

**AN APPROACH TO INVESTIGATE THE
RELATIONSHIP BETWEEN SHARE PRICES AND
MACROECONOMIC VARIABLES**

A.N. Jayasundara

07/8529



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Department of Mathematics

University of Moratuwa
Sri Lanka

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Thesis/ Dissertation submitted in partial fulfillment of the requirements for the degree



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DECLARATION

I declare that this is my own work and this thesis/dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any University or other institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text

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A.N. Jayasundara
(07/8529)

.....

Date



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I have supervised and accepted this thesis for the submission of the degree.

.....

T.M.J.A. Cooray
(Supervisor)
Senior Lecturer
Department of Mathematics,
Faculty of Engineering,
University of Mortuwa.

.....

Date

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ABSTRACT

With the development of the economy in Sri Lanka and low interest rate for savings influencing people to invest their money in other profitable areas. Therefore stock market is one of the good opportunities that can open the door for local investors as well as foreign investors to invest their money. This study examines the causal long run relationships among stock prices and macroeconomic variables and forecasting stock prices in an emerging stock market, the Colombo Stock Exchange (CSE). Data is used on four macroeconomic variables obtained by web site of Central Bank of Sri Lanka and the All Share Price Index (ASI) of the CSE obtained from Data Library CD published by the Colombo Stock Exchange for the period January 2003 to December, 2010. Johansen's co-integration test, Granger Causality Test and econometrics techniques with regression analysis were used in the empirical analysis and indicate that there are long-run causal relationships among stock prices and macroeconomic variables where as Money Supply (M1) and Interest rate in Sri Lanka. These results indicate that stock prices can be predicted from certain macroeconomic variables. The above results have implications for investors, both domestic and international.



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LIST OF ACRONYMS

AIC	-	Akaike's Information Criterion
APT	-	Arbitrage Pricing Theory
AR	-	Autoregressive
ASI	-	CSE All Share Price Index
ATS	-	Automated Trading System
BVAR	-	Bi-Variate Auto Regressive Model
CSE	-	Colombo Stock Exchange
DW	-	Durbin-Watson
EMH	-	Efficient Market Hypothesis
EXRATE	-	Exchange rate of US Dollar against Sri Lankan Rupee
GDP	-	Gross Domestic Product
GMM		Generalized Method of Moments
GNP		Gross National Product
INFLRATE	-	Inflation rate
INTRATE	-	Interest rate
KLSE	-	Kuala Lumpur Stock Exchange
MA	-	Moving Average
MONSUP	-	Money Supply M ₁
MPI	-	Milanka Price Index
OLS	-	Ordinary Least Squares
PVM	-	Present Value Model.
SAFE	-	South Asian Federation of Exchanges
TRI	-	Total Return Indices
VECM	-	Vector Error Correction Model
WFE	-	Federation of Exchanges