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Analysis of Indian Banking Sector-A Study

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ABSTRACT

Banking sector is the backbone of the county's economy and this sector has contributed good returns for the investor in the past. Risk and return are important variables while making an investment and one cannot ignore either of the two. This study is an attempt to uncover the practical aspect of 'risk-return theory'. Risk and Return analysis plays a very important role in individual decision making process. If the investor wishes to earn more return investor should be in the position to accept higher risk. This paper analyses the performance of banking sector taking Bank Nifty Index as benchmark. The study is based on secondary data collected from NSE. This study shows the returns and risks of banking stocks listed on Bank Nifty and to identify the best stocks to invest and the worst stocks to be ignored.

1. Introduction of the banking industry

Indian banking is the lifeline of the country and its people. Banking has helped in growing the essential sectors of the economy and usher in a new dawn of progress on the Indian outlook. The sector has convert the hopes and desire of millions of people into reality. But to do so, it has had to control miles and miles of hard to terrain, suffer the indignities of foreign rule and the pangs of division.

Types of Bank

Co-operative Banks

Co-operative Banks are the banks that usually give short term, medium term, long term credit to agricultural. Co-operative Banks also give loans to small-scale artisans. Co-operative Banks usually provide credit facilities to farmers, small industries, etc at a low rate of interest. Co-operative Banks are mainly locate in rural areas and can also be seen in urban areas.

Central Bank

Every country has its Central Bank. The Central bank aims at non-profit work. It manage the monetary and credit system of the country. Central Bank acts as regulator controller and supervisor of the activities of commercial banks and other financial institutions in the country. The Central bank is include as the apex institution of the country's money market.

Industrial Banks

Industrial banks are also called as Investment Banks. Industrial banks give long-term loans to the industries. Industries need long-term capital for buying machinery, expansion of operations construction of buildings, etc. These capital needed by industries is provided by industrial banks for industrialists to develop their businesses. Industrial banks also get long-term deposits from the public. They secure capital by issuing shares and debentures.

Agricultural Banks

Agricultural Banks are the banks which give agricultural credit to the farmers. The Agricultural Development Banks provide medium term and long term loan. Some examples of Agricultural Banks in India are Agricultural Refinance and Development Corporation, Agricultural Finance Corporation National Bank for Agricultural & Rural Development. Agricultural Banks are established by the government to develop agricultural credit in the country.

Savings Bank

Savings Banks mainly concentrates on the mobilisation of savings of the people. In India Post offices run by Postal department act as savings banks. Since Commercial banks are give these facilities of savings banks to the public, the require for separate savings bank is fading.

Foreign Exchange Banks

Foreign Exchange Banks are the banks which provide finance for foreign trade .These banks get deposits from the public. Foreign Exchange Banks are banks in providing credit for the foreign trade. These banks have their branches in foreign countries for uninterrupted functioning of their services. But in current times commercial banks are also financing foreign trade.

Exchange Banks

Exchange Banks are the banks which regulate by financing the imports & exports of the country. These banks are mainly include with providing foreign exchange to their customers and help to develop international trade. They also provide to discount of foreign bills of exchange to their customers.

Private Bankers

Private Bankers are the individuals who manage banking business individually or partnership. It is purely an unorganized sector. Most of the private bankers do not receive or give any deposits from the public, they do banking business with their own capital. They lend money to the people for high-interest.

Chit Funds

There are chit funds in India. They give finance to trade. But, they cannot be called as banks in the regular sense. The

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Chit fund business is very big in a country like India. it is also an unorganized sector in India.

Public Sector Banks

Public Sector Banks (PSBs) are a major type of bank in India, where a majority stake (i.e. more than 50%) is held by the government. The shares of these banks are listed on stock exchanges. Among the government Sector Banks in India, United Bank of India is one of the 14 major banks which were nationalized on July 19, 1969. Its forerunner, in the Public Sector Banks, the United Bank of India Ltd., was formed in 1950 with the amalgamation of four banks viz. Camilla Banking Corporation Limited. (1914), Bengal Central Bank Ltd. (1918), Camilla Union Bank Ltd. (1922) and Hooghly Bank Ltd. (1932).

Private Sector Banks

Private banking in India was practiced since the beginning of the banking system in India. The first private bank in India to be frae-up up in Private Sector Banks in India was IndusInd Bank. It is one of the fastest developing Bank Private Sector Banks in India. IDBI ranks the tenth begets development bank in the world as Private Banks in India and has promoted a world-class institution in India.

2. Statistical Measures

Mean (Return)

Mean is simple average of given data. The mean can find out by applying the following formula. Mean indicates the average return (in %).

$$\text{Mean} = \frac{\sum X}{n}$$

Standard Deviation (Risk)

The standard deviation is very useful for the investors to measure the risk of a stock or a stock portfolio. The formula for the S.D. is given below.

$$\text{Standard deviation } (\sigma) = \sqrt{\frac{\sum (x-\overline{x})^2}{N-1}}$$

Beta

Beta is the calculate of a stock's sensitivity of returns to changes in the market. It is a measure of systematic risk. Beta is thus a measure of Systematic Risk of the market & does not represent the unsystematic risk. Market Risk is represented by National Stock Exchange National Index.

Beta interpretation

- Beta = 1.0 means Stock's return has same volatility as the market return
- Beta > 1.0 means Stock's return is more volatile than the market return
- Beta>1.0 means stock's return is more volatile than the market return

Coefficient of Correlation

Correlation is a statistical measure of how much the movement of two securities or asset classes is related. The range of possible correlation is between -1 and +1. A result of -1 expresses a perfect negative correlation, +1 expresses a perfect positive correlation, and 0 means no correlation at all. A positive correlation between two securities means that they tend to move up and down together.

Thus in this study whether Indian Equity Market has any correlation with USA is to be checked.

$$\text{Correlation(r)} = \frac{\sum(xy) - \sum(x)\sum(y)}{\sqrt{\sum(x^2) - \sum(x)^2}\sqrt{\sum(y^2) - \sum(y)}}$$

It ranges from -1.0 to +1.0. The close r is to +1 or -1, the more immediate the two variables are related. A positive value of coefficient "r" indicates that as one value increases the other tends to increase whereas a negative value specify as one variable increases the other tends to decree.

3. Review of literature

Balaji chintala (2016) studied on : A comparative study on the financial performance of selected public & private sector banks in India. The objective of this study is to analyze and compare the overall financial performance of selected public sector banks and private sector banks in India. The study finds that the total income of both public and private sector banks recorded good growth in total income during all the year of study. There exist a good variability of net profits between public sector banks and private sector banks. Habiba Abbasi (2017) studied on A Comparative Study of Public and Private Sector Banks in India. Private Sector Banks profitability is more than that of Public Sector Banks. The economic liberalization measures introduced by the Indian government coupled with trends towards globalization have substantially altered the banking sector and the profitability of public sector banks has declined to a large extent. It is clear from the analysis that the public sector banks are less profitable than the private sector banks in terms of overall profitability. All these improvements in Indian banking are says that, the Indian banks are moving towards modern banking changing a face of traditional banking of Indian economy .It is grate change of banking industry. They having a installing an information technology for 191 banking business and they trying to provide technology based banking services to their customers. Indian banks also trying to make universal of banking products and services to one top banking shop for customer delight, but comparatively private and foreign banks existing in Indian economy are having a higher level of modernization and those giving numbers of new services to their customers.

4. Research Objectives

- To analyse the risk and return of selected Public sector banks and Private sector banks in India
- To find out the top and lower banks on the basis of their return and risk.
- To analysis the performance of selected banks.

5. Statistical Tools

- Return
- Standard deviation (Risk)
- Beta
- Correlation

6. Sample Size

For the research purpose, Daily data of Bank NIFTY of 10 public sector banks and 10 private sector banks has been collected form NSE for the period of four years.

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7. Data Analysis & Interpretation

Table 1.1: Return Analysis of Private & Public Sector Banks

PVT.	AXIS	HDFC	DCB	SOUTH	FEDERA	KARUR	KOTAK	KTK	YES	CITY
RETRUN	0.051	0.045	0.053	-0.061	-0.004	-0.101	0.260	-0.032	-0.01	0.088
PUBLIC	BOB	CORP	GOL	MAHA	SYNDI	ALB	ANDHR	CENERA	UCO	ORIEN
RETURN	-0.08	-0.11	0.03	-0.07	-0.09	-0.12	-0.11	-0.02	-0.09	-0.10

Chart 1.1: Return Analysis of Private & Public Sector Banks

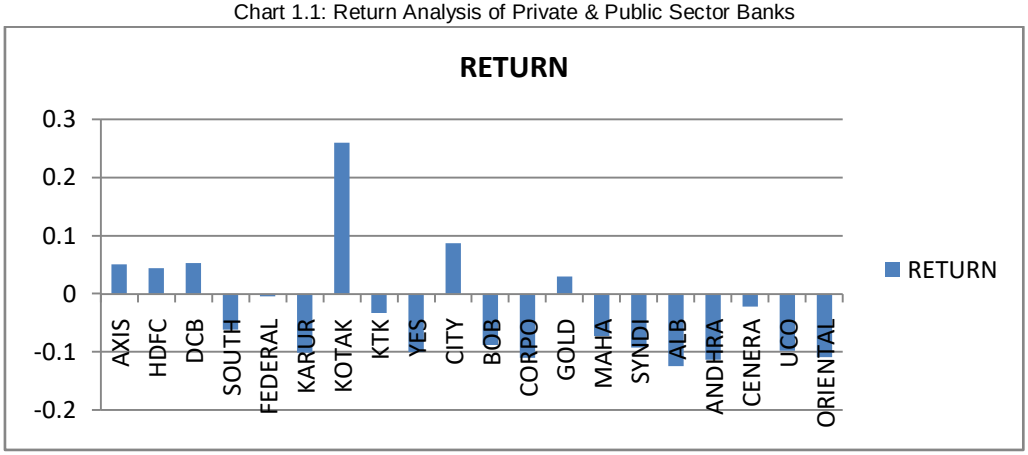


Table 1.2: Risk (Standard Deviation) Analysis of Private & Public Sector Banks

PVT.	AXIS	HDFC	DCB	SOUTH	FEDERA	KARUR	KOTAK	KTK	YES	CITY
SD	1.89	1.77	2.28	2.19	2.59	2.88	10.38	2.19	4.18	1.68
PUBLIC	BOB	CORP	GOL	MAHA	SYNDI	ALB	ANDHR	CENERA	UCO	ORIEN
SD	3.59	3.46	0.73	2.33	2.67	2.66	2.43	2.72	2.66	2.95

Chart 1.2: Risk (Standard Deviation) Analysis of Private & Public Sector Banks

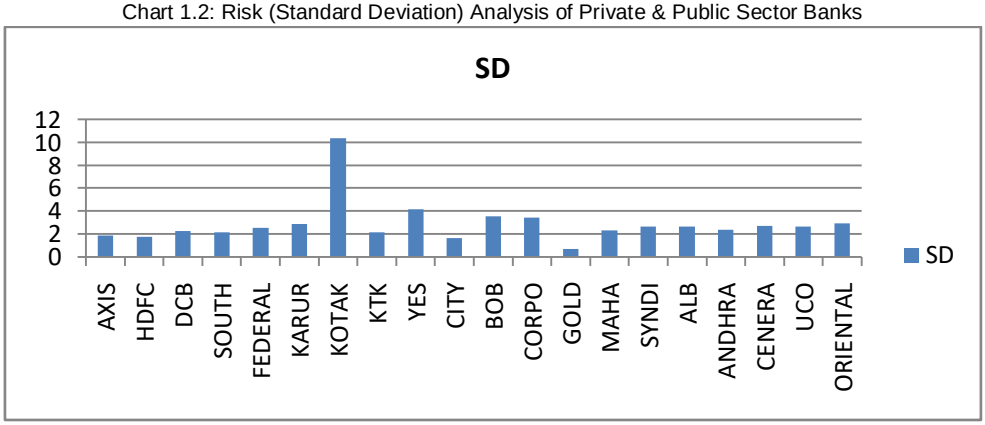


Table 1.3: Sensitivity (BETA) Analysis of Private & Public Sector Banks

PVT.	AXIS	HDFC	DCB	SOUTH	FEDERA	KARUR	KOTAK	KTK	YES	CITY
BETA	1.32	0.91	1.23	1.17	1.34	0.72	1.28	1.34	1.53	0.48
PUBLIC	BOB	CORP	GOL	MAHA	SYNDI	ALB	ANDHR	CENERA	UCO	ORIEN
BETA	1.58	0.95	-0.12	0.89	1.64	1.52	1.42	1.70	1.21	1.84

Chart 1.3: Sensitivity (BETA) Analysis of Private & Public Sector Banks

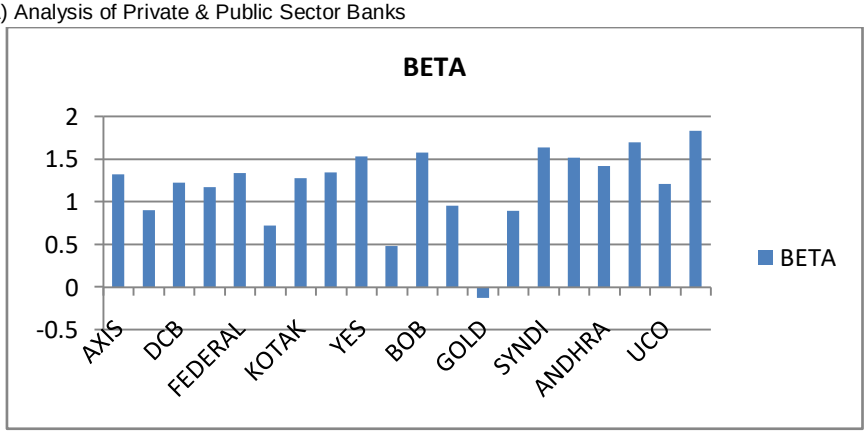
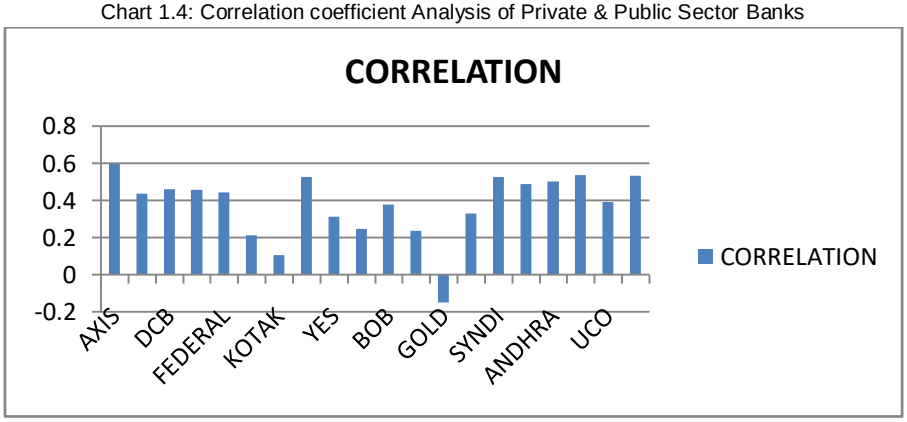


Table 1.4: Correlation coefficient Analysis of Private & Public Sector Banks

PVT.	AXIS	HDFC	DCB	SOUTH	FEDERA	KARUR	KOTAK	KTK	YES	CITY
Corr	0.60	0.44	0.46	0.46	0.44	0.22	0.11	0.53	0.32	0.25
PUBLIC	BOB	CORP	GOL	MAHA	SYNDI	ALB	ANDHR	CENERA	UCO	ORIEN
Corr	0.38	0.24	-0.15	0.33	0.53	0.49	0.50	0.54	0.39	0.53

Chart 1.4: Correlation coefficient Analysis of Private & Public Sector Banks



8. Results & Discussion

Table 1.5: Summary

BANK NAME	RETURN	SD(RISK)	BETA	CORRELATION
AXIS	0.0507	1.8948	1.324	0.5991
HDFC	0.0445	1.7707	0.9055	0.439
DCB	0.0529	2.2796	1.2274	0.4623
SOUTH	-0.0614	2.1925	1.1747	0.46
FEDERAL	-0.004	2.5942	1.3428	0.4444
KARUR	-0.1013	2.8842	0.7239	0.2155
KOTAK	0.2603	10.3845	1.2766	0.1055
KTK	-0.0321	2.1881	1.3446	0.5276
YES	-0.0993	4.1811	1.5341	0.315
CITY	0.0877	1.6782	0.484	0.2476
BOB	-0.088	3.5932	1.5821	0.378
CORPO	-0.1102	3.4615	0.9536	0.2365
GOLD	0.0307	0.7267	-0.1264	-0.1494
MAHA	-0.0717	2.3265	0.8932	0.3296
SYNDI	-0.0919	2.6695	1.6401	0.5275
ALB	-0.1241	2.6618	1.5211	0.4906
ANDHRA	-0.113	2.4273	1.4206	0.5025
CENERA	-0.0217	2.7169	1.7013	0.5376
UCO	-0.0981	2.6561	1.2149	0.3927
ORIENTAL	-0.1086	2.9543	1.8373	0.5339

The top and lower bank on the basic return.

- KOTAK bank has the highest return that is 0.26.
- ALLHABAD bank has the lowest that is -0.1241.

The top and lower bank on the basic risk.

- KOTAK Bank has the highest risk that 10.3845.
- UTI GOLD has the lowest risk that is 0.7267.

To measure the sensitivity of stock market with Bank Nifty.

- SYNDICATE BANK has highest beta that is 1.64.
- UTI GOLD bank has lowest beta that is -0.1264.

To study the relationship between Bank and index.

- The correlation between AXIS bank with respect to BANK NIFTY is 0.5991 which shows that highly positive correlation between AXIS bank and Bank Nifty.
- The correlation between UTI GOLD with respect to BANK NIFTY is -0.1494% which shows the negative correlation.

9. Conclusion

This study is an attempt to evaluate the returns and risks of banking stocks listed on Bank Nifty and to identify the best

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stocks to invest and the worst stocks to be ignored. While taking decision, the investor can also consider the fundamental and technical analysis. So that investor should know about to tack a decision regarding investment which one is best and get a better return.

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