

**A STUDY ON ECONOMIC VALUE ADDED AND
FUNDAMANTAL ACCOUNTING VARIABLES IN
EXPLAINING STOCK RETURNS -
EVIDENCE FROM COLOMBO STOCK EXCHANGE**

By

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DECLARATION

The work described in this Research was carried out by me under the supervision of Dr.Anura Kumara Uthumange and a report on this has not been submitted in whole or in part to any university or any other institution for another Degree/ Diploma

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I certify that the above statement made by the candidate is true and that this research is suitable for submission to the University for the purpose of evaluation.



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ABSTRACT

The study is carried out to find out the relationship between Economic Value added (EVA) and other accounting measures with stock return performance of companies listed in the Colombo stock exchange (CSE). This includes test for relative information content test and incremental information content test further extended analysis for the significant sectors in terms of the market capitalization also carried out under this study

This study uses a sample from 238 companies listed in CSE over the 2006-2010 quarterly observations. The study is conducted on shares listed in the CSE for the period 2006-2010 due to the unavailability of data for longer period. Quantitative research method is applied using secondary data and macro economic variables, corporate events and announcements are not directly considered in this study.

This research is conducted using panel data regression model with test for fixed effects and found that regression model with period fixed is significant for the Sri Lanka market for the period covered by the Study. It also found EVA does not outperform the traditional measures for the overall sample and most of the sectors and Return on Assets (ROA) as a single measure is highly significant in explaining the variation of stock market return. However there were slight differences in findings for sector wise analysis.

Keywords and abbreviations

Economic Value Added- EVA

Net Income - NI

Return on Assets- ROA

Return on Equity- ROE

Net operating profit after tax - NOPAT

Operating Cash Flow – OCF

Colombo Stock Exchange- CSE

Chapter I

INTRODUCTION

1.1 Background

Capital markets are becoming more and more global and information requirements of investors are becoming more and more complex and need much more detail than mere profitability of companies. Moreover capital market is also a very important sign in the development of a country and in order to get the optimum benefits of the capital market it should be allocationaly efficient which is a key sign of market efficiency. Financial information presented by way of traditional profit and loss and balance sheet provides insufficient information to the investors although cash flow statement still provides a valuable piece of information for the investors. Therefore it requires the parties involved in disseminating information to provide value based performance measures to cater the high level of information requirement of sophisticated investors.

The idea that the primary responsibility for management is to increase shareholder value gained prominence and became widely accepted in the USA after Rappaport's (1986) publication of *Creating Shareholder Value*. Rappaport (1981, 1986, and 1998) argued that earnings fail to measure the real change in economic value. Arguments such as: the alternative accounting methods that could be used, the investment requirements, exclusion of the calculation of profits, and the ignorance of the time value for money, brought earnings under hard criticism. The shareholder value approach was developed in the late 1980s and early 1990s. Shareholder value approach estimates the economic value of an

investment by discounting forecasted cash flows by the cost of capital (Rappaport, 1998). Proponents of shareholder value approach, either academics or consulting firms, based their analysis on free cash flows (FCF) and the cost of capital and developed a variety of such measures.

Accounting rates of return has shortcomings in measuring economic profitability. EVA, as a concept of economic profit, is the result of adjustments to Accounting profit in order to produce a more economically meaningful version of residual income. EVA is a performance metric that calculates the creation of shareholder value and is a registered trademark of Stern Stuart, New York. EVA has been widely adopted by management when making decisions to increase productivity, where to invest new capital and which underperforming assets to liquidate. EVA is also widely used by investors and analysts especially in the international context as a measure of company performance when deciding on which shares to invest in.

Moreover, the claim that EVA as a main driver for shareholder value has been empirically tested by a number of US studies, giving rather mixed results. Several studies have proved the superiority of EVA as a performance measure (Stewart, 1991). Further, number of these studies reports either poor or no statistical relation between EVA and stock return, or between EVA and market value.

Thus EVA was selected as one of the better performance measures to use to show true operating performance. Statistical tests to be done on EVA and share price growth and EVA and other common performance measures. Common performance measures are

Return on Assets (ROA), Net Income (NI), Net Operating Profit after tax (NOPAT), Return on Equity (ROE), and Operating Cash Flow (OCF).

The population of this study consists of around 238 companies listed in the stock exchange in 20 industrial categories and sample consists of around 43 companies which cover significant percentage of market capitalization of each sector and also more than 50% of overall market capitalization. The test covers the period from 2006 to 2010 due to unavailability of relevant data for the prior periods.

One of the key features in this study is the use of the econometric analysis and panel data regression models, which are used in this analysis over the normal linear regression in order to eliminate some of the estimation biases.

The limitation of the study would be the period, sample size and high degree of variability in the stock market returns over different periods irrespective of the company performance. Further, as per the literature on relationship between stock market return and beta which used in estimating the cost of equity also questionable. Further, in order to minimize the estimation bias of relationship between EVA and stock market return beta is estimated using previous five years' monthly returns for each period considered.

1.2 Problem Statement

In recent periods, risk free interest rates in government securities have been reduced from around 18-20% about two years ago to around 10%. However, share market provided abnormal risk return trade off and transformed to a one which provided highly significant

returns which is around 100% in 2009 and 2010 in particular and continue to provide rather abnormal returns time to time. However apparently abnormal return of the stock market returns of the companies were not supported by the attractive company performance since most of the companies have not doubled the companies' investment or revenue generating capacity and their fundamental values. Further, this might result in a stock market bubble situation.

Although the share market is a key element of capital market of a country in order to get the optimum benefits of the market, it should be allocationaly efficient which is a key sign of market efficiency. Stock market is a one of the important aspect in the development of the capital market. Therefore, capital market especially equity market should be efficient in terms of resource allocation as most investors bring money to the market that needs to be channeled to the most effective economic operations.

.Stock market is a place, where buy orders and sell orders are matched and price is determined based on that. Therefore in making investment decisions performance measures play a critical role and in turn it affect the price of the securities which are traded in particular market. However, when we look at the measures taken in the market based on the analysis and recommendation research publications by stock brokers and analysts to a greater extent they are based on the traditional accounting measures Further, accounting measures has shortcomings in measuring economic profitability, which are used extensively in analyzing company performance and taking investment decisions by most analysts, investors and stock brokers.

Therefore there is a gap in the practice or in the market in taking into consideration economic value adding capacity and looking at more long term measure and appreciating the economic value adding capacity over the mere profitability, which is measured by traditional accounting variables. Therefore EVA, as a concept of economic profit, is the result of adjustments to Accounting profit in order to produce a more economically meaningful version of residual income. EVA is a performance metric that calculates the creation of shareholder value. Thus EVA is selected as one of the better performance measures to use to show true operating performance.

1.3 Problem Justification

Stock market is a very significant element in the development of a country. It acts as an indicator to give the market value of companies and also indicate the investors on investments opportunity and investment prospects. Stock market act as a resource allocation mechanism since investors bring money to the market and invest in the securities issued by the companies. Therefore it is required that the returns and market value added to reflect the economic reality in order to act as an efficient resource allocation mechanism.

However, most of the studies suggest that EVA is less associated with the Stock returns than accounting variables even though accounting profit does not really reflect the economic reality especially fail to recognize opportunity cost of capital and earning potential of companies' operations. Therefore it needs an efficient measure of economic performance than the accounting profit.