

Assessing Systematic Risk through an Accounting Model: Evidence from Colombo Stock Exchange

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The focus of this study is to assess the systematic risk through an accounting model based on the objectives; to test whether the accounting model significantly influences the systematic risk and to identify the explanatory power of the accounting based risk factor model with single index model and capital asset pricing model. To achieve this aim, the researcher selected 154 companies from 16 economic sectors in the Colombo Stock Exchange (CSE). Then six portfolios were constructed which doubled on firm beta values. In order to carry out operationalisation of the relationship with regard to the accounting variables such as Return on Equity, Free cash flow to Equity, Total accruals, Leverage, Share turnover, Market value per share, Change in gross margin, Sales growth, Change in earnings and the Working capital turnover with systematic risk, a panel data analysis was conducted in stock analysis ranging from portfolio of higher beta stocks, portfolio of moderate beta stocks and portfolio of lower beta stocks as well as overall stocks. Then time series analysis was used to assess systematic risk with beta sorted portfolio small, portfolio medium and portfolio big. Within this application, the present study seeks to present empirical evidence on the relationship between accounting information and systematic risk in Colombo Stock Market. The study found that the accounting variables significantly influence the systematic risk. While accruals found to be not significant on influencing systematic risk. Also the accounting based risk factor model well explains the beta than the other popular market models in Sri Lanka. As per the results on portfolio of higher beta, moderate beta and lower beta stocks presented in between the range of 94% - 99% of adjusted R square as well as more than 95% significant F statistics while the single index model and CAPM resulted less than 5% of adjusted R square and F stat is only significant for CAPM. This study suggest more importantly the accounting variables are well explain systematic risk and recommend to use accounting based risk factor model other than market based risk factor models on Sri Lankan context as the study confirms the accounting model is effective on investment decisions.

Keywords: *Accounting information, Accounting model, Beta, CAPM, Colombo stock exchange (CSE), Systematic risk*