Day of the Week Effects in the Sri Lankan Stock Market

MASTER OF BUSINESS ADMINISTRATION
IN
INFORMATION TECHNOLOGY

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December 2004

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Day of the Week Effects in the Sri Lankan Stock Market

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This dissertation was submitted to the
Department of Computer Science and Engineering of the
University of Moratuwa
in partial fulfillment of the requirements for the
Degree of MBA in Information Technology

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Supervisor

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Abstract

This study investigates empirically the day of the week effect in Sri Lankan stock Market (Colombo Stock Exchange- CSE). The day of the week effects refers to the existence of a pattern on the part of stock returns, whereby these returns are linked to the particular day of the week. In general the day of the week effects is present in the equity markets in the form of a weeks ending strong and opening down. Last trading days of the week particularly Friday, are characterized by positive and substantially positive returns, while Monday, the first trading day of the week differs some other days, even producing negative returns. This phenomenon is observed globally in many developed and emerging stocks markets, Fields (1931), Cross (1973), Gibbons & Hess (1981), Keim & Stambaugh (1984), Hirsh (1986a,b), Lakonihok and Levy (1982), Rogalski (1984), Simrlok and Starts (1986), Board and Sutcliffe (1988), Jacobs and Levy (1988), Linn and Lockwood (1988), Piero (1994), Argawal and Tandon (1994), Mills and Coutts (1995), Arsad and Coutts (1977), Gregoriou, Kontonicas and Tsitsianis (2002), Thomas (2002), Lyroudi, Subeniotis and Komisopoulos (2002). The results of the most significant studies and the possible explanations of the day of the week effect are presented briefly.

The analysis is carried out by utilizing the closing price of the All Share Price Index (ASPI) of the CSE, for the full period of January1985 to December 2003.Moreover analysis was carried out for two sub period covering the periods of January 1985 to May 1997 and June 1997 to December 2003 respectively. This division of data is based on the fact that the prior to the automation of trading system of the CSE and after. Automation consist of the trading with the installation of a Screen Based Trading System, rules for establishing branch offices and sales outlets of member firms and dispute resolution between clients,brokers and member firms adopted and the establishment of a settlement guarantee fund and a compensation fund in CSE. This was applied to see whether the day of the week effect is influenced by the market risk.

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This research makes use of analysis of variance (ANOVA) as a methodology for investigating the day of the week effect. The empirical results indicated that the day of the week effect is observed in the second sub and the full period of analysis and but not visible in the first sub period. In the first sub period the day with the lowest returns of the week is Tuesday. The highest returns of the week presents on Monday. In the second sub period the day with the lowest and negative returns of the week is Tuesday and this is unique result for the first sub period. Friday presents highest return of the week. The full period analysis of 19 years the lower mean value is on Tuesday and negative. The highest mean value is on Friday. Therefore especially second sub period and the full period analysis of empirical results of this research are consistent with developed stock markets. Therefore the implication here is that emerging Sri Lankan stock market gradually stepping in to the developed market status. Because, the day of the week effect appears in the CSE on Fridays. There is no specific explanation for the day of the week effect in Sri Lankan stock market.

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