Research Paper Management

A Study on Impact of Dividend on Nifty Bank Stocks

Dr.C.Swarnalatha Professor & Head, Dept. of Management Studies, Anna University, Regional Centre, Madurai

K.S. Karthik Babu Associate Professor, Michael Institute of Management, Madurai.

ABSTRACT

In an efficient market, price of each share is independent of previous price. Prices are influenced by the factors of demand and supply and the prices follow a random walk. A market can be either identified as efficient or inefficient. With the introduction of SEBI, and electronic trading system, the stock market tends to be efficient. However there exist certain anomalies in the market that certain events influence the share prices. The present study is confined to the impact of dividend on bank share prices. AAR (Average Abnormal Returns) and Descriptive Statistics have been employed to study the impact of dividend and it revealed that there is a considerable impact (both positive and negative) and there is a chance to earn abnormal profits owing to share prices fluctuation.

KEYWORDS Efficient Market, Abnormal profits, AAR, Descriptive Statistics

Introduction

In the mid-1960s, Eugene Fama introduced the idea of an " efficient" capital market to the literature of financial economics. STOCK MARKET EFFICIENCY is an important concept, in terms of an understanding of the working of the capital markets. In an efficient market, price of each share is independent of previous price. Prices are influenced by demand and supply. A market can be either identified as efficient or inefficient. The market efficiency totally depends on the facilities, full disclosure, transparency and regulatory provision governing the market. The Indian market was inefficient in the past due to various factors like lack of transparency, manual trading system, delay in settlement of trades, absence of protection to investors, especially small investors, etc. With the introduction of SEBI, and electronic trading system, the stock market tends to become more efficient with some limitations.

Efficient Market hypothesis is based on the fundamentals that markets are efficient and prices make an independent movement in these markets. The price of an individual share is independent of the previous price and it does not affect the price of another movement.

The efficiency of the emerging markets assumes greater importance as the trend of investments is accelerating in these markets as a result of regulatory reforms and removal of other barriers for the international equity investments. The term market efficiency is used to explain the relationship between information and share prices in the capital market literature. Fama (1970 and 1991) provides the formal definition of "Market Efficiency". He classifies market efficiency into three categories namely, weak form, semi strong form and strong form. In its weak form, market efficiency hypothesis (EMH) states that the stock returns are serially un-correlated and have a constant mean. In other words, a market is considered weak form efficient if current prices fully reflect all information contained in historical prices, which implies that no investor can devise a trading rule based solely on past price patterns to earn abnormal returns. A market is semi strong efficient if stock prices instantaneously reflect any new publicly available information and strong form efficient if prices reflect all types of information whether available publicly or privately.

Market Efficiency has an influence on the investment strategy of an investor because if security markets are efficient trying to pick winners will be a waste of time. Since in an efficient market, the prices of securities will reflect the market's best estimate of their expected return and risk, taking into account all that is known about them. Therefore, there will be no undervalued securities offering higher than deserved expected returns, given their risk. So, in an efficient market, an investment strategy concentrating simply on the overall risk and return characteristics of the portfolio will be more sensible. If however, markets are not efficient and excess returns can be made by correctly picking winners. (Rutterford, 1983 pp. 282).

The present study is to analyze impact of dividend on stock prices of select banking stocks and tests whether the stock prices follow random walk theory.

LITERATURE REVIEW

The study of market efficiency can be traced to the seminal works of Fama (1970). He developed the three forms of market efficiency strong ,semi-strong and weak form. Since then many studies have been done to examine whether some markets are efficient in the weak form. For instance, Chan, Gup, and Pan (1992) analyzed the weak form in Hong Kong, South Korea, Singapore, Taiwan, Japan, and the United States markets and their findings indicated that stock prices are efficient in weak form.

Several researchers have studied efficient markets and obtained conflicting results. Chetan K.S. (2012) has studied the stock market reactions to announcements of acquisitions by mid cap Indian IT companies and concluded that semi- strong form of Efficient Market is not being followed. Announcements have made the investors to make abnormal profits.

Dr. M. Selvam et.al in their study on the impact of dividend announcement on share price on 35 companies and concluded that significant reaction took place mostly on days 0,1 and 2 and reacted immediately to the information.

Dhillon and Johnson (1994) studied the effect of dividend changes on stock and bond prices and observed markets were efficient.

Chaturvedi (2000) in his article on Half yearly results and behavior of share prices in India discussed P / E ratios in the pre and post announcement period of 90 stocks listed in BSE and

observed that two-thirds of the post announcement cumulative abnormal returns occurred in the control period of 21 days to 40 days, implying that stock prices do not adjust rapidly to P/E information.

Objectives of the study
To study the impact of dividend on banking stocks

To offer suggestions for the investor

Scope of the study
The study is intended to test the Semi- strong informational efficiency of Indian Capital Market with respect to Banking Sector.

Relevance of the Study
Accounting information is a valuable tool for investors in valuing securities. SEBI has made it mandatory for all the listed companies to publish the unaudited financial results to the Stock Exchange as one of the steps towards the creation of an efficient capital market.

Methodology of the study
Sample Selection
The study is intended to test the informational efficiency with respect to Banking sector. Bank nifty comprises of 12 stocks (public and private sector banks). The constituents of Bank nifty and their market capitalisation are given below (as on 2013).

S.No	Name of the Bank	Market Capitalisation (crores)
1	HDFC Bank	160259
2	ICICI Bank	126805
3	State Bank of India	119993
4	Axis Bank	60916
5	Kotak Mahindra Bank	55884
6	Bank of Baroda	27343
7	Punjab National Bank	22263
8	Bank of India	13630
9	Yes bank	10981
10	Central Bank of India	5955

The top Five banks (HDFC, ICICI, State Bank of India, Axis and Kotak Mahindra Bank) by market capitalization are taken as sample for the study.

Data
The data collected for the study is Secondary data collected from NSE, websites of banking companies. The closing price of the share price is taken and the fluctuations during the day are not considered for the study.

The period of study is 2012 - 2013.
Analytical tools.
Daily returns
The daily returns were calculated for both individual securities and as well as market index using the following equation.

Ri,t = (Pt – Pt-1) / P t-1 * 100
Where
Ri t= Returns on security i on time t

Pt = Price of the security at time t

Pt-1 = Price of the security at time t-1

Abnormal returns
The capital asset pricing model is employed to calculate the abnormal returns

AR = Rit – B j x Rmt
Where
AR = Abnormal returns

Rit = Returns on security i at time t

B = Beta for security i

Rmt = excess returns on market for period t

T statistics
To determine whether the excess returns around the announcement date are different from zero, estimate the T statistic for each day.

T statistic for excess return on day t = Average excess return / Standard error

Event date
The interval for calculating the returns is – 10 to + 10. Days.

Hypothesis
Ho : There is no significant impact of dividend on share price
H1 : There is significant impact of dividend on share price

Ho : Mean returns of all stocks are not equal
H1 : Mean returns of all stocks are equal

DATA ANALYSIS
The following table gives the closing price of State Bank of India stock. The dividend announcement date was 28th May 2013. 10 days before and after announcement of the event date was considered for the study.

Table 1

S.No	Period	Mean	Standard Deviation	Coefficient of variation	Standard error	Kurtosis
1	Before	2314.64	110.99	4.8	35.09	-1.46
2	After	2045.34	34.25	1.67	10.83	-0.45

The following table gives the Descriptive Statistics of ICICI Bank of India during the year 2013. The dividend announcement date was 30th May 2013.

Table 2

S.No	Period	Mean	Standard Deviation	Coefficient of variation	Standard error	Kurtosis
1	Before	1211.15	16.53	1.36	5.23	-3.28
2	After	1121.29	33.73	3	10.5	-1.31

The following table gives the closing price of HDFC Bank stock. The dividend announcement date was 13th June 2013.

Table 3

S.No	Period	Mean	Standard Deviation	Coefficient of variation	Standard error	Kurtosis
1	Before	684.9	17.91	2.61	5.66	2.09
2	After	645.5	17.08	2.64	5.4	-1.75

The following table gives the Descriptive Statistics of Axis Bank of India during the year 2013. The dividend announcement date was 5th July 2013.

Table 4

S.No	Period	Mean	Standard Deviation	Coefficient of variation	Standard error	Kurtosis
1	Before	1278.30	37.93	2.96	11.99	-0.36
2	After	1251.65	39.30	3.13	12.43	-0.75

The following table gives the Descriptive Statistics of Kotak Mahindra Bank of India during the year 2013. The dividend announcement date was 4th July 2013.

Table 5

S.No	Period	Mean	Standard Deviation	Coefficient of variation	Standard error	Kurtosis
1	Before	713.12	16.57	2.32	5.24	-1.16
2	After	723.26	22.98	3.177	7.26	-1.00

The following table gives the AAR (Average Abnormal re-

turns) and T statistics.

Table 6

S.No	Name of the stock	Year	AAR	T- stat
1	HDFC Bank	2013	0.15	0.175
2	ICICI Bank	2013	0.51	0.56
3	State bank of India	2013	-0.34	-0.23
4	Kotak Bank	2013	-0.08	-0.05
5	Axis Bank	2013	-0.06	-0.05

The AAR and T-stat is positive for HDFC Bank, ICICI Bank and State Bank of India indicating the dividend has a positive impact while it is negative for Kotak Mahindra Bank and Axis bank.

FINDINGS AND CONCLUSIONS

- There was a considerable variation in the price of stock during the event period.
- The Coefficient of Variation was high in State Bank of India stock (4.8 %) before the dividend announcement and low in the case of ICICI bank (1.36 %).
- The coefficient of variation was high in Kotak Bank (3.17 %) after the dividend announcement and low in the case of State Bank of India (1.67 %).
- The AAR and T-stat were found to be positive for HDFC and ICICI bank, implying the dividend announcement has a considerable positive impact on the stock price.
- The AAR and T-stat were found to be negative for State bank of India, Kotak Mahindra and Axis Bank , implying the dividend announcement has a considerable negative impact on the stock price.
- The varying returns and coefficient of variation indicate that dividend has an impact on the stock price and the share prices do not follow a random walk.
- Since dividends have an impact on share price, there is a chance for earning abnormal profits. The volatility of share is higher before three days of the announcement and an investor can buy at a low price and sell at a higher price.

REFERENCES

Dhanes Khatri, Security Analysis and Portfolio Management, Macmillan Publishers, 2010, p. 348 | | Prasanna Chandra, Investment Analysis and Portfolio Management, Tata McGraw hill Publishers, 3rd edition, p.276 – 283. | | Punivathi Pandian, Security Analysis and Portfolio Management, Vikas Publishers, 4th Edition 2008. p.284. | Journals | Abisek Tripati and Amandeep Singh (2012). Event Study on declaration of separation on Stock Prices of Hero Motocorp Ltd: A case study on Hero & Honda Separation, Indian Journal of Finance, vol 6 No.7 pp 34 – 43. | Amitesh Kapoor, Sakshi Sachdeva, Ashima Gupta, (2013), " Monitoring Abnormality in returns around Credit rating announcements", Journal of Commerce & Management Thought pp. 739 – 755. | Alan Harper, Zhenhu Jin. Examining market efficiency in India : An empirical analysis of the Random walk Hypothesis, Journal of Finance and Accountancy pp 1- 6. | Ansari, A. (2000). "Capital Asset Pricing Model : Should we Stop using it ". Vikalpa : The Journal for Decision Makers, Vol 25, Number 1, pp 55-64. | Avramov, D. (2007) " Credit ratings and the cross section of stock returns. | Babu. C and Kasilingam, R (2013) " Impact of Quarterly results on Share Prices", Indian Journal of Finance, pp 19 – 31. | Beaver, W.H. (1981). Market Efficiency. " The Accounting Review, Vol 56, No.1, pp 23-37. | Chan C.K. Gup B.E. and Pan M.s. (1992) An empirical analysis of stock prices in major Asian Markets and the U.S. financial review 27 (2) pp.289 – 307 | Chan, W.P. (2008) " The Effects of Credit Ratings on stock returns in China". The Chinese Economy, vol. 41 no.2 pp. 34 – 55. | | Chetan K.S. (2012) A study of the stock market' s reaction to announcements of acquisitions by midcap Indian IT companies, Indian Journal of Finance, Nov 2012, pp 16 -25. | | Cross, F., 1973, "The Behavior of Stock Prices on Fridays and Mondays, Financial Analysts Journal, 29, November/December, pp 67-69. | | Dickinson , J., and Muragu, K., 1994, "Market Efficiency in Developing Countries: A Case Study of the Nairobi Stock Exchange", Journal of Business Finance & Accounting, January, 21(l), pp 133-150. | | Dutta, a. (2000). " Investors Reaction to the Good and Bad news in Secondary Market : a study relating to investors Behaviour. " Finance India, Vol XV, No. 2 pp 567 -576 | Fama E. (1970) Efficient Capital markets : A review of theory and empirical work. Journal of Finance, 25 pp. 285-307. | Fama. E. (1965). " Random Walks in Stock Market Prices. " Financial Analysts Journal, Vol 21. No. 5 pp 55 -59. | Fama, E.F., 1991, "Efficient Capital Markets II", The Journal of Finance, XLVI, 5, December 1991. | | Groenewold, N., and Kang, K.C., 1993, "The Semi-strong Efficiency of the Australian Share Market", Economic Record, Vol. 69, Iss. 207, December, pp 405-410. | | Gupta R, and Basu, P.K. (2007). Weak form efficiency in Indian stock markets, International Business and Economics research Journal, 6 (3), pp 57-64. | Jacobs, B.J., and Levy, K.N., 1988, "Calendar Anomalies: Abnormal Returns at Calendar Turning Points, Financial Analysts Journal, November/December, pp 28-39. | | Jayaraman, M.S. Ramarathinam and K.N. Ganapaty (2011). An Empirical Event Study on Possibilities to earn superior risk adjusted returns of selected stocks by trading on Earnings announcements, Indian Journal of Finance, Vol 5 No.2 pp 10 – 14. | Keim, D., and Stambaugh, R., 1984, "A Further Investigation of the week-end Effect in Stock Returns", Journal of Finance, 30, pp 819-835. | | Khan, A.Q., Ikram, S., and Mehtab, M.(2011). Testing weak form market efficiency of Indian capital market: A case of national stock exchange (NSE) and Bombay stock exchange (BSE). African Journal of Marketing Management, 3(6), p. 115 | Lakonishok, H. J., and Levy, M., 1982, "Week-end Effects on Stock Returns: A Note", Journal of Finance, 37, pp 883-889. | | Lo, A.W. and MacKinlay, C. (1998). Stock market prices do not follow random walks: Evidence from a simple specification test. The Review of Financial Studies, 3(1), pp. 41-66. | | Mall, M., Pradhan, B.B., and Mishra, P.K. (2011). The efficiency of India's stock market: an empirical analysis. International Research Journal of Finance and Econ pp. 178-184. | | Pant B. and Bishnoi, T.T. (2001). Testing random walk hypothesis for Indian stock market indices. Proceedings of the Fifth capital markets conference 2001, UTI Capital Markets. | | Pearce, D.K. & Roley, V.V(1985). " Stock prices and economic news". Journal of Business, 58 (1), pp 49 -67. | | | Rajagopalan, N. V.R. & Shankar, H (2012), " Stock Market Behaviour around buyback announcements in India : An Empirical Justification for preferring the open market repurchase mode", Indian journal of Finance, pp. 43 -52. | | Rogalski, R., 1984, "New Findings Regarding Day of the Week Returns over Trading and Non- trading Periods", Journal of Finance, 39, pp 1603 -14. | | Sharma, G.D., & Mahendru, M. (2010), " Impact of macro-economic variables on stock prices in India". Global Journal of Management & Business Research, 10 (7), pp 19 -26. | | Seiler, M.J. and Rom, W. (1997). A historical analysis of market efficiency: Do historical returns follow a random walk? Journal of Financial and Strategic Decisions, 10(2),pp. 49-57. | | Singh, T., Mehta, S., & Varsha, M.S. (2011) "Macroeconomic factors and stock returns : Evidence from Taiwan". Journal of Economics and Internatational Finance, 2(4), pp 217 – 227. | | Selvam.M, Babu.M, G.Indhumathi & N.Kogila (2010), " Impact of Dividend announcement on share price : An Evaluation Study", Indian journal of Finance, pp. 3 -15. | | Selvarani, M. and Lakshmi shree, M. (2009), " Seasonality in National Stock Exchange Indices and Pharamceutical industry", Indian Journal of Finance, pp. 17 – 26. | | Subasi, F.O. (2008) " The Effect of Sovereign rating changes on stock returns and exchange rates". International Research Journal of Finance and Economics, ISSN 1450-2887. | | Sunil Posakwale, (1996) " Evidence on Weak Form Efficiency and Day of the week effect in the Indian Stock Market. " Finance India, Vol.X. No.3, pp 605 – 616. | | Thomas, A.E., and Kumar, M.C.D. (2010 Indian stock market. ASBM Journal of Management, III, (1&2), p. 89 | | Vaidyanathan, R., and Gail, K. (1994). Efficiency of the Indian capital market. Indian journal of finance and research, 5(2), p. 35 | | Vikram Bisen and Madhulika Pandey, (2013), " Testing EMH in current Indian stock market", Journal of Commerce & Management Thought, IV – 4 pp. 792 – 799. |