Exploratory Study and Analysis of Bank Index with Other Sectoral Indices of NSE

Dr.M. Pushpalatha[1], Narmadha N[2], Nithish Sam Dev V[3],Praveen K.S[4], Ajay Sankar J[5]

[1] *Assistant Professor of Commerce, Sri Krishna Arts and Science College, Coimbatore-08*

[2,3,5]*Sri Krishna Arts and   Science College, Coimbatore-08. Tamilnadu*

[4]*Department of Commerce, Sri Krishna Arts and   Science College, Coimbatore-08. Tamilnadu*

Abstract

Financial exchange is one of the most adaptable divisions in money related framework, Stock Market assumes a significant job in financial advancement. Securities exchange is a focus where offers are given to the speculators to buy and sell their Shares, Bonds and Debentures. Stock Market is a stage for exchanging different protections and subsidiaries with no obstructions.

This article is an endeavor to quantify the instability of the Nifty Bank and Other Sectoral Indices of NSE which are considered volatile. The key job in estimating the hazard return tradeoffs, such huge numbers of variables that make the securities exchange unstable, one is interested to know the instability of the securities exchange in India is in which is unpredictable because of the various divisions in India, in this case Nifty Bank and other sectoral indices assessing instability empowers the valuing of stocks furthermore, understanding the unpredictability helps to take a good decision on the part of investors.

Assessing unpredictability empowers the valuing of protections and, understanding securities exchange instability or individual stock value unpredictability empowers great choices with respect to financial specialists. Financial specialists who are disinclined would not be glad to put resources into an exceptionally fluctuating stock, while those with a hunger for danger would joyfully put resources into a profoundly unstable market. Putting resources into equity showcase is constantly a difficult procedure and it requires some measure of insight and data base.

Financial exchange Indices are going about as or indicator to gauge the exhibition of offers from different divisions. Every sectoral index is showing the behavioral pattern of stocks of the same sector and the behavioral pattern of one sector may likely impact on other sectors too. Normally performance of Nifty Bank will influence the performance of Other Sectoral Indices. Hence, an attempt is made in this study to know the nature and extent of influence by Nifty Bank with Other Sectoral Indices during the Period.Pearsonian correlation coefficient technique is applied to find the nature and extent of influence by

Nifty Bank and Other Sectoral Indices, it was found that there is a positive correlation between Nifty Bank and most of the Other sectoral indices

Keywords: Stock Market, Nifty Bank, Other Sectoral Indices, National Stock Exchange

Introduction

At this in spite of time for the moment many investors are attracted towards investing in the stock market because of its growth rate and high yielding. As there are many ways of investment techniques such as bank deposits, insurance, real estate etc. Stock markets are having a significant role in attracting the investors when compared to other investment alternatives. National Stock Exchange of India is one of the leading stock trades, established in 1992 with its headquarters located at Mumbai.

Indian capital market is a vigorous market which has experienced intense modifications Securities exchanges are neither open and straightforward than any other time at recent memory. Instability regularly alludes to the measure of vulnerability or hazard identified with the size of changes in a security's worth. Higher instability implies that a security's worth can potentially be spread out over a bigger scope of qualities. This implies the cost of the security can change significantly over a brief

time frame period in either bearing. A lower instability implies that a security's worth doesn't change drastically, it will in general be all the more consistent. Given this reason, the Nifty bank list is picked right now to check whether the developments of the financial area in are in pair to national stock developments which are reflected in Nifty other sector indices. According to current date there are 13 Escorial indices in NSE. Therefore. Study   performance of these Nifty banks and other sector which influence the market or on the other hand pair up in the market. Right now the Nifty Bank record is considered to mirror other sector index in NSE.

At present National Stock Exchange of India is having 1696 listings of different sectors. It contains various indices like broad market indices, sectorial lists, technique files, thematic files and fixed salary files. In sectoral files we have many sectors such as

Banking, Automobiles, Consumer durables, Financial Service, FMCG, IT, Media, Metal, Oil &Gas, Pharma, PVT bank, PSU bank, and Reality, Nifty 500Industry indices. For complete analysis of sector-wise market, it is important to analyze and compare the same with the market index. Clever Auto record demonstrates the presentation of vehicles part. It comprises 13 organizations recorded right now. Clever Consumer Durables Index proposes the reflection to the introduction of stocks having a spot with the Consumer Durables industry. Nifty Consumer Durable Index includes a cutoff of 15 stocks which are recorded in National Stock Exchange Nifty Financial Service demonstrates 20 stocks which are recorded on National Stock Exchange, Nifty FMCG shows execution of 15 FMCG segment values.

Clever Bank list incorporates 12 values of banking part exchanging on NSE. IT Companies right now which have over portion of their turnover from the IT connected deeds like IT Infrastructure, IT Education and Software Training, Telecommunication Services and Networking Infrastructure, Software Development, Hardware Manufacturer's, Vending, Support and Maintenance. Pharmaceuticals region is another vital area are Indian associations have made an overall brand used for themselves other than programming, Nifty Pharma incorporates the pharmaceutical part values and NSE Media incorporates values of media and amusement division. Nifty Private Bank Index contains 10 stocks of National Stock Exchange are related on the nifty indices of bank index. Indian budgetary structure, accepting the prices of strong credit off take and upgraded danger of board practices. PSU banks' not kidding edge against their private accomplices in modifying customers both retail and corporate at worldwide and family unit markets. Seeing these fluctuating components of Indian money related industry, NSE Indices has made Nifty PSU Bank Index to get the introduction of the PSU banks. NSE Indices have developed the Nifty Realty Index to synergize the rising open entryways close by their Index inclination making new pursuit streets for money related options. Cunning 500 Index is incorporated into different Industry packs which are autonomously kept up by NSE Indices. Nifty500 Industry records are derived out of the Nifty 500 rundown. Nifty500 Industry Indices are figured using free float to promote capitalization weighted system has been effect from October 11,2010All the group oral lists reflect the direct execution of particular territory's stocks. A study covers the relative execution of different faction oral files of National Stock Exchange.

Review Of Literature

Shanmugasundram and Benedict (2013) drove an assessment on the flimsiness of the sectoral records concerning NSE. At present time peril relationship in different time breaks of the CNX NIFTY rundown and five sectoral records including Auto list, Bank document, FMCG list, Infrastructure rundown and IT list were examined. The results of the assessment didn't reinforce any colossal

complexity over the risk of sectoral records and NIFTY. Swarna Lakshmi (2013) used the ARCH model to check the insecurity in NIFTY and other 11 select sectoral records in India for the period 2008 to 2013. An end was made on the 11 sections unusualness in assessment with the NIFTY and it was found that among the 11 regions, the realty division was the most insecure than some other portion. The paper moreover has discussed on the reasons behind the equivalent. Piyush Kumar Singh and Venkata Vijay Kumar (2011) 7 to understand the advancement of sectoral returns and their duties towards the Sensex returns. Assessment could find that the Sensex returns could be explained with the help of picked sectoral list of returns only and there a tremendous association between the different regions' duty to the last Sensex returns. Anbukarasi and Nithya (2014) made an undertaking to Point out the association between's select stock records and the NIFTY from January 2013 to June 2014. It was originating that there was a vital association regardless of the picked records from Metal, Pharma, Bank and Realty documents. It was similarly assumed that the Pharma and Bank records firmly influence NIFTY advancements. William and Vimala (2015) assessed the capriciousness of significant worth offer expense of five select private banks recorded in the National Stock Exchange. Considering that banks expect a noteworthy activity in the economy of India, undertaking was made to separate the market capriciousness of the picked banks by using mean, standard deviation and beta characteristics using the opening and closing expenses. It was contemplated that the eccentrics of the end costs was similar for all the five banks decided for the examination.

NEED FOR THE STUDY: Presently days the Indian securities exchange is bit by bit picking up its power. In any case, a large portion of the retail financial specialists have very little thought regarding where and how to put and furthermore in which segment to contribute, the majority of the studies in the above literature have discovered the information that the stocks of banking sector are in performance a leading role in the market movement and influence the performance of stocks of other sectors too. But no study has been conducted so far by considering the Bank Nifty Index as a base to compare the nature and extent of relationship with the index of other sectors furthermore, to discover the nature and degree of connection among revenues and unpredictability of the Bank Nifty Index and the Sectorial files of NSE will be dissected and the degree of instability will be inspected. Thus the analyst has taken this subject to know the nature and degree of impact by the Bank Nifty Index with the other sectoral lists of NSE Profits of the Bank NIFTY record and the other area file will be investigated so that the degree of instability likewise will be inspected.

Focus of the Study

❖ Goal of this study is complete to discover the nature and degree of linking amongst returns and unpredictability of the Bank Nifty Index and Sectorial lists of NSE will be investigated through which the degree of instability will be analyzed.

❖ To identity the nature and level of association so that the presentation of Bank Nifty Index and execution of Other Sectoral Indices of National Stock Exchange can be clearly understood.

Research Methodology

Sources of Data

Essential information is the information which is gathered legitimately through in examination. Right now, essential information is utilized. Auxiliary information is the information gathered from

different outside sources. In this analysis, majority of the data is composed from www.nseindia.com. Data which was collected is analysed for 1 year after which values collected.

Time of Study: Data used for the examination is basically assistant in nature where the ordinary closing of the Nifty Bank Index and other sectorial record one and one and the closing expenses of stock is used. Consistently closing expenses have been accumulated from the official site of National stock Exchange (NSE) for a period of one year from 1 Jan 2020 to 31st Dec 2020.

Tools Used for Analysis: For information and examination into the informative measurements with respect to day by day shutting costs, normal, high and low and the everyday returns are utilized for calculations. Unpredictability is clarified utilizing Standard Deviation and to dissect the performance of the sectoral indices with the nifty bank index, the Correlation Coefficient Technique is employed.

Sample Design: Following sectoral indices are considered for the analysis-

Results And Analysis

Exploratory Statistics of Nifty Bank and Other Sectoral Indices

S.No	Sectoral indices of Nifty
1	Bank
2	Auto Index
3	Consumer durable index
4	Financial service index
5	FMCG index
6	IT index
7	Media index
8	Metal Index
9	Oil &Gas index
10	Pharma index
11	Private bank index
12	PSU bank index
13	Realty index

Data relating to the step by step closing estimation of record of 13 stocks for the period between were removed from 1stJan 2020 to 30thDec 2020. NSE site, the mean and standard deviation has appeared. The table one underneath shows the step by step high, low, ordinary worth offer expense and standard deviation of the 13 bank record stocks and moreover the most important, least typical characteristics of standard deviation of the NIFTY Index.

Table-1 Shutting Nifty Bank Index and Other Sectoral   Indices: Highest, Lowest, Mean Qualities and Standard Deviation for the period January 2020   -December2020

Name of Index/Stock	CH	CL	CM	SD
Bank	32412	26573	29360.09	1676.557
Auto	9182	6764	8014.22	571.203
Consumer Durable	17108	13422	15292.08	969.368
Financial Services	14679	14679	12788.56	923.277
FMCG	32536	28257	30032.79	886.121
IT	16705	14146	15564.67	475.489
Media	2574	1707	2088.52	262.14
Metal	3150	2204	29360.09	252.510

Oil &Gas	5394	4314	4936.15	292.49
Pharma	9462	7149	8365.79	576.118
Private Bank	17888	14825	16420.76	849.127
PSU Bank	3150	2204	2817.36	340.253
Realty	299	221	262.38	19.033

Table 1 shows that the most elevated estimation of the Nifty Bank record for the period between 1st Jan 2020 to 30thDec 2020 was 32412 with the least being 26573 and a mean of 29360.09 which a standard deviation of 1676.557. Among the Other sectoral lists file. Auto the most noteworthy 9182 with the least being 6764 and a mean of 571.203 with a standard deviation of 571.203. Buyer Durable the most extreme 13422 with the least being 13422 a mean of 15292.08 and a standard deviation of969.368. Consumer Durable reflecting highest fluctuation in price This could represent High Volatility in this sector during the study period from Jan –Dec 2020. Metal has the least standarddeviation252.510ofreflectingless volatility followed by Media262.4 and Realty19.033.**Table 2**

Sectoral Indices	X-Average	Y-Average	Deviation Square of X	Deviation Square of Y	dx.dy	Correlation co-efficient
Auto	29360.09	8014.22	79610665.54	29888204.02	79610665.54	326273.219
ConsumerDurable	29360.09	15292.08	296063765.1	229280584.4	296063765.1	1213376.087
Financial Services	29360.09	12788.56	343067121	207995524.3	343067121	1406012.791
FMCG	29360.09	30032.79	148095713.9	191591391	148095713.9	606949.647
IT	29360.09	15564.67	141771.068	55165949.88	141771.068	141771.068
Media	29360.09	2088.52	-30613051.92	16767177.17	-30613051.92	-125463.328
Metal	29360.09	29360.09	18060176.14	15557810	18060176.14	2810844.11

Oil &Gas	29360.09	4936.15	96825905.53	20874869.41	96825905.53	396827.482
Pharma	29360.09	8365.79	-40958236.21	80986402.38	-40958236.21	-167861.624
Private Bank	29360.09	16420.76	340063320.6	175927903.3	340063320.6	1393702.134
PSU Bank	29360.09	2817.36	20518490.65	28248354.67	20518490.65	84092.175
Realty	29360.09	262.38	6936710.363	88391.453	6936710.363	28429.141

RELATIONSHIP BETWEEN BANK NIFTY AND OTHER SECTORAL INDICES DURING JAN2020_DEC 2020 To analyses the indices movements during the stock market movement data was collected from 1stJan 2020 to 30thDec 2020, the period when Nifty Bank Index peak with 32412 to its low was 26573. To achieve more accuracy, all observations during the above mentioned period (the daily closing price of all 245 trading days) has been taken for consideration to calculate the Coefficient of Correlation.

Table- 2 Relationship between Nifty Bank and Other Sectoral Indices

clearly indicates that the calculated value of Correlation Coefficient for all the indices are positive during the market movement except the Media Sector and Phama Sector it is the only sectoral index having opposite relationship with the movements of Nifty Bank Index (calculated value Media r is-125463.328, Pharma r is-167861.624. Consequently, the invalid speculation (H0) is dismissed and it is demonstrated that there is sure connection between the developments of Nifty Bank Index with practically all different lists of NSE.

Conclusion

This paper will introduce and specifically state the nature, degree of connection among returns, instability of the Nifty Bank and other sectoral records additionally to see whether the stock showing up in the Nifty Bank file which are pretty much unpredictable than the other sectoral files. In India Banks are as in any nation are a profoundly controlled which large scale level choices of the economy can directly affect the financial part. Financial exchanges by and large are viewed as unstable and unpredictability assumes a key job in estimating the hazard – return exchange offs. While there are such a significant number of elements that make the financial exchange unstable, this examination endeavored to gauge the instability of the Nifty bank to contrast it and that of other sectoral lists. Assessing instability empowers the estimating of protections, understanding financial exchange unpredictability or individual stock value unpredictability empowers great choices with respect to speculators. Financial specialists who are chance unwilling would not be glad to put resources into a profoundly fluctuating stock, though those with a hunger for danger would

cheerfully put resources into an exceptionally unstable market. From the outcomes and discoveries of this examination, one can relate to the Nifty Bank Index is decidedly impacting practically all the sectoral files of NSE. Thus before making any investments in equity market, the investing community must look into the behavioral pattern of bank as they influence the behavior of other sectoral stocks too and do investments in view of that.

Reference:

Piyush Kumar Singh &VenkataVijayaKumar [2011], "A Study of Return, Liquidity of Sectoral Indices, Market Index Return of Indian Financial Market [BSE]". Universal Journal of Research in Commerce and Management, vol. 2 [6], p.p.[01-08]

Shanmugasundram.G, and Benedict. [2013]. Unpredictability of the Indian Sectoral Indices - A Study regarding National Stock Exchange. Global Journal of Marketing, Financial Services and Management Research.

Swarna Lakshmi, P. [2013]. Unpredictability Patterns in various sectoral indices in Indian stock

Market. Worldwide Journal of Management and Business Studies.

Anbukarasi, M., and Nithya, B. [2013, August]. Return and volatility analysis of the Indian sectoral indices-with special reference to National Stock Exchange. EPRA International Journal of Economic and Business Review, 2[8].

William, A. J., and Vimala, T. [2015]. A Study on Equity Share Price Volatility of Selected Private Banks in National Stock Exchange. Effect: International Journal of Research in Applied, Natural and Social Sciences, [88-95].

www.nseindia.com

Authors Profile

First Author: Dr.M.Pushpalatha.,

M.Com., M.Phil., NET., MBA., Ph.D.,

Assistant Professor of Commerce,

Sri Krishna Arts and Science College, Coimbatore-08. Tamilnadu.25-Paper Presented in various National, Internationaljournal,7FacultyDevelopmentProgramme,12 Workshop, symposium &Webinars Attended,4 Online Course Completed,15 Publications in various international journal and 1 journal published in Scopus.

Second Author:

NarmadhaN, M. Com IB

Sri Krishna Arts and Science College, Coimbatore-08. Tamilnadu.

Third Author:

Nithish Sam Dev, V, M. Com IB

Sri Krishna Arts and Science College, Coimbatore-08. Tamilnadu.

Fourth Author:

Praveen K.S, M. Com IB.,

Department of Commerce, Sri Krishna Arts and   Science College, Coimbatore-08. Tamilnadu.

Fifth Author:

Ajay Sankar J, M. Com IB.,

Sri Krishna Arts and   Science College, Coimbatore-08. Tamilnadu.