V**
6	MULANTHURUTHY	40	**VI**
7	MUVATTUPUZHA	40	**VII**
8	PALLURUTHY	40	**VIII**
9	PAMPAKUDA	40	**IX**
10	PARAKKADAVU	40	**X**
11	PARAVOOR	40	**XI**
12	VADAVUKODE	40	**XII**
13	VAZHAKKULAM	40	**XIII**
14	VYPIN	40	**XIV**
15	VYTTALA	40	**XV**
TOTAL		**600**	

III. Data and sources of data

This study is based on both primary data and secondary data. The primary data was collected from the banking customers are in Ernakulam District.

i).Primary Data

In order to fulfill the objectives set, a sample study was undertaken by using a well framed questionnaire that was duly filled by the respondents. The respondents were selected on the basis of both public and private sector bank account holders in Ernakulam District.

ii). Secondary Data

The primary data were supplemented by a spate of secondary sources of data. The secondary data pertaining to the study were gathered from the records of various data bases like CMIE and corporate data bases. Latest information was gathered from well equipped and from internet web resources. Further, the secondary data were also collected from leading journals such as International Journal of Finance & Banking Studies, Global Journal Of Finance And Banking Issues, Journal of Finance and Bank Management, International Journal of Bank Marketing, International Journal of Banking, Accounting and Finance, Banking & Finance Journals, Arabian Journal of Business and Management Review and Review of Public

Administration and Management, etc., A number of standard text books were studied to obtain pertinent literature on banking sectors in India.

IV. Analysis

Various accounting and statistical techniques have been made by the researcher in an efficient manner. The major tools used for the analysis are Descriptive statistics, Chi-Square analysis, Ratio analysis, correlation analysis, Confirmatory factor analysis, Henry garrett ranking analysis, Cluster analysis and Structural equation modeling have been employed to study the customer's perception and financial achievements of public and private sector banks in Ernakulam district.

6. Tools for analysis

The researcher has adopted various statistical techniques in an efficient manner for analyzing the customer's perception and financial achievements of public and private sector banks in Ernakulam district. The major statistical tools used for the analysis are as below.

- Percentage Analysis
- Chi-Square Analysis
- Henry Garret Ranking
- Cluster Analysis
- Confirmatory Factor Analysis (CFA)
- Structural Equation Modelling (SEM)
- Comparative Fit Index(CFI)
- Normed Fit Index (NFI)
- Relative Fit Index (RFI)
- Incremental Fit Index (IFI)
- Parsimonious Normed Fit Index (PNFI))
- Parsimony Comparative Fit Index (PCFI)
- Tucker Lewis Index (TLI)
- Mean Squared Error of Approximation(RMSEA)

Percentage analysis

Percentage refers to special kind of ratio. Percentages are used in the comparison between two or more data. Percentage is used to describe the relationship. Since the percentage reduce everything to a common base and there by allow meaningful comparison to be made.

$$\text{Percentage} = \frac{\text{Observed data}}{\text{Sample size}} \times 100$$

Chi-Square Analysis

The Chi-Square analysis is also applied by the researcher to ascertain the degree of influence between independent variables with the dependant variable. The various demographic variables have been taken as

Independent variables and level of perception has taken as the dependant variable for the study. For examining the level of perception towards public and private sector banks, the chi-square (χ^2) test was used and the formula is given below.

Chi–square test (χ^2) = $\sum \frac{(O-E)^2}{E}$

Whereas,
O = observed frequency
E = expected frequency
R = number of rows
C = number of columns

Henry Garret Ranking Method

Henry Garret ranking technique was used to rank out the various factors according to analyse the preference towards public and private sector banking services and they were asked to rank the given factors according to their magnitude. The order of merit given by the respondents was converted into ranks by using the following formula.

Percentage position = $\frac{100\ (R_{ij} - 0.5)}{N_j}$

Where, R_{ij} = Rank given for i^{th} factor by j^{th} individual.
N_j = Number of factors ranked by j^{th} individual

The percentage position of each rank thus obtained is converted into scores by referring to the table given by Henry Garret. Then the mean scores are found and these mean scores for all the factors are arranged in the descending order, ranks are given and most important factor is identified.

K-Means Cluster Analysis

In order to analyse the strong, moderate and weak variables to improve the financial achievements of public and private sector banks in Ernakulam District, cluster analysis have been made. Clustering is the classification of objects into different groups, or more precisely, the partitioning of a data set into subsets (clusters), so that the data in each subset (ideally) share some common trait - often according to some defined distance measure. The k-means algorithm is an algorithm to cluster *n* objects based on attributes into *k* partitions, where $k < n$. It assumes that the object attributes form a vector space. An algorithm for partitioning (or clustering) N data points into K disjoint subsets S_j containing data points so as to minimize the sum-of-squares criterion.

$$J = \sum_{j=1}^{K} \sum_{n \in S_j} |x_n - \mu_j|^2,$$

Where x_n is a vector representing the the n^{th} data point and u_j is the geometric centroid of the data points in S_j. Simply speaking k-means clustering is an algorithm to classify or to group the objects based on attributes/features into K number of group. K is positive integer number. The grouping is done by minimizing

the sum of squares of distances between data and the corresponding cluster centroid. It is used to analyse the leverage level of select manufacturing sectors.

Confirmatory Factor Analysis

Factor analysis is a collection of methods used to examine how underlying constructs influence the responses on a number of measured variables. The methods have employed so far an attempt to repackage all of the variance in the p variables into principal components. The researcher has to restrict our analysis to variance that is common among variables. There are two types of factor analysis: Exploratory and confirmatory. Exploratory factor analysis (EFA) attempts to discover the nature of the constructs influencing a set of responses. Confirmatory factor analysis (CFA) tests whether a specified set of constructs is influencing responses in a predicted way. SPSS 22.0 has been applied to perform EFA. The AMOS 22.0 was used to perform structural equation model like CFA, which have been used to analyse the customer's perception of public and private sector banks in Ernakulam district.

Structural Equation Model (SEM)

Structural equation modeling (SEM) is a statistical technique for testing and estimating causal relations using a combination of statistical data and qualitative causal assumptions. The structural equation model (SEM) consists of graphical display, which has boxes and arrows. Boxes represent observed data and the arrows represent assumed causation. Within the model, a variable that receives a one-way directional influence from some other variable in the system is termed as "endogenous" or dependent variable. A variable that does not receive a directional influence from any other variable in the system is termed as "exogenous" or independent variable.

When interpreting structural equation model (SEM) results, the values attached to one-way arrows (or directional effects) are regression coefficients, whereas two-way arrows (non-directional relationships) are correlation coefficients; regression coefficients and correlations comprise the "parameters" of the model. The regression coefficients and correlations measure the strength of the relations between the variables. A regression coefficient of 0.70 or higher indicates a very strong relationship; 0.50 to 0.69 indicates a substantial relationship; 0.30 to 0.49 indicates a moderate relationship, 0.10 to 0.29 indicates a low relationship; 0.01 to 0.09 indicates a negligible relationship; and a value of 0 indicates no relationship. In this study, the AMOS 22.0 statistical package was used to perform structural equation modelling.

Structural equation model have been used for analyzing the customer's perception of public and private sector banks in Ernakulam district with specified latent and manifest variables.

Comparative Fit Index (CFI)

The comparative fit index (Bentler, 1990) is given by.

$$\mathrm{CFI} = 1 - \frac{\max\left(\hat{C} - d, 0\right)}{\max\left(\hat{C}_b - d_b, 0\right)} = 1 - \frac{\mathrm{NCP}}{\mathrm{NCP}_b}$$

where $\hat{C}$, d, and NCP are the discrepancy, the degrees of freedom and the noncentrality parameter estimate for the model being evaluated, and $\hat{C}_b$, d_b and NCP_b are the discrepancy, the degrees of freedom and the noncentrality parameter estimate for the baseline model.

Normed Fit Index (NFI)

The Bentler-Bonett (Bentler & Bonett, 1980) normed fit index, or $\boldsymbol{\Delta}_1$ in the notation of Bollen (1989b) can be written

$$\text{NFI} = \boldsymbol{\Delta}_1 = 1 - \frac{\hat{C}}{\hat{C}_b} = 1 - \frac{\hat{F}}{\hat{F}_b}$$

where $\hat{C} = n\hat{F}$ is the minimum discrepancy of the model being evaluated and $\hat{C}_b = n\hat{F}_b$ is the minimum discrepancy of the baseline model.

Rule of Thumb

"Since the scale of the fit indices is not necessarily easy to interpret (e.g., the indices are not squared multiple correlations), experience will be required to establish values of the indices that are associated with various degrees of meaningfulness of results. In experience, the models with overall fit indices of less than .9 can usually be improved substantially. These indices, and the general hierarchical comparisons described previously, are best understood by examples". (Bentler & Bonett, 1980, p. 600, referring to both the NFI and the TLI)

Relative Fit Index (RFI)

Bollen's (Bollen, 1986) relative fit index is given by

$$\text{RFI} = \rho_1 = 1 - \frac{\hat{C}/d}{\hat{C}_b/d_b} = 1 - \frac{\hat{F}/d}{\hat{F}_b/d_b}$$

Where $\hat{C}$ and d are the discrepancy and the degrees of freedom for the model being evaluated, and $\hat{C}_b$ and d_b are the discrepancy and the degrees of freedom for the baseline model. The RFI is obtained from the NFI by substituting *F*/*d* for *F*. RFI values close to 1 indicate a very good fit.

Incremental Fit Index (IFI)

Bollen's (Bollen, 1989b) incremental fit index is given by

$$\text{IFI} = \boldsymbol{\Delta}_2 = \frac{\hat{C}_b - \hat{C}}{\hat{C}_b - d}$$

Where $\hat{C}$ and d are the discrepancy and the degrees of freedom for the model being evaluated, and $\hat{C}_b$ and d_b are the discrepancy and the degrees of freedom for the baseline model. IFI values close to 1 indicate a very good fit.

Parsimonious Normed Fit Index (PNFI)

The PNFI is the result of applying the James, Mulaik and Brett, 1982 parsimony adjustment to the NFI:

$$\text{PNFI} = (\text{NFI})(\text{PRATIO}) = \text{NFI}\,\frac{d}{d_b}$$

Where d is the degrees of freedom for the model being evaluated, and d_b is the degrees of freedom for the baseline model.

Parsimony Comparative Fit Index (PCFI)

The PCFI is the result of applying the James, Mulaik and Brett, 1982 parsimony adjustment to the CFI:

$$\text{PCFI} = (\text{CFI})(\text{PRATIO}) = \text{CFI}\,\frac{d}{d_b}$$

Where d is the degrees of freedom for the model being evaluated, and d_b is the degrees of freedom for the baseline model.

Tucker Lewis Index (TLI)

The Tucker-Lewis coefficient (ρ_2 in the notation of Bollen, 1989b) was discussed by Bentler and Bonett (1980) in the context of analysis of moment structures, and is also known as the Bentler-Bonett non-normed fit index (NNFI).

$$\text{TLI} = \rho_2 = \frac{\frac{\hat{C}_b}{d_b} - \frac{\hat{C}}{d}}{\frac{\hat{C}_b}{d_b} - 1}$$

Where $\hat{C}$ and d are the discrepancy and the degrees of freedom for the model being evaluated, and $\hat{C}_b$ and d_b are the discrepancy and the degrees of freedom for the baseline model. The typical range for TLI lies between zero and one, but it is not limited to that range. TLI values close to 1 indicate a very good fit.

Root Mean Squared Error of Approximation (RMSEA)

F_0 Incorporates no penalty for model complexity and will tend to favor models with many parameters. In comparing two nested models, F_0 will never favor the simpler model. Steiger and Lind (1980) suggested compensating for the effect of model complexity by dividing F_0 by the number of degrees of freedom for testing the model. Taking the square root of the resulting ratio gives the population "root mean square error of approximation", called RMS by Steiger and Lind, and RMSEA by Browne and Cudeck (1993).

$$\text{population RMSEA} = \sqrt{\frac{F_0}{d}} \quad \text{estimated RMSEA} = \sqrt{\frac{\hat{F}_0}{d}}$$

Rule of Thumb

"Practical experience has made us feel that a value of the RMSEA of about .05 or less would indicate a close fit of the model in relation to the degrees of freedom. This figure is based on subjective judgment. It cannot be regarded as infallible or correct, but it is more reasonable than the requirement of exact fit with the RMSEA = 0.0. And opined that a value of about 0.08 or less for the RMSEA would indicate a reasonable error of approximation and would not want to employ a model with a RMSEA greater than 0.1." (Browne and Cudeck, 1993)

7.LIMITATIONS OF THE STUDY

1. The study is confined to Ernakulam district due to time and cost constraint.
2. The findings and suggestions given in the study are derived from the analysis from the very nature of the background of the respondents in Ernakulam district. Hence the suggestions and findings given the study may or may not be applicable to other states, due to the diversified culture and income generation capacity.

CONCLUSION

The above selected banks play an important role in the economic development of a nation. Banking sector has a very important place in our Indian economy. The amount of the profit indicates the efficiency of the organization the larger the profit higher the growth rate. The profitability depends on the effective utilization of funds to procure maximum profit for growth. From this view point, the further research has been carried out by applying various statistical tools in an efficient manner.

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