

Relationship between Stock Returns and Firm Size, and Book-To-Market Equity: Empirical Evidence from Selected Companies Listed on Milanka Price Index in Colombo Stock Exchange

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Abstract

This paper aims to reinvestigate the behavior of expected stock returns with respect to two popularly known firm level characteristics: firm size and book-to-market equity in Sri Lankan context. The sample of the study consist of 12 companies out of total 25 companies listed on Milanka Price Index in base year of 2005 in Colombo Stock Exchange, financial year ended in December and have positive book values are only taken into consideration. The formal tests is applied the Fama-MacBeth (1973) procedure for the period from 2005 to 2010. Empirical findings reveal that Book-to-market equity has a significant negative role in expected stock returns while firm size does not have any significant behavior in expected stock returns. In reality, even though there are plenty of sources affected on expected stock returns, this study only reflect two popularly known firm level characteristics to examine the behavior of expected stock returns and covers only six years' annual data of 12 companies listed on Milanka Price Index due to the CSE will review & revise the companies to be included in the MPI on a yearly basis commencing from 2005. This study has practical implications for different interested parties such as investors, governments, policy makers, stock market analysts, stock market regulators and multinational corporations to make decisions on their different field based on Sri Lankan context. For an example, Investors can invest in small or large firms which have small book-to-market equity because of findings of this study reveal that no relation in the economy between firm size and return, and negative relation between book-to-market equity and return. The paper builds on previous work, but highlights two new findings. Namely, book to market equity only has significant negative role in behavior of stock returns of financial companies as well as non-financial companies while firm size does not have significant relation with stock returns of financial and non-financial companies and selected two firm specific factors highly explain the behavior of stock returns of financial companies than non-financial companies.

Keywords: Firm Size, Book-to-Market Equity, Expected Stock Returns, Milanka Price Index, Colombo Stock Exchange.

INTRODUCTION

There is an accepted norm in finance that firm specific variables & macroeconomic variables explain the behavior of expected stock returns. Even though previous studies {e.g.: Gordon (1959); Friend & Puckett (1964); Bower and Bower (1969); Malkiel & Cragg (1970) and Zahir (1992)} found that expected stock returns is highly sensitive to macroeconomic factors, there are number of firm specific factors such as earnings, dividends, risk, leverage, size, book-to-market ratio, right issue and bonus issues explain the behavior of expected stock returns.

There are different models developed to explain the relationship between risk and returns. Capital Asset Pricing Model (CAPM) of Sharpe (1964), Lintner and Mossin (1966) (SLM) or Sharpe (1964), Lintner (1965) and Black (1972) (SLB) is the first model to explain the relationship between risk and return. The

developers of this model found that market beta is positively related to expected stock returns. Even though this finding is supported to earlier researchers such as Lintner (1965), Black, Jensen, and Scholes (1972) and Fama and MacBeth (1973), the limitation of this model is that it is employed market beta only as risk factor and not employ the macro and firm specific factors to explain the behavior of expected stock returns and also the most of recent researchers Stattman (1980), Reinganum (1981), Rosenberg et al. (1985), Lakonishok and Shapiro (1986), Chan et al. (1991), Fama and French (1992, 1998), Daniel et al. (1997), Patel (1998), Chui and Wei (1998), Rouwenhorst (1998) and Claessens et al. (1998) report that market beta has little or no ability in explaining the behavior of expected stock returns and firm size and book-to-market equity play significant role in explaining the behavior of expected stock returns. Therefore later Fama and French (1992) developed FF three-factor pricing model (TFPM) in

which they added two supplementary risk factors which are firm size and B-M equity to the CAPM. FF is tested successfully in many markets around the world.

The financial interested parties such as investors, stock market analysts, policy makers, government and stock market regulators give more attention on macroeconomic variables by the reason of expected returns is highly sensitive to macroeconomic factors than firm specific variables. So that, they have lack of knowledge on behavior of firm specific variables on expected stock returns. Besides there have been a very few of studies in Sri Lankan context {except a few-e.g, Samarakoon (1998); Mahawanniarachchi, (2006); Anuradha (2007) and Chaturika Seneviratne and Nimal} to explain the relationship between expected stock returns and firm specific variables. Therefore, to fill this gap, this study attempt to reinvestigate the behavior of expected stock returns with respect to two popularly known firm level characteristics: firm size and book-to-market equity in Sri Lankan context on selected companies listed on Milanka Price Index in Colombo Stock Exchange for the period span from 2005 to 2010 by applying the Fama and Macbeth (1973) procedure.

The rest of the paper is organized as follows. Section 2 reviews the related literature. Section 3 explains the data, hypotheses and methodology. Section 4 provides the empirical results and section 5 presented the conclusions.

LITERATURE REVIEW

After 1980, the relationship between firm-level characteristics and stock returns is extensively investigated in developed, developing and group of countries. The findings of the literature suggest that there is a significant linkage between firm specific factors and stock returns in the countries examined.

The size effect was first documented by Banz (1981) and Reinganum (1981) who found a return premium on small stocks during the 1936-1975 period for the stocks quoted on the NYSE. The size effect or size premium was later confirmed by Blume and Stambaugh (1983) and Brown et al. (1983) in USA and Australia respectively. The BM effect was first documented by Rosenberg et al. (1985) who found a return premium to stocks with high ratios of book value to market value of equity in US stock markets. This BM effect or value premium was confirmed by Davis et al (1994) in USA and by Chan et al. (1991) and Capaul et al. (1993) in outside the USA. These findings show that firm size and BE/ME are significantly effect on expected stock returns, negative and positive, respectively.

The first group of the studies covers developed countries. Fama and French (1992) (henceforth FF)

report that the market beta has little or no ability in explaining the variation in stock returns on U.S stock on selected non-financial firms and on the other hand, they find that the variation of cross – sectional stock returns can be captured by two firm characteristics: firm size and book-to-market equity during the period of 1962 to 1989. According to Fama and French (1992), the associated risk premium of the size and BM variables is easily measurable, significantly negative and positive, respectively. Andreas and Eleni (2004) empirically examined the FF (1993) three factor model using Japanese data over the period of 1992 to 2001. The findings reveal significant relationship between the three factors and the expected stock returns in the Japanese market. Further, it clearly shows that the market factor has the most explanatory power in explaining the variation of stock returns. The explanatory power of the size factor (SMB) dominates the explanatory power of the BE/ME factor (HML) when the testing portfolios consist of small stocks and the opposite occurs when the testing portfolios consist of big stocks. Bryant and Eleswarapu (1997) for the period from 1971 to 1993 and Pinfold et al. (2001) for the period from mid-1993 to March 2001, documented a BM effect but a weak size effect in US stocks. On the other hand, Vos and Pepper (1997) reported strong size and BM effects over the period 1991-1995, while Li and Pinfold (2000), replicating Vos and Pepper (1997) for the period starting at the end of 1995 to June 1999, did not find a book to market effect. Chui and Wei (1998) and Daniel et al. (1997) find that book-to-market equity plays a significant role in explaining the cross – sectional variation of stock returns in the Japanese market.

Second group of studies investigate this relationship for developing market including Sri Lankan Stock Market. Drew and Veeraraghavan (2002) present evidence of the size and value premium for the case of Malaysia using multifactor model approach. They report that the factors identified by FF (1993), better explain the variation in stock returns in Malaysia. Drew et al. (2003) also report a firm size effect and a less pervasive book to market effect in the Shanghai stock market. Senthilkumar (2009) employed Fama-MacBeth (1973) cross-sectional regression model in selected Indian industries to examining behavior of stock return in size and market-to-book ratio. They find that no size effect in all the markets and a significant market-to-book effect in all the groups. When the test allow for both variables, the negative relationship between size and average return is less significant; the inclusion of market-to-book equity seems to absorb the role of size in selected Indian stock returns.

Anuradha (2007) investigate the above two most popular factors on stock returns in the CSE and reports the negative size to return relation and

positive BE/ME to return relation. Mahawanniarachchi, (2006) also reports that there is significant negative relationship between size and individual stock returns and positive relationship between BE/ME, market and individual stock returns. Further, it reports that size, market and BE/ME factors have significant explanatory powers in explaining the Sri Lankan stock returns. Chaturika Seneviratne and Nimal employed (Fama and French (FF) (1995) three factor model to investigate the size and book to market factors in explaining equity returns and earnings in the CSE. Findings of the study suggest that the earnings (i.e., sales and earnings growth) of a firm are associated with three factors, but it doesn't provide any reliable link between the behavior of three factors in earnings and stock returns in the CSE. Additionally, they recognize that market factor is capable in predicting the future stock returns of firms than the size and BE/ME in the CSE.

Samarakoon (1998) test the relation between stock returns and fundamental variables, this study employed two methodologies. The first is informal tests which examine averages returns and averages of fundamental variables for portfolios formed on the basis of size alone, beta alone, and size and beta. The second is a formal asset pricing test which uses the Fama-MacBeth (1973) cross-sectional regression procedure. In the formal tests, returns are regressed on β , size, book-to-market equity, leverage, and earnings-price ratio, both individually and jointly, in every month in the cross-section. The results show that, inconsistent with the central prediction of the Capital Asset Pricing Model, the relation between average returns and beta is strongly negative. Firm size and BE/ME are not related to average returns in any significant manner.

There is another group of studies that examines the situation for more than one country. Fama and French (1998) and Patel (1998) document a premium for small firms and value stocks in 17 emerging market countries. These results differ from Claessens et al. (1998) who reports a premium for large firms and growth stocks in an earlier sample of 19 emerging markets. Rouwenhorst (1998) shows that the return factors in 20 emerging markets are qualitatively similar to those documented. On the contrary, Chui and Wei (1998) shows that book-to-market equity can explain the cross-sectional variation of expected stock returns in three out of five Pacific Basin emerging markets, while the size effect is significant in all markets except Taiwan. Maroney and Protopapadakis (2002) test the three factor model (FF, 1993) on different equity markets of Australia, Canada, Germany, France, UK and US. The size effect and the value premium survive for all the countries examined. They conclude that the size and BE/ME effects are international in character. The

positive relationship of stock returns with BE/ME and the negative relationship with size remains in the model. Mirela and Madhu (2004) investigate the robustness of the three factor model (FF, 1993) for equities listed in three main European markets namely France, German and United Kingdom and paper provides evidence that the beta of the CAPM alone is not sufficient to describe the variation in average equity returns for the three of the markets concerned.

Even though empirical research has been evidence on firm size and book to markets effects in behavior of stock return in Sri Lankan context, there have been a very few of studies in Sri Lanka stock market {except a few-e.g. Samarakoon (1998); Mahawanniarachchi, (2006); Anuradha (2007) and Chaturika Seneviratne and Nimal}. Therefore, the objective of this study is to reexamine whether the variation in stock returns is explained by firm size and BE/ME in Sri Lankan context on selected companies listed on Milanka Price Index in Colombo Stock Exchange for the period from 2005 to 2010 by applying the Fama and Macbeth (1973) procedure.

DATA, HYPOTHESES AND METHODOLOGY

Sample and Data Collection

This paper aims to reinvestigate the behavior of expected stock returns with respect to two popularly known firm level characteristics: firm size and book-to-market ratio in Sri Lankan context. so that this study is used firm size and book-to-market equity (BE/ME) as independent variables to examine the behavior of stock returns in Sri Lankan context. Firm size is measured as the total market capitalization, BE/ME equity as the BE divided by ME at financial year t and stock returns as dividend plus changes in stock price divided by beginning stock price. In order to smooth the data, data of all variables were transformed into natural logarithm prior to the empirical analysis.

For the purpose of this study, Data of selected variables have been collected from annual reports of selected 12 companies out of the total 25 companies listed on MPI in CSE for the period of 2005 to 2010. The following criteria are used to select 12 companies out of 25 companies. (1) Selected companies listed on MPI in base year of 2005 and also listed in following years in the selected period. Because of the CSE reviews & revises the companies to be included in the MPI on a yearly basis commencing from 2005. (2) Selected companies are most stocks traded frequently. (3) Selected companies' financial year ended in December and (4) this study excludes those companies whose book values are negative.

Fama and French (1992) point out high leverage which is normal for these firms do not have the same

meaning as for non-financial firms. Therefore, this study has been grouped the selected companies as namely financial and non-financial companies.

Table I is shown the selected companies listed on Milanka Price Index in Colombo Stock Exchange.

Table I: List Of Selected Companies Listed On Milanka Price Index

Financial Companies	
No	Name of Companies
1	Commercial Bank of Ceylon Ltd
2	Hatton National Bank Ltd
3	Merchant Bank of SL Ltd
4	Nations Trust Bank Ltd
5	Seylan Bank Ltd
6	National Development Bank
Non-financial Companies	
No	Name of Companies
1	Galadari Hotels (Lanka) Ltd
2	Caltex Lubricants Lanka Ltd
3	Ceylon Grain Elevators Ltd
4	Sri Lanka Telecom
5	Colombo Land & Development Company Ltd
6	Colombo Dockyard Ltd

HYPOTHESES

In order to achieve the objective of this study, the following hypotheses have been generated.

H₁: There is a positive effect of firm size on stock returns.

H₂: There is a negative effect of book-to-market equity on stock returns.

METHODOLOGY

Previous studies have employed different methodology to investigate the impact of firm specific factors on stock returns. This study is employed Fama-MacBeth (1973) cross-sectional regression procedure to individual securities for the objective of the study. This methodology earlier employed by Samarakoon (1997, 1998) and Senthilkumar (2009) in same study in Sri Lankan Stock Market and Indian selected industries, respectively. Since Fama and MacBeth (1973) procedure is intuitive and easy to implement, it is commonly used in the empirical assets pricing literature to evaluate a model's performance. Thus their procedure, hereafter the "Fama MacBeth method" serves a goal in this study that it can estimate the factor risk premiums and their standard errors corrected for correlation in the cross sectional framework.

Like the evidence found in the developed markets, for instance, Lakonishok and Shapiro (1986), Fama and French (1992), Chui and Wei (1998) showed that the relationship between market beta (β) and average return is flat for five emerging markets in the Pacific Basin, even when beta is corrected for measurement

error and used alone to explain average return. Due to this lack of explanatory power and for reasons of comparison, we do not include market β as a predictable variable in our models.

Fama MacBeth (1973) model is discussed with special emphasis on modification of the model by excluding the betas. The following methodological approach is adopted in this study for establishing the significant relationship between firm specific financial variables and stock returns in the Emerging Sri Lankan Stock Market.

$$SR_{i,t} = \alpha_{0,t} + \alpha_{1,t} \ln(MC_{i,t}) + \varepsilon_{i,t} \quad (1)$$

$$SR_{i,t} = \alpha_{0,t} + \alpha_{1,t} \ln(BE / ME_{i,t}) + \varepsilon_{i,t} \quad (2)$$

$$SR_{i,t} = \alpha_{0,t} + \alpha_{1,t} \ln(MC_{i,t}) + \alpha_{2,t} \ln(BE / ME_{i,t}) + \varepsilon_{i,t} \quad (3)$$

Where, $\ln$ is the natural logarithm, $\varepsilon_{i,t}$ is a random error term. $SR_{i,t}$ is the stock returns of i^{th} company for the period of t , $MC_{i,t}$ is the market capitalization of i^{th} company for the period of t to measure the firm size and $BE / ME_{i,t}$ is the book-to-market equity of i^{th} company for the period of t ; and on both fundamentals to explain expected returns. The average slopes of the explanatory variables in yearly regressions provide a statistical test of whether expected returns can be captured by these variables.

All estimations have been performed in SPSS software package, whereas the ordinary calculations were done in Excel.

EMPIRICAL RESULTS

As a first step, descriptive statistics are examined. In the second step, the effect of selected firm specific factors in expected stock returns is evaluated by estimating equation 3 using multiple regression analysis.

Descriptive Statistics

Table II presents the descriptive statistics of selected variables of this study. See Appendix

The descriptive statistics is performed on 3 data sets: Full Sample (data set 1); Financial Companies (data sets 2); and Non-Financial Companies (data set 3). According to table 2, descriptive statistics of all variables have been calculated shows that all variables are based on 72 observations in full samples (financial firms or non-financial firms) and 36 observations in each (financial firms or non-financial firms).

As the results of the table below, each data set (full sample, financial and non-financial firms) values of mean, minimum and maximum of stock returns and firm size variables have equal amount. The average of the stock returns is Rs.8.11. the minimum and maximum values of stock returns are Rs. 7.40 and Rs. 8.86, respectively. The average value of the firm size

is about Rs. 22. The minimum and maximum values of the firm size are about Rs. 20 and Rs. 25, respectively. The average value of Book-to-Market equity has a negative and different in each data set. Book-to-Market equity seems to be negative for the research period, since minimum value is negative. The

minimum value of this variable is approximately equal in full and non-financial data set. This value is Rs. -2.15. But Rs.-1.17 in financial data set. The maximum value of this variable is approximately equal in full and financial data set. This value is Rs. 1.73. But 1.31 in non-financial data set.

Table II: Descriptive Statistics Of Selected Variables

Data Set	Variables	N	Min	Max	Mean	SD	Skewness	Kurtosis
Full Sample	Stock Return	72	7.40	8.86	8.11	0.45	0.10	-0.51
	Firm Size		19.78	25.24	22.43	1.49	0.15	-1.05
	Book-to-Market Equity		-2.15	1.73	-0.16	0.79	0.15	0.25
Financial Companies	Stock Return	36	7.40	8.86	8.11	0.45	0.11	-0.46
	Size		20.30	25.24	22.76	1.31	-0.11	-0.96
	Book-to-Market Equity		-1.17	1.73	-0.05	0.73	0.92	0.45
Non-Financial Companies	Stock Return	36	7.40	8.86	8.11	0.45	0.11	-0.46
	Size		19.78	25.21	22.10	1.60	0.53	-0.82
	Book-to-Market Equity		-2.15	1.31	-0.26	0.85	-0.29	-0.26

In each data set, Standard deviation of each variable has equal value. Firm size has the largest standard deviation among other two variables which portrays nothing but that it is dispersed around its value by Rs. 1.5. Meanwhile standard deviations of stock returns and Book-to-Market equity have approximately Rs.0.5 and Rs.1 respectively. From the skewness measurement, stock returns have same and positively skewness in each data set. Also found that all variables than firm size in financial data set and book to market equity in non-financial data set, have a positively skewness in each data set, which indicates the fat tails on the right-hand side of the distribution comparable with the left-hand side. In case of kurtosis, Book-to-

Market equity in full and financial data set is positively skewed. On other hand, each variable are negatively skewed in each data set, thus illustrating that Book-to-Market equity, in these two hand, have peaked distribution while in other situation, each variables have flatness distribution comparative with normal distribution.

Multiple Regression Model

One regressions model is developed to test H_1 and H_2 for full sample, financial companies and non-financial companies. The regression model is to test the relationship that exists between two popularly known firm level characteristics and stock returns. The results of the multiple regression analysis are in Table III.

Table III: Multiple Regression Results

Data Set		Firm Size	BE/ME	R^2	R^2 adjusted	F Value	Constant	N
Full Sample	Coefficient	0.118	-0.469	29.3%	27.2%	14.296		72
	Intercept	0.036	-0.268				7.260	
	Std. Error	0.036	0.068					
	t-statistics	0.988	-3.925					
	Significance	0.327	0.000			0.000	0.000	
Financial Companies	Coefficient	0.103	-0.052	35.5%	31.6%	9.076		36
	Intercept	0.036	-0.035				7.272	
	Std. Error	0.065	0.012					
	t-statistics	0.553	-2.809					
	Significance	0.584	0.008			0.001	0.000	
Non-Financial Companies	Coefficient	0.088	-0.446	24.9%	20.3%	5.460		36
	Intercept	0.025	-0.239				7.489	
	Std. Error	0.050	0.095					
	t-statistics	0.499	-2.518					
	Significance	0.621	0.017			0.009	0.000	

Dependent Variable is stock returns of individual securities,

Predictors (Constant) are Firm size and BE/ME and Multiple R is the Coefficient of Correlation, R^2 is the Coefficient of determination, **Adjusted R^2** is the coefficient of determination adjusted for degrees of freedom, **F** is the F Statistic for testing the overall significance of regression and **t** is the t Statistic for testing the significant impact of each independent variable on dependent variable. All the variables in the model are tested at 5% significant level

Full Sample

Following are the hypotheses and regression models developed to address the main issue of the research for the full sample.

Hypotheses: **H₁**: There is a positive effect of firm size on stock returns.

H₂: There is a negative effect of book-to-market equity on stock returns.

Model:

$$SR_{i,t} = 7.260 + 0.036 \ln(MC_{i,t}) + -0.268 \ln(BE/ME_{i,t}) + \varepsilon_{i,t}$$

(0.000) (0.327) (0.000)

This Model is estimated for the firm-level aggregates. Reasonable explanatory power (27.2%) is reported in these model measured by adjusted R² which indicates that 27.2% variability of the stock returns of selected companies (together financial and non- financial firms) can be explained by the firm size and book to market. The F-statistic used to test the overall fit of the above model is 14.296 (p<0.05), we reject the null that all coefficients are simultaneously zero and accept that the regression is significant overall. From this model, MC is not statistically significant (P-value = 0.327 > 0.05) and BE / ME is statistically significant (P-value = 0.00 < 0.05). Therefore at 5% significance level, we can reject the H₁. This indicates that only book-to-market equity has a significant and negative cross section on stock returns of full sample of companies.

Financial Companies

Following are the hypotheses and regression equation estimated for financial companies.

Hypotheses: **H₁**: There is a positive effect of firm size on stock returns.

H₂: There is a negative effect of book-to-market equity on stock returns.

Model:

$$SR_{i,t} = 7.272 + 0.036 \ln(MC_{i,t}) + -0.035 \ln(BE/ME_{i,t}) + \varepsilon_{i,t}$$

(0.000) (0.584) (0.008)

Financial firm-level aggregates are tested in this model as a remedy for the multicollinearity problem. The value of adjusted R² from regression analysis suggest that 31.6% variability of the stock returns of financial companies can be explained by the firm size and book to market. With computed F-value of 9.076 (p<0.05) for this model, we reject the null that all coefficients are simultaneously zero and accept that the regression is significant overall. From this model, MC is not statistically significant (P-value = 0.584 > 0.05) and BE / ME is statistically significant (P-value = 0.008 < 0.05). Therefore at 5% significance level, we can reject the H₁. This indicates that only book-to-market equity has a significant and negative cross section on stock returns of financial companies as well as full sample size.

Non-Financial Companies excluded Negative Book Equities

Following are the hypotheses and regression equation estimated for non-financial companies excluding negative Book Equities.

Hypotheses: **H₁**: There is a positive effect of firm size on stock returns.

H₂: There is a negative effect of book-to-market equity on stock returns.

Model:

$$SR_{i,t} = 7.489 + 0.025 \ln(MC_{i,t}) + -0.239 \ln(BE/ME_{i,t}) + \varepsilon_{i,t}$$

(0.000) (0.621) (0.017)

Non-financial firm level aggregates are tested in this model as a remedy for the multicollinearity problem. The value of adjusted R² from regression analysis suggest that 20.3% variability of the stock returns of non-financial companies can be explained by the firm size and book to market. With computed F-value of 5.46 (p<0.05) for this model, we reject the null that all coefficients are simultaneously zero and accept that the regression is significant overall. From this model, MC is not statistically significant (P-value = 0.621 > 0.05) and BE/ME is statistically significant (P-value = 0.017 < 0.05). Therefore at 5% significance level, we can reject the H₁. This indicates that only book-to-market equity has a significant and negative cross section on stock returns of non-financial companies and selected both firm specific factors capture less the cross section of stock returns than financial companies.

CONCLUSIONS AND RECOMMENDATIONS

Firm specific characteristics are one side of coin to explain the behavior of expected stock returns. A number of studies are well documented the relationship between stock returns and most popular firm specific factors: firm size and book to market equity in developed countries {e.g, Banz (1981), Reinganum (1981), Blume and Stambaugh (1983), Rosenberg et al. (1985), Davis (1994), Chan et al. (1991), Capaul et al. (1993), Chui and Wei (1998), Daniel et al. (1997), Fama and French (1992), Andreas and Eleni (2004), Bryant and Eleswarapu (1997), Pinfold et al. (2001), Vos and Pepper (1997), Li and Pinfold (2000), Claessens et al. (1998), Rouwenhorst (1998) and Maroney and Protopapadakis (2002)}, developing countries {e.g, Drew and Veeraraghavan (2002), Drew et al. (2003) and Senthilkumar (2009)} and group of countries {e.g, Fama and French (1998), Patel (1998), Claessens et al. (1998), Rouwenhorst (1998), Chui and Wei (1998), Maroney and Protopapadakis (2002) and Mirela and Madhu (2004)}. Most of previous studies reveal that firm size and book to market equity have significant relationship with stock returns, negative and positive, respectively.

Even though earlier researchers found on behaviors of expected returns with respect to firm specific factors in both developed and developing countries, there have been a very few of studies in Sri Lankan context {except a few-e.g. Samarakoon (1998); Mahawanniarachchi, (2006); Anuradha (2007) and Chaturika Seneviratne and Nimal}. Therefore, this paper aims to reinvestigate the behavior of expected stock returns with respect to two popularly known firm level characteristics: firm size and book-to-market equity in Sri Lankan context on selected companies listed on Milanka Price Index in Colombo Stock Exchange for the period span from 2005 to 2010 by applying the Fama and Macbeth (1973) procedure.

The findings reveal that Book-to-market equity has a significant negative role in expected stock returns while firm size does not have any significant behavior in expected stock returns. This finding is not consist with the results of Banz (1981), Reinganum (1981), Blume and Stambaugh (1983), Brown et al. (1983), Rosenberg et al. (1985), Davis (1994), Chan et al. (1991), Capaul et al. (1993), Chui and Wei (1998), Fama and French (1992) and Maroney and Protopapadakis (2002) and also this finding is not consistent with the results of Anuradha (2007) and Mahawanniarachchi (2006) in Sri Lankan context. These studies documented significant negative relationship between size and stock returns and positive relationship between BE/ME and stock returns. But, in Sri Lankan context, the finding of firm size is consistent with results of Samarakoon (1998) who reveals that firm size is not related to average returns in any significant manner while the finding of BE/ME is not consistent with results of samarakoon (1998) who reveals that BE/ME does not have significant impact on average returns.

Besides, the finding of this study is consistent with results of Senthilkumar (2009) who report that negative relationship between size and average return is less significant; the inclusion of market-to-book equity seems to absorb the role of size in selected Indian stock returns.

This finding implies that firm size is not significant factor in decision making of different financial interested parties. For an example, Investors can invest in small or large firms which have small book-to-market equity because of findings of this study reveal that no relation in the economy between firm size and return, and negative relation between book-to-market equity and return. This paper prove modern financial theory prediction that when there is no relation in the economy between firm size and return, there will be a negative relation between book-to-market value and return.

The limitations of this study are that even though there are plenty of sources affected on expected stock returns, this study has only employed two popularly known firm level characteristics to examine the behavior of expected stock returns and covers only six years' annual data of 12 companies listed on Milanka Price Index in Colombo Stock Exchange. Thus, future researchers can investigate the behavior of stock returns by employing macroeconomic variables and other firm specific variables with consider long time period ,large sample and take another methodology to vast analysis on this topic in order to obtain a better insight about the return generation process. Further, they can use various frequencies data set such as daily, weekly and quarterly.

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