

IMPACT OF COMPANIES INTERNAL VARIABLES ON STOCK PRICES: EVIDENCE FROM COLOMBO STOCK EXCHANGE

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Introduction

Investors are interested in receiving useful and reliable information in order to take profitable investing decisions. Listed companies use financial statements as one of the major medium of communication with their equity shareholders and public at large. Stock prices are predictors of future permanent earnings. Share prices are used by investors and general public for the purpose of share trading; hence it is important to analyze which factors affect them. Ball and Brown (1968) studied the relationship between stock prices and the accounting information disclosed in the financial statements. Many studies of past examined the relationship between accounting information and stock prices (Ball and Brown 1968; Guthrie J., 2007; Francis and Schipper.,1999; Beaver 2002). Selected variables of this study are return on equity (ROE), total asset turnover (TATO), net profit margin (NPM) and current ratio (CR).

Statement of Problem

Accounting information is called value relevant if it is (significantly) associated with (changes in) equity market values (Barth et al., 2001). Value relevance thus emerges through market participants basing trading decisions on accounting information about the future performance of an entity. However, not all information is used in the decision-making process: Only information that is both relevant and reliable will influence market values.

The research problem of this study is "What is the impact of internal variables on stock prices?"

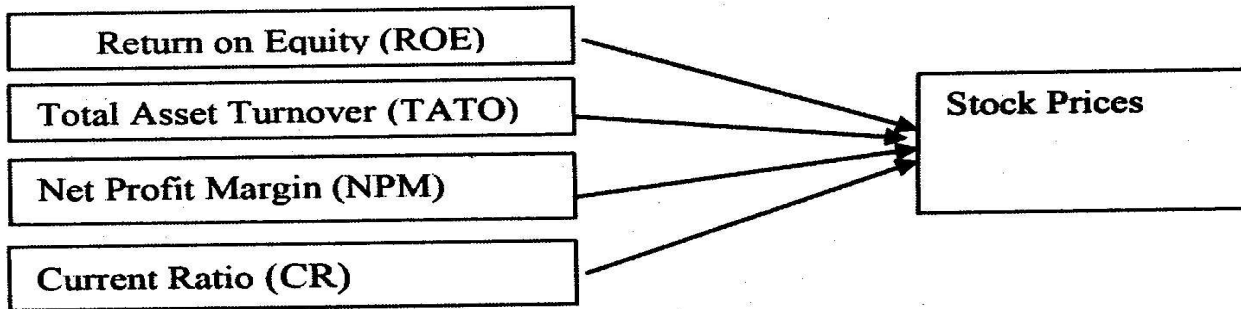
Objectives of the Study

The Objective of this research is to analyze the impact of companies' internal variables on companies' stock prices.

Methodology

Conceptualization

Conceptual Framework



Research Model

$$P_{it} = a_0 + \beta_1 ROE_{it} + \beta_2 TATO_{it} + \beta_3 NPM_{it} + \beta_4 CR_{it}$$

P_{it} - Stock price

Population and Sample

The sample consists of 155 firm/year observations of companies that are listed in the CSE during the period 2008-2012 (March financial year end). The ROE, TATO, NPM, CR data were obtained from CSE website (www.cse.lk), which provides financial statements for all the listed firms in the CSE. The price data and market

capitalization data were obtained from the CSE data library 2012. The observations with incomplete data record and outliers were deleted from the sample. Therefore, the final sample includes 75 firm/year observations.

Data Analyses

Uni-variate Analyses, Bi-variate analyses and Multi-variate analyses obtained from SPSS are used for final analysis of the research variables.

Results and Discussion

Uni-variate Analysis

Table 1 Descriptive statistics for Research Variables

Statistics	NPM	TATO	CR	ROE
Mean	0.04	1.10	1.43	0.8
Median	0.04	1.00	1.42	0.9
Mode	0.01	0.79	1.45	0.15
Skewness	0.29	0.87	0.39	-0.271

Table 1 depicts some descriptive statistics of these variables. As it can be shown, the mean value for NPM is 0.04. Since mean of NPM is a low value that indicates sample firms are having low profitability. The median

ratio value is 0.04, indicating at least 50% of sample firms' NPM mean value is more than 0.04. TATO mean value is 1.10, the median value is 1.00. The mean, median and mode values of CR are very close (1.4) to each other,

so it can be argued that perhaps the data is symmetrical. Mean value of ROE is 0.8 and median is 0.9.

Values of skewness ($sk=0.29$, $sk=.87$, $sk= 0.39$ & $sk= -.27$) show the

evidence about the sample distribution for the all the sample variables to be normally distributed which are within +1 and -1. Hence, data can be assumed to be normally distributed.

Table 2 Results of Correlation Analysis

Variables	A	B	C	D	E
A. STOCK PRICES	1				
B. ROE	.317**	1			
C. NPM	-.505**	-.434*	1		
D. TATO	.323**	.347**	.341**	1	
E. CR	.543**	.431**	.423**	.421**	1

** . Correlation is significant at the 0.01 level (2-tailed).

As can be seen in Table 2, ROE positively and weakly correlates with stock price ($r = 0.17$). However, this relationship is also statistically significant either at 0.01. Similarly, even though NPM depicts negative and somewhat relationship with stock price (-0.505), the relationship is statistically significant at 0.01. The correlation between TATO and stock price shows there is a positive and significant relationship between them ($r=0.2$, $p< 0.01$). In other words, higher TATO will result in higher stock price and vice-versa. In the same way, CR is positively correlated with stock price with strength of $r= 0.54$ ($p<0.01$). the relation is statistically significant at 0.01.

The statistical literature claims that a strong inter-correlation between

variables leads multi-collinearity which is assumed to produce a furious regression. Thus, all the data series initially were tested for presence of multi-collinearity. According results of multi collinearity- tolerances of above ratios are not closer to 0. So it can be manifested that there is no any multi-collinearity among selected variables. In general, if a variance inflation factor (VIF) is greater than 2 is usually considered as problematic. However, since all VIF in the table is less than 2 there is no any evidence to suspect a problem of multi-collinearity among the selected variables.

Following Table 03 shows the results obtained from regression analysis of variables on share prices.

Table 3 Regression Result

Variables		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
(Constant)		74.163	19.868		3.733	0.000
ROE		12.342	88.381	0.020	0.140	0.889
NPM		-26.931	10.471	-0.266	-2.585	0.004
TATO		4.397	9.162	0.050	0.480	0.000
CR		189.303	68.508	0.401	2.763	0.002

R, the multiple correlation coefficients, is the linear correlation between the observed and model-predicted values of the dependent variable. Its value of 0.522 indicates a positive and reasonable relationship between the dependent and set of independent variables. R Square explains the ability of predictor variables to explain the variation in the dependent variable. The value of 0.31 reveals that the predicted variables have only 31% ability to represent total variation of the stock price. Thus, R square shows the evidence for bad goodness of fit of the model. F value is also used as a good measure of model fit and to test the linearity of the relationship. F value of 6.54 which significant at 0.01 shows that model is reasonably fit for the data.

A closer look at the individual coefficients in Table 04 reveals that only one variables, out of four predictors, (ROE, $b = 12.342$ are not statistically significant either at 0.05 or 0.01. Both coefficients show that those two variables (TATO, $b = 4.397$ and CR, $b = 189.303$) have a significant positive impact on the stock price. With confidence, at 0.05, another one

variables (NPM) can be considered as the significant predictors which have a negative impact on the stock price ($b = -26.931$)

Regarding the coefficients on model 1 in table 04, the regression equation is; Stock Price = $74.163 - 26.931$ (NPM) + 4.397 (TATO) + 189.303 (CR)

To investigate the effect of return on equity stock price, so the first hypothesis will be accepted.

Conclusion and Recommendations

The objective of this research was to analyze the impact of companies' internal variables on its stock prices, for the accomplishment of this purpose. This study used the internal variable R.O.E, T.A.T.O, N.P.M and C.R. and used regression model with these variables as independent variables and dependent variable was stock price. After analyzing the results, the conclusion is that, T.A.T.O, N.P.M and C.R. have significant impact on the stock prices, whereas R.O.E has no significant impact on the stock prices. This result is obtained by analysis done on 15 companies from manufacturing sectors of Colombo Stock Exchange for 5 years data.