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ABSTRACT
Banking sector plays an important role in economic development of a country. The banking system of India is featured by a large network of bank branches and financial services. Today, banking sector is a leading player in Indian economy. Among banking sector private sector banking is always a competitor for public sector banks. This study will throw light on performance of top nine private sector banks, nifty and nifty bank. The research will be analyzed the data for the period of two years from Apr 2014 to Mar 2016. A comparative study was carried out between the private sector banks, nifty and nifty bank by using correlation coefficient. This research is based on secondary data and the results prove that there is a relation between private sector banks, nifty and nifty bank. Investors are suggested to trade on nifty bank which is directly related to the performance of the private sector banks.

Keywords---- nifty, nifty bank, correlation coefficient, private sector, public sector etc.

I. INTRODUCTION
The private sector banks are banks where greater parts of stake or equity are held by private share holders and not by government. Banking sector is a leading player in Indian economy. Private Banks have gained good share in Indian banking industry over few years because of usage of technology. The share of private banking is 18.2 percent of Indian banking industry.

Initially all the banks in India were private banks, which were founded in the pre-independence era to cater to the banking needs of the people. In 1921, three major banks i.e. Banks of Bengal, Bank of Bombay, and Bank of Madras, merged to form Imperial Bank of India. In 1935, the Reserve Bank of India (RBI) was established and it took over the central banking responsibilities from the Imperial Bank of India, transferring commercial banking functions completely to IBI. In 1955, after the declaration of first-five year plan, Imperial Bank of India was subsequently transformed into State Bank of India (SBI). Following this, occurred the nationalization of major banks in India on 19 July 1969. The Government of India issued an ordinance and nationalized the 14 largest commercial banks of India, including Punjab National Bank (PNB), Allahabad Bank, Canara Bank, Central Bank of India, etc. Thus, public sector banks revived to take up leading role in the banking structure. In 1994, the Reserve Bank of India issued a policy of liberalization to license limited number of private banks, which came to be known as New Generation tech-savvy banks. Global Trust Bank was, thus, the first private bank after liberalization; it was later amalgamated with Oriental Bank of Commerce (OBC). Then Housing Development Finance Corporation Limited (HDFC) became the first (still existing) to receive an 'in principle' approval from the Reserve Bank of India (RBI) to set up a bank in the private sector. Undoubtedly, being tech-savvy and full of expertise, private banks have played a major role in the development of Indian banking industry. They have made banking more efficient and customer friendly.

II. IMPORTANCES OF PRIVATE SECTOR BANKS

- Introducing of professional management and marketing concepts in banking sector.
- Creating healthy competition with public sector banks
- Encourage for foreign investments.
- Introducing innovative products and schemes to provide quality service.
- Injection of new technology like computerized operations, Credit card, ATM services etc.

<table>
<thead>
<tr>
<th>S.NO.</th>
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<th>DETAILS</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>HDFC</td>
<td>Housing Development</td>
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Finance Corporation Ltd., was popularly known as HDFC Bank Ltd., It was established in the year 1994. It was one of the first banks to receive an ‘in principle’ approval from RBI, for setting up a bank in private sector.

ICICI Industrial Credit and Investment Corporation of India, was popularly known as ICICI bank Ltd., It was established in the year 1994. It was the second largest bank in India in terms of assets and third in term of market capitalization.

Axis bank, former called as UTI bank. In 1994, Axis bank was sponsored together by the administration of Unit Trust of India(UTI), Life Insurance Corporation of India(LIC) and General Insurance Corporation Ltd.,

Yes bank is one of the top most private Indian banks. It was established in 2004. Yes bank is the only Green field bank license awarded by the RBI in the last two decades. It is the world’s single AAA rated private bank.

Kotak Mahindra Bank This bank was established in 1985, is an Indian financial services conglomerate.In 2003, RBI gave license to carry on banking business. With this KMFL(kotak Mahindra finance Ltd.) became the first non-banking finance company in India to be converted into a bank- Kotak Mahindra Bank Ltd.,(KMBL).

Indusind Bank, is a Mumbai based bank and was established in 1994. It is the first among the new generation private banks in India. The name Indus ind is derived from the rich and vivid Indus valley civilization.

In 1931, Travancore Federal bank began operations in kerala. After 10 years, the day to day operations has stopped. In 1947, the bank’s name was shortened from Travancore Federal bank to Federal bank. In 1970, Federal bank became a scheduled commercial bank and came out Initial public offering in 1994.

The Karur Vysya bank Ltd., popularly known as KVB was established in 1916 in Tamil nadu. It is one of the largest old generation private bank in India and also largest Tamilnadu based private bank. The bank is known for its cash deposit machine (CDM), a major technology initiative taken only by few banks in India.

One of the earliest banks in South India, established in1929 during the Swadeshi movement. First among the private sector in Kerala to become a schedule bank in 1946. First among the private sector banks in Kerala to open an overseas branch in 1993. First Kerala based bank to implement core banking system.

There are many private sector banks. Based on Net sales top nine private sector banks have been selected for this study.

III. REVIEW OF LITERATURE

Sarkar and Das (1997) conducted “A study on comparison of the performance of the three bank sectors - public, private and foreign” - for the year 1995-1996. These banks are compared in terms of profitability, productivity and financial management. They find that the public sector banks are very poor in performance than the other two sectors due to lack of technology and innovative ideas.

Gaganjot Singh (1998) in his study “New innovations in banking industry – a study of new private sector banks” views that the new private sector banks in India are using better technology and are offering better services to the customers. As the public sector banks have already established a huge customer base, they become complacent and are slow to become customer friendly. They are also less innovative in the use of technology-
assisted customer service. He concluded that public sector banks are success full because of their customer’s trust only and private sector banks are more successful because of their creative ideas.

N. S. Varghese and P Verma (2000) conducted study on “Analyzing the impact of information technology on new generation banks”. He concluded that new generation banks are far ahead of traditional public sector banks. He observes that the business per employee of major public sector banks in India is a mere fraction of the business per employee of new generation banks. So the public sector banks have to improve their productivity and efficiency to compete with the new generation banks which are fully computerized.

Garima chaudhary (2014) conducted a study on “Performance comparison of private sector banks with public sector banks in India”. He concluded that the major area of concern for any bank is the customer service and customer satisfaction, thus just like the private sector banks, it is high time that the public sector banks also start concentrating more on the customers and the services provided to them. Top most rank held by a private bank is a clear indicator of the better performance of the private banks due to their higher concern towards customer feedback, their efficient management and thus yielding to higher productivity and networks throughout India. To strive the cut throat competition given to the public sector banks by the private sector banks, the public sector will have to pull up their shoes to be at the better half part of the race else the time is very near which can make these public sector banks just a memory or a history for everyone.

D Mishra (1997) conducted a study on the performance of commercial banks in India by choosing relevant parameters like quality of service, risk management, profitability etc. He concluded that the banks should try to increase quality, balance risk management, and optimize profitability in order to survive and succeed.

IV. OBJECTIVE OF THE STUDY

- To study the performance of nifty bank and nifty from 2014-2016.
- To study the performance of top 9 private sector banks from 2014-2016.
- To compare the performance of private sector banks with nifty bank.
- To compare the performance of private sector banks with nifty.

V. SCOPE OF THE STUDY

There are many private sector banks in India, Based on Net sales (2016) top nine banks are selected for my study. The time period is selected from April 2014 to March 2016.

VI. RESEARCH METHODOLOGY

- Sample size is 9 private sector banks, nifty bank and nifty.
- Data collection is secondary data collected from NSEindia.com. Respective company prospectus is used to get details regarding bonus issues, stock split etc.
- The research is designed by using the analysis tools like Simple percentage to calculate stock and market returns and correlation coefficient to compare the stock and market returns.

VII. ANALYSIS AND INTERPRETATION

<table>
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<tr>
<th>MONTH</th>
<th>HDIFC BANK</th>
<th>ICICI BANK</th>
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<th>YES BANK</th>
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<th>INDUSIND</th>
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</table>
The returns of stock and market has been calculated as the difference between the closing Price and opening price and divided by the offer price. The result figure was multiple by 100 to set the figure in percentage.

\[
\text{Stock or market return} = \frac{P_1 - P_0}{P_0} \times 100
\]

Where, 
- \( P_1 \) = closing price of stock or market
- \( P_0 \) = opening price of stock or market

### VIII. CORRELATION COEFFICIENT

Correlation coefficient formulas are used to find how strong a relationship is between data. The formulas return a value between -1 and 1, where:
- A correlation coefficient of 1 means that for every positive increase of 1 in one variable, there is a positive increase of 1 in the other.
- A correlation coefficient of -1 means that for every positive increase of 1 in one variable, there is a negative decrease of 1 in the other.
- Zero means that for every increase, there isn’t a positive or negative increase. The two just aren’t related.

The absolute value of the correlation coefficient gives us the relationship strength. If the number is larger, the relation between the variables will be stronger and vice versa.

### IX. CORRELATION FORMULA

In this study Pearson’s correlation coefficient formula is used:

\[
r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[n \Sigma x^2 - (\Sigma x)^2][n \Sigma y^2 - (\Sigma y)^2]}}
\]

### TABLE

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<th>CORRELATION</th>
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<td>0.9082</td>
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<tr>
<td>SOUTH INDIA</td>
<td>0.7233</td>
<td>0.576</td>
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</tbody>
</table>

The correlation between top nine banks with nifty bank and nifty are positive and strong in most of the cases. The correlation between ICICI, nifty bank and nifty was very strong. Besides, the relation between Karur Vysya bank, nifty bank and nifty was positive but very weak when compared with other banks.

### X. COMPARISION OF PRIVATE SECTOR BANKS, NIFTY AND NIFTYBANK THROUGH GRAPHS

**HDFC BANK:**

GRAPH:1 Comparison of HDFC bank performance with nifty and nifty bank
INFERRECE:
The graph implies that the movement of HDFC stock price was good but when compared with nifty and nifty bank the correlation was 0.6381 and 0.9082 respectively. This implies that the relationship between the stock and nifty was strong when compared with nifty bank.

ICICI BANK:

Graph: 2 Comparison of ICICI bank performances with nifty and nifty bank

INFERRECE:
The stock prices of ICICI has reached top so experts decided to split the face value of its shares from 10 Rs to 2 Rs that is 1:5. The performance of ICICI shares are fluctuating. When we compare with correlation the values of nifty and nifty bank are 0.9082 and 0.8295. This implies that the relationship between ICICI shares, nifty and nifty bank are positive and strong.

AXIS BANK:

Graph: 3 Comparison of Axis bank performances with nifty and nifty bank

INFERRECE:
Axis bank has undergone stock split, the face value of the share was split from 10 Rs to 2 Rs that is 1:5. The performance of the Axis bank was moderate. When we compare with correlation the values of nifty and nifty bank are 0.8304 and 0.9387 respectively. The relationship between the stock, nifty and nifty bank was positive and very strong.

YES BANK:

Graph: 4 Comparison of Yes bank performances with nifty and nifty bank

INFERRECE:
The performance of Yes bank was fluctuating. The correlation coefficient values of nifty and nifty bank are 0.7192 and 0.8414 respectively. The relationships between the variables are positive and relation between stock and nifty bank is strong when compared with nifty.

KOTAK MAHINDRA BANK:

Graph: 5 Comparison of Kotak Mahindra bank performances with nifty and nifty bank

INFERRECE:
In July, 2015 Kodak Mahindra bank has announced bonus share in 1:1 ratio. Before and after the bonus issue the performance of the bank is high. Overall the performance of the bank in two years is moderate. The correlation coefficient values of nifty and nifty bank are 0.7704 and 0.848 respectively. The relation between the nifty bank and share is strong when compared with nifty.

INDUSIND BANK:

Graph: 6 Comparison of IndusInd bank performances with nifty and nifty bank
INFERENCE:
The performance of Indus Ind bank is fluctuating. The correlation coefficient values of nifty and nifty bank are 0.7615 and 0.7751 respectively. The relation between stock, nifty and nifty bank are positive.

FEDERAL BANK:
Graph: 7 Comparison of Federal bank performances with nifty and nifty bank

INFERENCE:
In July, 2015 federal bank has issued bonus shares in 1:1 ratio. The performance of federal bank is fluctuating in past two years. The correlation coefficients of nifty and nifty bank are 0.5472 and 0.6877 respectively. The relationship between the nifty and nifty bank is positive but its week when compared with other banks.

SOUTH INDIAN BANK:
Graph: 9 Comparison of South Indian bank performances with nifty and nifty bank

INFERENCE:
The performance of south Indian bank is moderate. The correlation coefficient of nifty and nifty bank is 0.576 and 0.7233 respectively. The relationship between variables is positive but the relation between nifty bank and stock is strong when compared with nifty.

XI. FINDINGS AND SUGGESTIONS

- The performances of all the banks are fluctuating. In the month of May 2014, the entire banks growth rate has increased except HDFC bank.
• Similarly, the performance of all the banks was high in the month of Mar 2016 except Federal bank and HDFC.
• The performance of nifty bank is dependent on the performance of top private sector bank.
• In last two years it is clear that nifty bank shows negative growth rate whenever top private sector banks are down in its growth rate.
• The performance of nifty bank is fluctuating and their performance was maximum in the months of May 2014 and mars 2016 same as private sector banks.
• The relation between all the banks and nifty banks are positive and almost strong except Karur vysya bank which is 0.4318.
• The relation between all the banks and nifty are positive and are strong except Karur vysya bank which has very week relation.
• The relation between ICICI, Axis and Yes bank with nifty and nifty bank are relatively very strong when compared with other banks.

In my study the relation between bank performances with nifty and nifty bank was taken by taking correlation coefficient. The relation can also be explained by means of Return on Equity or profitability by using ratio analysis and other techniques. All these comparisons will help the investors to take decision on their investments.

**XII. CONCLUSION**

The performances of private sector banks are good. Even though there are negative growth rate at some times, investors shows interest to invest in private sector banks due to their innovative schemes and services. All these efforts are making the private sector banks to be in top position. The growth rate determines the percentage increase in their performance which can give an overall idea about the performance of their selected banks. The correlation coefficient indicates that the percentage increase in growth rate of nifty is totally dependent on the growth rate of private sector banks. The relation between the private sector banks and nifty bank are positive and are very strong which indicate that the increase in growth rate of private sector banks will definitely increases the growth rate of nifty bank. The relation between the private sector banks and nifty is positive and is moderately strong because the nifty index is composed of many companies also with banks which also affect the performance of nifty.

**REFERENCES**


**Website:**