MBA JOURNALS

NOLEGEIN Journal of
Business Risk Management

ISSN: 2582-287X
Volume 4, Issue 2, 2021
DOI (Journal): 10.37591/NJBRM

http://mbajournals.in/index.php/JoDBCM/index

Review NJBRM

A Study on Risk and Return Analysis of Select Public Sector Banks

Rahul[1,*]

Abstract

Money is the study of Assets The executives. The overall regions of account are business money, individual budget (private money), and public account. Account incorporates setting aside cash and regularly incorporates loaning cash. The field of account manages the ideas of time, cash, hazard and how they are interrelated. It likewise manages how cash is spent and planned. India Money and Venture Guide gives quality data and information sources with respect to speculation openings in India. The benchmark inclusion stretches out to business news, individual budget, securities exchange news, live Sensex refreshes, product costs, shared asset execution, and so on the entrance fills in as an open source information control focused to make business more pertinent and help financial backers in settling on right choice.

Keywords: Financial Accounting, Managerial Accounting, Balance Sheets, Risk & Return Analysis

INTRODUCTION

A monetary market is a market wherein individuals and substances can exchange monetary protections, wares, and other fungible things of significant worth at low exchange costs and at costs that reflect market interest. Protections incorporate stocks and securities, and items incorporate valuable metals or agrarian merchandise. Return communicates the sum which a financial backer really acquired on a venture during a specific period. Return incorporates the premium, profit and capital increases; while hazard addresses the vulnerability related with a specific assignment. In monetary terms, hazard is the opportunity or likelihood that a specific speculation might possibly convey the actual expected returns. The danger and return compromise say that the potential return ascends with an expansion in hazard. It is significant for a financial backer to settle on equilibrium the craving for the most minimal conceivable danger and most noteworthy conceivable return [1]. There is a positive connection between the measure of hazard and the measure of expected return i.e., the more noteworthy the danger, the bigger the normal return and bigger the odds of significant misfortune. Quite possibly the most troublesome issues for a financial backer is to assess the most significant level of hazard. The line from 0 to R (f) is known as the pace of return or hazard less speculations. Return and hazard are indistinguishable in speculation choice. Scrip's return relies upon numerous factors and hazard is likewise connected with the factors which impact the profit from the scrip. Any exploration should address the factors with which the examination is completed and once the factors are distinguished then the examination hole can be discovered. The survey of writing of this examination will assist the scientist with distinguishing the variables affecting the danger and return and furthermore the significance of methodical danger in assessing speculation choice. Since the idea of precise danger originates from created market and creating market the writing survey covers the examination regarding unfamiliar setting just as Indian setting [2, 3].

*Author for Correspondence
Rahul
E-mail: rahulchinna198@gmail.com

[1]Student, Department of Management, KLH Business School, Koneru Lakshmaiah Education Foundation Deemed to be University, Hyderabad, Telangana, India

Received Date: September 23, 2021
Accepted Date: October 04, 2021
Published Date: November 07, 2021

Citation: Rahul. A Study on Risk and Return Analysis of Select Public Sector Banks. NOLEGEIN Journal of Business Risk Management. 2021; 4(2): 42–49p.

REVIEW OF LITERATURE

Baesel (1971) showed that the individual security betas were steady on the ground of expanding the length of assessment period. He demonstrated that beta strength has shown greater improvement when the assessment time frame was bigger [4].

A.K. Dubey (2014) made an endeavor in breaking down time scale reliance of orderly danger of stocks for a developing business sector economy. The consequence of the investigation showed that the betas were pretty much instable as far as various exchanging stocks at various speculation skylines. The investigation was attempted based on the attributes of the heterogeneous financial backers with various venture skylines. In this examination, it was focused on that holding various stocks by exchanging classes fluctuated because of the time skyline of speculation and view of the danger. The investigation accentuated the states of business are extremely liquid for example the pace of progress happens in the period of association as quick as could really be expected [5].

Dr. K.V. Ramanathan and Dr. M. Muthu Gopalakrishnan (2013) analyzed the instability in Indian financial exchange during the post and pre-downturn time frame. The examination reasoned that the offer costs are continually fluctuating because of different components. The unpredictability is the most concerning issue for exchanging the securities exchange. Understanding the recorded unpredictability is significant for one who puts resources into the securities exchange. The examination has made an endeavor to look at instability of sectorial records recorded in NSE [6, 7].

Kirti Arekar and Rinku Jain (2011) looked at the market execution during 2007–2010 with the major abroad business sectors. The examination considered the market execution of various areas for example Data Innovation and saving money regarding the market. Further they dissected which area is affected most during the downturn time frame. At last, they deciphered what area performing great and terrible at Worldwide downturn period and which area has performed well after the downturn [8].

Alexander & Chervary (1980) Showed the outcome against Baesel to demonstrate that the limit betas were less steady contrasted with inside beta. They likewise negated the perspective on Baesel that more drawn out the time frame would expand the beta dependability. They set forth the outcome so that not just the time frame decided the security of beta yet in addition the beta was controlled by the extent of portfolio [9].

K.V. Aruna Shanta (2010) analyzed the solidness of beta during the time in various market stages from 2000 to 2009. The investigation assessed the beta for five sub times of two years each and one bullish market stage with one more bearish market stage. The strength was tried with the assistance of time variable relapse and faker variable relapse. The outcome showed that in the majority of the cases for example 80% of the contents upheld the invalid speculation prompting induce that strength of beta over the long run and market stages was not dismissed by both of the econometric strategies [10]. From the investigation, it is perceived there is less ground to presume that beta qualities are not steady throughout the time and market stages in Sri Lankan Securities exchange. Sharma and Sharma (2009) inspected whether major examination signals (conventional and development) on development stock separate the limit entertainers. The investigation reasoned that the conventional technique flags association's benefit, money execution, working effectiveness and liquidity and development signals related with the company's profit, development, innovative work, capital consumption and publicizing use. At long last, the examination presumes that key investigation dependent on development signals is exceptionally fruitful in separating firms [11].

OBJECTIVES OF THE STUDY

- To understand the concept of risk and return of a security.
- To compare the risk and return of selected public sector banks.
- To offer valid suggestion and recommendation based on the findings of the study.

- To study the stock price fluctuations of the selected public sector banks during 2017–2020.
- To make a comparative study among the selected companies with Nifty during the period of the study.

NEED FOR THE STUDY

Stock market is one of the highest Return investment avenues with High Risk. To overcome some sort of Risk we have to analyze the performance of company to invest in it. So, this study would help in analyzing and understanding the performance level of few of the stocks in this particular public sector banks.

DATA COLLECTION

Secondary Data Source

Secondary data are those that have already been collected by others. These are usually available in journals, periodicals, dailies, research, publications; official records research papers of educational Institutions, organizations and various government official websites etc.

In this research data is collected from official website of:

- Money control
- NSE
- Websites
    - www.moneycontrol.com
    - www.yahoofinance.com
    - www.nseindia.com

Data Size

The study was taken on 5 public sector banks.

Data Tools Used

- Standard deviation
- Beta calculation
- Average return

Tools Used for Analysis

The data collected is analysed with the help of mean, beta, standard deviation and variance.

To know the average rate of return (R) the following has been used

Where,

= Sum of rate of return

= Total number of months

The next step is to know the risk associating with each selected security. For such, the following formula is applied.

Standard deviation (SD) = √variance

$-\quad ( )$

Where,

$( )$ = squares of difference between sample and mean n =

number of sample observations.

$$( )^{( )( )}\frac{\qquad}{( )}$$

Where
N = number of observations,
X = nifty returns,
Y = returns of respective companies

PERIOD OF STUDY

Data analysis is done for a period of 3 financial years (2017–19 to 2019–20).

SCOPE OF THE STUDY

The scope of the study is of 5 public sector banks: Canara Bank, Syndicate Bank, Andhra Bank, Vijaya Bank, State Bank of India

Interpretation (Table 1)

- In the month of September 2018, Canara Bank yields the highest average return of 31.68831.
- In the month of May 2017, Canara Bank yields the lowest average return of -18.8642.

Interpretation (Table 2)

- In the month of September 2018, Syndicate Bank yields the highest average return of 32.42376.
- In the month of January 2017, Syndicate Bank yields the lowest average return of -24.5199.

Interpretation (Table 3)

- In the month of March 2018, Andhra Bank yields the highest average return of 18.18182.
- In the month of December 2017, Andhra Bank yields the lowest average return of -21.3424.

Table 1. Data Analysis and Interpretation of Canara Bank

Date	Open	Close	Return Y	Date	Open	Close	Return Y
3/31/2017	356.478	368.004	3.233299	9/30/2018	303.468	305.17	0.560859
4/30/2017	368.004	333.961	-9.25071	10/31/2018	305.949	309.693	1.223729
5/31/2017	333.086	270.252	-18.8642	11/30/2018	312.319	255.711	-18.1251
6/30/2017	271.371	269.036	-0.86044	12/31/2018	258.532	275.991	6.753123
7/31/2017	268.453	278.325	3.67737	1/31/2019	277.207	295.55	6.617072
8/31/2017	275.456	272.149	-1.20056	2/28/2019	296.1	302.75	2.245861
9/30/2017	275.553	269.328	-2.2591	3/31/2019	303	357.55	18.0033
10/31/2017	269.231	264.173	-1.87868	4/30/2019	357.55	350.9	-1.85988
11/30/2017	266.021	226.58	-14.8263	5/31/2019	350.9	328.65	-6.34084
12/31/2017	226.531	188.695	-16.7023	6/30/2019	328.8	368.1	11.95256
1/31/2018	189.668	154.117	-18.7438	7/31/2019	369.8	339.75	-8.12601
2/29/2018	154.944	184.853	19.3031	8/31/2019	343	308	-10.2041
3/31/2018	183.832	200.318	8.967966	9/30/2019	308	405.6	31.68831
4/30/2018	199.394	200.756	0.68307	10/31/2019	410	370.1	-9.73171
5/31/2018	201.34	212.476	5.530944	11/30/2019	374.5	360.4	-3.76502
6/30/2018	213.887	243.699	13.93821	12/31/2019	361.7	341.35	-5.62621
7/31/2018	245.498	272.878	11.15284	1/31/2020	342	299.25	-12.5
8/31/2018	272.343	299.918	10.1251	2/28/2020	290.05	263.9	-9.01569

Table 2. Data Analysis and Interpretation of Syndicate Bank

Date	Open	Close	Return Y	Date	Open	Close	Return Y
3/31/2017	100.8	99.3	-1.4881	9/30/2018	74	73.7	-0.40541
4/30/2017	99.3	116.5	17.32125	10/31/2018	73.6	67.25	-8.62771
5/31/2017	116.5	98.25	-15.6652	11/30/2018	67.7	61.55	-9.08419
6/30/2017	98.25	94.95	-3.35878	12/31/2018	61.9	66.85	7.996762
7/31/2017	95.4	85.55	-10.3249	1/31/2019	67.5	69.5	2.962963
8/31/2017	84.9	82.45	-2.88575	2/28/2019	69.75	71.25	2.150538
9/30/2017	82.95	93.9	13.20073	3/31/2019	71.55	82.75	15.65338
10/31/2017	94	96	2.12766	4/30/2019	82.75	76.95	-7.00907
11/30/2017	96.15	87.75	-8.73635	5/31/2019	77.15	73.5	-4.73105
12/31/2017	88.15	67.3	-23.6529	6/30/2019	73.85	73.7	-0.20312
1/31/2018	67.7	51.1	-24.5199	7/31/2019	74	64.55	-12.7703
2/29/2018	51.65	67.65	30.97773	8/31/2019	64.75	62.3	-3.78379
3/31/2018	67.5	69.65	3.185188	9/30/2019	62.3	82.5	32.42376
4/30/2018	69	67.1	-2.75363	10/31/2019	90.75	92.75	2.203857
5/31/2018	67	72.8	8.656721	11/30/2019	93.05	80.15	-13.8635
6/30/2018	73.5	76.55	4.149664	12/31/2019	80.7	72.55	-10.0991
7/31/2018	77.1	77.1	0	1/31/2020	73	61.1	-16.3014
8/31/2018	77.1	73.15	-5.12321	2/28/2020	60.7	55.45	-8.64909

Table 3. Data Analysis and Interpretation of Andhra Bank

Date	Open	Close	Return Y	Date	Open	Close	Return Y
3/31/2017	78.35	76.4	-2.48883	9/30/2018	57	56.35	-1.14035
4/30/2017	76.4	80.1	4.842927	10/31/2018	56.5	51.85	-8.23009
5/31/2017	80.1	68	-15.1061	11/30/2018	52.1	47.45	-8.92514
6/30/2017	68	74.1	8.970585	12/31/2018	47.6	50.65	6.407572
7/31/2017	74.85	63.45	-15.2305	1/31/2019	50.75	56.25	10.83744
8/31/2017	66.9	67	0.149474	2/28/2019	56.75	57.95	2.114539
9/30/2017	67.75	69.8	3.025835	3/31/2019	58.3	68.9	18.18182
10/31/2017	65.15	69.1	6.062925	4/30/2019	68.9	58.6	-14.9492
11/30/2017	69.35	65.65	-5.33525	5/31/2019	58.2	54.5	-6.35739
12/31/2017	66.3	52.15	-21.3424	6/30/2019	54.6	57.15	4.670337
1/31/2018	52.5	46.1	-12.1905	7/31/2019	57.35	52.35	-8.7184
2/29/2018	46.55	52.25	12.2449	8/31/2019	52.4	55.95	6.774807
3/31/2018	52.15	55.25	5.944387	9/30/2019	55.95	66.05	18.05184
4/30/2018	55	50.25	-8.63636	10/31/2019	67.95	62.7	-7.72626
5/31/2018	50.25	57.8	15.02487	11/30/2019	62.7	58.15	-7.25678
6/30/2018	58.2	60.15	3.350517	12/31/2019	58.4	57.3	-1.88357
7/31/2018	60.3	60.35	0.082917	1/31/2020	52.55	46.05	-12.3692
8/31/2018	60.2	56.4	-6.31229	2/28/2020	45.25	41.6	-8.0663

Interpretation (Table 4)

- In the month of May 2018, Vijaya Bank yields the highest average return of 22.71242.
- In the month of August 2018, Vijaya Bank yields the lowest average return of -20.4215.

Interpretation (Table 5)

- In the month of February 2018, SBI yields the highest average return of 21.02804.
- In the month of December 2017, SBI yields the lowest average return of -20.0444

Table 4. Data Analysis and Interpretation of Vijaya Bank

Date	Open	Close	Return Y	Date	Open	Close	Return Y
3/31/2017	46.5	45.45	-2.25806	9/30/2018	40.5	44.25	9.259259
4/30/2017	45.45	46.35	1.980191	10/31/2018	43.95	44.5	1.25142
5/31/2017	46.25	40.05	-13.4054	11/30/2018	44.65	47.45	6.270994
6/30/2017	40.15	40.85	1.743452	12/31/2018	47.35	52.4	10.66527
7/31/2017	41.2	35.4	-14.0777	1/31/2019	52.5	70.35	34
8/31/2017	35.9	34.3	-4.45683	2/28/2019	71	68.75	-3.16901
9/30/2017	34.5	36	4.347826	3/31/2019	68.75	81.9	19.12728
10/31/2017	36.9	34.55	-6.36857	4/30/2019	81.9	75.15	-8.24176
11/30/2017	34.8	34.05	-2.15517	5/31/2019	75.3	72.35	-3.91767
12/31/2017	34.3	31.1	-9.32944	6/30/2019	72.45	70	-3.38164
1/31/2018	31.2	31.1	-0.32052	7/31/2019	70.4	68.15	-3.19602
2/29/2018	31.8	31.35	-1.41509	8/31/2019	68.8	54.75	-20.4215
3/31/2018	31.5	31.7	0.634924	9/30/2019	54.75	65.95	20.45662
4/30/2018	31.1	30.35	-2.41158	10/31/2019	66.65	70.7	6.076511
5/31/2018	30.6	37.55	22.71242	11/30/2019	71	68.35	-3.7324
6/30/2018	37.65	41.3	9.694547	12/31/2019	68.4	63.85	-6.65205
7/31/2018	41.3	38.6	-6.53753	1/31/2020	64	59.9	-6.40625
8/31/2018	38.9	40.7	4.627247	2/28/2020	59.3	52.05	-12.226

Table 5. Data Analysis and Interpretation of State Bank of India

Date	Open	Close	Return Y	Date	Open	Close	Return Y
3/31/2017	266.65	269.75	1.162575	9/30/2018	253	258	1.976285
4/30/2017	269.75	278.15	3.113992	10/31/2018	257	258.35	0.525294
5/31/2017	278.65	262.75	-5.70608	11/30/2018	259.65	250.2	-3.63951
6/30/2017	263.1	270.05	2.641574	12/31/2018	252.5	260.35	3.108913
7/31/2017	270	247.35	-8.38889	1/31/2019	262	269.2	2.748096
8/31/2017	244.85	237.15	-3.14479	2/28/2019	270	293.4	8.666664
9/30/2017	241.2	237.05	-1.72056	3/31/2019	294.8	289.75	-1.71302
10/31/2017	238	248.65	4.474787	4/30/2019	289.75	288.3	-0.50044
11/30/2017	250.85	224.45	-10.5242	5/31/2019	287.95	273.65	-4.96615
12/31/2017	225	179.9	-20.0444	6/30/2019	274.1	312.5	14.00948
1/31/2018	181.95	158.75	-12.7508	7/31/2019	314	277.75	-11.5446
2/29/2018	160.5	194.25	21.02804	8/31/2019	277.65	253.85	-8.57194
3/31/2018	193.7	189	-2.42643	9/30/2019	253.85	305.8	20.46483
4/30/2018	187.6	204.95	9.248396	10/31/2019	309.4	320.35	3.539112
5/31/2018	205.95	218.8	6.239381	11/30/2019	321.5	309.9	-3.60809
6/30/2018	220.8	229.4	3.894923	12/31/2019	310.6	313.25	0.853185
7/31/2018	230.8	252.5	9.402078	1/31/2020	316.9	268	-15.4307
8/31/2018	251.95	251.25	-0.27783	2/28/2020	266.3	249.9	-6.15847

Interpretation (Table 6)

- Vijaya Bank yields the highest return of 0.521327 followed by the SBI with -0.11165.
- Syndicate Bank yields the lowest return of -1.4174.
- Syndicate Bank has the highest risk of 12.3967 followed by the Canara Bank with 11.44282.
- SBI has the lowest risk of 8.766129.
- Syndicate Bank has the highest beta of 2.029461 and Vijaya Bank has the lowest risk of 0.711938.

Table 6. Comparison of Risk, Return and Beta

Companies	Returns	Risk	Beta
Canara Bank	-0.39511	11.44282	1.596573
Syndicate Bank	-1.4174	12.3967	2.029461
Andhra Bank	-1.26464	9.771838	1.569044
Vijaya Bank	0.521327	10.84206	0.711938
State Bank Of India	-0.11165	8.766129	1.653478

FINDINGS

From the above study, there are some findings as follows.

Return and Risk

- The Vijaya Bank yields highest return of 0.521327 and Syndicate Bank yields the lowest return of -1.4174.
- The Syndicate Bank has highest risk of 12.3967 and State Bank of India has lowest risk of 8.766129.

Beta

- From the above study, it reveals that Syndicate Bank has highest beta of 2.049261.
- The Vijaya Bank has lowest beta of 0.711938.

SUGGESTIONS

- From the above calculations
  - As per the calculations Vijaya Bank yields the highest average return of 0.521327 with the risk of 10.84206. So, this bank is best to invest.
  - Syndicate Bank yields the lowest average returns of -1.4174 with the risk of 12.3967.so better not to invest in this bank.
  - Investors who wish to take less risk may invest in State Bank of India where the average returns of -0.11165.

CONCLUSIONS

From the study of 5 public sector banks during 2017–18 the public sector banks performed well. Vijaya Bank performed very well when compared to other banks. Investment in Vijaya Bank is best when compared to other public sector banks like Canara Bank, Syndicate Bank, Andhra Bank, SBI.

REFERENCES

1. Ramdani, A., Hendiani, A.T., Nurfitriani, F., Sondari, S., & Utami, E.M. (2020). The Comparative Analysis of Risk and Returns Convetional Mutual Fund and Sharia Mutual Fund. PalArch's Journal of Archaeology of Egypt/Egyptology, 17 (4), 3500–3511.
2. Harrison, J.S., Thurgood, G.R., Boivie, S., & Pfarrer, M.D. (2020). Perception is reality: How ceos' observed personality influences market perceptions of firm risk and shareholder returns. Academy of Management Journal, 63 (4), 1166–1195.
3. Kevin. S, Portfolio Management, Printice Hall of India Pvt. Ltd, New Delhi, 2003.

4. Troster, V., Tiwari, A.K., Shahbaz, M., & Macedo, D.N. (2019). Bitcoin returns and risk: A general GARCH and GAS analysis. Finance Research Letters, 30, 187–193.
5. Prasanthi, B.G., Lakshmi, B.G., Abraham, M.K., & AL, M.L. (2020). A Empirical Study on Risk and Returns of HDFC and ICICI Banks. PalArch's Journal of Archaeology of Egypt/Egyptology, 17 (6), 13214–13223.
6. Tan, Z., Huang, Y., & Xiao, B. (2021). Value at risk and returns of crypto currencies before and after the crash: long-run relations and fractional cointegration. Research in International Business and Finance, 56, 101347.
7. Gariba, F., Amidu, M., & Coffie, W. (2018). The risk and returns effects of corporate governance and funding strategy of banks in Ghana. African Journal of Accounting, Auditing and Finance, 6 (2), 154–175.
8. Chiang, T.C. (2019). Empirical analysis of intertemporal relations between downside risks and expected returns—Evidence from Asian markets. Research in International Business and Finance, 47, 264–278.
9. Nguyen, S.N., Dinh, P.T.M., Vu, P.H., & Nguyen, P.A. (2019). The Impact of Futures Contracts On Risk and Returns of the VN30 Index in Vietnam. Central Asian Review of Economics and Policy, 1 (1), 48–59.
10. Dr. Prasanna Chandra, Investment Analysis and Portfolio Management, Tata McGraw-Hill Publishing Company Limited, 2004.
11. PandianPunithavathy, Meera E, Machiraju H.R, Investment Management, Vikas Publishing House Pvt Ltd, New Delhi, 2011.

