MONTHLY SEASONALITY OF STOCK IN EMERGING EQUITY MARKET: A SPECIAL REFERENCE TO COLOMBO STOCK EXCHANGE PERIOD FROM 1985 TO 2011

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Introduction

This research aimed to study the monthly effect seasonalties on the emerging stock market and the Efficient Market Hypothesis (EMH). This research attempted to examine the monthly effect on stock returns in the selected stock market in Colombo Stock Exchange (CSE).

The literature regarding this research area is not available because any interested party has carried out no such research. However, in the western countries researches have been carried out and corresponding literature are available but they are not directly relevant to Sri Lankan context. Stock market anomalies have been investigated extensively in developed countries such as UK and USA by Baker and Limmack (1998) Gultekin and Gultekin (1983) and Keim (1983). Of late, there has been an increased interest in investigating the anomalous behavior of the emerging stock markets by Chenung and Coutts (1999). However, little attention has been paid to investigate these phenomena in Sri Lankan context, although the stock market has been in existence since 1890 January effect refers to a situation where the returns of January are significantly higher than those of the other months. Monthly seasonal pattern refers to the possibility that the returns of particular months are significantly greater or lower than those of the other months. When January effect or monthly seasonality exists in a stock market, investors are able to plan their investments strategies so that they can make gains from the share market investments consistently. Further, the existence of a January effect or a monthly seasonal patterns violates a well – known concept in financial economics originally attributed to Fama (1965) known as the Efficient Market Hypothesis (EMH). This theory says that all the information in respect of a security is in bounded in the security's price and therefore, no investors are able to beat the market consistently.

Guneratne Bandara (2001) had a study and examined two well – known phenomena in financial economics known as the January effect and monthly seasonality using ASPI returns of the CSE. The results were consistent with the EMH and have important implications for investors in planning their investment strategies. Coutts and Sheikh (2001) investigated the existence of the Weekend, January and Pre – Holiday effects in the All Gold Index on the Johannesburg Stock Exchange over an 11 – year period; 5 January 1987 through 15 May 1997, and for three sub – samples of equal length. These results were in severe contrast to the overwhelming international evidence documented for the stock markets of many other countries, be they developed or emerging markets; there appears to be no Weekend, January or Pre – Holiday effects, present in the All Gold Index. Consequently it was suggested that further research is required in this area. Study done by Mehdian and Perry (2002) investigated the January effect in US equity markets using three market indexes from 1964 – 1998: Dow Jones Composite, NYSE Composite and the SP 500. Chow tests for structural stability indicate that the estimated parameters in an equation testing for monthly seasonal effects in the stock market were not stable over time. Lian and Chen (2004) this study examines the daily anomalies in the five

ASEAN equity markets of Malaysia, Singapore, Thailand, Indonesia and the Philippines before, during and after the Asian financial crisis.

Methodology

To achieve the objectives two hypotheses were developed for testing. Adjusted closed stock market indices are collected through online data stream. This research covered twenty seven years sample period beginning from January 1985 to December 2011. Analysis was done for the entire sample period to test the monthly effect. For this purpose price indices have been collected monthly basis for the sample period 1985 – 2011 in the CSE. The total sample size was 324 observations. Parametric and Non- parametric statistics were used for testing the hypotheses. The one way ANOVA procedure was used and Kruskal Wallis test was employed to substantiate the results of the existence of the monthly effect.

Discussion and Conclusion

The monthly seasonalities analysis presents the statistical evidence and the mean returns of the CSE from January 1985 – December 2011. Empirical results shows that except in December all other month mean returns are positive. The highest mean return 2.885 is reported in September and the lowest mean return -0.373 is reported in December. The second highest mean return is recorded in January. But it is not at significant level. In overall there is no statistical significant effect is observed among monthly mean returns of the year. This confirms the results of high probability value of 0.954 of the F – statistics. Further, the Kruskal Wallis test also used to test the seasonality. The results shows that monthly mean returns do not differ significantly among different months. Therefore, the null hypothesis, the existence of equal return among different month is rejected. If the null hypothesis is rejected this reveals that there is a monthly seasonality. Z – Value is calculated to investigate whether the January return is significantly different from other months of the year. None of the month is recorded with statistically significant at any level for the entire sample period the results of the t – statistics also present in the same results. It can be seen that statistically 10% level significant mean return is reported in the month of September. Skewness is more imported for April, November and December while Kurtosis is more important for May, June and October. These results are closely mirrored with sub sample. Evidence reveals that there is no any statistical significant mean return is observed in the first sub sample 1% statistical significant effect is reported in September for the second sub sample.

The results of the monthly effect for the same market reveals although a high positive mean return is reported in January the significant effect is observed only the in September. A January effect which occurs in other markets cannot be expected to occur in the CSE because there is no particular reason which motivates the investors to sell loser shares expecting tax gains. The reason for the irregularities with stock may be due to Asian crisis and the global stock market crash, collapse of the blue ships stocks in US recently, also turn of the tax year effect. It has important implementations for the investors, management of companies and the stock market regulating agencies. The investors could make use of these findings to make decisions with regard to changes buy or sell, they have to make their portfolio to make profits or avoid losses. Hence the monthly effect is anomalies in that they represent opportunities for investors to maximize their returns by choosing to trade on certain month.

Further findings facilitate the investors with awareness of the advantages of investment and interest in the monthly effect. Similarly, monthly effects give prediction for immediate return from the investment because every month market situation is subject to changes due to direct and indirect environmental impacts.

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