INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

IJRCM

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   REVIEW OF LITERATURE

   NEED/IMPORTANCE OF THE STUDY

   STATEMENT OF THE PROBLEM

   OBJECTIVES

   HYPOTHESES

   RESEARCH METHODOLOGY

   RESULTS & DISCUSSION

   FINDINGS

   RECOMMENDATIONS/SUGGESTIONS

   CONCLUSIONS

   SCOPE FOR FURTHER RESEARCH

   ACKNOWLEDGMENTS

   REFERENCES

   APPENDIX/ANNEXURE

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- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, KurukshetraUniversity, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

A STUDY ON HOW RISK AND RETURN CREATE AN IMPACT ON PORTFOLIO SELECTION

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ABSTRACT

Investing in securities involves high risk, but they yield high returns as well. In order to diversify the risk we need to build a strong portfolio. This article gives us an overview of how risk and return play a vital role in selecting a portfolio which yields better returns at comparatively lower returns. This also helps to understand the movement stocks in line with the Index and at the same time gives a picture of how stocks react while the market is in a bearish trend.

KEYWORDS

portfolio selection, finance, investment.

INTRODUCTION

The Stock Market lays a platform for the investors who are willing to invest in direct market equities and is the most important component of our Indian Financial system. It facilitates flow of funds from those who have surplus to those who are in need of funds. Individual investors and Institutional investors are the major players of the Stock Market. It is a barometer which indicates the economic growth of a nation. This Market is highly sensitive and volatile. Any changes that occur in other markets create an impact on our Market. This volatility restricts us form predicting the appropriate stock returns and the future outcomes. These variations or fluctuations constitute to another important element called 'Risk'. Most of the investors are Risk averse in nature and they expect better returns for their investments. The term Risk means Uncertainty, and it can be classified under two broad categories: The Systematic Risk and Unsystematic Risk.

SYSTEMATICRISK: The risk inherent to the entire market also known as "un- diversifiable risk" or "market risk." Interest rates, recession and wars all represent sources of systematic risk because they affect the entire market and cannot be avoided through diversification.

UNSYSTEMATICRISK: This risk is due to the influence of internal factors prevailing within an organization. Such factors are normally controllable from an organization's point of view.

Despite, many investors invest in direct equities knowing that the returns are uncertain. But understanding the relationship between Risk and Return is vital for any investor to maximize their returns at a minimal risk.

Markowitz (1952) argues that by combining different set of securities investors can eliminate their unsystematic risk. He also suggests considering the correlation among the securities while selecting a portfolio. On the other hand calculation of beta co-efficient will lay a path to eliminate systematic risk. The Beta coefficient will provide us the reaction of a Stock on the Index volatility. The possible increase or decrease in the price of a stock can be predicted in relation to possible increase or decrease the Index. This study aims to investigate the Impact of return and risk on the index, IT and banking stocks. This study evaluates the investment strategies like buy and hold, and also measures the role of correlation in investment decisions.

REVIEW OF LITERATURE

Scott and Horvath (1980) that positive preference for skewness and negative preference for kurtosis has been postulated in explaining financial behavior of the investors. Skewness preference is one potential explanation for investors holding imperfectly diversified portfolios.

Dittmar (2002) showed that higher expected returns compensate investors bearing systematic variance and kurtosis risks, while investors forego return to benefit from increasing systematic skewness.

Harvey, Liechty, Liechty and Muller (2004) found that international asset holdings can be quite different under third-moment preferences compared to the standard mean-variance case.

Taleb (2004) found that investors commonly engage in negatively skewed stocks. A negatively skewed stock was characterized as a trade that has a large chance of making gains but a very small chance of losing big money.

Levy (2006), suggested that investors would consider the standard deviation while selecting the portfolio for the maximization of returns.

OBJECTIVES OF THIS STUDY

- To compare the performance of IT sector and Banking sector stocks with the performance of the Index or the Market
- To measure the Performance and relation of the stocks among the same industry as well with the index
- To identify the combination of stocks which will provide us a better returns at comparitively

RESEARCH METHODOLOGY

MS Office Excel 2003 was used to calculate the Holding period Return (HRR), Daily return, Standard deviation, correlation coefficient and the Beta Coefficient among the stocks.

Dividend paid during the study period, transaction cost, brokerage, taxes, and other charges were ignored.

PERIOD OF THE STUDY

Period of the study ranges between 20-12-2010 to 11-12-2012. During this period there were 495 trading days in National Stock Exchange India.

SAMPLE

- For this study, the top 9 IT sector and the top 10 Banking sector stocks were taken.
- The S&P CNX NIFTY Index was considered as The Market
- The closing price of the stocks and the closing value of the index on a daily basis was considered for the above mentioned period. These data's were obtained from NSE India website.

TABLE 1: LIST OF IT SECTOR AND BANKING SECTOR STOCKS CONSIDERED FOR DISCUSSION

S.No	IT Stocks	Banking Stocks
1	TCS	HDFC Bank
2	Infosys	ICICI Bank
2	Wipro	AXIS Bank
4	HCL	IDBI
5	Satyam	Canara Bank
6	Tech Mahindra	Indusind Bank
7	Mphasis	Bank of India
8	Hexaware	Punjab National Bank
9	Honeywell	State Bank of India
10		Union Bank of India

TOOLS OF ANALYSIS

HOLDING PERIOD RETURN

The returns obtained from an asset or a stock when it been held with the investor for a specific period of time is known as holding period returns. The holding period returns has been calculated for a period of 3 months,6 months,9 months,12 months,15 months, 18 months,21 months and 24 months.

This return was calculated using the formula **$(T_1 – T_o^{)}/T_o$ * 100**

Where

Ti is the Last day price till which the stock was held and

To is the Beginning Price or the Price at which the stock was bought

DAILY RETURNS

Daily returns on the stocks was calculated using the formula **$((P_1 – P_o)/P_o)$ * 100**

Where P_1 is Today's Price and Po is Yesterday's Price

The average of the Daily returns for the above mentioned period constitutes the Average Daily Returns

COMPOUNDED ANNUAL GROWTH RATE (CAGR)

The **compound annual growth rate (CAGR)** is a useful measure of growth over multiple time periods. It can be thought of as the growth rate that gets you from the initial investment value to the ending investment value if you assume that the investment has been compounding over the time period.

The formula for CAGR is:

CAGR **= $(EV / BV)^{1/n} – 1$**

where:

EV = Investment's ending value

BV = Investment's beginning value

n = Number of periods (months, years, etc.)

STANDARD DEVIATION

It is a widely used measure of variability or diversity used in statistics and probability theory. It shows how much variation or "dispersion" there is from the average (mean, or expected value). It is used to calculate the stock price volatility. It measures how much values are dispersed from the average

SD = √ (ΣX- μ)2/N-1

CORRELATION

It is a measure that determines the degree to which two variable's movements are associated. The correlation coefficient is calculated as:

Correlxy = Cov(x,y)/ Ϭx * ϬY

Correlation is computed into what is known as the correlation coefficient, which ranges between -1 and +1. Perfect positive correlation (a correlation co-efficientof +1) implies that as one security moves, either up or down, the other security will move in lockstep, in the same direction. Alternatively, perfect negative correlation means that if one security moves in either direction the security that is perfectly negatively correlated will move in the opposite direction. If the correlation is 0, the movements of the securities are said to have no correlation; they are completely random. Correlations are used in advanced portfolio management

BETA

Beta is a measure of a stock's volatility in relation to the overall market. The market has a beta of 1.0, and individual stocks are ranked according to how much they deviate from the market. A stock that swings more than the market over time has a beta above 1.0.If a stock moves less than the market, the stock's beta coefficient is less than 1.0. High-beta stocks are supposed to be riskier but provide a potential for higher returns; low-beta stocks pose less risk but also lower returns. In other words, volatility refers to the amount of uncertainty or risk about the degree of changes in a stock's value. A higher volatility means that a stock's value can potentially be spread out over a larger range of values. This means that the price of the security can change dramatically over a short time period in either direction. A lower volatility means that a security's value does not fluctuate dramatically, but changes at a steady pace

RESULTS AND DISCUSSIONS

TABLE 2: DAILY AVERAGE DAILY RETURNS, STANDARD DEVIATION AND COMPOUNDED ANNUAL GROWTH RATE FOR IT SECTOR STOCKS

S&P CNX NIFTY		0.00362	1.16	-0.01
S.No	**IT Stocks**	**Average Daily Returns (%)**	**Standard Deviation (%)**	**CAGR (%)**
1	TCS	0.03	1.80	0.03
2	Infosys	-0.06	1.77	-0.17
3	Wipro	-0.03	1.65	-0.11
4	HCL	0.08	1.92	0.17
5	Satyam	0.13	2.47	0.28
6	Tech Mahindra	0.09	2.14	0.17
7	Mphasis	-0.07	2.52	-0.24
8	Hexaware	0.05	3.66	-0.09
9	Honeywell	0.03	2.42	0.00

TABLE 3: DAILY AVERAGE DAILY RETURNS, STANDARD DEVIATION AND COMPOUNDED ANNUAL GROWTH RATE FOR IT SECTOR STOCKS

S&P CNX NIFTY		0.00362	1.16	-0.01
S.No	**Banking Stock**	**Average Daily Returns (%)**	**Standard Deviation (%)**	**CAGR (%)**
1	HDFC Bank	-0.06	3.90	-0.44
2	ICICI Bank	0.03	2.10	0.01
2	AXIS Bank	0.03	2.29	0.02
4	IDBI	-0.05	2.14	-0.17
5	Canara Bank	-0.03	2.30	-0.14
6	Indusind Bank	0.13	2.08	0.30
7	Bank of India	-0.05	2.32	-0.17
8	Punjab National Bank	-0.06	1.96	-0.17
9	State Bank of India	-0.01	2.09	-0.08
10	Union Bank of India	-0.01	2.46	-0.10

From table 2 & 3 it is inferred that, The Daily Average returns of IT stocks and the Banking stocks were compared with market index, 6 IT stocks and 3 Banking stocks have outperformed the market. The other 3 stocks of IT sector and 7 stocks of banking sector have reported negative returns than the market. The stocks that show a positive indication on daily average returns also show a positive compounded Annual Growth rate. But the CAGR of Honeywell, ICICI Bank and the Axis bank are lower when compared to their daily average returns. Whereas, the other stocks CAGR is high.

TABLE 4: CORRELATION AMONG THE BANKING SECTOR STOCKS WITH THE INDEX AND THE IT SECTOR STOCKS WITH THE INDEX

S.No	Banking Stock	Correlation Coefficient (%)	IT Stocks	Correlation Coefficient (%)
1	HDFC Bank	0.07	TCS	0.08
2	ICICI Bank	0.15	Infosys	0.06
2	AXIS Bank	0.20	Wipro	0.04
4	IDBI	0.13	HCL	0.09
5	Canara Bank	0.12	Satyam	0.07
6	Indusind Bank	0.19	Tech Mahindra	0.15
7	Bank of India	0.13	Mphasis	0.04
8	Punjab National Bank	0.13	Hexaware	0.19
9	State Bank of India	0.12	Honeywell	0.06
10	Union Bank of India	0.14		

The table 4, indicates the correlation coefficient that is, how a security responds to the movement of the Index All the securities have a perfect positive correlation.

TABLE 5: STOCK VOLATILITY WITH REFERENCE TO THE INDEX VOLATILITY

S.No	Banking Stock	Beta Coefficient (%)	IT Stocks	Beta Coefficient (%)
1	HDFC Bank	0.24	TCS	0.12
2	ICICI Bank	0.27	Infosys	0.09
2	AXIS Bank	0.39	Wipro	0.06
4	IDBI	0.23	HCL	0.15
5	Canara Bank	0.24	Satyam	0.14
6	Indusind Bank	0.34	Tech Mahindra	0.28
7	Bank of India	0.26	Mphasis	0.09
8	Punjab ational Bank	0.23	Hexaware	0.59
9	State Bank of India	0.23	Honeywell	0.12
10	Union Bank of India	0.29		

Beta is a measure of a stock's volatility in relation to the overall market. The Beta coefficient of IT sector stocks is lower when compared to the Beta coefficient of banking stocks. The Banking stocks are more volatile than the IT sector stocks. The Beta coefficient of the index will be 1 which implies 1 % change in the index will have either positive or negative change in the stocks according to their respective beta coefficients.

TABLE 6: THE HOLDING PERIOD RETURN OBTAINED BY BANKING STOCKS AT DIFFERENT PERIODS OF TIME

S&P CNX NIFTY		-9.64	-11.59	-13.68	-20.40	-12.08	-13.47	-4.59	-1.50
S.No	**Banking Stock**	**3 months**	**6 months**	**9 months**	**12 months**	**15 months**	**18 months**	**21 months**	**24 months**
1	HDFC Bank	-1.07	8.14	-77.69	-81.31	-77.04	-75.31	-72.13	-68.20
2	ICICI Bank	-8.86	-6.17	-21.87	-40.26	-17.47	-24.84	-4.64	2.05
2	AXIS Bank	-0.13	-3.80	-13.08	-33.19	-5.66	-21.19	-15.54	4.29
4	IDBI	-17.81	-20.12	-33.88	-45.69	-35.36	-45.22	-39.26	-31.53
5	Canara Bank	-6.42	-21.46	-34.12	-40.18	-29.11	-37.76	-39.43	-25.83
6	Indusind Bank	-0.49	4.03	9.72	0.63	23.01	28.84	36.04	68.56
7	Bank of India	-0.51	-6.59	-28.73	-32.66	-19.12	-23.60	-32.28	-30.30
8	Punjab National Bank	-9.66	-12.91	-18.94	-33.71	-23.06	-37.83	-33.40	-31.18
9	State Bank of India	-4.08	-18.05	-29.01	-39.71	-20.10	-22.21	-21.37	-15.02
10	Union Bank of India	3.71	-3.96	-26.85	-45.14	-31.60	-37.01	-39.16	-19.69

TABLE 7: THE HOLDING PERIOD RETURN OBTAINED BY IT STOCKS AT DIFFERENT PERIODS OF TIME

S&P CNX NIFTY		-9.64	-11.59	-13.68	-20.40	-12.08	-13.47	-4.59	-1.50
S.No	IT Stocks	**3 months**	**6 months**	**9 months**	**12 months**	**15 months**	**18 months**	**21 months**	**24 months**
1	TCS	-7.20	-4.93	-12.74	-1.98	-3.83	9.19	13.31	5.07
2	Infosys	-12.20	-17.32	-29.47	-20.11	-15.30	-26.06	-22.36	-31.52
2	Wipro	-7.89	-14.39	-28.60	-15.41	-10.39	-16.34	-21.89	-21.52
4	HCL	0.26	6.86	-12.65	-8.39	11.09	5.08	27.72	36.78
5	Satyam	6.16	31.44	7.42	-0.16	11.93	21.48	64.14	63.90
6	Tech Mahindra	6.33	4.01	-4.17	-14.01	-6.69	3.39	35.62	37.89
7	Mphasis	-41.26	-31.71	-48.16	-48.61	-35.64	-47.88	-42.35	-41.61
8	Hexaware	-49.98	-36.88	-34.41	-24.24	5.02	8.40	17.71	-16.34
9	Honeywell	-7.68	9.36	13.41	-26.63	21.27	8.81	9.12	0.15

From table 6 & 7 it is inferred that, Most of the Banking and IT sector stocks show negative returns during 3 months, 6 months, 9 months and 12 months period. But later they show a positive sign. The index also shows very high negative returns during the above mentioned period and later it has started to move in the forward direction. Though it shows a negative return the percentage of negative returns is in positive direction.

PORTFOLIO SELECTION AND RISK DIVERSIFICATION

By investing in different securities investors can reduce the portfolio risk. The fundamental premise behind diversification is that portfolio risk and volatility can be lowered by investing in a number of different asset classes which have varying levels of risk. In order to achieve effective diversification portfolio holding should not be highly correlated. It is evident from table: 4 that, all the stocks are positively correlated with the market index. It can be said that all the IT and banking stocks are moving in tandem with the market. By combining high correlation with low correlation stocks, we can minimize the portfolio risk.

From the above results, based on the holding period, standard deviation, correlation and Beta analysis these sets of stocks were selected for the portfolio. Table: 8 shows the stocks selected for the portfolio. Satyam, HCL, Tech Mahindra and Indusind Bank show very high and positive returns over the long run. Though TCS shows a negative return in the short run it also shows a positive returns in the long run. ICICI Bank and AXIs bank also show a positive return in the long run.

TABLE 8: STOCKS SELECTED FOR THE PORTFOLIO

S. NO	Sector	Stock Name	3 months	6 months	9 months	12 months	15 months	18 months	21 months	24 months
1	IT	Satyam	6.16	31.44	7.42	-0.16	11.93	21.48	64.14	63.90
2	IT	HCL	0.26	6.86	-12.65	-8.39	11.09	5.08	27.72	36.78
3	IT	TCS	-7.20	-4.93	-12.74	-1.98	-3.83	9.19	13.31	5.07
4	IT	Tech Mahindra	6.33	4.01	-4.17	-14.01	-6.69	3.39	35.62	37.89
5	Banking	ICICI Bank	-8.86	-6.17	-21.87	-40.26	-17.47	-24.84	-4.64	2.05
6	Banking	AXIS Bank	-0.13	-3.80	-13.08	-33.19	-5.66	-21.19	-15.54	4.29
7	Banking	Indusind Bank	-0.49	4.03	9.72	0.63	23.01	28.84	36.04	68.56

TABLE9:CAGR, STANDARD DEVIATION, CORRELATION AND BETA COEFFICIENT FOR THE STOCKS SELECTED FOR THE PORTFOLIO

S. NO	Sector	Stock Name	CAGR (%)	Standard Deviation (%)	Correlation Coefficient (%)	Beta Coefficient (%)
1	IT	Satyam	0.28	2.47	0.07	0.14
2	IT	HCL	0.17	1.92	0.09	0.15
3	IT	TCS	0.03	1.80	0.08	0.12
4	IT	Tech Mahindra	0.17	2.14	0.15	0.28
5	Banking	ICICI Bank	0.01	2.10	0.15	0.27
6	Banking	AXIS Bank	0.02	2.29	0.20	0.39
7	Banking	Indusind Bank	0.30	2.08	0.19	0.34

CONCLUSION & RECOMMENDATIONS

It is assumed that investment in common stocks provide more returns than any other financial assets. Current study provides evidence to this argument. There is a positive relationship between the stocks holding period and the measures of dispersion with the market return. Longer the holding period gives better returns. It suggests that investors should sell the stock when it meets their expected return. Another important finding of the study is that some of the stocks were outperformed the market index. Significant positive correlation was found among the stocks with the market index. This suggests that all stocks are moving in Tandem with the market. Based on this, investors advised to design portfolio in which equilibrium is maintained high and weak correlation stocks.

REFERENCES

1. Cvitani´c, Jaksa, Vassilis Polimenis, and Fernando Zapatero, (2008), "Optimal portfolio allocation with higher moments", Annals of Finance, Vol. 4, pp. 1-28
2. Dittmar, R. (2002), "Nonlinear Pricing Kernels, Kurtosis Preference, and Evidence from the Cross-Section of Equity Returns", Journal of Finance, 57(1), 369-403.
3. Harvey, Campbell R., Merrill Liechty, John Liechty, and Peter Muller, (2010), "Portfolio selection with higher moments", Quantitative Finance, Vol. 10, pp.469-485
4. Massimo Guidolin and Allan Timmermann (2007), "International Asset Allocation under Regime Switching, Skew and Kurtosis Preferences" QuantitativeFinance, Vol. 10, No. 4, pp. 469-485
5. Scott, R.C., P.A. Horvath (1980,) "On the Direction of Preference for Moments of Higher Order than The Variance", Journal of Finance, Vol.35, pp. 915-919.
6. Taleb, Nassim N., (2004), "Bleed or blowup: what does empirical psychology tell us about the preference for negative skewness?", Journal of Behavioral Finance, Vol. 5, pp 32-39.

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7. www.nseindia.com

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